Introducing FTP

Hummingbird FTP lets you connect to a remote FTP server and transfer files between computers. FTP is supported only under TCP/IP transports. You cannot use this application with DECnet or IPX/SPX.

A server implementation of the FTP protocol must be running on the remote computer to permit FTP communication. The remote computer is the FTP server (host); the PC running the Hummingbird FTP application is the FTP client.

FTP can transfer files in two different formats:

- ASCII (for text files)
- Binary (for image and executable files)

You can transfer files in three ways:

- choose commands from the FTP menus
- type commands in the FTP command line window
- drag and drop the files from the remote FTP server window to the local FTP client window

The Hummingbird FTP application also lets you:

- Save any configuration settings you make from the FTP menus to an FTP settings file. You can then connect to a host using the settings file.
- Connect to multiple FTP servers during a single FTP session.
- Create automated Hummingbird Basic scripts using FTP API scripting commands in the Hummingbird Basic scripting tool. For example, you can create a Hummingbird Basic script that connects to an FTP server, transfers designated files, then disconnects from the FTP server.

Related Topics

Creating a Settings File
Using the Hummingbird Basic Scripting Tool
Creating an OLE Script

Connecting Using the FTP Dialog Box

You can open a single connection or multiple connections to perform server-to-server transfers.

To connect using the FTP dialog box:

- 1. On the Connection menu, click Open.
- 2. Specify the FTP server to which you want to connect, for example, ftp.hcl.com.

By default, FTP displays the name of the last server to which you connected in the Server Name box. To specify another FTP server, type its name or IP address in the Server Name box, or select a server from the drop-down list box.

See your system administrator if you do not know the name of the FTP server.

3. In the appropriate boxes, type your user name and password for the FTP server you specified.

Select the Anonymous FTP check box if the FTP server is a valid anonymous site on the Internet. The word Anonymous automatically appears in the User Name box. Type your Internet email address in the Password box. If you have already supplied FTP with your e-mail address, it automatically appears in the Password box.

Note: You cannot use Anonymous FTP if you use the Secure Shell option. The Secure Shell option appears if you have the Hummingbird Connectivity Security Pack installed.

- 4. Type your account in the Account box if the FTP server requires one.
- 5. To specify your initial directory on the remote system, type the path in the Initial Directory box.

The form your directory takes depends upon the remote system. For example, a UNIX system uses the form /usr/mydir; a PC system uses the form \usr\mydir. You can also specify a directory name in the form mydir. If the path and/or directory you specify does not exist or is inaccessible, the initial directory does not change.

- 6. In the Default Sys. list box, click the type of FTP server you specified in Step 2 above. You can set the default system to UNIX, VMS, DOS, OS/2, NT, MVS, VM/CMS, VM/VPS, VOS, or Other to perform this step if your FTP server identifies its system type.
- 7. Select the Force Default System Type check box to set the system type if the server does not identify its system type or if it is not supported by FTP.

Note: Problems can occur if the server identifies itself as a particular system type but does not exactly follow the conventions of that system (for instance, because of differing international date and time formats). In this case, you can force the system type to another type, such as *Other*.

8. If you want to use a secure connection, select the Secure Shell check box. For more information, see the topic "Using FTP with Connectivity Secure Shell" in this help.

Note: The Secure Shell option is available only if you have the Hummingbird Connectivity Security Pack installed. You cannot use Anonymous FTP if you use the Secure Shell option.

- 9. In the command box, type the name of the command file, or click Browse to search for it.
- 0. Click Open.

Related Topics

Transferring Files Among Multiple Servers

Connection Settings Dialog Box

Connecting Using the Command Line Window

Connecting Using Secure Shell

Creating Secure Shell-Enabled FTP Profiles

Connecting Using the Command Line Window

You can open a connection to an FTP server using the command line window.

To connect using the command line window:

- 1. On the Window menu, click New Command Line Window.
- 2. Type Open and specify the name or IP address of the FTP server to which you want to connect, for example: Open ftp.hummingbird.com.
- 3. After connecting successfully, specify your user name and password when prompted.

Note: If you have trouble opening a connection, verify that the server name or IP address is correct. If you still cannot connect, verify that the FTP server machine is up and running.

Related Topics

Connecting Using the FTP Dialog Box
Connection Settings Dialog Box

Starting FTP from the Command Line Window

You can use the FTP command line window to automate the process of connecting to FTP servers by including your current connection selections in the settings file.

To start FTP from the command line window, type the following command in the Windows Run dialog box:

home\accessories\ftp settings.fs

where:

- home is the directory in which you installed your Hummingbird Product. The default directory is C:\program files\hummingbird\connectivity\version, whereversion is the version number of your Hummingbird product.
- settings.fs is the FTP settings file you want to use

Creating a Customized FTP Shortcut

You can use the command line window to set up a custom FTP shortcut that automatically starts FTP, connects to the FTP server(s), and loads a specific FTP settings file.

