



User Manual & Instructions

Version 2.2

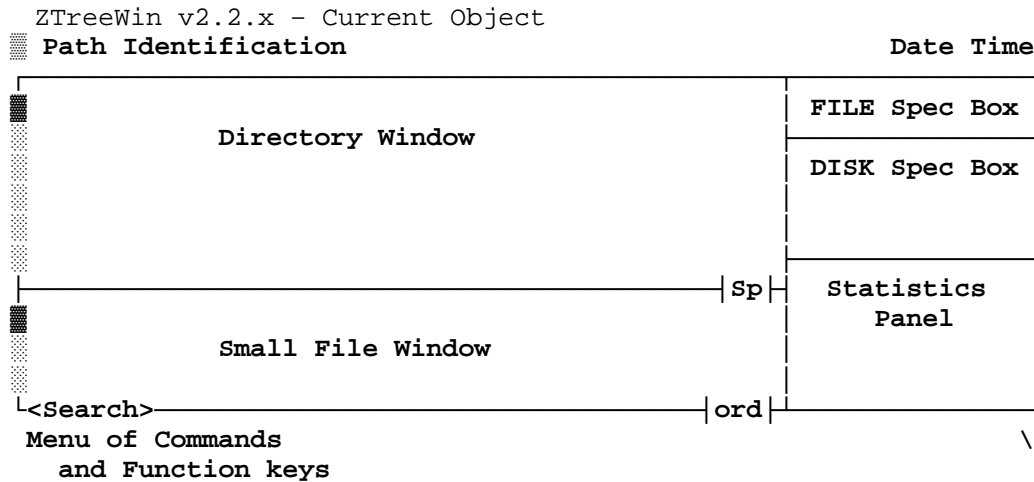
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ZTreeWin Instructions

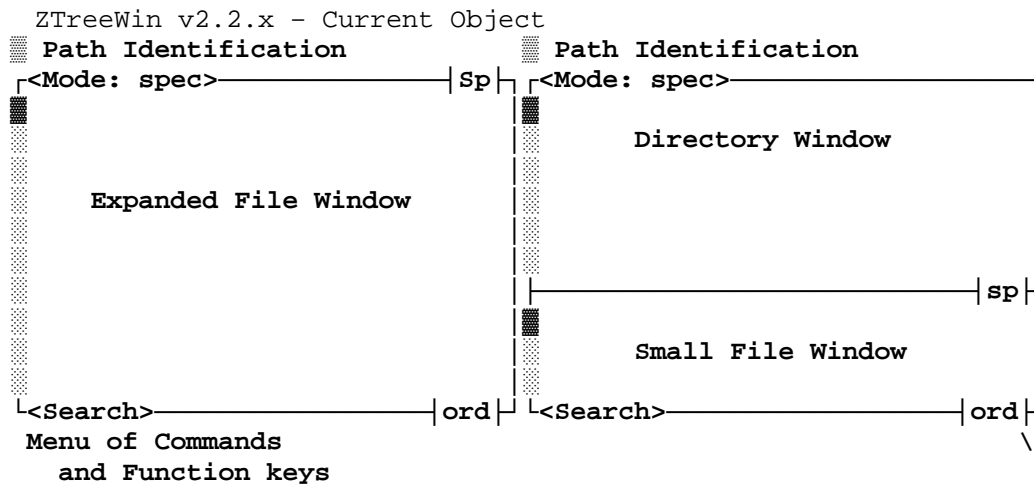
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1. Main Display



The main display, shown above, is composed of five main areas surrounded by additional information. The window titlebar defaults to displaying the current 'object' name. This can be modified by using one or more of the various /Tx command-line options (see section 3.13 'Command-Line Options'). The main display can be split using F8 into a side-by-side pair of displays, called the "Split Screen," as shown below.



In a Split Screen, each side can display directory and file information independently from the opposite side, and each can display the Directory and Small File Windows, or the Expanded File Window. By default there are no statistics boxes or panels, and no date and time when in the split mode. See section 1.8 'Split Screen' for more information.

The overall size of the ZTreeWin main display can be controlled initially by configuration options, command-line options and shortcut properties, and can be changed at any time with the video commands. Additional file and command information is often available in the wider screen sizes. See sections 1.10 'Video Control' and 3.12 'Shortcut Setup' for more information.

The left border of the File and Directory Windows contains a scroll bar which shows the relative position of the highlighted item in the entire list.

A more detailed description of the display areas follows the following brief description.

Directory Window	Displays a list of directories in a "tree" structure.
Small File Window	Displays a list of files in the directory currently highlighted in the Directory Window.
Expanded File Window	A single window which replaces both the Directory Window and the Small File Window. This displays a list of files in the current directory, branch, disk, or all disks, depending on the command used.
FILE Spec Box	Shows the current file specification (filespec) which "filters" the files to be displayed.
DISK Spec Box	Displays the Volume ID and size of the disk drive of the currently selected directory or file.
Statistics Panel	Contains detailed information about the currently displayed Directory or File Window.
Path Identification	The full path of the currently highlighted directory or file.
█ (Filter Indicator)	Displayed to the left of the Path Identification, this indicates that not all files may be shown.
Date Time	The current system date and time when the screen is not split.
<Mode: spec>	The window mode followed by the current filespec when the screen is split.
<Search>	Displays the most recent spell search string used in the Directory or File Window.
| Sp|	The sort order in effect for the File Window. The first letter corresponds to the sort command in use, and the case indicating the sequence, lowercase meaning ascending, and uppercase meaning descending. The second letter will display a 'p' when Path mode is on.
| ord|	The ordinal line-number of the currently highlighted file or directory, and the total count of lines in the list. Also includes the tagged-file count if tagged files are present. Format: | tagged-count line-number/of total count|.
Menu of Commands	Displays most of the commands and function keys and Function Keys available in the current Directory or File Window. A command or response enclosed in [brackets] is the default if the Enter key is pressed.
\ (Spinner)	Appears to the right in the menu area when ZTreeWin is busy with an operation. Keyboard commands are accepted in the type-ahead buffer, but execution will be delayed until the current operation is completed.

1.1 Directory Window

This window shows the directory structure of the current disk. The Root directory is at the top of the list, and all other directories are sorted alphabetically, and displayed from the top of the window to the bottom. If the root directory is a network drive or a SUBST drive, the UNC name or SUBST path is also displayed to the right of the drive letter.

Main directories, (first level directories), are on the left, with their subdirectories indented to the right. A Branch is defined as any directory, and all the subdirectories that are indented below it, (a "parent" directory and all its "child" directories).

When the highlight bar is located in the Directory Window, this window is active, and ZTreeWin's Directory Commands are available. The highlight bar identifies the current directory. When you start ZTreeWin, the Directory Window is active and the highlight bar is at the directory specified in the shortcut, or the directory that was current if none was specified. You can move the bar to any directory on the tree by using the cursor keys.

If you move the highlight bar to the Small File Window, (by pressing Enter), a left-arrow symbol is shown in the Directory Window, marking the current directory.

The size of the Directory Window can be controlled with the Alt-Up/Down keys, and restored to its default size with the Alt-Home key. The method used by ZTreeWin to control the size is set with the Alt-F10 configuration option "Window sizing".

By default ZTreeWin logs only the first level of the directories under the root of the drive. For large disks this improves the start-up time as less disk activity will be required before ZTreeWin is ready for use. Configuration

options provide the ability to configure ZTreeWin to initially log the entire directory tree on the disk, either including or not including logging all the files. You can then use outlining commands to expand, collapse, log, and release (unlog) branches on the tree.

ZTreeWin provides a quick method of displaying a selected number of levels of directories (from 1 to 9, or the entire directory tree) under the root directory, or under any branch. Logging and displaying partial branches helps to conserve memory and allows you to focus only on areas of the tree you are most interested in.

The following symbols to the left of the directory tree have special meaning:

<u>Symbol</u>	<u>Meaning</u>
+	Files in the directory are not logged. The subdirectory tree may or may not be logged and displayed.
<blank>	Files in the directory are logged. All its files and first level subdirectories are in memory and available for operations.
.	Files in the directory are logged. All its files and first level subdirectories are in memory, but the subdirectory tree has been collapsed with the F5 or F6 command keys.
:	Files in the directory are not logged. The subdirectory tree is logged and in memory, but the tree has been collapsed with the F5 or F6 command keys.
÷	Files in the directory are not logged. The subdirectory tree is displayed, but some or all subdirectories have been unlogged and removed from the display with the Shift-Numpad-minus command.
-	Files in the directory are logged. All its files are in memory, but some or all of its subdirectories have been unlogged and removed from the display with the Shift-Numpad-minus command.

The following table summarizes the appearance of the above six symbols.

	Directory Logged State	
	Files Unlogged	Files Logged
Normal (Not modified)	+	(blank)
Collapsed with F5 or F6	:	.
Removed with Shift-Numpad-minus	÷	-

Tree Outlining Commands - The following keys are used to control the tree display. They affect how much directory and file information is logged and kept in memory.

<u>Key</u>	<u>Operation</u>
+	Expand the tree 1 level below the directory. ZTreeWin logs the directory files and shows them in the File Window, and logs the 1st level subdirectory names and shows them on the tree. If the directory is already logged then it is relogged.
=	Equivalent to +
Enter	If the directory is not logged, the '+' operation is performed.
*	Fully expand the branch under the current directory. Logs all subdirectories and their files and shows the branch on the tree. At the root directory, this has the effect of fully logging the entire disk.
-	Collapse the entire branch. All file and directory information for the branch is unlogged (released) from memory, and the subdirectory tree is no longer displayed.

Ctrl-Backspace	Unlog (release) the files in the current directory, but continue to display the subdirectory tree.
F5	Toggle between collapsing and expanding the currently-logged second-level subdirectories of the current directory, without unlogging (releasing) them.
F6	Toggle between collapsing and expanding the currently-logged first-level subdirectories of the current directory, without unlogging (releasing) them.
Shift-Numpad--	(Shift-Numpad-minus) Unlog the current directory and remove it from the display. (Use a refresh or log command on the parent directory to return it to the display).

1.2 File Windows

The ZTreeWin File Windows are used to list file information. Only those files that are logged and have names matching the File Specification are shown and available for ZTreeWin operations. Logged files are those that have been read into memory by using a log command, or at program startup if ZTreeWin is configured to automatically log directories.

The highlight bar indicates the current file, which is the file affected by the File Commands. Move the highlight bar with the cursor keys.

In ZTreeWin the method of selecting a group of files for an operation is called "tagging". Generally, the "T" key is used to tag, and the "U" key to untag. A diamond symbol is displayed to the left of each file that is tagged. There are many methods of tagging, untagging and operating on tagged files. See section 2.10 '*Tagging Files*' for more information. You can also display only those files that are tagged by entering one of the Tags-Only filter modes. See section 1.7.1 '*Tags-Only Mode*' for details on that.

You can change the order in which the files are listed by using the Alt-Sort command, and can select what details about the files are displayed by using the Alt-File display command. You can also vary the length of the file extension displayed in most of those displays with the Shift-Left and Shift-Right commands.

1.2.1 Small File Window

The Small File Window appears under the Directory Window, and lists the files found in the current directory that match the current filespec.

The size of the Small File Window can be controlled with the Alt-Up/Down keys, and restored to its default size with the Alt-Home key. The method used by ZTreeWin to control the size is set with the Alt-F10 configuration option "Window sizing".

Normally you cannot move the highlight bar into the Small File Window. In order to move the highlight bar to the file list, you expand the Small File Window to the Normal full-size File Window with the Enter key, or to one of the other Expanded File Windows using keys described in the next section.

If you wish to be able to move the highlight bar to the Small File Window, you can set the Alt-F10 configuration option for the Enter key assignments, "Directory - Bypasses Small File Window", to "No". When this bypass is disabled, press Enter to move the highlight bar to the Small File Window. Press Enter again to expand the Small File Window to the Expanded File Window. Press Enter a third time to move back to the Directory Window. Press Esc in either File Window to exit to the Directory Window.

When the highlight bar is in the Directory Window or the Small File Window you can change the height of the Small File Window with the Alt-Up and Alt-Down keys, and return it to its default size with the Alt-Home key.

When the highlight bar is in the Directory Window and the Alt-F10 configuration option "Maintain file position in each directory" is set to "Yes", a highlighted right-arrow pointer is displayed to the left of the current filename in the Small File Window. If that file is tagged, then a highlighted diamond is displayed instead.

Under certain conditions the Small File Window will contain one of the following messages:

No files

There are no files in this directory.

No files match the filespec

There are files in the directory, but none of them match the current File Specification.

Directory not logged

The directory has not been logged, and it is not known if it contains any files. Use +, Enter or * to log the directory.

Access denied!

The permissions on the directory prohibit you from accessing the files that it contains the "System Volume Information" directory on NTFS volumes is an example of this.

1.2.2 Expanded File Window

The Expanded File Window replaces the Small File Window and the Directory Window, allowing more file information to be displayed.

There are four variations of the Expanded File Window.

- Normal - The Normal File Window lists only the files that are in the current directory and match the current filespec, just as the Small File Window does. Press Enter in the Directory Window to enter this window. (Or press Enter in the Small File Window if the Small File Window is not bypassed in the Alt-F10 configuration).
- Branch - The Branch File Window lists all the files in the current branch which are logged, and match the current filespec. This includes all logged subdirectories of the current, highlighted directory. Press "B", for Branch, in the Directory Window to enter this window.
- Showall - The Showall File Window lists all logged files on the current disk that match the filespec. Press "S", for Showall, in the Directory Window to enter this window.
- Global - The Global File Window lists all logged files on all logged disks that match the filespec. Press "G", for Global, in the Directory Window to enter this window.

When either the Branch, Showall or Global Window is displayed, the title of the Statistics Panel is changed to indicate the current window type, and the color scheme changes (unless it has been configured to be the same color as the Normal Window scheme, using Alt-F10, then F4).

Press Enter or Esc while in any Expanded File Window to return to the Directory Window.

1.3 Directory and File Window Control Keys

1.3.1 Basic Control Keys

Use these keys to perform basic ZTreeWin control functions:

- Enter - When in the Directory Window, enter the Normal File Window, and when in any Expanded File Window, exit to the Directory Window. The actions performed by the Enter key can be modified in the Alt-F10 configuration option section "Enter Key Assignments in Specific Windows".

- Esc - In any File Window this exits to the Directory Window that was current before the File Window was entered.
- B, S, G - In the Directory Window, these three keys enter the Branch, Showall and Global File Windows, as described above in section 1.2.2.
- Ctrl - Hold this key to display and use the Ctrl commands.
- Alt - Hold this key to display and use the Alt commands.
- F4 - Press this key to cycle through the Normal, Ctrl and Alt menu commands without having to press the Ctrl or Alt keys.
- F8 - Split and unsplit the Directory or File Window. See section 1.8 '*Split Screen*' for more information.
- F1 - Display ZTreeWin Help (this file). This key may not always be displayed in the menu, but it usually opens this Help file to a section that includes a description of the command or window being used.
- Alt-F10 - Enter the ZTreeWin configuration pages. See section 3.7 '*Configuration Options*' for information on each option.
- E - Edit a file using the Editor configured with Alt-F10.
- V - View a file.
- X - Execute a command in a command prompt shell window.
- ? or / - Display the Extended Statistics Window. See section 1.6.2 '*Extended Statistics Window*'.
- < and > - Switch to the previous or next disk that has been logged. (These do not have to be shifted, so the comma and period work as well on U.S. keyboards). See section 2.8 '*Log Disk*' for more detail on logging and unlogging disk drives.
- Q - Quit ZTreeWin.

1.3.2 Basic Navigation

The following descriptions assume that the Alt-F10 Directory Window configuration option "Highlight bar" is set to the default "Scrolling" mode. If it is set to "Fixed", then the directory list will always scroll in the Directory Window so that the highlight remains on line 4 of the display.

File and Directory Windows

- Up/Down arrows - Use the Up and Down arrows to move the highlight one line up or down until it reaches the top or bottom of the window, then scroll the list up or down.
- Home/End - Move the highlight to the first or last item in the file or directory list.
- Numpad-5 - Scroll the highlighted directory or file to the center of the display window (if possible without having blank lines at the top of the window). In the Directory Window, if the highlight is configured to be Fixed, then reposition the highlight to the mid-point of the directory list.
- Shift-Numpad-# - Where # is 1 through 9, use this with NumLock off to move the highlight to the directory or file at the 10% to 90% point in the list.
- Ctrl-Up/Down - Scroll the list keeping the currently highlighted item highlighted until it reaches the top or bottom of the window. Then continue scrolling the list with the highlight at the top or bottom of the window. (This is disabled in the File Windows if Alt-F10

configuration option "File window Ctrl/Alt-Up/Down to tag/untag" is set to "Yes").

- Ctrl-PgUp/PgDn - Scroll the list up or down so the currently highlighted item is placed at the top or bottom of the window, then scroll the list one page up or down (like PgUp and PgDn).
- Backspace - Use this to navigate to the parent directory. (In a File Window this will log the files in the parent directory if they are not yet logged).

Directory Windows Only

- Left/Right arrows - Use the Left arrow to move the highlight up one level within the current first-level branch. Use the Right arrow to move the highlight down one directory within the current first-level branch.
- PgUp/PgDn - Move the highlight to the top or bottom of the window then scroll the list one page up or down.
- Ctrl-Left/Right - Use to navigate up and down the levels of a directory tree, unlogging and logging directories as you do so.
- Tab/Shift-Tab/
Ctrl-Tab/
Ctrl-Shift-Tab - Move the highlight down or up to the next directory at the same level as the current directory. If the screen is split (see section 1.8 'Split Screen') then use Ctrl-Tab to move down, since in split mode Tab moves the highlight to the opposite side of the split. The functions of Tab and Ctrl-Tab in a Split Screen can be reversed with the Alt-F10 configuration option "Swap Tab & Ctrl-Tab key assignments".
- Ctrl-Home/End - Move the highlight to the first or last directory at the same level as the current directory within the current branch.
- Shift-Up/Down - Move the highlight to the previous or next logged directory.
- Shift-PgUp/PgDn - Move the highlight to the previous or next unlogged directory.

File Windows Only

- Left/Right arrows - Use the Left and Right arrow to scroll the list up or down one page, while keeping the highlight in a fixed position in the window.
- PgUp/PgDn - Scroll the currently highlighted file to the top or bottom of the window, then scroll the list one page up or down. (Set Alt-F10 configuration option "File Window paging like the Directory Window" to "Yes" to make these keys work like they do in the Directory Window).

1.3.3 Treespec Navigation

One of the most powerful and useful ZTreeWin navigation aids is Treespec Navigation. This is entered from the Directory Window and the Normal File Window by pressing the Backslash (\) key.

When the Backslash (\) key is pressed, the input line immediately contains the current directory path, followed by a backslash, ready for editing. As you edit this line, you are interactively taken to the directory that matches the input.

To navigate to a subdirectory, simply begin entering the first letter(s) of the subdirectory name. After reaching the desired subdirectory, press another Backslash (\) to automatically complete the current name, add a backslash, and expand the next subdirectory level (if one exists). Continue this process to navigate to the desired subdirectory. Usually only a few letters are required to navigate in this manner.

Use the Tab and Shift-Tab keys to complete the name and then to navigate to the next or previous directory at the same level as the current directory. The first Tab or Shift-Tab key will complete the name, and subsequent Tab or Shift-Tab keys will navigate. (This can be changed so that the first Tab or Shift-Tab will navigate by setting the Alt-F10 configuration option "Treespec Tab navigates immediately" to "Yes").

To navigate to a parent directory, you can Backspace over the name until the desired parent is reached. However, it is usually easier to use the Left arrow rather than Treespec to navigate in this direction, or use Home to reach the Root, before starting Treespec Navigation.

At the Root of a drive you can Backspace over the disk drive letter and enter a new letter to navigate to that drive.

You can press F5 to disable the automatic mode of the Treespec command and enter the edit mode. This mode enables you to edit the Treespec input line without navigating, until you press Enter. This is useful for navigating to the same directory on another drive by just changing the drive letter (press Home, change the letter and press Enter), or deleting the drive letter for accessing that directory on the current drive. The edit mode also permits the use of wildcards, and system environment variables such as %WINDIR%, %TEMP%, and %USERPROFILE%. These are useful for navigating to directories without having to know the actual path names. Short path names such as C:\PROGRA~1 can also be used in the edit mode. When a pathname is entered using wildcards, all directories matching the pathname mask will be logged. While in edit mode the Tab and Shift-Tab keys cycle the input line through all next-level subdirectory names matching the letters manually input. If no letters were input, they will cycle through all subdirectory names.

In either mode, once you have reached the desired directory, press Enter to complete the navigation and log that directory (if it is not already logged).

Press F6 to display a list of commonly used system and user profile directories, which can then be selected by a single-letter shortcut. Pressing Alt in combination with the shortcut will immediately select and enter the specified item, then exit Treespec. The list of these directories and their shortcuts is as follows:

A	All Users Profile
C	Cookies
D	Desktop
F	Favorites
I	Temporary Internet Files
L	Local Settings
M	My Documents
N	NetHood
O	Outlook
P	Program Files
Q	Quick Launch
R	Recent
S	Start Menu
T	Temp
U	User Profile
W	Windows
Z	ZTree Home

Press Esc to cancel the Treespec navigation and return to the previous directory. Press Shift-Esc to cancel Treespec and remain on the current directory without logging it.

All Treespec Navigation is saved in the history, providing a very quick method of reaching your recently used or favorite directories. The short path names and environment variables saved there in the edit mode can be used even in the automatic mode. Use F3 to retrieve the last Treespec used, or Up arrow to reach the bottom of the history list. (See section 3.6 '*History Lists*' for more information on marking and retrieving history items).

While in the Treespec menu, you can use the Ctrl-Up/Down and Ctrl-PgUp/PgDn keys to scroll the directory list to make a target directory visible that is out of view. (This is not required for Treespec to work, but is simply an additional aid).

You can also use the F4 key to navigate directly to the most recent target directory of a Copy or Move operation.

The Treespec command will automatically refresh the first level of the directory tree under the current directory, in order to reflect changes that may have occurred externally to ZTreeWin. This can be prevented by setting the Alt-F10 configuration option "Automatically refresh directories" to "No" or to "After a write". However, even if set that way, the refresh can be done by pressing a second Backslash key.

In the Branch, Showall or Global File Windows, the Treespec command performs a special form of navigation. In these windows, pressing Backslash navigates directly to the directory containing the currently highlighted file, and enters the Normal File Window with that file highlighted.

1.3.4 Spell Search Navigation

Spell search provides the ability to navigate directly to the next file or directory listed in the current window that matches the key(s) entered. There are two spell search modes, the "Active" and "Prompted" modes. By default the Active mode is disabled. When disabled, you can use Shift-A through Shift-Z to move the highlight bar to the next logged directory or file name that begins with a specified letter. Likewise, pressing a numeric key (0 through 9) will jump to the next logged directory or file beginning with that number.

To turn on the Active mode, set the Alt-F10 configuration option "File/directory name spell search" to "Yes". You can then enter a "search string" to navigate to a currently logged directory or listed file name beginning with a specified string. In addition to Shift-A through Shift-Z and the numerics, most other valid filename characters can then be used. To enter characters matching the extension, enter a colon (:) to represent the period that starts the extension. The current search string is displayed in the lower left border. Use the double quote (") key to repeat the search for the next occurrence of the search string. Use Shift-Backspace to remove a character. Pressing any command key, Ctrl key or Alt key will stop the search. Use Shift-Esc to clear the search string.

Whether or not the Active mode is enabled, you can always use the Prompted mode with the "]" command to do a spell search. In this mode you can enter the alphabetic characters without holding Shift, and can access all valid directory and file name characters currently logged and listed. Also, in this mode, you can use the asterisk (*) wildcard anywhere in the string, so the name does not have to begin with the string. Use double quote (") or PgDn to find the next occurrence of the search string, PgUp for the previous one, and Ctrl-Home/End to go to the first and last match in the list. Use Up/Down to access the history list, and F3 to retrieve the previous search string. Press Enter to exit the Prompted spell search mode.

A separate spell search string is maintained for the Directory and File Windows, the F2 Browse window, and for each side of a split screen (see section 1.8 '*Split Screen*'). However, the same spell search strings are shared between both the Active and Prompted spell search modes.

1.3.5 Bookmark Navigation

As you navigate and enter File Windows to view file information, ZTreeWin automatically maintains a list of directory "bookmarks" which represent the 10 most recently "visited" directories.

A directory is automatically added to or repositioned on the list each time you enter or exit a Normal or Branch File Window. (Entering and exiting Showall or Global File Windows does not affect the list).

Use the bookmark navigation keys [and], or Alt-Left and Alt-Right, to navigate and revisit any directory on the list. ZTreeWin will remain in either the Directory Window or File Window during this navigation.

The [and Alt-Left keys navigate the list starting at the most recent entry towards the oldest. The] and Alt-Right keys navigate in the opposite direction. As you move between bookmarked directories with the navigation keys, the order of the list is not changed. Only the act of entering or exiting a Normal or Branch File Window will move that directory to the most recent position on the list.

The Alt-F10 configuration option "Directory bookmarks wrap" controls whether or not the] and Alt-Right keys will enter the list at the oldest entry. If set to "Yes" it will allow entering the list at the oldest entry, and the list will wrap in either direction. If set to "No" (the default) then the navigation keys will stop functioning when the top or bottom of the list is reached.

To remove the current directory from the list, press Ctrl-]. To remove all bookmarks and clear the list, press Ctrl-].

Press F11 to display the bookmark list. This is very much like the History Lists, except you cannot mark, filter or sort items, and the list is not saved when the ZTreeWin session is ended. Like the History Lists, the most recent directory is shown at the bottom. When the list is displayed, you may pick an entry using the Up, Down and Enter Keys to immediately navigate to that directory. Press Delete to remove an entry from the list.

If your mouse or keyboard has buttons or keys mapped to the Windows Forward and Back functions, and your mouse or keyboard driver generates the Alt-Left and Alt-Right keystrokes, then these will also perform bookmark navigation. (Not all mouse and keyboard drivers do this).

You can also use this window to pick a destination directory, rather than typing the path when moving or copying files, or comparing or grafting directories. Display this window by pressing F11 when being prompted for the destination path during these commands, or when prompted for input. It can be enabled for almost all input prompts by setting Alt-F10 configuration option "Enable F2 and F11 on non-destination input" to "Yes".

Note again that this bookmark list is a temporary list that only exists for the current session, and will be empty the next time you start ZTreeWin. For more permanent quick navigation to certain directories, refer to the Treespec and History List features.

1.4 FILE Specification Box

File Specification (or "filespec") is one of the three methods in ZTreeWin of "filtering" the files that are displayed. (See section 1.7 '*Filtered Displays*' for a description of the other two).

Filespec is one of the main features of ZTreeWin file operations. Only files that match the current filespec are displayed and affected by ZTreeWin operations. These files are called "Matching files". This has the effect of serving as a "filter" to show you only the file, or group of files, with which you are interested in working.

When ZTreeWin is first started, the default *.* (all files) specification appears, and all files are displayed. Press "F" for Filespec in any window to enter a new filespec. Press Enter after the "F", without any input, to quickly return to the default *.* specification.

Filespec is capable of displaying files based on three different types of specifications:

- File names - "name spec"
- File dates - "date spec"
- File sizes - "size spec"

Within each type, multiple specifications can be used, and combinations of the three types can also be used. (See section 1.4.3 '*Combining Filespecs*' for more information on multiple filespecs).

When the length of the File Specification exceeds the space available in the File Specification Box, a right arrow indicates that part of the specification is not visible. To see the complete specifications of the current or previous filespec, press "F", then use the command history (up-arrow) to see the specs; or press "F", then press F3 to retrieve the previous filespec to the input line.

When the filespec is not set to *.* , the Filter Indicator to the left of the Path Identification contains a highlighted dash (-) to indicate that some files may not be displayed. Also, if the "FSSTATS" keyword is assigned a color in the ZCOLORS.INI file, the Filespec, and the Matching statistics will be displayed in that color.

1.4.1 Filespec Rules

The filespec is not case sensitive, so all files matching a name spec, regardless of case, will be displayed.

Filespec treats the name and extension sections of the name spec separately. This means that wildcards do not span the extension period. The only exception to this is that trailing asterisks in the name section will be treated as spanning the extension period if the configuration option "Treat trailing '*' & no '.' as ' *.*'" is set to "Yes". (ZTreeWin automatically adds the period and asterisk (.*) in this case).

If a name spec has no period it is treated as if it had a trailing period and no extension. (ZTreeWin automatically adds the period). A trailing period, if it's not the only period (not counting a leading period), is ignored. A trailing period, if it's the only period (not counting a leading period), means files with no extensions.

A leading period in a name spec is always considered to be like any other character in the name section, and never considered to be the rightmost period which separates the name and extension sections. In ZTreeWin all files are treated as having a name section, therefore if a name spec has a leading period and no other period, it is treated as a name section starting with a period, and no extension. (ZTreeWin automatically adds the extension period).

In date spec, the valid month, date and year separator characters are "/", "." and "-". The year must be specified as either two or four digits.

The entire filespec can be reversed, or "inverted", so as to show only those files that do not match the filespec. Press Ctrl-I to "Invert", then press "F" for Filespec. The filespec shown in the FILE Specification Box will be highlighted, to indicate that the filespec is inverted, or reversed.

1.4.2 Filespec Characters

The following are all the characters, (besides the valid file name and date separator characters), that can be used in the filespec.

- * Use the asterisk in a name spec to specify any number of any characters, including zero (or no characters) in that position of the filename. A rightmost period followed by an asterisk (.*) means files with and without extensions. A leading asterisk followed by a period, and no other periods in the name spec (*.xx*), means the period is to be considered the extension period. (Because files in ZTreeWin must have a name section, the asterisk in this special case cannot represent zero characters).

Example: *ZT*.* displays all files that have a "ZT" anywhere in the name section of the file name, but not any files that do not have a "ZT" in the name section. It includes files with any extension, or no extension.

.HTM displays only those files that have extensions that start with "HTM", and not any files that start with ".HTM" in the name section and have no extensions.

- ? Use leading or embedded question marks in a name spec to specify an exact number of any characters in that position of the filename. Use trailing question marks in either section of a name spec to specify an exact number or fewer, including zero, of any characters in that position of the filename. Use only question marks in either section of a name spec to specify an exact number or fewer, not including zero, of any characters in that section of the filename. To restrict matches to only include the exact number of characters specified, use an additional negated filespec which will match files with fewer characters in that section of the name.

Examples: A?C*.* displays only those files that begin with "A", and have a third letter of "C".

???AB.* displays only those files that have exactly 5 characters in the name section and end in "AB".

AB????.* displays only those files that begin with "AB" and have 5 or fewer characters in the name section.

A*.*?? displays only those files that begin with "A" and have extensions of 1 or 2 characters in length.

????.*JPG,-????.*JPG displays only those files that have exactly 4 characters in their name section, and have an extension of "JPG".

Use question marks immediately followed by an asterisk (???*) to specify an exact number or more of any characters in a filespec.

Examples: A*.*????* displays only those files that begin with "A" and have extensions of four or more characters in length.

A???*G*.* displays only those files that begin with "A" and have two or more characters

followed by a "G" which can then be followed by zero or more characters in the name section.

An asterisk followed by a question mark (*?) is invalid anywhere in a filespec.

, ; To enter multiple specifications, separate each one with a comma, space or semicolon. (See section 1.4.3 'Combining Filespecs' for more information on multiple filespecs).

Example: *.GIF,*.JPG,*.BMP, displays all files having any of the three extensions, and no others.

" " For name specs containing commas, spaces or semicolons, you must enclose the specification in double quotes (or they will be considered separators between multiple specifications). You must also use double quotes for name specs that have a leading dash or equal sign.

Examples: "ABC *XYZ.DOC" will display all files that start with "ABC " (including the space) followed by any number of any characters, and ending in "XYZ", and having a ".DOC" extension. No other files will be displayed.

"-*.TXT" will display all files that have a dash as the first character and a ".TXT" extension. No other files will be displayed.

◀ ▶ Enclose a group of characters, any one of which may occupy this position in the file name. Use Alt-[and Alt-] to insert the ◀ and ▶ characters (or glyphs) into the filespec. (For non-US keyboards, see section 2.11 'Non-US Keyboards'). Use a hyphen between two characters to indicate a range of characters that may occupy that position.

Example: ABC◀123▶.TXT displays ABC1.TXT, ABC2.TXT and ABC3.TXT, but not ABC4.TXT, (or any other files).

??◀A-J▶*.TXT displays those files with ".TXT" extensions that have a character from "A" to "J" in the third position of the name section.

< = > Display only those files that have dates or sizes less than, equal to, or greater than the specified date or size. To specify a size, rather than a date, follow the symbol with an "s". You can also enter TODAY as a spec, to reference files dated today, and TODAY-# to reference files dated a number (#) of days prior to today.

Examples: >12-31-99 displays all files newer than 12-31-99.

=>s200000 displays all files 200,000 bytes or larger in size.

<TODAY displays all files older than today.

- Negate the individual specification, (not the entire filespec), showing only those files that do not match the specification. This must be the first character of the specification.

Examples: -*.TXT will display all files except those with a ".TXT" extension.

-"ABC *XYZ.*" will display all files except those that start with "ABC " (including the space) followed by any number of any characters, and ending in "XYZ", with any extension.

: Label the entire filespec. Precede the colon with the desired label, to make it easy to recognize a long or complex combination of filespecs in the small filespec box. (This is just a visual clue, and has no effect on the filespec itself).

Example: "Pics: *.GIF,*.JPG,*.BMP" will display "Pics:" as the first part of the filespec in the filespec box. This can also help when retrieving a filespec from history. (See section 3.6 'History Lists').

1.4.3 Combining Filespecs

Filespecs can be combined within types. For example, multiple name specs can be used together.

The logic used for positive name specs is "OR", which means that the file is displayed if it meets any of the listed specs. For negative name specs, the logic is "AND NOT", which means that, of the otherwise displayed files, these will be not be displayed. If all the name specs are negative, then the *.* name spec is assumed to be present, even though not specified.

Examples: *.GIF,*.JPG,*.BMP means display all files that have either .GIF or .JPG or .BMP extensions.
.GIF,-A.* means display all files with .GIF extensions, except those that start with the letter "A".

-.*.GIF,-*.JPG,-*.BMP means display all files except those with .GIF or .JPG or .BMP extensions.

The logic used for positive date and size specs is "OR", except when a ">" lower value is immediately followed by a "<" higher value. In this case the logic is "AND", so that the range will be included. For negative, (not equal), date and size specs, the logic is "AND NOT", which means that, of the otherwise displayed files, these will not be displayed.

