



WS_FTP Professional 12



Tools Guide

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This guide introduces tools that can help you automate regular file transfer tasks, troubleshoot problems, verify transfers, and customize the way you work with Ipswitch WS_FTP 12.

This chapter shows some of the situations where the tools can help you. The following chapters present more detailed information about the tools.

Ways to Automate Regular File Transfers

If you do regular file transfers, such as updating a web site nightly, or sending an accounting report to the home office weekly, you may find it easier to automate the transfer. Several WS_FTP tools let you automate transfers:

If you want to:	Use this tool:
Have a regular transfer, such as a file upload, occur at a specified time interval, such as every Thursday at 5:00 pm.	Scheduler Utility. See the <i>Scheduler Utility</i> (on page 17) chapter.
Mirror a set of files on your PC with a set of files on an FTP server.	Synchronize Utility. See <i>Synchronizing Files and Folders</i> (on page 29).

If you want to:	Use this tool:
Automate a regular process that includes not only a file transfer, but actions such as changing directories, deleting files, or checking for the success or failure of a command.	Script Utility. See the <i>Script Utility</i> (on page 43) chapter.

You can open any of these tools from the **Tools** menu.

Check Transfer Status and Logs

Use the **Information Window** at the bottom of the WS_FTP main window to verify transfers, pause or cancel a transfer, and troubleshoot both transfer and connection problems.

You can interact with “transfer jobs” shown in the Transfer Manager and Transfer History. For example, you can use Batch Mode with the Transfer Manager to build a list of files for transfer.

The Connection Log shows the commands sent back and forth (the “conversation”) between WS_FTP and the FTP server.

For more information, see *Using the Information Window* (on page 11).

Building a List of Files for Transfer

When transferring multiple files, you may find it easier to first build a list of files for transfer and then process the transfer. When **Batch Mode** is active, you can browse folders and add files to the batch list. You can review the list, make any changes, and then upload or download the entire list.

To use Batch Mode:

- 1 In the toolbar, click **Connect** to open the Site Manager.
- 2 Select a site and click **Connect**.
- 3 Select **Tools > Batch Mode**. At the bottom of the remote site's file list, you'll see the Batch Mode icon.
- 4 Select a file or files and click the transfer arrow. The file will be placed in the Transfer Manager.

Within the Transfer Manager, you can select a file to remove it from the list, view the transfer properties, transfer or schedule for later transfer. For more information, see *Using the Information Window* (on page 11).

- 5 After you have added all of the files to the batch, select **Tools > Batch Mode** again to take WS_FTP out of batch mode.

- 6 In the Transfer Manager, select the requests you want to execute. Hold down the Ctrl key to select multiple requests.
- 7 After you take the client out of batch mode, it will execute the transfers.

Transfer Files as a Compressed Archive

When you select files or folders and upload them while **Compression Mode** is enabled, the files are transferred as a single ZIP archive. Compression Mode can only be used when transferring files from your local computer to a remote server.

To use Compression Mode:

- 1 In the toolbar, click **Connect** to open the Site Manager.
- 2 Select a site and click **Connect**.
- 3 From the Tools menu, select **Compression Mode**. At the bottom of the remote site's file list, you should see the Compression Mode icon.
- 4 Select the files or folders to transfer.
- 5 Click the **Upload arrow**.

Transfer and Append to a Remote File

When WS_FTP is in **Append Mode**, you transfer a source file and append it to a destination file. You can append files in either direction, upload or download. Append Mode saves you the extra step of concatenating two files after transfer.

To use Append Mode:

- 1 In the toolbar, click **Connect** to open the Site Manager.
- 2 Select a site and click **Connect**.
- 3 From the Tools menu, select **Append Mode**. At the bottom of the remote site's file list, you should see the Append Mode icon.
- 4 Select the file or files to transfer. You are prompted for the destination file name.
- 5 Enter the file name of the destination file (the file to which the transferred files are appended).

The selected files are transferred and appended to the destination file. If you open the destination file, you will see the appended files.

How to Speed Up Transfer of Large Files

Large files, such as an architect's blueprint or a software executable, can take longer to transfer. If you regularly transfer large files, you can use **Multipart mode** to speed up the transfer.

When in Multipart Mode, WS_FTP splits large files into smaller segments and downloads all segments via different, yet concurrent, connections. This decreases the total download time for large individual files.



Multipart works with download files only. It does not work with SSL connections.

To use Multipart Mode:

- 1 In the toolbar, click **Connect** to open the Site Manager.
- 2 Select a site and click **Edit**.
- 3 Select the Transfer options and make sure that **Maximum transfer connections** is set to more than one.

The number of connections made is determined by the number of additional connections specified here and the number of connections allowed by the server.

- 4 Click **OK** to close the Site Options, and then click **Connect**.
- 5 Select **Tools > Multipart Mode**. At the bottom of the FTP site's file list, you'll see the Multipart Mode icon.

When you transfer files to this site, WS_FTP will use multiple data connections.

The Transfer Manager displays the file, the number of segments that the file has been divided into, and the status of the transfer of each of the segments. When each of the segments are complete, the Transfer Manager shows the status of re-combining the segments into one file, if that process takes longer than 2 seconds.

If there are no segments listed under the file being downloaded, then the file is not large enough to be divided.

- 6 To turn off MultiPart Mode, select **Tools > Multipart Mode** again.

Integrating WS_FTP with a Browser or E-Mail

FTP sites have an Internet address, similar to a web address, that looks like:

ftp://ftp.ipswitch.com, sftp://ftp.ipswitch.com, or ftps://ftp.ipswitch.com

You can set an option in WS_FTP so that when you click on an FTP, FTPS, or SFTP address in your browser or e-mail client, so that WS_FTP will open and connect to the FTP server.

The type of FTP address affects how this works:

If the address includes:	WS_FTP does:
the name of an FTP server Ex. ftp.ipswitch.com	Opens and connects to the server
the path and name of a file Ex: ftp.ipswitch.com/French/ftp803.txt	Downloads the file to your PC and prompts whether to save or open the file.
the path and name of a folder Ex: ftp.ipswitch.com/French	Opens, connects to the server, and navigates to the folder.

To turn on **Browser Integration for Internet Explorer**:

- 1 In the toolbar, click **Options**.
- 2 From the **Program Options** dialog, select **Browser Integration**.
- 3 Select the option **Enable Integration for FTP URLs in Internet Explorer**.
- 4 If you want to be prompted each time you click an FTP URL so you can choose whether or not to use WS_FTP, select **Prompt before using WS_FTP to process FTP URLs**.

Search an FTP Site for a File or Folder

If you are searching a large, complex site for a file, you can use the Find Utility to quickly locate the file and then initiate a transfer. For more information, see *Search Utilities (local and remote)* (on page 47).

Using the Upload Wizard

The Upload Wizard is a utility that allows you to transfer files from your local system to a remote site without using the WS_FTP interface. There are two ways to access the Upload Wizard:

- In Windows Explorer, select the files or folders you want to upload, then right-mouse click on the list. In that list you will see 'Upload using WS_FTP Upload Wizard.' After selecting that option, the Upload Wizard appears with the files already added to the upload list.
- From the Start menu, select **Programs > Ipswitch WS_FTP 12 > Utilities > WS_FTP Upload Wizard**. The Wizard opens and is ready for you to add the files you want to upload.

Using the Information Window

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Use the **Information Window** at the bottom of the WS_FTP main window to verify transfers, pause or cancel a transfer, and troubleshoot both transfer and connection problems.

You can interact with transfer jobs shown in the Transfer Manager and Transfer History. For example, you can use Batch Mode with the Transfer Manager to build a list of files for transfer.

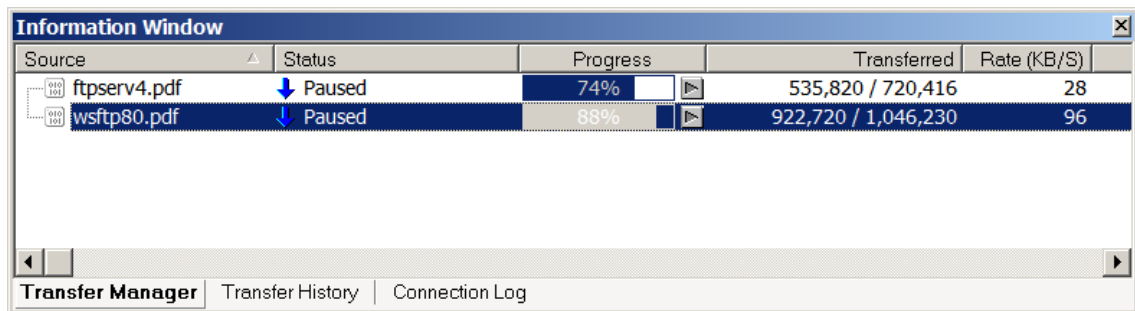
The Connection Log shows the commands sent back and forth (the “conversation”) between WS_FTP and the remote server.

By default, the Information Window is viewable, but you toggle it on or off using the View menu.

The Transfer Manager

The Transfer Manager is the module of Ipswitch WS_FTP Professional that performs transfers. It can also be used to view the progress of transfers, schedule the transfer of multiple files, and view logs for individual transfers.

The Transfer Manager displays a list of all pending, paused, and failed transfers.



- **Source.** The path and name of the file or folder that is to be transferred.

- **Status.** The current status of the listed item. The icon shows the type of event.
- **Progress.** How complete the event indicated in Status is. Click the button next to Progress to either start or pause the transfer.
- **Transferred.** The number of bytes transferred.
- **Rate (KB/S).** The number of kilobytes being transferred per second.
- **Time Left.** The estimated time left until the transfer is complete.

How to Use the Batch Mode

You can use Batch Mode to add requests to the Transfer Manager.

- 1 Connect to a server.
- 2 Select **Tools > Batch Mode** or click **Batch Mode** in the toolbar.
- 3 Select a file or files and click the transfer arrow. The file will be placed in the Transfer Manager.
- 4 After you have added all of the files to the batch, select **Tools > Batch Mode** again to take WS_FTP out of batch mode.
- 5 In the Transfer Manager, select the requests you want to execute. Hold down the Ctrl key to select multiple requests.
- 6 After you take the client out of batch mode, it will execute the transfers.

How to Pause a Transfer

To pause an active transfer from the Transfer Manager, select the entry, then right-click and select **Pause** from the menu.

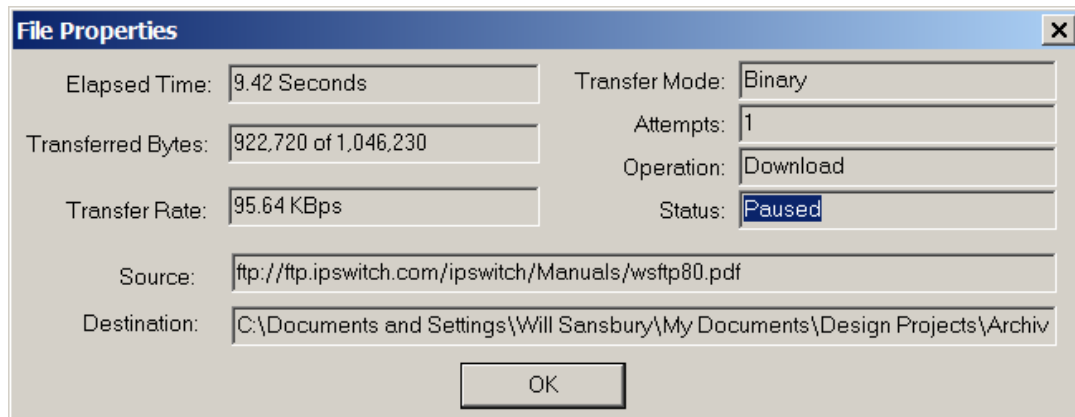
You can also click the Pause button next to the progress column.

How to Remove an Item

To remove an item from the Transfer Manager, select the transfer item, then right-click and select **Delete** from the menu.

Request Properties

You can double-click any item on the Transfer Manager to view the Properties dialog for that item.



The following information appears on the **File Properties dialog**.

- **Elapsed Time.** The amount of time that has passed since the transfer began.
- **Contains.** Number of files and folders contained in the request. (Only displayed when a folder is selected.)
- **Transferred Bytes.** The number of bytes transferred.
- **Transfer Rate.** The number of Kilobytes being transferred per second.
- **Transfer Mode.** Whether the file was transferred in binary or ASCII mode. (Not displayed when a folder is selected.)
- **Attempts.** Number of times the application tried to make the transfer.
- **Operation.** The type of transfer being performed. Either Upload or Download.
- **Status.** The current status code of the listed item.
- **Source.** The path name of the source of the transfer.
- **Destination.** The path name of the destination of the transfer.

Transfer History

The Transfer History tab displays a list of successful transfers. This list can be sorted by clicking on the column headers.

The screenshot shows the 'Information Window' with a table of transfer history entries. The table has the following columns: Date, Source, Source Path, Source File Name, Destin..., Destination Pa..., Destination File Name, and Size.

Date	Source	Source Path	Source File Na...	Destin...	Destination Pa...	Destination File Name	Size
4/18/2005 12:27:18 AM	ftp://doc...	/WS_FTP/H...	wsftpH10Alpha...		C:\Documents...	wsftpH10Alpha_1.exe	9,664,851
4/26/2005 10:33:06 AM	ftp://doc...	/WS_FTP S...	ifs6setupUAB2...		C:\Documents...	ifs6setupUAB2.exe	56,126,469
4/26/2005 3:57:03 PM	ftp://doc...	/WS_FTP S...	ifs6setupUAB4...		C:\Documents...	ifs6setupUAB4.exe	56,165,622
4/26/2005 3:59:14 PM	Alpha	/WS_FTP/P...	wsftpProRC1.e...		C:\Documents...	wsftpProRC1.exe	10,321,286
5/5/2005 1:06:46 PM	Alpha	/WS_FTP/P...	demo32.exe		C:\Documents...	demo32.exe	503,808
5/9/2005 11:30:08 AM	ftp://ano...	/ipswitch/M...	whatsupg.pdf		C:\Documents...	whatsupg.pdf	2,607,864

At the bottom of the window, there are tabs for 'Transfer Manager', 'Transfer History' (which is selected), and 'Connection Log'.

- **Transfer Arrow.** The arrow on the far left side of the item identifies what type of transfer was performed. An up arrow means upload, a down for download, and a left-right arrow is for site-to-site transfers.
- **Date.** This is the date and time the transfer was completed.
- **Source.** This is the site profile that was used to connect to the source.
- **Source Path.** The path on the source directory from the root to the transferred item.
- **Source File Name.** The name of the source file that was transferred.
- **Destination.** The site profile and folder that was used to connect to the destination.
- **Destination Path.** The path on the destination directory from the root to where the transferred item was placed.
- **Destination File Name.** The name of the file after it has been transferred.
- **Size.** The number of bytes transferred.

Executing a file

After a file is successfully transferred, you can select it and choose **Execute** from the right-click menu. If it is a download, the destination file will be opened in its associated application. If it is an upload, the source file will be opened.

Clearing the History

You can remove items from the history list by selecting them and choosing **Delete** from the right-click menu.

You can remove all items by selecting **Clear All** from the right-click menu.

How to Schedule a Transfer

To schedule a transfer from the Transfer Manager or Transfer History tabs:

- 1 Select a request, file, or folder.
- 2 From the right-click menu, select **Schedule**.
- 3 In the **Schedule Item Properties** dialog, enter the date, time, and frequency of the transfer.
- 4 Click **OK** to add the item to **Scheduler**.

Operation After Transfers

The **Operations After Transfers** submenu can be found on the **Tools** menu. This submenu allows you to select the following operations:

- **Exit Application.** After the application finishes all active or scheduled transfer requests, WS_FTP will close itself.
- **Shutdown Computer.** After the application finishes all active or scheduled transfer requests, WS_FTP will attempt to shut the computer down.

Connection Log

The Connection log shows all commands sent from WS_FTP to the server and shows the replies from the server. This log can help you troubleshoot a connection error.