To create a customized FTP shortcut:

- 1. In Windows Explorer, click the program folder to which you want to create a shortcut.
- 2. On the File menu, select New and click Shortcut.
- 3. In the Command line box, type home\accessories\ftp settings.fs:

where:

- home is the directory in which you installed your Hummingbird Product. The default directory is C:\program files\hummingbird\connectivity\version, whereversion is the version number of your Hummingbird product.
- *settings.fs* is the FTP settings file you want to use.
- 4. Click Next.
- 5. Type the name of your shortcut, then click Finish.

Related Topics

Creating a Settings File

Disconnecting From an FTP Server (Host)

Click Close on the Connection menu to disconnect from an FTP server.

Use the <u>close</u> command to disconnect from an FTP server. The close command does not terminate the FTP application. When you finish using the FTP application, type <u>quit</u> or <u>exit</u> to disconnect from any FTP server(s) and close FTP.

Troubleshooting FTP Connections

If you are running FTP and have difficulty opening a connection, try the following:

- Verify that the server name or address is correct. If you specified the server name and it did not work, try specifying its IP address instead.
- Addresses are specified in dot notation as follows:

value.value.value.value

If this format works and specifying a server name does not, the server name is not being translated to the correct address.

- See your system administrator to verify that the remote host is responding and running a server implementation of FTP.
- You can use the FTP command line window for troubleshooting purposes. When you are using the FTP command line window, the command that you use depends upon whether you are performing a local operation (on the PC) or an FTP server operation.

Note: For troubleshooting purposes, the FTP protocol logs commands and replies to a trace file if you select the Trace FTP Protocol Commands and Replies check box on the Connection tab of the Preferences dialog box. When a trace file is created, the default file name is server.flg, where server is the name of your particular server. You can create your own log file by typing its name in the Override Default Trace File box.

Related Topic

Preferences Dialog Box (Connection Tab)

Connecting Using Secure Shell

If you purchase and install Connectivity Secure Shell, the Hummingbird SSH-2 client, you gain the option of securing your FTP session with Secure Shell.

Securing an FTP session requires that you create an FTP session profile in FTP that specifies Secure Shell as the security method. In order for Connectivity Secure Shell to establish a Secure Shell tunnel to the target host of the FTP session, it also requires you to specify certain connection parameters including:

- host address
- user name
- authentication method
- authentication method parameters such as a password or key

When you configure an FTP profile to use Secure Shell, all parameters used to establish the Secure Shell tunnel are stored in the FTP profile.

Using Tunnel Profiles to Secure FTP Sessions

Instead of specifying the connection parameters explicitly when you create a Secure Shell-enabled FTP session profile, you also have the option of specifying these parameters by associating a tunnel profile with your FTP profile. Tunnel profiles contain all the connection parameters needed to establish the Secure Shell tunnel to the remote host.

You can also do a combination of both. That is, in the FTP profile, you can specify a tunnel profile from which to load the necessary parameters. Then, in the same FTP profile, you can specify and save parameters that override some of those loaded from the specified tunnel profile.

When you launch a Secure Shell-enabled FTP session, Hummingbird FTP uses a combination of the original parameters in the tunnel profile and the Secure Shell parameter overrides stored in the FTP session profile.

Related Topics

Creating Secure Shell-Enabled FTP Profiles
Connecting Using the FTP Dialog Box

Creating Secure Shell-Enabled FTP Profiles

FTP profiles are saved session configurations. Typically, they contain the settings to connect to an FTP server on a remote machine to and from which you want to transfer files. In the case of Secure Shell-enabled FTP profiles, however, you must provide the parameters to establish a Secure Shell tunnel to the target host.

To create a Secure Shell-enabled FTP profile:

- 1. Using the Start menu, start Classic FTP.
- 2. In the Open Connection dialog box, type the server address, user name and password.
- 3. Select Secure Shell.
 - At this point, you have provided the minimum requirements to establish a Secure Shell tunnel to the remote host. This configuration supports password authentication only. If you want to configure different authentication methods, or want to use a tunnel profile, proceed with the next step. Otherwise, click Open.
- 4. Click Configure. The Secure Shell Configuration dialog box opens.
- 5. To specify a tunnel profile, do one of the following. Otherwise, proceed to the next step.
 - Type the name of the tunnel profile (*profilename*.csp) into the CSS Tunnel Profile box.
 - Click Browse to access the Connectivity Secure Shell Open Tunnel dialog box which lets you select from a list of your tunnel profiles. Then click Open.
 - Click Create to access the Connectivity Secure Shell Add New Tunnel dialog box, which lets you create a new tunnel profile with default settings.

Note: Every time you select a new tunnel profile, change the name of a tunnel profile, or click Reload, all override values you have specified in the FTP profile are reset.

6. To configure the authentication method, click Config and press F1

help. Otherwise proceed to the next step.

