# Explorer++ Help

# Having difficulty *getting around...*?





# Explorer++

# can help!

# About - Explorer++

**Explorer**++ is a free multi-tab file manager for the Windows® operating system, released as open source under the GNU GPLv3 license. Windows® Explorer provides basic functionality - the ability to navigate throughout your computer, and perform basic tasks - but **Explorer**++ goes further, introducing several enhancements and improvements for a much richer file browsing experience. Aside from basic navigation, **Explorer**++ has:

- a two paned <u>interface</u>, like Windows<sup>®</sup> Explorer, but with multiple tabs in the fileS pane. You can have many locations open at once and quickly change from tab to tab.
- a <u>Drives toolbar</u>, showing all available volumes disk drives (including network and USB drives). Jump to a drive with a single mouse click.
- a <u>Bookmarks menu</u> (similar to Windows<sup>®</sup> Explorer favorites, but with more functionality), and a <u>Bookmarks toolbar</u>
- an <u>Application toolbar</u> where you can create shortcuts to your favorite applications
- Show Command Prompt built into Explorer++
- <u>attribute control</u> (set, clear) for multiple files
- various methods of file display, including multiple groupings
- quickly <u>split</u> a large file into pieces, for email or other purposes, and quickly <u>merge</u> pieces back into the original file
- a *destroy files* function which deletes files, then wipes their former disk space clean. This provides secure erasing of files.
- a built-in file <u>search</u> function which allows searching by name or attributes
- customized file display colors, by name or attributes
- ability to run in portable mode, storing all configuration in an XML file
- highly <u>configurable</u>, for user preference
- full drag-and-drop support with other applications, including Windows® Explorer
- much more...!

**Explorer**++ requires Windows<sup>®</sup> XP, Vista or Seven (32 bit or 64 bit systems) to run; there is no installation required.

**Explorer**++ uses English as its native language, but can be used with other languages through the use of translation DLLs, available on the website. Translations are user contributed (thanks for the work!), and as a result, some may be incomplete.

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# **Help File Compiled:** November 3/11

## **About - Help**

This help file has incorporated several **interesting features** to aid in usage:

- a **table of contents**, organized by topic
- an **index** with common topics identified
- **<u>full-text search</u>** to aid in finding specific items
- an accessibility aid adjustable font size available from the icon bar
- image links for **quick navigation** through most of the topics see *Navigate* on the icon bar
- a *Favorites* tab which allows the user to bookmark commonly used topics
- special *Contents* (available from the icon bar) and *Index* (available from *Contents* ) pages which allow the same usage as the Contents and Index in the navigation panel, but with the panel closed for **maximum screen usage**
- some **samples** of listings or text files as needed, embedded in this help file

This document uses 3 distinct styles of **hyperlinks**, with *rollover* characteristics:

- local (internal) links, which look like this,
- external links, which open a web page in your browser and
- image rollovers, which look like this
   | File Edit (hover your mouse over the menu headings)

Hyperlinks may sometimes have *tooltips* - text which pops up when the mouse is paused over the link (ie. *hovered*) - which could clarify the topic or provide useful information.

In addition to the usual explanations and descriptions, some pages may contain **special text** as follows:



**Tip:** Tips (and tricks) provide additional useful information, perhaps not immediately obvious to the topic.

- **Info:** Useful information, but perhaps not specifically related to the topic at hand.
- Caution: Warnings are made if some operations may be dangerous to your data, etc.



**Bug:** Unfortunately, **Explorer**++ has a few bugs; every program does. Bugs may vary from version to version. Most of the bugs have been reported and are "in the queue" for fixing. If **Explorer**++ were already perfect, there would never be any improvement!



**Incomplete:** Some of **Explorer**++'s features have been created, but not completed. The author may have only partially implemented the feature for now; future releases may enhance the current capabilities.

**Note:** Some images (screen captures) have been modified (eg. resized) and may not appear exactly as they will in **Explorer++**. Screen captures have been done in Windows XP SP3; if your system is Vista or Windows 7 menus, etc. may appear slightly different - efforts will be made to include screen captures, etc. from those newer operating systems. In addition, some references to locations or tools (eg. Start Menu) may be applicable only to Windows XP; more recent versions of Windows (ie. Vista, 7) may use different terminology or controls.

This help file was created as a volunteer effort - please accept it in that *spirit*. While every effort has been made to ensure that the information contained herein is accurate, it may not be complete. Please do not read this help file as the "*last word* in using **Explorer**++ - any issues or bugs not discussed here can be dealt with by contacting the program's author:

email: david@explorerplusplus.com

on the

http://www.explorerplusplus.com/forum

## forums:

- Allen T., British Columbia, Canada



## **Using Search Effectively**

**Click** or *Hover* on an item for more ...



This electronic book (*Explorer*++ - *Help File*) contains a great deal of information about the program and its use. The manual is organized using menus and topics, but it may sometimes be difficult to find the right information! This book's **Search** tab can help in this regard, but **Search** has **more power** than might be evident on the surface. Following are some hints for using **Search** effectively.

use On the tool bar, click **Options** and make sure that the *Search* **HIGHLIGHT** *Highlight* feature is ON. If the menu item says "Search
Highlight Off", then the feature is already enabled. This feature
will highlight items in the text that are found by the search.

wildcards to expand your search:

The search utility normally looks for words (or phrases) *as-is*WILDCARDS (not case sensitive). This means that a search for the word divide will not find any occurrences of the word divides Use wildcards to expand your search:

\* including an asterisk (ie. \*) somewhere in the search

target finds more combinations of the target, just as it does from a DOS (or Command) prompt. The asterisk stands for any (optional) **multiple** characters. Using **divid\*** as the target finds **divide**, **divided** and **dividing** as well. The search target \*divid\* finds all the previous, plus will find individual, etc.

? including a question mark somewhere in the search target finds any (mandatory) **single** character in that position. Using **divide**? as the target finds **divides**, **divider** and **divides** but **won't** find **divide** or **dividing**.

Enabling the **Match similar words** option will help to find plurals, etc., but a wildcard search can be more versatile.

use PHRASES Searching for ctrl key finds occurrences of both words in the same topic, but not necessarily together! Using "ctrl key" (enclosed in double quotes) treats it as a phrase and only finds that phrase. Quotation characters cannot be found using the search, since they enclose a phrase. Note that when searching for file names with extensions (eg. EXPLORER++.EXE), use a phrase also (eg. "EXPLORER++.EXE") otherwise the period will separate the search into 2 distinct words.

### use BOOLEANS

If you are looking for more than one word (or phrase), you may separate them with one of the reserved boolean words to restrict your search:

AND OR NEAR NOT

- **AND** Topics must contain both words, eg. **tip AND key** will **only** find topics containing **both** words or phrases. Note that **tip AND key** is equivalent to **tip key**.
- OR Topics may contain **either** word or **both** words. Searching for **ctrl OR alt** finds topics containing either or both of the words, anywhere in the topic.
- **NOT** Topics may not contain the word or phrase following NOT, as in **ctrl NOT alt**, which will find occurrences of **ctrl**, providing **alt** is **not** found on the page.

**NEAR** Topics must contain both words or phrases, but *close together*. A search for **macro NEAR user** will find phrases containing both words, but will not find pages where the words are *far apart*. This search mode is not effective where pages/topics are short, since *close together* and *far apart* are not precise terms; **NEAR** works best on larger documents or pages.

## **Searching in the Document pane**

Once you are reading a particular page, it is also possible to search for a word or phrase **within** that page by:

- clicking the mouse on the right-hand pane (ie. the actual page you are reading), preferably near the start of the page. This sets Windows' focus on the text, although usually no visible change is evident.
- press <ctrl>F to initiate the **Find** dialog
- follow the instructions in the dialog (simple search options)

Unfortunately, the search highlight color in the document pane is not changeable; highlighting words which are already written in the highlight color (or close) renders them difficult - but not impossible - to see.



**Tip:** If a global search has been done which highlights certain phrases or words, and a search within that page follows which uses the same words, the highlight colors may not be as expected. A work-around to this behavior is to turn off search highlighting (using the Options button on the Help file's toolbar) and reload the page by re-selecting it from the original global search results.



## **Revision History**

Older▶

**Explorer**++'s revision history has been included here and may be useful for the following reasons:

- it demonstrates how much effort has been put into the application, and an approximate *time line* for same,
- features which have not been documented (eg. hotkeys, special operations) may be uncovered,
- behaviors which might be considered bugs can be traced to see if they are intended, and
- more insight into *how things work* can be gleaned.

The full-text search capability of this document (along with the page titles) can be used effectively to search for a particular item, if you have a concern. Otherwise, it still may be valuable reading.

## Version 1.3.3 (29/10/2011) - Current version

## New features:

• n/a

## **Bug fixes:**

- The media duration column was previously showing times in 100-nanosecond units. Updated to *hh:mm:ss*.
- The processed search string (rather than original search string) was been stored in the search dialog. Fixed.

#### Misc:

• When searching using the search dialog, if the filename entered already appears in the history list, it will simply be swapped to the first position

(rather than been re-entered).

• The number of history entries stored for the filename field in the search dialog is now capped at 20.



**Info:** On the 64-bit version of Windows, the control panel may not show all items, and any 64-bit shell extensions will not work. If you have a 64-bit version of Windows, it is recommended that you use the 64-bit version of **Explorer++**.



## **Revision History**

Older ▶

## Version 1.3.2 (11/10/2011)

## New features:

• n/a

### **Bug fixes:**

- Under some circumstances, a copy and paste/drag and drop operation would fail (when copying a message from *Outlook 2010*, for example).
- Fixed bug in customize colors dialog (entries were not been moved up/down correctly).
- When renaming a file in the listview with *IME* turned on, text was been overwritten (because the text selection was modified). Fixed.
- Links to zip files will now be opened in an external program, if *Open zip files in Explorer*++ is unchecked.

#### Misc:

n/a



## **Revision History**

Older ▶

## Version 1.3.1 (05/09/2011)

## New features:

• The sort mode and direction are now saved in the search dialog.

### **Bug fixes:**

• The image in the about dialog would not be shown when a translation was loaded. Fixed.

- The help file (if present) can now be launched from the Help/Help menu. It must be named *Explorer++ Help.chm* and be in the same folder as the **Explorer++** executable.
- Updated Always hide the link (.lnk) extension option to read Hide the link (.lnk) extension.



## Version 1.3 (20/08/2011)

### *New features:*

- The complete state of most dialogs are now saved.
- Most dialogs can now be resized.
- Significant improvements to split file dialog.
- Context menu extensions are now shown on the main right-click context menu.
- Enhanced undo functionality. Multiple rename operations (such as those performed by the mass rename dialog) can now be undone as a single set.
- *Delete permanently* button added to main toolbar.
- Added *Close Tabs to the Right* entry to the tab right-click menu.
- The listview hover time can now be set by the user.
- Right-clicking search dialog results now brings up the file context menu.
- Search dialog results can now be sorted by name/path.
- Added *Case sensitive* option to filter dialog.
- The folder navigation sound can now be disabled via the options dialog.
- The search dialog can now search using regular expressions. A case insensitive flag has also been added.
- Deleting an item in the treeview will select the parent folder prior to deletion (allowing the previously selected folder to be deleted).

- Right-clicking on the root desktop folder in the treeview now brings up its context menu.
- Trailing spaces are now trimmed when renaming an item in the listview/treeview.

## **Bug fixes:**

- In Windows 7 when closing a tab, the wrong taskbar preview pane would be closed (i.e. the taskbar preview pane for another tab would be closed instead).
- Fixed a crash that occurred when collapsing a node in the treeview.
- When single-click activation was enabled, and an area in the listview was selected, any file under the mouse when it was released would be opened. Fixed.
- Fixed *Open Parent in New Tab* bug (parent of current tab would always be opened, regardless of which tab was clicked).
- When opening a folder in a locked tab, the newly created tab was not switched to correctly (which caused directory modifications to fail, for example). Fixed.
- Fixed toolbar bug (when a button was added or removed from a toolbar, the length of the toolbar would be reset, causing it to resize).
- Fixed listview gridline issue (Windows XP only).
- Under certain circumstances, translation DLL's would still be loaded, even if they did not match the current version. Fixed.
- Filename extension is now hidden correctly (if required) in details view.
- Size column now remains right aligned after sorting.
- When allow multiple instances was not set, and a new instance was started, it would not restore the previous window correctly if it was minimized. Fixed.

- Summary information stream codepage wasn't being checked. Fixed.
- Fixed control panel handling bug.
- Fixed drag and drop memory leak.
- Fixed bugs in mouse wheel handler.
- Fixed bug in options dialog (apply button not enabled when changing size selection in files and folders tab).

- Version number now takes the form: *Major.Minor.Micro.Revision*.
- Improved drag and drop interoperability.
- File sizes are now formatted according to the current system locale.
- When collapsing the direct parent of the current folder in the treeview, the listview selection would change to the parent. Now works when collapsing multiple levels.
- The *Size On Disk*, *Total Size*, and *Free Space* columns are now right aligned.
- The current directory is now set when the directory or tab selection changes. Updated *Handle zip files* option to read *Open zip files in Explorer*++.
- The error message shown on a translation DLL version mismatch will now be shown in the target language (when possible).
- The (main) right click context menu is no longer owner drawn.



## Version 1.2 (13/09/2010)

Major changes for this version include several Windows 7 specific features, such as per-tab taskbar thumbnails, and a 'New Tab' jump list task. As with the previous version, there have also been some significant improvements to drag & drop. These improvements include both a wide range of bug fixes, as well as some new functionality. One example of this new functionality is the ability to copy and paste/drag & drop text and images into **Explorer**++ directly.

#### New features:

- Taskbar thumbnails are now shown for each tab in Windows 7 (this can be turned on/off by toggling *Show taskbar thumbnails* in the Options dialog).
- *New Tab* added to Tasks jump list in Windows 7.
- Numerous improvements to drag and drop/copy and paste.
- Text on the clipboard can now be pasted as a file. The file will be given a name of the form:

Clipboard Text ([datetime]).txt

This also applies to drag and drop.

• Images on the clipboard can now be pasted as a file. The file will be given a name of the form:

Clipboard Image ([datetime]).bmp This also applies to drag and drop.

- The contents of the address bar can now be dragged and dropped.
- Large toolbar icons added.
- Files can now be dropped onto existing application toolbar buttons. This will open the dropped files in that application.