The log window will contain all actions that have been initiated for the selected transfer request, including pause and resume.

For descriptions of error messages that may appear in the log, see *Textual Error Messages* (on page 73).

Scheduler Utility

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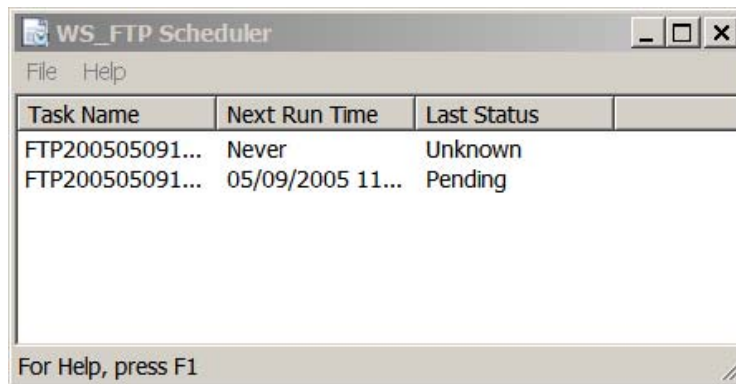
The WS_FTP Pro Scheduler Utility lets you create FTP tasks or “jobs” for transfers that you need to perform repeatedly or manually at a particular time. Each task can consist of any number of uploads and downloads of files and folders.

This chapter provides an overview of the Scheduler and some examples of how you might use it. For detailed instructions on using the Scheduler, start the Scheduler and use its online Help.

Using the Scheduler

To access the Scheduler window, do one of the following:

- In the **Tools** menu, select **Scheduler Utility**.
- From the **Start** menu, select **Programs > Ipswitch WS_FTP 12 > Utilities > WS_FTP Scheduler**.



Once you are in the Scheduler window, you are ready to set up a file transfer task. You can:

- Add a pre-existing script to run at a particular time. (For more information on creating scripts, see *Script Utility (on page 43)*.)
- Drag and drop a file from the WS_FTP interface to the Scheduler window to create an upload task.
- Create a new transfer/custom task.

- Modify or delete tasks.
- The WS_FTP Scheduler will run the task at the time you schedule it to run, or you can make the task run on demand by using the **Run Now** option.

Examples

The following are examples of how you might use the WS_FTP Scheduler.

Adding a Script to the Scheduler

To add a script to the scheduler:

- 1 From the WS_FTP Scheduler dialog, click **File > New > Custom**. The **Schedule Item Properties** dialog appears.
- 2 In the **Start Date** and **End Date** boxes, set the dates for when you want this recurring task to begin and when you want it to end.

The screenshot shows the 'Schedule Item Properties' dialog box. The fields are filled with the following information:

- Start Date:** 5/ 9/2005
- Start Time:** 11:47:32 AM
- End Date:** 5/ 9/2006
- Executable:** C:\Program Files\lpswitch\WS_FTP Professional\ftpscript.exe
- Command:** -f"C:\WS_FTP\uploadeverything.scp"
- Task Name:** TASK20050509114732
- Username:** administrator
- Password:** [masked]
- Password Confirmation:** [masked]
- Schedule Frequency:** Once (selected), Minutes 60

- 3 In the **Start Time** box, enter the time of day you want the task to run.
- 4 In the **Executable** box, enter the full path to the *ftpscript.exe* application.
- 5 In the **Command** box, enter *-f* followed by the full path to the script you want WS_FTP Scheduler to run. If the path contains spaces, put quotation marks around the path.
- 6 If you are on a Windows 2000 or Windows XP, you must enter your user login and password in the boxes provided.



If you are on a domain, include the domain name in the Username box. Example:
IPSWITCH_D\userid

- 7 Select the frequency of the recurring transfer in the **Schedule Frequency** area.
- 8 Click **OK** to add this task to the scheduler.

Updating a Web Site on a Nightly Basis

If you have a Web site you would like to update every night, without having to manually upload all of the files you have recently changed, you can set up a scheduled task to have it run as frequently as you like.

To schedule items:

- 1 In WS_FTP, in the local or a remote file list, right-click the file you want to transfer, then select **Send to Scheduler** from the pop-up menu.

You can select multiple files or folders by holding the Ctrl key and clicking the file or folder name. The **Schedule Item Properties** dialog appears.

- 2 In the **Start Date** and **End Date** boxes, set the dates for when you want this recurring task to begin and end.
- 3 In the **Start Time** box, enter the time of day you want the task run.
- 4 The **Executable**, **Command**, and **Task Name** boxes are filled in for you. A .tmp file name is automatically entered in the **Command** box. This file identifies the files to download and the locations to transfer them to and from.
- 5 If you are using Microsoft Windows 2000 or Microsoft Windows XP workstation, enter your **Username** and **Password** in the boxes provided.
- 6 In the **Schedule Frequency**, select the recurring transfer frequency.
- 7 Click **OK** to add this task to the scheduler.

Backing Up Files

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The Backup Wizard lets you select files or folders that you want to back up, schedule a backup time, or run the backup immediately. Unlike the Synchronize utility, rather than comparing and transferring files in multiple directions (for example, synchronizing files between a local and remote site), Backup transfers selected files or folders from one location to another (in one direction).

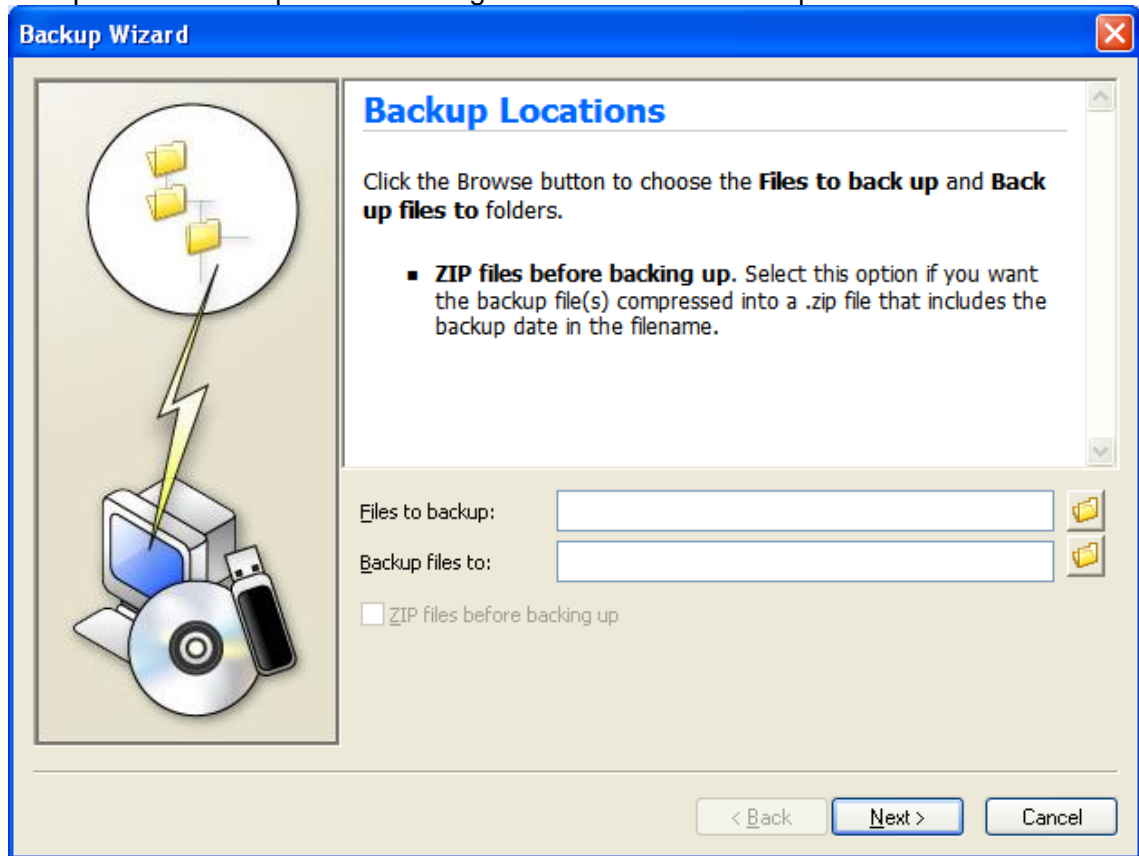
This chapter provides an overview of the Backup Wizard, Managing Backup Jobs, and some examples of how you might use the Backup features.

Using the Backup Job Wizard (WS_FTP Professional)

To start the Backup Job Wizard:

- 1 Click **Tools > Backup Files > Add a new backup job....**

- 2 Complete the Backup Wizard settings to create a new Backup Job.



To use the **ZIP files before backing up** option, the source files must be in a local folder. Also, to include the current date/time in the name of the destination zip file, include the string "%date" in the file name you enter. WS_FTP will replace that string with the current date/time in format: yyyyymmdd-hhmmss.

- 3 After the settings are complete, the Manage Backup Jobs dialog opens. The new Backup Job displays in the list. The job will run at the next scheduled time, or you can click **Run Now** to run the job immediately.



If you schedule a backup job to run **Daily** (in Backup Wizard settings), the job will start running on the day following the start date.

To manage backup jobs:

- 1 Click **Tools > Backup Files > Manage backup jobs**. The Manage Backup Jobs dialog opens.
- 2 Click to highlight a Backup Job that you want to **Change, Remove, or Run**:
 - **Change**. Click to edit the selected Backup Job.
 - **Remove**. Click to remove the selected Backup Job.
 - **Run Now**. Click to run the selected Backup Job immediately, without waiting for the scheduled time.

- 3 To add a new Backup Job, click **Add** and complete the new Backup Job settings.

Examples

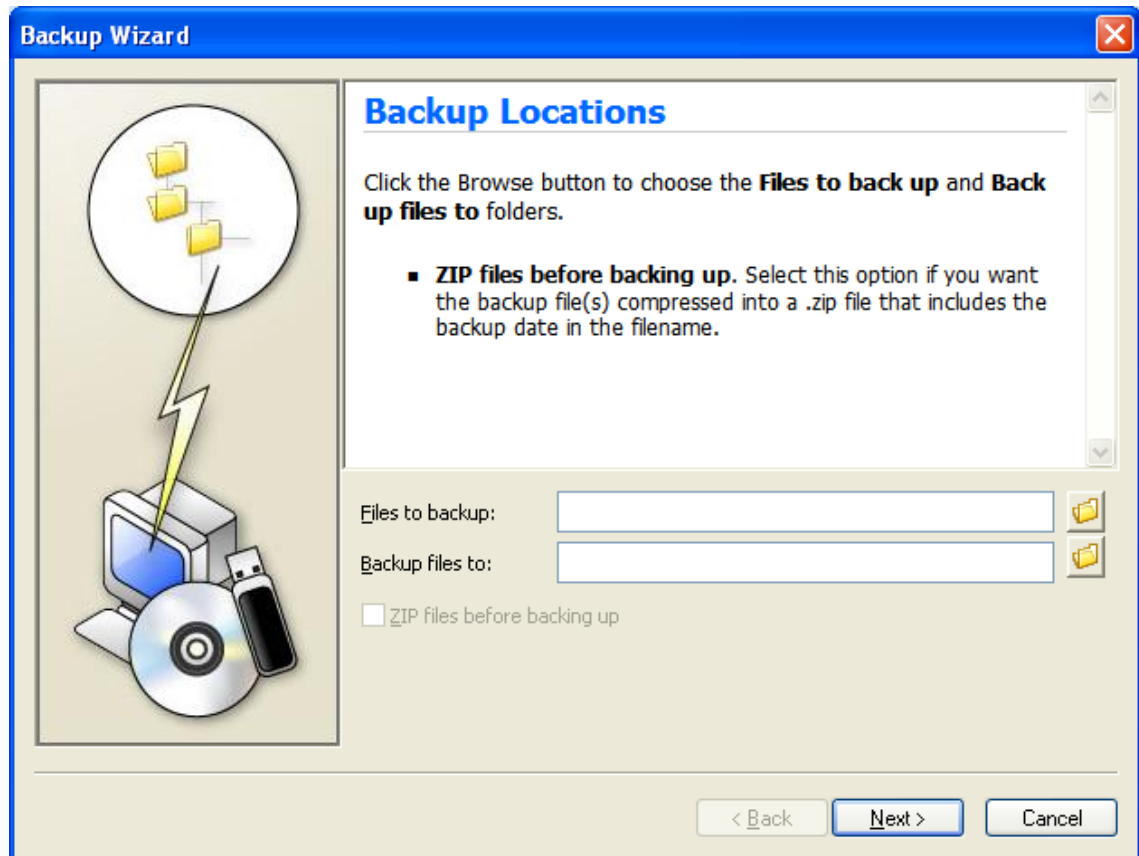
The following are examples of how you might use the Backup Job Wizard and Manage Backup Jobs.

Adding a Backup Job with the Backup Job Wizard

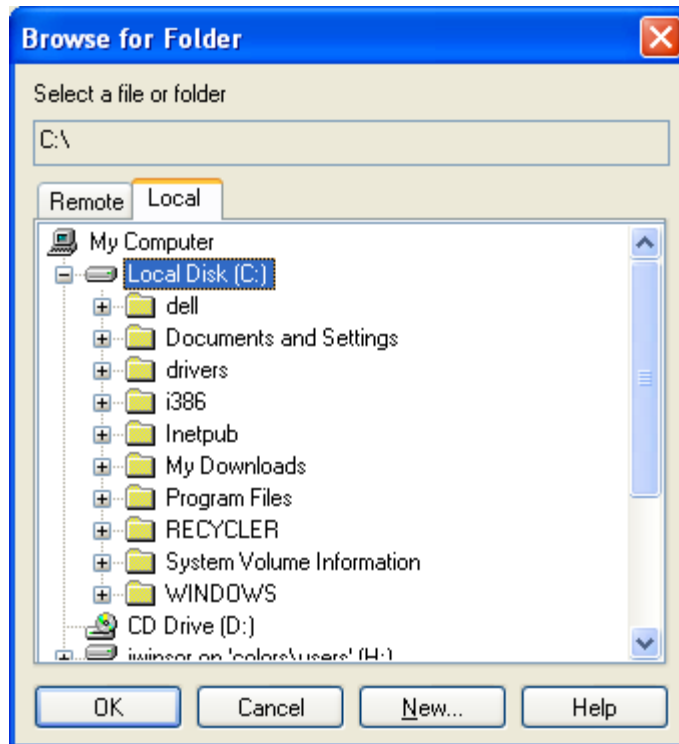
If you need to save critical report files that you receive each day and currently store on your local drive. You can back up the files to another drive (for example, a mapped network drive) at a selected time each day.

To add a backup job to the scheduler:

- 1 Click **Tools > Backup Files > Add a New Backup Job**. The Backup Wizard opens.