Note: If you specified a tunnel profile, any changes you make to the Authentication Methods here will be saved in the FTP profile as overrides of the authentication parameters specified in the tunnel profile. The tunnel profile will not be altered.

- 7. In the Secure Shell Configuration dialog box, click OK.
- 8. The Open Connection dialog box now displays the parameters as you configured them in the previous two steps.

Note: Some parameters may have no specified value depending on your previous configurations.

You now have the option of modifying any connection parameter.

Note: If you specified a tunnel profile, any changes you make to the connection parameters will be saved in the FTP profile as overrides of the equivalent parameters specified in the tunnel profile. The tunnel profile will not be altered.

9. Click OK. The FTP profile is saved. You can now use it to launch a secure FTP session.

Related Topics

Connecting Using Secure Shell
Connecting Using the FTP Dialog Box

Transferring Files Using the Get Command (File Menu)

The Get command on the File menu lets you copy files from the FTP server to your PC.

To transfer files using the Get command:

- 1. In the FTP server directory window, select the file(s) that you want to copy to your PC.
- 2. On the Options menu, select the file-transfer type. Select ASCII Transfer for text files, Binary Transfer for image files, or Auto to have FTP detect the file-transfer type.
- 3. On the File menu, click Get.
- 4. In the To box, type the destination. If the directory, file name, and path contain spaces, put quotation marks around them.
- 5. Click OK.

If you do not specify a name for the local copy, or if you are copying multiple files, FTP uses the file names as they appear on the FTP server. If you do not specify a path, FTP uses the current directory on your PC.

Note: You can also use the standard Windows Explorer drag and drop feature to transfer files.

Related Topics

Transferring Files Using the Put Command (File Menu)
Working with Multiple Files

Transferring Files Using the Put Command (File Menu)

You can transfer files from your PC to the FTP server (host) by using the Put command on the File menu.

To transfer files using the Put command:

- 1. Open the PC directory window by selecting New Client Window on the Window menu.
- 2. In the PC directory window, select the file(s) that you want to copy to the FTP server.
- 3. On the Options menu, select the file-transfer type. Select Binary Transfer for image files, ASCII Transfer for text files, or Auto to have FTP detect the file-transfer type.
- 4. On the File menu, click Put.
- 5. In the To box, type the destination.
- 6. Click OK.

If you do not specify a name for the FTP server copy, or if you are copying multiple files, FTP uses the source file names. If you do not specify a path for the FTP server copy, FTP uses the current directory.

Note: You can also use the standard Windows Explorer drag-and-drop feature to transfer files.

Related Topics

Transferring Files Using the Get Command (File Menu)
Working with Multiple Files

Moving Files

Click Rename on the File menu to move files.

You can move files by renaming them or by changing the path specification. Use the <u>ren</u> command to move a file between directories on the FTP server; use the <u>lren</u> command to move a file between directories on your PC. You can also use the <u>get</u>, <u>put</u>, <u>mget</u>, and <u>mput</u> commands.

Related Topics

Renaming Files

Working with Multiple Files

You can transfer multiple files using the standard Windows conventions for selecting and moving multiple files.

You can perform certain operations with more than one file at a time by using wildcard characters in the file specification. Use the standard DOS wildcard characters? (question mark) and * (asterisk) for local file specifications; use the wildcard characters of the host computer for remote file specifications. The commands that let you work with multiple files are:

mhosttohost

Transferring Files Among Multiple Servers

You can open multiple connections to servers and transfer files.

To transfer files between multiple servers:

- 1. Open any additional connections.
- 2. Select the files you want to transfer.
- 3. On the Options menu, select the file-transfer type. Select Binary Transfer for image files, ASCII Transfer for text files, or Auto to have FTP detect the file-transfer type.
- 4. On the File menu, click Server to Server Transfer.
- 5. From the Destination Connection drop-down list box, select a destination connection.
- 6. In the From box, type the source location of the file.
- 7. In the To box, type the destination of the file.
- 8. Click OK.

Related Topics

Connecting Using the FTP Dialog Box

Connecting Using the Command Line Window

Setting the Type of File to be Transferred

FTP transfers files in one of two formats: ASCII (for text files) or Binary (to transfer an exact copy of a binary file). By default, the transfer type is set to Auto. Auto attempts to detect the type of file you are transferring.

To set the file-transfer type, select the appropriate transfer format (ASCII, Binary, Auto) on the Options menu.

To specify the desired file-transfer type:

- for <u>ascii</u> format, type ascii or type a
- for binary or type i
- for <u>auto</u> format, type auto

Related Topics

Transferring Files Using the Get Command (File Menu)
Transferring Files Using the Put Command (File Menu)
File Menu

Using FTP Prompt Commands

FTP prompt commands are commands that you type on the FTP command line window. To open a command line window, click New Command Line Window on the Window menu.