- Automatically synchronize treeview with main pane option added; this setting controls whether or not the treeview will automatically stay in sync with the listview whilst browsing.
- Automatically expand nodes on selection option added; if this setting is enabled treeview nodes will automatically expand when they are selected.
- Shift+Mousewheel down and shift+mousewheel up can now be used to browse backwards and forwards, respectively.
- The tab bar can now be hidden when there is only one tab.
- The tab bar can now be shown at the bottom of the listview.
- A navigation sound is now played when entering a folder.
- The current folder is now selected when navigating up.
- Listview groups can now be collapsed (Vista and later).
- Listview checkboxes can now be turned on by selecting *Use check boxes to select items* in the Options dialog.
- Closing the last tab will now close the main window (provided the corresponding option is selected in the Options dialog).
- Items can now be rearranged in details view.
- It is now possible to show file sizes in one of: Bytes/KB/MB/GB/TB/PB.
- Ctrl+Backspace can now be used to browse to the root of a tab.
- Shift+Double Click will now open the selected folder in a new window.
- *Desktop, Pictures, Music, Videos* and *Documents* are all now valid address bar shortcuts.

## **Bug fixes:**

• Several dialogs weren't closing when Escape was pressed. Fixed.

- Fixed *Copy Universal File Paths* bug.
- Previously, if *Hide file extensions* was checked, the display names of both files and folders would be altered. Fixed so that only files names are altered.
- When *Single-click to open an item* was selected, navigation up would occur on a single click, instead of a double click. Fixed.
- Fixed directory modification bug.
- Fixed set file attributes dialog bug (file dates weren't been saved correctly).
- Fixed treeview rename bug (child items not updated).
- Fixed treeview sort bug.
- Fixed toolbar positioning bug.
- Fixed custom infotips bug.

- All settings are now saved to the registry (or XML file) when Ok or Apply is clicked in the Options dialog.
- The treeview no longer syncs with network/UNC paths.
- Copied data now remains on the clipboard after **Explorer++** exits.
- Search dialog now turns patterns of the form ??? into \*???\* before searching.
- Main window now obeys startup position information (e.g. minimized/maximized, etc).
- Wildcard select/deselect is now case insensitive.
- Can now scroll listview/treeview, even when it does not have focus.
- The options dialog is now modeless.

• Handle zip files set to false by default.



## Version 1.1 (05/04/2010)

New features in this version include the ability to replace Windows Explorer for all folders (only for Vista and Windows 7), and the ability to go up one level by double clicking in a tabs whitespace.

The major changes for this release, however, centre around drag & drop. For example, it is now possible to drag and drop attachments from a program such as Outlook, as well as drop text from the address bar of a web browser. Both the listview and treeview now make use of the same drag and & drop code (the copy and paste system also uses this code), meaning the listview and treeview will both support the same drop formats. These formats will also be supported via copy and paste.

There have also been a few important changes to the treeview. For instance, icons are gathered in a background thread, which should reduce load times slightly. Furthermore, all treeview items are now sorted correctly. Even though items now have to be sorted, there shouldn't be any performance hit. Expanding the C:\Windows\winsxs folder in the treeview (which has ~10,000 folders in my system) takes about ~3 seconds.

## New features:

- **Explorer**++ can now replace Windows Explorer for all folders (Vista and later only).
- New drag and drop type supported (this will now allow files to be dropped from Outlook and url's from a web browser's address bar).
- Column widths are now saved and restored for all tabs.
- Added *Save Column Layout as Default* under the **View** menu which will save the current tabs column layout as the default.
- Items in the treeview can now be dragged and dropped using right click.
- Folder sizes can now be disabled on removable and network drives.
- The privilege level can now be shown in the title bar by *Show privilege level in title bar* in the Options dialog.

- The extended right click menu is now shown when shift is held down and an item is right-clicked.
- Locked tabs now display a lock icon, rather than the normal folder icon.
- Double clicking in a tabs whitespace will now navigate to the parent folder.
- Middle click can now be used to open items in the treeview in a new tab.
- Middle click can now be used to open items on the bookmarks toolbar in a new tab.
- Middle click can now be used to open items on the drives toolbar in a new tab.

## **Bug fixes:**

- All items in the treeview are now sorted correctly.
- Icons for the treeview are now gathered in a background thread.
- Icon overlays are now shown in the treeview.
- When .lnk extensions were hidden, and a file with the .lnk extension was renamed, it would lose its extension. Fixed.
- When items were renamed, no icon overlay would be set. Fixed.
- Under certain conditions (for example, when .lnk extensions were hidden in Windows Explorer), and a file of that type was renamed, its extension would be hidden in details view in the 'Name' column. Fixed.
- When the system font size for menus was changed, the custom menus would be sized incorrectly. Fixed.
- When the treeview had focus, the file action buttons on the main toolbar (cut, copy, past, delete, etc) would be incorrectly disabled. Fixed.
- When a tab was locked (lock tab and address), it would not be possible to open a new tab. Fixed.
- Fixed toolbar bug.
- Fixed search bug.
- Fixed drives toolbar issue.

- **Explorer**++ will now only load translation DLL's that match the version of the main executable.
- Updated **About** dialog and image.
- Added menu image for **Edit/Paste Shortcut**.



## Version 1.0.0.0 (23/11/2009)

New additions in this version (as compared to the RC) include several minor new features (such as the ability to have new items inserted in their sorted positions, and the ability to browse to the default folder using the keyboard shortcut Alt+Home), as well as a relatively large set of bug fixes and tweaks, most centered around copy and paste/drag and drop.

#### New features:

- It is now possible to search for files using **Tools/Search**.
- Custom coloring rules can now be applied to the listview (i.e. an items text color can be set based on its filename and/or attributes).
- Items can now be dragged using the right mouse button (listview only).
- Tiles view now shows basic file information.
- New tabs can now be created by double clicking in the blank space to the right of the last tab.
- **Explorer**++ can now be restricted to only running one instance by deselecting *Allow multiple instances* in the options dialog.
- Large Icons and Extra Large Icons view modes added (Vista and later).
- It is now possible to browse through tabs by moving the mouse over the tab window, and scrolling with the mouse wheel.
- Various media metadata columns added (*Album*, *Duration*, *Composer*, etc).
- Columns can now be rearranged by dragging and dropping them in place.
- Folder sizes are now included when sorting by size.
- Universal file paths can now be copied by selecting **File/Copy Universal File Paths**.
- New items can now be inserted in their sorted position by selecting *Insert new items in their sorted position* in the options dialog.
- System files can now be hidden by selecting *Hide protected operating system files* within the options dialog.
- The link (.lnk) file extension can now be hidden by selecting *Always hide the link* (.lnk) *extension*.
- Single click activation mode can now be used by selecting Single-click to

- open an item (point to select) in the options dialog.
- Zip files may be opened externally by deselecting *Handle zip files* within the options dialog.
- All tabs can now be forced to have the same width by selecting *Force all tabs to have the same width* in the options dialog.
- Double clicking a tab will now close it (provided *Double click to close a tab* is selected in the options dialog).
- Ctrl+double clicking a folder will now cause it to open in a new tab.
- Alt+Home will now browse to the default tab folder.
- In rename mode, F2 will now cycle between selecting an items filename, extension and filename and extension.
- Ctrl+1...8 will now select the specified tab (between the first and eighth tab).
- Ctrl+9 will now select the last tab.
- In rename mode, tab will now select the next item and place it into rename mode.
- Application toolbar buttons can now have their names hidden (so that only the icon is visible on the toolbar).
- Right-clicking on the folder icon in the display window will now show the context menu for the selected files (or the normal right-click menu if no items are selected).
- Ctrl+Scroll will now cycle through each of the view modes within the listview.
- Ctrl+Pg Up and Ctrl+Pg Down as well as Ctrl+] and Ctrl+[ can now be used to select the previous and next tabs, respectively.
- Alt+double click will now show an items properties.

## **Bug fixes:**

- When creating a file/folder in details mode, the item would be selected, but immediately taken out of rename mode. Fixed.
- Improved listview grouping.
- Fixed several drag and drop bugs.
- Improved drag and drop item repositioning.
- Fixed cut/copy bug.
- Fixed *Open In New Tab* treeview bug.
- File/Set file attributes now works for the treeview as well.
- Folders with a total size greater than 4GB would have their size shown incorrectly when the *Show folder sizes* option was enabled.

- The icon modifier shown when dragging and dropping now matches the action that will take place when the item is dropped.
- Previously, if file was been pasted into a tab, and the directory of that tab was changed, the files would continue to be added. Fixed.
- When creating a new tab, its directory would not always be monitored. Fixed.
- Items would not always be correctly ghosted when they were cut. Fixed.
- When creating a new folder using the **New Folder** button on the main toolbar, the item would not be put into rename mode if the current directory was a directory root. Fixed.
- The *Open new tabs next to the current one* option was not been correctly read back from the registry, causing it to lose its value between sessions. Fixed.
- The bookmarks toolbar would not be updated when a bookmark was renamed. Fixed.
- Fixed double click bug.
- When switching folders, the column header in details view was not been updated.
- When entering a folder with an ampersand (&) in its name, the ampersand would be incorrectly translated into an underscore. Fixed.
- Fixed new menu bug.
- Improved mass rename dialog.

- **Explorer**++ will now save a minidump file in the event of a crash. This file is saved to %TEMP%.
- **Explorer**++ can now be set as the default file manager by using the command: explorer++.exe -set\_as\_default
- **Explorer**++ can now be removed as the default file manager by using the command: explorer++.exe -remove\_as\_default
- Most dialogs are now centered initially, and will save various state information when closed.
- Options dialog partially redesigned.
- Items can now be copied, cut and pasted to/from the treeview using Ctrl+C, Ctrl+X and Ctrl+V, respectively.
- Chevrons are now shown when toolbar buttons do not have enough room to be shown.
- Columns (in details view) are no longer resized automatically when

- changing folders or refreshing.
- Separate **Group By** menu added, as appears in Vista onwards.
- If a files name is only partially shown within the listview, it will be added to the files infotip.
- There is now a confirmation dialog shown when deleting an application button.
- Various new details shown on display window.
- Previews on the display window will not be shown if the display window is inactive.
- Ctrl+R can now be used to refresh a folder.
- Ctrl+L can now be used to select the address bar.
- Ctrl+E can now be used to duplicate a tab.
- Left click drag and drop is now cancelled when the user clicks the right mouse button.
- Tools/Show drive information removed.



## Version 0.9.5.4 (31/05/2009)

### New features:

- **Explorer**++ can now be used in place of Explorer for filesystem folders by selecting *Replace Explorer for filesystem folders* in the Options dialog (requires Administrator privileges).
- The positions of the main toolbars are now saved and restored between sessions.
- Folders can now be dragged onto the bookmarks toolbar directly.
- Files can now be dragged onto the applications toolbar directly.
- Icons are automatically updated when a file association changes.
- Any file that can be previewed in Explorer can now be previewed in **Explorer++**.
- Pasted files are now selected upon creation (provided no other files are selected).
- The apps key can now be used to show the main context menu.
- Enabled drag and drop modifier keys for the tree view.
- Right clicking the listview header in details mode will now bring up a context menu, which allows columns to be easily turned on and off.
- The user's name can now be shown in the main title bar.
- The **Move Up** and **Move Down** buttons in the 'Organize Bookmarks' dialog now work.
- File previews in the display window can now be turned on or off using the *Show file previews in display window* setting in the 'Options' dialog.
- F6 and Shift+F6 can now be used to cycle through each window.
- Ctrl+Enter will now open the selected folder in a new tab.
- Ctrl+F4 can now be used to close the current tab.
- Ctrl+Shift+P will now copy the current folder's path to the clipboard.

## **Bug fixes:**

• When a new file was created, it would not always be put into rename mode automatically [Windows XP only].

- Previously, the right click context menu would not be shown for some items. Fixed.
- Fixed listview positioning bug.
- If file extensions were hidden, and a filename started with a dot, no text would be shown for that item.
- If file extensions were hidden in Explorer, they would be hidden in **Explorer**++ as well, regardless of settings. Fixed.
- Drives are now added/removed correctly from the listview, treeview and drives toolbar.
- If a cd/dvd was inserted/removed, the entire drive would be added/removed, even though the physical device had not changed. Fixed.
- Files are now sorted using natural sort order (e.g. file2.txt comes before file19.txt).
- If the folders pane had focus, and an item was selected, the file associated menus (such as properties) would be disabled incorrectly. Fixed.
- Fixed several memory leaks.
- Improved synchronization in details mode.
- Improvements made to thumbnails mode.
- Fixed window size issue.
- Fixed address bar path issue.
- Fixed thumbnail image positioning error.
- Fixed back/forward menu bug.
- Fixed directory monitoring bug.
- In details mode, if the first column was removed and then added again, the other columns would not be shifted correctly.
- Items on the "Send to" context submenu may not have worked correctly. Fixed.

- The format of the time and date fields now follows the system time and date format.
- Clicking the views button on the main toolbar now cycles between the various views, rather than showing the drop-down menu.
- A small delay has been added to the time between when a file is dragged over a tab, and focus is switched to that tab.
- There is now a confirmation dialog shown when deleting a bookmark.
- In empty folders viewed in details mode, each column now has its width set to a default value.

## Version 0.9.3.2 (24/03/2009)

### New features:

- An application toolbar has been added, which allows quick access to any program.
- Drag and drop modifier keys (Ctrl+Shift, Ctrl, Shift, Alt) now work.
- **Explorer**++ is now compatible with paths containing embedded environment variables, such as %systemroot%.
- The tab control can now be extended across the entire window.
- Full row selection in details mode can now be turned on or off.

## **Bug fixes:**

- Removable drives can now be ejected and removed safely while **Explorer**++ is running.
- Drives are now inserted and removed from the drives toolbar dynamically, as they are connected and disconnected from the system.
- If file extensions were hidden, and a file was renamed, the extension would be dropped.
- When renaming a file within the listview, if the proposed filename ended with a trailing space or period, the rename operation would appear to succeed, even though it had not (as filenames cannot end with a trailing space or period).
- When a folder was put into rename mode, if its name contained a period, everything before the period would be selected (as for files).
- Corrected folder system infotip bug.
- Previously, if files were dragged into **Explorer++**, and the auto arrange listview style was on, the files would not be repositioned.
- Fixed drag and drop selection bug.
- Fixed drag and drop position bug.
- Fixed several drag and drop memory leaks.
- When loading from a configuration file, the correct language selection would show up in the 'Options' dialog, but the default language would be

- used for the UI (regardless of the language that was loaded).
- The *Show In Groups* option was not been saved to the XML file. Fixed.
- The **Move Up**, **Move Down**, **Enable** and **Disable** buttons now work within the 'Set Default Columns' dialog.
- Fixed listview focus issue.
- The background of the listview was previously been set to white, regardless of the system background color.