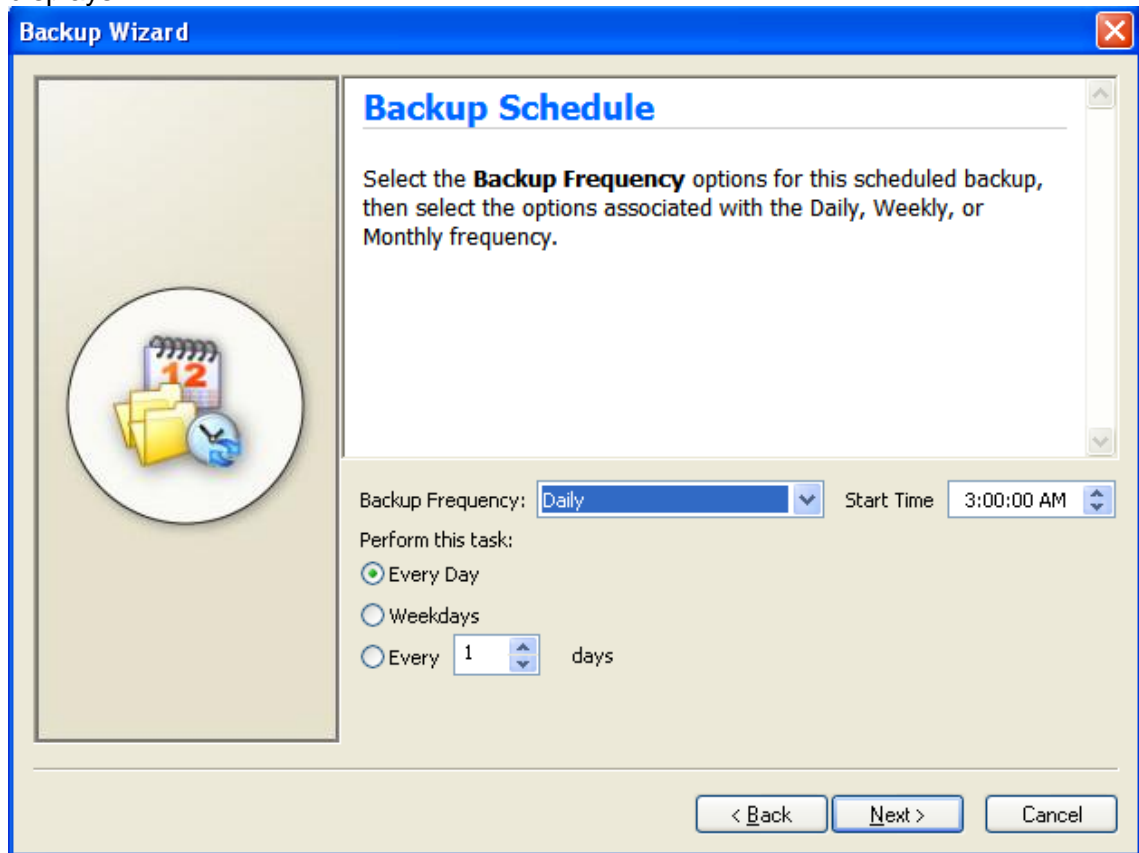
- 2 Browse to select the **Files to backup** location. When the Browse for Folder dialog opens, make sure that you select the appropriate tab (**Local** or **Remote**) for the files you want to back up. Click **OK**.



- 3 Browse to select the **Backup files to** location. Again, when the Browse for Folder dialog opens, make sure that you select the appropriate tab (**Local** or **Remote**) for the files you want to back up, then click **OK**.
- 4 If you want to have the backup files compressed to a .zip file, click **ZIP file before backing up**.

Bulk Import

- 5 Click **Next**. The Backup Schedule wizard page displays.

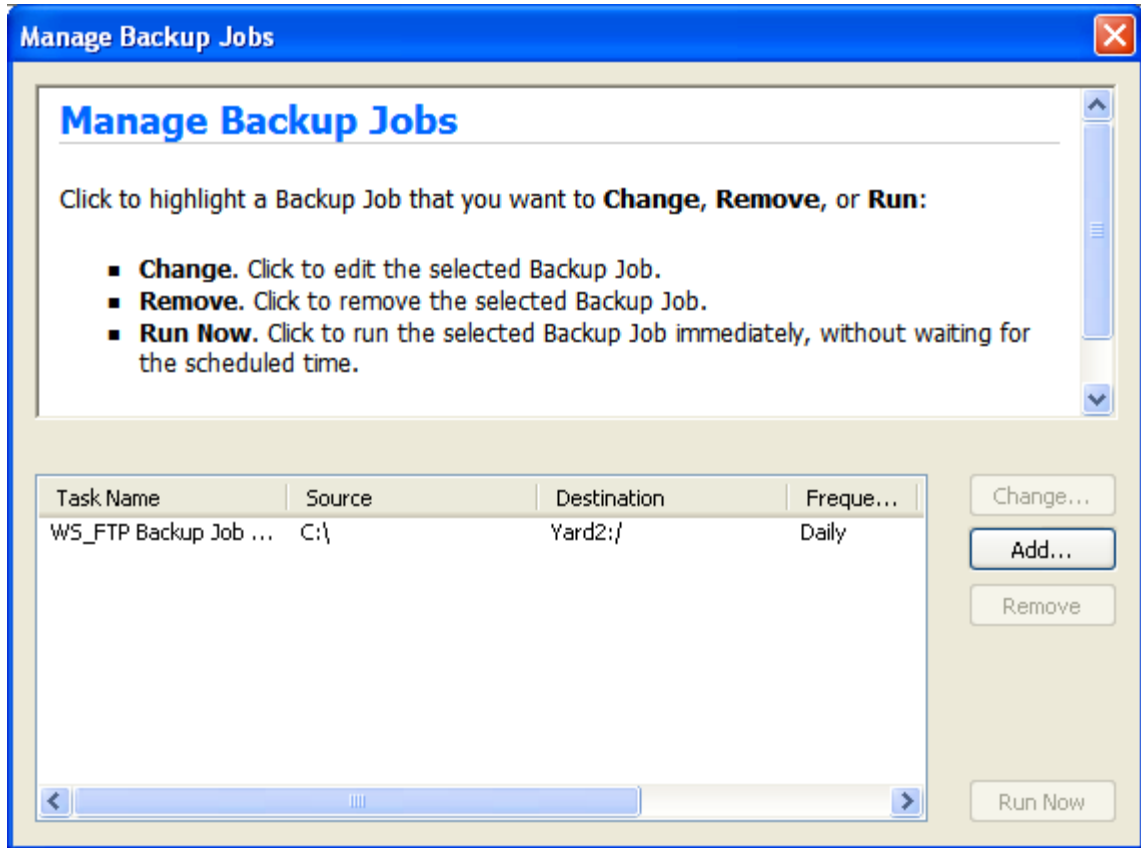


- 6 Select the **Backup Frequency**, **Start Time**, **Perform this task** options to schedule the backup, then click **Next**. The Backup Login wizard page displays.
- 7 Enter your Windows **Username**, **Password**, and **Password Confirmation** for your user account.



Important: Make sure that you enter your **Username**, **Password**, and **Password Confirmation**. This provides the appropriate login information when the Backup Wizard starts to run a scheduled backup.

- 8 Click **Next**. The Manage Backup Jobs dialog opens and the new Backup Job displays in the list. The job will run at the next scheduled time, or you can click **Run Now** to run the task immediately.



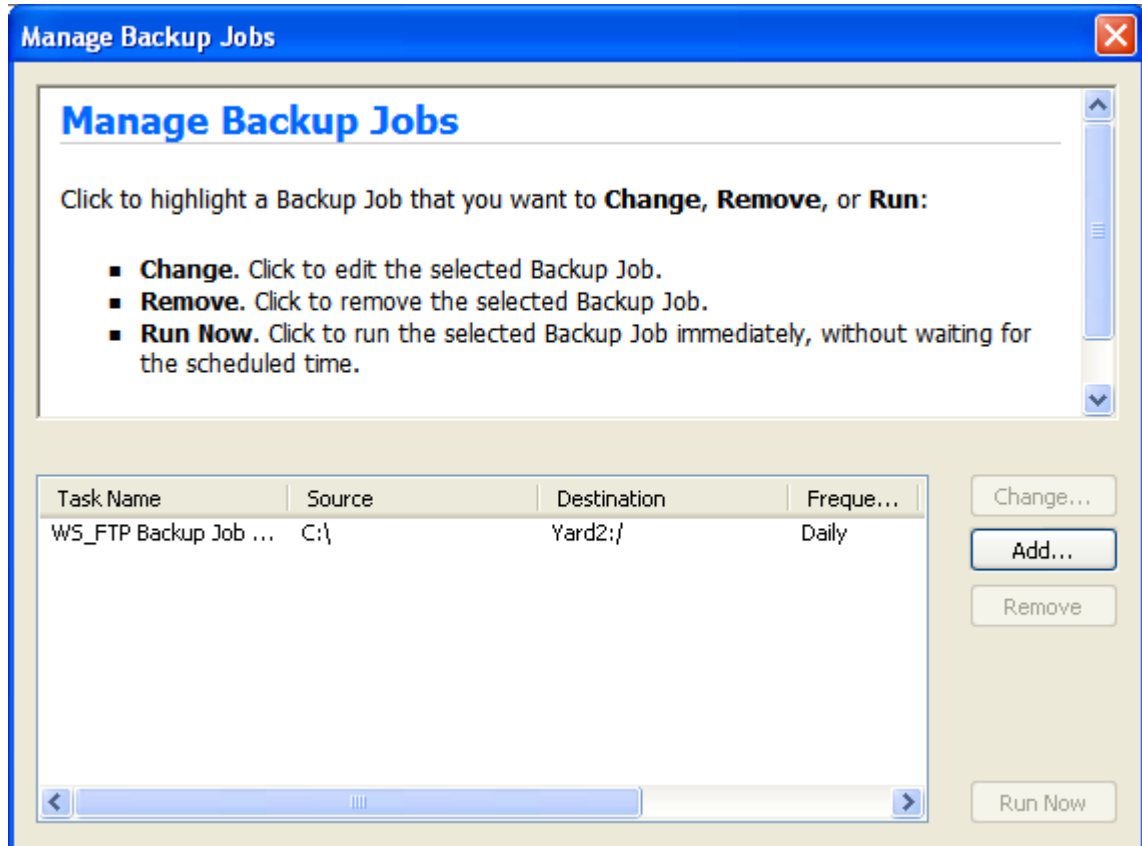
Changing a Backup Job with Manage Backup Jobs Dialog

If you need to change settings for a currently scheduled backup job or add a new backup job, you can use Manage Backup Jobs options.

To change, add, remove, or run a backup job:

Bulk Import

- 1 Click **Tools > Backup Files > Manage backup jobs** The Manage Backup Jobs dialog opens.



- 2 Click to highlight a Backup Job that you want to **Change, Remove, or Run:**
 - **Change.** Click to edit the selected Backup Job.
 - **Remove.** Click to remove the selected Backup Job.
 - **Run Now.** Click to run the selected Backup Job immediately, without waiting for the scheduled time.
- 3 To add a new Backup Job, click **Add** and complete the new Backup Job settings.

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The WS_FTP Synchronize Utility lets you synchronize (or “mirror”) files and file directories between local files, remote sites, network drives, and USB drives with minimal intervention.

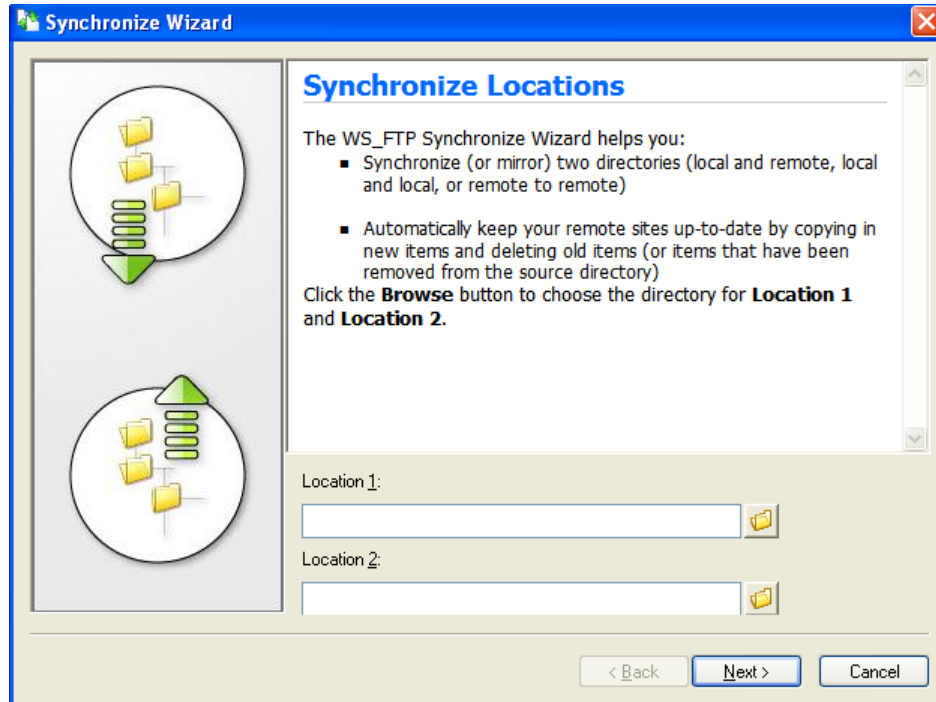
It lets you keep remote sites up-to-date by automatically uploading files which have changed while deleting files that have been removed from the master directory. This is especially useful for quickly and efficiently updating Web sites.

This chapter provides an overview of the Synchronize Wizard, the Synchronize Utility and some examples of how you might use it. For detailed instructions on using the Synchronize Utility, start the Synchronize Utility and use the online Help.

Using the Synchronize Wizard

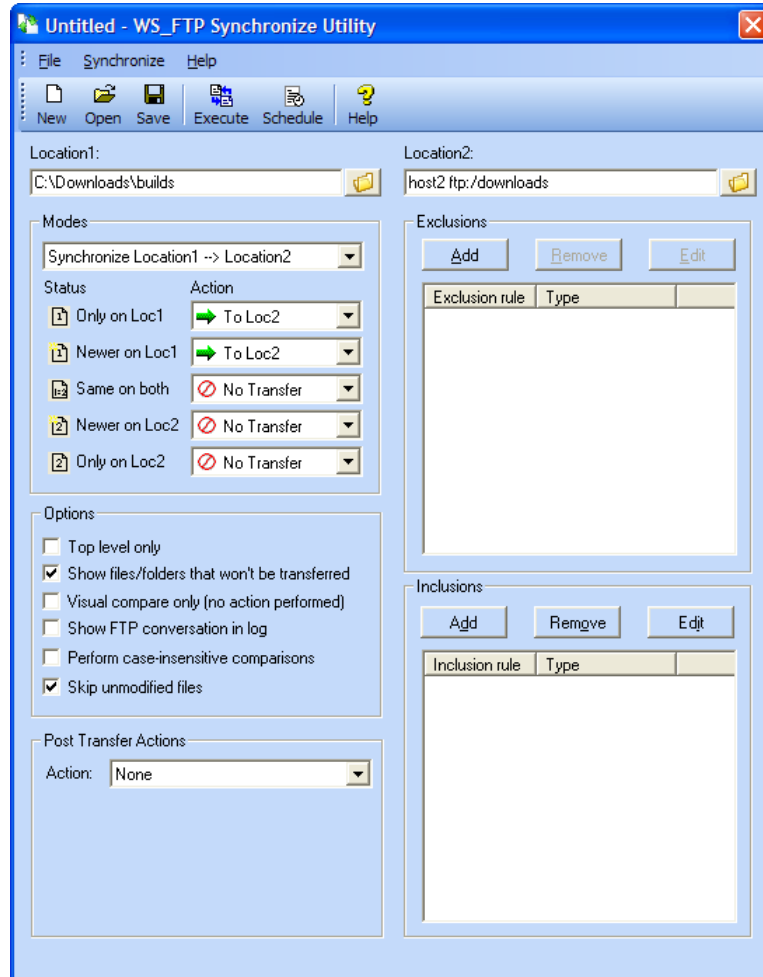
To start the Synchronize Wizard:

- 1 Click **Tools > Synchronize Files > Add a new synchronize task**. The Synchronize Wizard opens.



Bulk Import

- 2 Complete the Synchronize Wizard settings to create a new Synchronize project (control file). After you have completed the Synchronize Wizard, the synchronize settings disin the Synchronize Utility dialog.



- 3 Click:
 - **Execute** to run the sync job immediately.
 - **Schedule** to open the Schedule utility and set times to run the sync job.
 - **Save** to save the sync job control file (.ctl) to store configuration options and setfor your synchronize jobs. This saves you from setting up a job each time you want to run it.

Using the Synchronize Utility

To start the Synchronize Utility:

- From the Tools menu, click **Synchronize Files > Manage synchronize tasks**. The Synchronize Utility opens.