You can group these commands into two categories of file operations:

- Local file operations are operations that you perform on your PC, such as deleting a file.
- Remote file operations are operations that you perform on the FTP server.

Local operations and remote operations require different commands.

Most of the functionality provided by these commands is available on the FTP menus.

Related Topics

Local File Operations
Remote File Operations

Send Arbitrary FTP Protocol Command

The Send Arbitrary FTP Protocol Command on the File menu sends FTP protocol commands to the remote FTP server only. For example, you may want to send commands to change the timeout values on the FTP server or change file permissions on UNIX FTP servers. These commands are not part of the standard FTP protocol and vary from server to server. You can choose the server that receives the commands by selecting an item in the Combination list box.

In the Command box, type the command you want to send. When you click Send, FTP sends this command to the FTP server you specified. It then displays all server-generated messages or replies to the sent command in the Server Reply box. If you want FTP to automatically refresh the directory windows after you send the command, select the Refresh the Server and Client Windows after Send check box. This box is not selected by default.

The command syntax varies depending upon the remote FTP server. Type help in the Command box to get a listing of the commands available for the server. For more details on a particular command, type help followed by the command name.

The quote command lets you send arbitrary FTP protocol commands to the remote FTP host computer. The syntax for this command is:

quote command

where *command* is the command you want to send to the host. The command syntax varies depending on your FTP host. Consult the FTP server online Help for details.

Viewing a File

You can view a file using the application associated with its file extension.

To view a file:

- 1. Select the file.
- 2. On the File menu, click View File.

If you cannot view a file by its association, you can create an association in Windows Explorer or using FTP. This association is between a file and an application, so that the application starts when you open the file.

To create an association using FTP:

- 1. On the Options menu, click Preferences.
- 2. On the General tab, select the Viewer box, then type an application name and extension, for example: notepad.exe.

If there is no association, the default FTP viewer attempts to open the file. If you select a remote file, FTP transfers the file to the defined temporary directory. If you do not have a temporary directory defined, you receive an error message. If the file is executable, FTP attempts to start it from the temporary directory. If the temporary directory does not include all necessary files to run the program, an error message appears.

Removing a Directory

To remove a directory:

- 1. Select the directory.
- 2. On the File menu, click Remove Directory. The Remove Directory window opens.
- 3. Click OK to confirm that you want to remove the directory and all of its contents.

Use the <u>lrmdir</u> command to remove an empty directory from your PC and the <u>rmdir/xrmdir</u> command (from the command line window only) to remove an empty directory from the FTP server. To remove a directory tree on a PC from the command line window, use the <u>ldeltree</u> command; you can use the <u>deltree</u> command for a remote server.

Listing the Contents of a Directory

To list the contents of a directory in either the remote or local window, double-click that directory.

You can list the contents of a directory by using the 1s, 11s, or directory by using t

Use the <u>ls</u> command to list the contents of a directory on the FTP server. Use the <u>dir</u> command to list the contents of a remote directory to the window or to save the output to a local file. Use the <u>lls</u> command to list the contents of the current working directory of your PC or of another directory on the same drive.

If you are experiencing difficulty with large files shown on servers in foreign countries, you may need to change the parsing method.

To list the contents of a directory on another drive, you must change the working drive with the drive command before using 11s. First type drive, then type 11s.

Related Topics

Configuring an Alternate Parsing Method
Changing the Working Directory

Changing the Working Directory

To change the working directory or subdirectory:

- 1. On the File menu, click Change Directory.
- 2. In the Name box, type the new path name.
- 3. Click OK.

Following the following procedure to change the working directory or subdirectory using FTP command line window instructions:

1. Identify the current working directory.

To identify the current working directory on your PC, use the 1cd command. To identify the current working directory on the FTP server, use the pwd/xpwd command.

2. Change the current working drive.

If you want to change to a different drive on the remote server (for example, from C:\ to D:\), use either the cd or cwd command.

3. Change the working directory.

To change the working directory on your PC, use the lcd command. To change the working directory on the FTP server, use the cd, cwd, or parent/xparent commands.

Command Syntax

Imkdir

mkdir/xmkdir

lcd

pwd/xpwd

cd

cwd

<u>parent</u>

Changing PC Drives

To change the current drive, click the Drive drop-down list box and select the desired drive.

To change the current working drive, use the drive command prompt, for example: $drive\ d:$

Creating a Directory

To create a directory or subdirectory:

- 1. On the File menu, click Create Directory.
- 2. In the Name box, type the name of the directory you want to create; include the path, if necessary.
- 3. Click OK.

FTP command line window instructions

Use the lmkdir command to make a new directory on your PC; use the mkdir/xmkdir command to make a new directory on the FTP server.

Naming Files

Invalid file names

Most FTP server systems follow naming conventions different from those used in DOS, FAT, or VFAT. FTP server file names often start with a period (.) or include characters such as a period in the file name. When you try to copy these files to your PC, FTP creates valid FAT file names if the Create Valid Local Filenames check box is selected on the General tab of the Preferences dialog box. This applies only to FAT drives.