NOTE: All date and size specs are considered to be positive, unless they are "-=" or "<>", (not equal). This is because a "-<" spec is actually a "=>" spec, and a "-=>" spec is actually a "<" spec, etc.

Examples: <5-1-06,>5-31-06 displays all files not dated in May, 2006.

-=>5-1-06,-<=5-31-06 displays the same as above.

=>5-1-06,=<5-31-06 displays all files dated in May, 2006.

-<5-1-06,->5-31-06 displays the same as above.

-<5-1-06,->5-31-06,<>5-10-06 displays all files dated in May, 2006, except those dated May 10,2006.

Filespecs can be also combined between types. In other words, name specs, date specs and size specs can all be used together.

The logic used when combining the different types of specs is always "AND", which means that files must meet each of the types of specs to be displayed.

Examples: *.TXT,=5-10-06,<s1000 means display only those files with a .TXT extension which are dated May 10, 2006 and are smaller than 1000 bytes in size.

.GIF,.JPG,*.BMP,-* ◀XYZ▶ .*,<5-1-06,>5-31-06,=>s10000,<=s100000 means display all .GIF, .JPG and .BMP files that have names that do not end in "X" or "Y" or "Z", and are not dated in May, 2006, and are between 10,000 and 100,000 bytes in size.

1.5 DISK Specification Box

This identifies the disk currently referenced by ZTreeWin, and shows the volume name and number of available bytes for this disk. If NTFS disk quotas are in use not all these bytes may be available to the user.

Use the Log or Alt-Log (Log Options) commands to log another disk. Log keeps the information for previously logged disks in memory, and Alt-Log releases all other disks, and/or provides for partial logging. Use the < and > keys to switch to a previously logged disk without relogging it.

To change the volume name of a disk, select the Ctrl-Volume command from the Directory Window command menu.

1.6 Statistics Displays

1.6.1 Statistics Panel

When the Directory Window or Showall File Window is active, the statistics in this box reflect the data for the entire disk: DISK Statistics, or SHOWALL statistics. For the Small or Expanded File Window, the statistics apply only to the current directory: DIRECTORY Statistics. When the Branch Window is active, the statistics apply only to the current branch: BRANCH Statistics. In the Global Window, the statistics include all logged disks: GLOBAL Statistics. In all cases, the statistics reflect totals only for currently logged directories.

The Total statistics shows you the total number of files and how much space these files use. The Matching statistics show you how many files match the File Specification and the amount of space they utilize. The Tagged statistics show you how many files have been tagged (marked with a diamond) and how many bytes these tagged files occupy.

This box also displays the name of the current directory and the size of its contents if the Directory Window is active, or the current file and its size if any of the File Windows is active.

If the line height is set to more than 25 lines, then the number of files in the directory is also shown in the Directory Window, and the file attributes, date and time is also shown in the File Window.

When the keyword "FSSTATS" is assigned a color in the ZCOLORS.INI file, then the "Matching" section is displayed with that color when the Filespec is not set to *.*. Also, when the keyword "TAGSTATS" is assigned a color in the ZCOLORS.INI file, then the "Tagged" section is displayed with that color when there are tagged files in the current directory or File Window.

1.6.2 Extended Statistics Window

In addition to the statistics displayed in the Statistics Panel, ZTreeWin provides more detailed information about your disk drive and files in the Extended Statistics Window. Press "?" or "/" from the Directory or File Window to display this window. The initial information shown is for the drive of the currently selected directory or file. Use the < or > keys to switch drives while the statistics are displayed. Press F3 to refresh the statistics for the displayed drive. Press Ctrl-F3 to automatically refresh the statistics each second. Close the window by pressing Esc or Enter.

Below is a guide to some of the additional data supplied in this window:

DISK STATISTICS Column

- | | |
|-------------|---|
| Disk Drive | - Drive letter assigned and volume name. |
| File system | - Formatted file system. |
| Location | - If the disk drive is a mapped network share or a SUBST drive, then the UNC or SUBST |

Path will be shown.

- Capacity - Total amount of physical space on the logical disk.
- Available space - Amount of space on the disk that is available for files and directories. If NTFS compression is used on the disk, this statistic may not be accurate until refreshed (use F3). If NTFS disk quotas are in use not all this space may be available to the user.
- Used space - Amount of space on the disk that is not available for files and directories.
- Slack space - Used disk space not available due to clustering. This is the difference between the total size of the logged files on the disk, and the amount of space used on the disk to store them. This is caused by the fact that files occupy multiples of entire fixed-size clusters, but do not usually occupy the entire last cluster, thereby wasting space. To see the slack space of the entire disk, all files must be logged. This statistic is not calculated for and does not appear on NTFS disks.
- Compression gain - Disk space saved by NTFS file compression. This is the difference between the total uncompressed size of the logged compressed files on the disk, and the amount of space used on the disk to store them. This statistic appears only on NTFS disks.
- Other overhead - Used disk space that is not allocated to files and their slack space. It includes the space occupied by directories. On NTFS disks it also includes the master file table (MFT), alternate data streams (ADS), and files that are hidden due to permissions. This statistic appears only if all files on the disk are logged.

NOTE: If the disk is a mapped network shared subdirectory, or a subdirectory mapped with the SUBST command, then this overhead will include all physically used space on the disk that is not occupied by the mapped subdirectory, and is therefore hidden from ZTreeWin.

NOTE: On an NTFS disk, if reparse points or hard links are in use, other overhead may appear as a negative number. This is because ZTreeWin has no way of determining that some files are actually being accessed from another disk, or accessed more than once. The calculation of space occupied by the files will therefore be more than actual, and other overhead will be less.

- Cluster size - The size of the clusters formatted on the disk.
- Sector size - The size of the sectors formatted on the disk.
- Total sectors - The number of sectors formatted on the disk.
- Total clusters - The number of clusters formatted on the disk.
- Sectors/cluster - The number of sectors in each cluster on the disk.

FILE STATISTICS Column

- Filespec - The current filespec filter.
- Total files - The number and total size of files currently logged on the disk or branch.
- Matching files - The number and total size of logged files on the disk or branch that match the filespec.
- Tagged files - The number and total size of tagged files on the disk or branch.
- Compressed files - The number and total uncompressed size of NTFS compressed and sparse files currently logged on the disk or branch. This statistic appears only on NTFS disks.

- Directories logged - The number of directories that are logged on the disk or branch.
- Displayed files - The number and total size of files displayed in the current Directory or File Window.
- Average size - The average file size of files displayed in the current Directory or File Window.

SYSTEM INFORMATION Column

- RAM total - The total amount of system RAM reported by Windows.
- RAM free - The amount and percentage of available free RAM reported by windows.
- Commit total - The total amount of virtual address space in use. and its percentage of the total system RAM.
- Commit peak - The highest amount of virtual address space in use since Windows was last booted, and its percentage of the total system RAM.
- CPU speed - The approximate processor speed.
- CPU type - The processor name as stored in the registry.

DISPLAY INFORMATION Column

- Cols - The total character width of the entire ZTreeWin window.
- Rows - The total line height of the entire ZTreeWin window.
- List height - The number of lines in the current Expanded File Window.
- Files/page - The number of files that can be displayed in the current Expanded File Window in the current Alt-File display mode.
- Name.ext length - The lengths of the largest filename (name.extension sections) that can be displayed in the current Expanded File Window in the current Alt-File display mode.
- Screen resolution - The display resolution of the active monitor in width x height.

LOGON INFORMATION Column

- Computer name - The name of the computer.
- User login name - The name of the currently logged in user.
- Workgroup name - The workgroup of which the computer is a member.
- Domain name - The Windows domain the computer is currently logged into.

1.7 Filtered Displays

As mentioned in section 1.4 '*FILE Specification Box*', there are three methods of filtering files in ZTreeWin. The first was described in that section. The other two methods are to enter a "Tags-Only" display mode, or to use the Compare Filter.

1.7.1 Tags-Only Mode

In the Tags-Only mode ZTreeWin displays in the File Window only those files that are tagged, and also match the filespec, (matching tagged files). See section 2.10 '*Tagging Files*' for more basic information about tagging files.

When the Tags-Only mode is active, the Filter Indicator to the left of the Path Identification contains a diamond (◆) to indicate that some files may not be displayed.

The Tags-Only mode can only be entered if there are tagged files that match the filespec. If there are no matching tagged files, then no action is performed. There are five methods of entering the Tags-Only mode, (four from the Directory Window, and one from the File Window).

From the Directory Window, use the same keys as usual to enter the File Windows, except also hold the Ctrl key to show only matching tagged files:

- Ctrl-Enter - Normal File Window.
- Ctrl-Branch - Branch File Window.
- Ctrl-Showall - Showall File Window.
- Ctrl-Global - Global File Window.

From any File Window:

- Ctrl-Enter - Enter the Tags-Only mode. If already in the Tags-Only mode, reduce the list to only the tagged or Ctrl-F4 Files or exit the Tags-Only mode if all or no displayed files are tagged.

The detail of how this works is as follows:

If not in the Tags-Only mode, then:

- If some displayed files, but not all, are tagged, enter the Tags-Only mode showing only the tagged files that match the filespec.
- If none or all displayed files are tagged, then take no action. If no displayed files are tagged and there are non-matching tagged files in the directory, this will first display the message "No tagged files match the filespec".

If already in the Tags-Only mode, then:

- If some displayed files remain tagged, but not all, remain in the Tags-Only mode and reduce the list to show only the matching tagged files.
- If all displayed files remain tagged, then exit from the Tags-Only mode and display all matching files.
- If no displayed files remain tagged, exit the Tags-Only mode and display all matching files. If there are non-matching tagged files in the directory, this will first display the message "No tagged files match the filespec".

If you untag files while in the Tags-Only mode, the untagged files will remain displayed until a refresh is done. The refresh can occur either automatically or by pressing F3, at which point the display will be reduced to only the tagged files, (or if all tags have been removed, expanded to display all files). See Alt-F10 configuration option "Automatically refresh directories" to enable or disable automatic refreshing.

1.7.2 Compare Filter

While in any File Window where it is possible to have duplicate file names, (Branch, Showall or Global File Windows), you can enter the Compare Filter mode by pressing Alt-F4.

This provides a special compare menu which allows the display to be reduced to a subset of files, based on their name, size or content. This mode is very temporary. Any operation that causes a refresh will exit the Compare Filter mode.

The Compare filter options are as follows:

- Duplicate names - Lists files with duplicate names, regardless of their dates, size or content.
- siZe - Lists files with duplicate size, regardless of their name.
- Content - Lists files with duplicate binary content regardless of their name or timestamp.
NOTE: This option potentially involves reading the contents of every file, and can take some time.
- Unique names - Lists files that have unique names.
- Identical dates - Lists files with duplicate names AND the same date.
- Newest dates - Lists the most recent version of each file that is not unique. If there is more than 1 file with the same (most recent) date, all copies are listed.
- Oldest dates - Lists the earliest version of each file that is not unique. If there is more than 1 file with the same (earliest) date, all copies are listed.
- All files - Remove the current compare filter to redisplay all files.

The siZe and Content options present a secondary menu which allow the suppression of 0-byte files. For the siZe option, there is also a Tolerance setting, which can be used to allow for inexact matches within a specified number of bytes. This setting can be entered with optional K or M suffixes to indicate KByte or MByte values.

When in a Global File Window, the compare scope for Duplicate names and Unique names can be restricted to all files, or to just those files on different drives, or to those in matching paths on different drives.

The global Scope options are as follows:

- all - Disk and path are ignored when comparing file names.
- across drives - Files must be on different disks to be considered duplicate. Path names are ignored.
- matching paths - Files must be on different disks but must have matching path names to be considered duplicate.

This Compare Filter mode operates only on the files currently being displayed. In effect, it reduces the current list to those files that match the menu choice. Once reduced, additional Alt-F4 Compare operations (other than All files) only further reduce the list. They do not redisplay any files not currently displayed.

Filtering by either Duplicate or Unique names will leave the file list sorted by name. Filtering by siZe or Content will leave the file list sorted by size. This is to further assist in the identification of duplicate files. This is a temporary sort, and the original sort criteria will be restored once the File Window is exited.

When the Compare Filter mode is active, the Filter Indicator to the left of the Path Identification contains a number sign (#) to indicate that some files may not be displayed, even though they do match the active filespec.

As this mode is very temporary, it is useful in some circumstances to use Ctrl-Tag on the resultant file list, so that they may be recalled together later in a Ctrl-Branch/Showall or Global File Window.

1.7.3 Filter Indicator

The Filter Indicator is displayed to the left of the Path Identification any time that ZTreeWin is in one of the three filtering modes. This indicates that not all files may be displayed.

- Filespec - Whenever the filespec is not *.* , the filter indicator is highlighted. If no other filter mode is active, then a dash (-) is highlighted.
- Tags-Only - When ZTreeWin is in a Tags-Only mode, a diamond (◇) is displayed in the Filter Indicator.
- Compare Filter - When the Alt-F4 Compare Filter is active, a number sign (#) is displayed in the Filter Indicator.

1.8 Split Screen

ZTreeWin provides the ability to have two simultaneous views of the files and directories on your disks. From the Directory or File Window press F8 to split the current display in two. After splitting the display, the new window on the right side will initially display the same information as on the left. You can then perform ZTreeWin commands separately on each side of the split. The operations are performed in the side that contains the highlight bar. To swap the contents of the left and right sides, press Shift-F8, Swap.

Use the Tab key to move the highlight bar between the two sides. The side of the split you are leaving is temporarily frozen, and a highlighted right-arrow pointer is displayed to the left of current directory or file on that side. If the directory is not logged, or the file is tagged, then the log symbol or tag is highlighted instead.

If you perform operations in the newly activated side of the split that affect the information in the inactive side, the inactive side is updated only when you Tab back to it.

Since the Tab key is used to toggle between the two sides, the alternate Ctrl-Tab key can be used to navigate down the directory tree at the same level. (Shift-Tab or Ctrl-Shift-Tab are used whether or not the screen is split to navigate up the directory tree at the same level). The functions of the Tab and Ctrl-Tab keys can be swapped by setting the Alt-F10 configuration option "Swap Tab & Ctrl-Tab key assignments" to "Yes".

When the screen is split, the destination directory for copy and move operations always defaults to the current directory on the opposite side of the split. If the opposite side is in a Branch, Showall or Global File Window, the default current destination directory on that side is the

Initially when the screen is split the current state of the previous unsplit window is duplicated on the right side. After that, a separate independent state is maintained for each side of the split for the following settings:

- Tags
- Filespecs
- Spell search strings
- Window mode (Directory or File) for each disk
- Current directory and file for each disk
- Sort order (if the Alt-Sort F8 setting is 'Diff')

A common ZTreeWin state applies to both sides of the split for all other settings. Any change to these will affect both sides of the split, but will be seen only when you Tab to the other side. Some of these settings are:

- Disk and directory logging
- F5/F6 collapse/expand state
- Sort order
- Column mode
- Kbyte mode
- Bookmarks
- History
- Most recent target and browse directories
- Sort order (if the Alt-Sort F8 setting is 'Same')

When you first split the display, ZTreeWin copies the file tags and other window states from the original display to the new one on the right. Any Tag or Untag operations you then perform affect only the tags in the display side that is currently active. As indicated above, file tags are maintained separately once the display is split, unless you unlog a directory with tagged files in it.

When the display is split, the Merge tags (Ctrl-F6) command can be used to copy the tags in the current window to the same files in the same directory on the opposite side. This works whether or not the files on the opposite side are currently being displayed. (You must Tab to the other side to refresh that window before the tags will appear).

To unsplit the display, press F8 again. ZTreeWin displays in full width whichever side was active when you pressed F8 to unsplit the display, and any tags unique to the opposite side will be lost.

If the ZTreeWin window is wide enough, you can optionally display the Statistics Panel for the current or for both panes. Press Shift-F8 to set the display of statistics to None, Current or Both. If the ZTreeWin window is at least 102 columns wide, Current is an available option. If the ZTreeWin window is at least 122 columns wide, Both is also available. The initial setting can be made in the Alt-F10 configuration option "Initial Statistics Panels in Split Screen".

Also, in wider screens more file and command information may be available. See section 1.10 '*Video Control*' for the various methods of controlling the screen size.

1.9 Browse Window

This window enables you to browse for a destination directory, rather than typing the path when moving or copying files, or comparing or grafting directories. Display this window by pressing F2 when being prompted for the destination path during these commands, or when prompted for input. It can be enabled for almost all input prompts by setting Alt-F10 configuration option "Enable F2 and F11 on non-destination input" to "Yes".

The Browse Window is displayed using inverted colors to differentiate it from the normal Directory Window.

If the active input prompt contains a path specification at the time F2 is pressed, that will be in initial location of the Browse Window; otherwise the first time this function is used during a session, the display will be of the active disk with the current directory highlighted. As other disks are later browsed, the last selection on each is saved, and is shown by default in subsequent uses when the input line is blank. Use the F4 key to return to the current directory at any time (on menu only if window is wide enough).

The highlight bar identifies the destination directory that will be placed on the input line. Use the cursor keys to Highlight the desired directory. Most of the directory outlining and navigation keys work in this window, including Ctrl/Shift-Tab for next/previous directory at same level, '+' and Ctrl-right to expand, F5/F6 to collapse, \ for Treespec, Alt-Left/Right for previous directory bookmarks, Shift-letter for spell searching, etc. (A separate spell-search string is maintained for the Browse function). You can also use < and > to switch drives, or "L" to log a new drive while in this window. See section 1.1 '*Directory Window*' for the full list of outlining commands, and section 1.3 '*Directory and File Window Control Keys*' for a description of the navigation, spell search and bookmark navigation commands.

Log commands performed in this window affect the actual logged state of disks and directories in ZTreeWin. The unlog and release commands are not active.

Press Enter to select the highlighted directory and pass the path name to the destination prompt. Press Esc to return to the destination prompt without passing a path name.

1.10 Video Control

The initial default size of the ZTreeWin window is 96 columns by 43 lines (96x43). This window can be enlarged and controlled in several ways. Enlarging it not only provides longer lists and longer visible file names, but in many cases can provide additional file information and menu command help.

One method of controlling the initial size is by the Alt-F10 configuration options "Number of characters wide" and "Number of rows high". Either or both of these may be set to "MAX" to set the initial size to the maximum size that will fit on the screen. This size will depend on the screen resolution and the font being used in the shortcut.

The initial size may also be set by command-line options. These will override the configuration option settings, as explained in section 3.13 'Command-Line Options'. The /COLS and /ROWS switches provide the ability to specify a series of sizes, which will be used by the horizontal and vertical video control commands.

There are three video control commands which can be used at any time to change the overall size of the display:

- Alt-F7 Zoom - Use to toggle the size to maximum size and back to the previous size. If there was no previous size, (initially MAX), then it will toggle to the size set in the configuration options, or 96x43.
- Alt-F8 Video - Use to cycle the horizontal width through the settings specified on the command line with the /COLS switch, (or use internal settings if not specified), up to the maximum width possible, depending on the screen resolution and font being used.
- Alt-F9 Video - Use to cycle the vertical height through the settings specified on the command line with the /ROWS switch, (or use internal settings if not specified), up to the maximum height possible, depending on the screen resolution and font being used.

Some 16-bit DOS programs have difficulties if the window size is not one of the standard sizes, (80x25, 80x43 and 80x50). These programs may freeze, especially when they exit. Therefore, if you start one of these programs from ZTreeWin, you may want to set up your window sizes so that you can cycle with the video control commands to one of these standard sizes.

In some cases, when calling an external program from ZTreeWin, an undesirable blinking will occur. This is a Windows problem caused by the use of bright background colors in ZTreeWin. To avoid this, configure ZTreeWin to use only one of the eight normal (dim) background colors.

You may use the Windows Alt-Enter key to toggle the ZTreeWin window to full screen and back. This works best if the window is first set to one of the above mentioned standard sizes. (This function is not supported in Windows Vista or Windows 7).

See section 3.12 '*Shortcut Setup*' for important information regarding how the shortcut properties may affect the video display.

2. ZTreeWin Commands

ZTreeWin provides two primary sets of command menus. These menus are displayed at the bottom of the screen, and change according to the type of window in which the highlight bar is located.

The Directory Command menus contain the commands that operate on disks and directories, and are displayed only when the highlight bar is in the Directory Window. The File Command menus usually operate on files, and are only displayed when the highlight bar is in a File Window.

There are three sets of commands in each type of window.

- Normal (unshifted) commands are those you usually see at the bottom of the screen when you are not pressing a shift key (Ctrl or Alt). Choose these commands by pressing the key indicated by the first uppercase letter in the command. Normal commands generally operate on individual disks, directories, and files.
- Ctrl commands appear when you hold down the Ctrl key. They typically act on multiple files, (or tagged files).
- Alt commands appear when you hold down the Alt key. They are advanced commands and sometimes extend the function of Normal commands. When calling external commands, the Alt versions usually launch in a separate session.

You can access the Ctrl and Alt commands without holding down those keys by using the F4 key to cycle through the Normal, Ctrl and Alt menus.

2.1 Standard Operation Keys

There are a number of standard keys used throughout ZTreeWin to control the operation of commands. These are active after commands are started and a command is prompting for input on an input line.

The descriptions of the individual commands in sections 2.2 through 2.7 do not usually include the descriptions of the keys and options described here. Being familiar with these keys will be very helpful in becoming proficient in using ZTreeWin. They are described in the following subsections.

2.1.1 Command Control And Help

The following keys are normally used at all command prompts to complete or cancel the command, or obtain help:

- Enter - Accept the information on the input line, perform the action indicated by the ◀ symbol, or complete the command.
- Esc - Cancel the command operation.
- F1 - Display this ZTreeWin Help file at a point or section that is related to the operation in progress.

2.1.2 Retrieving Information to the Input Line

Most Input Lines

The following keys will normally be available to retrieve information from history to the input line. (See section 3.6 '*History Lists*' for a full description of all the keys used for retrieving history into the input line).

- Up/Down arrow - Pick a history item from the history list, then press Enter to retrieve it to the input line.
- F3 - Retrieve the most recent history item from the history list and place it on the input line.

File and Directory Name Input Lines

The following keys will normally be available to aid in entering a file or directory name on the input line:

- Tab / Ctrl-Tab - Change the case of the name when prompted for a name. (Set the Alt-F10 configuration option "Rename function - Tab case mode" to "Name only" to have Tab change only the name section). Use Ctrl-Tab to change the case of the extension only.
There are four states to the Tab/Ctrl-Tab change-case toggle:
- ALL UPPER Capitalizes all characters.
 - all lower Changes all characters to lower case.
 - Word Caps Capitalizes the first letter of any word which follows a space or symbol.
 - * Does not change the case of this section of the name. (In Ctrl-Rename, the 4th cycle changes to the file name currently highlighted).

Destination Directory Input Lines

The default destination input line depends on whether or not the screen is in the F8 Split mode, a previous destination had been selected, and whether the sHortcut command is being used. When the screen is not split, the default is:

- Blank if no previous destination, and not the sHortcut command
- The previous destination, and not the sHortcut command
- The Desktop directory if the sHortcut command is being used

When the screen is in the F8 Split mode the default is always the directory which contains the file in the opposite panel.

The following keys will normally be available to aid in entering an alternative destination directory name on the input line:

- Tab - Cycle through a selection of directory paths. The first press of Tab always selects the current directory (the directory that was current when the File Window was entered). The following is the sequence of paths that may be available, depending on the command in progress and the window mode. Except for the first press of Tab, the destination will be skipped if it was already displayed in the sequence:
- Current directory (always)
 - Desktop directory if a sHortcut command
 - Previous target directory
 - Current directory in opposite panel in F8 Split mode
 - Directory of the current file
 - Loop back to the original input line default directory
- Shift-Tab - Cycle in reverse through a selection of directory paths. The first press of Shift-Tab always selects the directory containing the current file. The sequence is:
- Directory of the current file (always)
 - Current directory in opposite panel in F8 Split mode
 - Previous target directory
 - Desktop directory if a sHortcut command
 - Current directory
 - Loop back to the original input line default directory
- F2 - Activate the Browse Window. Use this to place a directory path into the input line. (See section 1.9 '*Browse Window*' for more details on using the Browse function to choose a destination directory).
- F11 - Pick from the recently visited (bookmarked) directory list and enter it on the input line. (See section 1.3.5 '*Bookmark Navigation*' for more information on using directory bookmarks).
- .
- Use a period to choose the directory path of the currently highlighted file for the destination.
- ..
- Use double-period to refer to the parent directory of the currently highlighted file for the destination,

except when in Branch, Showall or Global File Window, where this refers to the parent directory of the base directory of the current File Window.

2.1.3 Editing the Input Line

Many input lines show and highlight the default input. When highlighted, pressing any character key erases the highlighted input and places that character at the beginning of the input line. You may edit the input line by first pressing any normal navigation key, or the Backspace key.

If the Alt-F10 configuration option "Highlight the default input values" is set to "No", then no highlighted input will appear. Pressing Enter on the blank input line in this case will normally fill in the default value for that input line.

NOTE: Input lines are limited to a maximum of 255 characters.

Use the following keys to edit input lines:

- Left/Right arrow - Move the cursor left or right one character.
- Home/End - Move the cursor to the beginning or end of the input.
- Ctrl-Left/Right - Move the cursor one word to the left or right. (Words are delimited by the following characters: space, comma, period, underscore, slash and backslash).
- Shift - Hold Shift while using any of the above navigation keys to select or deselect characters on the input line.
- Del Key - Delete the character at the cursor.
- Backspace - Delete the character to the left of the cursor.
- Ctrl-Backspace - Delete the entire input line.
- Ctrl-Home Key - Delete all characters to the left of the cursor.
- Ctrl-End Key - Delete all characters to the right of the cursor.
- Ctrl-Del Key - Delete all characters to the right of the cursor. (Same as Ctrl-End).
- Ctrl-Ins Key - Copy the selected portion of the input line to the Windows Clipboard. (You may also use Ctrl-C for this purpose if "C" is not being used to mark a history item related to this input). If nothing is selected the entire input line is copied to the Clipboard.
- Shift-Del Key - Cut the selected portion of the input line to the Windows Clipboard. (You may also use Ctrl-X for this purpose if "X" is not being used to mark a history item related to this input). If nothing is selected the entire input line is cut to the Clipboard.
- Shift-Ins Key - Paste the Windows Clipboard information into the input line. (You may also use Ctrl-V for this purpose if "V" is not being used to mark a history item related to this input).
- Alt-*nnn*/Alt-0*nnn* - Using the Numpad, enter the decimal ASCII code for the required OEM or ANSI character to be inserted from the active Windows codepage. A leading zero causes the equivalent ANSI character to be inserted, otherwise by default it will be the OEM character.
- Alt+-*xxxx* - If the registry key *HKEY_CURRENT_USER\Control Panel\Input Method\EnableHexNumpad* has a string value of "1", pressing Alt and '+' on the Numpad, followed by the hexadecimal Unicode code point, will generate a Unicode-encoded (UTF-16) character.
- Alt-. - Use this key (Alt-period) to place ".*" on the input line.

2.2 Directory Window Commands – Normal

Normal Directory Commands are displayed at the bottom of the screen when the highlight bar is in the Directory Window. Some commands do not appear on the menu, and some will only be shown in wide screen modes. To execute a Normal command, press the key indicated by the first uppercase letter, character or function key for the command. This key is highlighted if it's on the menu.

The following is a list of all Directory Window Normal commands. Descriptions of those commands that do not appear on the menu are marked here with "~".

- Avail - Show the amount of space available on any disk drive.
- Branch - Enter the Branch File Window and display all matching files logged in the current branch.
- Compare - Compare the file entries in the current directory with those in a second directory, and tag the files in the current directory that match the options chosen, when compared to the files in the second directory.
The options are:
 - Identical- All files that are identical in size, date (timestamp) or both.
 - Unique - All files that do not have the same name in the second directory.
 - Newer - All files that have a newer date (timestamp) in the current directory.
 - Older - All files that have an older date (timestamp) in the current directory.
 - Size - All files that are smaller, larger or differ to the same file in the second directory.
 - Binary - All files that have either the same or different internal contents.
 - Case - Set to "Yes" to treat files with the same name but different case as different files.Combinations of the options Identical, Unique, Newer, Older and Size use "or" logic. For example, you can tag files that are Unique "or" Newer. Binary scans the contents of the files, then uses "and" logic with Identical, Newer, Older and Size, and uses "or" logic with Unique. For example, you can tag files that have identical timestamps, "and" have different contents. Note that NTFS timestamps are accurate to less than one second, and while ZTreeWin does not display this additional precision, it is used when performing the comparison. Time tolerances can be set with Alt-F10 configuration options "Ignore 2 second timestamp differences" and "Ignore 1 hour timestamp differences". The default settings can be set in Alt-F10 configuration section "Compare and Alt-Compare remembered settings". Press F12 to reset compare options to default settings.
- Del - Delete the current directory, which must be empty. (Use Alt-Prune to remove non-empty directories). If the directory is on a local fixed drive, use F4 to choose whether or not to use the Recycle Bin.
- Edit - Edit a new or existing file using the editor specified in the Alt-F10 configuration option "Editor:".
- Filespec - Specify a group of files for ZTreeWin's operations. This specification is a filter that defines "matching" files. Press F4 to retrieve the current filespec to the input line. See section 1.4 'FILE Specification Box' for a detailed description.
- Global - Enter the Global File Window and display all matching logged files on all logged disks.
- sHortcut - Create a shortcut to the current directory. The default name of the shortcut will be the directory name. You may enter a new name if desired. The .LNK extension will automatically be added to the name on the input line.
- Invert - Reverse the tags on all matching files in the current directory, or reverse the File Specification.
- Log - Log another disk, keeping the disks which were previously logged in memory. See section

- 2.8 'Log Disk' for more details on the available options. This function may be swapped with Ctrl-Log, using the Alt-F10 configuration option "Swap Log and Ctrl-Log key assignments".
- Make**
- Make a new subdirectory under the current directory using the standard operation keys. Multiple levels may be created in one operation by separating each level with a Backslash (e.g. dir1\dir2\dir3). Use the Rename colon insertion pair to insert date and time elements in the name (see section 3.3.1.16 'Colons Insert Date and Time'). Set the F4 Jump option to 'yes' to navigate directly to the newly created directory once it is created. Use the F12 Reset command to reset the F4 Jump option to 'no'.
- New date**
- ~ Modify the timestamp (written, created, accessed) of the current directory by either setting it to a specific value, or adjusting the current value by the specified criteria. Use F2 to place the current system date and time on the input line, and use Tab to place the original timestamp on the input line. Blanking out the date or time will cause the directory's current date or time value to be preserved, allowing you to change the date or time independently. Use F4 to cycle through the Timestamps (written, created, accessed or ALL) to be modified. Use F5 to toggle between set to mode and 'adjust' mode. In F5 'adjust' mode, the following syntax is used:
 [+/-d|m|y][+/-h|n|s][e]
 where:
 d = Day h = Hour
 m = Month n = Minute
 y = Year s = Second
 e = round timestamps to the next even second
 examples:
 +1y-5n
 -3d+10se
 (This function is not supported under Win9x).
- Oops!**
- Open the Windows Recycle Bin to restore files and directories, or run ZOOPS.BAT if it exists in the ZTreeWin directory to launch an alternative program.
 NOTE: The Recycle bin window may not be visible because Windows placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.
- Print**
- Print directory information. There are three directory print options:
 - Catalog of tagged files - Print a list of all tagged files in visible directories on the current drive.
 - Pathnames - Print a list of all logged paths on the current drive.
 - Tree - Print a directory tree of the current drive.
 Set the following print options:
 - Lines/page - Set to the desired number of lines on a page before a page break. Set to 0 to not send page breaks to the printer.
 - Margin - Set to 1 to create a left margin of about 1 inch. (Actually 8 characters).
 - Wrap - Set to "Off" to not wrap long lines sent to the printer, or select 75, 80 or 132 as the wrap point for the right margin.
 - Print to - Enter a port name such as LPT1 or COM1, or enter a file name to print to a file, (appends if the file exists). Press Tab to cycle through the installed printers. Select "CLIP:" to print to the Windows Clipboard. Select "Windows Drivers" to use the Windows dialog to choose the printer. Press Esc to return to the Print menu without selecting a different printer, or Enter to use the selected printer.
 NOTE: The Recycle bin window may not be visible because Windows placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.
- Quit**
- Quit ZTreeWin and return to Windows. Use Y or Q for the confirmation.
- Rename**
- Change the name of the current directory using the standard operation keys. A preview confirmation will appear automatically on a complex Rename if the Alt-F10 configuration option "Rename protection" is set to "Confirm". Press F5 to recall the original name from the previous Rename command. Although F5 is intended as a quick 'undo' of a single-directory

name, it can be used to rename another directory to the previous name of the most recently renamed directory. (See section 3.3 '*Renaming Files and Directories*' for details on the many rename options and features).

- Showall - Enter the Showall File Window and display all matching files logged on the current disk.
- Tag - Tag all matching files in the current directory, and advance the highlight bar to the next directory.
- Untag - Untag all matching files in the current directory, and advance the highlight bar to the next directory.
- View - View the contents of the entered file using the internal viewer, or another viewer using the viewer specified in the Alt-F10 configuration option, "Viewer:". See section 3.8 '*The Internal Viewer*' for more information on the internal viewer.
- eXecute - Open a command prompt shell window to run programs or Windows commands from a command line. Console programs will be launched in the synchronous mode as a part of the ZTreeWin task. GUI programs may be launched synchronously or asynchronously, depending on the version of Windows and the program. (See section 2.11 '*Launching Programs*' for more details). Use Batch parameters and environment variables to include information about the directory, and other variable information, on the command line. (See section 3.4 '*Batch Parameters and Environment Variables*'). The current directory, or in a Branch, Showall or Global File Window the directory containing the current file, is automatically the current directory in the shell window. Use the Up, Down, F3 or other history keys to retrieve previous command history. (See section 3.6 '*History Lists*'). Press Esc to exit the shell window, or press Ctrl-Enter rather than Enter to exit the shell window immediately after executing the command.
- Y Assist ~ ZTreeWin Assistant Application Program (ZAAP) command. Requires that ZTreeWin be started with the /ZB switch. At the Assist prompt enter a command string to be passed to the assistant program. ZTreeWin will pass the command string and the highlighted directory name to the program selected by the first letter of the command string. For more information on available ZAAPs visit the ZTreeWin ZAAP web page at:
<http://www.ztree.com/html/zaap.htm>
- Shift A..Z ~ Move the highlight bar to the next directory in the list that starts with this letter. (See section 1.3.4 '*Spell Search Navigation*' for more details).
- 1..9 ~ Move the highlight bar to the next directory in the list that starts with this number. (See section 1.3.4 '*Spell Search Navigation*' for more details).
- Numpad-5 ~ Scroll the highlighted directory to the center of the Directory Window, (if possible without having blank lines at the top of the window). If the highlight is configured to be Fixed, then reposition to the mid-point of the directory list.
- Shift-Numpad-# ~ Where # is 1 to 9, use this with NumLock off to move the highlight to the 10% to 90% point in the directory list.
- F1 Help - Display the online Help file.
- F3 ~ Refresh the file list for the current directory and update its entire branch structure, to reflect possible changes made by other applications. (Keeps tags and does not log files or subdirectories of any new subdirectories). Also redisplay directories hidden with Shift-Numpad-minus.
- Shift-F3 ~ Refresh the file list for the current directory and update the branch structure of the next level only, to reflect possible changes made by other applications. (Keeps tags and does not log files or subdirectories of any new subdirectories).