- OR -

- From the Start menu, select **Programs > Ipswitch WS_FTP 12 > Utilities > WS_FTP Synchronize Utility**.

The Synchronize dialog opens.

Synchronize Dialog

This is the main dialog of the WS_FTP Synchronize utility. When you use this dialog, you are creating a control file (.ctl) that will be used to perform the synchronization between the locations you identify.



Important: You cannot use OpenPGP mode when transferring files using the Synchronize Utility. You can transfer files that have already been OpenPGP-encrypted.

The following are the dialog features:

Toolbar buttons - The buttons control the various functions of the utility.

- **New** - Click this button to start a new control file.
- **Open** - Click this button to open a control file.
- **Save** - Click this button to save your current settings as a control file.
- **Execute** - Click this button to execute the synchronize job. If the **Visual compare only** (no action performed) option is selected, the Compare dialog shows the actions that will occur, but no transfers are made.
- **Schedule** - Click this button to schedule the synchronize job through WS_FTP Scheduler.
- **Location1** and **Location2** - The locations section is where you identify the directories that you want to synchronize. Click the Browse button to choose the directory for Location 1 and Location 2. Locations can be either a local or a remote site.
- **Modes** - Select the mode you want Synchronize to operate in.
 - **Synchronize Location 1 --> Location 2** - This mode updates Location 2 so that it includes all the files and subfolders of Location 1.
 - **Synchronize Location 1 <-- Location 2** - This mode updates Location 1 so that it includes all the files and subfolders of Location 2.
 - **Synchronize both Location 1 <--> Location 2** - This mode makes each location match the other by copying the newest version of Location 1 files to the Location 2 and by copying the newest version of Location 2 files to Location 1.
 - **Customized** - Lets you set the actions you want the utility to perform when files are found with a specific status.

Bulk Import

- **Status and Actions** - Use these options when you have chosen **Customized** mode. The **Status** is the current state of the comparison, and the **Action** is what WS_FTP Synchronize will do when it finds an item with that status.
 - **Only on Loc1** - The file is only found in Location 1.
 - **Newer on Loc1** - The file found in Location 1 is newer than the file found in Location 2.
 - **Same on both** - The file found is the same in both locations.
 - **Newer on Loc2** - The file found is newer on Location 2.
 - **Only on Loc2** - The file is only found in Location 2.
- **Options.** Select the options you want Sync to use.
 - **Top level only.** Select this option to have the locations synchronized on the top level only. All subdirectories will be ignored.
 - **Show files/folders that won't be transferred.** Select this option to have Sync disfiles with the **No Action** action code in the Compare dialog.
 - **Visual compare only (no transfer).** Select this option to have Sync populate the Compare dialog without executing the synchronize job. Once you are on the Comdialog, you can make changes to what tasks the job will perform.
 - **Show FTP conversation in log.** Select this option to show the FTP conversation in the generated log file, as well as the log pane on the Compare dialog.
 - **Perform case-insensitive comparisons.** Select this option to have Synchronize ignore differences in upper and lower case filenames.
 - **Skip unmodified files.** Select this option to have Synchronize compare files between the sites. The content is compared using the user selected File Integrity algorithm settings, click **Help** for more information. If the files are the same, no transfer occurs. If the files are not the same, they are updated to the target site(s).



Note: This option compares files before transferring them and therefore may reduce the transfer speed.

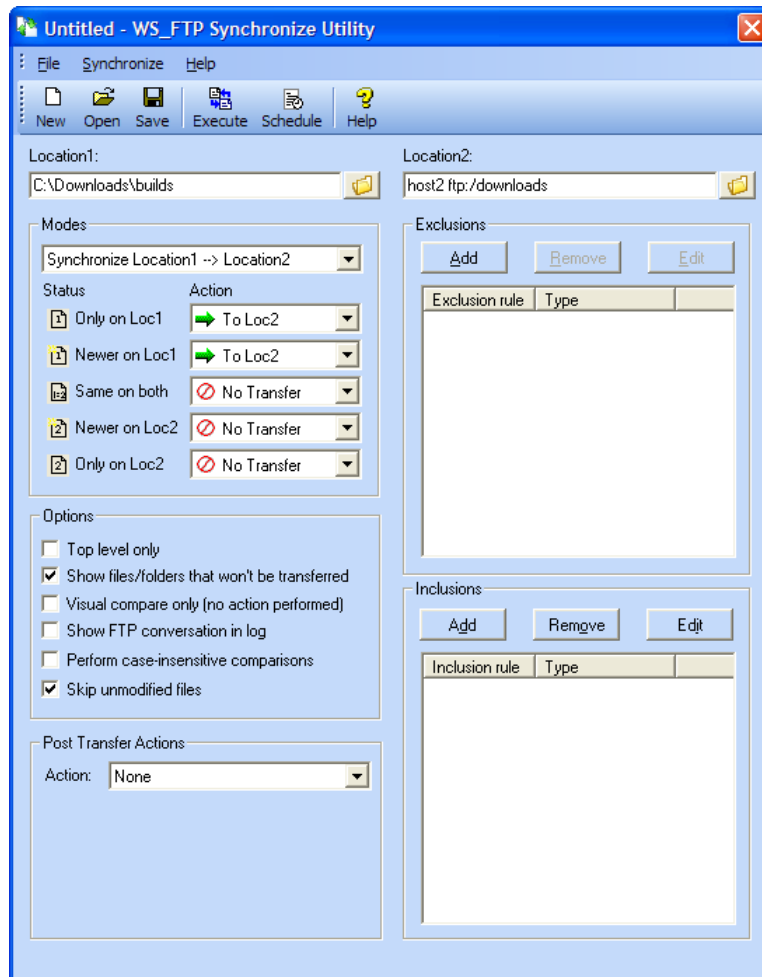


If ASCII Transfer Mode, OpenPGP, Compression Mode, or Append Mode transfer options are used, then the Skip unmodified files option is ignored.

- **Post Transfer Actions.** See *Post Transfer Actions* (on page 36).
- **Exclusions.** See *Exclusions* (on page 38).
- **Inclusions.** See *Inclusion Examples* (on page 39).

Example

The following is an example of how you might use the Synchronize Utility.

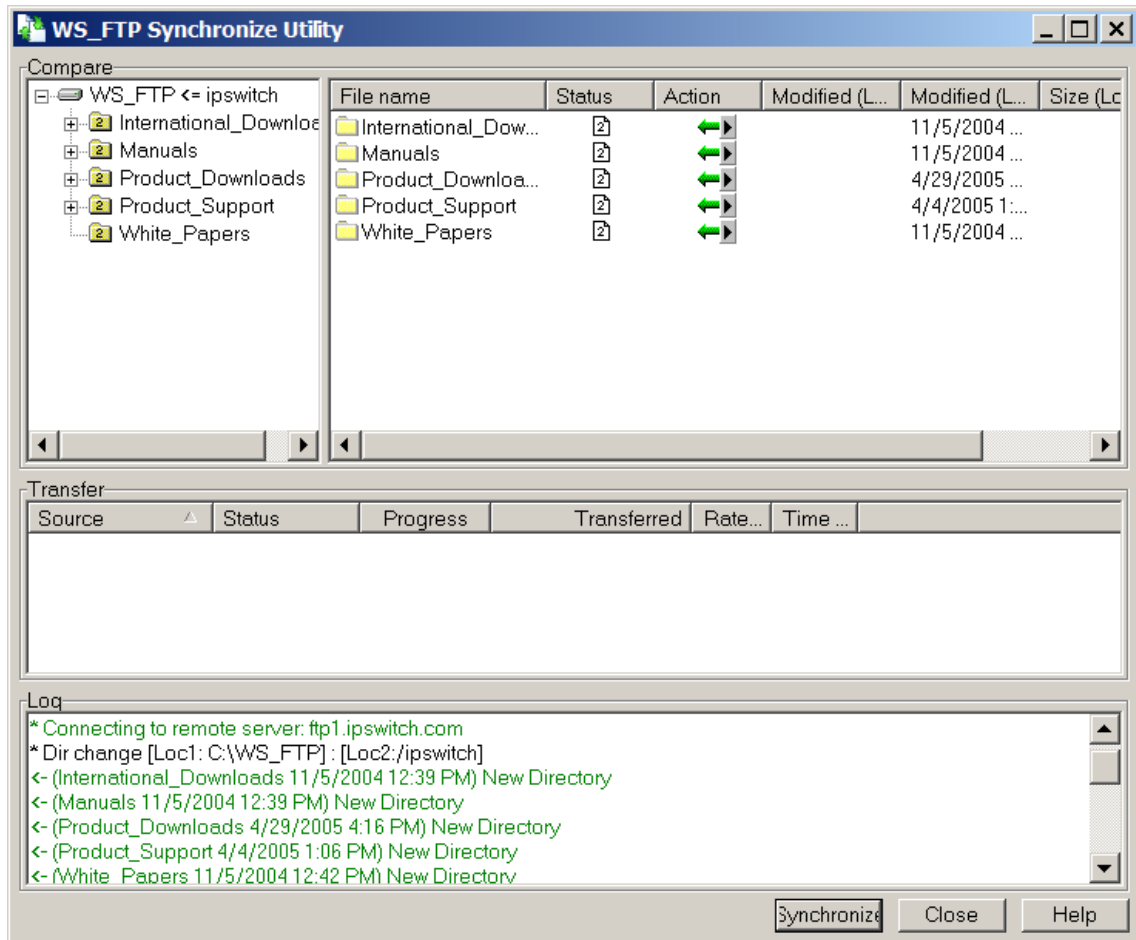


When you click the **Execute** button, the control file named *untitled.ctf* (the name is disingenuous the title bar for the dialogue) is executed according to the parameters set on the WS_FTP Synchronize Utility screen:

- Synchronize makes a connection with the FTP site defined in the **Location 2** box and logs on with the information stored on the site profile.
- After the connection is made, the program navigates to the '/ipswitch' directory on the FTP site and the 'C:\WS_FTP Pro' directory on your local system as defined in the **Location 1** box.
- According to the options selected, **Location 1** is to be updated with all files found in **Location 2**.
- If you want to schedule this task to run on a regular basis, or at a certain time of day, click the **Schedule** button. The **Schedule Item Properties** dialog appears. Use this dialog to set the time, date, and frequency of the synchronize job. For more information on using the WS_FTP Scheduler, see "Using the Scheduler" on page 13.

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- Since the **Visual compare only** option is selected, the transfers will not be executed, but the Compare dialog will appear comparing the two locations, and displaying potential actions to be taken by the utility. You can change the actions to be performed on this dialog, then click **Execute** to start the process.



Using a Control File

The Synchronize Utility uses *control files* (.ctl) to store configuration options and settings for your synchronize jobs. This saves you from having to set up a job each time you want to run it.

To create a control file

To create a control file:

- 1 Choose a directory for both **Location 1** and **Location 2**. You can type in a local directory in either box, or click the **Browse** button to choose a remote site from a

site profile, or a local folder. Click the **Local** tab on the **Folder Selection** dialog to choose a local folder.



Note: You cannot use OpenPGP mode with the Synchronize Utility. If you use a OpenPGP-enabled site with Synchronize, be aware that the files will not be encrypted. You can, however, transfer files that have already been OpenPGP encrypted.

- 2 Select the options you want to use.
- 3 Select the mode you want to execute.
- 4 Review the Status and Actions that will perform and make any adjustments you need to make. If you make an adjustment, your status will be changed to **Customized**.
- 5 Set up any *post transfer actions* (on page 36) you want to use.
- 6 Identify any *Inclusions* (on page 39) or *Exclusions* (on page 38) you may have.
- 7 Click **Save** to save the control file.

You will now be able to use that control file anytime you use Synchronize. You can open and edit the control file when you want to change the Synchronize option.

Executing Control Files Using HotSync (WS_FTP Professional)

You can save a control file (.ctl) as an icon on your desktop and use the HotSync functionality to quickly synchronize files and folders.

To set up a control file as a HotSync shortcut:

- 1 Go through the process of creating a control file.
- 2 Save the control file as a shortcut icon on your desktop.
- 3 To initiate the Synchronize job, double-click the shortcut icon. The Synchronize Utility is displayed to show the progress of the synchronization.

The files and folders are automatically synchronized with the location defined in the control file.

Post Transfer Actions (WS_FTP Professional)

Post transfer actions let you further process a source file after the transfer has been completed. If you are doing an upload, then the source file is in a local folder, and the post transfer action will be processed on the local machine. If you are doing a download, then the source file is in a remote folder, and the post transfer action will be processed on the remote server, if the server allows it.

You can choose from the following actions:

- **None.** No action taken on completion of file transfer.
- **Delete Source File(s).** After the file transfer is completed, delete the source file(s) from the folder.

- **Rename Source File(s).** After the file transfer is completed, rename the source file(s) in the folder.
- **Move Source File(s).** After the file transfer is completed, move the source files to a specified folder.



Note: To move the file, the source location must have access to the specified folder. For example, you cannot move local files to a remote site; you can move files from a local folder to another local folder; or from a remote folder to another folder on the remote site.

- **Rename and Move Source File(s).** After the transfer has completed, renames the source file(s) using the *Rename Mask* (described above), then moves the files to the specified *directory* on the source machine.

To delete a file after the transfer completes:

- 1 For the **Action** option, select **Delete Source File(s)**.
- 2 For any files transferred in the specified Synchronization job, the source files will be deleted.

To move files after the transfer completes:

- 1 For the **Action** option, select **Move Source File(s)**. The Folder box appears.
- 2 Browse and select a folder to which the source files will be moved.

When the transfer is completed, for any files transferred as part of the Synchronization job, the source file will be moved to the specified folder.

To rename files after the transfer completes:

- 1 For the **Action** option, select **Rename Source File(s)**. The File Rename Mask appears.
- 2 In the **File Rename Mask**, enter the characters and any macros to use in renaming the file. For information about what can be entered here, see Post Transfer Macros.

When the transfer is completed, for any files transferred as part of the Synchronization job, the source file will be renamed using the file mask.

To rename and move files after the transfer completes:

- 1 For the **Action** option, select **Rename Source File(s)**. The File Rename Mask and the the Folder box appear.
- 2 In the **File Rename Mask**, enter the characters and any macros to use in renaming the file. For information about what can be entered here, see Post Transfer Macros.
- 3 In the **Folder** box, browse and select a folder to which the source files will be moved.

When the transfer is completed, for any files transferred as part of the Synchronization job, the source file will be renamed using the file mask and then moved to the specified folder.

Exclusions (WS_FTP Professional)

With the Exclusion system, you can enter a file name, file extension, or search string to have WS_FTP Synchronize ignore any files or folders that match the string. Wildcards (* and ?) can be used for unknown file names or several files of a similar name or type.



Note: Exclusion settings are processed after Inclusion settings.

To add an exclusion:

- 1 In the Exclusions section of the dialog, click **Add**. The **Exclusion** dialog appears.
- 2 Enter what you want to exclude in the **Rules** box. If you are using the **Absolute location** type, you can click the **Browse** button to select the file or folder.

Click here for examples of exclusion rules.

- 3 In the **Type** box, select what type of item you want to apply the exclusion to.
 - **Apply to files.** Select to apply the exclusion to files only.
 - **Apply to folders.** Select to apply the exclusion to folders only.
 - **Apply to both.** Select to apply the exclusion to both files and folders.
 - **Absolute location.** Select to apply the exclusion to a specific file or folder in a specific location.
- 4 Click **OK** to add the exclusion to the list.

Exclusion Examples

Here are a few examples of exclusions, followed by an explanation of each.

Absolute file exclusions

Exclusion rule: /mydir/*.exe

Type: Absolute location

This will exclude all .exe files in the mydir remote directory, but the path is taken from the root of the remote system.

Exclusion rule: c:\mydir*.exe

Type: Absolute location

This will exclude all .exe files in the c:\mydir local directory.

Exclusion rule: /mydir/nextdir/myfil?.*

Type: Absolute location

This will exclude any file beginning with myfil with one arbitrary character and any exten in the directory /mydir/nextdir.