Case sensitivity and the FTP command line window

When you use the put or send commands, you may need to change the case of the local PC files.

Renaming Files

To rename a file:

- 1. Select the file to rename.
- 2. On the File menu, click Rename.
- 3. In the Rename dialog box, type the new name of the file and the path in the To box.
 - If a file was not selected before clicking Rename, you can type the original name of the file and the path in the From box.
- 4. Click OK.

FTP command line window instructions

Use the <u>lren</u> command to rename a file on your PC and the <u>ren</u> command to rename a file on the FTP server.

Printing Text Files

To print text files:

- 1. Select the file you want to print, or type the path and name of the file in the Print box.
- 2. On the File menu, click Print.
- 3. Select either the Client File or Server File option.

Note: FTP automatically selects the correct option if you omit this step.

4. Click OK.

Related Topic

Print Setup Dialog Box

Creating a Settings File

An FTP settings file contains all the settings chosen from FTP menus. It also includes the current position of directory windows in the FTP window. If you connect to one or more FTP servers and save a settings file, the settings file saves the current connection information. If you have specific settings you use for a particular FTP server, you can save them in a settings file, which you can reload the next time you connect to that FTP server.

FTP settings files use the .fs extension. By default, they reside in the user directory.

To load a specific settings file, either click Open on the File menu or specify the settings file from the command line window.

To create a settings file:

- 1. On the File menu, click New. This creates a new FTP (.fs) settings file or loads a default settings file if one exists.
- 2. On the Connection menu, click Open.
- 3. Specify the information required to connect to the desired FTP server, then click Open.
- 4. Choose all the necessary settings for this connection from the FTP menus.
- 5. On the File menu, click Save As.
- 6. In the Save As dialog box, type a name for the file in the File Name box.
- 7. Click Save.

Related Topics

Connecting Using the FTP Dialog Box
Starting FTP from the Command Line Window

Using the Hummingbird Basic Scripting Tool

Hummingbird Basic lets you create scripts that automate routine tasks. In addition to the Hummingbird Basic Language, a set of FTP API functions can be incorporated into a script to access and control FTP.

To access the Hummingbird Basic scripting tool:

- 1. On the Tools menu, click Load Hummingbird Basic Script File.
- 2. Select a file and click Open to access the Hummingbird Basic scripting tool.

OR

Click New to write a new Hummingbird Basic script file.

You can also debug and run a script using the scripting tool. The scripting tool differs from Hummingbird Basic Workbench in that only one file can be open at a time. If Hummingbird Basic is installed, refer to Hummingbird Basic Help for more information.

Related Topic

Creating an OLE Script

Creating an OLE Script

You can code OLE automation containers to implement all the features and functions of FTP in another application that uses OLE features, such as Hummingbird Basic. You can work with FTP session objects to call functions such as connecting to a host and transferring files from host to host. You can use any tool that supports OLE automation control, such as Visual C++ and Visual Basic.

To access the scripting tool, select Load Hummingbird Basic Script File on the Tools menu.

To create OLE tasks:

1. Create the main FTP Engine Object. For example:

```
Dim FtpEngine As Object
```

```
Set FtpEngine = CreateObject("HclFtp.Engine")
```

All objects support a dual interface. This lets you fully use the FTP OLE features.

2. Retrieve an FTP Sessions collection. For example:

```
Dim FtpSessions As Object
```

```
Set FtpSessions = FtpEngine.Sessions
```

This lets you set such things as local drives and access permissions.

3. Create the FTP session object. For example:

```
Dim FtpSession1 As Object
```

```
Set FtpSession1 = FtpSessions.NewSession
```

4. Set properties, such as server name, user name, and user account. For example:

FtpSession1.ServerName="ftp.com"

5. Call the session method, such as Connect to Host, User Log in, and Get. For example:

FtpSession1.UserLogin

Loading an FTP Command Script File

The FTP application uses the FTP command script file as a batch file to execute and perform specific tasks.

To load an FTP command script file:

- 1. On the Tools menu, click Load FTP Command Script File.
- 2. Select the file you want, or type the name of the FTP Command Script File in the File name box.
- 3. Click Open.

Configuring an Alternate Parsing Method

You can configure FTP to use an alternate parsing method for the directory host listing. This is important for users listing and transferring extremely large files internationally.

Note: This procedure works with UNIX hosts only.

FTP does not create the ftp.ini file. You need to create the file yourself using a text editor. In the text editor, type settings, then save the file in the <u>user</u> directory as ftp.ini.

To configure an alternate parsing method:

- 1. Open the ftp.ini file.
- 2. Under settings, type AlternateParse=1.
- 3. On the File menu, click Save.

Configuring FTP to Work Around System Problems

You can configure FTP to work around specific operating system problems.