- F4 ~ Cycle through the Ctrl, Alt and Normal menus without holding the Ctrl or Alt keys.
- F5 ~ Toggle between collapsing and expanding the currently-logged second-level subdirectories of the current directory, without unlogging (releasing) them.
- F6 ~ Toggle between collapsing and expanding the currently-logged first-level subdirectories of the current directory, without unlogging (releasing) them.
- F7 Autoview - Autoview the files in the current directory. Use F7, Esc or Enter to exit the Autoview mode. Use Alt-Right and Alt-Left to change the relative widths of the file list and document windows. Use Alt-Home to restore the default widths. Use Shift to control the viewer in this mode, using the normal viewer commands. (See section 3.8 '*The Internal Viewer*' for these commands).
- F8 Split - Split and unsplit the window display. (See section 1.8 '*Split Screen*').
- Shift-F8 ~ Display a menu to choose displaying the Statistics Panel for None, the Current, or Both sides of a Split Screen (provided the screen is wide enough), and to Swap the left and right sides.
- F9 Menu - Application Menu. Activate the ZTreeWin Application Menu. See section 3.5 '*Application Menu*'.
- Shift-F10 ~ Show the Windows context menu for the highlighted directory, or for the drive if the highlight is at the root. This is the same as a right-click with the mouse in Windows Explorer.
- F11 ~ Show the bookmark history. See section 1.3.5 '*Bookmark Navigation*' for a detailed description.
- F12 ~ Run a keyboard macro. See section 3.10 '*Keyboard Macros*'.
- * ~ Log all files and directories of the currently highlighted directory.
- + or = ~ Log the files in the current directory, and display the next level subdirectories of the current directory, without logging their files.
- or _ ~ Unlog all the files and subdirectories of the current directory.
- Shift-Numpad-- ~ (Shift-Numpad-minus). Unlog the current directory and all its subdirectories, and remove them from the display. (Use F3 Refresh or a log command on the parent directory to return them to the display).
- < or , Select - Switch to the previous logged drive.
- > or . Select - Switch to the next logged drive.
- | ~ Enter the Prompted spell search mode. See section 1.3.4 '*Spell Search Navigation*' for more details.
- ? Stats - Display the Extended Statistics Window.
- / ~ Same as "?" Stats.
- \ Treespec highlighted - Use this to quickly navigate directories. The first directory that matches the input is in the Directory Window. See section 1.3.3 '*Treespec Navigation*' for details on all the features and options.
- ; ~ Same as "\" Treespec.
- [~ Navigate to the previous directory in the bookmark list. See section 1.3.5 '*Bookmark Navigation*' for more details.
-] ~ Navigate to the next directory in the bookmark list.

See section 1.3.5 '*Bookmark Navigation*' for more details.

- ← File - Enter key. Enter the Normal File Window and display all matching files in the current directory. (If the Alt-F10 Enter Key Assignment, "Directory - Bypasses Small File Window" is set to "No", then Enter will move the highlight bar to the Small File Window).
- Shift-Esc ~ Clear the display of the most recent spell search string.
- Del Key ~ Delete the current directory, which must be empty. (Same as the Delete command).
- Up ~ Move the highlight bar up one directory.
- Down ~ Move the highlight bar down one directory.
- Shift-Up ~ Navigate to the previous logged directory.
- Shift-Down ~ Navigate to the next logged directory.
- Shift-PgUp ~ Navigate to the previous unlogged directory.
- Shift-PgDn ~ Navigate to the next unlogged directory.
- Left ~ Move the highlight bar up to the parent directory of the current branch, but stop at the first level under the root directory.
- Shift-Left ~ Move the extension period to the left in the File Windows so that more of the extension section is visible.
- Right ~ Move the highlight bar down to the next directory within the current first-level branch.
- Shift-Right ~ Move the extension period to the right in the File Windows so that more of the name section is visible.
- PgUp ~ Move the highlight bar to the top of the window, then move up the directory list a page at a time.
- PgDn ~ Move the highlight bar to the bottom of the window, then move down the directory list a page at a time. NOTE: The above PgUp/PgDn keys always scroll the directory list if the Alt-F10 Configuration option "Highlight Bar" is set to "Fixed".
- Home ~ Move the highlight bar to the root directory of the drive.
- Shift-Home ~ Return the extension period to the default position in the File Windows (extension length of 3).
- End ~ Move the highlight bar to the last directory in the list.
- Space ~ Move the highlight bar down one line. (Same as Down).
- Backspace ~ Move the highlight to the parent directory. (Same as Left, except it can move to the root of the drive).
- Tab ~ If the screen is not split move the highlight bar down to the next directory at the same level as the current directory. If the screen is split, move the highlight bar to the opposite side of the split, and use Ctrl-Tab instead to move the highlight bar down one directory at the same level. The functions of Tab and Ctrl-Tab in a Split Screen can be swapped with the Alt-F10 configuration option "Swap Tab & Ctrl-Tab key assignments".
- Shift-Tab ~ Move the highlight bar up to the previous directory at the same level as the current directory.

Ctrl-Shift-Tab ~ Move the highlight bar up to the previous directory at the same level as the current directory.
(Same as Shift-Tab).

2.3 Directory Window Commands – Ctrl

Ctrl Directory Commands are displayed at the bottom of the screen by holding down the Ctrl key when the highlight bar is in the Directory Window. Some commands do not appear on the menu. To execute a Ctrl command, hold Ctrl and press the key indicated by the first uppercase letter, character or function key for the command. This key is highlighted if it's on the menu.

The following is a list of all Directory Window Ctrl commands. Descriptions of those commands that do not appear on the menu are marked here with "~".

- Ctrl-Branch - Enter the Branch File Window in the Tags-Only mode to show only the matching tagged files in the current branch.
- Ctrl-Filespec - Toggle between the two most recently used Filespecs (not including *.*).
- Ctrl-Global - Enter the Global File Window in the Tags-Only mode to show only the matching tagged files on all logged disks.
- Ctrl-Invert - Reverse the tags on all matching files on the current drive, or reverse the File Specification.
- Ctrl-Log disk - Log another disk, but if it is already logged then switch to it without relogging it. See section 2.8 'Log Disks' for more information on the available options. This function may be swapped with Log, using the Alt-F10 configuration option, "Swap Log and Ctrl-Log key assignments".
- Ctrl-Quit - Quit ZTreeWin and launch a new command shell at the directory which is current in ZTreeWin. Use this when ZTreeWin was started from a shortcut. (This does not require the use of the ZTWIN.BAT file).
- Ctrl-Showall - Enter the Showall File Window in the Tags-Only mode to show only the matching tagged files on the current disk.
- Ctrl-Tag - Tag all matching files logged on the current disk.
- Ctrl-Untag - Untag all matching files tagged on the current disk.
- Ctrl-Volume - Change the volume name (label) of the current disk.
- Ctrl-Zlist - Automatically perform the log, release, tag and untag operations contained in the ZLIST.ZLS file, or another file of your choice. See the instructions in the sample ZLIST.ZL_ file for more details.
- Ctrl-F7 Tag - Tag all matching files logged in the current branch.
- Ctrl-F8 Untag - Untag all matching files tagged in the current branch.
- Ctrl-F9 Invert - Invert tags on all matching files in the current branch. Untags tagged files, and tags untagged files in the current branch that match the filespec.
- Ctrl-F12 ~ Begin and end recording of keystrokes to the macro file ZSAVE.ZTM, or to a file of your choice, in the ZTreeWin directory. See section 3.10 'Keyboard Macros'.
- Ctrl-\ - Toggle between the two most recently used Treespecs. (For non-US keyboards, see section 2.11 'Non-US Keyboards').
- Ctrl-; ~ Same as the Ctrl-\ command.
- Ctrl-[~ Delete the bookmark for the current directory. (For non-US keyboards, see section 2.11 'Non-US Keyboards').

- Ctrl-] ~ Delete all bookmarks. (For non-US keyboards, see section 2.11 '*Non-US Keyboards*').
- Ctrl-⏏ - Ctrl-Enter. Log the current directory if not logged. If logged, enter the Normal File Window in the Tags-Only mode to show only the matching tagged files in the current directory.
- Ctrl-Ins Key ~ Copy information about the current directory to the Windows Clipboard. Choose one of the following commands to copy the information:
- Base - Current directory name base only (no ext).
 - Ext - Current directory name extension only.
 - Name - Current directory name only.
 - full Path - Drive, path and name of the current directory.
 - path Info - Name, attributes and timestamp of the current directory.
- You may first toggle any of the following options to select or modify the information copied by the above commands:
- \ or / - Choose to use slash or backslash in path names.
 - Case - Choose to retain the case, or convert the information to upper or lower case.
 - Long - Use the long path and directory names.
 - Short - Use the short path and directory names.
 - UNC - Use the UNC path rather than the mapped drive letter for network paths.
- Press F12 to reset these options to default settings.
- Ctrl-Up ~ Scroll up a line, keeping the highlighted directory highlighted until it reaches the top of the window.
- Ctrl-Down ~ Scroll down a line, keeping the highlighted directory highlighted until it reaches the bottom of the window.
- Ctrl-Left ~ Logged directory: Unlog the directory and branch. Unlogged directory: Move up a directory level.
- Ctrl-Right ~ Unlogged directory: Expand the directory tree. Logged directory with subdirs: Move down a directory level. Logged directory without subdirs: Log the files.
- Ctrl-PgDn ~ Scroll down so the highlighted directory moves to the top of the window and remains highlighted, then scroll down a page at a time.
- Ctrl-PgUp ~ Scroll up so the highlighted directory moves to the bottom of the window and remains highlighted, then scroll up a page at a time.
NOTE: The above Ctrl-PgUp/PgDn keys are not active if the Alt-F10 configuration option "Highlight bar" is set to "Fixed".
- Ctrl-Home ~ Go to the first directory at the same level.
- Ctrl-End ~ Go to the last directory at the same level.
- Ctrl-Backspace ~ Unlog the files in the current directory, without affecting subdirectories. Same as Alt-Release Current.
- Ctrl-Tab ~ Move to the next directory down at the same level. In a Split Screen the functions of Ctrl-Tab and Tab can be swapped using the Alt-F10 configuration option "Swap Tab & Ctrl-Tab key assignments".

2.4 Directory Window Commands - Alt

Alt Directory Commands are displayed at the bottom of the screen by holding down the Alt key when the highlight bar is in the Directory Window. Some commands do not appear on the menu. To execute an Alt command, hold Alt and press the key indicated by the first uppercase letter, character or function key for the command. This key is highlighted if it's on the menu.

The following is a list of all Directory Window Alt commands. Descriptions of those commands that do not appear on the menu are marked here with "~".

- Alt-Attributes - Modify the attributes of the current directory.
There are four attributes, each represented by a letter:
R - Read-only
A - Archive
S - System
H - Hidden
ZTreeWin prompts you to enter an attribute string. To set an attribute, precede the attribute letter with a "+". To remove an attribute, precede the attribute letter with a "-". For example, "+A-R" will add the Archive attribute and remove the Read-only attribute. Press F4 to apply the attributes to all logged subdirectories.
- Alt-Compare - Compare the logged file entries in the current branch with those in a second branch, and tag the files in the current branch that match the options chosen, when compared to the files in the second branch.
The options are:
Identical - All files that are identical in size, date (timestamp) or both.
Unique - All files that do not have the same name in the second branch.
Newer - All files that have a newer date (timestamp) in the current branch.
Older - All files that have an older date (timestamp) in the current branch.
Size - All files that are smaller, larger or differ to the same file in the second directory.
Binary - All files that have either the same or different internal contents.
Case - Set to "Yes" to treat files with the same name but different case as different files.
Combinations of the options Identical, Unique, Newer, Older and Size use "or" logic. For example, you can tag files that are Unique "or" Newer. Binary scans the contents of the files, then uses "and" logic with Identical, Newer, Older and Size, and uses "or" logic with Unique. For example, you can tag files that have identical timestamps, "and" have different contents. Note that NTFS timestamps are accurate to less than one second, and while ZTreeWin does not display this additional precision, it is used when performing the comparison. Time tolerances can be set with Alt-F10 configuration options "Ignore 2 second timestamp differences" and "Ignore 1 hour timestamp differences". The default settings can be set in Alt-F10 configuration section "Compare and Alt-Compare remembered settings". Press F12 to reset compare options to default settings.
- Alt-Edit ~ Edit a new or existing file using the alternate editor specified in the Alt-F10 configuration option, "Alt-Editor:".
- Alt-File Display - Change the format and amount of file information displayed in the Display File Windows.
Use this to cycle through the following four display modes:
- Name - Multi-column mode, displaying file name and extension only.
- Name, size and attributes. Multi-column mode, displaying file name, extension, size and attributes.
- Name, size, attributes and date - Single-column mode, displaying file name, extension, size, attributes, date and time. (Time is not displayed in a Split Screen if the window is not wide enough).
- Long name - Single-column mode, displaying file name and extension only. The extension immediately follows the name, rather than being in a separate column.
Use the Alt-F10 configuration option "Initial file display mode" to set the initial display mode

when ZTreeWin starts.

- Alt-Graft
 - Move the current branch (current directory with all its subdirectories and files) to another location. If the target path is on the same disk, the source directory and files are not physically moved, only the affected directory entries are changed. If the target path is on another disk, the branch is first copied then deleted. See section 3.2 '*Copying and Moving Directories*' for more detailed information on moving directories.

- Alt-Hide
 - Set or unset the Hidden attribute of the current directory.

- Alt-Info
 - Display additional information on the highlighted directory including timestamps, attributes, short directory name, directory name length and owner when available. The table below lists all the possible directory attributes shown:

r - Read-Only	c - Compressed	n - Normal
a - Archived	e - Encrypted	o - Offline
s - System	i - Not content indexed	p - Sparse file
h - Hidden	j - Junction	t - Temporary

Use the navigation keys while this information is displayed to show the information for other directories. To display the owner on Novell volumes, use the 'N' command to toggle the invocation of NDIR.EXE.

- Alt-KByte
 - Display, to the right in the directory tree, the sum of the file sizes or the number of files in each logged directory. Press the highlighted letter of the following commands to change the display immediately. (The Enter key is not required).
 - Size - Total of the file sizes in kilobytes.
 - Count - The number of files.
 - None - No display (turns it off).You may first toggle the following options to modify the display before choosing one of the above commands. The current setting is shown in parenthesis.
 - All - All files.
 - Tagged - Only the tagged files.
 - Branch - Total in directory and all subdirectories.
 - Directory - Total in directory only.Sizes are normally displayed in kilobytes, but can be changed to thousands of bytes with Alt-F10 configuration option "Kilobytes displayed as multiples of". The following shows how each of the choices that display numbers is bracketed.

Size	
Directory	
All files	(k
Tagged files	(t
Branch	
All files	[k
Tagged files	[t
Count	
Directory	
All files	(#
Tagged files	(♦
Branch	
All files	[#
Tagged files	[♦

NOTE: A partially logged branch will be displayed with a leading {. Empty directories or branches will not have any brackets displayed.

- Alt-Log
 - Either log a disk and release (unlog) all disks which were previously logged, or perform a partial branch log operation. See section 2.9 '*Log Options*' for details on the options.

- Alt-Mirror
 - Create a mirror of the current branch by copying all logged subdirectories in the branch, including directory attributes, empty directories and all logged files. By default this will replace only those files in the target branch that are older than the source. The destination directories are created if they do not exist, but existing directories and files in the destination that do not

exist in the source are not deleted. ZTreeWin first prompts for the destination path to which the source path will be copied. (See section 2.1 'Standard Operation Keys' for the common keys and options available at all input lines). Use the F4 key to be prompted later for file-replace options other than Older. Use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes for the new copy of the files and directories. Use the F8 key to set the Sync mode to 'One way' to also delete any files and directories found in the target branch which are not in the source branch being mirrored, and to 'Two way' to copy newer and unique files in either branch to the other. (The 'Two way' Sync mode treats both branches equally as sources and targets, and does not delete any files or directories in either branch). Press Enter to accept the destination path. If the root directory is not being mirrored you will then get an additional prompt to choose duplicating the Full, Current or Relative paths. (The Full path is always duplicated from the root directory). Press Enter to accept the path option. If F4 was used at the destination prompt, you will then be asked whether you want to automatically replace existing files. Press F2 to choose replacing Read-only, System and Hidden (RSH) files, and choose Yes, No, Older or neVer as the replace option to begin executing the command. (See section 3.2 'Copying and Moving Directories' for more detailed description of the prompts and options for copying directories, and see Alt-Copy on the File menu described in section 2.7 for an alternative to Alt-Mirror).

NOTE: In order to mirror all the files and directories in an entire branch, it must be completely logged. Directories and files will not be copied if they are not logged.

- Alt-Prune - Delete all the logged subdirectories of the current directory, including all files contained in them, or delete only empty directories. Optionally delete the files in the current directory, and the current directory itself. If the entire branch is not logged, and therefore cannot be completely deleted, you will be prompted to proceed. Use the F2 option to choose the forced deletion of Read-only, System and Hidden files and directories, if configured for display. If the directory is on a local fixed drive, use the F4 option to choose the use of the Recycle Bin. (The default setting for this can be set by the Alt-F10 configuration option "Use Recycle Bin by default for"). If not recycling the branch as a single object, use the F3 option to choose to recycle the branch as a single object, use the F5 option to choose to keep the files in the current directory, and the F6 option to choose to delete only the empty directories (no files will be deleted). One of the following three confirmations is required, as specified by the Alt-F10 configuration option "Prune confirmation": "prune", "y" or the directory name (not case sensitive).

- Alt-Quit - Quit ZTreeWin and return to the command window in the directory that is current in ZTreeWin. This requires that ZTreeWin be started using the ZTWIN.BAT file in a command window.

- Alt-Release - Unlog an entire drive, directory, branch or files in a branch from memory:
 - All other drives - All drives except the current drive.
 - Branch - The current directory and all its subdirectories.
 - Current directory - The files in the current directory, but not those in its subdirectories.
 - Drive(s) - Specify a drive to release (hold shift to specify multiple drives).
 - Files in branch - The files in the current directory and in all its subdirectories. (The branch directories remain visible).
 - Non-current directories - All directories of the current drive, except the current directory.
 - Other branches - All branches on the current drive, except the current branch.
 - This drive - The entire current drive.
 - F4 - Windows dialog to disconnect a drive.

NOTE: This dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.

- Alt-Sort - Choose one of the following sort commands to sort the file list. Press the highlighted letter of the command to sort immediately (the Enter key is not required). The files will not be re-sorted if no changes have been made in the current File Window. (Press Enter to force a re-sort even if no such changes have been made). The current sort order is shown in parenthesis on the left of the middle menu line. (All other data being equal, drive and path are used as the final sort level in the Branch, Showall and Global File Windows).

Name	- File name (then extension).
Ext	- File extension (then name).
Date	- File last-write date (then time, name, ext).
Time	- File last-write time (then date, name, ext).
Length	- File name+ext length (then name, extension).
Alpha	- File name by alphabetic value, ignoring leading numerics and punctuation.
nuMber	- Numeric digits (regardless of length) which start in same character positions of filename.
Size	- File size (then name, extension).
Unsorted	- Sequence as written in the disk directory, regardless of any sort options (below).
Value	- Numeric digits (regardless of length) ignoring all non-numerics at the Start of the filename.

You may use one of the following sub-commands to modify the sort order and specify other sort options before choosing one of the above commands.

Charset	- Use the OEM or ANSI character set. (This also affects the sequence of directories).
Order	- Ascending or descending sequence. You may also use the Up arrow (or >) to select ascending, or the Down arrow (or <) to select descending.
Path	- In a Branch, Showall or Global File Window, use the directory path as the first level of the sort sequence, rather than the last.
F8	- Toggle between 'same' and 'diff' to choose whether the sort order on the opposite side of a Split Screen will automatically be changed to the new sort order.
F12	- Use to reset the sort order and options to the initial default order and options.

Use the options in the Alt-F10 configuration option section "File Sorting" to set the initial default sort order and options when ZTreeWin starts.

Alt-Tag	- Use the Attributes option to tag all matching logged files on the disk with specified file attributes. (For example, "+S-H" to tag all files with the System attribute set and the Hidden attribute not set).
Alt-Untag	- Use the Attributes option to untag all matching logged files on the disk with specified file attributes. (For example, "-R+A" to untag all files with the Read-Only attribute not set and the Archive attribute set).
Alt-View	- View the contents of a file using the alternate viewer specified in the Alt-F10 configuration option, "Alt-Viewer:". See section 3.8 ' <i>The Internal Viewer</i> ' for more information on the internal viewer.
Alt-Wash	- Write over the unused area of a disk to protect against unerasing sensitive data. Use F2 to choose nulls, random data, or the DoD sanitize method. Be aware that certain Recycle Bin utilities, such as the one by Norton, may cause the temporary file/s created by this function to be saved to the Recycle Bin. If after using the Wash function you find that there is very little free space available on the drive, be sure to check the contents of the Recycle Bin. Press Esc to interrupt the Wash operation. You may use the "F3 Keep temp files" option to retain the temporary files created by this operation when cancelling, to allow the Wash function to be continued at a later time within the session. If a new session is started, a new temporary directory will be created, and the files created by the previous execution will have to be manually deleted.
Alt-eXecute	- Open a command prompt shell window to run programs or Windows commands from a command line. This is the same as the eXecute command, except that the program will always be launched in the asynchronous mode as a separate task. (See section 2.11 ' <i>Launching Programs</i> ' for more details).
Alt-ZLog	~ Save or load logged information to or from the specified file. This saves a log file containing the

current state of ZTreeWin, or reloads a previously saved log file. There are four main commands. These commands will then prompt for the filename. Use the Alt key with these commands to bypass the filename prompt and use the default TEMP.ZLOG file.

The four commands are:

- Load - Load volume and state information from the specified file. This replaces all currently logged data.
- Merge - Load volume and state information from the specified file. This Retains the currently logged data for volumes not present in the log file, and restores the state of all other volumes.
- save and Quit (and Alt-Z) - Save all logged volume and state information to the specified file, then Quit ZTreeWin. (Alt-Z does the same as Alt-Q, so that the sequence Alt-Z, Alt-Z can be used to quickly save the default file and quit).
- save and Resume - Save all logged volume and state information to the specified file, then resume operation.

When the save functions write information to the default TEMP.ZLOG file in the same directory that contains ZTW.INI, that log file will be loaded automatically the next time ZTreeWin is started from that directory, and will be automatically deleted. When the save functions write information to an existing file other than the default TEMP.ZLOG file, a confirmation prompt will appear. Use the /ZV command-line option to force the loading of a specified log file at startup, or with a non-existent filename to prevent the automatic loading of the TEMP.ZLOG file at startup. When a log file is loaded automatically at startup (ie. without the use of the /ZV command-line option), any macros specified on the command line with the /K option will be ignored.

- Alt-F1 ~ Display program version and registration information. This is also displayed with Right-Ctrl-Alt (AltGr). While displayed, you can press F1 to go to the ZTreeWin website, or Alt-F1 to display the build date.
- Alt-F2 Format - Open the Windows Format dialog to format the current disk. There will first be a confirmation prompt, or an error if ZTreeWin determines that the current drive should not be formatted.
NOTE: This Windows dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.
If a ZFORMAT.BAT file exists in the ZTreeWin directory, it will be run instead of the prompts and Windows dialog..
- Alt-F3 Relog - Relog the file list for the current directory, and update its entire branch structure, to reflect possible changes made by other applications. (Loses tags in the current directory, keeps tags in subdirectories, and does not log files or subdirectories of any new subdirectories). Also redisplay directories hidden with Shift-Numpad-minus.
- Alt-F6 ~ Cycle between the colorization of files and directories, as defined in the ZCOLORS.INI file, and a monochrome mode useful for screen printing. ZCOLORS.INI is reloaded each time the toggle is enabled. (This does not affect colors assigned in the Alt-F10, F4 color configuration).
- Alt-F7 Zoom - Maximize the ZTreeWin window or restore it if it is already maximized. The maximum number of columns and rows is dependent on the screen resolution and the font being used. See section 1.10 'Video Control' for more details, and section 3.12 'Shortcut Setup' for guidelines on how the shortcut might affect maximizing the window.
- Alt-F8 Video - Cycle the horizontal display width through the settings specified on the command line with the /COLS switch, (or use internal settings if not specified), up to the maximum width possible, depending on the screen resolution and font being used. The initial width may also be set using the Alt-F10 configuration option "Number of characters wide".
- Alt-F9 Video - Cycle the vertical display height through the settings specified on the command line with the /ROWS switch, (or use internal settings if not specified), up to the maximum height possible, depending on the screen resolution and font being used. The initial height may also be set using the Alt-F10 configuration option "Number of rows high".

- Alt-F10 Config - Enter the ZTreeWin configuration mode. See section 3.7 '*Configuration Options*' for details.
- Alt-F12 ~ Replay the last used keyboard macro. See section 3.10 '*Keyboard Macros*'.
- Alt-\ ~ Jump to a specific directory based on the entered ordinal value. This value is absolute from the top of the list unless prefixed with + or -, in which case it is relative to the current directory.
- Alt-; ~ Same as the Alt-\ command.
- Alt-Up ~ Make the Small File Window larger.
- Alt-Down ~ Make the Small File Window smaller.
- Alt-Left ~ Navigate to the previous bookmarked directory in the list.
- Alt-Right ~ Navigate to the next bookmarked directory in the list.
- Alt-Home ~ Restore the Small File Window to its default size.

2.5 File Window Commands - Normal

Normal File Commands are displayed at the bottom of the screen when the highlight bar is in any of the File Windows. Some commands do not appear on the menu. To execute a Normal command, press the key indicated by the first uppercase letter, character or function key for the command. This key is highlighted if it's on the menu.

The following is a list of all File Window Normal commands. Descriptions of those commands that do not appear on the menu are marked here with "~".

- Attributes - Modify the file attributes of the current file.
There are four attributes, each represented by a letter:
R - Read-only
A - Archive
S - System
H - Hidden
ZTreeWin prompts you to enter an attribute string. To set an attribute, precede the attribute letter with a "+". To remove an attribute, precede the attribute letter with a "-". For example, "+A-R" will add the Archive attribute and remove the Read-only attribute.
- Copy - Copy the current file to another disk or directory. ZTreeWin first prompts for the name of the new file, then for the destination directory. (See section 2.1 '*Standard Operation Keys*' for the common keys and options available at all input lines). Press Enter at the "as:" prompt to keep the original name, or use a rename mask as described in section 3.3.1 '*Rename Mask*' to change the name. At the "to:" prompt use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes for the new copy of the file. (See section 3.1 '*Copying and Moving Files*' for a more detailed description of the prompts and options for copying files).
- Delete - Delete the current file. If the file is on a local fixed drive, use F4 to choose whether or not to use the Recycle Bin.
- Edit - Edit the highlighted file using the editor specified in the Alt-F10 configuration option, "Editor:".
- Filespec - Specify a group of files for ZTreeWin's operations. This specification is a filter that defines "matching" files. Use the Tab key to cycle through the following 5 filespec choices based on the currently highlighted file, which can then be edited as desired:
filename.ext
filename.*
*.ext
=snnnn (where nnnn is the file's size)
=dd-dd-dd (where dd-dd-dd is the file's last write date in the configured date format)
Press F4 to retrieve the current filespec to the input line.
See section 1.4 '*FILE Specification Box*' for a detailed description of the filespec rules.
- sHortcut - Create a shortcut to the current file. The default name of the shortcut will be the file name, and a .LNK or .PIF extension in place of the file's extension. You may enter a new name if desired. The .LNK or .PIF extension will automatically be added to the name on the input line. This has similar options to the Copy command, except the Desktop directory will be added to the Tab default paths. Use Alt-. in the input line to quickly generate *.* to retain the file's extension before the .LNK or .PIF extensions are added.
- Invert - Reverse the tag of the current file, or reverse the File Specification. (In the Invert menu, "I" can be used instead of "T").
- JFC - Compare two files using TFC.BAT, or another compare program specified in Alt-F10 configuration option "JFC compare". The default name on the input line will be *.BAK if the screen is not split. In Split Screen mode the default will be the same file name as the current file if it exists on the opposite side, or a blank input line if it does not. You may use the Tab key to

cycle through a selection of other files to compare. The sequence of files using the Tab key is:

- The current file on the opposite side in Split Screen
- *.BAK in Split Screen
- The same file name as the current file
- The single (other) tagged file on the current side
- Loop back to the original input line default

You can use Shift-Tab to reverse this sequence, which enables you to quickly choose the tagged file on the current side if only one (other) tagged file exists.

- Log
- Log another disk, keeping the disks which were previously logged in memory. See section 2.8 'Log Disk' for more details on the available options. This function may be swapped with Ctrl-Log, using the Alt-F10 configuration option "Swap Log and Ctrl-Log key assignments".
- Move
- Move the current file to another disk or directory. ZTreeWin first prompts for the name of the file in its new location, then for the destination directory. (See section 2.1 'Standard Operation Keys' for the common keys and options available at all input lines). Press Enter at the "as:" prompt to keep the original name, or use a rename mask as described in section 3.3.1 'Rename Mask' to change the name. At the "to:" prompt use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes for the file in its new location. (See section 3.1 'Copying and Moving Files' for a more detailed description of the prompts and options for moving files).
- New date
- Modify the timestamp (written, created, accessed) of the current file by either setting it to a specific value, or adjusting the current value by the specified criteria. Use F2 to place the current system date and time on the input line, and use Tab to place the original timestamp on the input line. Blanking out the date or time will cause the file's current date or time value to be preserved, allowing you to change the date or time independently. Use F4 to cycle through the Timestamps (written, created, accessed and ALL) to be modified. Use F5 to toggle between 'set to' mode and 'adjust' mode. In F5 'adjust' mode, the following syntax is used:
[+/-d|m|y][+/-h|n|s][e]
where:
d = Day h = Hour
m = Month n = Minute
y = Year s = Second
e = round timestamps to the next even second
examples:
+1y-5n
-3d+10se
- Open
- Open the current file. ZTreeWin will perform one of the following operations, selected in the order listed:
 - If an ext.BAT file exists that matches the extension of the file, that .BAT file is launched. (See ext.BAT in section 3.14 'Auxiliary Files').
 - If the file has a .ZLS extension execute the Ctrl-Zlist command using this file.
 - If the file has a .ZAM extension, open the file with the F9 Menu command.
 - If the file has a .ZLOG extension, open the file with the Alt-ZLog/Load command.
 - If the file has a .DBF extension, launch the program ZTW_VDBF.EXE to view the file, unless that program is deleted or renamed.
 - If the file is an executable program (.EXE, .COM, .BAT, etc.) it is launched.
 - If there is a Windows association with the extension of the file, then the associated program is launched.Most programs launched by the Open command are run in the asynchronous mode as separate tasks. Console programs launched by ext.BAT files (as explained in section 3.14 'Auxiliary Files') are run in the synchronous mode as part of the ZTreeWin task. (See section 2.11 'Launching Programs' for more details).
- Print
- Print the contents of the currently highlighted file. Set the following print options:

- ASA - Set to "Yes" to have ZTreeWin treat the first character of each line printed as a mainframe ASA print control character.
- Headers - Set to "On" to print a two-line header, (plus a blank line), containing the file path, size, attributes, timestamp and a page number.
- Lines/page - Set to the desired number of lines on a page before a page break. Set to 0 to not send page breaks to the printer.
- Margin - Set to 1 to create a left margin of about 1 inch. (Actually 8 characters).
- Wrap - Set to "Off" to not wrap long lines sent to the printer, or select 75, 80 or 132 as the wrap point for the right margin.
- Print to - Enter a port name such as LPT1 or COM1, or enter a file name to print to a file, (appends if the file exists). Press Tab to cycle through the installed printers. Select "CLIP:" to print to the Windows Clipboard. Select "Windows Drivers" to use the Windows dialog to choose the printer. Press Esc to return to the Print menu without selecting a different printer, or Enter to use the selected printer.

NOTE: The Windows dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.

- Quit - Quit ZTreeWin and return to Windows. Use Y or Q for the confirmation, unless configured not to prompt for this.
- Rename - Change the name of the current file using the standard operation keys. A preview confirmation will appear automatically on a complex Rename if the Alt-F10 configuration option "Rename protection" is set to "Confirm". Press F5 to recall the original name from the previous Rename command. Although F5 is intended as a quick 'undo' of a single-file rename, it can be used to rename another file to the previous name of the most recently renamed file. (See section 3.3 '*Renaming Files and Directories*' for details on the many rename options and features).
- Tag - Tag the current file, and advance the highlight bar to the next file.
- Untag - Remove the tag from the current file, and advance the highlight bar to the next file.
- View - View the contents of the current file using the internal viewer, or another viewer using the viewer specified in the Alt-F10 configuration option, "Viewer:". See section 3.8 '*The Internal Viewer*' for more information on the internal viewer.
- eXecute - Open a command prompt shell window to run programs or Windows commands from a command line. If the currently highlighted file is an executable as defined by the PATHEXT environment variable (or has an extension of .BAT, .BTM, .CMD, .COM or .EXE if not so defined) that file will automatically be displayed on the command line. Console programs will be launched in the synchronous mode as a part of the ZTreeWin task. GUI programs may be launched synchronously or asynchronously, depending on the version of Windows and the program. (See section 2.11 '*Launching Programs*' for more details). Use Batch parameters and environment variables to include information about the file, and other variable information, on the command line. (See section 3.4 '*Batch Parameters and Environment Variables*'). The current directory, or in a Branch, Showall or Global File Window the directory containing the current file, is automatically the current directory in the shell window. Use the Up, Down, F3 or other history keys to retrieve previous command history. (See section 3.6 '*History Lists*'). Press Esc to exit the shell window, or press Ctrl-Enter rather than Enter to exit the shell window immediately after executing the command.
- Y Assist ~ ZTreeWin Assistant Application Program (ZAAP) command. Requires that ZTreeWin be started with the /ZB switch used. At the Assist prompt enter a command string to be passed to the assistant program. ZTreeWin will pass the command string and the highlighted file name to the program selected by the first letter of the command string. For more information on available ZAAPs visit the ZTreeWin ZAAP web page at: <http://www.ztree.com/html/zaap.htm>
- Shift A..Z ~ Move the highlight bar to the next file in the list that starts with this letter. (See section 1.3.4 '*Spell Search Navigation*' for more details).