- The languages shown in the 'Options' dialog are now generated dynamically, based on any translation DLL's within the same directory as **Explorer**++.
- The normal rename/replace dialog is now shown when a collision is encountered during a copy/move operation.
- The main windows can now be cycled through in reverse using Shift+Tab.
- The size column in details view is now right-aligned.
- Removed the 'Back' text from the toolbar back button.
- The 'Filter Results...' menu item under **View/Filter** has been changed to 'Set Filter...'.



## Version 0.9.2.1 (15/02/2009)

#### New features:

- Each tab now has an icon attached to it (the folder icon from the tabs' current directory).
- The default directory for new tabs can now be set from within the 'Default Settings' pane of the 'Options' dialog.
- **Explorer**++ is now compatible with application command buttons and keys, such as the back and forward buttons found on some mice and keyboards.
- Infotips can now be turned off, set to the system ones (i.e. the ones used by Windows Explorer), or be set to custom (for now, this simply sets the infotip to be the files modification date).
- Tab lock state and custom name are now saved between sessions.

## **Bug fixes:**

- Fixed several directory monitoring bugs.
- Shortcuts that pointed to a website (via a URL) would previously not be opened within the default browser. Fixed.
- When two files were selected, whose individual sizes were less than 4GB, but whose combined size was greater than 4GB, the combined size would not be shown correctly. Fixed.
- When a file size was between 1000 and 1024 of the specified unit (bytes, KB, MB, etc), the fourth character would not be shown, causing the size to appear to be incorrect. Fixed.
- Fixed a paste file bug.
- If a file that could not be cut (such as a virtual item) was cut anyway using Ctrl+X, the item would be ghosted whether or not it was actually placed on the clipboard. Fixed.
- The address bar would not scroll horizontally. Fixed.
- Fixed tab highlight bug.
- Because of a timing problem, it was possible that when **Explorer**++ was

opened, the first icon(s) shown may not have been correct. Fixed.

- Ctrl+N can now be used to create a new folder.
- On a rename operation, if a files new name contains an invalid character [\/:\*?"<>|], an error dialog will be shown.
- When an item is put into rename mode by clicking on it twice, only the files name (and not the files extension, if any), will be selected.
- An error message is now shown when attempting to open a shortcut that points to a non-existent item.
- Items on the **Go** menu now have their names taken directly from the operating system. This means, for example, that the 'My Computer' item will be shown as 'My Computer' on XP, but 'Computer' on Vista.
- Added an error message for the situation when a new folder could not be created.
- A slight change to the bookmarks key means that bookmarks saved in previous versions will not have their paths loaded in this version (this only affects bookmarks saved to the registry).



# **Revision History**

Older▶

## Version 0.9.0.8 (03/02/2009)

## New features:

- Sort by File System now works.
- Folders created using the 'New Folder' toolbar button or menu item are now automatically selected for rename when they are created.

## **Bug fixes:**

• Fixed rebar positioning error that occurred when using the "Windows Classic" theme.



# **Revision History**

Older ▶

## Version 0.9.0.6 (31/01/2009)

New features:

## **Bug fixes:**

• Fixed overflow bug.

#### Misc:

 Any previous registry settings can now be cleared using the command: explorer++.exe -clear\_settings
 This command should be used if either version Alpha 1 or Alpha 2 have previously been run.



## Version 0.9.0.0 (30/01/2009)

### *New features:*

- **Explorer**++ is now built as a Unicode executable.
- **Explorer**++ can now save its settings to an XML preference file (config.xml).
- **Explorer**++ will attempt to load its settings in the following order:
  - 1. config.xml (this file must be in the same directory as **Explorer**++)
  - 2. the registry

If neither of these options are available, **Explorer**++ will switch to using its internal defaults. To save to the config file initially, check the *Save* preferences to *XML* file in the 'Options' dialog.

- Significantly upgraded bookmarks system.
- Icon overlays (such as those used by TortoiseSVN) are now supported.
- Items that are created using the shell 'New' menu are now automatically selected and put into rename mode on creation.
- A file rename operation can now be undone by selection '**Edit/Undo**'.
- Folder sizes are now shown in details view.
- A drives toolbar is now available, which allows for quick access to any drive.
- Bands on the rebar can now be repositioned.
- Tabs can now be renamed, by right clicking on them and selecting 'Rename Tab...'.
- 'Lock Tab and Address' now works. This option, when selected, will block any directory changes from occurring within the current tab.
- Folder shortcuts are now opened within **Explorer++**.
- When in thumbnails view, image thumbnails are now gathered independently of the main thread.
- Added 'Open Parent in New Tab' menu item to tab context menu.
- Added 'Bookmark Tab' toolbar button.
- Added 'New Tab' toolbar button.

- Added 'Show Command Prompt' toolbar button.
- Added 'Organize Bookmarks' toolbar button.
- Added option to disable treeview delay.
- 'Show In Groups' now works when sorting by camera model.
- 'Show In Groups' now works when sorting by date taken.
- 'Show In Groups' now works when sorting by image width.
- 'Show In Groups' now works when sorting by image height.
- 'Show In Groups' now works when sorting by file extension.
- 'Show In Groups' now works when sorting by file system.
- 'Show In Groups' now works when sorting by network adapter status.

## **Bug fixes:**

- All columns could previously be deselected, causing the program to crash.
   Fixed.
- Fixed several small memory leaks that occurred in thumbnails view.
- When at the root of the namespace (i.e. the desktop), refreshing the tab would change the path to the real desktop. Fixed.
- When at the root of the namespace (i.e. the desktop), the 'New' menu item would not appear on the right click context menu. Fixed.
- Fixed a problem that occurred when cutting items.
- Fixed a drag and drop issue that caused an item dragged between tabs not to be moved.
- When dragging and dropping an item between tabs, the item count in the destination tab and item selection count in the source tab would become corrupted. Fixed.
- When creating a new tab without the 'auto arrange' style, auto arrange would be set anyway. Fixed.
- Fixed selection bug.
- When items (such as executable files) are opened from within **Explorer++**, their start directory is now set to the directory they reside within.
- Fixed several small memory leaks that occurred when closing a tab.
- Improved synchronization between threads.

- The menu selection color is now alpha blended.
- Drives in the treeview are now sorted by drive letter, rather than drive name.

- Pressing the space bar will now cause whichever item in the listview has focus to be selected. If not item has focus, the first item is selected.
- Paths specified on the command line no longer need a trailing backslash. For example, the commands: explorer++.exe C:\ and explorer++.exe C: will both open the C:\ directory in its own tab.
- A command line usage message can now be shown by typing: explorer++.exe /?
- Slight changes have been made to the structure of the registry keys used to save program settings. These changes mean that tabs saved in previous versions of **Explorer**++ will not load in this version.



# **Revision History**

Older ▶

## Version Alpha 2 (26/09/2008)

### New features:

- The language to use can now be selected in the 'Options' dialog, in the 'Language' tab. The language **Explorer**++ uses is based on the following (in order of importance):
  - 1. Any language specified on the command line.
  - 2. Any language saved from a previous session (using the above method).
  - 3. The system default language.
- Files can now be dragged and dropped onto the treeview control.
- 'Copy File Paths' can now be used on items in the treeview.
- 'Cut' and 'Copy' can now be used to copy and move items from the treeview.
- The 'Back' and 'Forward' buttons on the main toolbar now show what folder is back/forward in their infotip.
- 'Show In Groups' now works when sorting by title.
- 'Show In Groups' now works when sorting by subject.
- 'Show In Groups' now works when sorting by author.
- 'Show In Groups' now works when sorting by keywords.

### **Bug fixes:**

- Fixed bug that would cause directory monitoring to stop working under certain circumstances.
- Fixed listview drag and drop bug.
- Fixed bug that arose when sorting items by comment.
- Fixed 'Merge Files' cancel bug.
- Fixed 'Split File' cancel bug.
- Fixed small 'Show In Groups' bug.
- Fixed toolbar show/hide bug.

#### Misc:

• A small delay has now been added to the treeview, meaning that when a

## (02/09/2008)

### New features:

- 'Show In Groups' now works when sorting by attributes.
- 'Show In Groups' now works when sorting by file owner.
- Show In Groups' now works when sorting by file creation date.
- 'Show In Groups' now works when sorting by date of last access.
- 'Show In Groups' now works when sorting by short name.
- 'Show In Groups' now works when sorting by product name.
- 'Show In Groups' now works when sorting by company name.
- 'Show In Groups' now works when sorting by file description.
- 'Show In Groups' now works when sorting by file version.
- 'Show In Groups' now works when sorting by product version.

### **Bug fixes:**

- When closing a tab, directory monitoring would sometimes be stopped for a different tab. Fixed.
- Fixed toolbar bug that would sometimes cause the program to crash on exit.
- When the column representing the current sort mode is deselected, the sort mode is automatically changed to the first available one.

#### Misc:

• Drives in 'My Computer' are now sorted according to drive letter when sorting by name.

## (21/08/2008)

## New features:

- Confirmation when closing multiple tabs can now be requested when the 'Ask for confirmation before closing all tabs' option is selected.
- The main toolbar can now be customized by selecting 'Customize...' on the

toolbar context menu or on the View/Toolbar menu.

- Added an error message for the situation when a file cannot be renamed.
- Alt+D will now shift focus to the address bar.
- F4 will now show the drop down for the address bar.
- Ctrl+B can now be used to access the 'Organize Bookmarks' dialog.
- The tab button can now be used to switch between the main item pane, the folders pane and the address bar.
- Gridlines in details view can now be toggled on or off via the *Show gridlines in details view* option within the 'Options' dialog.

### **Bug fixes:**

- Fixed 'Remove' button within the 'Destroy Files' dialog.
- Fixed 'Remove' button within the 'Merge Files' dialog.
- Fixed bug when moving columns up/down in column selection dialog.
- Fixed several other small bugs within column selection dialog.
- The 'Auto Arrange', 'Show In Groups' and 'Sort Ascending' default options are now saved and loaded.

#### Misc:

- Default output file when merging is now 'output.txt'.
- Menu mnemonic characters are now underlined on the main menu after the alt key is used to select the menu.
- Description of column items are now shown in the 'Select Columns' dialog.

## (10/08/2008)

### New features:

• The right click context menu is now owner drawn.

## **Bug fixes:**

- Fixed bug that would cause the 'Sort By' submenu to be drawn incorrectly.
- Fixed position of the 'hide folders pane' button.

• Fixed bug relating to the 'Address Bar' item on the toolbars menu.

## (20/07/2008)

### New features:

• Files can now be merged using **Actions/Merge Files...**.

### **Bug fixes:**

- Fixed **Go** button bug.
- The paste button on the main toolbar is now enabled automatically when there are files on the clipboard, and disabled automatically when there are none.

## (13/07/2008)

### *New features:*

- Added 'Autosize Columns' to the 'View' menu, which will resize listview columns to fit in the text of all items.
- Files can now be dragged and dropped between tabs.
- Added a main toolbar context menu.
- The main menus as well as the main toolbar context menu are now owner drawn. Various items on the main menus now have pictures shown along side the menu text.
- More main toolbar buttons added.

## **Bug fixes:**

• Improvements made to drag and drop handling.

- Aesthetic changes made to the About dialog.
- Build date/time is now shown in the About dialog.

## (07/07/2008)

### New features:

- Menu help strings are now shown for items on the shell context menus.
- Added 'Bookmark Folder...' and 'Copy Folder Path' to right click context menu.
- When browsing into a folder, the path of the folder been loaded is now shown in the status bar (i.e. if browsing into the 'C:\' folder, the text in the status bar will read 'Loading C:\...').
- Added 'Duplicate Tab' to right click menu for tabs, which will open a duplicate of the specified tab in a new tab.
- Added 'Lock Tab' to right click menu for tabs to prevent a tab been closed.
- Tabs can now be bookmarked using the keyboard shortcut 'Ctrl + D'.
- Files can now be split using **Actions/Split File...**.
- Files can now be permanently deleted using **Actions/Destroy Files...**.
- If 'Show Folder Sizes' is activated in the **Tools/Options** dialog, folder sizes will now be shown in the display window when a folder is selected.

## **Bug fixes:**

- Fixed 'Refresh Tab' on tab right click menu so that it refreshes the specified tab instead of the one that currently has focus.
- Thumbnail images are now shown in the correct position when items are sorted in groups.
- Small bug fixed relating to showing items in groups when sorting by name.
- Menu help now shows for items on the context menu for individual tabs.

## (03/07/2008)

## New features:

 Thumbnails view can now be set as the default view in the 'Default Settings' page of the **Tools/Options** dialog.

### **Bug fixes:**

• Bookmarks can now be rearranged and have their properties (name,

- location, description) changed.
- Tabs now update when relevant settings in the **Tools/Options** dialog have been applied.
- Fixed treeview sorting bug.
- Folders created are now inserted into their correct position in the treeview automatically.
- Some improvements made to **Tools/Show Drive Information**.

#### Misc:

 New tabs can be opened with middle click even if the listview window does not have focus.

## (01/07/2008)

#### New features:

- Thumbnails view has been added to the 'View' menu. As this is the first implementation of thumbnails view, it may still contain some bugs.
- Added **File/Copy Column Text**, which will copy the currently selected items' column text to the clipboard.
- **File/Copy Paths** can now copy the full paths of multiple items.

## **Bug fixes:**

- Fixed tab swapping bug.
- Fixed column sorting bug.
- Fixed file size bug that arose when files in a directory were deleted then created.

## (29/06/2008)

## New features:

• Virtual folders can now be opened from the command line simply by supplying their name: e.g. explorer++.exe "control panel" will open the Control Panel.

## **Bug fixes:**

- Improvements made to sorting by column.
- Fixed bug relating to directories opened via the command line.
- Fixed bug relating to columns not showing up for the printers folder.
- Folder specific columns added for the 'My Network Places' folder.
- Additional virtual folders (Recycle Bin, Printers, Network Connections and My Network Places) now have their active columns saved and loaded.
- Fixed bug where program would sometimes stop responding after the columns for a folder had been changed.

- 'My Network Places' on the 'Go' menu has been changed to read 'Network' on Windows Vista.
- The items shown on the 'Sort By' menu for a particular tab now depend on the columns that are active for that tab.
- Menu help messages added for items on the 'Sort By' menu.



# **Revision History**

## Version Alpha 1 (26/06/2008)

### New features:

- The display window font can now be changed (via **View/Change Display Colours**).
- 'Open in New Tab' added to right click menu for treeview items.