Absolute directory exclusion

Exclusion rule: /m?dir

Type: Absolute location

This will exclude all directories that match the mask m?dir, but the path is taken from the root of the file system. The ? is a substitute for any single character.

Exclusion rule: c:\m?dir

Type: Absolute location

This will exclude all directories on the c: drive that match the mask m?dir. The ? is a substitute for any single character.

Relative directory exclusions

Exclusion rule: mydir

Type: Apply to folders

This will exclude any directory named mydir anywhere in the file system.

Exclusion rule: m*ir

Type: Apply to folders

This will exclude any directory that matches the mask m*ir from anywhere in the file system. The * means that the name can have any number and value of character in between the "m" and the "ir."

Relative file exclusion

Exclusion rule: mydir*.exe

Type: Apply to files

This will exclude any .exe files in any directory named mydir anywhere in the file system.

Relative file/folder exclusion

Exclusion rule: ~*

Type: Apply to both

This will exclude any file or folder starting with the ~ character, anywhere in the file system.

Inclusions (WS_FTP Professional)

With the Inclusion system, you can enter a file name, file extension, or search string to have WS_FTP Synchronize include any files or folders that match the string. Wildcards (* and ?) can be used for unknown file names or several files of a similar name or type.



Note: Inclusion settings are processed before Exclusion settings.

To add an inclusion:

- 1 In the Inclusions section of the dialog, click **Add**. The **Inclusion** dialog appears.
- 2 Enter what you want to include in the **Rules** box. If you use the **Absolute location** type, click **Browse** to select the file or folder.

Click for examples of inclusion rules.

- 3 In the **Type** box, select what type of item you want to apply the inclusion to:
 - **Apply to files**. Select to apply the inclusion to files only.
 - **Apply to folders**. Select to apply the inclusion to folders only.
 - **Apply to both**. Select to apply the inclusion to both files and folders.
 - **Absolute location**. Select to apply the inclusion to a specific file or folder in a specific location.
- 4 Click **OK** to add the inclusion to the list.

Inclusion Examples

Here are a few examples of inclusions, followed by an explanation of each.

Absolute file inclusions

Inclusion rule: /mydir/*.exe

Type: Absolute location

This will include all .exe files in the mydir remote directory, but the path is taken from the root of the remote system.

Inclusion rule: c:\mydir*.exe

Type: Absolute location

This will include all .exe files in the c:\mydir local directory.

Inclusion rule: /mydir/nextdir/myfil?.*

Type: Absolute location

This will include any file beginning with myfil with one arbitrary character and any exten in the directory /mydir/nextdir.

Absolute directory inclusion

Inclusion rule: /m?dir

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Type: Absolute location

This will include all directories that match the mask `m?dir`, but the path is taken from the root of the file system. The `?` is a substitute for any single character.

Inclusion rule: `c:\m?dir`

Type: Absolute location

This will include all directories on the `c:` drive that match the mask `m?dir`. The `?` is a substitute for any single character.

Relative directory inclusions

Inclusion rule: `mydir`

Type: Apply to folders

This will include any directory named `mydir` anywhere in the file system.

Inclusion rule: `m*ir`

Type: Apply to folders

This will include any directory that matches the mask `m*ir` from anywhere in the file system. The `*` means that the name can have any number and value of character in between the "m" and the "ir."

Relative file inclusion

Inclusion rule: `mydir*.exe`

Type: Apply to files

This will include any `.exe` files in any directory named `mydir` anywhere in the file system.

Relative file/folder inclusion

Inclusion rule: `~*`

Type: Apply to both

This will include any file or folder starting with the `~` character, anywhere in the file system.

Using the Synchronize Utility from the Command Line

The Synchronize Utility has been designed to be a command line utility that can be scheduled and run unattended. To do this, you must first use the user interface to set up and test a control file for the synchronization task.

After this has been done, you can run the Synchronize Utility directly from the command line by using the following syntax:

You can also add this command to a batch file and schedule it using WS_FTP Scheduler. For more information on using command line batch files, see *Using a Batch File* (on page 66). For more information on using the WS_FTP Scheduler, see *Using the Scheduler* (on page 17).

Script Utility

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Writing and Debugging Scripts	44
Executing Scripts.....	45
Running a Script from the Script Utility.....	45
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The WS_FTP Script Utility lets you group any number of file transfer tasks into a script that can be executed with one action. This can be especially useful for file transfers that you do repeatedly.

This chapter provides an overview of the Script Utility and some examples of how you might use it. For detailed instructions on using the Script Utility, start the Script Utility and use its online Help.

Using scripts, you can:

- Connect to FTP sites
- Upload or download files
- Set the transfer mode
- Make, delete, and rename folders
- Delete and rename files
- After the transfer has completed: delete, rename, move source files
- Execute a DOS command

Scripts can also have some limited flow control. They can:

- Check for the success or failure of the previous command
- Jump to another point in the script if either success or failure is detected

Suppose you post weekly reports on your company's server for your co-workers in other cities to download. Let's assume you place the current week's reports in a folder named *Current*. You could create a script that:

- Changes the name of last week's *Current* folder to *Prior*.
- Creates a new folder named *Current*.
- Uploads your current weekly reports to the *Current* folder.

You can also create scripts for downloads that you do repeatedly.

Starting the Script Utility (WS_FTP Professional)

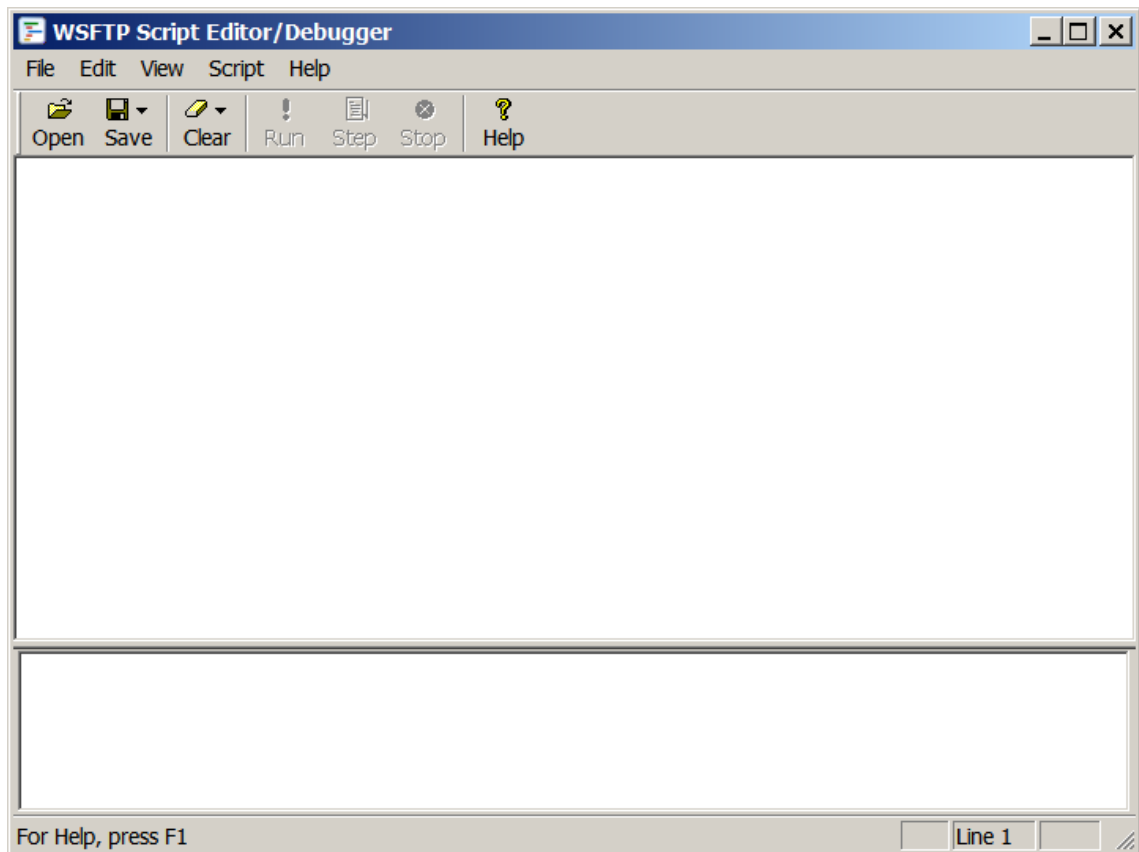
You can start the WS_FTP Script Utility in the following ways:

- Select **Start > Programs > Ipswitch WS_FTP 12 > Utilities > WS_FTP Script Utility**.
- With WS_FTP open, select **Tools > Script Utility**.

Writing and Debugging Scripts

To write and/or debug a script, start the Script Utility.

The Script Editor/Debugger window appears.



For a complete list of scripting commands, see “Script Command Reference” in the online help.

Executing Scripts

You can execute scripts from either the Command Prompt or from the Script Utility itself.

Executing a Script from the Command Prompt

Go to the Command Prompt and type *ftpscript* followed by the appropriate command line parameters.

For example:

There are other parameters you can use with the *ftpscript* command. For detailed information go to the Script Utility online Help and see “Executing Scripts.”

To be able to run a script from any location on your hard disk, we recommend that you place the Script Utility folder in the Path statement in your *Autoexec.bat* file - if you are running Microsoft Windows XP. If you're using Windows 2003, add the WS_FTP Professional folder to the path variable in the System Environment.

Running a Script from the Script Utility

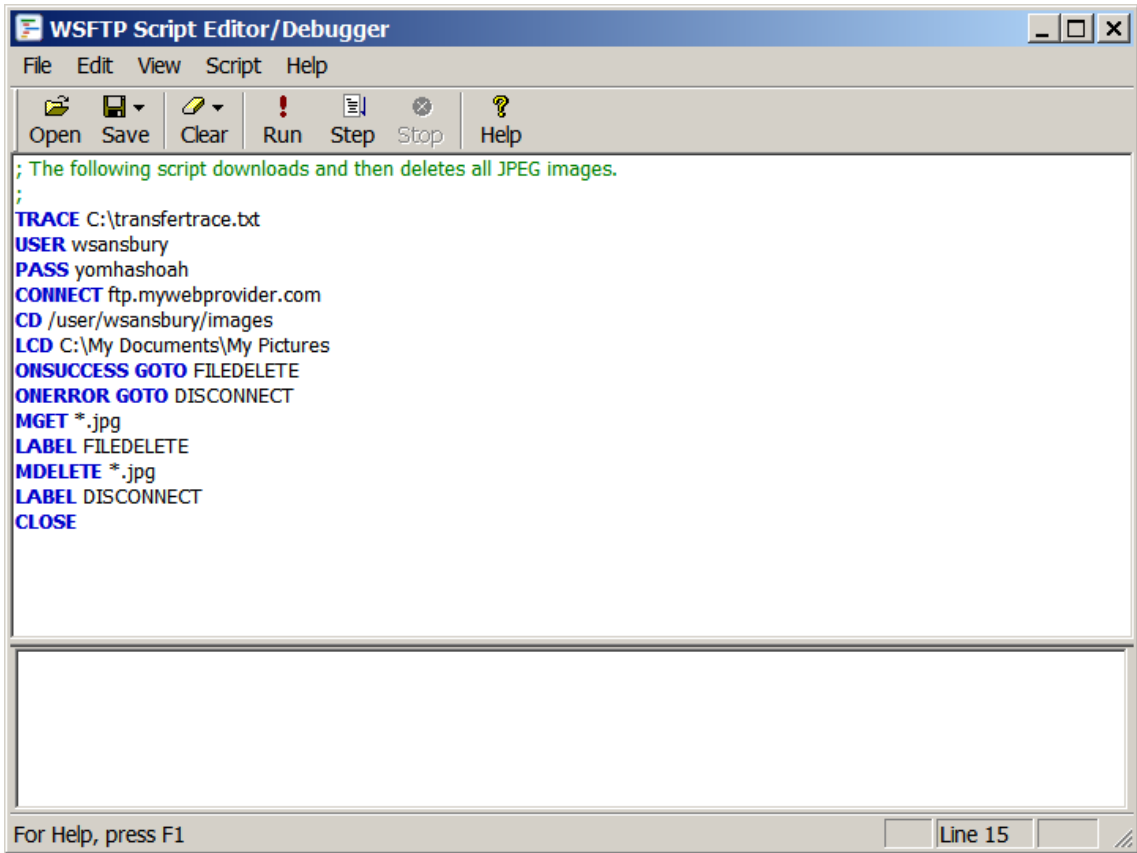
To run a script from the Script Utility, start the utility, open the script, then click **Run**.

Example

In the following example, the script executes the following sequence of commands:

- 1 Turns on the Trace command to send detailed information to the *transfertrace.txt* file.
- 2 Logs onto the server with the user name *wsansbury*.
- 3 Logs onto the server with the password *yomhashoah*.
- 4 Connects to the FTP server *ftp.mywebprovider.com*.
- 5 Changes the remote directory to */user/wsansbury/images*.
- 6 Changes the local directory to *C:\My Documents\My Pictures*
- 7 If the MGET is successful, the script executes the FILEDELETE label.
- 8 If the MGET fails, the script executes the DISCONNECT label.
- 9 All files ending in *.jpg* are copied from the remote directory to the local directory.
- 10 This line identifies the FILEDELETE label.
- 11 All files ending in *.jpg* are deleted from the */user/wsansbury/images* remote folder.
- 12 This line identifies the DISCONNECT label.

13 CLOSE disconnects from the FTP server



Search Utilities (local and remote)

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WS_FTP lets you search local files or a remote site for files that match your search criteria. After the files are found, you can transfer the files to the appropriate local or remote location.

Remote search is especially useful if you are looking for files on a large, complex FTP site.

Local search helps you find files or file content on your computer. The Local search provides two types of search capabilities:

- **File content.** Use the Google™ Desktop or Copernic Desktop Search™ to search for content within files on your computer.
- **File name.** Use the Windows® Desktop Search to search for files by file name on your computer.

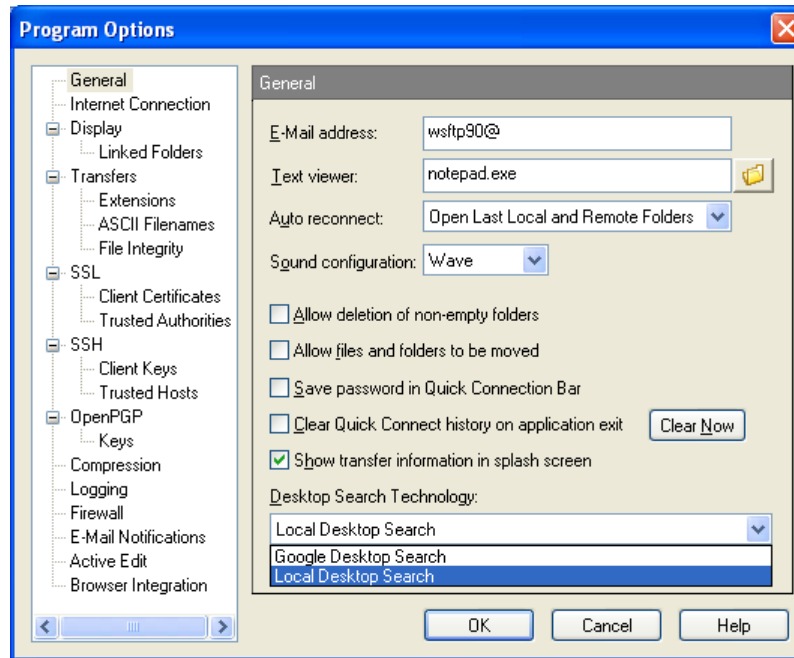
This chapter provides an overview of the local and remote search utilities and some examples of how you can use them. For more information, see the online Help.

Using Local Search

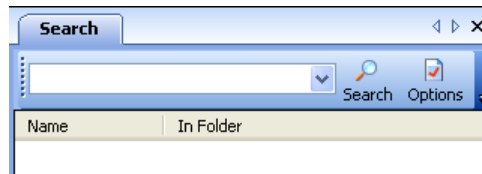
Use the **Local Files** Search to search for files by *file name* or search for *file content* on your computer.