- 1..9 ~ Move the highlight bar to the next file in the list that starts with this number. (See section 1.3.4 '*Spell Search Navigation*' for more details).
- Numpad-5 ~ Scroll the highlighted file to the center of the display window, (if possible without leaving blank lines at the top of the window).
- Shift-Numpad-# ~ Where # is 1 to 9, use this with NumLock off to move the highlight to the 10% to 90% point in the file list.
- F1 Help - Display the online Help file.
- F3 ~ Refresh the file list in the current File Window, to reflect possible changes made by other applications. (Keeps tags and does not add new or remove deleted subdirectories). Also redispays files hidden with Shift-Numpad-minus.
- F4 ~ Cycle through the Ctrl, Alt and Normal menus without holding the Ctrl or Alt keys.
- F5 Archive - Archive current file. Use the "A" key to choose which archiver to use (defined in the ARCHIVER.BB2 file). Use Shift-A to cycle backwards. Use "P" to choose options for the Paths (relative, current, full and none) or press "R", "C", "F" or "N" to choose these paths (not on the menu). See section 3.1 '*Copying and Moving Files*' for an explanation of these path options. Press "B" to choose Background execution, "D" for Display output, and "E" for Encryption. If in a Branch, Showall or Global File Window, the default target directory for the archive file will be the directory that was current before entering that File Window. This can be modified on the resulting archiver command line before executing the command.
- F7 Autoview - Autoview the files in the current directory. Use F7, Esc or Enter to exit the Autoview mode. Use Alt-Right and Alt-Left to change the relative widths of the file list and document windows. Use Alt-Home to restore the default widths. Use Shift to control the viewer in this mode, using the normal viewer commands. (See section 3.8 '*The Internal Viewer*' for these commands).
- F8 Split - Split and unsplit the window display. (See section 1.8 '*Split Screen*').
- Shift-F8 ~ Display a menu to choose displaying the Statistics Panel for None, the Current, or Both sides of a Split Screen (provided the screen is wide enough), and to Swap the left and right sides.
- F9 Menu - Application Menu. Activate the ZTreeWin Application Menu. See section 3.5 '*Application Menu*'.
- Shift-F10 ~ Show the Windows context menu for the highlighted file. This is the same as a right-click with the mouse in Windows Explorer.
- F11 ~ Show the bookmark history. See section 1.3.5 '*Bookmark Navigation*'.
- F12 ~ Run a keyboard macro. See section 3.10 '*Keyboard Macros*'.
- < or , ~ Switch to the previous logged drive.
- > or . ~ Switch to the next logged drive.
- | ~ Enter the Prompted spell search mode. See section 1.3.4 '*Spell Search Navigation*' for more details.
- ? or / ~ Display the Extended Statistics Window.
- \ Treespec - Use in the Normal File Window to quickly navigate directories in the Directory Window. Use in the Branch, Showall and Global File Windows to navigate to the Normal File Window containing the highlighted file. See section 1.3.3 '*Treespec Navigation*' for more details.
- ~ Same as "\" Treespec.

[	~ Navigate to previous bookmarked directory in list. See section 1.3.5 ' <i>Bookmark Navigation</i> ' for more details.
]	~ Navigate to next bookmarked directory in list. See section 1.3.5 ' <i>Bookmark Navigation</i> ' for more details.
← Tree	- Enter key. Exit the File Window and return to the Directory Window.
Esc Cancel	- Exit the File Window and return to the Directory Window.
Shift-Esc	~ Clear the display of the most recent spell search string.
Del Key	~ Delete the current file. (Same as the Delete command).
Up	~ Move the highlight bar up one file.
Down	~ Move the highlight bar down one file.
Left	~ Scroll the file list up a page up at a time, while keeping the highlight bar in a constant position in the window.
Shift-Left	~ Move the extension period to the left so that more of the extension section is visible.
Right	~ Scroll the file list down a page at a time, while keeping the highlight bar in a constant position in the window.
Shift-Right	~ Move the extension period to the right so that more of the name section is visible.
PgUp	~ Scroll the highlighted file to the bottom of the window and move the highlight bar to the top of the window, then move up the directory list a page at a time.
PgDn	~ Scroll the highlighted file to the top of the window and move the highlight bar to the bottom of the window, then move down the directory list a page at a time NOTE: The above PgUp/PgDn keys will work the same as in the Directory Window if the Alt-F10 Configuration option "File window paging like directory window" is set to "Yes".
Home	~ Move the highlight bar to the first file in the list.
Shift-Home	~ Return the extension period to the default position, (extension length of 3).
End	~ Move the highlight bar to the last file in the list.
Space	~ Move the highlight bar down one file. (Same as Down). This can be changed to instead reverse the tag by setting the Alt-F10 configuration option "Invert current file tag with space key" to "Yes".
Backspace	~ Enter the File Window of the parent directory from the Small or Normal File Windows. This will log the files in the parent directory if they are not yet logged. If the parent directory cannot be entered because configuration options disallow it when there are no files to display, then the parent directory will become highlighted in the Directory Window. (Backspace is inactive in the Branch, Showall and Global File Windows).
Tab	~ In a Split Screen use this to move the highlight bar to the opposite side.

2.6 File Window Commands - Ctrl

Ctrl File Commands are displayed at the bottom of the screen by holding down the Ctrl key when the highlight bar is in any of the File Windows. Some commands do not appear on the menu. To execute a Ctrl command, hold Ctrl and press the key indicated by the first uppercase letter, character or function key for the command. This key is highlighted if it's on the menu.

The following is a list of all File Window Ctrl commands. Descriptions of those commands that do not appear on the menu are marked here with "~".

- Ctrl-Attribute - Modify the attributes of the tagged files. There are four attributes, each represented by a letter: A=Archive, R=Read-only, S=System and H=Hidden. ZTreeWin prompts you to enter an attribute string. To set an attribute, precede the attribute letter with a '+'. To remove an attribute, precede the attribute letter with a '-'. For example, '+A-R' will add the Archive attribute and remove the Read-only attribute.
- Ctrl-Batch - Create a batch file that contains a command line to be executed for each tagged file. You may also use this command to create a listing of tagged-file information, so the resulting file can be used as a list, or as data input to another program. You will first be prompted for the name of the file. You may enter a directory path before the filename to create the file in that directory. (In a Branch, Showall or Global File Window, the default destination directory for the file will be the directory that was current before entering that File Window). Next you will be prompted for a line mask which defines each line of the file. Enter constant data and variable parameters. (See section 3.4 '*Batch Parameters and Environment Variables*' for more information on the parameters and variables that may be used). Use F4 to toggle between the OEM, ANSI and Unicode character sets for text written to the file.
- Ctrl-Copy - Copy the tagged files to another disk or directory. ZTreeWin first prompts for the filename mask for the new files, then for the destination directory. (See section 2.1 '*Standard Operation Keys*' for the common keys and options available at all input lines). Press Enter at the "as" prompt to keep the original names, or use a rename mask as described in section 3.3.1 '*Rename Mask*' to change the names. Press F4 to receive a confirmation if you are changing the names. At the "to:" prompt use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes for the new copy of the files. You will then be asked whether you want to automatically replace existing files. Press F2 to choose replacing Read-only, System and Hidden (RSH) files, and choose Yes, No, Older, neVer or Rename Seq as the replace option to begin executing the command. (See section 3.1 '*Copying and Moving Files*' for a more detailed description of the prompts and options for copying tagged files).
- Ctrl-Delete - Delete the tagged files. You may choose whether or not to confirm the deletion of each file. If you choose "Yes" to the confirmation prompt, you may later choose "All" to delete all remaining tagged files without further confirmations. Use F2 to force the deletion of Read-only, System and Hidden (RSH) files, or you may override these deletions on each file. If files are on a local fixed drive, use F4 to choose whether or not to use the Recycle Bin. (CAUTION: In a Showall or Global File Window, be careful not to delete files in a "Recycled" directory, unless you intend to do so).
- Ctrl-Edit - Edit all tagged files using the editor specified in the Alt-F10 configuration option, "Editor:". This will prompt for confirmation if more than five files are tagged in the current file list. If one or more files are read-only and the Alt-F10 configuration option "Prevent Edit command on read-only files" is set to "Yes", then a warning is displayed, and only the files that are not read-only are opened.
- Ctrl-Filespec ~ Access the most recently used two Filespecs, (not including *.*).
- Ctrl-sHortcut - Create shortcuts to all tagged files. The default name of the shortcuts will be the file name and a .LNK or .PIF extension in place of the file's extension. You may enter a new name if desired.

The .LNK or .PIF extension will automatically be added to the name on the input line. This has similar options to the Copy command, except the Desktop directory will be added to the Tab default paths. Use Alt-. in the input line to quickly generate *.* to retain the file's extension before the .LNK or .PIF extensions are added.

- Ctrl-Invert - Reverse the tags of all files in the current File Window, or reverse the File Specification. (In the Invert menu, "I" can be used instead of "T").

- Ctrl-JFC - Compare two files using TFC.BAT, or using another compare program specified in the Alt-F10 configuration option "JFC compare". This will compare two tagged files, or the currently highlighted file with one tagged file.

- Ctrl-Log - Log another disk, but if it is already logged then switch to it without relogging it. See section 2.8 'Log Disks' for more information on the available options. This function may be swapped with Log, using the Alt-F10 configuration option, "Swap Log and Ctrl-Log key assignments".

- Ctrl-Move - Move the tagged files to another disk or directory. ZTreeWin first prompts for the filename mask for the moved files, then for the destination directory. (See section 2.1 'Standard Operation Keys' for the common keys and options available at all input lines). Press Enter at the "as" prompt to keep the original names, or use a rename mask as described in section 3.3.1 'Rename Mask' to change the names. Press F4 to receive a confirmation if you are changing the names. At the "to:" prompt use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes for the files in their new location. You will then be asked whether you want to automatically replace existing files. Press F2 to choose replacing Read-only, System and Hidden (RSH) files, and choose Yes, No, Older, neVer or Rename Seq as the replace option to begin executing the command. (See section 3.1 'Copying and Moving Files' for a more detailed description of the prompts and options for moving tagged files).


- Ctrl-New date - Modify the timestamps (written, created, accessed) of the tagged files by either setting them to a specific value, adjusting their current value by the specified criteria, or incrementing each timestamp successively by the specified criteria, starting with the first tagged file. Use F2 to place the current system date and time on the input line, and use Tab to place the timestamp of the highlighted file on the input line. Blanking out the date or time will cause the file's current date or time value to be preserved, allowing you to change the date or time independently. Use F4 to cycle through the Timestamps (written, created, accessed and ALL) to be modified. Use F5 to toggle between 'set to' mode, 'adjust' mode, and 'increment' mode. In 'adjust' mode, each file's timestamp is adjusted by the specified criteria. In 'increment' mode, tagged files are incrementally adjusted, such that the previous file's timestamp is used as the basis of generating the next one. In F5 'adjust' and 'increment' modes, the following syntax is used:
 [+/-d|m|y][+/-h|n|s][e]
 where:
 d = Day h = Hour
 m = Month n = Minute
 y = Year s = Second
 e = round timestamps to the next even second
 examples:
 +1y-5n
 -3d+10se

- Ctrl-Open - Open all tagged files. This runs the .BAT file associated with the extension of each tagged file, if one exists. (See section 3.14 'Auxiliary Files'). If one does not exist, then the Windows association is used, if one exists. If there is no association, then the "open with" Windows dialog is run. Ctrl-Open will prompt for confirmation if more than five files are tagged in the current file list. NOTE: For files with a .DBF extension, Ctrl-Open will automatically launch the program ZTW_VDBF.EXE to view the files, unless that program is deleted or renamed.

- Ctrl-Print - Print the contents of all tagged files. Set the following print options:
- Headers - Set to "On" to print a two line header, (plus a blank line), containing the file path, size, attributes, timestamp and a page number.
 - Lines/page - Set to the desired number of lines on a page before a page break. Set to 0 to not send page breaks to the printer.
 - Margin - Set to 1 to create a left margin of about 1 inch. (Actually 8 characters).
 - Wrap - Set to "Off" to not wrap long lines sent to the printer, or select 75, 80 or 132 as the wrap point for the right margin.
 - Print to - Enter a port name such as LPT1 or COM1, or enter a filename to print to a file (each tagged file is appended, thereby concatenating all tagged files into one file). Press Tab to cycle through the installed printers. Select "CLIP:" to print to the Windows Clipboard. Select "Windows Drivers" to use the Windows dialog to choose the printer. NOTE: This Windows dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.
- Ctrl-Quit ~ Quit ZTreeWin and launch a new command shell at the directory which is current in ZTreeWin. Use this when ZTreeWin was started from a shortcut. (This does not require the use of the ZTWIN.BAT file).
- Ctrl-Rename - Change the name of all tagged files using the standard operation keys. Use F4 to request a preview confirmation for each file before renaming the file. A preview confirmation will appear automatically on a complex Rename if the Alt-F10 configuration option "Rename protection" is set to "Confirm". (See section 3.3 '*Renaming Files and Directories*' for details on the many rename options and features)..
- Ctrl-Search - Search all tagged files for a text or hex string. If the string is not found, then the file is untagged, so that all remaining tagged files contain the string. Use an asterisk (*) embedded within a text search string to match zero or more characters within the same line. (Any leading or trailing asterisks are taken literally as part of the search string; additionally, a leading asterisk will cause all other asterisks to also be taken literally).
Use F2 to choose case sensitivity.
Use F4 to choose between a text, hex, or Unicode search. (The hex string format consists of hexadecimal pairs separated by a space).
Use F5 to specify that only tagged files determined to be ZIP files containing a Table of Contents are searched, and only within the TOC.
If an error occurs, use Cancel to cancel the search, or Retry to retry the current file.
Use Tag or Untag on the error file to continue the search with the next file. Use Keep or Lose to skip all errors of this type and either Keep or Lose tags on all remaining files with the same error type. (A maximum of five error types can be automatically skipped).
NOTE: Strings in the file that are split by a line break will not be found with a search.
- Ctrl-Tag - Tag all files in the File Window list.
- Ctrl-Untag - Remove the tag from all files in the File Window list.
- Ctrl-View - View the contents of each tagged file. Use Next and Previous to navigate through the list, and Alt-Home/Alt-End to get directly to the first and last tagged file. See section 3.8 '*The Internal Viewer*', for explanations of the other viewer commands. The Search commands will extend through all the tagged files being viewed. The number of the current file, and the total of the tagged files being viewed, is displayed in the lower right of the window. The archive listing is disabled in this function.
- Ctrl-Y Assist ~ ZTreeWin Assistant Application Program (ZAAP) command. Requires that ZTreeWin be started with the /ZB switch. At the Assist prompt enter a command string to be passed to the assistant program. ZTreeWin will pass the command string and the tagged file names to the program selected by the first letter of the command string. For more information on available ZAAPs visit the ZTreeWin ZAAP web page at: <http://www.ztree.com/html/zaap.htm>
- Ctrl-Zlist - Automatically perform the log, release, tag and untag operations contained in the ZLIST.ZLS

file, or another file of your choice. See the instructions in the sample ZLIST.ZL_ file for more details.

- Ctrl-F3 ~ Refresh the current file list each second, to automatically see changes made by other applications. The highlight will be repositioned to the top of the list only if the Alt-F10 configuration option "Restore file position after F3 refresh" is set to "No".
- Ctrl-F4 ~ Same as Ctrl-Enter. If some files, but not all, are tagged, change the display to the Tags-Only mode, showing only tagged files that match the filespec. If in the Tags-Only mode and some files, but not all, are tagged, remain in the Tags-Only mode and reduce the list to show only the tagged files. If in the Tags-Only mode and all or no displayed files are tagged, change to the normal mode showing all matching files. See section 1.7.1 '*Tags-Only Mode*' for more detail on how this works.
- Ctrl-F5 - Archive tagged files. Use the "A" key to choose which archiver to use (defined in the ARCHIVER.BB2 file). Use Shift-A to cycle backwards. The highlighted file name will be the default on the command line, and if that file's extension is an archive type supported by the ARCHIVER.BB2 file it will be used as the default extension and archiver. Use "P" to choose options for the Paths (relative, current, full and none) or press "R", "C", "F" or "N" to choose these paths (not on the menu). (See section 3.1.3 '*File Alt-Copy/Move*' for an explanation of these path options). Press "B" to choose Background execution, "D" for Display output, and "E" for Encryption. If in a Branch, Showall or Global File Window, the default target directory for the archive file will be the directory that was current before entering that File Window. This can be modified on the resulting archiver command line before executing the command. (When editing the resulting input line, the path and file name must be last, regardless of the syntax of the archiver program being used).
- Ctrl-F6 - Merge tags. Use in the F8 Split-Screen mode to copy the tags of all files in the current window to the same files in the same directory on the opposite side. This works whether or not those files are currently being displayed on the opposite side. (You must Tab to the other side to refresh that window before the tags will appear).
- Ctrl-F7 - Megaview. Display information for each file listed in the File Window. Unlike F7 Autoview, this display mode shows a single line of information for each file listed in the left column. Different information will be displayed depending on the type of file. Specific information is displayed for the following file types:
- | | |
|--------------------|--|
| Executable files | - Name and version information is displayed if found. These files are detected by internal inspection regardless of extension. |
| Internet shortcuts | - The URL to the web page is displayed for files with a .URL extension. |
| Music files | - Tag data is displayed for files with a .MP3 or .WAV extension. |
| HTML files | - The title line contents are displayed if found. These files are detected by internal inspection, regardless of extension. |
| Document files | - The first text found is displayed for files with a .DOC or .DOT extension. |
| All other files | - The first chunk of displayable data is shown for all other files. |
- Use Ctrl-F7 a second time to toggle this display mode off.
- Ctrl-F8 - Partial untag. Use to untag all files except those that were not processed by the previous tagged-file operation when that process was interrupted for some reason. Set Alt-F10 configuration option "Partial untag only successful operations" to "Yes" to cause Ctrl-F8 to leave those files tagged upon which the operation was not successfully completed, even though all files were processed.
- Ctrl-F12 ~ Begin and end recording of keystrokes to the macro file ZSAVE.ZTM, or to a file name of your choice, in the ZTreeWin directory. See section 3.10 '*Keyboard Macros*'.
- Ctrl-\ ~ Most recently used Treespec. (For non-US keyboards, see section 2.11 '*Non-US Keyboards*').

- Ctrl-; ~ Same as the Ctrl-\ command.
- Ctrl-[~ Delete bookmark for current directory. (For non-US keyboards, see section 2.11 'Non-US Keyboards').
- Ctrl-] ~ Delete all bookmarks. (For non-US keyboards, see section 2.11 'Non-US Keyboards').
- Ctrl- - Ctrl-Enter. Same as Ctrl-F4. If some files, but not all, are tagged, change the display to the Tags-Only mode, showing only tagged files that match the filespec. If in the Tags-Only mode and some files, but not all, are tagged, remain in the Tags-Only mode and reduce the list to show only the tagged files. If in the Tags-Only mode and all or no displayed files are tagged, change to the normal mode showing all matching files. See section 1.7.1 'Tags-Only Mode' for more detail on how this works.
- Ctrl-Ins Key ~ Copy information about the current file or all tagged files to the Windows Clipboard. Choose one of the following commands to copy the information:
- fileName - Current filename only (base and ext).
 - Base - Current filename base only (no ext).
 - Ext - Current filename extension only.
 - full Path only - Drive and path of the current file.
 - path and File - Drive, path and name of the current file.
 - Info - Name, attributes and timestamp of the current file.
 - Tagged files - File names, or paths and file names, of all tagged files.
- You may first toggle any of the following options to select or modify the information copied by the above commands:
- \ or / - Choose to use slash or backslash in path names.
 - Case - Choose to retain the case, or convert the information to upper or lower case.
 - Long - Use the long path and file names.
 - Short - Use the short path and file names.
 - UNC - Use the UNC path rather than the mapped drive letter for network paths.
 - Delimiter - Toggle between the available delimiters for tagged-file information, which include CR/LF, space, comma, semi-colon and Tab. Note that the keys associated with these delimiters may be pressed directly to select them.
 - With paths - Copy tagged-file paths and file names.
 - nO paths - Copy tagged filenames only.
- Press F12 to reset these options to default settings.
- Ctrl-Del Key ~ Same as the Ctrl-Delete command.
- Ctrl-Up ~ Scroll up a line, keeping the highlighted file highlighted until it reaches the top of the window. If the Alt-F10 configuration option "File window Ctrl/Alt-Up/Down to tag/untag" is set to "Yes" then this tags the current file and all files above it, (same as Alt-Tag,Up).
- Ctrl-Down ~ Scroll down a line, keeping the highlighted file highlighted until it reaches the bottom of the window. If the Alt-F10 configuration option "File window Ctrl/Alt-Up/Down to tag/untag" is set to "Yes" then this tags the current file and all files below it, (same as Alt-Tag,Down).
- Ctrl-PgUp ~ Scroll up so the highlighted file moves to the bottom of the window and remains highlighted, then scroll up a page at a time.
- Ctrl-PgDn ~ Scroll down so the highlighted file moves to the top of the window and remains highlighted, then scroll down a page at a time.
- Ctrl-Space ~ If the Alt-F10 configuration option "Invert current file tag with space key" is set to "Yes", invert the tag setting of the current file without moving the highlight bar.

2.7 File Window Commands - Alt

Alt File Commands are displayed at the bottom of the screen by holding down the Alt key when the highlight bar is in any of the File Windows. Some commands do not appear on the menu. To execute an Alt command, hold Alt and press the key indicated by the first uppercase letter, character or function key for the command. This key is highlighted if it's on the menu.

The following is a list of all File Window Alt commands. Descriptions of those commands that do not appear on the menu are marked here with "~".

- Alt-Batch - Execute a command line for the currently selected file without first creating a batch file. See section 3.4.1 '*Batch Parameters*'.
- Alt-Copy - Copy tagged files with their directory structure to another disk and/or directory. The destination directories are created if they do not exist. ZTreeWin first prompts for a filename mask for the new files, then for the destination directory. (See section 2.1 '*Standard Operation Keys*' for the common keys and options available at all input lines). Press Enter at the "as" prompt to keep the original names, or use a rename mask as described in section 3.3.1 '*Rename Mask*' to change the names. Press F4 to receive a confirmation if you are changing the names. At the "to:" prompt use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes for the new copy of the files. If in the Normal or Branch File Window, and not in the root directory, you will get an additional prompt to choose duplicating the Full, Current or Relative paths. (The Full path is always duplicated from the Showall and Global File Windows). Press Enter to accept the path option. You will then be asked whether you want to automatically replace existing files. Press F2 to choose replacing Read-only, System and Hidden (RSH) files, and choose Yes, No, Older, neVer or Rename Seq as the replace option to begin executing the command. (See section 3.1 '*Copying and Moving Files*' for more detailed description of the prompts and options for copying tagged files, and see Alt-Mirror on the Directory menu described in section 2.4 for an alternative to Alt-Copy).
- Alt-Edit - Edit the current file using the alternate editor specified in Alt-F10 configuration option, "Alt-Editor".
- Alt-File display - Change the format and amount of file information displayed in the File Windows. Use this to cycle through the following four display modes:
 - Name - Multi-column mode, displaying file name and extension only.
 - Name, size and attributes - Multi-column mode, displaying file name, extension, size and attributes.
 - Name, size, attributes and date - Single-column mode, displaying file name, extension, size, attributes, date and time. (Time may not be displayed in a Split Screen if the window is not wide enough).
 - Long name - Single-column mode, displaying file name and extension only. The extension immediately follows the name, rather than being in a separate column.Use Shift-Left/Right to set the position of the extension period.
Use the Alt-F10 configuration option "Initial file display mode" to set the initial display mode when ZTreeWin starts.
- Alt-Goto - When a .LNK shortcut file is highlighted, navigate to the target file or directory of the shortcut. If the file no longer exists, navigate to its directory, and if the directory no longer exists, remain on the shortcut.
- Alt-Hide - Set or unset the Hidden attribute of the current file. (See also the Attributes command).
- Alt-Info - Display additional information on the highlighted file including timestamps, attributes, short filename, filename length, module version information, owner when available, and number of hard links. The table below lists all the possible file attributes shown:
 - r - Read-Only c - Compressed n - Normal

a - Archived e - Encrypted o - Offline
 s - System i - Not content indexed p - Sparse file
 h - Hidden j - Junction t - Temporary

Use the navigation keys while this information is displayed to show the information for other files, or use the 'v' command to view the current file. To display the owner on Novell volumes, use the 'N' command to toggle the invocation of NDIR.EXE.

- Alt-JFC - Compare two files using the alternate compare program specified in the Alt-F10 configuration option "Alt-JFC compare" (or TFC.BAT if no alternate is specified). The default name on the input line will be *.BAK if the screen is not split. In Split Screen mode the default will be the same file name as the current file if it exists on the opposite side, or a blank input line if it does not. You may use the Tab key to cycle through a selection of other files to compare. The sequence of files using the Tab key is:
 - The current file on the opposite side in Split Screen
 - *.BAK in Split Screen
 - The same file name as the current file
 - The single (other) tagged file on the current side
 - Loop back to the original input line default
 You can use Shift-Tab to reverse this sequence, which enables you to quickly choose the tagged file on the current side if only one (other) tagged file exists.

- Alt-Log - Log another disk and release (unlog) all disks which were previously logged. See section 2.8 'Log Disks' for details on the available options.

- Alt-Move - Move tagged files with their directory structure to another disk and/or directory. The destination directories are created if they do not exist. ZTreeWin first prompts for a filename mask for the files to be moved, then for the destination directory. (See section 2.1 'Standard Operation Keys' for the common keys and options available at all input lines). Press Enter at the "as" prompt to keep the original names, or use a rename mask as described in section 3.3.1 'Rename Mask' to change the names. Press F4 to receive a confirmation if you are changing the names. At the "to:" prompt use the F5 and F6 keys to add, remove or keep the Read-only and Archive attributes to apply to the moved files. If in the Normal or Branch File Window, and not in the root directory, you will get an additional prompt to choose duplicating the Full, Current or Relative paths. (The Full path is always duplicated from the Showall and Global File Windows). Press Enter to accept the path option. You will then be asked whether you want to automatically replace existing files. Press F2 to choose replacing Read-only, System and Hidden (RSH) files, and choose Yes, No, Older, neVer or Rename Seq as the replace option to begin executing the command. (See section 3.1 'Copying and Moving Files' for more detailed description of the prompts and options for moving tagged files, and see Alt-Mirror and Alt-Prune on the Directory menu described in section 2.4 for an alternative to Alt-Move).

- Alt-Open - Open the current file. This is the same as the Open command (described in detail in section 2.5 'File Window Commands - Normal') except that all programs, including those launched by ext.BAT files, will be run in the asynchronous mode as separate tasks. (See section 2.11 'Launching Programs' for more details).

- Alt-Quit - Quit ZTreeWin and return to the command window in the directory that is current in ZTreeWin. This requires that ZTreeWin be started using the ZTWIN.BAT file in a command window.

- Alt-Release - Unlog an entire drive, directory, branch or files in a branch from memory:
 - All other drives - All drives except the drive that contains the current file.
 - Branch - The directory containing the current file, and all its subdirectories.
 - Current directory - The files in the directory containing the current file, but not those in its subdirectories.
 - Drive(s) - Specify a drive to release, (hold shift to specify multiple drives).
 - Files in branch - The files in the directory containing the current file, and in all its subdirectories. (The branch directories remain visible).
 - Non-current directories - All directories of the current drive, except the directory containing the current file.

Other branches - All branches on the current drive except the branch containing the current file.

This drive - The entire drive that contains the current file.

F4 - Windows dialog to disconnect a drive.

NOTE: This Windows dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.

Alt-Sort

- Choose one of the following sort commands to sort the file list. Press the highlighted letter of the command to sort immediately (the Enter key is not required). The files will not be re-sorted if no changes have been made in the current File Window. (Press Enter to force a re-sort even if no such changes have been made). The current sort order is shown in parenthesis on the left of the middle menu line.

(All other data being equal, drive and path are used as the final sort level in the Branch, Showall and Global File Windows).

Name - File name (then extension).

Ext - File extension (then name).

Date - File last-write date (then time, name, ext).

Time - File last-write time (then date, name, ext).

Length - File name+ext length (then name, extension).

Alpha - File name by alphabetic value, ignoring any leading numerics and punctuation.

nuMber - Numeric digits (regardless of length) which start in same character positions of filename.

Size - File size (then name, extension).

Unsorted - Sequence as written in the disk directory, regardless of any sort options (below).

Value - Numeric digits (regardless of length) ignoring all non-numerics at the start of the filename.

You may use one of the following sub-commands to modify the sort order and specify other sort options before choosing one of the above commands.

Charset - Use the OEM or ANSI character set. (This also affects the sequence of directories).

Order - Ascending or descending sequence. You may also use the Up arrow (or >) to select ascending, or the Down arrow (or <) to select descending.

Path - In a Branch, Showall or Global File Window, use the directory path as the first level of the sort sequence, rather than the last.

on eXit - Toggle between 'keep' and 'lose' to choose whether the new sort order will be kept or lost when the File Window is exited. (Default is always 'keep').

F8 - Toggle between 'same' and 'diff' to choose whether the sort order on the opposite side of a Split Screen will automatically be changed to the new sort order.

F12 - Use to reset the sort order and options to the initial default order and options.

Use the options in the Alt-F10 configuration option section "File Sorting" to set the initial default sort order and options when ZTreeWin starts.

Alt-Tag

- Use one of the following options:

Attributes - Tag all files in the File Window with specified file attributes.

(For example, "+S-H" to tag all files with the System attribute set, and the Hidden attribute not set).

Branch - In a Branch, Showall & Global File window, tag all files in the same branch as the current file.

Current dir - In a Branch, Showall & Global File window, tag all files in the same directory as the current file.

Up - Use "U" or Up-arrow to tag the current file and all files in the list above it.

Down - Use "D" or Down-arrow to tag the current file and all files in the list below it.

Name - Tag all files that match the name of the current file.

Extension - Tag all files that match the extension of the current file.

Filespec - Tag all files that match the specified filespec. Press Tab for the current file.

Alt-Untag

- Use one of the following options:

- Attributes - Untag all files in the File Window with specified file attributes. (For example, "-R+A" to untag all files with the Read-only attribute not set, and the Archive attribute set).
- Branch - In a Branch, Showall & Global File window, untag all files in the same branch as the current file.
- Current dir - In a Branch, Showall & Global File window, untag all files in the same directory as the current file.
- Up - Use "U" or Up-arrow to untag the current file and all files in the list above it.
- Down - Use "D" or Down-arrow to untag the current file and all files in the list below it.
- Name - Untag all files that match the name of the current file.
- Extension - Untag all files that match the extension of the current file.
- Filespec - Untag all files that match the specified filespec. Press Tab for the current file.

Alt-View - View the contents of the current file using the alternate viewer specified in the Alt-F10 configuration option, "Alt-Viewer:". See section 3.8 '*The Internal Viewer*' for more information on the internal viewer.

Alt-eXecute - Open a command prompt shell window to run programs or Windows commands from a command line. This is the same as the eXecute command, except that the program will always be launched in the asynchronous mode as a separate task. (See section 2.11 '*Launching Programs*' for more details).

Alt-ZLog ~ Save or load logged information to or from the specified file. This saves a log file containing the current state of ZTreeWin, or reloads a previously saved log file. There are four main commands. These commands will then prompt for the filename. Use the Alt key with these commands to bypass the filename prompt and use the default TEMP.ZLOG file.

The four commands are:

- Load - Load volume and state information from the specified file. This replaces all currently logged data.
- Merge - Load volume and state information from the specified file. This retains The currently logged data for volumes not present in the log file, and Restores the state of all other volumes.
- save and Quit - Save all logged volume and state information to the specified file, then Quit ZTreeWin. (Alt-Z does the same as Alt-Q, so that the sequence Alt-Z, Alt-Z can be used to quickly save the default file and quit).
- save and Resume - Save all logged volume and state information to the specified file, then resume operation.

When the save functions write information to the default TEMP.ZLOG file in the same directory that contains ZTW.INI, that log file will be loaded automatically the next time ZTreeWin is started from that directory, and will be automatically deleted. When the save functions write information to an existing file other than the default TEMP.ZLOG file, a confirmation prompt will appear. Use the /ZV command-line option to force the loading of a specified log file at startup, or with a non-existent filename to prevent the automatic loading of the TEMP.ZLOG file at startup. When a log file is loaded automatically at startup (ie. without the use of the /ZV command-line option), any macros specified on the command line with the /K option will be ignored.

Alt-F1 ~ Display program version and registration information. This is also displayed with Right-Alt-Ctrl (AltGr). While displayed, you can press F1 to go to the ZTreeWin website, or Alt-F1 to display the build date.

Alt-F2 Format - Open the Windows Format dialog to format the current disk. There will first be a confirmation prompt, or an error if ZTreeWin determines that the current drive should not be
 NOTE: This Windows dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.
 If a ZFORMAT.BAT file exists in the ZTreeWin directory, it will be run instead of the prompts and Windows dialog.

Alt-F3 Relog - Relog the files for the current directory, to reflect possible changes made by other applications. (Loses tags). Also redisplayes directories hidden with Shift-Numpad-minus.