### **Bug fixes:**

- Fixed combobox keyboard input bug.
- Image previews in the display window now adjust their width (to maintain the correct aspect ratio) as the display window is vertically resized.

## (25/06/2008)

### New features:

- Additional settings added to default options dialog (auto arrange, show in groups and sort ascending).
- The program can now be launched from the command line with a set of directory arguments: explorer++.exe dir1 dir2 ... dirN where dir1 to dirN are the directories to open. Each directory will be opened in its own tab.

## **Bug fixes:**

- Newline characters which are embedded in comments for an item in details view have been replaced with a space.
- Virtual folders now have their friendly name shown in the title bar when the program is configured to show full directory paths.
- Fixed drag selection bug.

• The display window can no longer be resized to zero height.

## (16/06/2008)

## **Bug fixes:**

• Minor internal bugs fixed.

## (10/06/2008)

### **Bug fixes:**

• Greater amount of internal error checking added.

#### Misc:

• New tabs opened with the middle mouse button are no longer switched to automatically.

## (08/06/2008)

### New features:

- Tabs can now be closed with the middle mouse click button.
- Folders can now be opened in a new tab by clicking on them with the middle mouse button.

## **Bug fixes:**

- Fixed slight bug with tab selection when a tab is closed.
- Sometimes when a folder was created, it would be inserted into the treeview twice. Fixed.
- Fixed slight problem involved with swapping tabs.

- Changed main window title from 'Explorer++ Current directory' to 'Current directory Explorer++'.
- Display window can now be vertically resized.

### (06/06/2008)

### **Bug fixes:**

- Greater amount of error checking added to treeview control.
- Minor treeview collapse selection bug fixed.
- Bug associated with setting column data in details view fixed.
- In options dialog, in the default settings tab, setting the details radio button had no effect on the state of the apply button. Fixed.
- Fixed small bug where program could crash as a tab is closed (would only happen under very specific circumstances).

## (05/06/2008)

### **Bug fixes:**

- Display window now redraws its gradient background as the main window is resized.
- For items in the my computer folder which have no comment, no comment text is shown in details view (previously a random series of characters was shown for an item with no comment).

## (04/06/2008)

## **Bug fixes:**

- Fixed treeview updating bug relating to folder renaming.
- Minor sorting bug fixed.
- Fixed bug relating to the collapse state of treeview items when a folder is deleted.
- Slight alteration made so that the copying files dialog is now shown during a paste files operation.

• Changed copy and cut on context menu so that they are handled internally, rather than by the shell.

### (03/06/2008)

### New features:

• Added 'Open in New Tab' to right click menu for folders.

## **Bug fixes:**

- Fixed bug where delete file permanently on File menu was only sending files to recycle bin.
- Preview images were only been shown for images with a lower case extension. Fixed to be case insensitive.
- Fixed thread synchronization bug, which would sometimes cause the program to hang.

## (02/06/2008)

## **Bug fixes:**

- Fixed small bug relating to directory monitoring/updating.
- Fixed problem with options not been applied in **Tools/Options** general tab.
- Slight modification made to **Tools/Show drive information** meaning it may no longer crash. Information shown may be incorrect though.

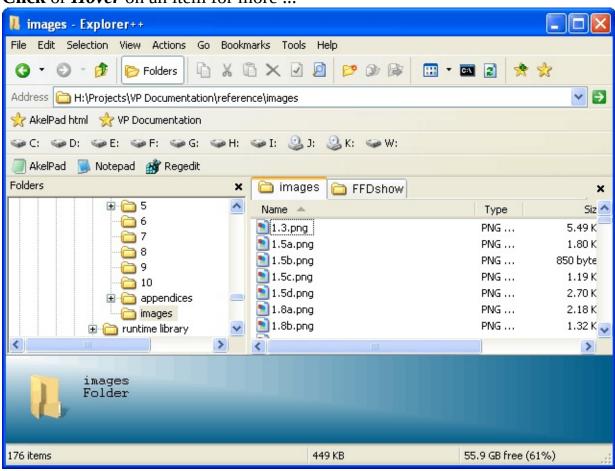
## (01/06/2008)

• \* INITIAL RELEASE \*



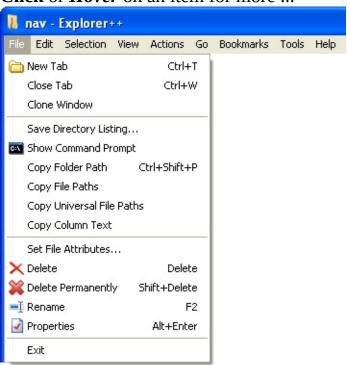
# **Explorer++ Help Navigation**

**Click** or *Hover* on an item for more ...



# **Navigation**/File Menu

**Click** or *Hover* on an item for more ...



## File/ □ New Tab



This function creates a new tab in the files pane. The tab is always created:

- as the last tab (far right) default, or
- next to (right of) the current tab

depending on the setting in <u>Options..</u> (<u>Tabs</u>). The contents default to the current setting for same - see <u>Default new tab folder</u> option. The new tab automatically receives the focus (ie. becomes the active tab).

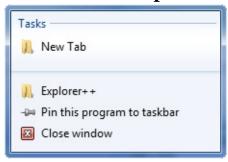
**Tip:** This function - opening a new tab - is also available by:

- using the middle mouse button while hovering over
  - a folder in either the *treeview* or files pane
  - a drive on the <u>Drives toolbar</u>
  - o an item on the Bookmarks toolbar
- selecting **New Tab** (default contents) or **Duplicate Tab** (focus not transferred to new tab) from the tab's <u>context</u> (ie. right-click) menu
- selecting Open in New Tab from a folder's context (ie. right-click) menu in the files pane, or from a button's context menu on the Bookmarks toolbar
- pressing **Ctrl+Enter** while a folder in the files pane is selected
- using **Ctrl**+*doubleclick* while hovering over a folder in the files pane
- double-clicking empty space in <u>Tab bar</u> (default contents)
- clicking the Create a new tab <u>button</u> (if visible) on the <u>Main</u> toolbar
- selecting **New Tab** from a Windows 7 *jump list* (available as a context, ie. right click) menu from the Task Bar

The above methods, unless stated otherwise, open the tab with the contents of the folder used, not the default contents or *Default new tab folder* (see above).



# Windows 7 Jump List



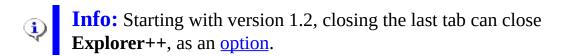
Screen capture courtesy of David Erceg - thanks!



# **File/Close Tab**



This menu item closes the current tab in the file pane. Currently, there is no way to reopen a closed tab (ie. undo the closing operation), except using normal methods for a new tab.





## **File/Clone Window**

This operation opens a new **Explorer**++ window (instance), complete with all settings and panes copied from the original window. Clone Window only clones the active tab; other (non-active) tabs are ignored.

Clone Window obeys the setting of the <u>Allow multiple instances</u> option; if multiple instances are not allowed, then only a new tab is created and duplicated.

**Info:** Some *settings* (eg. column widths in the files pane) may not be duplicated.



# **File/Save Directory Listing...**

This menu item performs a simple directory (folder) listing and saves it as a text file. A *Save As* Windows dialog allows the user to save the file in any location, under any name.

The listing only contains file/folder names, sorted in alphabetical order; folders are identified with "(Folder)" appended. Note that the file is saved in Unicode format (codepage = UTF-16 LE), with a BOM (byte order mark = FFFE hex) header. Windows Notepad can read this file format and can save the file is ANSI format, if desired.

A small sample file may be found here.



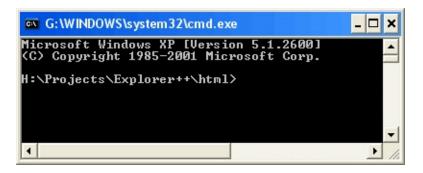
**Tip:** More detailed lists can be obtained by opening a <u>Command Prompt</u> window and using the <u>Dir command</u>.

Example: dir /ogn > "Directory Listing.txt" Type: dir /? for help on the **Dir** command.



# **File**/ **■** Show Command Prompt

This menu item opens a command prompt (ie. *DOS box*) in the current directory. Executing command line commands can perform some tasks quickly and easily. Note that this opens a 32 bit (ie. **cmd.exe**) window rather than a 16 bit (ie. **command.com**) window.



**Info:** For more information, search the Windows internal *Help and Support* for "command shell" and "command line reference".



# File/Copy Folder Path



This function places the full (ie. *fully qualified*) path to the current folder - whose contents are shown in the files pane - on the clipboard, for pasting into another application. This may be useful for pasting into text or word processing documents. This is equivalent to

- selecting the path shown in the <u>address bar</u>, then
- copying that to the clipboard, using the context menu, or **Ctrl+C**.

The folder path is copied to the clipboard as Unicode text (ie. *plain* text) - the clipboard contents cannot be use to paste the **actual** folder or its contents. Because this is a Unicode copy, foreign characters, such as the *Beta* in the example, are represented correctly. If Asian characters are included, your Windows system must have support installed for "East Asian Languages" (*Control Panel/Regional and Language Options*). In order to save true Unicode information, pasting must be done into a text editor which is Unicode compatible, like Windows Notepad.

## **Example:**

H:\Projects\Explorer++\html\mnu\_file\New & Folder



**Info:** Using this function on a *virtual* folder (eg. My Computer, not really a true directory) copies the path as a special *registry path* or GUID (globally unique identifier) - not the path as shown in the <u>Address Bar</u>.



# **File/Copy File Paths**

This function places the full (ie. *fully qualified*) paths to all currently selected files - as shown in the files pane - on the clipboard, for pasting into another application. If multiple file paths are selected, the paths are delimited (ie. separated) by carriage-return/linefeed characters; pasting multiple files to a text document pastes them as separate line.

File paths are copied as Unicode text - see <a href="here">here</a> for more comments.

Folder paths, ie. selected folders displayed in the files pane, are copied the same as files.

## **Example:**



H:\Projects\Explorer++\html\mnu\_file\New Folder
H:\Projects\Explorer++\html\mnu\_file\close\_win.htm
H:\Projects\Explorer++\html\mnu\_file\close\_tab.htm
H:\Projects\Explorer++\html\mnu\_file\copy\_col\_text.htm



**Info:** Network resources - files, folders and printers, etc. on a network - are copied using <u>UNC</u> rules, rather than fully qualified paths on the local computer.



# **File/Copy Universal File Paths**

This menu item behaves nearly identically to <u>Copy File Paths</u>, except that the paths to Network resources (ie. files, printers, etc.) are always copied obeying Windows UNC (Universal Naming Convention) rules.

UNC syntax for Windows systems has the generic form:

```
\\ComputerName\SharedFolder\Resource, or
\\Server\Volume\File
```

A sample listing (1 file) might look like

\\Netbook\SharedDocs\My Pictures\Josh & Penny - house\IMG\_0595.JP@



## File/Copy Column Text

The files pane displays file and folder information in columns, such as:



The *Copy Column Text* function copies to the clipboard (as plain, Unicode text)

- column headings and
- the text shown in each column, whether visible or not

for files that are currently selected. Copied text may be pasted into another application, such as a word processor or text editor, using **Paste** (**Ctrl+V**) from within that application. Text columns are delimited by tab characters (09h), but columns may not *line up* in your word processor or text editor, depending on the length of text in each column.

## **Example:**

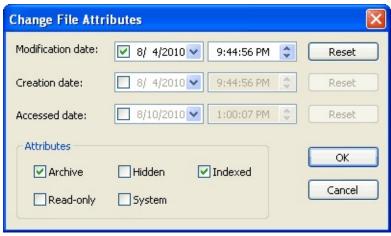
In the image above, using this function copies the following text to the clipboard:

```
Name Type Size Date Modified about.png PNG Image 14.8 KB 8/4/2010, 9:44:56 PM about-sample.gif GIF Image 247 bytes 8/6/2010, 10:31:02 AM
```



## **File/Set File Attributes...**

Click or Hover on an item for more ...



This dialog allows the user to change the file attributes, including system time stamps, of selected files and folders.

## **Change date manually**

You may select each of the three fields (month/day/year, shown here), then type a new value. For example, selecting the day field and typing 23 changes the day to the 23rd of the month shown.

Caution: The individual fields may not be the same as shown here they are determined by the setting for Short date format, found in the *Control Panel / Regional and Language Options* applet. You may open

the Control Panel applet here:
select Customize, then Date tab for the current setting.

### Calendar tool



The calendar tool allows you to quickly select a date. You may

- click any **day** of the month to select the day
- cycle through **months** by clicking the left/right buttons
- click the **month** (eg. August) for a *drop-down* list of months and select one
- click the **year** (eg. 2010) for a *spinner* control to adjust the year
- click the **Today:** line at the bottom to select *Today* (ie. today's date)

## Change time manually

As with the manual date change, you should select a field, then type a new value. Type "A" or "P" to change to AM or PM.

## **Attributes**

The checkboxes may be checked (set attribute) or cleared (clear attribute) to affect the following attributes:

#### Archive

The archive attribute is used to determine whether a file or folder has been changed. Whenever a file (not folder) is created or saved, the archive attribute is set. Most backup programs may be configured to clear the archive attribute as files are backed up.

**Read-only** This attribute marks a file or folder to prevent overwriting or

deletion. Obeying the status of the **Read-only** attribute is the duty of individual programs using those files; some may ignore any read-only status. In general, the Windows system will warn you before doing deletion or overwriting of **Read-only** files.

Hidden

Assigning the hidden attribute flags a file or folder to prevent it from <a href="mailto:being shown">being shown</a> during normal file listings, providing <a href="mailto:Explorer">Explorer</a>++ (or Windows Explorer) is not set to view hidden files. Command line operations (eg. *Dir*) also obey the setting of the hidden attribute.

System

Windows tries to protect system files (necessary for system operation) in a number of ways, one of which is to assign the system attribute. When this attribute is applied, some operations will respect it and alter their function, ie. refuse deletion. In most cases, this behavior can be over-ridden. Windows can also set the **Hidden** attribute on a system file, making it superhidden.

Indexed

Starting with Windows 2000, the indexing service creates indices of files for speed up of searches. With this attribute set, the file is marked for inclusion in the index.

**Info:** The **Date Accessed** (or **Accessed date** in the dialog) attribute may be considered to be unreliable as:

- it is not present on FAT16 file systems,
- has no time component (ie. resolution of 24 hours) on FAT32 file systems,
- may not be transferred correctly from system to system, and
- may not be enabled on systems running Windows XP. See <a href="here">here</a> for a tip on enabling this feature.