PASV Warning

OS/2 and VMS machines have known problems with operations if FTP uses the PASV command. FTP warns users of these problems when connecting.

Note: The ftp.ini file is not created by FTP. You need to create the file yourself using the Windows Notepad application. In Notepad, type [settings], then save the file in the <u>user</u> directory as ftp.ini.

To disable the PASV warning:

- 1. Open the ftp.ini file.
- 2. Under settings, type DisablePASVWarning=1.
- 3. On the File menu, click Save.

Note: This procedure works for OS/2 and VMS machines only. You can also disable the PASV mode by clearing the Use PASV Mode check box in the Connection Settings dialog box before making a connection to the server.

Protocol errors

A broken FTP server sends incorrect FTP protocol replies to system commands.

To avoid protocol errors:

- 1. Open the ftp.inifile.
- Under settings, type ForDGOnly=1.
- 3. On the File menu, click Save.

End of File characters

You can force FTP to treat Ctrl-Z characters in any ASCII file transferred to a server as the End of File (EOF) character, even if the Ctrl-Z character is in the middle of a file.

To treat Ctrl-Z as EOF:

- 1. Open the ftp.ini file.
- 2. Under settings, type TreatCtrlZAsE0F=1.
- 3. On the File menu, click Save.

Note: This procedure works only with ASCII files and can be used in conjunction with the Strip Ctrl-Z from the End of Files Sent to Server check box on the Connection tab of the Preferences dialog box.

Using Other as the Default System Type

When you select *Other* from the Default Sys. drop-down list box in the Open Connection dialog box, all files and directories on the server are shown, even if FTP is unable to recognize the system type. This is useful when the FTP server does not identify its system type or when the system type it uses is not supported.

Other is also useful if the server declares its system type but does not follow those conventions. When you select *Other*, then select the Force Default System Type check box, FTP displays a list of all the files and directories found in the current directory on the server.

In this case, FTP displays the file and directory names but no other details. You cannot determine the nature of a listed item until you attempt to perform either a file or directory operation on that item. If you try to perform a file function on an item, such as using the drag-and-drop method for your PC, FTP attempts to treat it as if it were a file. If the item is not a file, the FTP server displays an error message, indicating that the item is not a plain file. If the item is a file, the action is performed.

Similarly, an error message appears if you try to perform a directory function on a file, such as double-clicking to open it. If the item is a directory, double-clicking opens it and its contents are shown. You can move up a level in the hierarchy by selecting the parent directory item.

Local File Operations

For more information on the use and syntax of a specific FTP prompt command, click the command in the list below. The description includes the command syntax. Parameters in italics are optional and should be included only when appropriate. If you leave out a parameter when you type a command, FTP prompts you for the required information.

cls lls
drive lmkdir
exit lren
help lrmdir
lcd open
ldel quit
ldeltree

These are the only commands that FTP recognizes regardless of an open FTP connection to a server.

Note: Local paths follow the same conventions as NTFS, HPFS, CDFS, POSIX, or DOS. Paths on the FTP server can follow different conventions, depending upon the system.

Remote File Operations

For more information on the use and syntax of a specific FTP prompt command, click the command in the list below. The description includes the command syntax. Parameters in italics are optional and should be included only when appropriate. If you leave out a parameter when you type a command, FTP prompts you for the required information.

account mkdir
append mput
ascii mrecv
auto parent
binary put
cd puttree

close pwd

cwd quote

del receive

deltree remotehelp

<u>dir</u> ren <u>rmdir</u> <u>get</u> select <u>gettree</u> <u>hosttohost</u> send hosttohostappend show hosttohosttree status <u>ls</u> system mdelete type mget user

mhosttohost

FTP does not recognize these commands without an open FTP connection.

Note: Local paths follow the same conventions as NTFS, HPFS, CDFS, POSIX, or DOS. Paths on the FTP server can follow different conventions, depending upon the system.

General Accessibility

Hummingbird products are accessible to all users. Wherever possible, our software adheres to Microsoft Windows interface standards and contains a comprehensive set of accessibility features.

Access Keys All menus have associated access keys (mnemonics) that let you use the keyboard, rather than a mouse, to navigate the user interface (UI). These access keys appear as underlined letters in the names of most UI items. (If this is not the case, press Alt to reveal them.) To open any menu, press Alt and then press the key that corresponds with the underlined letter in the menu name. For example, to access the File menu in any Hummingbird application, press Alt+F.

Once you have opened a menu, you can access an item on the menu by pressing the underlined letter in the menu item name, or you can use the arrow keys to navigate the menu list.

Keyboard Shortcuts Some often-used menu options also have shortcut (accelerator) keys. The shortcut key for an item appears beside it on the menu.

Directional Arrows Use the directional arrows on the keyboard to navigate through menu items or to scroll vertically and horizontally. You can also use the directional arrows to navigate through multiple options. For example, if you have a series of radio buttons, you can use the arrow keys to navigate the possible selections.