- Alt-F4 Compare - In the Normal File Window, this performs the same function as Compare in the Directory Window. Use this to compare the list of files in the current directory with the list in another directory, based on the selected file-matching criteria. Files are tagged if they match the specified criteria. For more detail, see Compare in section 2.2 '*Directory Window Commands – Normal*'. In the Branch, Showall and Global File Windows, the displayed file list will be reduced to only those with Duplicate names, or duplicate names with Identical, Newest or Oldest dates, or files with Unique names, or files with same siZe or Contents regardless of their names or timestamps. See section 1.7.2 '*Compare Filter*' for more detail.
- Alt-F5 Open Archive - Display the compressed directories and files contained in the currently highlighted archive file. If the archive file contains directories, the Directory Window is opened, and the path and name of the archive file is displayed at the root. If the archive file does not contain directories the File Window is opened, and the path and name of the archive file is Displayed on the Path Identification line. This function uses the ARCHIVER.BB2 file to choose which archive program to use. (That file includes notes on how to set up new archivers). Extracting and viewing of .ZIP and .RAR files is provided by the integrated modules UNZIP32.DLL and UNRAR.DLL (or UNZIP64.DLL and UNRAR64.DLL for the 64-bit version), respectively. If the file is not recognized as an archive file, then the file is opened in the primary viewer. While the archive file is open, many of the same commands, navigation and input-line options are available as they are in the normal ZTreeWin windows. (The commands C, Ctrl-C and Alt-C are not on the menu, but work the same as E, Ctrl-E and Alt-E. Also, the File Window Ctrl-F command may be used) NOTE: If ZTreeWin appears to have frozen after invoking Alt-F5, it may be that the called external archiver is awaiting the input of a password (for encrypted headers). In this case, you may simply type the password and Enter to continue..
- Alt-Shift-F5 ~ Same as Alt-F5. This is useful if the Alt-F5 key has been reassigned by some other software, such as the ATI video drivers.
- Alt-F6 ~ Cycle between the colorization of files and directories, as defined in the ZCOLORS.INI file, and a monochrome mode useful for screen printing. ZCOLORS.INI is reloaded each time the toggle is enabled. (This does not affect colors assigned in the Alt-F10, F4 color configuration).
- Alt-F7 Zoom - Maximize the ZTreeWin window or restore it if it is already maximized. The maximum number of columns and rows is dependent on the screen resolution and the font being used. See section 1.10 '*Video Control*' for more details, and section 3.12 '*Shortcut Setup*' for guidelines on how the shortcut might affect maximizing the window.
- Alt-F8 Video - Cycle the horizontal display width through the settings specified on the command line with the /COLS switch, (or use internal settings if not specified), up to the maximum width possible, depending on the screen resolution and font being used. The initial width may also be set using the Alt-F10 configuration option "Number of characters wide".
- Alt-F9 Video - Cycle the vertical display height through the setting specified on the command line with the /ROWS switch, (or use internal settings if not specified), up to the maximum height possible, depending on the screen resolution and font being used. The initial height may also be set using the Alt-F10 configuration option "Number of rows high".
- Alt-F10 ~ Enter the ZTreeWin configuration mode. See section 3.7 '*Configuration Options*' for details.
- Alt-F12 ~ Replay the last used keyboard macro. See section 3.10 '*Keyboard Macros*'.
- Alt-\ ~ Jump to a specific file based on the entered ordinal value. This value is absolute from the top of the list unless prefixed with + or -, in which case it is relative to the current file.
- Alt-; ~ Same as the Alt-\ command.
- Alt-Up ~ Make the Small File Window larger if the highlight bar is in the small File Window. If the Alt-F10 configuration option, "File window Ctrl/Alt-Up/Down to tag/untag", is set to "Yes", then this will instead untag the current file and all files above it, (same as Alt-Untag-Up).

- Alt-Down ~ Make the Small File Window smaller if the highlight bar is in the Small File Window. If the Alt-F10 configuration option, "File window Ctrl/Alt-Up/Down to tag/untag", is set to "Yes", then this will instead untag the current file and all files below it, (same as Alt-Untag-Down).
- Alt-Left ~ Navigate to previous bookmarked directory in list. If the F7 Autoview mode is active, this narrows the file list and widens the file view.
- Alt-Right ~ Navigate to next bookmarked directory in list. If the F7 Autoview mode is active, this widens the file list and narrows the file view.
- Alt-Home ~ Reset the Small File Window to the default size if the highlight bar is in the Small File Window. If the F7 Autoview mode is active, reset the file list and the file view windows to the default sizes.

2.8 Log Disk

The Log (L) command may be executed from any File or Directory Window, including the F2 Browse Window. This reads file and directory information for a disk and makes it the current drive for further ZTreeWin operations. You are prompted for the new drive to log. The file and directory information for that drive is then read from disk and the disk statistics are updated to reflect the new disk contents. The file ZNOLOG.INI in the ZTreeWin directory is used to specify certain directories to be excluded from branch and full disk logging.

ZTreeWin retains the information for previously logged drives in memory until you release (unlog) it. To cycle the display through the disk drives that are currently logged and in memory, press the "<" or ">" keys. (These keys do not have to be shifted, therefore the comma and period do the same on U.S. keyboards).

To unlog a disk, use the Alt-R Release command.

The following are the options for the Log command:

F2 Method - Cycle through the three logging methods to be used:

- Full disk - Log all directories and files.
- Root only - Log only the first level directories (fastest method).
- Tree only - Log all directories, but not files (conserves memory).

F3 All mode - Use this to set the type of drives you wish to log in one operation with the "*" (all) key.

The options are:

- Local - Logs only local drives, including removable disks.
- Local fixed - Logs all local drives except removable media disks.
- All fixed - Logs all local fixed and all network drives.
- Network - Logs only network drives previously mapped.
- All - Logs all local and all network drives.

* All - Log all the disk drives selected with the F3 "all mode" option.

F4 Map to network - Call up the Windows dialog to map, (connect), additional drives that can then be logged in ZTreeWin.

NOTE: This Windows dialog may not be visible because Windows may have placed it behind the ZTreeWin window. Use Alt-Tab to bring it to the foreground.

↑ Volumes - Use the Up arrow to display a list of mapped drives, and the available free space on each. Local drives show the volume ID, while network and SUBST drives show their actual paths. Select the drive and press Enter. You may use Insert to mark any number of drives, then select the "** All marked drives" item at the bottom to log them all.

If a media error occurs during logging, (drive or directory not found), you can press "S" to Skip it. In the case of logging multiple drives, press "N" to skip to the Next drive, or "S" to Skip all remaining errors.

The Ctrl-Log command is the same as the Log command, except that it does not relog, (read again), the information from the specified disk if it is already in memory. The functions of the Log and Ctrl-Log key commands may be reversed by setting the Alt-F10 configuration option "Swap Log and Ctrl-Log key assignments" to "Yes".

To unlog a disk, use the Alt-Release command. To unlog all disks and log one disk all in one operation, use the Alt-Log command.

The File Window Alt-Log command is the same as the Log command, except that all other disk drives are automatically released from memory (unlogged).

The Directory Window Alt-Log command provides a Log Options menu, described in section 2.9 'Log Options' below. The Disk option is the same as the File Windows Alt-Log command.

2.9 Log Options

In the Directory Window, the Alt-Log command provides a menu with several options for partially logging a disk and expanding the directory tree, or logging one of the current user's special directories. These options are typically most useful when you have configured ZTreeWin to log disks only to the first level subdirectories, or to log only the tree structure. When you perform partial logs, you can only work with the files that are logged. See the Tree Outlining Commands in section 1.1 'Directory Window' for more information about partial logging and expanding and collapsing the tree.

The following Log options are available:

- Disk - Logs (or relogs) a disk, releasing from memory all other currently logged disks. This is the same as the Alt-Log command in the File Windows, and has the same options.
- Branch - Logs the directory branch from the current directory down. This is the same as the "*" tree outlining key.
- Relog - Relogs the current directory's files only. This is the same as the "+" key.
- One level - Logs only the first directory level of files and directories under the current directory, and releases (unlogs) any levels already logged beyond the first level.
- 1-9 levels - Logs the specified number of directory levels and files from the current directory down, and releases (unlogs) any levels already logged beyond that level.
- Tree only - Logs just the tree structure of the branch, releasing (unlogging) all of its files.
- Unlogged branches only - Logs only those directories in the current branch that are not already logged, and whose parent is not collapsed by F5/F6. This option ignores the contents of ZNOLOG.INI.

2.10 Tagging Files

One of the most important features to understand in ZTreeWin is File tagging. This is the method used to select a group of files for an operation, such as Copy, Move, Rename, etc. It is far more powerful than the method used in Windows Explorer to select files, because it is more permanent. Files remain selected, (tagged), until you choose to deselect, (untag), them, or you relog the directory, branch or disk drive. You can therefore perform several operations without losing your file selections, and you can easily perform operations on groups of files that are in different directories, and even on different disk drives.

The basic method of tagging files is to press "T" while a file is highlighted in a File Window. A diamond is displayed to the left of the file name to indicate it is tagged, and the highlight automatically moves down to the next file in case you want to tag that one also. To untag, press "U" when the tagged file is highlighted. The diamond is removed, and again the highlight automatically moves down to the next file.

To use the space bar to tag and untag files, (invert the tags), set the Alt-F10 configuration option "Invert current file tag with space key" to "Yes".

To tag all the files in a File Window that match the filespec, use Ctrl-Tag, and to untag all of them use Ctrl-Untag. To tag all the files that are logged on a disk drive and match the filespec, use Ctrl-Tag while in the Directory Window, and to untag them all use Ctrl-Untag while in the Directory Window.

You can "invert" all the tags in the File Window, or on the disk drive from the Directory Window, by using Ctrl-Invert and choosing the Tags option.

When in a File Window, you can also tag or untag all the files at and above or below the highlight bar by using Alt-Tag Up/Down and Alt-Untag Up/Down.

In addition to these manual methods of tagging and untagging, there are several operations that cause certain files to be automatically tagged for you. The most important of these are the Compare commands. In the Directory Window you can press "C", (or Alt-C), to compare two directories. All files in the currently highlighted directory, (or branch), will become tagged if they meet the criteria you choose when compared to the second directory, (or branch). When in a Normal File Window, you can use the Alt-F4 key to perform the same function.

One tagged-file command causes some or all files to become untagged. This is the tagged-file search command, Ctrl-Search. It will cause ZTreeWin to search all the tagged files in the File Window for a string, and untag all files that do not contain that string.

You can also tag files in the File Window that have certain attributes by using Alt-Tag, and then select Attributes. In the Directory Window this will tag all files on the disk drive that match the selected attributes.

Once you have tagged the files on which you wish to operate, you can then use one of the "tagged-file" commands to perform the operation. These commands are usually the same commands as are used for single files, but with the Ctrl key held. For example, "C" copies a single file, and Ctrl-C copies all tagged files in the File Window.

There are several methods of entering the Tags-Only mode to display only those files that are tagged. See section 1.7.1 '*Tags-Only Mode*' for details on these methods.

Whenever tagged files are present in the current Directory or File Window, the "Tagged" section in the Statistics Panel is displayed with the color specified in the ZCOLORS.INI file with the "TAGSTATS" keyword.

There are many more tagged-file commands which you will learn to use as you become more familiar with ZTreeWin. These are described in more detail in the descriptions of the individual commands in sections 2.2 through 2.7.

2.11 Launching Programs

A number of methods are provided to run other programs from within ZTreeWin. This is a summary of those methods, and a general explanation of how programs are launched.

There are two types of programs that can be launched by ZTreeWin commands and features: Console programs and Graphical User Interface (GUI) programs.

ZTreeWin is an example of a Console program. The EDIT.COM program and the Command Prompt window are other examples. For Console programs, Windows provides the ability to choose shortcut properties such as fonts, screen and miscellaneous features not available for GUI shortcuts. In Windows NT/2000/XP/Vista and Windows 7, these settings are saved in .LNK shortcuts or the registry.

Either type of program may be launched in one of two modes: The "synchronous" mode or the "asynchronous" mode.

Asynchronous mode means that the program is launched as a separate task from ZTreeWin. In this mode, control will be returned to ZTreeWin immediately, so that you may switch back to ZTreeWin and resume operations while the launched task is running.

Synchronous mode means that the program is run as part of (or a child of) the ZTreeWin task. In this mode ZTreeWin will wait until the launched program is ended before resuming operations.

The obvious advantage of the asynchronous mode is being able to run one or more programs from ZTreeWin, since control is returned and ZTreeWin continues to operate. However, a disadvantage is that when the program ends, ZTreeWin is unable to automatically refresh the information in its memory for files and directories which may have been affected by that program. In synchronous mode ZTreeWin can detect that the program has ended, and automatically refresh this information.

When a Console program is run in the synchronous mode, that program will occupy the ZTreeWin window, appearing to take the place of ZTreeWin until it is ended. GUI programs which are run in the synchronous mode will start in another window, and if you switch back, ZTreeWin will appear frozen until the GUI program is ended.

The following are the four principal methods of launching programs from within ZTreeWin. (Other methods are used by some ZTreeWin internal functions, but these four are considered to be the principal user-controlled methods). Each method is followed by one or more references to more details in this Help file.

- Open and Alt-Open commands

- Open - Section 2.5 'File Window Commands - Normal'
- Alt-Open - Section 2.7 'File Window Commands - Alt'
- ext.BAT - Section 3.14 'Auxiliary Files'

- eXecute and Alt-eXecute commands

- eXecute - Section 2.2 'Directory Window Commands - Normal'
- Alt-eXecute - Section 2.4 'Directory Window Commands - Alt'
- eXecute - Section 2.5 'File Window Commands - Normal'
- Alt-eXecute - Section 2.7 'File Window Commands - Alt'

- F9 Application Menu programs

Section 3.5 'Application Menu'

- Configured Editor, Viewer and JFC Compare programs

Section 3.7.1 'Configuration Page 1' - Support Programs

The following are the general rules and exceptions explaining how GUI and Console programs are launched by the above four methods from ZTreeWin.

GUI:

- Rule - Launched in separate windows in the asynchronous mode as separate tasks.
- Except - In Windows NT/2000/XP/Vista/Windows 7, when launched by an ext.BAT file, the F9 menu Enter command, or the eXecute command window, they are launched in the synchronous mode as part of the ZTreeWin task. (Some GUI programs in some versions of Windows may vary from this exception).

Console:

- Rule - Launched in the ZTreeWin window in the synchronous mode as part of the ZTreeWin task.
- Except - When launched directly by the Open command, or by using the Open command on a file associated by Windows to a Console program, or by using the Alt-Open or Alt-eXecute commands, they will be launched in a separate window in the asynchronous mode as a separate task.

To force a program to always be launched in the asynchronous mode as a separate task, use the Windows START command to launch it. To force a program to run in the synchronous mode, use the START command with the /WAIT (or /W) switch to launch it.

When using START in Windows NT, 2000, XP, Vista and Windows 7, the first pair of double quotes after the START command is used for the title. Therefore, if you need to enclose the program path and name in double quotes, you must add an extra pair of quotes (which may be null) to launch that program. For example:

```
START "" "C:\Program Files\Example Dir\Example Program.exe" %1
```

(Type START /? at a command prompt for more help with the START command).

2.12 Non-US Keyboards

There are a few command keys in ZTreeWin that are not easily typed on non-US keyboards. This happens when the following three conditions occur:

- The key is available without using Shift on the US keyboard.
- The key is available only by using Shift or AltGr on the non-US keyboard.
- The ZTreeWin command requires that Ctrl or Alt be used with the key.

The following table shows the functions and keys that are affected by this in ZTreeWin, and the alternative keys that can be used on the German, French, French-Canadian and Swedish/Finnish keyboards. (If your keyboard is not listed, you can go to the appropriate ZTreeWin input line and try various Ctrl, Alt and AltGr combinations to find the equivalent keystrokes).

Function	Keyboards				
	US	German	French	French-Canadian	Swedish/Finnish
Previous Treespec Toggle	Ctrl-\ Ctrl-;	Strg-# Strg-ü	Ctrl-* Ctrl-\$	Ctrl-< Ctrl-;	Ctrl-< Ctrl-"
Jump to Ordinal	Alt-\ Alt-;	Alt-ü	Alt-* Alt-\$	LAlt-< LAlt-;	Alt-§
Delete Bookmark	Ctrl-[	Strg-ß	Ctrl-)	Ctrl-^	Ctrl-´
Delete All Bookmarks	Ctrl-]	Strg-´	Ctrl-^	Ctrl-,	Ctrl-å
Filespec Group Begin (◀)	Alt-[	Strg-Alt-ß	Alt-)	Ctrl-LAlt-^	Ctrl-Alt-´
Filespec Group End (▶)	Alt-]	Strg-Alt-´	Alt-^	Ctrl-LAlt-,	Alt-å

NOTE: In order to support keyboard layout switching within ZTreeWin under Windows NT 4.0, it is necessary to install a helper module available from Microsoft. See: <http://support.microsoft.com/kb/284996>. The file PDH.DLL should be placed in the ZTreeWin program directory.

2.13 Error Log

The Error Log facility provides a way to review errors that were identified during the last tagged-file or Mirror operation. It is enabled using the Alt-F10 configuration option "Error log/summary dialog". Following the completion of one of these operations where an error has been identified, a dialog will be shown with the number of errors processed, and permit viewing or saving the temporary log file. Press "V" to view the log in the internal Viewer. Press "S" to save the error log to a new "permanent" file, with a default name in the format "YYYYMMDD@HHMMSS.log". Press F4 to choose between saving all error log entries for the current session, or only those for the last operation. Press F5 to automatically tag all files that produced an error during the last operation.

3. Feature Descriptions

3.1 Copying and Moving Files

This section and its subsections describes the methods within ZTreeWin of copying and moving files. It describes in detail the special prompts and options available when using the various Copy and Move commands.

NOTE: This section does not describe all the keys commonly available in most input lines. These are referred to here as the "standard operation keys". It will be helpful if you become familiar with those keys and options, described in section 2.1 'Standard Operation Keys'.

The creation and last-access timestamps of files that are moved or copied are preserved in all cases except when the /API switch is used. When the /API switch is used these timestamps are not preserved except for move operations within the same disk. System and Hidden attribute flags are always preserved. Read-only and Archive attribute flags are either copied or set according to default settings in the "Attribute" section of the Alt-F10 configuration options, or set by the F5 and F6 command options during the Copy or Move.

NOTE: The Copy commands, and the Move commands to another drive, do not normally copy or move NTFS attributes that are extensions of the FAT system attributes, such as alternate data streams (ADS). To preserve these attributes during Copy and Move operations use the /API command-line switch when starting ZTreeWin. (NTFS security attributes are never copied, or moved to another drive).

Short file and directory names (such as C:\PROGRA~1) and environment variables (such as %TEMP% and %USERPROFILE%) may be used to specify the destination file or directory.

In this section and subsections, only the differences between commands are described. This is to help show the similarities as well as the differences between the commands.

The Copy and Move file commands have almost identical prompts and options, so they are described together in these subsections. Copy operations always make duplicate copies of the files. Move operations to another location on the same drive simply change the directory entries (the files are not physically copied or moved). Move operations to a different drive first physically copy each file, then after a successful copy each source file is deleted.

The only difference in the prompts and options for Copy and Move operations is that for the Move commands, if the source file has the Read-only, System or Hidden attributes set, there will always be an Error prompt to confirm that you want to move the file. You may Override the error to confirm the Move, or press Esc to cancel.

The main difference between the Ctrl and Alt operations is that Ctrl copies or moves tagged files to a single destination directory, while Alt copies or moves files to directories with the same name as the source directories, automatically creating those directories if they do not exist.

3.1.1 File Copy/Move

Use the Copy and Move commands to copy and move a single file while in any File Window. The sequence of prompts and options is:

As:

Press Enter at this prompt to not change the file name. Enter a new name or use a rename mask to change the name in the destination directory. (See section 3.3.1 '*Rename Mask*' for details). All options are controlled by standard operation keys.

To:

Enter the directory name using the standard operation keys. Press F5 or F6 to control how the Archive and Read-only attribute flags will be set for the file in the destination directory. (The System and Hidden attribute flags will be duplicated from the source).

Directory does not exist. Make new path?

This prompt will appear only if the destination path does not exist.

The following responses are available:

- Yes - Create the specified destination path.
- No - Cancel the Copy/Move of this file.

File exists, replace?

This appears only when the file name already exists in the destination directory. File size, timestamp and attribute differences on the file to be replaced are highlighted. The following responses are available:

- Yes - Replace it.
- No - Cancel the Copy/Move of this file.
- JFC - Compare the file contents first. If the file contents are identical a message will be displayed "Files are identical, replace?". If they are not identical, the compare program will be launched to compare the files, and when exited will display "Files are different, replace?". In either case answer "Y" or "N".
- Rename Src - Return to the As: prompt to specify a new name for the source file.
- Tgt - Prompt to rename the existing destination (target) file before proceeding with the copy or move operation, allowing the specified source name to be used for the copied or moved file.

When attempting to copy or move a file to the current directory without changing its name, you will get an error message stating "*Cannot copy/move file into itself*". In the case of a copy operation, you are given the option "Rename Seq", which will create a copy of the file by automatically by appending a sequential number in parenthesis, eg. *filename(2).txt*.

3.1.2 File Ctrl-Copy/Move

Use the Ctrl-Copy/Move commands to copy or move all tagged files in the current File Window to a single destination directory. These prompts and options are similar to the Copy/Move prompts described above, with some additions. The sequence of prompts and options is:

As:

Use the same options as single-file Copy/Move.

In addition there is the following option:

- F4 - Confirm. Use this to force a confirmation prompt on each file, even if it does not exist in the destination directory. This is especially useful if a complex rename mask is being used to change the names.

To:

Use the same options as single-file Copy/Move.

Directory does not exist. Make new path?

Use the same options as single-file Copy/Move.

Automatically replace existing files?

This prompt lets you choose whether or not you want to automatically replace files if the same file name exists in the destination directory. The following are the available options and responses:

- F2 - Force replace RSH files. Press F2 to cycle the option to choose the attributes of files that will automatically be replaced without a prompt.
- Yes - Automatically replace files in accordance with the F2 setting.
- No - Do not automatically replace files. Prompt for each file that already exists in the destination directory.
- Older - Only replace files that are older, and skip replacing files that have the same timestamp or are newer.
- neVer - Never replace files that exist. Copy or move only those files that do not exist in the destination directory.
- Rename Seq - Rename the source file automatically by appending a sequential number in parenthesis, eg. *filename(2).txt*.
- Esc - Cancel the entire Ctrl-Copy/Move operation.

This prompt can be suppressed on empty destination directories if the Alt-F10 configuration option "Ctrl/Alt-

Copy/Move prompt for empty target" is set to "No".

Error: File is read-only, or system/hidden.

This error occurs if the F2 option in the above "Automatically replace" prompt is not set to replace such a file. The options are:

- F2 - Cycle to force replace of all such files, then press Enter to retry the copy/move operations.
- Override - Override the error on this file only.
- Enter - Skip replacing this file (if F2 is not changed).
- Esc - Cancel all copy/move operations on the remaining tagged files.

File exists, replace?

This prompt will appear only if the above "Automatically replace" prompt is answered "No". It has the same Options and highlighting as the single-file Copy/Move, and in addition has the following available responses:

- All - Replace all remaining files automatically without a prompt.
- Older - Only replace remaining files that are older, and skip replacing files that have the same timestamp or are newer.
- neVer - Never replace remaining files that exist. Copy or move only those files that do not exist in the destination directory.

3.1.3 File Alt-Copy/Move

Use the Alt-Copy/Move commands to copy or move all tagged files in the current File Window to destination directories having the same names and structure as the source directories. This will duplicate those directory names if they do not already exist.

An alternative command for copying files to directories having the same names is the Alt-Mirror command.

Six important differences from Alt-Mirror when using Alt-Copy are:

- It operates only on tagged files.
- It will not copy empty directories or directories without tagged files.
- It will not copy source directory attributes.
- It will not copy source directory creation and last-access timestamps.
- A prompt is always available for replacing existing or older files.
- There is no option to synchronize directories.

If the source window is a Showall or Global File Window, or the current directory is the root directory of a drive, full paths will always be duplicated as subdirectories of the destination directory. In those cases all prompts and options will be identical to the Ctrl-Copy/Move prompts described above.

If the source window is a Normal or Branch File Window, and the directory is not the root of a drive, then an additional prompt will occur after the "To:" prompt, to let you choose how much of the path relative to the current directory will be duplicated. (In a Branch File Window, the current directory is the directory that was current when the Branch File Window was entered, and which will be current when it is exited). This prompt is then the only difference from the prompts and options available when using the Ctrl-Copy/Move commands:

Source: Paths are (full/current/relative)

Press "P" to cycle the three choices, or "F", "C" or "R" to make the choice.

The following describes the three choices:

- Full - Duplicates the full path names of all tagged files as subdirectories of the destination directory.
- Current - Duplicates the current directory name as a subdirectory of the destination directory, and duplicates all subdirectory names for all tagged files.
- Relative - Duplicates only the subdirectory names of the current directory as subdirectories of the destination directory for all tagged files.

The default path is normally "full", but this default can be changed with the two options in the Alt-F10 configuration section "Alt-Copy, Move and Mirror".

3.2 Copying and Moving Directories

This section and its subsections describes the methods within ZTreeWin of copying and moving directories. It describes the special prompts and options available when using the Alt-Mirror and Alt-Graft commands.

NOTE: This section does not describe all the keys commonly available in most input lines. These are referred to here as the "standard operation keys". It will be helpful if you become familiar with those keys and options, described in section 2.1 'Standard Operation Keys'.

NOTE: The Mirror command does not normally copy NTFS attributes that are extensions of the FAT system Attributes, such as alternate data streams (ADS). To preserve these attributes during Mirror operations use the /API command-line switch when starting ZTreeWin. (NTFS security attributes are never mirrored).

3.2.1 Directory Alt-Mirror

Use the Alt-Mirror command in the Directory Window to mirror the current branch by copying all subdirectories in the branch to the destination. This includes the attributes and timestamps of all empty directories and logged files that are newer than, or do not exist, in the destination.

Files in the destination that are newer or have the same timestamp as the source are not normally replaced. The F4 key can be used to set other replacement options to determine how existing files are handled in the destination.

Three synchronization modes are available, selected by pressing the F8 key after Alt-Mirror is started. These modes determine how non-existing directories and files are handled in the destination.

- Synch (No) - This is a one-way copy-only operation. Existing directories and files in the destination that do not exist in the source are not deleted.
- Synch (One way) - This is a one-way copy-and-delete operation. Existing directories and files in the destination that do not exist in the source are deleted.
- Synch (Two way) - This is a two-way copy-only operation. Both sides of the operation are treated as both a source and destination. Existing directories and files in both the source and destination that do not exist on the other side are copied to the other side. No files or directories are deleted.

Files and subdirectories will not be copied from an unlogged directory, so in order to mirror all the files and directories in an entire branch it must first be completely logged.

You may also mirror just the branch structure without any files by first using Alt-Log 'Tree only' on an unlogged directory, or Alt-Release 'Files in branch' on a fully-logged branch.

An alternative command for copying files to directories having the same names is the Alt-Copy command.

Six important differences from Alt-Copy when using Alt-Mirror are:

- It makes no difference whether or not files are tagged.
- It will copy empty directories.
- It will copy (and can set) directory attributes.
- It will preserve directory creation and last-access timestamps.
- F4 must be used to be prompted for replacing existing or newer files.
- There is an option to synchronize directories.

The sequence of prompts and options for Alt-Mirror is:

To:

Enter the directory name using the standard operation keys. In addition, press F5 or F6 to control how the Archive and Read-only attribute flags will be set for the destination files and directories. (The System and Hidden attribute flags will be duplicated from the source). Press F4 to be prompted for replacing files other than older files.

Directory does not exist. Make new path?

This prompt will appear only if the destination path does not exist.

The following responses are available:

- Yes - Create the specified destination path.
- No - Cancel the Alt-Mirror command.

Source: Paths are (full/current/relative)

This prompt appears only if the source path is not the root directory.

Press "P" to cycle the three choices, or "F", "C" or "R" to make the choice.

The following describes the three choices:

- Full - Duplicates the full path names of directories as subdirectories of the destination directory.
- Current - Duplicates the current directory name as a subdirectory of the destination directory, and duplicates all of its subdirectory names.
- Relative - Duplicates only the subdirectory names of the current directory as subdirectories of the destination directory.

The default path is normally "full", but this default can be changed with the two options in the Alt-F10 configuration section "Alt-Copy, Move and Mirror".

Automatically replace existing files?

This prompt appears only if you pressed F4 at the "To:" prompt. It lets you choose whether or not you want to automatically replace files if the same file name exists in the destination directory. The following are the available options and responses:

- F2 - Force replace RSH files. Press F2 to cycle the option to choose the attributes of files that will automatically be replaced without a prompt.
- Yes - Automatically replace all files in accordance with the F2 setting.
- No - Do not automatically replace files. Prompt for each file that already exists in the destination directory.
- Older - Only replace files that are older, and skip replacing files that have the same timestamp or are newer.
- neVer - Never replace files that exist. Copy only those files that do not exist in the destination directories.
- Esc - Cancel the entire Alt-Mirror operation.

CAUTION: This will delete non-matching destination directories and files

Are you sure?

or

CAUTION: Non-matching and newer destination directories and files will also be copied to this source directory.

Are you sure?

One of these prompts will appear only if you pressed F8 at the "To:" prompt to choose a synchronize mode.

Consider carefully the results before continuing. The available options and responses are:

- Yes - Perform the synchronize operation
- No - Cancel the entire Alt-Mirror operation
- Esc - Same as No

3.2.2 Directory Alt-Graft

Use the Alt-Graft command in the Directory Window to move the current branch (current directory with all its subdirectories and files) to another location. If the target path is on the same disk, the directory and files are not physically moved, only the affected directory entries are changed. If the target path is on another disk, the branch is first copied, then deleted. All directory and file timestamps and attributes are preserved.

NOTE: There is no confirmation prompt for moving Read-only, System or Hidden (RSH) directories, as there is for files. This is because Windows permits these functions on all directories without warning if they are not considered critical directories.

The sequence of prompts and options for Alt-Graft is:

To:

Enter the directory name using the standard operation keys.

3.3 Renaming Files and Directories

One of the most powerful features of ZTreeWin is the Rename function. The Rename and Ctrl-Rename commands can operate on a single file, and on multiple tagged files, respectively. Also, all the Rename functions are available in the "as" file-renaming prompts when you use the Copy or Move commands to copy or move files. They are also available when creating an archive file with the Ctrl-F5 command, and when creating a shortcut with the sHortcut commands. The colon pair to insert date and time elements is also available when using the Make directory command.

The Rename operations include the ability of inserting, deleting and overwriting characters, as well as more advanced functions such as changing case, adding sequential numbers, adding parts of the system and file timestamps, and performing find-and-replace operations. All the Rename operations are explained in detail in the following subsections, with examples.

The use of the wildcard characters, "*" and "?", is similar to their use in DOS and Windows, but not identical to either. Since DOS and the various versions of Windows have somewhat different rules, ZTreeWin has adapted the rules to achieve the most powerful results.

You can control the confirmation of Rename operations with the Alt-F10 configuration option "Rename protection". If set to "Confirm", (the default), single-file and directory Renames will show you a preview, and prompt you for a confirmation if they are "complex". A complex Rename is one that contains any rename mask characters, (except that a single asterisk and no other character in the name or extension section of the file name is not considered complex). Also, the tagged-file Ctrl-Rename operation provides the use of the F4 function key to preview and confirm the new file names.

The single-file Rename command provides the F5 function key to retrieve the previous file name of the most recently renamed file.

3.3.1 Rename Mask

The rename mask is a set of characters which can be used as a template when renaming a file, or when using Copy/Move "as" a new name.

The following are the characters used in the rename mask:

- * Asterisk - Use as a wildcard to represent a group of a variable number of characters to be retained in that position of the name.
- ? Question Mark - Use as a wildcard to represent a specific character to be retained in that position of the name.
- / Slash - Use to indicate a specific character to be deleted in that position of the name.
- < > Less-than and Greater-than Signs - Use to enclose characters to be inserted in that position of the name.
- : : Colons - Use to enclose digits to be inserted as sequential numbers, and date/time elements, in that position of the name. Note that multiple : : entries will be initialized to the same initial value, which will be the last one encountered in the mask.

The following are characters used to perform additional rename operations:

"" Double quotes - Use to define a find-and-replace string, rather than a rename mask.
(See section 3.3.2 '*Rename Find-and-Replace*').

- | Piping character - Use to separate multiple rename operations, (rename masks and find-and-replace strings). No space is permitted on either side of the | separator. The rename operations are performed in a left to right sequence, with the result of the previous operation being fed ("piped") to the next operation.

The following 18 "rules" define how the rename mask functions.

NOTE: All the examples shown in these rules rename the file "ABC.DEF.XYZ", which is treated as having a 7 character name section and a 3 character extension section. The mask examples always use numbers for greater clarity.

3.3.1.1 General

The rename mask is separated into two name and extension "sections", separated by the rightmost period. A rename mask is always evaluated against the name and extension sections separately. Additional periods to the left are treated the same as any other normal character.

3.3.1.2 Non-wildcard Characters (Substitution)

Non-wildcard characters are considered substitution characters, and therefore overwrite that position in that section of the name.

Examples: 1*. * = 1BC.DEF.XYZ
1*.2* = 1BC.DEF.2YZ
1*. = 1BC.DEF
1* = 1BC.DEF

3.3.1.3 Asterisks (Group Retention)

A leading, trailing or embedded asterisk represents whatever number of previously existing characters remain, and are to be retained, in that position of that section of the name.

Examples: 12*. * = 12C.DEF.XYZ
*12. * = ABC.D12.XYZ
1*2. *3 = 1BC.DE2.XY3
1. *2*3 = 1.C.DEF.2Y3
.*1.2* = .BC.DE1.2YZ

3.3.1.4 Asterisk Limitations

Only one asterisk may be specified in each section.

Examples: *123*. * = Error: Invalid mask
*. *.123 = Error: Invalid mask
1*.23*. * = Error: Invalid mask

3.3.1.5 Question Mark (Single-Character Retention)

A question mark represents a character position which is to be retained in that position of that section of the name.

Examples: 12345??6?? = 12345EF.6YZ
??12345. ?67 = AB12345.X67
12??345.6?7 = 12C.345.6Y7
?1*??. * = A1C.D2F.XYZ
?1*????. * = A1C2DEF.XYZ
??1*???. * = AB1.2EF.XYZ
.??1. ?2. * = .BC1.E2.XYZ

3.3.1.6 Slash (Single-Character Deletion)

A slash (forward) represents a character position which is to be deleted in that position of that section of the name.

Examples: /*. * = BC.DEF.XYZ
/. ?/ = ABC.DE.XZ
??/*./ * = ABDEF.YZ
1?///??. ?/? = 1BEF.XZ

3.3.1.7 Excess Substitution Characters

Excess substitution characters are inserted to the right in that section of the name.

Examples: ????. ???123. * = ABC.DEF123.XYZ
1234??5678. * = 1234DE5678.XYZ
1234/?/5678. ?987* = 1234E5678.X987

3.3.1.8 Insufficient Substitution Characters

When no asterisk is present, insufficient substitution characters cause deletion of characters to the right in that section of the name.

Examples: 123?.? = 123..X
 ??123.?4 = AB123.X4
 12??34.5? = 12C.34.5Y

3.3.1.9 Excess Wildcards

Excess wildcards are ignored.