The **Indexed** attribute is not supported by FAT16 and FAT32 file systems.



## **File**/ × Delete



This function deletes - with a confirmation dialog - selected files and folders. Deleted items are sent to the Windows Recycle Bin and may be recovered from there, if necessary.

Read-only files or folders are deleted as usual, but are identified as read-only by the dialog; if a read-only file is among the selected files (not read-only) it will require an additional confirmation.

<u>System</u> files receive a similar warning, but may still be deleted (probably not a good idea!).



**Info:** Files deleted from removable drives (eg. *flash* or *jump* drives are not sent to the Recycle Bin but are <u>deleted permanently</u> by Windows. Not all USB drives are considered removable drives; some larger drives install as local drives. Viewing the <u>properties</u> for a drive in the Folders pane will identify it as Local (fixed) or Removable.



# **File/Delete Permanently**



This menu item <u>deletes</u> selected files and folders, but does **not** send them to the Windows Recycle Bin. This is not a *secure* delete; see <u>Destroy File(s)...</u> for secure deletion of files.



**Info:** Files and folders deleted by Windows are not really removed (immediately) from the file system. Instead, the *File Allocation Table* (FAT16 and FAT32 file systems) or *Master File Table* (NTFS) is marked indicating that the file has been deleted, and its entry is cleared. The disk space occupied by the file is declared free for use, but the actual file data is not immediately removed. It can, however, be over-written; once that occurs, the file is usually unrecoverable, except possibly in part, by recovery utilities such as Recuva, a freeware product by Piriform.



## **File**/ **■ Rename**

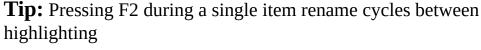


This routine is really two routines in one, depending on whether a single file (or folder) is selected or <u>multiple</u> items are selected.

## Single item



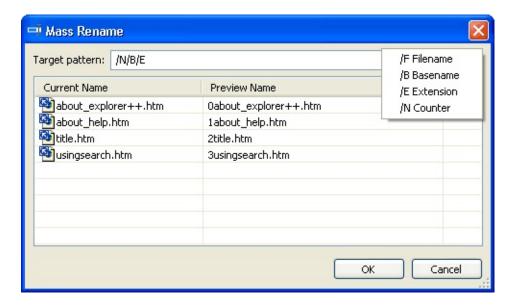
**Explorer**++ allows you to edit the name in an *in-place* edit box, keeping the extension the same. The extension may be edited, but must be deleted then re-typed or selected then over-written.





- the file name
- the file extension
- the full name, including the extension

## **Multiple items - Mass Rename**



The **Mass Rename** dialog allows you to build a new name for all files selected using alphanumeric characters, combined with special character combinations or *words*. The special *words* are visible in a *reminder* box by clicking the arrow button to the right of the **Target pattern:** edit box. Note that special *words* are case-sensitive and any characters that do not form a special *word* are placed in the new filename *as-is*.

- /**F** resolves to the entire filename, as originally named. Same as /**B**/**E**
- **/B** resolves to the filename minus extension, example: for "about\_help.htm", **/B** resolves to "about\_help"
- **E** resolves to the file extension, including ".", example: for "title.htm", **E** resolves to ".htm"
- /N resolves to an integer, beginning with 0 for the first file

Typing the new file name pattern into the edit box shows the new files previewed to the right of the existing names. Clicking OK completes the rename operation.

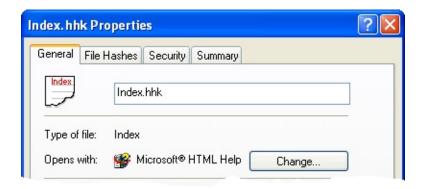


**Info:** <u>Undo</u> works on the entire list as a set; all files renamed by a Mass Rename as restored to their original names.



# **File/ Properties**





This function opens the Windows property sheets for the file or group of selected files. Property sheets may vary, depending on your configuration, and whether additional utilities are installed, but in general should show information such as:

- **Type of file:** as recognized by Windows, eg. *Text document* (.txt), *PNG image* (.png), etc.
- **Opens with:** an application associated with the file, if any
- Location: folder containing the file
- **Size:** and **Size on disk:** actual file size (of contents, if folder is selected) and disk space used
- **Contains:** number of files and folders contained in a folder (if a single folder is selected only)
- File attributes currently applied
- **Security** settings and permissions (NTFS only may not be shown, depending on system settings)
- File **Summary:** comments, if any assigned to the file by the user or an application (NTFS only)
- **Customize:** allows you to change certain properties (eg. image, icon) of a folder or group of folders

Utilities such as Hashtab (which displays *hashes* for the file, such as CRC32 and MD5) may introduce additional property sheets.

If multiple files are selected, many of the same properties are shown, including **Size:** and **Size on disk:**, which now refer to the collective size of all the files selected.

The **Properties** function is also available as part of the context (ie. right-click) menu in the folder or files panes.



**Tip:** The Properties dialog can also be activated by **Alt**+*doubleclick* while hovering over a file or folder.



### File/Exit

This menu item exits **Explorer++**. Prior to closing, **Explorer++** 

- saves settings to an XML file (config.xml) in the same folder as *Explorer++.exe*, or
- saves settings to the Windows registry,

depending on the setting for portable mode.

The window close button - \(\bigsiz \) - and closing the last remaining tab in the files pane (subject to an option), perform the same operations as **Exit**.



# **Navigation**/Edit Menu

**Click** or *Hover* on an item for more ...



### Edit/ " Undo



This function allows you to undo a **single** file or folder <u>renaming</u> operation, restoring the original name. When renaming multiple items using the <u>Mass</u> <u>Rename</u> dialog, all items can be undone as a single operation.

- **Caution: Explorer++**'s **Undo** cannot undo a file cut, move or delete.
- **Info:** Renaming a folder which has been <u>bookmarked</u> does **not** automatically rename the bookmark.



# **Edit**/ x Cut



The **Cut** operation removes selected files and folders and places them on the clipboard, for <u>pasting</u> in a different location. **Cut** may be used from the files or folders pane.

Items to be cut are still in their original location - they are only *marked* for cut - until pasted, at which time the originals are removed. Items cut are **not** placed in the Recycle Bin; they are <u>deleted permanently</u> from their original location after pasting.



# **Edit**/ • Copy



**Copy** places selected items (files and folders) on the clipboard for subsequent pasting. The clipboard's contents may be pasted into the source folder; copies of all items are created.

**Copy** does not delete the original files or folders.



**Info:** Copying (and <u>Pasting</u>) files or folders from other locations (ie. not the same folder) detects *collisions* (duplicate names) and presents the *usual* dialog allowing replacement, if desired. Files or folders copied from the **same** folder are renamed - Copy of..., Copy (2) of..., etc.



### **Edit/** • Paste



This menu item takes data from the clipboard and pastes it into the files pane, or the folders pane if it has the focus. If files or folders were <u>cut</u> in order to place them on the clipboard, then they are deleted at this time. **Explorer++** handles various types of data, and the pasting method, differently, according to the following table:

Clipboard data	Paste method	Result
files/folders	paste into blank area of files pane	files/folders pasted normally to location of the files pane
files/folders	paste into folders pane (using menu item, or toolbar button)	files/folders pasted into the folder having the focus in the folders pane. New files/folders will, of course, appear in the files pane (contents of focused folder).
text	paste into dialog, or rename file operation	text inserted, or overwrites text selection
text	paste into blank area of files pane	text pasted as new text file, automatic naming: eg. Clipboard Text (10-20-2010, 6.44.01 PM).txt
text	paste into folders pane (using menu item, or toolbar button)	text pasted as new text file (as above) into the folder having the focus in the folders pane. New file will, of course, appear in the files pane (contents of focused folder).
bitmap (image)	image data, copied from a paint program, for example is pasted into blank area of files pane	new image created, automatic naming: eg. Clipboard Image (10-20-2010, 6.53.48 PM).bmp New image always created as Windows bitmap, regardless of

original image type.

See **Copy** for a discussion of behavior when file names are duplicated.



#### **Edit/ A Paste Shortcut**



This menu item pastes Windows *shortcuts* to the files and folders currently on the clipboard, in the current folder as shown in the files pane. The files and folders would have been placed on the clipboard by <u>Copy</u> or <u>Cut</u>. If **Cut** was used, then pasting shortcuts does **not** delete the original file, as with <u>Paste</u>.

#### **About Shortcuts**

Shortcuts are small files (typically < 1000 bytes) - always with the extension **.LNK** - which contain, among other things, the path to a file or folder. A shortcut file behaves, for the most part, the same as the file it references. That is,

- double-clicking a shortcut (or .LNK file) opens the target file
- using a context (or right-click) menu to Edit a shortcut, opens the target file for editing
- etc.

Creating shortcuts using this function always creates a .LNK file with the *fully qualified* path (eg. C:\folder\file.ext) used, rather than a *relative* path (eg. ..\..\folder2\file2.ext), and may, therefore, be moved anywhere on the local computer and will still function correctly.

Since shortcuts are true files and only link to the target through a (text) path, deletion or modification of a shortcut has no effect on the target file.

A good use for shortcuts is to place in one location (ie. one folder) a collection of shortcuts to files which are related in content or purpose, but which are scattered over the whole computer.

Shortcuts may be edited by using the <u>Properties</u> function. Typically, the user may change

• the shortcut's name. When created, it has the same name as the target file, but this is not necessary.

- the application used to open the target file
- the shortcut's (not the target file's) <u>attributes</u>
- the target file, working folder (if any) and hotkey (if any)
- the shortcut's icon (default is the icon of the target file)
- security settings (ownership, permissions, etc.), if implemented (NTFS drives only)

Shortcuts may be created (by other means, such as <right-click>*Create Shortcut*) to Windows special folders, such as *Control Panel*, which are not true physical folders. The target for these types of shortcuts is usually not editable. Also, installation of some applications may create shortcuts to those applications which are not editable.



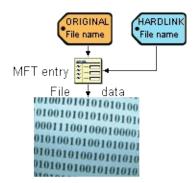
#### **Edit/Paste Hard Link**

This menu item pastes Windows *hard links* to the files currently on the clipboard, into the current folder as shown in the files pane. The files would have been placed on the clipboard by <u>Copy</u> or <u>Cut</u>. If **Cut** was used, then pasting shortcuts does **not** delete the original file, as with <u>Paste</u>. Note that folders **cannot** have hard links.

#### **About Hard Links**

Hard links are a feature of the NTFS file system (ie. not available on FAT16 or FAT32 drives) which allows creation of *virtual files* which point to a true file. Multiple *virtual* files may point to the same file, with each behaving as though it were the true file. The hard link *points* to the MFT (Master File Table) entry for the true file and propagates changes to the entry (except for the file name) to all other hard links *pointing* to the same file.

The following diagram may explain this concept better, but may not be completely accurate in its representation of the MFT entry or file structure.



In the diagram, the original name points to (and accesses) an MFT entry which contains all file attributes (timestamps, read-only flag, etc.) and in turn points to the actual file data. When the hard link is created, it points to the **same** MFT entry, but could have a different name. The **Explorer**++ function - *Paste Hard Link* - always creates the hard link with the original file name; obviously, then it cannot be created in the original folder or else a naming conflict will exist.

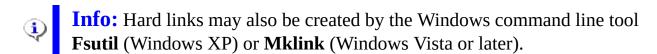
Since the original name and hard link name use the same MFT entry, etc., changes to either file result in changes to the true file data and attributes; the newly created hard link *file* is essentially a *true file*! To remove a hard link, deleting either file name has the same effect; the remaining (single) link becomes the *true file*.

In Windows, the NTFS file system counts the original name as hard link #1 and the additional hard link as #2; all *normal* files, then would have a hard link count of 1. The file system tracks the hard link count for each file at all times; when the count becomes 0, then the file data area is considered free space and may be reclaimed. It is interesting to note, therefore, that when a file is deleted (to the Recycle Bin), it would still have a count of 1 since only the name (and MFT entry?) have been removed. It is not until the Recycle Bin is emptied that the file is completely deleted, assuming its hard link count was 1, ie. no additional hard links to the file exist.

Hard links may **only** be created for files on the same volume (ie. the same drive letter); attempting to paste a hard link to a file on a different volume results in a true copy of the file.

**Explorer**++ can view the hard link count by enabling *Hard links* as a <u>column</u> <u>heading</u> in the files pane.

If you use hard links frequently, you might consider a useful freeware tool - Link Shell Extension - which can manage hard links. When installed, it (among other things) creates an additional property sheet which allow enumeration (ie. location) of any additional hard links to a file, something that Windows can't do!





# **Edit**/ **☞** Copy To Folder



This menu item copies selected files and folders to a different location. After selecting the files/folders and selecting this item, the user is presented with a standard *Browse for folder* dialog (see tip for a picture of this Windows dialog), allowing the destination location to be chosen.

Using this function is the same as a <u>Copy/Paste</u> operation, but without changing tabs or folders on a tab.



### **Edit**/ **▶** Move To Folder



This menu item moves selected files and folders to a different location. After selecting the files/folders and selecting this item, the user is presented with a standard *Browse for folder* dialog (see tip for a picture of this Windows dialog), allowing the destination location to be chosen.

Using this function is the same as a <u>Cut/Paste</u> operation, but without changing tabs or folders on a tab.



#### **Edit/Save File Slack...**

This function recovers a **single** file's slack space and saves it to a (text) file using a standard *Save As* dialog. Multiple files may be selected, but the resulting file slack file is usually not useful or complete. In some cases, this may help recover lost data which has been overwritten, but the user should not rely on this. Saving file slack as a text file may still result in some binary (eg. non-text) data.

See below for more information on file slack.

#### **About File Slack**

When Windows formats a hard disk, it uses the disk capacity to determine a cluster size - the minimum unit of disk space available for file storage. In most cases on NTFS file systems, this will be 4 kilobytes or 4096 bytes. This means that as file space is allocated to a saved file, the actual space used is stepped in 4 kilobyte increments. A 2 Kb file, for example, would still use (at least) 4 Kb of disk space. Checking a file's properties, shows that in every case (?) the size on disk is larger than the actual file size. Some of this disk space used is for attributes, security/permissions, etc., but in most large files, the majority of space is dedicated to actual file data.

But not all...! Since files - unless the size of data + attributes, etc. **exactly** equals a multiple of sector size - use disk space in 4 Kb increments, it is usual that some empty space in disk clusters exists. That empty space is not assigned to file data, or to attributes, security concerns, etc.; it is just *wasted* space and usually contains data left over from previous files which occupied the same clusters, or simply random memory bytes which were written with the file. That empty space (ie. **file slack**) *could* contain data placed there intentionally by malevolent programs, or *could* be used to hide data by the user. Programs such as **Slacker** can hide files within a file's slack space; interesting, but not a good idea unless you are sure the file size will not change or the file be erased.