Tab Key Sequence To navigate through a dialog box, press the Tab key. Selected items appear with a dotted border. You can also press Shift+Tab to go back to a previous selection within the dialog box.

Spacebar Press the Spacebar to select or clear check boxes, or to select buttons in a dialog box.

Esc Press the Esc key to close a dialog box without implementing any new settings.

Enter Press the Enter key to select the highlighted item or to close a dialog box and apply the new settings. You can also press the Enter key to close all About boxes.

ToolTips ToolTips appear for all functional icons. This feature lets users use Screen Reviewers to make interface information available through synthesized speech or through a refreshable Braille display.

Microsoft Accessibility Options

Microsoft Windows environments contain accessibility options that let you change how you interact with the software. These options can add sound, increase the magnification, and create sticky keys.

To enable/disable Accessibility options:

- 1. In Control Panel, double-click Accessibility Options.
- 2. In the Accessibility Options dialog box, select or clear the option check boxes on the various tabs as required, and click Apply.
- 3. Click OK.

If you installed the Microsoft Accessibility components for your Windows system, you can find additional accessibility tools under Accessibility on the Start menu.

Technical Support

You can contact the Hummingbird Technical Support department Monday to Friday between 8:00 a.m. and 8:00 p.m. Eastern Time.

Hummingbird Ltd. 1 Sparks Avenue, Toronto, Ontario, Canada M2H 2W1			
	Canada and the USA International		
Technical Support:	1-800-486-0095	+1-416-496-2200	
General Enquiry:	1-877-FLY-HUMM	+1-416-496-2200	
Main:	+1-416-496-2200		
Fax:	+1-416-496-2207		
E-mail:	support@hummingbird.com		
FTP:	ftp.hummingbird.co	<u>m</u>	
Web Support:	<pre>support.hummingbird.com/customer</pre>		
Web Site:	www.hummingbird.com		

Connection Settings Dialog Box

To access

This dialog box lets you specify various connection settings.

E-Mail Address—Most anonymous FTP servers expect your e-mail information as the password. After completing this box, this address automatically appears in the Password box of the Open dialog box when you click Anonymous FTP. You can edit your e-mail address when opening a connection.

Server Port—This is the server port number used for connections. You can type any value in the range 0 through 65535 in this box. The default value is port 21.

Use PASV Mode—Determines whether the FTP client (the PC running FTP) or the remote FTP server actively attempts to establish the data connection. If this check box is selected, the FTP client actively attempts to establish the data connection, and the FTP server becomes passive. Otherwise, the FTP server is active and the FTP client is passive. By default, this check box is selected: this permits the server to send information bypassing simple firewalls.

To view the current FTP status (using PASV mode or not), click Information on the Connection menu.

Note: If you have problems connecting to the FTP server, your network may prohibit incoming connections. To overcome this problem, select the Use PASV Mode check box and try to connect again.

When PASV mode is selected, FTP does not work properly with some IBM mainframe and OS/2 FTP servers. Because PASV mode is selected by default, clear this check box in the Connection Settings dialog box before attempting to make any connections to these types of FTP servers. In these cases, FTP prompts you to disable or enable PASV mode at connection time.

Some FTP servers are unable to become passive. In these cases, see your network administrator.

Use Firewall—When you select the Use Firewall check box, the input boxes in the Firewall area are available. The login information you supply

defines your access to the firewall node on the way to an external connection (not the login information of the remote node). Normally, firewall computers act as an intermediary between the client and the server for added security from Internet intruders.

The corresponding options in the Firewall Type area support the following types of firewall protection for FTP connections:

SITE Server Name	Firewall server name, user name, and password are required. FTP logs the user into the firewall and establishes the remote connection using the FTP SITE command remote_host.
USER After Login	Firewall server name, user name, and password are required. FTP logs the user into the firewall and establishes the remote connection using the FTP USER command remote_user@remote_host.
USER Without Login	Firewall server name is required, and user name and password are ignored. FTP does not log the user into the firewall; it establishes the remote connection using the FTP USER command remote_user@remote_host.
Proxy OPEN	Firewall server name is required, and user name and password are ignored. FTP sends OPEN remote_host to the firewall when it connects.
Proxy	Firewall server name is required, and user name and password are ignored. FTP sends

CONNECT CONNECT remote_host to the firewall when it connects.

Preferences Dialog Box (Connection Tab)

To access

You can set the following preferences on the Connection tab in the Preferences dialog box:

Connection—Specify the name or IP address of the remote host to which you want to set connection preferences. Select a host name from this drop-down list box or type the name or IP address in the box.

Write Ctrl-Z at the End of Files Sent to Server—Select this check box to insert CTRL-Z at the end of all ASCII files transferred to the FTP server. This helps you to easily detect the end of the file. This check box is not selected by default.

Strip Ctrl-Z from the End of Files Sent to Server—Select this check box to remove the last CTRL-Z from the end of a file when it is being uploaded.