To find files on your computer (searching for file names):

- 1 Make sure that the Local Desktop Search is enabled in the Program Options, under **Tools > Options > General**, in the **Desktop Search Technology** box click **Local Desktop Search**, then click **OK**.

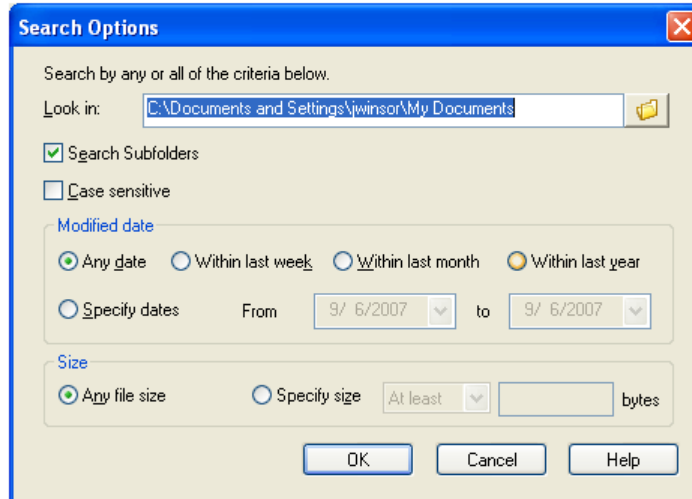


- 2 From the **Tools** menu, click **Search > Local File**. The Search tab opens in the local connection window.



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- 3 In the **Search** box, enter the file name or part of the file name you want to find. You can use wild card characters such as * and ?. For additional search options, click **Options**. The Search Options dialog box opens. Click **Help** for more information about the Search Options dialog.



- 4 Click **OK**. The search results are displayed in the search results list.
- 5 Select the file that you want to upload from the search results. Upload the files to the FTP server you select. For more information about search result transfer options, see the following section *Using the Local Search Results* (on page 51).



Only a single file at a time can be selected and transferred from the search results.

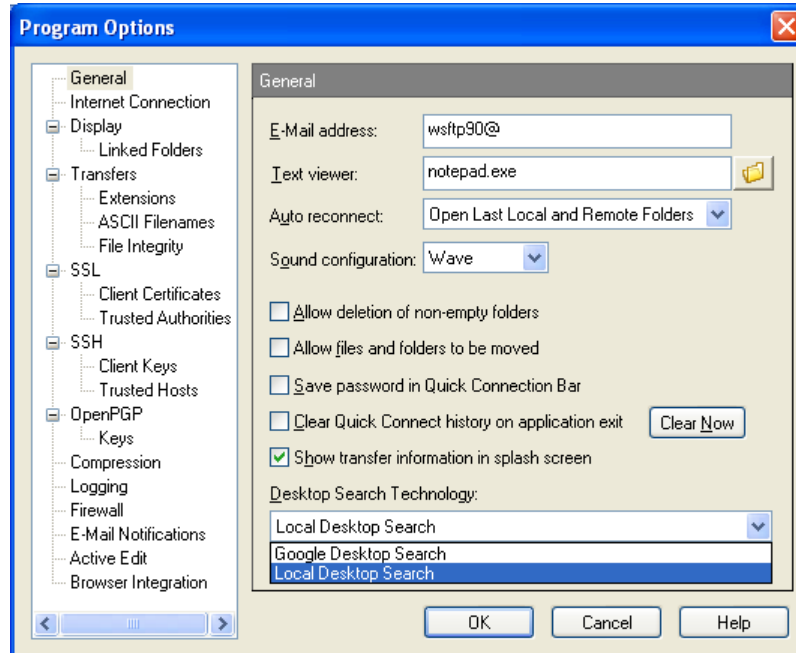
You can also search for content within files on your computer with the Google™ Desktop Search or Copernic Desktop Search™ options.



Copernic or Google Desktop Search utility must be installed to search for file content using their integrated search engine from the Ipswitch WS_FTP client. If the desktop search utility is installed on your computer, it will appear in the **Program Options > General > Desktop Search Technology** list.

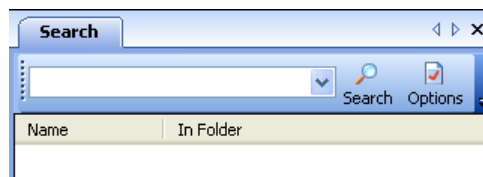
To find file content in files on your computer:

- 1 Make sure the Local Desktop Search is enabled in the Program Options, under **Tools > Options > General**, in the **Desktop Search Technology** box click your preferred desktop search engine, **Google Desktop Search** or **Copernic Desktop Search**, then click **OK**.



If the Google Desktop Search or the Copernic Desktop Search utility is installed on your computer, it appears in the Desktop Search Technology list.

- 2 From the **Tools** menu, click **Search > Local File**. The Search tab opens in the local connection window.



- 3 In the **Search** box, enter the file content search criteria for the text you want to find.



The **Google Desktop Search** or the **Copernic Desktop Search** parameters are determined by each search utility. Refer to the Help information to learn about using each utility's unique search parameter requirements.



The search **Options** button is disabled when the **Google Desktop Search** or the **Copernic Desktop Search** utility is installed and enabled. If the desktop search utility is installed on your computer, it appears in the **Tools > Options > General > Desktop Search Technology** list.

- 4 Click **OK**. The search results are displayed in the search results list below.

Bulk Import

- 5 Select the file that you want to upload from the search results. Upload the files to the FTP server you select. For more information about search result transfer options, see the following section *Using the Local Search Results* (on page 51).



Only a single file at a time can be selected and transferred from the search results.

Using the Local Search Results

After you locate a file on a local site, you can right-click, then click:

- **Upload using the WS_FTP Upload Wizard.**
- **Send to [favorites site name]** (HotDrop file) to transfer the file to the HotDrop's associated remote site.
- **WS_FTP Transfer > Compress and Transfer as [filename.zip]** to transfer the file to the active remote site.
- **WS_FTP Transfer > Encrypt and Transfer** to use an encryption key to encrypt a file before transfer.
- **WS_FTP Transfer > Sign and Transfer** to add your digital signature to a file. By adding your digital signature, you provide a higher degree of confidence in the file integrity for those downloading your files.
- **WS_FTP Transfer > Encrypt, Sign and Transfer** to first encrypt a file, then to add your digital signature.
- **Send to Scheduler** to open the Schedule Properties dialog and schedule a file transfer.

To transfer a file

- 1 In the search results dialog box, select the file you want to transfer, then select one of the short cut (right-click) menu options described above.
- 2 Select the site or folder to upload the file to.

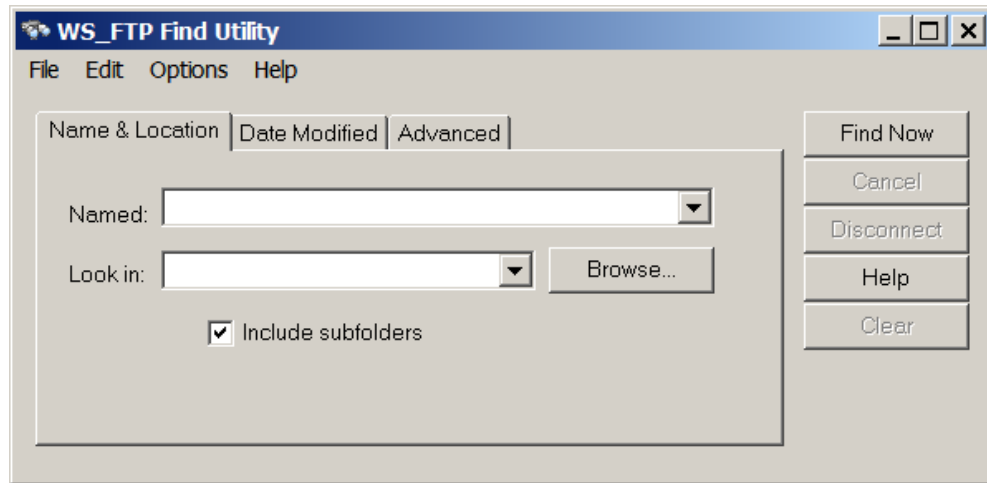
Using Remote Search

Use the **Remote Files** search to find files by *file name* on a remote site.

To find files on an FTP site:

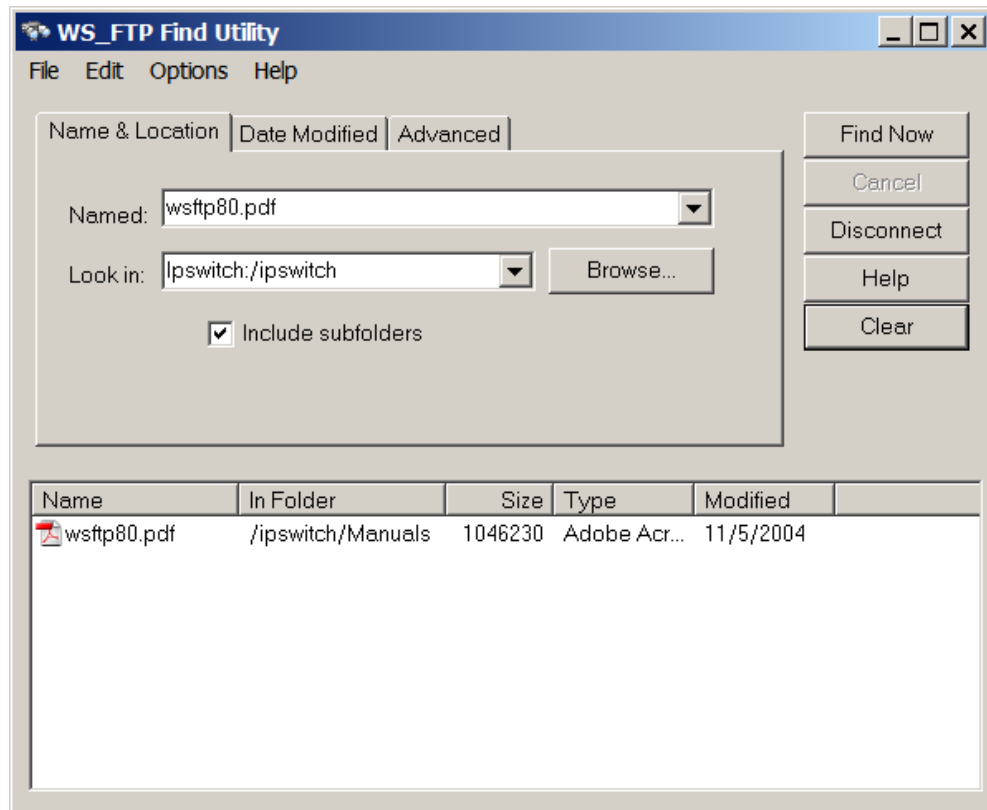
- 1 Start the Find Utility by doing one of the following:
 - From the **Tools** menu, click **Search > Remote File**. The WS_FTP Find Utility dialog opens.
- OR -

- From the **Start** menu, select **Programs > Ipswitch WS_FTP 12 > Utilities > WS_FTP Find Utility**.



- Use the **Look in** list box to select a site previously searched or click the **Browse** button to specify the site to which you will connect and search. You can also type in a host name or FTP URL.
- Enter your search criteria. You can search by name, date modified, size, or any combination of the three.
- Click **Find Now**. The Find Utility connects to the FTP site and searches according to your criteria.

For example, if you search the Ipswitch FTP site for a file named *wsftp80.pdf*, the following results are displayed.



Using the Remote Search Results

After you locate a file on a remote site, you can:

- Transfer it.
- Schedule it for transfer at a later time, by selecting **Send to Scheduler** from the right-mouse menu.

To transfer a file

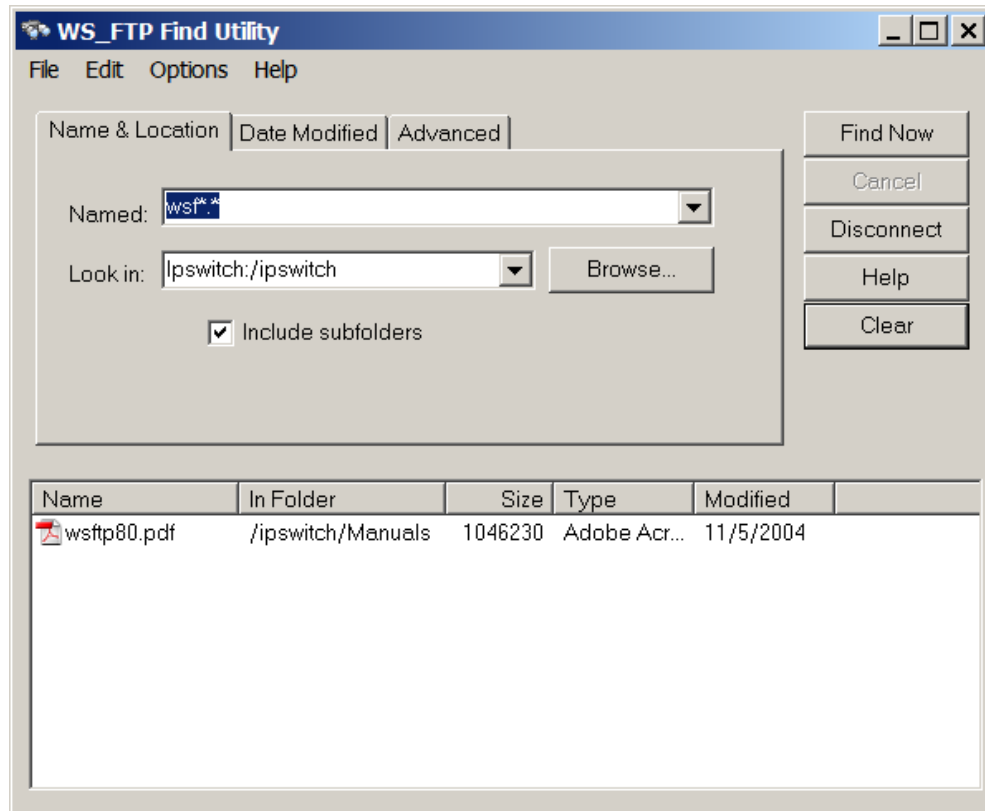
- 1 In the dialog box above, select the file you want to transfer, and select **Transfer** from the right-mouse menu. A browse window appears.
- 2 Select the folder to which you want to download the file.

Examples

The following are examples of different types of searches.