Examples: 12345678*.9 = 12345678.XY9
 *12345678.9*8 = 12345678.9Y8
 1234*5678.9*87 = 12345678.987
 1234?????????.7?????* = 1234DEF.7YZ
 ??????????123.?????4* = ABC.DEF123.XYZ4
 12?????????34.5?????6* = 12C.DEF34.5YZ6
 ??123????456??.* = AB123EF456.XYZ
 1234////////.* = 1234.XYZ
 //////////1234.* = 1234.XYZ
 ///1234///.* = 1234.XYZ
 1??2//????3.* = 1BC2F3.XYZ

3.3.1.10 Mask Priorities

If an asterisk is present with either excess question marks or slashes in a section of the rename mask, question marks and slashes take priority over the asterisk.

Examples: 12???3456*. * = 12C.D3456.XYZ
 12???3456. = 12C.D3456.XYZ
 12???3*456.* = 12C.D3456.XYZ
 ?1*2?????.* = A12.DEF.XYZ
 ?123*456?.* = A123456.XYZ
 ?12*34????.* = A1234EF.XYZ
 ?1234*5678?.9*876 = A12345678.9876
 12///3456*. * = 123456.XYZ
 12///3456. = 123456.XYZ
 //123*456/. * = 123456.XYZ

3.3.1.11 Less-than and Greater-than Insertion Pair

A pair of less-than and greater-than signs enclose characters which are to be inserted in that position of that section of the name.

Examples: <12>*.<34>* = 12ABC.DEF.34XYZ
 <12>* = 12ABC.DEF
 *.<12> = ABC.DEF.12
 <12>.<34> = ABC.DEF12.XYZ34
 <12>??.<34>? = 12AB.34X
 ??<12>?.??<34> = AB12.XY34
 ?<12>?.?<3>? = A12B.X3Y
 <12>??.<3>? = ABC.D12EF.XY3Z
 ??<12>*.?<3>* = AB12C.DEF.X3YZ
 <12. = Error: Invalid mask

3.3.1.12 Wildcard Usage with the Insertion Pair.

Wildcards may be placed inside the insertion pair.

Examples: <12*34>.<5?6*> = 12ABC.DEF34.5X6YZ
 <*12>.<*3> = ABC.DEF12.XYZ3
 <?1??2*3??>.<4?5> = A1BC2.D3EF.4X5
 <?12/?34?/5>*.<?/6?> = A12C34.5EF.X6Z

3.3.1.13 Period Usage in Insertion

If an inserted period is the rightmost period it creates a new extension section. (Part or all of the old extension may become part of the name section).

Examples: *.*.<.123> = ABC.DEF.XYZ.123
 1*.*.<.234> = 1BC.DEF.XYZ.234
 ..<1.2> = ABC.DEF.XYZ1.2
 ..<1.2>* = ABC.DEF.1.2XYZ

```

.*??<1.2>*           = ABC.DEF.XY1.2Z
*12?.?<.34>*         = ABC.12F.X.34YZ

```

3.3.1.14 Colon Pair Inserts Sequential Numbers

A pair of colons may enclose sequential digits which are to be inserted in that position of that section of the name. When renaming a series of tagged files, the first file renamed will receive the specified digits, and each file thereafter will be incremented or decremented by one, or the step size specified preceding 'i' or 'd'. To insert the tagged-file count, specify 'x', or '0x' to specify one less. If the number of files to be renamed exceeds the capacity of the number of digits specified, the number of digit inserted will be increased.

```

Examples:  *:001:.*           = ABC.DEF001.XYZ
           *:01:.*          = 01ABC.DEF.XYZ
           *:1001:.*        = ABC.DEF1001.XYZ
           *:500:          = ABC.DEF.500
           *:d99:          = ABC.DEF.XYZ99
           *<.>:d100:.*     = ABC.DEF.100.XYZ
           *:*<.>:d349:     = ABC.DEF.XYZ.349
           *:2i002:.*       = ABC.DEF002.XYZ
           *:4d100:.*       = ABC.DEF100.XYZ
           *: _01:<_of_>:x:.* = ABC.DEF_01_of_42.XYZ
           *: _00:<_of_>:0x:.* = ABC.DEF_00_of_41.XYZ
           *: _dx:<_of_>:x:.* = ABC.DEF_42_of_42.XYZ
           *: _1d0x:<_of_>:0x:.* = ABC.DEF_41_of_41.XYZ

```

3.3.1.15 Colons Insert Non-Alphabetic Characters

The colon pair may contain any valid non-alphabetic characters to be inserted as template characters.

```

Examples:  *:-001:.*       = ABC.DEF-001.XYZ
           *: [001]:.*     = ABC.DEF[001].XYZ
           *: .001:.*      = ABC.DEF.001.XYZ
           *: *.001:.*     = ABC.DEF.XYZ.001
           *: 001:.*       = Error: Invalid mask
           *: 00X:.*       = Error: Invalid mask
           *: 00?:.*       = Error: Invalid mask

```

3.3.1.16 Colons Insert Date and Time

The colon pair may enclose date and time elements which are to be inserted in that position of that section of the name. The following elements may be used, and are not case-sensitive. By default, the system date and time are used. However, a leading (leftmost) single character inside the colon pair can be used to indicate that one of the file's date and time elements are to be used, rather than the system date and time.

Leftmost within the colon pair:

- a - use the file's last-access date and time
- c - use the file's creation date and time
- w - use the file's last-write date and time

In any position within the colon pair:

- Dd - day
- mm - month
- cc - century (supported only for backward compatibility)
- yy - two-digit year
- yyyy - four-digit year
- jjj - Julian day of the year
- hh - hours
- nn - minutes
- ss - seconds
- t - tenths of seconds
- tt - hundredths of seconds

```

Examples: *: [mm-dd-yy]:.*       = ABC.DEF[12-31-05].XYZ
           *: ccyjjj:.*.*       = 2005365.ABC.DEF.XYZ
           *: .(mm-dd-ccyy)-[hh;nn;ss.tt]:.* = ABC.DEF.(12-31-2005)-[23;59;59.99].XYZ

```

3.3.1.17 Colons and Wildcards

Wildcards may be placed inside the colon pair.

Examples: : mmddyy-* -001:.* = 123105-ABC.DEF-001.XYZ
 :(001)????:. = ABC(001).DEF.XYZ

3.3.1.18 Nesting Insertion Pairs and Colon Pairs

The colon pair and the insertion pair may be nested.

Examples: * <.Seq=:001:>.* = ABC.DEF.Seq=001.XYZ
 * <.Seq>=001:.* = ABC.DEF.Seq=001.XYZ
 * <.mm=:mm: dd=:dd: yy=:yy:>.* = ABC.DEF.mm=12 dd=31 yy=05.XYZ
 * <.mm>=mm<.dd>=dd<.yy>=yy:.* = ABC.DEF.mm=12.dd=31.yy=05.XYZ

3.3.2 Rename Find-and-Replace

To perform a find-and-replace operation while renaming a file, or when using Copy or Move "as" to a new name, use the double quote to begin the rename operation.

The find-and-replace "rules" are:

- The format is "old"new"O, where the "O" represents optional operation codes.
- The double quote must be the first character of the operation.

- There must be exactly three double quotes for a valid find-and-replace string.

- Optional operation codes may follow the third double quote. If none is specified, the default operation codes are assumed.

- Operation codes are not case-sensitive, and may be specified in any order.

- File names will be searched from left to right for the "old" string.
- When an "old" string is found, it is replaced by the "new" string.
- When the search continues, the "new" string is not included in the search.

- The "new" string may be null, (empty), effectively deleting the "old" string in the name.

- Wildcards are not permitted.

The following are the optional find-and-replace operation codes:

- Name operators. These indicate which sections of the filename are to be targeted for replacement. Only one name operator may be used.
 - N - Name section only. (Default). The operation will be performed only on the name section of the filename. Periods in the "old" string will never match the extension period.
 - E - Extension section only. The operation will be performed only on the extension section of the filename. Periods in the "old" string will never match the extension period.
 - B - Name and extension sections separately. The operation will be performed on both the name and extension sections of the filename. Periods in the "old" string will never match the extension period.
 - X - Name and extension sections together. The operation will be performed on both the name and extension sections of the filename. Periods in the "old" string will match the extension period. (The eXtension section is treated as if it is part of the name section).
- Find operators. These control only the find "old" operation. (The replace string will always be substituted exactly as input).
 - I - Ignore case on find "old". (Default).

C - Case sensitive find "old".

- Limit the search to a number of occurrences in each name.
Use a number from 1 to 9. (Default is unlimited number of occurrences).

S - Separate strings only. Limit the search to strings separated by non-alphabetic characters.

- Change-case operators. These are applied to the entire filename sections as specified by the Name operator. The change-case operation will be performed after the specified find-and-replace operation. It may also be specified with two null strings, (three double quotes), to indicate only a change-case is to be done. Only one change-case operator may be used.

L - Change to Lower case.

U - Change to Upper case.

W - Change to Word Caps case.

3.3.3 Changing Case

In addition to using the rename mask and find-and-replace strings, the case of the filename can be changed using Tab, and the extension can be changed with Ctrl-Tab. (See section 2.1.2 '*Retrieving Information to the Input Line*').

3.4 Batch Parameters and Environment Variables

There are three types of variables that can be used in ZTreeWin. Two are described in this section. (The third type, called a "Token," is available only in the Application Menu, and is described in section 3.5.2 'Application Menu Directives and Tokens').

Batch Parameters are variables that are only available in several specific functions within ZTreeWin. These parameters contain information about the currently highlighted directory or file, and are interpreted or translated internally by ZTreeWin.

Environment Variables are variables that are set in the Windows environment for the current ZTreeWin session or "shell". These can be used not only by ZTreeWin functions, but also in any batch file or script launched from ZTreeWin.

3.4.1 Batch Parameters

The functions within ZTreeWin that can accept and interpret Batch parameters are the Ctrl-Batch and Alt-Batch commands, the ext.BAT batch files used by Open and Alt-Open, the eExecute and Alt-eExecute command lines, the configured Editor and Viewer command lines, and the F9 Application Menu scripts.

Batch parameters provide a means for ZTreeWin to pass information about the current directory, file, or tagged files to an external program. The file created by the Ctrl-Batch command can also be used as a simple list of tagged file information which can then be used for other purposes.

The following Batch parameters may be used to pass file and directory information to the batch file or command line. ZTreeWin will process these parameters, and pass the interpreted result to the generated batch file or command line. When in a Directory Window, the file name and extension information will be blank.

%1 - the file's path and name	- e.g. C:\2005\September\Test_File.txt
%2 - the file's drive id	- e.g. C
%3 - the file's path	- e.g. \2005\September
%4 - the file's name	- e.g. Test_File
%5 - the file's extension	- e.g. txt
%6 - the file's current path	- e.g. September
%7 - the file's short path and name	- e.g. C:\2005\SEPTEMBER~1\TEST_F~1.TXT
%8 - the file's short name	- e.g. TEST_F~1.TXT
%a - Attributes	- e.g. r.sh
%d - Timestamp	- e.g. 12-13-05 1:30:00
%s - Size	- e.g. 1,234,567

When ZTreeWin is in split screen mode (F8), you also have access to the following parameters to reference the file name in the inactive file pane.

%j1 - Path and name	- e.g. D:\2005\September\Test_File.txt
%j2 - drive letter	- e.g. D
%j3 - Directory path	- e.g. \2005\September
%j4 - Name	- e.g. Test_File
%j5 - Extension	- e.g. txt
%j6 - Current directory	- e.g. September
%j7 - Short path and name	- e.g. D:\2005\SEPTEMBER~1\TEST_F~1.TXT
%j8 - Short name	- e.g. TEST_F~1.TXT
%ja - Attributes	- e.g. .a..
%jd - Timestamp	- e.g. 9-01-05 1:49:20
%js - Size	- e.g. 1,234,567

The above %a, %d, %j and %s parameters must be in lower case.

Double percent signs (%%) will always be passed on to the generated batch file or command line as a single percent sign (%). You can use this to prevent ZTreeWin from interpreting a variable as one of its own Batch parameters, and to pass that variable on to the batch file or command line, where it will instead be interpreted by Windows. For example, %%1 and %%systemdrive%% will be generated as %1 and %systemdrive% in the batch file or command line.

In addition, the following two parameters may be used:

- !! - Create a new line (in Ctrl/Alt-Batch only)
- %+ - For 4DOS/4NT users

If a parameter resolves to a name or path containing a space, or any other character that may be interpreted as a separator in Windows (,;&=) ZTreeWin will automatically enclose the name or path in double quotes. If you manually add the quotes, additional quotes will not be added.

ZTreeWin will not add the quotes if any character other than a space immediately precedes the parameter string. therefore, if you do not want ZTreeWin to add the quotes, you can manually add the drive letter to prevent the quotes from being added, and still have a valid path. For example, quotes will not be added around the following, even if spaces or other separator characters are in the path or name: C:%3%4.%5

3.4.2 Environment Variables

ZTreeWin sets several Environment Variables in the Windows "command shell" environment established by the current ZTreeWin session. These can therefore be used by any batch file or script launched by the current session, but cannot be used by scripts not launched from within this ZTreeWin shell. They are not case sensitive.

The following is a description of each of these variables.

- ##ZDesktop% - Full path to the current user's Desktop directory.
- ##ZDrive% - Drive letter (without the colon) on which the currently running ZTreeWin program (ZTW.EXE) is installed.
- ##ZFavorites% - Full path to the current user's Favorites directory.
- ##ZHome% - Full path to the installation directory of the currently running ZTreeWin program (ZTW.EXE).
- ##ZMenu% - Full short path and file name of the F9 Application Menu file last used by the current ZTreeWin session.
- ##ZMyDocuments% - Full path to the current user's My Documents directory.
- ##ZStartMenu% - Full path to the current user's Start Menu directory.
- ##ZTemp% - Full path to the ZTMP### temporary directory in use by the current instance of the ZTW executable.
- ##ZTools% - Path set by the Alt-F10 configuration option "#ZTools path". Can be used to access commonly-used utility programs, without having to set a PATH variable for them. If not set, this defaults to the short path name of the installation directory of the currently running ZTreeWin program (ZTW.EXE).

3.5 Application Menu

The F9 Application Menu provides a structured method to run applications from within ZTreeWin. This is a powerful and often overlooked feature of the program.

The power comes from the ability to use the Batch parameters so that information about the currently highlighted file or directory (before entering the Application Menu) can be passed as parameters to the program being called from the menu. Environment variables can also be used. (See section 3.4 '*Batch Parameters and Environment Variables*' for more information).

When a menu item is executed, the menu script is used to create a temporary batch file, ZTW_MENU.BAT, then that batch file is automatically executed. For this reason, the menu can be scripted with any commands that are valid in a batch file (and in a command file for Windows NT, 2000, XP, Vista and Windows 7).

The current directory, or in a Branch, Showall or Global File Window the directory containing the current file, is automatically the current directory for the script being launched.

Double percent signs (%%) will always be passed on to the generated batch file as a single percent sign (%). You can use this to prevent ZTreeWin from interpreting a variable as one of its own Batch parameters, and to pass that variable on to the batch file, where it will instead be interpreted by Windows. For example, %%1 and %%systemdrive% will be generated as %1 and %systemdrive% in the ZTW_MENU.BAT batch file.

Many commands cause the Application Menu to be flagged as being modified, which is indicated by a '*' next to the Application Menu filename at the top of the screen. Pressing F3 will manually save the current state of the Application Menu at this point, or it will be saved automatically when the Application Menu is closed.

The Application Menu itself is, by default, saved to the ZTW.ZAM file, and a backup is saved to the ZTW.ZA\$ file. Additional menu files can be created from a copy of ZTW.ZAM, and loaded using the F2 Load command. The most recently loaded menu file will automatically be loaded when ZTreeWin starts.

CAUTION: If there are multiple instances of ZTreeWin running they will all write to the same menu files unless alternate configuration files are used. (See section 3.14 '*Auxiliary Files*' for details).

The Application Menu is limited to a maximum of 2048 lines, each of which can hold a script of up to 999 lines, each of up to 400 characters.

By default all Console programs run by the Application Menu are launched in the synchronous mode as part of the ZTreeWin task. GUI programs may be launched synchronously or asynchronously, depending on the version of Windows and the program. (See section 2.11 '*Launching Programs*' for more details).

The Application Menu may be constructed as a tree structure, then collapsed and expanded just like a directory tree. Use the F5 key to display or hide the tree, and the Alt-Move command to change an item's position in the tree.

3.5.1 Application Menu Keys and Commands

The following are the keys and commands used in the main F9 Application Menu.

In these lists, descriptions of those commands that do not appear on the menu are marked with "~".

Main-menu Keys and Commands

Use these for controlling and using the Application Menu.

Up, Down	~ Navigate up and down the menu a line at a time.
Right	~ Navigate down one line, (same as Down).
Left	~ Navigate to the parent menu item, but not to the heading.
Backspace	~ Navigate to the parent menu item, including the heading.
PgUp, PgDn	~ Navigate the menu a page at a time.

- Home, End ~ Go to the first and last item in the displayed menu.
- Ctrl-Up, Down ~ Scroll the menu without navigating from the current item until it reaches the top or bottom of the window.
- Ctrl-PgUp, PgDn - Scroll the menu so the currently highlighted item is placed at the top or bottom of the window, then scroll the menu a page at a time.
- Ctrl-Right ~ Expand the next sublevel if it is not displayed. Move to the next sublevel if it is displayed.
- Ctrl-Left ~ Collapse the sublevels if any are displayed. Move to the parent item if no sublevels are displayed.
- Ctrl-Home, End ~ Go to the first and last item at the current level.
- Tab, Shift-Tab ~ Navigate the menu at the same level.
- Menu character ~ Type the first letter, number or other character of a menu item to jump to that item, or to navigate to each of the items beginning with that letter, number or character. (Most characters are supported).
- ← Execute - Enter to execute the currently highlighted menu item, then exit the Application Menu. If the menu item is empty, expand the next sublevel.
- Ctrl-Enter ~ Execute the currently highlighted menu item and remain in the Application Menu. If the menu item is empty, expand the next sublevel.
NOTE: The above functions of the Enter and Ctrl-Enter keys can be reversed by setting the Enter key assignment Alt-F10 configuration option "F9 Menu - Closes menu after executing" to "Yes".
- +, -, * ~ Use these to expand and collapse the menu structure.
- F1 Help - Display this help file.
- F2 - Load the specified *.ZAM menu file.
- F3 - Save the current menu file in memory to disk.
- F4 ~ Activate the Alt commands without having to press or hold the Alt key.
- F5 Graphics - Turn the display of the menu tree structure on and off.
- Alt - Access the menu editing keys, described below.
- Esc Cancel - Exit the Application Menu.

Alt-menu Commands

Use these for maintaining and executing menu scripts.

- Add item - Add a new item as a "child" of the current item.
- Copy item - Copy the current menu item script and name to a new item just below the current item.
- Delete item - Delete the selected item and script from the menu.
- Edit script - Edit the script of the selected item.
- Move item - Move the selected item to a different position on the menu. Use Up and Down to move within the current branch, and Left and Right to move to another level. (It helps to have the tree structure displayed while doing this). Use Enter to complete the move, or Esc to cancel the move and return the item to its original location.
- Rename item - Rename the selected item.
- Undo - Undo the last change.
- View - Process the current menu item script without execution, then display the resultant ZTW_MENU.BAT in the viewer. This processes and displays the results of the ZTreeWin Batch parameters, directives and tokens (but not environment variables).
- eXecute - Execute the currently highlighted menu item with the START command, then exit the Application Menu. This is the same as Enter, except that it launches the script with the START command asynchronously as a separate task, and creates a timestamp-named version of the ZTW_MENU.BAT file. Use the #ZTStart directive to pass parameters to the START command that launches the script.

Edit-menu Commands

Use these after pressing Alt-Edit to enter the menu script editor.

- Copy - Copy the current line, inserting it before the next line.
- Delete - Delete the current line.
- Edit - Edit the current line (same as Enter).
- Insert - Insert a line before the current line.
- Load - Load the contents of a text file, replacing the entire script. If the first line of the file begins

	with ":", that line will loaded as the menu item name.
Move	- Move the current line up/down with the Up/Down keys.
cCopy scrap	- Copy all lines of the current script to the scrap area.
Paste scrap	- Paste from the scrap area, inserting the lines into the script above the current line. NOTE: The scrap area is cleared when exiting back to the menu, so use Tab and Shift-Tab instead to navigate to the destination item.
Rename	- Rename the current menu item.
Enter	- Edit the current line (same as Edit).
Tab	- Move to the next menu item while in the Edit script menu.
Shift-Tab	- Move to previous menu item while in the Edit script menu.
Up/Down	- Move the cursor up or down one line.
PgUp/PgDn	~ Move the cursor up or down one page.
Home/End	~ Move the cursor to the top, or to 3 lines below the last script line.
Ctrl-C	~ Copy the current line to the Windows Clipboard.
Ctrl-V	~ Paste from the Windows Clipboard, inserting the lines from the Clipboard into the current script above the current line.
Ctrl-Ins key	~ Same as Ctrl-C.
Shift-Ins key	~ Same as Ctrl-V.
Undo	- Exit back to the menu without saving any changes.
Write	- Save the current script to the specified file, or to the Windows Clipboard. The menu item name will be saved as the first line of the file, prefixed by ":". Use F4 or F5 to copy or append to the Windows Clipboard, and F6 to set the line gap if appending. If saving to an existing file, a prompt will give you the options of Overwrite, Append, or Esc to cancel.
Quit	- Exit back to the menu, saving changes (same as Esc).
Esc	- Exit back to the menu, saving changes (same as Quit).

Script-line Editing Keys

Use these after pressing Edit or Enter on a line in the menu script editor.

Left/Right	~ Move the cursor left or right one character.
Up/Down	~ Move the cursor up or down one line.
Ctrl-Left/Right	~ Move the cursor one word left or right.
Home/End	~ Move the cursor to the beginning or end of the line.
Del key	~ Delete the character at the cursor.
Backspace	~ Delete the character to the left of the cursor.
Ctrl-Del key	~ Delete the line to the right of the cursor.
Ctrl-Backspace	~ Delete the entire line.
Ctrl-C	~ Copy the line to the Windows Clipboard.
Ctrl-V	~ Paste the first line of the Windows Clipboard into the line, inserting it in the current position.
Ctrl-Ins key	~ Same as Ctrl-C.
Shift-Ins key	~ Same as Ctrl-V.
Enter	- Save the line changes and return to the Edit script menu.
Esc	- Discard the changes on the current line and return to the Edit script menu.

3.5.2 Application Menu Directives and Tokens

Directives and tokens can be placed in the menu script to provide control over how the batch file is generated. Directives and tokens are processed before the batch file is created. When the batch file is executed, directives will be ignored as comments by Windows, and tokens will have been replaced by ZTreeWin. Directives and tokens are not case sensitive.

The following is a list of these directives.
(NOTE: ":" may be used instead of "REM").

REM #ZTExit	Automatically exit the Application Menu after executing the current menu script.
REM #ZTIfDir	Text line to include if in the Directory Window, so that the script can detect if the selected item was a file or directory. Example:

```

SET ZTMode=File
REM #ZTIfDir SET ZTMode=Dir
IF [%%ZTMode%%]==[File] ECHO This is file %1
IF [%%ZTMode%%]==[Dir] ECHO This is directory %1

```

REM #ZTIfTagged Text line to include if there are tagged files in the current file window, so that the script can be made to detect the presence of tagged files.

Example:

```

SET ZTTagged=False
REM #ZTIfTagged SET ZTTagged=True
IF [%%ZTTagged%%]==[False] Goto Err_NoTag
REM
REM Commands that require tagged files
REM
Goto End
:Err_NoTag
Echo This menu item requires tagged files to operate
pause
:END

```

REM #ZTInclude Text line to include in the generated .BAT file. This literal text is placed in the batch file when the file is generated from a ZTreeWin menu item. This is useful if it is desired that a menu script and an external batch file be identical, yet work differently..

REM #ZTSet VAR "Prompt for input:"
Requests user input using the quoted string as the prompt. The user input is assigned to the environment variable specified in VAR. This directive is executed before the generated batch file is executed. The data entered by the user may include environment variables.

REM #ZTSetQ VAR "Prompt for password:"
This is identical to the #ZTSet directive above, except that the user input is masked with asterisks.

REM #ZTStart Parameters to be used by the START command when Alt-eXecute is used to launch the script. These parameters must be valid for the version of Windows being used. (Type START /? at a command prompt to see the valid parameters). The #ZTStart directive is ignored when Enter is used to launch the script.

REM #ZTTag filename [-a] [-s] [-uq] [-CA|-CO] [-f%parameter string]
Generate a text file with the specified filename containing the set of tagged files in the current open File Window. By default the %1 Batch parameter is used to generate each line of the file (it does not need to be specified). If the full path to the generated filename is not specified, it will be created in the current directory. The optional parameters are:

- a - Append to file, rather than overwrite.
- s - Use a space to delimit filenames rather than CR/LF.
- uq - Prevent quotes being added to filenames
- CA- Output filenames using the ANSI charset
- CO- Output filenames using the OEM charset (default)
- f - Use the specified string and Batch parameters rather than %1 for each line. (If used, this parameter must be last on the #ZTTag line).

Example 1 - This performs the first operation (Op #1) on all tagged files, then performs the second operation on the same files:

```

REM #ZTTag #ZTTemp\~ZTtag.bat -fECHO Op #1 on tagged file %1
REM #ZTTag #ZTTemp\~ZTtag.bat -a -fECHO Op #2 on tagged file %1
CALL #ZTTemp\~ZTtag.bat
PAUSE

```

Example 2 - This uses a recursion technique to perform the both operations together on all tagged files:

```
REM #ZTTag #ZTTemp\~ZTTag.bat -fCALL #ZTTemp\ZTW_MENU.BAT NEXT %1
IF [%%1]==[NEXT] GOTO Next
CALL #ZTTemp\~ZTTag.bat
PAUSE
GOTO End
:Next
    ECHO Op #1 on tagged file %%2
    ECHO Op #2 on tagged file %%2
:End
```

REM #ZTView Force the generated script to be loaded by the viewer, instead of being executed.

The following is a list of the tokens. These eliminate the need to set an external environment variable, and provide a means of making a menu script fully portable between systems. All token-generated path and file names will be in short name form.

#ZTDrive	Represents the drive letter of the current instance of the ZTW executable. When encountered anywhere in the script, this token is replaced by the drive letter of the currently running ZTW executable (without the colon).
#ZTExe	Represents the filename of the current instance of the ZTW executable. When encountered anywhere in the script, this token is replaced by the filename of the currently running ZTW executable.
#ZTHome	Represents the path name of the current instance of the ZTW executable. When encountered anywhere in the script, this token is replaced by the path of the currently running ZTW executable.
#ZTMenu	Represents the full path/filename of the .ZAM menu file in use by F9. This can be used to make self-referencing scripts.
#ZTTemp	Represents the path name of the ZTMP### temporary directory in use by the current instance of the ZTW executable. When encountered anywhere in the script, this token is replaced by the path of the current ZTMP### directory.
#ZTTools	Represents the Alt-F10 configuration option "#ZTTools path", or if not set, the installation directory of the currently running ZTreeWin program (ZTW.EXE).
#ZTVersion	Represents the current ZTreeWin version string. When encountered anywhere in the script, this token is replaced by the ZTreeWin version number.

3.6 History Lists

History lists are provided by ZTreeWin at virtually all command input lines. This important and powerful tool provides a means of recalling and reusing frequently-used input. Each list can hold a maximum of 64 unmarked entries, and an unlimited number of marked entries. These marks can be assigned a letter or number so that the history item may be accessed directly with that single letter or number. When there are a total of 64 unmarked entries in the list, the oldest unmarked entry rolls off the top of the list to make room for new entries to be added.

The history list is saved to the ZTW.HST file when ZTreeWin is exited.

CAUTION: If there are multiple instances of ZTreeWin running they will all write to the same history file. Since the history is held in memory until the ZTreeWin instance ends, the history from the last running instance of ZTreeWin will overwrite the history files from the other instances unless alternate configuration files are used. (See section 3.14 'Auxiliary Files' for details).

(See section 2.1 'Standard Operation Keys' for detailed information on the basic keys used to control and edit input lines).

To retrieve or save a history item from most command prompt input lines:

- Up arrow - Display the history list at the newest entry, (bottom).
- Down arrow - Display the history list at oldest entry, (top).
- F3 - Retrieve the newest history item to the input line.

- Ctrl-% - Where % is a letter or number, retrieve the entry marked with that letter or number from the history, ready to edit in the input line.

- Alt-% - Where % is a letter or number, retrieve the entry marked with that letter or number from the history, and immediately perform the operation. (This is the same as Ctrl-%, followed by the Enter key).

- Alt-Up - Save the input line to the history list and continue editing.

To navigate, retrieve from and maintain a displayed history list:

- Up/Down arrow - Move up or down one entry.
- Home/End - Move to the top or bottom of the list.
- PgUp/Down - Page the list up or down.
- Enter - Retrieve the highlighted item into the input line.
- A..Z, 0..9 - Select and retrieve into the input line the item marked with that letter or number.
- Alt-% - Where % is a letter or number, retrieve the entry marked with that letter or number from the history, and immediately perform the operation.
- | or + - Retrieve the highlighted item and append it to the data already in the input line. When used in a file naming operation, the "|" separator character is added for command chaining. When used in Filespec, the "," separator is added for multiple filespecs. In all other operations, no separator is added. Press Esc (do not press Enter) after appending the items from the history list to return to the input line for editing.
- Del - Remove the history item, (provided it is not marked).
- Ins - Mark the entry to prevent it from rolling off the top of the list, or remove the mark if the item is already marked.
- Ctrl-% - Where % is a letter or number, mark the entry with that letter or number, or remove that letter or number from the highlighted entry. If % already exists on an entry other than the one highlighted, move the highlight to that entry. (Duplicate marks are not permitted).
- Left/Right - Use to cycle the filtering of the current history list arrow to temporarily display only marked, bookmarked or unmarked entries.
- Alt-Left/Right - Use to cycle the sort sequence of the displayed history arrow items, by the mark symbol, or the item text.
- Ctrl-Ins Key - Copy the history item to the Windows Clipboard.
- F3 - Save all command history to the ZTW.HST file. (This performs the same function that automatically occurs when you Quit ZTreeWin).

- Alt-F10 - Open the history maintenance menu, which provides the following commands:
- Delete - Delete unmarked entries.
 - Read - Read the ZTW.HST from disk into memory.
(This replaces all the history items created in this session).
 - Sort - Sort the list using the selected options.
 - Write - Save the ZTW.HST to disk. (This performs the same function that automatically occurs when you Quit ZTreeWin).
- The Delete and Sort commands can be set to apply to:
- Current - Only the currently displayed history list,
 - All - All the history lists. (The entire file).
- The Sort command is controlled by the following options:
- Mark - Sort by marks.
 - Text - Sort by the text entry.
 - Order - Sort in Ascending or Descending sequence.

If the Alt-F10 configuration option "*History lists allow Ctrl-C/V/X bookmarking*" is set to "Yes", and you bookmark a history item with "X", "C" or "V", these marks will take precedence and override the use of the these keys for the corresponding Cut, Copy and Paste clipboard operations on the input lines of any command that uses that particular history list.

Several other Alt-F10 configuration options affect how the history lists operate. See the "*History and Directory Bookmarks*" section of the Configuration Options for more detail on these.

3.7 Configuration Options

To accommodate the preferences of many different users, ZTreeWin is highly configurable. The configuration options are accessed from any Directory Window or File Window with Alt-F10.

The default settings match the default XTreePro behavior as closely as possible. To take better advantage of many features in ZTreeWin that were not available in XTreePro it is recommended that these options be reviewed and changed as desired.

Many of the configuration options provide the same function as command-line options. In those cases the command-line options always take precedence and override these settings. (See section 3.13 '*Command-Line Options*').

The configuration option settings are saved in the ZTW.INI file. You may delete or rename this file to cause ZTreeWin to revert all settings to the original defaults.

CAUTION: If there are multiple instances of ZTreeWin running they will all write to the same configuration file unless alternate configuration files are used. (See section 3.14 '*Auxiliary Files*' for details).

Most of the configuration changes are effective immediately in the current ZTreeWin session. Exceptions to this are those settings that can be changed with ZTreeWin commands. Examples of these are the Alt-Sort settings, and the Alt-File display mode settings. In these cases the configuration change sets the initial state when ZTreeWin first starts.

Use the following keys for navigation and control while in the configuration pages:

- PgDn - Next page.
- PgUp - Previous page.
- Down - Next option.
- Up - Previous option.
- 1..7 - Jump to that page number.
- A..Z - Cycle that option on the current page and highlight it.
- Enter - Cycle through the values for the highlighted option, or display a dialog to input changes for some options.
- Space ~ Same as Enter.

- Esc - Exit the configuration without saving changes. Prompts for confirmation if changes have been made.
- F1 - Display this Help section.
- F3 - Save the changes and exit the configuration.
- F4 - Enter the color configuration screen, described in section 3.7.8 'Color Configuration'.

3.7.1 Configuration Page 1

The option choice shown on each option line in these configuration pages is the ZTreeWin default if no ZTW.INI file is present.

Support Programs

- | | |
|--------------------|-------------------|
| A Editor: | NOTEPAD.EXE |
| B Alt-Editor: | START NOTEPAD.EXE |
| C Viewer: | (Internal) |
| D Alt-Viewer: | (Internal) |
| E JFC Compare: | TFC.BAT |
| F Alt-JFC Compare: | TFC.BAT |
- Use the above six options to specify the programs which are launched and the parameters used when the Edit, Alt-Edit, View, Alt-View, JFC and Alt-JFC commands are used, respectively.
 - Use the START command to launch a Console mode support program in the asynchronous mode as a separate task, and immediately give control back to ZTreeWin. GUI support programs are always launched as a separate tasks. (See section 2.11 '*Launching Programs*' for more details).
 - Use Batch parameters and environment variables to define the command line parameters and path for the Editor and Viewer. If no Batch parameters are specified, the default %1 parameter is used. (See section 3.4 '*Batch Parameters and Environment Variables*').
 - Use a Batch parameter of %7, or the single parameter [SFN], to pass the short file path and name to the Editor or Viewer. (The [SFN] parameter itself is not passed to the support program).
 - Use the special JFC parameters and the environment variables to pass the filenames and other information to the compare programs. See section 3.9 '*Jeff's File Compare*' for a description of the special JFC parameters and how they are passed to the support programs.
 - An empty string for the Viewer or JFC programs causes the defaults (Internal) and TFC.BAT, respectively, to be used.
- | | |
|------------------|--------|
| G #ZTTools path: | #ZHome |
|------------------|--------|
- Set this option to define an environment variable where F9 and other external scripts launched by ZTreeWin can locate desired support and utility programs. Environment variables may be used in the defined path.