The concept of file slack forms an important part of computer forensics - analysis of computer data for legal evidentiary purposes. An interesting short

video on the possible use of file slack to learn more about a computer user can be found <a href="here">here</a> on *YouTube*.



#### **Edit/Resolve Link**

This function *resolves* (ie. locates) the target file (or folder) of a **single** selected shortcut. A new tab is opened and the target file is selected. Locating the file/folder in this way is usually considerably faster than navigating to the target manually.

If the target cannot be located, for example, if it has been deleted, a Windows error message is displayed which allows you to locate the target file.





# **Navigation**/Selection Menu

**Click** or *Hover* on an item for more ...



## **Selection**/Select All



This function selects **all** files (and folders) in the files pane as shown in the current tab.



Info: Individual files may be deselected, after using **Select All**, by using **Ctrl**+*click\_on\_file*. In <u>Details</u> view, the file must be clicked in the first column, unless the <u>Full row selection in details view</u> option is enabled.



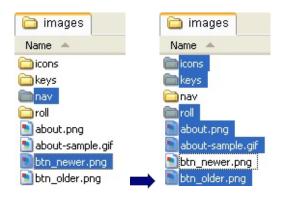
### **Selection**/Invert Selection



Using this function affects the files or folders in the files pane, causing

- selected files to be deselected, and
- deselected to be selected.

In other words, it inverts that state of selection for all contents of the current tab.





# **Selection**/Select All Of Same Type

This function selects all files in the folder of the same type as the **one** currently selected. For example, if the files pane (ie. currently folder) shows multiple types of images, ie. *gif*, *png*, *jpg*, *bmp*, etc., it is possible to select only jpg images by

- select a single jpg image, by clicking on it
- use this function **Select All Of Same Type**.

The end result is that all jpg files will be selected.



**Tip: Select All of Same Type** uses the file *type*, as determined by the Windows registry - not the file extension! This means, for example, that *image1.jpg* and *image2.jpeg* will **both** be selected, since they are both of type **JPEG Image**. Windows file types may be viewed by <u>enabling</u> the *Type* column in the files pane. You may select by file name using the <u>Wildcard Select...</u> routine.



#### **Selection**/Select None



This menu item deselects **all** files (and folders) in the files pane, ie. current tab.

All files may also be deselected by clicking in a blank area in the files pane, in the first column (usually *Names*) or clicking in any other column.



**Info:** Individual files may be selected, after using **Select None**, by using **Ctrl**+*click\_on\_file*. In <u>Details</u> view, the file must be clicked in the first column, unless the <u>Full row selection in details view</u> option is enabled.



### **Selection/Wildcard Select...**





This menu item allows the user to select files in the files pane (ie. current folder) using a wildcard pattern. A dialog is opened which allows the user to enter a new wildcard pattern, or use the *drop-down* button and

choose a previously used pattern. Clicking OK selects files and folders based on that pattern. Repeated use of **Wildcard Select...** is cumulative; additional files may be selected, adding to the current selection.

Unlike <u>Select All Of Same Type</u>, the selection process is based on file name and extension.

#### **About wildcard patterns**

A wildcard pattern is a file specification which contains symbols representing unknown characters, as well as *ordinary* alphanumeric characters.

The two wildcards available here are:

	this character substitutes for <b>zero or more characters</b> . Some examples are:	
	*file.txt	matches "somefile.txt", "my_file.txt", but not "my_files.txt" (intervening "s" prevents match).
	btn*.*	matches "btn_23.png", "btnumbers.txt" and "btn-img.jpg", but not "mybtn.jpg" (leading "my" prevents match) or "btn12" ("." specified must exist)
? (question	this character substitutes for any <b>single character</b> , which	

mark)	must exist.	Some examples are:
	final?.do	c matches "final1.doc", but not "final_chapter.doc" (? matches only 1 character, "_chapter" is not 1 character)
	file.tx?	matches "file.txt", but not "file.tx" (last wildcard character must exist)



# **Selection**/Wildcard Deselect...



This menu item allows the user to deselect files (already selected) in the files pane (ie. current folder) using a wildcard pattern. A dialog is opened



which allows the user to enter a new wildcard pattern, or use the *drop-down* button and choose a previously used pattern. Clicking OK deselects files and folders based on that pattern. Repeated use of **Wildcard Deselect...** is cumulative; additional files may be deselected, reducing the current selection.

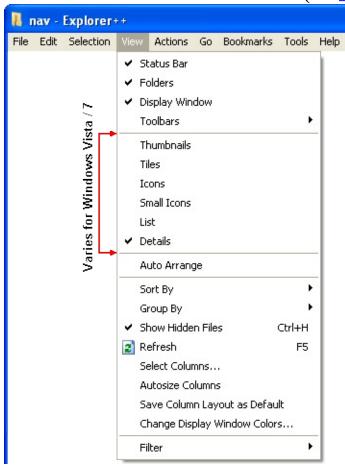
**Wildcard Deselect...** deselects files (and folders) based on file name and extension.

See Wildcard Select... for examples of wildcard patterns.

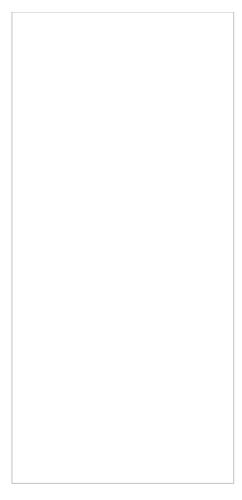


# **Navigation**/View Menu

**Click** or *Hover* on an item for more ... (see <u>below</u> for alternate menu)



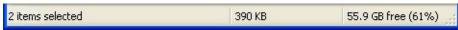
Windows Vista / 7



Screen capture courtesy of David Erceg - thanks!

#### **View**/Status Bar

#### **Click** or *Hover* on an item for more ...



The status bar presents some quick information and may be toggled on/off from the **View** menu.

#### Items/text

This area shows either

- the number of *items* (files and/or folders) and displays one of the following:
  - if no selection exists total **item count** (eg. *24 items*), a count of items in the folders pane (current folder)
  - if a selection exists total **selection count**, the number of items selected, or
- the *helper text* of a menu item when the mouse is hovered over that item. Example: hovering over the File/<u>New Tab</u> menu item displays "Creates a new tab".

#### Size

This area shows the actual item (files and/or folders) size and displays one of the following:

- if no selection exists total **file size**, the combined size of all files in the folder. Note that folder items are not included in this size, even if the <u>Show folder sizes</u> option is enabled.
- if a selection exists total **selected file size**, the combined size of all selected files (not folders)
- if the current tab is a *virtual* folder (ie. special Windows folder) the words

Virtual Folder. Selecting items has no effect.

If a real size is shown (not a virtual folder), then the size is affected by the <a href="Show all file sizes in:...">Show all file sizes in:...</a> setting.

#### Free space

This area shows free disk space for the volume which houses the currently active folder (files pane). Free space is shown in bytes (rounded to MB, GB, etc., regardless of any options settings) and in percentage of the entire volume.



### **View/Folders**

This menu item toggles the visibility of the <u>Folders pane</u>. When the **Folders pane** is hidden, its former window area is used by the <u>Files pane</u>, allowing more columns (or wider columns) to be displayed.

Toggling the visibility of the **Folders pane** may also be done through a button on the <u>Main toolbar</u>.



# **View/Display Window**

This menu item toggles the visibility of the <u>Display Window</u>. The Display Windows presents some additional information about selected files.



# **View**/Toolbars ▶

**Click** or *Hover* on an item for more ...



#### **About toolbars**

For general information about **Explorer**++'s toolbars, ie. moving, resizing, customizing, etc., see the toolbars <u>Overview</u>.



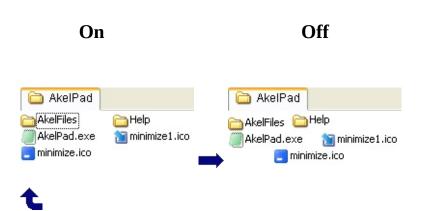
## **View/Auto Arrange**

When displaying items using the <u>Thumbnails</u>, <u>Tiles</u>, <u>Icons</u> or <u>Small Icons</u> methods, items are normally displayed in *orderly* columns, laid out according to available width in the <u>Files pane</u>. Checking the **Auto Arrange** menu item enforces this requirement.

When **Auto Arrange** is unchecked, items may be dragged to positions outside the columns allowing the user to visually organize the pane to his liking. This is not a permanent re-ordering; the effect is merely visual.

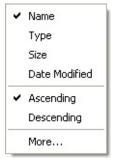
If the view is changed, for example from **Thumbnails** to **Icons**, the items are initially organized in columns even if **Auto Arrange** is not enabled.

The following image demonstrates what can be done with **Auto Arrange** turned off (disabled).



# **View**/Sort By ▶

**Click** or *Hover* on an item for more ...



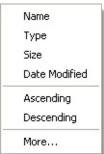
This menu selects a sort order for display of files and folders in the Files pane.

Selecting a **Sort By** order cancels a <u>Group By</u> order. The **Sort By** menu is built by **Explorer**++ based on the columns currently enabled in <u>Details</u> view; your menu may differ from the one shown here. Selecting an item in this menu has the same effect as clicking on the header for that column in the Files pane.



## **View**/Group By ▶

**Click** or *Hover* on an item for more ...



This menu selects a sorting order and grouping for display of files and folders in the <u>Files pane</u>.

Selecting a **Group By** order cancels a <u>Sort By</u> order. The **Group By** menu is built by **Explorer++** based on the columns currently being displayed in <u>Details</u> view; your menu may differ from the one shown here.



## **View/Show Hidden Files**



Clicking on this item toggles display of hidden files - on or off. Hidden files are those which have the <u>hidden attribute</u> set; they are *usually* masked from display if marked as hidden. This setting can be changed on a tab-by-tab basis; new tabs are created with this setting enabled.

In the Files pane (only), hidden files and folders are displayed with their accompanying icons *ghosted* (ie. *washed out*).

The *Control Panel/Folder Options/View* setting - **Show (Do not show) hidden files and folders** - has no effect on display of hidden items (see tip); **Explorer**++ controls hidden visibility for itself.

**Tip:** System files and folders may be *superhidden* - that is, they have **both** the Hidden and System attribute set - and are not displayed, even if **Show Hidden Files** is checked. To allow *superhidden* files and folders to be affected by this function, you must uncheck the "*Hide protected operating system files*" setting in the <u>Files and Folders tab</u> of **Explorer++**'s options.



Display of *superhidden* files is contingent on a Windows system setting being enabled; you must uncheck the "Hide protected operating system files" setting in the **Folder Options** applet (View tab). The **Folder Options** applet is found in the **Control Panel**. A <u>custom tool</u> found in **Appendix A** may be quicker for making this change. Note that **Explorer++** can control visiblility of *ordinary* hidden files (Hidden attribute, but **not** System attribute) **without** enabling the "Show hidden files and folders" option in the **Control Panel**.



## **View**/ **≥** Refresh



In the <u>Files pane</u>, all files (depending on **Explorer**++ setup) are displayed and sorted. Using **Refresh** updates the display; the files are re-sorted and re-displayed, subject to current settings (ie. <u>Sort By</u>, <u>Group By</u>, <u>Show Hidden Files</u>, etc.).

**Refresh** also restores the address of the currently active tab in the <u>Address bar</u>.

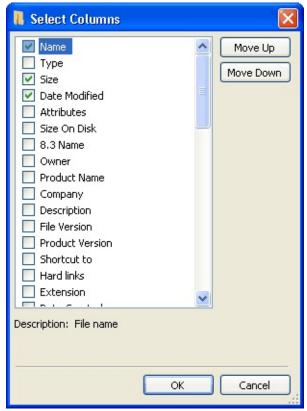


**Info:** The <u>Folders pane</u> is not refreshed (ie. rebuilt) by **Refresh**. Collapsing (clicking the minus, eg. [and mages]), then expanding (clicking the plus, eg. [and mages]) for a *node* in the Folders pane will refresh that *node*.



### **View/Select Columns...**

Click or *Hover* on an item for more ...



**Explorer**++ allows you to set data column visibility for folder listings on a **tab-by-tab** basis. Columns available also depends on the current tab's <u>folder type</u>. The settings here apply only to the current tab; future (new) tabs adopt the settings from the <u>Default Columns...</u> setting.

For more information about column settings, see <a href="here">here</a>.

#### **Columns available**

This area shows the list of columns available for the <u>type</u> of folder currently being viewed; checking the checkbox beside the name enables the column in the Files pane. This list of available columns may vary with the type of folder

currently being viewed (ie. the active folder for a tab). In addition, while a particular column may be checked, not every file in the folder may possess the type of data placed in that column. For example, image files may show data in the **Width** and **Height** columns, but text files will not. In addition, the columns is different for virtual folders, etc, as outline in the lists following.

#### Column Order

Columns are displayed (left to right in the Files pane) in the order shown, from the top down. The order may be changed using the **Move Up** and **Move Down** buttons.

#### Folder type

Folder type/name	Comments
<u>Control Panel</u>	Windows <i>virtual</i> folder: a collection of <i>applets</i> for modifying your system, etc.
<u>General</u>	This is a normal (ie. real) folder on your system. This type of folder comprises 99% of what you will view and presents, therefore, the most common list of columns.
My Computer	Windows <i>virtual</i> folder: shows volumes (ie. drive letters) and some other virtual or system folders, such as <i>My Documents</i> , <i>Control Panel</i> , etc.
<u>Network</u>	Windows <i>virtual</i> folder: This is actually the <i>Control Panel</i>
<b>Connections</b>	applet which manages connections.
<u>My Network</u>	Windows <i>virtual</i> folder: network configuration tools, and
<u>Places</u>	Entire Network (access to network computers and devices).
<u>Printers and</u>	Windows <i>virtual</i> folder: list of printers, faxes and printer
<u>Faxes</u>	drivers connected to your system.
<u>Recycle Bin</u>	Windows <i>virtual</i> folder: collection of erased files which are still recoverable.

Following is a list of all columns available for the different types of folders which can be viewed. Default columns (with a checkmark in the **Def** column) and default column order, assigned by the system (ie. order, left to right) ,are also shown. The user may change the default widths (always 150 pixels) through the <u>Save Column Layout as Default</u> menu item.