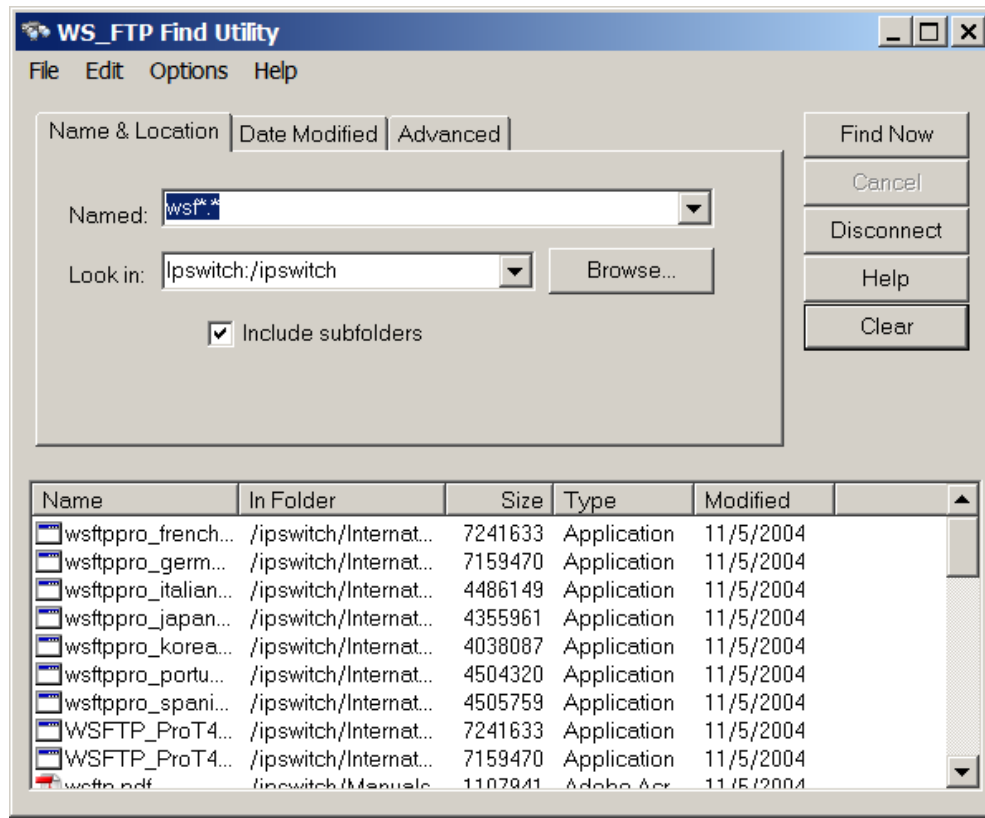
Finding a File When You Are Not Sure of Its Name

The example below shows how to search for a file when you are not sure of the correct full name. In this case, the name begins with `ws_f`, but the rest of the name is unknown. The `*` at the end is a “wildcard” that takes the place of the missing characters. When this search is run, the Find Utility locates every file on the site that begins with `ws_f`.



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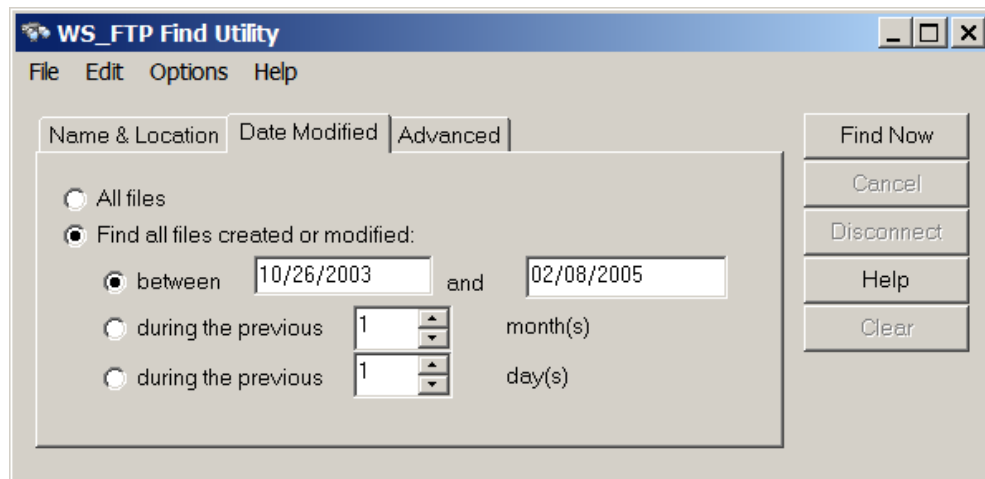
The results of the search are shown below.



You can also use wildcard characters (* and ?) at the beginning of a name if you are unsure about the beginning characters. For example, searching for *.exe returns all files ending with the .exe file extension.

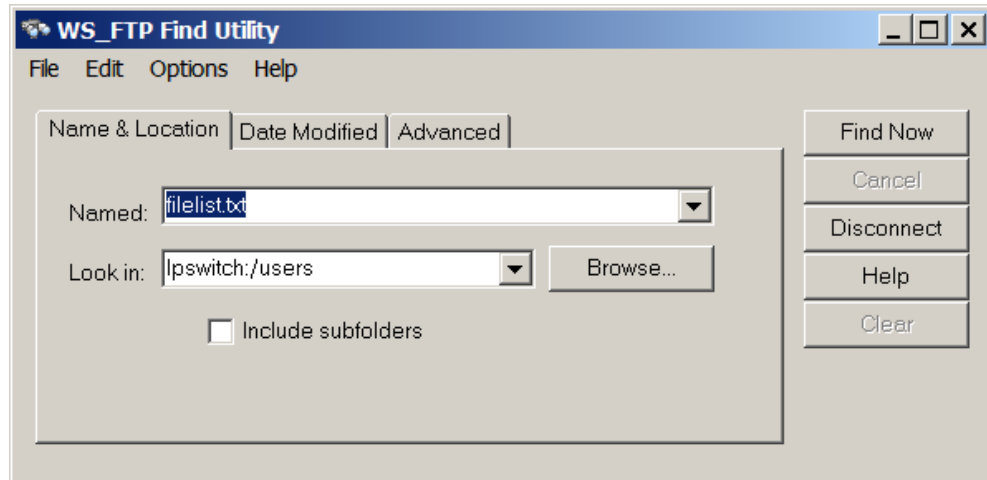
Finding a File Modified During a Specific Time Period

To search for a file modified during a specific time period, click the **Date Modified** tab and set the options you need. In the example below, the WS_FTP Find Utility will search for all files modified between October 26, 2003 and February 08, 2005.



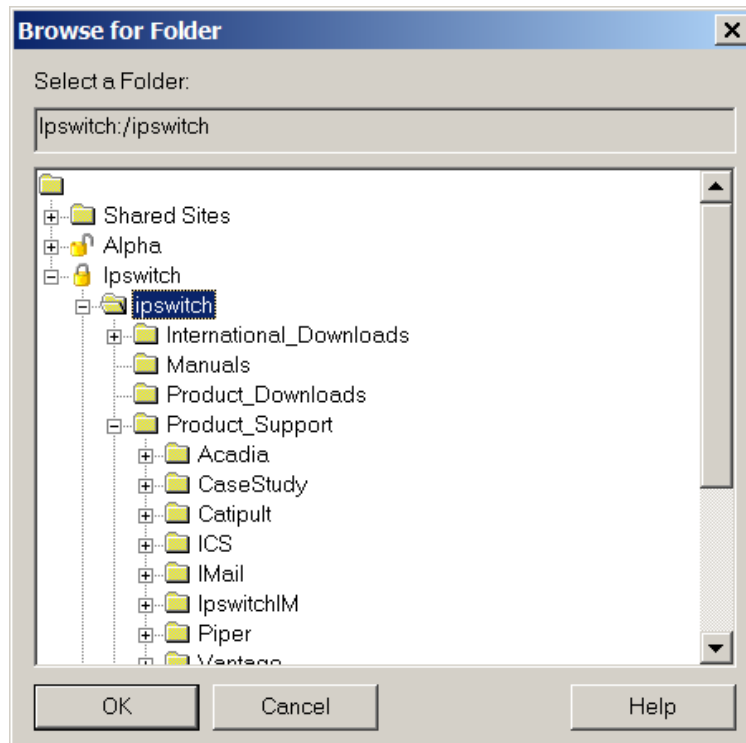
Finding a File in a Particular Folder

If you know the name of the folder in which the file you are looking for is stored, you can narrow your search by having the Find Utility look only in that folder.



To locate a particular folder:

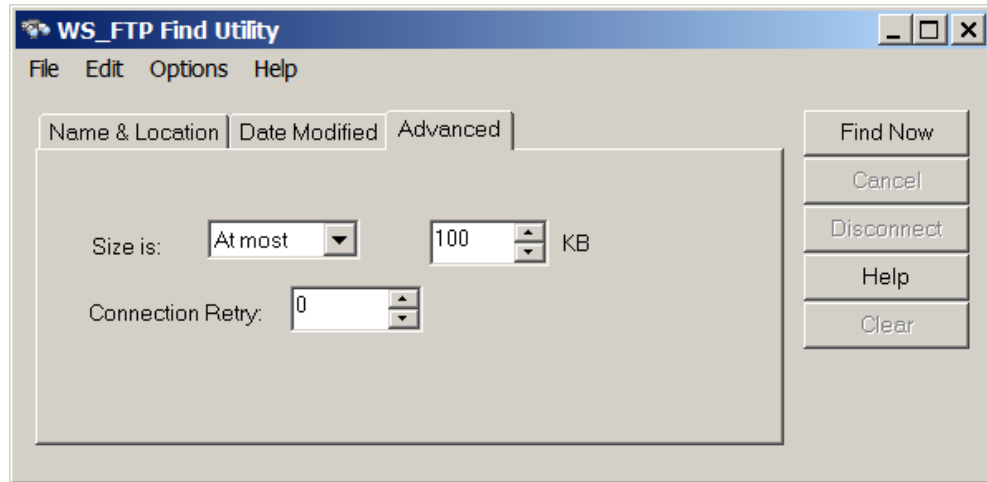
- 1 Click the **Browse** button next to the **Look In** field to connect to the selected site and display a list of the available folders.



- 2 Select the folder that you want to search.
- 3 Click **OK**. The **Look In** box is filled in with the path of the selected folder.
- 4 Click **Find Now** to search through the files in that folder.

Finding a File Smaller Than a Certain Size

If you want to limit the size of the files found in a given search, enter the FTP site and file name on the **Name & Location** tab, then click the **Advanced** tab.



In the Size is box, you can select **At least** or **At Most**, then enter the file size in kilobytes in the **KB** box.

Using the Command Line

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You can use the command line from the command prompt to run the WS_FTP interface.

When you use the command line, you are actually running a *subset* of the functionality of the WS_FTP interface. Using the command line, you can:

- Upload and download files
- Specify ASCII or binary transfer mode
- Convert file names to lowercase when uploading
- Set up pre-scheduled transfers
- Create batch files that will handle multiple commands
- Use post transfer actions to delete, rename, or move source files after the transfer has completed



Note: Though some command lines in this chapter may wrap across multiple lines, all command lines should be entered on one line.

Basic Command Line Syntax

The following illustrates the correct command line syntax, broken down by argument type.

```
wsftppro -s <source> -d <destination>
```

For example, a command using this format would look like this:

```
wsftppro -s local:c:\tartan.bmp -d robert!border:/pub/tartan.bmp
```

The section below shows the breakdown of that command into the parts illustrated above. The command name **wsftppro** must always be placed in the beginning of the command.



Note: So you can use the command line from any location on your hard disk, we recommend that you place the WS_FTP folder in the Path statement in your **Autoexec.bat** file, if you are running Windows 2000, Windows 2003, or Windows XP. Otherwise, change to your WS_FTP folder when you use the commands.

Site Information

```
wsftppro -s local:c:\tartan.bmp -d robert!border:/pub/tartan.bmp
```

If you use a configured site from the command line, WS_FTP uses the User ID, Password, and Account Name you saved in the site configuration. To use a configsite, enter the site name in front of the remote directory (which can be either the source or the destination). If the configured site is stored in a folder, you must also enter the folder name. Separate the folder name from the site name by using the ! symbol (*sitefolder!site*). In the example above, we use the *border* site configuration stored in the *robert* folder.

If you have saved a password with the site, WS_FTP logs you on using the saved password. If you have *not* saved a password with the site, you can enter it in the command line by using the **-w** argument.

For example:

```
wsftppro -u username -w password -s robert!border:/pub/tartan.bmp -d local:c:\armstrong\
```

If you have saved an account name in the site configuration, the command line logs you on using the saved account name. If you have *not* saved an account name, you can use the **-c** argument to specify the account name when you enter the command line. For example:

```
wsftppro -c account -s robert!border:/pub/tartan.bmp -d local:c:\armstrong\
```

If you do not use a configured site profile, you must put the IP address, URL, or host name in the source or destination argument to connect to that site. See the **Transfer Source** and **Transfer Destination** sections for examples of command line commands that use this.

Transfer Source

```
wsftppro -s local:c:\tartan.bmp -d robert!border:/pub/tartan.bmp
```

The transfer source argument begins with the **-s** argument, followed by the label for the source, and the path to the item or items being transferred. If the source of the transfer is your local system, the source label is *local*. If you are doing a download, the source label is either the site folder!site name or the IP address, FTP URL, or Host name of the remote site. For example:

```
wsftppro -s robert!border:/pub/tartan.bmp -d local:c:\tartan.bmp
```

or

```
wsftppro -s ftp://username:password@border.ipswitch.com/pub/tartan.bmp -d  
local:c:\armstrong\
```

or

```
wsftppro -u username -p password -s 156.21.50.78:/pub/tartan.bmp -d local:c:\
```

Transfer Destination

```
wsftppro -s local:c:\tartan.bmp -d robert!border:/pub/tartan.bmp
```

The transfer destination argument begins with the **-d** argument, followed by the label for the destination, and the path to where files are being transferred to. If the destination is your local system, the destination label is *local*. If you are doing an upload, the destination label is either the site folder!site name (as in the example above) or the IP address, FTP URL, or Host name of the FTP site. For example:

```
wsftppro -s local:c:\tartan.bmp -d  
ftp://username:password@border.ipswitch.com/pub/tartan.bmp
```

or

```
wsftppro -s local:c:\tartan.bmp -u username -w password -d  
156.21.50.78:/pub/tartan.bmp
```

File Transfer Options

Uploading Files

To upload a file, use the basic command syntax with the file or files you want to upload identified in the source argument. For example; if you want to copy the file *tartan.bmp* from the *armstrong* folder on your C: drive and place it in the */pub/* folder on the site identified in the *border* site profile use:

```
wsftppro -s local:c:\armstrong\tartan.bmp -d
robert!border:/pub/tartan.bmp
```

or

```
wsftppro -s local:c:\armstrong\tartan.bmp -d robert!border:/pub/
```

Notice that the second option omits the file name from the destination location. You can do this when you want the transferred file to have the same name as it does in the source local. However, note that you **must** enter the trailing slash after the destination folder in order for this to work.

Downloading Files

Use the same command syntax as described above for downloading files, except that, the source of the transfer is the remote system instead of your local system.

```
wsftppro -s robert!border:/pub/tartan.bmp -d
local:c:\armstrong\tartan.bmp
```

In the example above, you are connecting to the remote system using the *border* site profile and downloading the *tartan.bmp* file to the *armstrong* folder on your C: drive.

Renaming Files

To rename a file during the upload, enter a new file name after the destination folder. For example, to upload the **Tag.doc** file and rename it **NewTag.doc** on the FTP site, type:

```
wsftppro -s local:c:\sports\Tag.doc -d
robert!border:/pub/drop/NewTag.doc
```

Adding Current Date and Time Information to File Names

To automatically add the current date and time information during the upload, enter the **%date** attribute after the file name in the destination folder. For example, to include the date and time on the **Tag.doc** file on the FTP site, type:

```
wsftppro -s local:c:\sports\Tag.doc -d
robert!border:/pub/drop/Tag%date.doc
```

The date and time will be added in the following format:

YYYYMMDD.HH:MM:SS

For example, the file in the example (Tag.doc), if transferred on Feb 4, 2009 at 11:00 AM, would be renamed as:

Tag20090211:00:00.doc

Compressing Files

To compress a file to a .zip file during the upload, enter the **-compress** argument, type:

```
wsftppro -compress -s local:c:\sports\Tag.doc -d  
robert!border:/pub/drop/Tag.doc
```

Transferring multiple files from the same location

If all the files you want to transfer are in the same folder, you can use the wildcard charac* and ?, in the file name. For example, if you want to upload all of the files in C:\Sports\ use:

```
wsftppro -s local:c:\sports\*. * -d robert!border:/pub/drop/
```

Or, to transfer all .doc files in the same folder, enter:

```
wsftppro -s local:c:\sports\*.doc -d robert!border:/pub/drop/
```

To transfer multiple files not in the same folder, see *Multiple Folders or Com* (on page 67).