When this check box is selected, the Write Ctrl-Z at the End of Files Sent to Server check box is cleared, and its state is ignored.

Drop Extensions of Files Sent to Mainframe Servers—Select this check box to avoid sending the file extensions and version numbers of files sent to or from mainframe servers. For example, IBM mainframes as well as VM, VM/CMS, VM/VPS, MVS, and TANDEM operating systems. This check box is not selected by default.

Drop Version Numbers of Files Received from VMS Servers—Select this check box to avoid receiving version numbers and semicolons in the file names of received VMS files. This check box is not selected by default.

Drop Account Qualifier of Files Received from VOS Servers—Select this check box to drop the file qualifier of files received from Harris VOS machines. The account qualifier is all of the text up to and including the asterisk (*) in the VOS file name. For example, label123*file drops the account qualifier label123*.

Follow Symbolic Links on UNIX Servers—Select this check box to instruct FTP to follow symbolic links to remote directories. This check box

is selected by default. If it takes a long time to list files, clear this check box.

Note: It may take some time to scan the remote system.

Cache Graphical Server Window Files and Directories—Select this check box to instruct FTP to load the listings for graphical server window files and directories from cache memory instead of querying the server again.

Use Directory Listing Options for UNIX Servers—Select this check box to instruct the FTP client to use directory listing options to retrieve the file listings for UNIX servers. For UNIX servers that do not use directory listing options, clear this check box.

Use Only Filenames When Sending Files to UNIX Servers—Select this check box to use only the file name, instead of the full path name, when transferring a file. This check box is not selected by default.

Trace FTP Protocol Commands and Replies—Select this check box to record FTP protocol commands and replies in a log file. The connection name is used to create the log file name. You can read and review this file for troubleshooting purposes. FTP uses options for listing UNIX server files. Clear this check box if you are experiencing problems with the graphical window.

Override Default Trace File—You can create a log file name of your own in this box if you do not want FTP to create the trace file from the connection name.

Keep Connection Alive—Select this check box to override the automatic timeout specified by FTP servers and to keep the connection open indefinitely.

Keep Alive Every (Secs.)—Type a value for the number of seconds after which FTP sends the commands to keep the connection open.

Use Patterns for AUTO Transfer—Select this option if you want to specify naming patterns that will be used to transfer files between the FTP server and the PC. For example, s*.txt indicates that all .txt files that begin with the letter "s" will be transferred. This option is valid only if you have set the file transfer type to Auto which means that FTP

automatically detects the appropriate transfer type (Binary or ASCII) for the type of file being transferred.

File Menu

The File menu contains the following commands:

New—Creates a new FTP (.fs) settings file.

Open—Loads an existing FTP settings file.

Close—Exits the current FTP settings file.

Save—Saves the current FTP settings to an FTP settings file. By default, settings files are saved in the user directory. FTP uses the extension automatically.

Save As—Saves a new or existing FTP settings file under a new file name. By default, FTP settings files reside in the <u>user</u> directory. You can save the file to a different directory by selecting another directory in the Save As dialog box. FTP uses the .fs file extension automatically. Click OK to save the file.

Save As Defaults—Saves all the settings you made in an FTP session to a file named default.fs in the <u>user</u> directory. Those settings are reloaded automatically the next time you run FTP.

Get—Copies files from the FTP server to your PC.

Put—Copies files from your PC to the FTP server.

Server to Server Transfer—Transfers selected files from one server and directory to the selected FTP server.

Delete—Deletes one or more files.

Rename—Renames a file or directory.

Send Arbitrary FTP Protocol Command—Sends only FTP protocol commands to the remote FTP server.

View File—Displays the selected file by running the application specified in the Preferences dialog box.

When you double-click a file, FTP attempts to open the file with its associated application. If this does not work, it opens the file with the viewer specified in the Preferences dialog box.

Print—Sends text files to the default printer.

Print Setup—Specifies the printer to use and various printing options.

Change Directory—Changes the working directory.

Create Directory—Adds a subdirectory in the currently selected directory.

Remove Directory—Deletes a directory and any associated subdirectories.

Exit—Closes your current session with any FTP servers and exits FTP.

Related Topics

Changing the Working Directory

Send Arbitrary FTP Protocol Command

Transferring Files Using the Get Command (File Menu)

Transferring Files Using the Put Command (File Menu)

Print Setup Dialog Box

To access

The Print Setup command on the File menu specifies what printer to use and various related printing options:

Printer—Select the printer you want to use from the list of installed printers.

Properties—Specify advanced printer options such as encapsulated postscript file output, header printing, margins, and scaling in the Options dialog box.

Paper—Select the correct paper size and paper source supported by your printer.

Orientation—Specify the page orientation. If you select Portrait, the printed page is taller than it is wider; if you select Landscape, the printed page is wider than it is taller.

Network—Connects to a network printer (optional).