International

- | | |
|---|-----------|
| J Numeric format | 1,234,567 |
| Set the number format used by ZTreeWin. | |
| K Date format | mm-dd-yy |
| Set the date format used by ZTreeWin. | |
| L Time format | 23:14 |
| Set the time format used by ZTreeWin. | |

Disk and Directory Logging & Refreshing

- | | |
|---|-----------|
| P Disk logging method | Root only |
| Use to set the default logging method when logging a disk. | |
| Root only - Log only the files and directories in the root of the disk. | |
| Tree only - Log all the directories on the entire disk, but do not log any files. | |
| Full disk - Log all files and directories on the entire disk. | |
| Q Log files in disk root | Yes |

If the logging method is set to "Root Only", set to "No" to disable the automatic logging of files in the root of a drive. (Has no effect if disk logging is set to another method).

- R Automatically refresh directories Always
Set to "After a write" to refresh directories only after ZTreeWin performs a write to the drive. This disables the automatic refreshing of directories by Treespec and Bookmark navigation, and after certain operations like Edit, Open, eExecute, and F9 menu, which may have resulted in files being changed by other programs. Set to "No" to disable ZTreeWin from performing any automatic refresh of directories, including those following a function which was known to have caused a write to the drive, such as Ctrl-Batch, F5/Ctrl-F5 Archive, Alt-F5 Extract, sHortcut, View/Gather (to a file), Print (to a file) and Alt-Z/Resume. The "After a write" or "No" options may be preferred if there is often a large number of files logged, or the network connection to the disk is slow.

- S Refresh directory when file window entered No
Set to "Current" or "Branch" to automatically refresh the file list of the current directory when changing from the Directory Window to the File Window. Additionally, the "Branch" option will recursively refresh the branch's directory tree, while "Current" will refresh just the first-level sub-directories.

- T Refresh directory when file window exited No
Set to "Current" or "Branch" to automatically refresh the file list of the current directory when changing from the File Window to the Directory Window. Additionally, the "Branch" option will recursively refresh the branch's directory tree, while "Current" will refresh just the first-level sub-directories.

- U Refresh file window on split screen Tab No
Set to "Current" or "Branch" to automatically refresh the file list of the opposite side when using Tab to swap to a File Window in Split Screen mode. The "Branch" option will refresh all files in the File Window, while "Current" will refresh only the files in the current directory.

- V Swap Log and Ctrl-Log key assignments No
Set to "Yes" to swap the Log and Ctrl-Log key assignments, so that Log will not force a relog if the drive is already logged.

3.7.2 Configuration Page 2

Display Format

- A Number of characters wide 96
Set the width of the ZTreeWin window.
(Use Alt-F8 to change the width in the current session).
80-400 - Specifies an even exact width.
MAX - Uses the maximum width depending on the screen resolution and the font size.
AUTO - Uses the width previously set for the window by the shortcut.

- B Number of rows high 43
Set the height of the ZTreeWin window.
(Use Alt-F9 to change the height in the current session).
25-200 - Specifies an exact height.
MAX - Uses the maximum height depending on the screen resolution and the font size.
AUTO - Uses the height previously set for the window by the shortcut.

- C Scroll bars ☐
Set the scroll bar character to boxes or lines.

- D Disable file colorization in ZCOLORS.INI No
Disable the directory and file colors specified in the ZCOLORS.INI file when ZTreeWin starts. (Use Ctrl-Z to disable colorization in the current session).

- E Kilobytes displayed as multiples of 1024
Set the multiple used for displaying K or M bytes in ZTreeWin.

Directory Window Format and Control

- H Condensed tree width No
Set to "Yes" to reduce the horizontal space between each level of the directory tree in the Directory Window from 3 to 2 characters.
- I Highlight bar Scrolling
Set the highlight bar in the Directory Window to "Scrolling" or "Fixed". When set to "Fixed" the highlight remains fixed on the fourth line of the window.
- J Hide System/Hidden dirs and/or junctions None
Set to "+SH" to hide System and Hidden directories.
Set to "+J" to hide junctions (reparse-points).
Set to "+SHJ" to hide S and H directories and junctions.
- K Treewin Tab navigates immediately No
Set to "Yes" to have Tab and Shift-Tab in Treewin immediately jump to the next or previous directory at the current level.
- L Window sizing Proportional
Set the method used to position the Directory Window and Small File Window divider when the ZTreeWin window height is changed. "Proportional" retains a consistent ratio of the two window heights. Set to "DW Fixed" to keep the Directory Window size constant. Set to "SFW Fixed" to keep the Small File Window size constant.

File Window Format and Control

- N Initial file display mode Name
Set the initial file display mode in the File Window for a session. (Use the Alt-File command to change the display mode during the current session). The four modes are:
Name - Multi-column mode, displaying file name and extension only.
Name, Size, Attr - Multi-column mode, displaying file name, extension, size and attributes.
Name, Size, Attr, Date - Single-column mode, displaying file name, extension, size, attributes, date and time.
Long name - Single-column mode, displaying file name and extension only. The extension immediately follows the name, rather than being in a separate column.
- O Display lines between file columns No
Set to "Yes" to display dividing lines between the columns of files in the File Window.
- P File window paging like directory window No
Change how the PgDn and PgUp keys work in the File Window when the highlight is not on the top or bottom file.
No - Scrolls the highlighted file to the top or bottom of the window, (if possible), and moves the highlight to the opposite end of the window.
Yes - Moves the highlight to the top or bottom of the window without scrolling the file list.
- Q Access to file windows with no matches No
Sets the ability to enter and remain in the File Window when files exist, but no files match the filespec.
No - Never allow access if no files match the filespec.
Remain - Remain in the File Window if files exist, but no files match the filespec.
Enter and Remain - Allow entering and remaining in the File Window if files exist, but no files match the filespec.
- R Access to empty file windows No (dependent on above)
Sets the ability to enter and remain in the File Window when there are no files in it. (This cannot be set to override the above setting for no filespec matches).
No - Never allow access if the directory is empty.
Remain - Remain in the File Window even if the directory is empty.

Enter and Remain - Allow entering and remaining in the File Window even if the directory is empty.

Execute Window Format

- U Brief eXecute command headings No
Set to "Yes" to configure the eXecute command screen header to three lines instead of five lines.

3.7.3 Configuration Page 3

File Sorting

(Use the Alt-Sort command to change the sort sequence during the current session).

- A Initial Sort method Name
Set the initial file sort method to "Name", "Extension", "Date", "Size", "Unsorted", "Length", "Time", "nuMber" or "Alpha".
- B Initial Sort order Ascending
Set the initial file sort order to "Ascending" or "Descending".
- C Initial Sort character set OEM
Set the initial file and directory sort order to use the "OEM" or "ANSI" character-set code sequence.
- D Skip Alt-Copy/Move sorting by path No
Set to "Yes" to process the files on an Alt-Copy/Move operation in the order they appear in the File Window, instead of first sorting by path.
- E Split Screen Sort mode Same
Set the initial file sort mode to be "Same" or "Different" to force the same sort order or permit a different sort order on each side of a Split Screen.

File and Directory Window Restoration

- H Maintain file position in each directory No
Set to "Yes" to return the highlight to the previously highlighted file when returning to a previously entered File Window.
- I Maintain last file view for each drive No
Set to "Yes" to return into a previously entered File Window when switching to a previously logged drive.
- J Restore file position on Alt-Sort No
Set to "Yes" to maintain the highlight on the current file when performing an Alt-Sort operation.
- K Restore file position after Ctrl-function No
Set to "Yes" to return the highlight to the current file in the File Window after performing certain Ctrl operations on tagged files.
- L Restore file position after F3 refresh No
Set to "Yes" to maintain the highlight position in the File Window when performing an F3 refresh operation, provided that file still exists.

Enter Key Assignments in Specific Windows

- P Directory - Bypasses Small File Window Yes
Set to "No" to make the Enter key move the highlight to the Small File Window while the Directory Window remains displayed.
- Q File - Invokes view No
Set to "Yes" to reassign the Enter key in the File Window so that it launches the primary viewer, rather than exiting the File Window.

- R eXecute - Closes window after executing No
Set to "Yes" to automatically return to the Directory or File Window after using an eXecute command.
- S F9 Menu - Closes menu after executing No
Set to "Yes" to automatically return to the Directory or File Window after executing an F9 Menu command.

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Confirmation and Prompts

- A Quit confirmation Yes
Set to "No" to bypass the confirmation of the Quit commands.
- B Prune confirmation PRUNE
Set the confirmation method for the Alt-Prune command.
These are not case sensitive.
 - PRUNE - Requires typing "PRUNE".
 - Directory name - Requires typing the directory name.
 - Y - Requires typing "Y".
- C Ctrl/Alt-Copy/Move prompt for empty target Yes
Set to "No" to avoid the "Automatically replace existing files?" prompt when the target directory is empty.
Applies to Alt-Copy/Move only from the Normal File Window. (Setting this to "No" may cause difficulties in creating consistent macros).
- D Ctrl/Alt-Copy/Move prompt on completion No
Set to "Yes" to pause at the completion of Ctrl/Alt-Copy/Move as well as Binary compare operations, to allow final viewing of the elapsed time and data rate display
- E Rename protection (Confirm/Attributes) Confirm
Use to control the confirmation prompts on tagged-file rename operations, including Ctrl-Rename, Ctrl-Copy and Ctrl-Move. Also use to control complex single-file Renames, and the confirmation requirement if the file or directory has a Read-only, System or Hidden (RSH) attribute set. (See configuration option "Override attributes" to set the default attributes).
 - None - Set the default "F4 Confirm" option to "No", do not display the "F2 Override Attributes" choice, and do not require confirmation if an RSH attribute is set.
 - Confirm - Set the default "F4 Confirm" option to "Yes", do not display the "F2 Override Attributes" choice, and do not require confirmation if an RSH attribute is set.
 - Attributes - Display the "F2 Override Attributes" choice, require confirmation if an RSH attribute is set, and set the default "F4 Confirm" option to "No".
 - Confirm & Attributes - Set the default "F4 Confirm" option to "Yes", display the "F2 Override Attributes" choice, and require confirmation if an RSH attribute is set.

Filespec Definitions

- H Treat leading "." as "*" No
Set to "Yes" to permit filespecs and rename masks starting with a period to be interpreted as starting with a leading asterisk before the period. A setting of "Yes" is ignored when copying and moving files if the file name is not changed. ("Yes" disables the ability to set a filespec to only those files that actually start with a period).
- I Treat trailing "*" & no "." as "*.*" No
Set to "Yes" to interpret filespecs that end with an asterisk as if they were followed by ".*" and therefore match all extensions.
- J "<" & ">" include specified date/size No
Set to "Yes" to interpret less-than and greater-than specifications as if they included equal dates and sizes.

Tagging Operations

- N Invert current file tag with space key No
Set to "Yes" to use the Space key in the File Window to change the setting of the tag on the current file before moving to the next file, and to use Ctrl-Space to change the tag on a file without moving to the next file.
- O Partial untag only successful operations No
Use this to control the behavior of the File Window Ctrl-F8 Partial Untag command.
No - Untags all files that were processed by ZTreeWin, whether or not the operation, (Ctrl-Copy, Ctrl-Move, etc.), was successful. This leaves only those files tagged that were not processed because some error or other interruption occurred before ZTreeWin could operate upon them.
Yes - Untags only those files that were successfully operated upon by ZTreeWin, even if all files were processed. This leaves only those files tagged that were not successfully operated upon, (Ctrl-Copied, Ctrl-Moved, etc.).
- P File window Ctrl/Alt-Up/Down to tag/untag No
Use this to control the assignment of the Ctrl-Up/Down and Alt-Up/Down keys in the File Window.
No - Use the default assignment of these keys so they control the scrolling of the File Window.
Yes - Assign the Ctrl-Up/Down keys to perform the same function as Alt-Tag,Up/Down, and assign the Alt-Up/Down keys to perform the same function as Alt-Untag,Up/Down.

Input Line Options

- T Highlight the default input values Yes
Set to "No" to cause ZTreeWin to not display and highlight the default values in most input fields.
- U Rename function - Tab case mode Name & extension
Set to "Name only" to cause the Rename command Tab key to change the case of only the Name section of the file, rather than both sections. (The Ctrl-Tab key can always be used to change the case of the extension section only).
- V Enable F2 and F11 on non-destination input No
Set to "Yes" to enable the use of F2 Browse and F11 Bookmark directory path retrieval into most input lines that do not prompt for a destination path.

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Viewer

- A Search skip movement Page
Set the initial behavior of searching in the viewer. (Use F8 in the viewer to change the search skip movement in the current session).
Page - Scroll the file to the next page containing the search string.
Hit - Move the highlight to the next occurrence of the search string.
- B Disable display mode detection No
Set to "Yes" to prevent ZTreeWin from attempting to detect the file type from its contents, and then automatically switch to the appropriate display mode in the viewer.
- C Ctrl-View starts viewing at current file No
Set to "Yes" to force the Ctrl-View command to start viewing the currently highlighted file, rather than the first tagged file in the file list.
- D Display archive list output for View
Use to control which View commands will attempt to automatically display archive files in the list format. Set to any combination of "View", "Alt-View" and "Autoview" (F7), or "None".
- E EBCDIC Charset mode enabled No
Set to "Yes" to enable the EBCDIC Charset mode.

- F Search Hit offset 0%
Specify the percentage of the window to be shown above or below the current search hit, depending on search direction. If set to 0% no percentage will be applied, and each hit in the window will be accessed before the window is paged.

Editor

- H Show Edit command prompt No
Set to "Yes" to always display the file name to be edited in the File Window, so that the name can first be changed.
- I Prevent Edit command on read-only files No
Set to "Yes" to prevent the Edit command from being used on a file if its Read-Only attribute is turned on.

History and Bookmarks

- N History lists wrap No
Set to "Yes" to enable the history lists to wrap directly from the top to bottom and back while scrolling through them.
- O Bookmarks wrap No
Set to "Yes" to enable the bookmarks to wrap directly from the newest to the oldest and back while navigating with them.
- P Leading '@' omits batch/execute/arc history No
Set to "Yes" to prevent batch, execute and archive commands prefixed with the "@" sign from being added to history lists.
The specific commands are:
Ctrl-B, Alt-B, X, Alt-X, Ctrl-F5
(This may be useful when passwords are used and security is an issue, or to keep one-time batch commands from being added to the history).
- Q History saves one character entries No
Set to "Yes" to cause ZTreeWin to save user input to history even if it is only one character.
- R History lists allow Ctrl-C/V/X bookmarking No
Set to "Yes" to allow Ctrl-C, U & V to mark history items. Use with caution, as these keys will then override the default functionality of the corresponding Windows clipboard keys in an input prompt.

Alt-Copy, Move and Mirror

- X Default path mode Full
Set to "Current" or "Relative" to override the default "Full" path mode for Alt-Copy, Move and Mirror operations.
- Y Alt-Copy Relative after Alt-Compare No
Set to "Yes" to cause the path mode for Alt-Copy from a Branch or Normal File Window to default to "Relative", when immediately following an Alt-Compare operation to the same target directory.

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Attributes

- A Override attributes (F2 Default) No
Use this to set the default attributes to be overridden without a confirmation prompt for file and directory deletion, renaming, and file replacement during copy and move operations. For tagged-file operations and Alt-Prune, this setting will be the initial value that appears in the "F2 Force" prompt. (Set the configuration option "Rename protection" to include "Attributes" for this setting to be effective).
- B Rename/New-date set +A attribute Yes
Set to "No" to prevent ZTreeWin from turning on the Archive attribute when files are renamed or their timestamps are changed.

- C Copy/Move/Mirror "R" attribute (F5 default) =R
Set to "=R", "-R" or "+R" to assign the default target file Read-only attribute used in the F5 prompt when copying or moving files, or mirroring directories.
- D Copy/Move/Mirror "A" attribute (F6 default) +A
Set to "=A", "-A" or "+A" to assign the default target file Archive attribute used in the F6 prompt when copying or moving files, or mirroring directories.

Active Mode Spell Searching

- H File/directory name spell search No
Set to "Yes" to enable active spell search navigation using a search string from any Directory or File Window. (See section 1.3.4 'Spell Search Navigation').
- I Reassign + - and * for spell searching No
If file/directory name spell search is set to "Yes", you can set this to "Yes" to reassign these keys for use in spell searching, rather than their normal use for logging and unlogging directories. (This affects only the main keyboard keys, not the numeric-pad keys).
- J Reassign < > and ? for spell searching No
If file/directory name spell search is set to "Yes", you can set this to "Yes" to reassign these keys for use in spell searching, rather than their normal use for switching drives and displaying the Extended Statistics Window. When set to "Yes", the shifted "<" and ">" keys will produce the unshifted "," and "." keys for spell searching.
- K Reassign [and] for spell searching No
If file/directory name spell search is set to "Yes", you can set this to "Yes" to reassign these keys for use in spell searching, rather than their normal use for navigating bookmarks.

Printing

- P Headers printed by default Off
Set to "On" to assign the default headers choice when using the Print command.

Recycle Bin

- R Use Recycle Bin by default for Delete & Prune
Use this to set the initial "F4 Use Recycle bin" choice to "Yes" when using the Delete and Prune commands on local hard drives.
commands.
None - Set to "No" for Delete and Prune.
Delete - Set to "Yes" for Delete and "No" for Prune.
Prune - Set to "Yes" for Prune and "No" for Delete.
Delete & Prune - Set to "Yes" for Delete and Prune.

Error Handling

- T Auto timeout for tagged-file errors None
This option can be set to allow an automatic response to popup errors that might occur during tagged-file and Alt-Mirror operations. The available options are 1s, 3s, 10s, 30s, 1m, 3m, 10m & 30m.
- U Default error dialog response Cancel
When a tagged-file operation (apart from Ctrl-Search) stops due to an error, this option provides the automatic response supplied when the timer in option 6T expires. Available choices are "Cancel", "Retry", "Next" & "Skip"
- V Ctrl-Search error dialog response Cancel
When a Ctrl-Search operation stops due to an error, this option provides the automatic response supplied when the timer set by 6T expires. Available choices are "Cancel", "Retry", "Keep tags" & "Lose tags"

- W Error log/summary dialog No
Set to "Yes" to provide a summary dialog and log file when a tagged-file or Mirror operation completes with errors. The dialog will show the number of errors processed, and will permit viewing or saving the log file.
- X Log Retry Attempts No
Set to "Yes" to record all Retry attempts in the error log following an error. These will be logged even if the operation is finally successful.

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File Comparing

- A Ignore 2 second timestamp difference No
Set to "Yes" so that the Compare commands will treat files with only two seconds difference as having the same times. (A two second difference can occur when some programs round the time to an even two seconds in a FAT or FAT32 file system).
- B Ignore 1 hour timestamp difference No
Set to "Yes" so that the Compare commands will treat files with exactly one hour difference as having the same times. (A one hour difference can occur in certain environments when daylight savings time changes).
- C Compare & Alt-Compare remembered settings Compare
Choose which Compare operation settings will be remembered for this and subsequent ZTreeWin sessions. Set to "None" to not remember any compare operation settings. Compare operations that are not set to be remembered will always start with the default settings. Only the operations selected ("Compare" or "Alt-Compare") will be remembered. When set to "Both," all compare operation settings will be remembered, in which case those settings can be shared "(same)" or kept separately "(separate)".

Compare & Alt-Compare Default Settings

- G Identical No
- H Unique Yes
- I Newer Yes
- J Older No
- K Size No
- L Binary No
- M Case sensitive No
Change the above settings to set the default options for all Compare and Alt-Compare operations that are not being remembered from a previous compare operation.

Split Screen Format and Control

- P Initial Statistics Panels in Split Screen None
Choose the Statistics Panels that will initially be displayed in a Split Screen when the windows are wide enough. "Current" will display the statistics for the current side, and "Both" will display a separate Statistics Panel for each side. Use the Shift-F8 key to change the displayed panels at any time.
- Q Swap Tab & Ctrl-Tab key assignments No
Set to "Yes" to swap the Tab and Ctrl-Tab key assignments in a Split Screen, so that Tab will not change its function when going to and from the Split Screen mode in the Directory Window.

3.7.8 Color Configuration

From any Alt-F10 configuration option page, press F4 to enter the color configuration screen.

Press a menu selection key, or Left/Right, to select an item. If the selected item shows a choice, (in parenthesis), then press that key again, or the Enter or Space key, to cycle through the choices.

The following describes the command keys:

F5/Shift-F5 - Cycle the foreground color of the selected item and choice, forward / backward.

F6/Shift-F6 - Cycle the background color of the selected item and choice, forward / backward.

Window - Choose the window type (directory, normal file, global file or F2 Browse) to configure the colors in each of these windows. The global file colors are used in the Branch, Showall and Global File Windows. The normal and global file colors are also used for the menu command keys, Statistics Panel, FILE Spec and DISK Spec Boxes, and all input lines. The normal file colors are also used in the internal viewer.

Frames - Change the colors of the border frames, background and general text used in all windows and command menus.

Bar - Change the highlight-bar colors used in all windows. These are also the colors used in the F2 Browse Window, the input line highlight, (if it is set on), the file pointers, the filespec filter indicator, and the inverted filespec.

Tags - Choose the window type, normal file, (n), or global file, (g), to configure the tag colors for each of these windows. The normal file tag color is also used for the spinner.

Long tags - Displayed only when Tags is selected. Choose between using a short tag color for just the tag, (s), or a long tag color for the entire line, (l). This setting affects all File Windows.

History - Change the colors used for all History windows.

Menu - Change the colors of the F9 Application Menu.

View hits - Choose the search hit, (current or other), to change the colors of the search-hits highlight when you do a search in the internal viewer.

Alt-F3 - Restore all colors to the original defaults.

Alt-Export - Export the active color configuration to a text file named zcolors.txt in the same directory as the ZTW.INI currently being edited. The text file is generated in a format compatible with ZCOLORS.INI.

F1 Help - View this section of the Help file.

F3 - Save the color changes and exit the color configuration. (You must also press F3 in the main configuration options page to save the changes).

Esc - Exit the color configuration without saving the changes. Prompts for confirmation if changes have been made.

(Additional colorization can be controlled with the ZCOLORS.INI file. See the remarks in that file for details).

3.8 The Internal Viewer

The internal file viewer is accessed by the View, Alt-View, Ctrl-View and Autoview (F7) commands (unless configured in the Alt-F10 configuration to use an external viewer), and when using F1 Help.

While using Autoview, most of the viewer commands can be accessed by using the Shift key in combination with the viewer command.

When F1 Help is pressed, the internal viewer is used to view this ZTW.HLP file, and jump to a section associated with the current window or command in progress. The Edit and Hex Edit commands are disabled when using F1 Help.

The maximum size of a file which can be viewed by ZTreeWin depends on the version of Windows, and how much free contiguous virtual memory is currently available. It will usually be more than 500 MB and will always be less than 2 GB. When the entire file cannot be loaded by the viewer, ZTreeWin will display the message "File too large to view. Only the first ###MB shown".

3.8.1 Viewer Modes

These five commands choose the five viewer display modes. Pressing the first letter of any of these commands places the viewer in this mode. Pressing the same key repeatedly cycles the mode between the previous display mode and the named mode. The current mode is displayed on the bottom menu line, near the right side.

- Alpha - Display the file as normal text characters, observing line termination codes, (CR and LF).
- Dump - Display all characters of the file, without regard to line termination codes. The relative location in the file is displayed on the left.
- Hex - Display the hexadecimal representation of each byte of the file, 16 bytes per line. Shows the relative location on the left, and the character representation on the right.
- Junk - Display only the characters with hex values of 20 through 7E, (decimal 32 through 126).
- Wrap - Same as the Alpha mode, but wrap long lines of text within the width of the window.

3.8.2 Viewer Display Characteristics

The top line, above the border, shows the entire path to the viewed file.

A double line on the bottom border line, above the menu, indicates the approximate location being viewed within the file, and the approximate size, relative to the entire file size, of the portion of the file on the screen.

The following commands modify the viewer display characteristics:

- Charset - Choose between the OEM, ANSI and EBCDIC (if enabled) character set modes, and in ALPHA and WRAP modes, the detected Unicode encoding of UTF-8, UTF-16LE or UTF-16BE. The current character set is displayed on the bottom menu line, near the right side. If ZTreeWin is unable to automatically detect a character set (as in a binary file), or the Alt-F10 configuration option "Disable display mode detection" is set to "Yes", Charset will cycle through all three Unicode types.
- Shift-Charset- Reverse the direction of the Charset command.
- Line - Available in the Alpha and Wrap modes only, use this to highlight the current line, and display the line number in the upper right border. This uses the line termination codes, (CR and LF), to identify individual lines.
- Mask - Mask certain characters, so they are replaced with others. The state of the mask is displayed in

the bottom right side of the menu. In Alpha and Wrap modes, this masks off the high-order bit of all characters from hex A0 through FF, effectively replacing them with hex 20 through 7F. It also replaces all bytes with values below hex 20 with nulls, and all bytes from hex 80 through 9F with spaces. In Hex and Dump modes, it replaces all characters outside the range of hex 20 through 7F with periods. It has no effect in Junk mode.

- Ruler - Display a ruler on the top border line.
- [Tab] - In the Alpha and Wrap modes, use this to cycle the tab width display between 2, 3, 4, 6 and 8 characters.
- Alt-F5 - Change the foreground color.
- Alt-F6 - Change the background color.
- Alt-F7 - Maximize or restore the ZTreeWin window size.
- Alt-F8 - Cycle the horizontal width of the ZTreeWin window.
- Alt-F9 - Cycle the vertical height of the ZTreeWin window.

3.8.3 Viewer Navigation and Control

These command keys provide the ability to navigate and control the display:

- Up/Down - Scroll the display up or down a line at a time. If Lines are active, move the highlight until it reaches the top or bottom of the screen, then scroll by line.
- Left/Right - Scroll the display left or right 2 characters at a time.
- PgUp/PgDn - Scroll the display up or down a screen at a time. If Lines are active, first move the highlight to the top or bottom of the screen, then scroll by screen.
- Home/End - Scroll to the top or bottom of the viewed file.
- Ctrl-Up/Down - Only available when Lines are active. Scroll the display so the current line remains highlighted until it reaches the top or bottom of the screen, then continue scrolling.
- Ctrl-Left/Right - Scroll the display left or right 20 characters at a time.
- Ctrl-PgUp/PgDn - Only available when Lines are active. Scroll the display so that the current line remains highlighted and is scrolled to the top or bottom of the screen, then continue scrolling.
- Ctrl-Home/End - Scroll the display left or right so either the leftmost or rightmost character on the current display page is made visible.
- Alt-Left/Right - In the F7 Autoview mode, use these to change the relative widths of the file list and view windows.
- Alt-Home - In the F7 Autoview mode, use this to change the relative widths of the file list and view windows back to the default widths.
- Offset - Jump to the specified line number or offset.
- 0..9 - Enter a line number or offset for the Offset command, without pressing "O" first.
- Numpad-5 - If the Line mode is active, scroll the highlighted line to the center of the view window. If the Line mode is not active, move the highlight to the mid-point of the viewed file.
- Shift-Numpad-# - Where # is 1 to 9, use this with NumLock off to jump to the 10% to 90% point in the file.
- Ctrl-0..9 - Set a bookmark within the current file to assign to one of the keys Alt-0 - Alt-9.

- Alt-0..9 - Jump to a bookmark within the current file previously assigned by the keys Ctrl-0 - Ctrl-9.
- Shift-F2..F6 - Auto-scroll the display at various speeds.
- Shift-F7 - Toggle the looping of Auto-scroll mode.
- F3 - Reload the current file into memory from disk.
- Ctrl-F3 - Reload the current file from disk each second, to automatically see changes made by other applications.
- Alt-X - Execute a command in a command prompt shell window, as an asynchronous task.
- X - Execute a command in a command prompt shell window.
- Esc - Exit the viewer (same as Quit).
- Quit - Quit the viewer (same as Esc).

The following commands are available only when in Ctrl-View of tagged files:

- Next/Prev - Use these to move the viewer so it displays the next or previous tagged file, without exiting the Ctrl-View. The number of the current file and the total of the tagged files is displayed on the right side of the first line of the menu.
- Alt-Home/End - Use to move the viewer to the first and last tagged file, without exiting the Ctrl-View. (This is not shown on the menu).
- Untag - Available only in Ctrl-View of tagged files, use this to untag the currently tagged file.

3.8.4 Viewer Searching

These commands provide searching capabilities within the viewed file, or all the tagged files in the Ctrl-View mode. When a search is active, the direction of the search is indicated by a Down or Up arrow to the right of the Esc command on the menu.

Search strings may be up to 255 characters in length. Use an asterisk (*) embedded within a search string to match zero or more characters within the same line. (An asterisk not embedded between two other characters is taken literally as part of the search string, and will cause all other asterisks to also be taken literally).

NOTE: Strings in the file that are split by a line break will not be found with a search.

The search commands are:

- Find - Search forward starting at the beginning of the file.
- Backward - Search backward starting at the end of the file.
- /, S and F9 - Search forward starting at the top of the current page. (S and F9 are not shown on the menu).
- \ - Search backward starting at the bottom of the current page.
- Ctrl-Search - Toggle between the two most recently used Search strings.
- + - Continue searching in the forward direction.
- - Continue searching in the backward direction.
- Space bar - Continue searching in the current direction.

- F8 - Change whether the search is to stop at each found "hit", or is to advance by pages of hits.

When beginning a search, the following options are available:

- F3 - Retrieve the previous search string from history.
- Up, Down - Display the search history to pick a previous search string.
- F2 - Choose whether or not the search is to be case sensitive.
- F4 - Choose to search for text, hex or Unicode strings. (The format for hex strings consists of hexadecimal pairs separated by a space).
- F8 - Choose whether the search is to stop at each found "hit", or is to advance by pages of hits.
- Enter - Press Enter without a search string to clear the search string and exit the search mode.
- Esc - Cancel entering a search string.

3.8.5 Viewer Text Copying and Editing

These commands provide copying and editing functions from within the viewer. No text editor is provided with ZTreeWin, so you must use the Alt-F10 configuration options to specify your preferred editors.

- Edit - Launch the configured editor to edit the file being viewed, except in the Hex mode. (See section 3.8.6 '*Viewer Hexadecimal Editing*' for information on the Hex editor).
- Alt-Edit - Launch the configured alternate editor to edit the file being viewed, except in the Hex mode. (See section 3.8.6 '*Viewer Hexadecimal Editing*' for information on the Hex editor).
- Gather - Mark a range of lines in the viewer to be saved to a file, printed, or copied to the Windows Clipboard. After pressing "G" to gather, the following keys are used to perform each stage of the gather operation.

Choose the gather start point:

- Up/Down - Position the highlight to the first line to be gathered.
- Home/End - Position the highlight to begin the gather at the beginning or end of the file.
- F2 - Clear the Windows Clipboard.
- F4 - Copy a single line to the Windows Clipboard.
- F5 - Append a single line to the Windows Clipboard.
- F6 - Set the gap between the last line in the destination file and the lines which will be appended.
- Esc - Exit the gather operation without copying any lines.
- Enter - Mark the beginning of a group of lines to be gathered.

Choose the gather end point:

- Up/Down - Position the highlight to the last line to be gathered.
- Home/End - Position the highlight to gather to the beginning or end of the file.
- F2 - Clear the Windows Clipboard.
- F4 - Copy the highlighted lines to the Windows Clipboard.
- F5 - Append the highlighted lines to the Windows Clipboard.
- F6 - Set the gap between the last line in the destination file and the lines which will be appended.
- Esc - Exit the gather operation without copying any lines.
- Enter - Mark the end of the group of lines to be gathered.

Copy the gathered lines:

- (Prompt) - Enter the name, (and path if not in the current directory), of a file to which you want to append the highlighted lines. If the file does not exist, it will be created. Enter

- PRN or LPTn to send the lines to a printer, or CLIP: to send them to the Windows Clipboard, (F4 will also do this). You may use Batch parameters to generate a path and file name.
- F3 - Retrieve the most recently used file name from the history list.
 - Up/Down - Access the history list to retrieve a previously used file name.
 - F4 - Copy the highlighted lines to the Windows Clipboard.
 - F5 - Append the highlighted lines to the Windows Clipboard.
 - F6 - Set the gap between the last line in the destination file and the lines which will be appended.
 - Esc - Exit the gather operation without copying any lines.
 - Enter - Append the lines to the named file, or send them to the printer.

NOTE: Ctrl-Ins Key and Ctrl-C can be used instead of F4 to gather lines to the Windows Clipboard.

- F4 - If the Line mode is on, copy the current line to the Windows Clipboard. If the Line mode is off, start The Gather command.
- F5 - If the Line mode is on, append the current line to the Windows Clipboard. If the Line mode is off, start the Gather command.

3.8.6 Viewer Hexadecimal Editing

A hexadecimal editor is provided in the viewer. To use the Hex editor, first enter the Hex view mode, then press "E" to edit. Only one visible page of the viewed file can be Hex-edited and saved at a time. You cannot insert new characters, or delete characters, you can only replace them by typing over them. The current byte location, hexadecimal, character and decimal codes are displayed to the right in the menu area. You cannot change the Charset or Mask display characteristics, but you can change them before entering the Hex-editor, and they are displayed in the menu area while in the Hex-editor.

The following command keys are available while in the Hex editor:

- Tab - Move the active cursor between the text area and the hex data area.
- Up/Dn/Lt/Rt - Move the cursor to the character to be replaced.
- Home/End - Move the cursor to the first or last character on the screen.
- Page-Up/Down ~ Save the changes made, then exit the editor and move the viewer to the next page. A confirmation message is provided. (This is not on the menu).
- Enter - Save the changes made, and exit the editor. A confirmation message is provided.
- F8 - Undo all changes made but not yet saved to disk.
- Esc - Cancel the changes made and/or exit the hex editor.

3.8.7 Viewing Archive Files

The Alt-F10 configuration option, "Display archive list output for", is used to configure ZTreeWin to detect if the file is an archive, before passing it to the viewer. If the file is detected as an archive, and the internal viewer is configured for the current View function, (View, Alt-View or Autoview), then the archiver List command, (in the ARCHIVE.BB2 file), is used to generate a temporary file for viewing by the viewer. You can then switch display modes at this point to any other mode to display the contents of the actual archive file, rather than the temporarily generated list file.

3.9 Jeff's File Compare

The JFC function, by default, uses the Tadzio's File Compare (TFC.EXE) program to compare two files either horizontally or vertically.

The JFC function is named for Jeffrey C. Johnson, the original programmer of XTree, and the originator of the function. TFC was originally written by Daniel Schroeder, and recently modified by Ian Binnie.

This section is a brief summary of TFC subcommands, configuration and command-line options. See the TFC.TXT file for a more detailed description.