Converting File Names to Lower Case

When uploading files, you can have WS_FTP convert file names to lower case by adding the **-lower** argument at the end of the command line. For example, if the file you want to transfer is named **Tag.doc**, WS_FTP can upload it as **tag.doc** by using:

```
wsftppro -s local:c:\sports\Tag.doc -d robert!border:/pub/drop/ -lower
```

Post Transfer Actions

Post transfer actions let you further process a source file after the transfer has been completed. If you are doing an upload, then the source file is in a local folder, and the post transfer action will be processed on the local machine. If you are doing a download, then the source file is in a remote folder, and the post transfer action will be processed on the remote server, if the server allows it.

The following post transfer actions are available from the command line:

- **-delete**
After the file transfer is completed, delete the source file(s) from the folder.
- **-rename [*Rename Mask*]**
where *Rename Mask* includes the characters and any *macros* (on page 64) to use in renaming the file.
After the file transfer is completed, rename the source file(s) in the folder.
- **-move [*directory*]**

After the transfer has completed, moves the source file(s) to the specified *directory* on the source machine.

Deleting source files after transfer

```
wsftppro -s local:c:\sports\*.doc -d robert!border:/pub/drop/ -delete
```

When the transfer is complete, the source files (c:\sports*.doc) will be deleted.

Renaming source files after transfer has completed:

```
wsftppro -s local:c:\sports\*.doc -d robert!border:/pub/drop/ -rename  
[dd] [mm] [yy] [hh] [OnlyName] . [OnlyExt]
```

When the transfer is complete, the source files (c:\sports*.doc) will be renamed, which if transferred on Jan 15, 2009 at 11:00 am, will be renamed with the date and time prefixed to the original file name and extension; for example: c:\sports\tartan.doc would be renamed c:\sports\01150911tartan.doc

Moving source files after transfer has completed:

```
wsftppro -s local:c:\sports\*.doc -d robert!border:/pub/drop/ -move  
c:\sports\archive\
```

When the transfer is complete, the source files (c:\sports*.doc) will be moved to the directory: c:\sports\archive\

Renaming and moving source files after the transfer has completed:

```
wsftppro -s local:c:\sports\*.doc -d robert!border:/pub/drop/ -rename  
[dd] [mm] [yy] [hh] [OnlyName] . [OnlyExt] -move c:\sports\archive\
```

When the transfer is complete, the source files (c:\sports*.doc) will be renamed, which if transferred on Jan 15, 2009 at 11:00 am, will be renamed with the date and time prefixed to the original file name and extension; for example: c:\sports\tartan.doc would be renamed c:\sports\01150911tartan.doc. The source files are then moved to the directory: c:\sports\archive\

Post Transfer Rename Macros

The Rename Mask lets you create a mask, or rule, that WS_FTP will use to rename a file, after the file transfer completes. The file name of the original file is compared to the mask, and the new file name is generated. In this mask, you can enter any data you want to include in the file name, such as a store number, or some other identifier.

You can also use macros, which are variables that you can use to add data to the file name, for example the date and time the file was transferred file. You can select from the following macros to create the File Rename Mask.

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- [OnlyName] - The original file name minus the extension and the period (between name and extension). To retain the original file name, you must use this macro.
- [OnlyExt] - The original file name extension. To retain the original file name extension, you must use this macro.



If you want to retain the original file name and extension, you would enter [OnlyName].[OnlyExt]. Whether or not you retain the original name or extension, you need to include the period between the file name and extension.

- [H] - HOUR; minimal representation, 24-hour clock. Example: "7"
- [HH]- HOUR; two-digit representation, 24-hour clock. Example: "07"
- [TT] - MINUTE; two-digit representation. Example: "07"
- [SS] - SECOND; two-digit representation. Example: "07"
- [MM] - MONTH; two-digit numeric representation. Example: "07"
- [DD] - DAY-OF-MONTH; two-digit representation. Example: "07"
- [YY] - YEAR; two-digit representation. Example: "02"
- [YYYY] - YEAR; four-digit representation. Example: "2002"

For example, if you want to upload a file named inventory.pgp, then rename the file in the destination directory with the upload date and time, you could use macros to create the following **File Rename Mask**:

```
[mm][dd][yy][hh][OnlyName].[OnlyExt]
```

which, if transferred on January 15, 2009 at 7:00 AM, would rename the file to: 01150907inventory.pgp



You do have to enter the period that separates the file name from the extension.

File Transfer Modes

You can transfer files in binary mode or in ASCII mode. We recommend using binary mode to transfer all files unless you know the file contains only text, then you are able to use ASCII mode.

To specify the transfer mode, you use the **-binary** or **-ascii** argument at the end of the command string.

When you *do not* specify the transfer mode in the command line, WS_FTP transfers the file in whatever file transfer mode is the default in the WS_FTP interface. Therefore, if you plan on using the command line more than just occasionally, set the **Startup Transfer Mode** to Auto Detect.

Transferring Files and Folders with Spaces in the Name

If you are transferring a file whose name has spaces in it, you have two options. You can enclose that portion of the command line in quotes, or use the short name of the file (as shown in the Dir listing you get from the command prompt.)

Enclosing the Command Line in Quotes

If the file you want to transfer is named **my tartan.bmp**, use:

```
wsftppro -s "local:c:\armstrong\my tartan.bmp" -d "robert!border:/pub/my  
tartan.bmp"
```

Using the Short Name

If the file you want to transfer is named **my tartan.bmp** in Windows, but appears as **my~1.bmp** when you use the Dir command at the command prompt, you can use the short file name to transfer the file (as shown in the Dir listing you get from the command prompt). To do this (using the first example in this chapter), enter:

```
wsftppro -s local:c:\armstrong\my~1.bmp -d robert!border:/pub/my~1.bmp
```

Using a Batch File

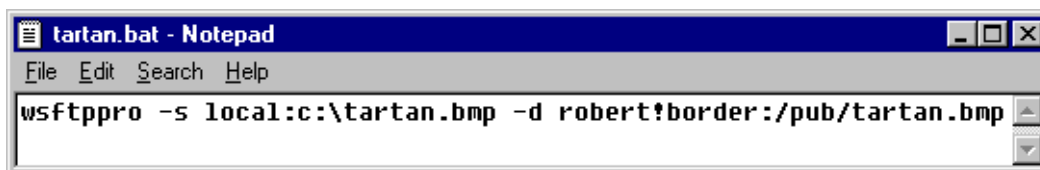


Note: You cannot run two batch files at the same time.

Instead of typing the command at the command prompt, you may find it more expedient to enter the command line into a batch file (a text file with the file extension **.bat**). This makes it easier to correct mistakes and to run the same command again.

You run the command by invoking the **.bat** file at the command prompt, double-clicking the icon for the **.bat** file from within Windows, or running the **.bat** file from another application (such as WS_FTP Scheduler).

Here is a batch file (for the example at the beginning of this chapter) as viewed from a Windows text editor:



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When you run the batch file named **tartan.bat**, WS_FTP uploads the **tartan.bmp** file to the **border** FTP site.

Note that using a batch file involves placing the command name **wsftppro** at the beginning of each line in the file. Since each instance of the command name starts the WS_FTP application (and connects to the remote site), you would only use a batch file to work with one command at a time. If, on the other hand, you want to issue a *group* of commands, follow the procedure in *Multiple Folders or Commands* (on page 67).

Remember that if a file name has a space in it, you must enclose that entire argument in quotes.

Multiple Folders or Commands

To transfer files to or from multiple source or destination folders, or to issue multiple comuse the **-m** argument followed by the name of a text file that contains the commands. To transfer files from several locations on the hard disk described in the first example in this chapter, enter (at the command prompt or in a batch file) something like:

```
wsftppro -m xferall.txt
```

where the content of **xferall.txt** (as viewed in Windows Notepad) is:



```
xferall.txt - Notepad
File Edit Search Help
-s local:c:\tartan.bmp -d robert!border:/pub/tartan.bmp
-s local:c:\armstrong\history.htm -d robert!border:/homepage/
-s local:c:\armstrong\armstrong.gif -d mysites!celtic:/pics/
```

Note that:

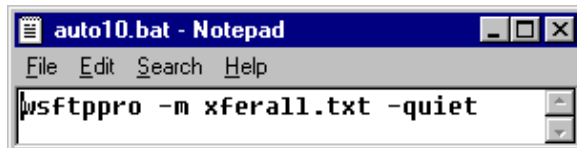
- The command name **wsftppro** must *not* appear in the text file
- Each line of text must contain only one command line.
- Each command line can contain any of the arguments described in this chapter.
- If a file or folder name has a space in it, you must enclose that entire argument in quotes.

Pre-scheduled Transfers ("Automated Transfers")

You can use the command line to schedule transfers that you want to run automatically. To do this, you create a batch file as described above, and then run the batch file using WS_FTP Scheduler. For more information, see *Scheduler Utility* (on page 17).

When you use the command line to perform a pre-scheduled transfer, you may use the **-quiet** parameter to prevent WS_FTP from displaying a message box if an error occurs. This is particularly useful for avoiding a situation in which WS_FTP might otherwise prompt for user input, such as clicking the **OK** button in an error message. This way, you can pre-schedule transfers to run automatically when you're not at your computer. (When you return to the computer, you can always check the log file to see if there were any problems.)

To use the examples shown previously, you could do a pre-scheduled transfer by creating the following batch file:



```
wsftppro -m xferall.txt -quiet
```

as well as the following text file:



```
-s local:c:\tartan.bmp -d robert!border:/pub/tartan.bmp  
-s local:c:\armstrong\history.htm -d robert!border:/homepage/  
-s local:c:\armstrong\armstrong.gif -d mysites!celtic:/pics/
```

Then, you could have the Scheduler run the **auto10.bat** file at 10:00 PM each night.

Remember that if a file name has a space in it, you must enclose that entire argument in quotes.

Extras

Here are a few more arguments and uses of the command line that some users have found helpful. These are listed below.

To have WS_FTP display a dialog box that prompts you for the command line, type:
wsftppro -ask

To launch the WS_FTP interface and default to the border site inside a folder named robert: **wsftppro -p robert!border**

To prevent WS_FTP from displaying error messages, use the **-quiet** argument. This is useful if you want to do automated transfers when no one is around to respond to a message. An example:

```
wsftppro -s local:c:\armstrong\tartan.bmp -d  
robert!border:/pub/tartan.bmp -quiet
```

Summary of Arguments

Here is a list of all arguments you can use in the command line.

Arguments (alphabetical)	When to use	Important restrictions
-ascii	Use -ascii when transferring text files.	
-binary	Use -binary when transferring non-text files such as executable programs, word processing documents, and so on.	
-c <i>account</i>	Use -c to work with sites that require an account for the user to log in, or to access partitions. <i>account</i> is the name of your account on the remote site.	If provided, overrides the account in the site configuration.
-compress	Use -compress to turn files into a .zip compressed file.	The -compress option overrides post transfer actions. Post transfer actions will not be run if the compress option is also specified.
-d <i>path_and_filename</i>	Use -d to indicate the destination path and desired file name of the file you want to upload or download.	You must specify one of the following: -d local: -d folder!profile -d ip address: -d ftp://address
-%date	Use -%date to add a date and time stamp as part of the file name.	
-delete	Use -delete when you want to delete the source files, after the transfer has been completed.	If the transfer is a download, you can delete files on the remote server only if the server allows it.
-lower	Use -lower to have WS_FTP convert file names to lower case letters when you transfer from your PC to a remote site.	If you use the -lower argument, it must be at the very end of the command.
-m <i>text_file</i>	Use -m to do transfers that involve multisource locations, multiple destinations, or multiple	

	commands. <i>text_file</i> is the name of the file that contains the commands.	
-move <i>directory path</i>	Use -move when you want to move the source files to another directory, after the transfer has completed.	If the transfer is a download, you can move files on the remote server only if the server allows it.
-quiet	Use -quiet to suppress pop-up dialogs. The primary use is to suppress a logon request for silent installs. Error messages are logged to the log file. They are never sent to the screen.	
-rename [<i>Rename Mask</i>]	Use -rename when you want to rename the source files, after the transfer has completed. See <i>Rename mask macros</i> (on page 64) for more information.	If the transfer is a download, you can rename files on the remote server only if the server allows it.
-s <i>path_and_filename</i>	Use -s to indicate the source path and file name of the file you want to upload or download.	
-u <i>userID</i>	Specifies a user ID. Use -u to use sign on using the userID.	If provided, overrides the user ID in the site config
-w <i>password</i>	Use -w to identify <i>password</i> as the passto use to connect to the ftp site.	If provided, overrides the password in the site configuration.

Return Codes

Messages returned in response to a wsftppro command can include the following codes:

Return Code	Description
0	Success
1	Failed to load site
2	Source parsing error

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3	Destination parsing error
4	Source and destination are local
5	Failed to connect with source
6	Failed to connect with destination
7	Failed to get source folder
8	Failed to get destination folder
9	No source filename
10	Destination filename specified with wild cards in the source
11	Wildcards in the destination
12	Source file not found
13	Transfer failed
14	No command line specified (starts the application user interface)
15	No command file - failed to open reference file
16	Failed to initialize

Textual Error Messages

This Appendix lists common textual error messages. Each error message is followed by an explanation of the error, and some possible workarounds or solutions, if any exist.

Some of these error messages are returned by the FTP protocol and will appear in the Connection Log, preceded by a three-digit reply code.

Others of these textual error messages may appear in dialog boxes generated by WS_FTP or your operating system.

For more information, see the **KnowledgeBase** on the Ipswitch web site at: <http://www.ipswitchft.com/support/index.asp>.

"Blocking call canceled"

There are several possible causes for this problem. Try these tests in the order shown:

- 1 Disconnect from the FTP site if you are currently connected to it. Then turn on passive mode. To do this:
 - Select **Tools > Site Manager**.
 - Select the site, then click **Edit**.

In the Site Options, select **Advanced**, then select **Use passive mode for data connections**.

After you have done this, try reconnecting to the site.
- 2 If you still receive this error message, set the network timeout for the site to 120 in the interface:
 - Select **Tools > Site Manager**.
 - Select the site, then click **Edit**.
 - In the Site Options, select **Advanced**, then enter 120 or higher for the **Network Timeout**.
- 3 If you still receive this error after making the above changes, try the command line FTP (not the WS_FTP Command Line) and see if you can connect and how long it takes. After you know how long it takes to connect, enter this time into the **Network Timeout** setting on the **Advanced** dialog of the site options as described above.
- 4 If you still cannot connect please contact the FTP server administrator for assistance.

"Connection refused" or "Connection closed by remote"

Either the host is not running an FTP server program, or the FTP site is accepting connections only from certain clients, or there is a conflict within your network. See page 59 and follow steps 3 and 4.

"Disk quota exceeded"

The disk quota is not determined by WS_FTP; it exists on the FTP site. You can either delete some files on the site to make room for your upload (if you have permission) or get more space from the site administrator.

"File too large to download"

This message is coming from the FTP site that you are connected to. This site has a limit on how large a file you can download.

"Logon failure; Quitting."

The FTP site is not recognizing or accepting your user ID and/or password. Contact the FTP site administrator to verify that you are using the correct User ID and password.

"MDTM"

The current FTP site does not support Month-Day-Time-Marking; this means that after the file was uploaded, WS_FTP attempted to preserve the date and time, but the FTP site does not support this feature. However, the files will transfer correctly. Note that this is not a fatal error, even though it displays in red.

You can disable this option by selecting **Preserve file time on upload (MDTM support required)** on **Site Properties > Session**.

"User access denied"

The error "530 user access denied" indicates that you are not properly logged on to the server. Make sure the information on the **Host Info** dialog of site options is correct. Comprobloms are spaces, case sensitive entries, or incorrect user name or password. If

Bulk Import

you are unsure whether or not you are using the correct user name and password, contact the FTP site administrator.

Most FTP sites support anonymous logins where you do not have to have an actual account on the FTP site in order to download files; the user ID is the word *Anonymous* and the pass is your e-mail address. To test this, try connecting to the Ipswitch FTP site (*ftp.ipswitch.com*) using the user ID "Anonymous."

If you do have to have an actual account on the FTP server, for example, a server where you place your web pages, then you will need to obtain a user ID and password from the server administrator and enter them in the host information tab.

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