**Incomplete:** Columns marked as "n/a" (not available) may not be implemented as of this version of **Explorer++**, ie. they may be present but contain no data.

#### **Control Panel**

Def Column	Description
√ 1 Name	applet name
$\sqrt{2}$ Comments	brief description of applet's purpose

#### General (real File or Folder) - not all tags apply to all file types

Def Column	Description or Comment
√1 Name	file or folder name
√ 2 Type	Windows associated descriptive file type
√ 3 Size	file size or folder contents size (if enabled)
√ 4 Date Modified	date of last file/folder modification. Some applications may modify the file without changing this attribute.
Attributes	common file <u>attributes</u>
Size On Disk	amount of disk space used by file - see <a href="here">here</a> for more
8.3 Name	file name in older (ie. DOS) 8 character name, 3 character extension format
Owner	Windows security - owner of file or folder
<b>Product Name</b>	executable - from Version property sheet
Company	executable - as above
Description	executable - as above
File Version	executable - as above

Product Version executable - as above

Shortcut to target of shortcut (.LNK or .PIF) file

Hard links number of hard links associated with this file - see <a href="here">here</a> for

more

Extension file extension (minus *dot*)

Date Created date of file or folder creation

Date Accessed date of last access (read or write) of file or folder. On

Windows XP this may only reflect the nearest hour. Also

see tip below.

Title user supplied - title of file - entered in Summary property

sheet

Subject user supplied - subject of document - entered in Summary

property sheet

Author user supplied - author of document - entered in Summary

property sheet

Keywords user supplied - associated key words - entered in Summary

property sheet

Comment user supplied - comment - entered in Summary property

sheet

Camera Model EXIF data, recorded by camera in an image file Date Taken EXIF data, recorded by camera in an image file

Width width of image (bits)
Height height of image (bits)

**Note:** The following media tags **may** be associated with audio, video or ? - tagging of media files allows many options!

Bit rate media (audio/video) file - bit rate associated with data Copyright media (audio/video) file - internal tag identifying file as

copyrighted

Duration media (audio/video) file - play time

Protected media (audio/video) file - identifies file as protected media

Rating media (usually video) - internal tag for rating

Album artist media (audio) - internal tag (text)
Album media (audio) - internal tag (text)

Beats-permedia (audio) - internal tag minute Composer media (audio) - internal tag (text) Conductor media (audio) - internal tag (text) Director media (video) - internal tag (text) media (audio) - internal tag (text) Genre media (audio) - internal tag (text) Language media (video) - internal tag (text) Broadcast date Channel media (video) - internal tag (text) Station name media (video) - internal tag (text) Mood media (audio) - internal tag (text) media (video) - internal tag (text) Parental rating media (video) - internal tag (text) Parental rating reason media (video) - internal tag (text) Period media (video) - internal tag (text) Producer media (audio) - internal tag (text) **Publisher** Writer media (video) - internal tag (text) Year media (audio) - internal tag (text)

**Tip:** The *Date Accessed* timestamp may not be reliable in Windows XP. It is subject to a registry setting - *NtfsDisableLastAccessUpdate* - which does not exist, by default. To enable automatic updating of *Date Accessed*, open a command prompt window and execute the following command:



#### fsutil behavior set DisableLastAccess 0

Executing this command creates the required registry entry and enables automatic updating of *Date Accessed*. Updating can be disabled by setting the value to 1.

#### My Computer

Description

√ 1 Name	drive name (and letter) or special folder name
√ 2 Type	Local Disk, CD Drive, Removable Disk, Folder, etc.
√ 3 Total Size	size available on drive
√ 4 Free Space	unused drive space available (bytes, GB, etc.)
Comments	provided by Windows - folder function, drive details, etc.
File System	FAT (ie. FAT16), FAT32, NTFS, Unknown

## **Network Connections**

Def Column	Description
√ 1 Name	name of connection, eg. Local Area Connection
√2 Type	n/a (future feature?)
√ 3 Status	n/a (future feature?)
√4 Owner	n/a (future feature?)

# **My Network Places**

Def Column	Description
√ 1 Name	name of tool or applet
$\sqrt{2}$ Comments	description of tool or applet

## **Printers and Faxes**

Def Column	Description
√1 Name	device or driver name (descriptive name, not file name)
√ 2 Documents	number of documents in queue (ready for printing)
√ 3 Status	Ready, Printing, error status, etc driver dependent
√ 4 Comments	user assigned, or place there by installation
√ 5 Location	user assigned? network?
√6 Model	brand name, model name

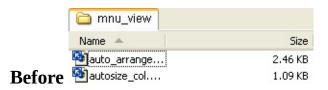
# **Recycle Bin**

Def Column	Description
√ 1 Name	file or folder name
√2 Original	n/a (future feature?)
Location	
√ 3 Date Deleted	n/a (future feature?)
√ 4 Size	file size or folder contents size (if enabled)
√ 5 Type	Windows associated descriptive file type
√ 6 Date Modified	date of last file/folder modification

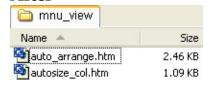


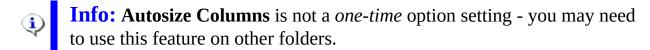
## **View/Autosize Columns**

This menu item automatically resizes enabled columns to fit the data shown in the Files pane, including items which must be scrolled into view. Data items should fit exactly (no extra space) and should not be truncated. This operation does not affect other tabs, or newly opened tabs.



#### **After**







## **View**/Save Column Layout as Default

This function saves the current column layout as the **default** for any future new tabs, but only of the same <u>folder type</u>. The column layout saved includes:

- which columns are enabled,
- column order and
- column width.

Setting the default columns using the <u>Default Columns...</u> option, accomplishes nearly the same thing, but uses the current default column widths rather than the current column widths.

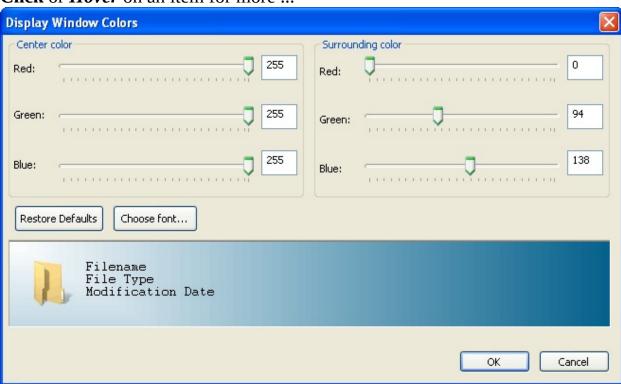
For more information about column settings, see <a href="here">here</a>.



## **View/Change Display Window Colors...**

This dialog allow you to customize the colors and font of the <u>Display Window</u>. See below for a brief <u>description</u> of the color gradient used as a background.

**Click** or *Hover* on an item for more ...



#### **Description of color gradient**

The Display Window background is a diagonal color gradient in 2 directions. Think of the **Center color** as the *starting* point of the gradient - a single point in the top-left corner of the **Display Window**; the **Surrounding color** is the *final* color, located in the bottom-right corner. The gradient is *drawn diagonally* from top-left to bottom-right, but also in a pseudo-complementary (ie. at 90°) direction. The end result is a pleasing diagonal gradient with colors on the left generally close to the **Center color** and colors to the right generally close to the **Surrounding color**. The algorithm behind drawing the gradient is not useful;

the colors should just be adjusted visually for the best combination.

#### **Center color**

The controls for the **Center color** (ie. top-left corner) allow RGB (Red/Green/Blue) adjustment, either by moving the slider or by entering an integer (0..255) in the edit box to the right of each slider. For a little help with RGB colors, here are some samples:

R	G	В	Common name	Sample
0	0	0	black	
255	0	0	red	
0	255	0	green	
0	0	255	blue	
255	255	0	yellow	
255	0	255	magenta	
0	255	255	cyan	
255	255	255	white	

#### **Surrounding color**

The controls for the **Surrounding color** (ie. bottom-right corner) allow RGB (Red/Green/Blue) adjustment, in a manner similar to the <u>Center color</u>.

#### **Restore Defaults**

This button restores **Explorer**++'s built-in defaults for the Display Window, that is

- Center color = RGB (0,0,0)
- Surrounding color = RGB (0,94,138)

- Font = "Segoe UI"
  - height = 10 (approximate device dependent)
  - $\circ$  weight = 500 (medium)
  - no italic
  - no underline
  - no strikeout
  - default character set
  - high quality output

Note that the "Segoe UI" font is an included font in Windows Vista and 7; most Windows XP users will not have access to that font and their system will substitute an available font, probably "Courier". A similar font might be

- Lucida Sans (Bold),
- Microsoft Sans Serif (Bold),
- Tahoma, or
- Trebuchet MS

but nearly any font may be used.

#### Choose font...

This button opens a standard Windows dialog allowing the user to choose a suitable font for text in the Display Window. Headings and information text both use this font. See comments in <u>Restore Defaults</u> regarding the font used.

#### **Display Window preview**

This area previews the color gradient and text using the selected <u>font</u>. Changes made to the <u>Center color</u> and <u>Surrounding color</u> are previewed, as the changes occur, so that the user may choose the color gradient visually.



## **View**/Filter ▶

Click or *Hover* on an item for more ...



Filtering allows certain files to be masked from view in the Files pane; **only** the files you specify (and folders) will be visible. This helps find files quickly, particularly in folders which contain a large number of files, such as the *Windows* folder. Filtering can be applied on a tab-by-tab basis.

#### Set Filter...





The filter specified is in the form of a wildcard pattern, in a manner similar to **Wildcard Select**. See <a href="here">here</a> for a description of wildcard patterns. When the pattern is set (by clicking OK), then the filter is <a href="here">applied</a> automatically to the current

tab and only those files which are a match for the wildcard pattern are displayed.

The **Set Filter...** dialog *drop-down* shows previous wildcard patterns used in filtering.

#### **Apply Filter**

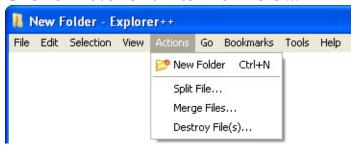
This menu item is a toggle which enables/disables filtering; filtering (when enabled) always uses the last set wildcard pattern, as shown on the **Set Filter...** (Filter Results) dialog.

When filtering is enabled, the following image is present in the center of the Files pane: Filtering Applied. If filtering is disabled, the files which are now visible may be placed at the top of the file list; a Refresh may need to be done in order to sort the files.



# **Navigation**/Actions Menu

**Click** or *Hover* on an item for more ...



## **Actions**/ **▶** New Folder



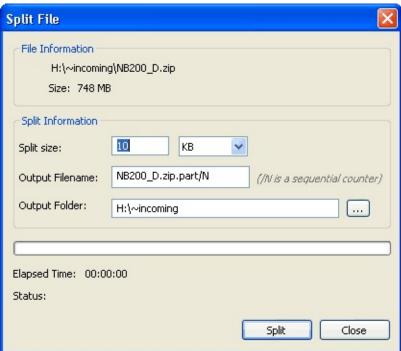
This menu item creates a new folder in the current folder (tab). The default name is **New Folder**, but creation of the folder automatically enters <u>rename</u> mode: New Folder so that the new folder may be renamed by the user to something more useful.

Creating a new folder inserts it into the file list (Files pane), obeying the setting of <u>Insert new items in their sorted positions</u>.



## **Actions**/Split File...

**Click** or *Hover* on an item for more ...



This function provides a useful operation - it splits the **selected** file into equal sized *sub-files*. While this may not seem that useful at first glance, many email providers, for example, have a limitation on the size of attachment that can be sent with a single message. If the file is over that size, then the server will automatically reject that message entirely; the file can be split, sent in parts, then *re-assembled* when received.

The companion function - <u>Merge Files...</u> - restores the original file by combining the *sub-files*.

#### **Split size:**

Enter the split size in the left box; set the units in the right box using the *pulldown*. Units are determined by the units *drop-down* list to the right and may be

- Bytes,
- KB kilobytes =  $1024 (2^{10})$  bytes,
- MB megabytes =  $1024 \text{ KB or } 1,048,576 \ (2^{20}) \text{ bytes, or }$
- GB gigabytes = 1024 MB or  $1,073,741,824 (2^{30})$  bytes.

The final size of the individual *sub-files* is a combination of the size and units selected.

#### **Output Filename:**

The output filename is actually a pattern for consecutive naming/numbering of the output files; the string "/N" (capital N only!) represents the *variable* numeric part of the future file names (e.g. 1, 2, 3, etc.). The default is <original filename>.part/N, which in the sample dialog above (original file = NB200\_D.zip) would create *sub-files* of

- NB200\_D.zip.part.1
- NB200\_D.zip.part.2
- NB200\_D.zip.part.3
- etc.

The *sub-file* naming pattern **must** contain a variable (i.e. /N) and the numeric variable portion of the new files always starts with 1.



**Tip:** Be careful with leading zeroes in the output filename; they are treated as constants. For example, using NB200\_D.00/N as the pattern yields files NB200\_D.001, NB200\_D.002 but would also yield NB200\_D.0010 instead of the *anticipated* NB200\_D.010! **Explorer**++'s Merge Files... routine can handle this naming, but other *split/join* applications may not behave properly.

#### **Output Folder:**

The output folder (where the sub-files will be placed) defaults to the same folder

as the target file. The folder may be chosen by typing (the target folder must exist) or by using the ... button to the right which opens a standard *Browse for folder* dialog (see tip for a picture of this Windows dialog).

#### **Split**

Clicking the Split button commences the operation, creating *sub-files* of the specified size. The last file may not be the same size; it is simply the remaining portion of the original file. Files are named the same as the target file, but with a number appended, that is, if **message.txt** is split, *sub-files* will be **message.txt.1**, **message.txt.2**, and so on.

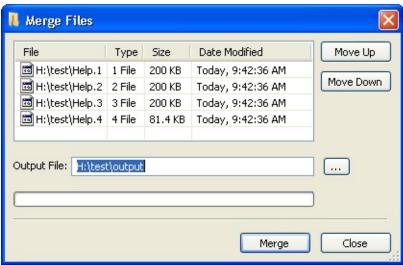


**Info:** If **Split File...** involves creating a large number of files (e.g. > 500), there may be delays in response, depending on the speed of your computer. Be patient - **Explorer++ will** finish the operations properly.



## **Actions**/Merge Files...

**Click** or *Hover* on an item for more ...



This function merges **selected** files (which were previously split by <u>Split File...</u>, or other utility) into a single file. The merge operation is a simple binary concatenation of the files, in the order shown.