Subcommands while running TFC:

Esc/Enter/Q	- Exit
Arrows	- Scroll up, down, left, right, etc.
Space	- Find next difference
+	- Find next difference
-	- Find previous difference
C	- Case sensitivity on/off
D	- Differing characters within differing lines toggle
E	- Empty line suppression toggle
H	- Hex / ASCII mode toggle
L	- Line number display toggle
M	- Menu display on/off
O	- OEM / ANSI character set toggle
S	- Split screen vertical / horizontal toggle
T	- Tall screen toggle (25/startup line mode)
W	- White space compression toggle
1..9	- Tab width setting to 1..9 blanks (default: 4)
F1	- Help
Alt-1..9	- Size of the block of lines to match (default: 4)
Alt-S	- Toggle Sync scan 200/max lines
Alt-F7	- Cycle screen size max/previous
Alt-F8	- Cycle width between 80, 100, 120, ... columns
Alt-F9	- Cycle height between 25, 50, 60, 70, ... lines
Alt-F10	- Color setup utility

3.9.1 JFC Configuration Options

The default setting for the Alt-F10 configuration options "JFC Compare" and "Alt-JFC Compare" is "%#ZHome%\TFC.BAT".

The standard TFC.BAT consists of a command line of the following format:

```
%#ZHome%\TFC.EXE -o %1 %6 %4 %5
```

Win9x users should replace TFC.EXE with the ANSI version TFC8.EXE.

ZTreeWin uses the following six parameters to pass information to the compare programs specified in the configuration options:

%1	= -z (Provides some special message handling)
%2	= First file to compare in short name format
%3	= Second file to compare in short name format
%4	= First file to compare in long name format
%5	= Second file to compare in long name format

%6 = "-aYY,XX" (Screen resolution)

If a .BAT or .CMD file is specified without using these parameters in the configuration option, then ZTreeWin passes all six of them to it.

If a .EXE program is specified without using these parameters in the configuration option, then ZTreeWin passes only the %4 %5 parameters to it, (or %2 %3 if the [SFN] parameter is used).

3.9.2 TFC Command-Line Options

- aYY[:XX] - Set window height to YY lines, and width to XX columns
- b - Batch mode
- c - Case insensitive compare
- d - Differing character highlighting within differing lines
- e - Empty line suppression
- h - Hex mode
- l - Line numbers not displayed
- n - No line numbers displayed (same as -l)
- o - OEM character set not used (uses ANSI)
- s - Sync scan +2400 lines (default 200)
- s+ - Sync scan to end of file
- v - Vertically split display
- w - White space is compressed
- z - ZTreeWin is the calling program
- 1...-9 - Set matching block-of-lines size (default 4)

3.10 Keyboard Macros

Keyboard macros can be used to automate repetitive tasks. They can be accessed directly or saved and recalled from files with a .ZTM extension.

Access existing macros by any of the following methods:

- Press F12 and enter macro commands directly.
- Press F12 and retrieve your macro file by preceding it with "@".
- Press F12 on the highlighted macro file (or press F12 then Tab).
- Press Alt-F12 to replay the last-used macro.
- Use the Open command on a macro file.
- Specify macro keys on the command line after the /K switch.
- Retrieve a macro file on the command line after the /K@ switch.

When using the F12 method to access and play a macro, use the F4 key to specify the number of times to repeat the macro.

Record a macro by using the Ctrl-F12 command. After pressing Ctrl-F12, all further keystrokes will be recorded to a temporary file (in the ZTMP### directory). A flashing "R" in the bottom right of the screen indicates that recording is active. Stop recording by pressing Ctrl-F12 a second time. A prompt is then provided to permanently save the macro (the default name is ZSAVE.ZTM in the ZTreeWin directory), or press Esc to cancel saving.

The maximum length of a macro is 3,072 ZTreeWin commands or keystrokes. The maximum length of a macro input at a command prompt is limited by the maximum length of the input line, which is 255 characters.

To replay your saved macro, load it into the F12 function with @ZSAVE.ZTM. If you specify the name of a macro file without a pathname, ZTreeWin will check the current directory first, followed by the #ZHome, then #ZTTools directories.

A flashing "P" in the bottom right of the screen indicates that a macro is being executed.

To immediately replay the last used F12 macro without any prompting, use the Alt-F12 command.

To cancel a macro while it is playing press F12 then Esc.

If one macro calls a second macro, the second macro will not return control to the first one. Therefore, if there are any keys in the first macro after the call to the second, those keys will not be executed.

Construct a macro by creating a string of command keystrokes, free text, special key codes and function mnemonics. Commas must be used to delimit the special codes and mnemonics so that they are not interpreted as keystrokes. Commas are optional between ZTreeWin command keys.

The following are two examples of a macro that ESCapes to the Directory Window, then edits the file test.txt.

```
ESC,etest.txt,RET  
ESC,e,test.txt,RET
```

It is important to type all command letters in lower case, (e.g. the "e" for edit above), since UPPER case is equivalent to holding the shift key, and will execute the Shift-Letter navigation functions, (or spell searching if it is enabled). See section 1.3 '*Directory and File Window Control Keys*' for more information on these navigation methods.

Note that you may edit a .ZTM macro file and break it up into separate lines to improve readability and ease maintenance. Any line that begins with a ';' symbol causes the entire line to be treated as a comment, and ignored.

The following are the codes used for special keys. These must be entered in UPPER case.

F1..F12, BKSP, BTAB, COMMA, DEL, DOWN, END, ENTER, ESC, HOME, INS, LEFT, NUM5, PGDN, PGUP,

QUOTE, RET, RIGHT, SEMI, SPACE, TAB, UP

Shift keys, where x is

ALT_x - 0..9, A..Z, F1..F12, BKSL, DOWN, HOME, LEFT, RIGHT, UP, [,]

CTRL_x- 0..9, A..Z, F1..F12, BKSL, BKSP, BTAB, DOWN, END, ENTER, HOME, INS, LEFT, PGDN, PGUP, RET, RIGHT, SH_LEFT, SH_RIGHT, SPACE, TAB, UP, [,]

SH_x - F1..F12, BKSP, DEL, DOWN, END, ESC, HOME, INS, LEFT, NUM-, NUM1..NUM9, NUM_INS, PGDN, PGUP, RIGHT, TAB, UP

Most codes in the above lists are self explanatory. Those that may need clarification are:

BKSL - Backslash (\)
BKSP - Backspace
BTAB - Backtab, (same as SH_TAB)
NUM- - Numpad-minus
NUM1..NUM9- Numpad-1 through Numpad-9
QUOTE - Double quote (")
RET - Return, (same as ENTER)
SEMI - Semicolon (;)

There are several special mnemonics available in certain functions for setting specific options to a known state. They are:

ANSI, OEM - In Alt-Sort to set the character set.
ASCEND, DESCEND - In Alt-Sort to set the sort order.
SPLIT, UNSPLIT - To split and unsplit the screen respectively.

Special directives are also available to control the execution of a macro, allowing it to be terminated under certain conditions:

WHILE_NOT_XXX directives can be used to automatically repeat the section of the macro from the current position to the end, until a certain condition is met.

STOP_ON_XXX directives are constantly evaluated during the execution of the macro, and can be inserted just once prior to any code that requires a certain condition to be met.

STOP_IF_XXX (and STOP) directives are evaluated at the time they are processed within the macro, and can therefore be inserted at any point (and as often as required) where a certain condition must be met for the macro to continue.

The following is a list of these directives:

WHILE_NOT_ERROR - Repeat the rest of the macro until any error condition is raised.
WHILE_NOT_END - Repeat the rest of the macro until the cursor is already at end, and an attempt is made to move beyond the end.
WHILE_NOT_HOME - Repeat the rest of the macro until the cursor is already at home, and an attempt is made to move prior to home.
STOP_ON_ERROR - Abort macro when any error condition is raised.
STOP_ON_HOME - Abort macro if the cursor is already at home.
STOP_ON_END - Abort macro if the cursor is already at end.
STOP - Abort macro immediately. Since the text to the right of the STOP directive will never be executed, it can be used for comments if desired.
STOP_IF_DW - Abort macro immediately if ZTreeWin is in the DW.
STOP_IF_FW - Abort macro immediately if ZTreeWin is in the FW.
STOP_IF_MATCH - Abort macro immediately if there are files in the FW.
STOP_IF_NOMATCH - Abort macro immediately if there are no files in the FW.
STOP_IF_TAGS - Abort macro immediately if some files are tagged.
STOP_IF_NOTAGS - Abort macro immediately if no files are tagged.
STOP_IF_SPLIT - Abort macro immediately if ZTreeWin is in Split mode.

STOP_IF_UNSPPLIT	- Abort macro immediately if ZTreeWin is not in Split mode.
PAUSE	- Prompt to continue or abort the current macro.
SLEEP	- Suspend the current macro for one second.
BEEP	- Generate an audible beep.

3.11 Mouse Functions

ZTreeWin is designed so that the keyboard is the primary method of input and control. However, you can also use the mouse to control most of the basic functions.

In order to use the mouse, it is important that the Windows shortcut that starts ZTreeWin does not have the "QuickEdit" mode active. This must be disabled in the shortcut in order to use the mouse in ZTreeWin.

NOTE: The QuickEdit mode is a Windows function that provides the capability of copying any text from the ZTreeWin window to the Windows Clipboard with the mouse. While this function can sometimes be useful for copying ZTreeWin data, it must be used with caution, because the right mouse button will also copy the clipboard back into ZTreeWin. Pressing this inadvertently will dump the clipboard into ZTreeWin which will interpret every character as a keystroke and attempt to execute them.

If you do not wish to use the mouse in ZTreeWin, you can use the /M command-line switch to disable it.

When enabled, the following mouse functions are available:

- Menu commands - Click on any menu command or command option to execute that command or option as if that key were pressed.
- Menu switching - Click on the command-set description in the lower left corner to change the menu from the Normal to the Ctrl and Alt command sets.
- Window switching - Click on the Enter key in the lower left corner to switch to the File and Directory Windows while a command is not active. Also, while in the Directory Window, you can click anywhere in the Small File Window to enter the File Window.
- Directory Window - Click on any directory to highlight it and make it current. Double-click it to log it if it is not logged. If it is logged, double-click on it to enter the File Window in that directory.
- File Window - Click on any file to highlight it. Double-click on a file to Open it (same as the Open command). Click with the Shift key pressed to invert the tags of all files from the currently highlighted file, to the one being clicked on. Right-click on a file to invert its tag (without advancing the highlight to the next file). Double-right-click on a file to View it.
- Filespec Box - Click on this box to execute the Filespec command.
- Statistics Panel - Click anywhere in the statistics panel to display the Extended Statistics Window.
- Extended Stats - Click anywhere in the Extended Statistics Window to return to the original window.
- Input lines - Double-click on any input line to execute it as if the Enter key were pressed.
- Scroll bar - Click, hold and drag the left-hand scrollbar to scroll the window. (The position indicator may not stay under the mouse cursor, because it shows the relative position of the highlighted item in the entire list).
- Scroll wheel - Use the scroll wheel, if you have one, to scroll in Windows 2000, XP, Vista and Windows 7, (The scroll wheel is not supported in other versions of Windows). Hold Shift while scrolling to scroll a page at a time. Hold Ctrl while scrolling to maintain the highlight position on a line. Clicking the scroll wheel in most places is the same as pressing Enter.
- Forward / Back - If your mouse has forward and back buttons, these can be used to navigate the bookmarks.
- History lists - When a history list is available on the menu, click on the History menu command, or use the scroll wheel, (if supported), to display the history list. Click a history item to highlight it,

or scroll to it with the wheel. Double-click an item to place it on the input line.

- Browse Window - Use the same scrolling methods as in a normal Directory Window. Click on any directory to place it on the input line. Double-click a directory to log it and expand the next level. If the directory is already logged, double-click it to close the Browse window.
- Viewer Window - Click above or below the center of the window to scroll in that direction. Use the scroll wheel to scroll, (if supported).
- Application Menu - Click any item to highlight it and make it current. Double-click an item to execute it, or expand it if it has sub-items, and has no script.

3.12 Shortcut Setup

This section provides some important guidelines to use when setting up the shortcut that starts ZTreeWin. If you use the ZTreeWin installation program to install ZTreeWin, then shortcuts are automatically generated which already include many of these recommendations. However, some of these settings cannot be set by the installation program, so you must set them manually. You may also want to manually set up alternate shortcuts to run the program with different initial options.

In Windows NT, 2000, XP, Vista and Windows 7, the .LNK shortcut properties automatically provide all the tabs, without the need of a .PIF file. It therefore may be preferable to create the shortcut to start ZTW.EXE directly, rather than start a .BAT file. This avoids launching a command shell, and may launch more quickly.

In Windows NT, 2000, XP, Vista and Windows 7, to ensure that part of the window will not be off the screen, set the Window position on the Layout tab to 0, 0, (or -4, -4), and uncheck "Let system position window".

To speed up the window initialization when starting ZTreeWin, set the window size in the shortcut to the same size that ZTreeWin will use when it starts.

ZTreeWin is a console application and requires a Monospace font. The default choices are basically only Raster Fonts and Lucida Console. The latter provides far more Unicode symbol support, and may be preferable with this version of ZTreeWin. For more information, and tips installing additional fonts, please see this link:

<http://ztwiki.com/tiki-index.php?page=Selecting+a+custom+font+for+ZTreeWin>

If the initial drive and directory are not specified on the command line, the "Working" or "Start in" entry in the shortcut will be the drive and directory that will be current when ZTreeWin starts.

If you intend to use the mouse in ZTreeWin, be sure the "QuickEdit" mode in the shortcut properties is not checked.

NOTE: The QuickEdit mode is a Windows function that provides the capability of copying any text from the ZTreeWin window to the Windows Clipboard with the mouse. While this function can sometimes be useful for copying ZTreeWin data, it must be used with caution, because the right mouse button will also copy the clipboard back into ZTreeWin. Pressing this inadvertently will dump the clipboard into ZTreeWin which will interpret every character as a keystroke and attempt to execute them.

Several icons are provided with ZTreeWin in the installation directory. You can change the default icon in the shortcut to one of these alternatives.

If you intend to run ZTreeWin from a console window without a shortcut, (from a DOS Prompt or Command Prompt), and want the ability to use the Alt-Quit command to change the current directory to the ZTreeWin current directory, then you must launch ZTreeWin with the ZTWIN.BAT file in the installation directory. (You may execute this .BAT file from another .BAT file if you wish).

If you start ZTreeWin from a shortcut, you may use the Ctrl-Quit command to open a command shell in the current directory when ZTreeWin closes.

3.13 Command-Line Options

You can specify various modes and options when you first start ZTreeWin. Some of these options (often referred to as command-line switches) provide the same functions as the Alt-F10 configuration options. In those cases the command-line options will always take precedence and override the configuration options.

You specify these options on the ZTW.EXE command line, either in a BAT, CMD, or shortcut. However, the ZTWIN.BAT file is rewritten each time ZTreeWin exits, (to support the Alt-Q function), therefore these options should not be placed in that file. Use a shortcut or other BAT or CMD file to specify them.

All command-line options should be specified using UPPER case, as shown.

The /K[macro] options must be last, as shown. All other options may be specified in any order.

Usage: ZTW [/video] [/progs] [/options] [A..Z] [paths] [filespecs] [/K[macro]]

[/video]: /2/3/4/5/6/8

Use the 25, 34, 43, 50, 60 or 28 line height video modes, respectively.

NOTE: Some console-mode programs launched synchronously by ZTreeWin may have problems with some of these modes. If the video mode is suspected to be causing a problem, then try one of the standard modes: 25, 43 or 50 lines, by 80 columns.

[/progs]: /Eeditor.EXE | /Vviewer.EXE

Specify an external editor and/or viewer.

[/options]:

- /? - Display the command-line options.
- /API - Use the Win32 API for copy and move functions. This will preserve NTFS extended attributes and may provide improved performance in some cases. It will cause the generation of new creation and last-access timestamps during copy operations, and move operations to a different disk. Progress reporting and Esc control will be disabled under older Windows version lacking the required APIs.
- /B - Disable beeps in ZTreeWin.
- /CP:nnn - Set output codepage for View display of OEM text.
- /DEB - Display all shell output for debugging purposes. Currently this is used only when debugging certain archiver-command output.
- /KBR - Log all keystrokes to ZKEYS.LOG. For use as a diagnostic tool for debugging. This file is output to the ZTMP### directory while the ZTreeWin session is active. When the session is ended, the file is appended to the ZKEYS.LOG file in the ZTreeWin directory.
- /L1 - Log method "root only". Log the 1st directory level only.
- /L2-9 - Log the specified number of directory levels and files at startup.
- /LF - Log method "full disk". Log all files and directories.
- /LQ - Log Quietly. Use with CAUTION! Prevents all drive and branch logging operations from displaying error messages for the entire ZTreeWin session.
- /LT - Log method "tree only". Logs the entire directory tree, without logging any files.
- /M - Disable mouse support.
- /NC - Disable new console creation. When run from an existing console, such as the DOS command-line window, ZTreeWin normally preserves the contents and attributes of the current window by creating a new console shell inside the window. Use this switch to disable this function if it causes problems when running ZTreeWin remotely.
- /OA - Sort file Order is Ascending.
- /OD - Sort file Order is Descending.
- /PMC - Set default-path mode for Alt-Copy/Move/Mirror to 'Current'.
- /PMF - Set default-path mode for Alt-Copy/Move/Mirror to 'Full'.
- /PMR - Set default-path mode for Alt-Copy/Move/Mirror to 'Relative'.
- /SA - Sort files by Alpha (ignore leading non-alphabetic).
- /SD - Sort files by Date.
- /SE - Sort files by Extension.
- /SL - Sort files by name Length.
- /SM - Sort files by nuMber.
- /SN - Sort files by Name.
- /SS - Sort files by Size.
- /ST - Sort files by Time.
- /SU - Files are Unsorted.
- /SV - Sort files by Value.
- /SCA - Sort files and directories in ANSI character-set sequence.
- /SCO - Sort files and directories in OEM character-set sequence.
- /SSD - Split mode sorting is Different.
- /SSS - Split mode sorting is Same.
- /T - Add text to the console title. Follow the /T switch with the text, and enclose it in double quotes if it

contains spaces. You may use this if you start ZTreeWin with different shortcuts and options, and would like to identify each of them in the title bar.

Up to two separate /T title strings can be specified.

- /TO - Display the current directory or filename in the console title.
- /TP - Display the current pathname in the console title and object in line one.
NOTE: /TO and /TP are mutually exclusive, and cannot be combined.
- /TV - Display the ZTreeWin version in the console title.
- /TZ - Display 'ZTreeWin' in the console title.
NOTE: The above /TO, /TP, /TV and /TZ switches replace the default title bar object (described in section 1. 'Main Display').
- /XT - XTreePro keyboard compatibility. See section 4. 'Quick Command Table' for the keys affected by this option.
- /Y - Prevent screen restoration on exit. Normally when run from a console window, and the /NC switch is not used, ZTreeWin restores the original contents of the window. Use this to prevent restoring those contents when ZTreeWin exits.
- /ZB - Enable the ZAAP (zbar.dat) program interface. Note that this causes all Shift-Alt and Shift-Ctrl key combinations (except for Shift-Ctrl-Tab) to be sent to the ZAAP interface, and not processed internally by ZTreeWin.
- /ZB1 - Same as /ZB except outputs the ZBar.dat file in v1.x format.
- /ZC - Load alternate color configuration file. Follow the /ZC switch with the path and filename, and enclose it in double quotes if it contains spaces.
- /ZF - Use the most recent Filespec from history.
- /ZI - Load alternate configuration file. Follow the /ZI switch with the path and filename, and enclose it in double quotes if it contains spaces.
- /ZN - Disable the loading of ZNOLOG.INI.
- /ZP - Display the progress bar time display and data rate display.
- /ZT - Execute the most recent Treespec command from history.
- /ZV - Load a static logged volume file that was created with the Alt-Z command. Follow the /ZV switch with the path and file name, and enclose it in double quotes if it contains spaces. The file will not be deleted. Use a non-existent file name to prevent the loading of the default logged volume file.

[/options - Video]:

- /AUTO - Use current console size for the ZTreeWin window.
- /MAX[:+/-r:+/-c] - Maximize the size of the ZTreeWin window, optionally adjusting the size by +/- r rows and +/- c columns.
- /MAX=+/-r[:+/-c] - Adjust the settings for Zoomed (Alt-F7) mode by +/- r rows and +/- c columns, but do not start ZTreeWin in Zoomed mode.
- /NOMAX - Prevent use of Alt-F7 to maximize the ZTreeWin window.
- /COLS:nn[:nn:nn] - Screen widths in columns to be used for Alt-F8.
- /ROWS:nn[:nn:nn]- Screen heights in rows to be used for Alt-F9.

NOTE: The effective number of columns for these switches will be rounded down to an even number to allow for F8 split mode.

[A..Z]:

Log the specified drives. If multiple drives are specified, the first one is logged last so that it becomes the current drive when ZTreeWin starts.

[paths]:

Log the specified directories. If multiple paths are specified, the first one is logged last so that it becomes the current directory when ZTreeWin starts. If a drive is not specified in the path, the current drive will be used. Specifying a path overrides the Alt-F10 configuration option "Disk logging method" when set to Full disk or Tree only.

[filespecs]:

Set initial filespecs. These filespecs must contain a wildcard (? or *) to distinguish them from drive or path names.

[/K[macro]]: /K[keys]@file.ztm]

Start with a macro sequence, or load from file. The /K switch must be the last option on the command line. If a volume file has been loaded automatically due to a previous Alt-Zlog command, or the /ZV switch was used, then these macros will be ignored.

3.14 Auxiliary Files

These are files used by the ZTreeWin ZTW.EXE program to control its operation. (See the README.TXT file for a complete list of files installed by the installation program).

The following files must be located in the ZTreeWin installation directory.

ZTWIN.BAT	Required for the Alt-Quit function. This is rewritten on every exit from ZTreeWin.
ZFORMAT.BAT	An optional file which, if it exists, is used instead of the Windows dialog by the Alt-F2 command to format drives.
ZOOPS.BAT	An optional file which, if it exists, is used instead of the Windows Recycle Bin when the Oops! command is used.
ZTREE.INF	Installs ZTreeWin into the drive and directory context menus of Windows Explorer, so that when you right-click on a directory in Windows, you can choose "ZTreeWin", and ZTreeWin will be launched with that directory logged and highlighted. This file must be edited before use. Read the comments inside this file instructions on how to prepare it for installation. This file may be located anywhere.
ZTW.INF	Adds the ZTW.EXE path to the Windows registry Apps Path. This enables you to use the command "START ZTW" to launch ZTreeWin from anywhere in Windows without having to add its path to the PATH environment variable. If ZTreeWin is not installed in the default location of "C:\Program Files\ZTree" the file must be edited before use. Read the comments inside the file for instructions. This file may be located anywhere.
ZQ\$\$\$BAT	A temporary file created and used by the Ctrl-Quit command.
TFC.BAT	Used to call the TFC file-compare program when using the JFC function.
TFC.INI	Contains the TFC program configuration and colors.

The following ten configuration files are normally located in the ZTreeWin installation directory. However, in order to support running ZTreeWin with alternate configurations, modified copies of these files may be located in alternate directories.

To run ZTreeWin with an alternate configuration, copy one or more of these files to another directory. Then create a new shortcut to ZTW.EXE, and set the "Working" or "Start in" directory to this alternate directory. ZTreeWin will then use these files for configuration settings. In this way you can create several shortcuts to start ZTreeWin with different initial settings. If you do not want ZTreeWin to actually start with that directory current, you can use the command line to specify the desired initial current drive and directory, while still using the alternate configuration files.

The ten relocatable configuration files are:

ZTW.INI	Contains the configuration settings made with the Alt-F10 configuration option function.
ZCOLORS.INI	Allows you to customize colors for different file types and attributes. Also allows you to assign colors to the current path portion of the Path Identification line, and the Statistics Panel when filespec is not *.* , or when there are tagged files present.

ARCHIVER.BB2	Configures the archive programs recognized by ZTreeWin. Read the comments in the file for instructions if you wish to modify this.
ZTW.HST	Contains the history lists and some settings which are passed to subsequent sessions of ZTreeWin. Allows use of a local ZTW.HST file for a network shared program directory.
ZTW.KEY	Contains the ZTreeWin license key. The name of this file must be in UPPER CASE.
ZTW.ZAM	Contains the default F9 Application Menu configuration. Saved each time the menu is exited.
ZTW.ZA\$	Backup of the ZTW.ZAM file, created whenever the F9 menu is edited, and saved each time the menu is entered.
ZLIST.ZLS	Default Zlist file used by the Ctrl-Z command to load a batch of log, release, tag or untag actions for the specified directories and files.
TEMP.ZLOG	Default volume log file created with the Alt-Z command. If this file is found in the ZTW.INI directory when the program is launched, it will be loaded then deleted. This will override any regular drive logging. Loading of a volume file will also cause any command-line macros to be ignored.
ZNOLOG.INI	Contains a list of pathnames that should be excluded from branch logging or full disk logging operations. The command line switch /ZN can be used to disable the use of this file.

In order to provide a reliable method of running more than one instance of ZTreeWin without conflicts, ZTreeWin creates temporary directories to hold working files. The first of these directories is named ZTMP000, the next ZTMP001, and so forth. These are automatically deleted by ZTreeWin when you Quit the program.

These temporary directories are normally created as subdirectories of the Windows Temporary directory, as defined by the TEMP or TMP environment variables. However, you may define a ZTEMP environment variable to place them in another location. This directory location must already exist, or certain ZTreeWin functions may not operate correctly.

The following five files are created in the corresponding ZTMP###, and are deleted or moved when ZTreeWin is ended.

ZTW.PID	A lock file created each time ZTreeWin is started. It is used to detect that the temporary directory is in use. It is deleted when ZTreeWin is ended.
ZTW_MENU.BAT	Created and used by the F9 Application Menu when executing menu commands. It is deleted when ZTreeWin is ended. A timestamp-named version of this file is created each time the F9 Alt-eXecute command is used. It is deleted when the corresponding F9 menu script task is ended.
ZSAVE.ZTM	Created by the Ctrl-F12 macro command to contain the recorded keystrokes. This file is created while Ctrl-F12 is active, then is moved to the ZTreeWin directory when Ctrl-F12 is ended.
ZKEYS.LOG	Log of all keystrokes, invoked with the /KBR switch. When ZTreeWin is ended, it is appended to the ZKEYS.LOG file in the ZTreeWin directory. This is primarily used for debugging purposes.
ZTWERR.LOG	Log of tagged-file operations created when Alt-F10 configuration option "Error log/summary dialog" is set.

The following file may be located in either the ZTreeWin installation directory, or the #ZTTools directory.

ext.BAT	Where "ext" is a file extension, use these batch files to override the automatic Windows file association when running programs from the Open and Alt-Open commands. For example, to
---------	--

Open a .TXT file automatically from ZTreeWin with a program other than Notepad (or whatever Windows program may be associated with the .TXT extension), create a TXT.BAT file which executes the desired program. Use Batch parameters to retrieve information about the current directory or file. (See section 3.4.1 'Batch Parameters'). Open will run the program coded in the ext.BAT file in the synchronous mode as a part of the ZTreeWin task. Alt-Open will run it in the asynchronous mode as a separate task, or you can use the START command in the ext.BAT file to always launch it as a separate task. (See section 2.11 'Launching Programs' for more details). Use caution when creating these files, since these ext.BAT files will take precedence, and many 'Open' command problems can be traced to faulty ext.BAT files, or ext.BAT files that were created earlier and forgotten, especially if they are located in the #ZTTools directory.

4. Quick Command Table

This is a table of the Directory and File Window command keys available in ZTreeWin.

The following abbreviations and symbols are used in the table descriptions:

- - Key not assigned
- * - Only when changed from the default by Alt-F10 configuration
- FW - File Window
- NTW - New Task Window
- SFW - Small File Window
- TF - Tagged files
- XT - When in XTreePro mode, set by the command line switch /XT
- (W) - Windows hotkey, (not a ZTreeWin key)

Key	Directory Window Commands			File Window Commands		
	Normal	Ctrl	Alt	Normal	Ctrl	Alt
A	Avail	-	Attributes	Attributes	Attributes TF	-
B	Branch	Branch TF	-	-	Batch TF	Batch
C	Compare	-	Compare branch	Copy	Copy TF	Copy TF with paths
D	Delete	-	-	Delete	Delete TF	-
E	Edit file	-	Edit file alternate	Edit	Edit TF	Edit file alternate
F	Filespec	Previous filespec	File display	Filespec	Previous filespec	File display
G	Global	Global TF	Graft	-	-	Goto
H	sHortcut	-	Hide	sHortcut	sHortcut TF	Hide
I	Invert tags or filespec	Invert tags or filespec	Info	Invert tag or filespec	Invert tags or filespec	Info
J	-	-	-	JFC compare	JFC compare two TF	JFC compare alternate
K	-	-	KByte	-	-	-
L	Log drive * Switch	Switch drv * Log drive	Log options	Log drive * Switch	Switch drv * Log drive	Log options
M	Make dir	-	Mirror branch	Move	Move TF	Move TF with paths
N	New date	-	-	New date	New date TF	-
O	Oops!	-	-	Open	Open TF	Open NTW
P	Print	-	Prune	Print	Print TF	-
Q	Quit	Quit and shell	Quit and change dir	Quit	Quit and shell	Quit and change dir
R	Rename	-	Release options	Rename	Rename TF	Release options
S	Showall	Showall TF	Sort criteria	-	Search TF	Sort criteria
T	Tag all files in directory	Tag all files on disk drive	Tag files by attribute	Tag file	Tag all files in FW	Tag by attribute, up, down
U	Untag all files in directory	Untag all files on disk drive	Untag files by attribute	Untag file	Untag all files in FW	Untag by attribute, up, down
V	View	Volume	View file alternate	View	View TF	View file alternate
W	-	-	Wash	-	-	-

Key	Directory Window Commands			File Window Commands		
	Normal	Ctrl	Alt	Normal	Ctrl	Alt
X	eXecute	-	eXecute NTW	eXecute	-	eXecute NTW
Y	ZAAP	-	-	ZAAP	ZAAP TF	-
Z	-	Load Zlist	Save/Load log volumes	-	Load Zlist	Save/Load log volumes
Shift-Letter	Jump to * Spell search	-	-	Jump to * Spell search		
0..9	Jump to * Spell search	-	-	Jump to * Spell search		
Numpad -5	Center	-	-	Center	-	-
Shift-Numpad -1..9	Jump to x/10 of Window	-	-	Jump to x/10 of Window	-	-
F1	Help	-	About	Help	-	About
F2	-	-	Format	-	-	Format
F3	Refresh directory tree	-	Relog directory tree	Refresh file list	Continually refresh file list	Relog files in list
Shift-F3	Refresh directory	-	-	-	-	-
F4	Toggle menu	-	-	Toggle menu	Show TF	Compare
F5	Hide 2nd subdirs	-	-	Archive	Archive TF	Open archive
Shift-F5	-	-	-	-	-	Open archive
F6	Hide 1st subdirs	-	Video color	-	Merge tags to split	Color cycle
F7	Autoview	Tag branch	Video zoom	Autoview	Megaview	Video zoom
F8	Split	Untag branch	Video col width	Split	Partial Untag	Video col width
Shift-F8	Split Options			Split Options		
F9	Application Menu	Invert branch tags	Video row height	Application Menu	-	Video row height
F10	-	-	Configure	-	-	Configure
Shift-F10	Windows context menu	-	-	Windows context menu	-	-
F11	Bookmark list	-	-	Bookmark list	-	-
F12	Run macro	Record macro	Replay macro	Run macro	Record macro	Replay macro
*	Log entire branch	-	-	-	-	-
+ or =	Log dir XT Select next drive	-	-	- XT Select next drive	-	-
- or _	Unlog dir XT Select prev drive	-	-	- XT Select prev drive	-	-
Shift-Numpad -minus	Hide this directory	-	-	-	-	-
< or ,	Select prev drive	-	-	Select prev drive	-	-

Key	Directory Window Commands			File Window Commands		
	Normal	Ctrl	Alt	Normal	Ctrl	Alt
> or .	Select next drive	-	-	Select next drive	-	-
|	Spell search	-	-	Spell search	-	-
/ or ?	Stats	-	-	Stats	-	-
\ or ;	Treespec	Previous treespec	Navigate to ordinal	Treespec	Previous treespec	Navigate to ordinal
[	Previous bookmark	Delete bookmark	-	Previous bookmark	Delete bookmark	-
]	Next bookmark	Delete all bookmarks	-	Next bookmark	Delete all bookmarks	-
Enter	Enter Expanded FW * Enter SFW	Log dir / Enter FW & show TF	(W)	Exit FW * View file	Show TF	(W)
Esc	-	(W)	(W)	Dir window	(W)	(W)
Shift-Esc	Clear spell search	(W)	(W)	Clear spell search	(W)	(W)
Insert	- XT Log directory	Copy to clipboard	-	-	Copy to clipboard	-
Delete	Delete dir XT Unlog directory	-	-	Delete file	Delete TF	-
Up	Dir up	Scroll up * Dir up	SFW larger	File up	Scroll up * Tag up	SFW larger * Untag up
Shift-Up	Previous logged dir	-	-	-	-	-
Down	Dir down	Scroll down * Dir down	SFW smaller	File down	Scroll down * Tag down	SFW smaller * Untag dn
Shift-Down	Next logged dir	-	-	-	-	-
Left	Parent dir	Close branch / parent dir	Previous bookmark	Page up	-	Previous bookmark / F7 left
Shift-Left	Extension left	-	-	Extension left	-	-
Right	Dir down	Open dir / child dir	Next bookmark	Page down	-	Next bookmark / F7 right
Shift-Right	Extension right	-	-	Extension right	-	-
PgUp	PgUp screen	Scroll page up	-	PgUp screen	Scroll Page Up	-
Shift-PgUp	Previous unlogged directory	-	-	-	-	-
PgDn	PgDn screen	Scroll page down	-	PgDn screen	Scroll Page Down	-
Shift-PgDn	Next logged directory	-	-	-	-	-
Home	First dir	First dir at level	SFW default size	First file	-	SFW / F7 default size
Shift-Home	Extension to default	-	-	Extension to default	-	-

Key	Directory Window Commands			File Window Commands		
	Normal	Ctrl	Alt	Normal	Ctrl	Alt
End	Last dir	Last dir at level	-	Last file	-	-
Space	Dir down	-	(W)	File down *Invert tag	*Invert tag	(W)
Back-space	Parent dir	Release dir	-	Parent dir	-	-
Tab	Dir down same level / Switch split sides	Dir down same level	(W)	Switch split sides	-	(W)
Shift-Tab	Dir up same level	-	(W)	-	-	(W)
Right Alt-Ctrl	About	-	-	About	-	-