#### Files to be merged

This area contains the list of files to be merged; the order in which they appear is the order in which they will be merged. The order may be changed through the use of the <a href="buttons">buttons</a> to the right. There is a good likelihood that - if the files were created by <a href="Explorer++">Explorer++</a>'s <a href="Split File">Split File</a> routine, they will already be in the correct order. Note that the <a href="Date Modified">Date Modified</a> column respects the setting of the <a href="Show user friendly dates">Show user friendly dates</a> option.

#### Move Up/Down buttons

These buttons help manipulate the file list by moving the selected file (one only!) up or down in the list. If the files were previously split by <a href="Split File...">Split File...</a>,

they *should* already be in order.



**Info:** Multiple files may be selected by default, but **Up/Down** operations only operate on a **single** file.

#### **Output File:**

This edit box contains the path and file name to the final *merged* output file. The default name is **output** (no extension); the file will be generated by default in the same folder as the files in the merge list.

#### **Output Folder:**

This button opens a standard Windows *Browse for folder* dialog (see tip for a picture of this Windows dialog), allowing the user to place the output file in a different location.



**Tip:** The *Browse for folder* dialog **only** selects a folder; the user must then add a file name. Failure to add a file name will result in an error.

**Example:** Browse for folder yields "F:\myfiles\temp", but user must add "\final.zip" as filename, making

**Output File:** "F:\myfiles\temp\final.zip".

#### Merge (or OK)

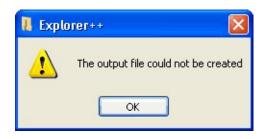
Clicking **Merge** (or **OK** - button text may change) performs the file merge operation, creating a new file. The merge is done using simple binary concatenation without regard for contents. While any set of files can be merged, the **Merge Files** action is designed to *re-combine* files created by the **Split File** action.

Tip: Although individual files may be selected before merging (eg. hold



**Ctrl** key and select random files), this has no effect. All files in the dialog will be merged in the order shown, regardless of any selection.

#### **Errors**

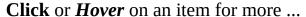


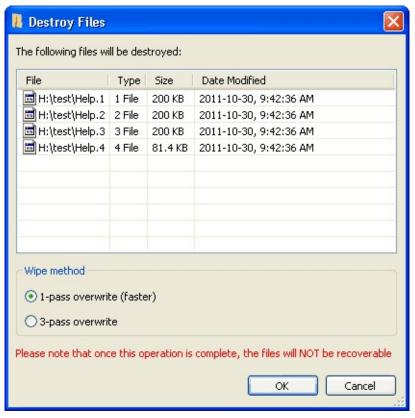
If a **Merge** error occurs, it is likely for one of the following reasons:

- the named output file already exists.
   Merge will not offer to overwrite the file.
- no file was specified (e.g. C:\files\temp\)
- the output file name matches a folder name, e.g. C:\files\temp where temp is a sub-folder. This may be a result of choosing an output folder but forgetting the file name - see <u>Output</u> <u>Folder:</u> above.



## **Actions**/Destroy File(s)...





#### **Page Contents**

- 1. Why use secure deletion?
- 2. What does Destroy File(s) actually do?
- 3. Speed
- 4. Early termination
- 5. <u>Disclaimer</u>

The **Destroy File(s)...** action securely deletes selected files by overwriting their file space, preventing file recovery. The dialog allows

- removal of files marked for deletion, and
- selection of either a 1-pass or 3-pass overwrite.



#### Why use secure deletion?

Today's computer stores much more than just games and documents; many users

access secure websites using password protection to

- buy and sell stocks and securities,
- manipulate their bank accounts and move money electronically
- pay bills
- make purchases using credit card information.

The computer of such a user likely contains records of such transactions which, in the wrong hands, could lead to identity theft, or worse! Although encryption is often used as a security measure, it has already been shown that RSA public key encryption - once considered unbeatable (even using sophisticated computers) in less than thousands of years - may be hacked under certain conditions in as little as several days. In short, we must always think about

- what is possibly on our computer passwords, sensitive data, etc., and
- how can we protect it.

Most of us know that deleted files can be recovered fairly easily by tools such as Recuva, a freeware product. But today computer forensic tools can be used to read residual magnetism on hard drives, possibly re-constructing portions of data that *could* be used unlawfully. Secure deletion of files - in a way which renders them unrecoverable - is one simple way we can safeguard some of our personal data.



Info: USB flash drives, although not magnetic, may still be recovered in a manner similar to hard drives. Secure deletion can be useful for flash drives as well.

#### What does Destroy File(s) actually do?

The **Destroy File(s)** - secure deletion - routine performs the following tasks on each file:

- 1. locates file data
- 2. determines the actual size of the file on disk, i.e. how many clusters are allocated to that file
- 3. opens the file, blocking any sharing mode, thus stopping the file from being

- opened (by another network user, for example) while it is being overwritten
- 4. extends the file out to the end of its last sector, eliminating file slack
- 5. starts at the beginning of the file, and writes in the first-pass data, 0x00 over the length of the whole file. This overwriting effectively eliminates the former contents of the file.
- 6. if **3-pass overwrite** has been chosen, then
  - 1. starts at the beginning of the file, and writes in the second-pass data 0xFF over the length of the whole file.
  - 2. then, writes in a *random* set of data, again byte by byte, as the third pass. This random data is obtained via the operating system's cryptography functions, and as such, is extremely difficult to duplicate.
- 7. flushes (ie. empties) all memory buffers connected to the file
- 8. closes the file and *frees* the Windows file handle used for the above procedures
- 9. deletes the file **without** sending it to the Recycle Bin.

#### **Speed**

**Destroy File(s)** writes data either once or three times, one byte at a time, and is, therefore, somewhat *disk intensive*. What this means is that the routine is not as fast as normal file writing. Calculation of an estimated write time would be difficult, since it would be dependent on a number of *uncertain* aspects, namely

- the type (number of cores, etc.) and speed of processor
- the type of drive (IDE, EIDE, SCSI, SATA, USB, flash, etc)
- fragmentation of the file fragmented files contain clusters that may be physically farther apart
- amount of system memory this affects the speed of system operations which indirectly could affect write times
- etc.

Attempting to use **Destroy File(s)** on a large file may create a **very** long wait time, so the following estimates are included here for reference and comparison:

**Hardware:** Pentium III processor, 1.2 Ghz, 768

Mb ram

**Operating** 

System: Windows XP SP2

**Drives:** 1: EIDE, 160 Gb

2: USB, 1.0 Tb

Drive 
$$\pm 2.1 \text{ sec} \pm 19.6 \text{ sec} \pm 3.2 \text{ min}$$
**pass** Drive  $\pm 1.8 \text{ sec.} \pm 16.0 \text{ sec} \pm 2.6 \text{ min}$ 

Drive  $\pm 9.9 \text{ sec} \pm 1.6 \text{ min} \pm 16.0 \text{ min}$ 
**pass** Drive  $\pm 8.5 \text{ sec.} \pm 1.4 \text{ min} \pm 14.0 \text{ min}$ 

The times for the USB drive are shorter, I believe, owing to the larger drive capacity (shorter seek time). To put these times into perspective, for the listed hardware, one could estimate the secure deletion times as

- 2 seconds/megabyte for 1-pass, and
- 10 seconds/megabyte for 3-pass.

This means that deleting a DVD image file ( $\pm$  4 Gb), for example, using 3-pass secure deletion, could take as long as 11.5 hours! Sleep on it!

#### **Early termination**

On the <a href="hardware">hardware</a> listed above, the Windows Task Manager reports that **Explorer++** is using between 95% and 99% of the CPU time during a **Destroy File(s)** operation, despite the fact that the process is operating at *Normal* priority. The effect of this is that

• the appearance of **Explorer++** (not the **Destroy File(s)** dialog) is that of a

- program that has "stopped responding to the system", and
- attempting to switch to another application (via the taskbar) and do something else is a waste of time.

If **Destroy File(s)** is launched in error on a large file (see <u>times</u> above), it can be prematurely terminated using the Task Manager by

- 1. opening the Task Manager using Ctrl+Alt+Delete
- 2. selecting the process **Explorer++.exe**
- 3. clicking *End Process*
- 4. agreeing to the warning dialog

The effect of this is to forcefully close **Explorer**++ and, of course, the **Destroy File(s)** dialog (a child window), freeing up your system resources. However, take note that

- settings for **Explorer**++ (ie. open tabs, views, etc.) may not have been saved, and
- the file(s) targeted for secure deletion were, in all likelihood, damaged (partially overwritten), but not fully deleted.

#### **Disclaimer**

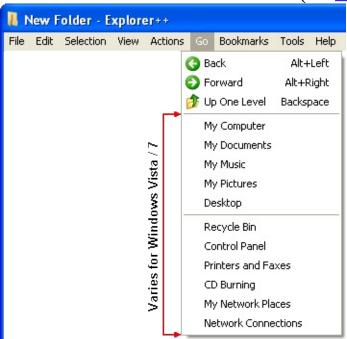
Although the **Destroy File(s)** action is deemed to be secure, **Explorer**++ is released under the GNU General Public License and no warranty as to suitability is offered. Section 15 of the GNU license states that the program is provided "as-is" without warranty of any kind.

In other words, if you use the **Destroy File(s)** routine, and you **still** get busted for importing ivory when the Police seize your computer and find your files, you're on your own!



# Navigation/Go Menu

**Click** or *Hover* on an item for more ... (see <u>below</u> for alternate menus)



# Windows Vista Windows 7

## Go/ @ Back



**Explorer**++ maintains a list of previous locations, or history, for each tab. The **Back** (and <u>Forward</u>) items on the **Go** menu can walk through this history, much like hyperlinks in HTML browsers (eg. Mozilla Firefox).

**Back** returns the currently active tab to an older location, closest to the current location in the history. If this item is disabled, the Files pane (active tab) is displaying the oldest location in the history, the location when the tab was first created, or when **Explorer++** was first opened.

#### **History**

A tab's history can be thought of as a collection (or list) of locations in the order they were visited, with the oldest at one end, and newest at the other. Locations are added to history each time a location is visited by

- clicking on a drive in the <u>Drives toolbar</u>,
- clicking on a folder (or other item) in the Folders pane,
- double-clicking (or single click, with <u>Single click option</u> enabled) on a folder in the <u>Files pane</u>,
- clicking on a Bookmark, either from the <u>Bookmarks menu</u> or the Bookmarks toolbar,
- clicking on an item from the **Go menu**, **except** Back or Forward,
- clicking on the Up button on the <u>Main toolbar</u> (same function as on the Go menu), or
- entering an address in the <u>Address bar</u> which changes the location.

Executing **Back** or **Forward** simply walks the Files pane through the current history for a tab; the functions do not add to, or subtract from, the location history. It is possible that history locations may be duplicated, if they were visited by one of the above methods more than once. As **Back** or **Forward** is used (either from the **Go** menu or the <u>Main toolbar</u>), items in history are *redistributed* between the *Back history* and *Forward history*; Explorer++ maintains

histories in both directions.



#### Go/ • Forward



**Explorer**++ maintains a list of previous locations, or history, for each tab. The **Forward** (and <u>Back</u>) items on the **Go** menu can walk through this history, much like hyperlinks in HTML browsers (eg. Mozilla Firefox).

**Forward** returns the currently active tab to a newer location, closest to the current location in the history. If this item is disabled, the Files pane (active tab) is displaying the newest location in the history.

See <a href="here">here</a> for a more detailed explanation of a tab's history.



## 



This menu item changes the address of the currently active tab to the *parent* folder (or location), as shown in the Folders pane (providing it is up to date).

The parent folder (or location) is the folder which contains the folder currently displayed.

**If Up One Level** is disabled, the Files pane is currently displaying the highest level available in the Folders pane (*virtual* tree) - <u>Desktop</u>.



## **Navigation**/Bookmarks Menu

**Click** or *Hover* on an item for more ...

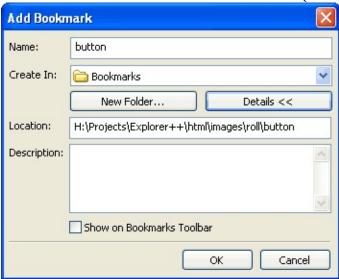


User bookmarks are displayed at the bottom of the menu. Clicking on a user bookmark "goes there", ie. set the active tab in the Files pane to the location for that bookmark. If the location does not exist (ie. folder for bookmark has been renamed or deleted), no change is made.

## **Bookmarks**/★ **Bookmark** This Tab...



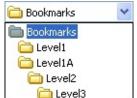
**Click** or *Hover* on an item for more ... (*Details* shown expanded)



#### Name:

The **Name** field allows entry of the final bookmark name, as it will be displayed on the <u>Bookmarks menu</u>. You should choose a name that conveys (to you) the usage of this location.

#### **Create In:**



Bookmarks may be built in a hierarchy, similar to the tree shown in the <u>Folders pane</u>, through use of the <u>New Folder...</u> button. Bookmarks, therefore, may be created on any level (ie. in any subfolder) which exists. Clicking this field (or the *drop-down* button) opens a list which shows all current levels;

the user may select which folder or level to create the new bookmark in, as in the image.

#### New Folder...

This dialog creates a subfolder in **Bookmarks** (the *root* level for user bookmarks), or within any other bookmark subfolder which currently exists. Note that folders may **contain** bookmarks, but do not have a bookmark associated with them.

**Click** or *Hover* on an item for more ...



**Bug:** Creation of a new folder (ie. one level below Bookmarks) is fine, but creation of second folder within the first (ie. two levels down) causes the folder names to be displayed incorrectly on the **Bookmarks** menu. All subfolders past the first level are shown with the same name - the name of the lowest level. **Workaround:** The <u>Organize Bookmarks</u> dialog displays the bookmark hierarchy and folder names correctly.



During creation of a new folder on the same level, **Explorer**++ does not check for duplicate names.

See also - fatal error (bug), when <u>deleting</u> empty bookmark folders.

### **Location:**

Normally, this field shows the URL (ie. location) of the currently active folder in the Files pane, but you may edit it as desired. Make sure that the location you edit actually exists.

Info: Any bookmark with no location (ie. empty string) will open in the

# default new tab folder.

## **Description:**

This field is normally not shown, but appears as part of the bookmark's <u>Properties</u> dialog in the <u>Organize Bookmarks</u> tool. Any user comments about this bookmark may be entered here, such as, perhaps:

- the use of this folder (eg. "Temporary storage for untested software", "Killer apps!")
- a date ("Wednesday's accounting updates")
- backup information ("These ZIP files have been archived")
- etc.

#### **Show on Bookmarks Toolbar**

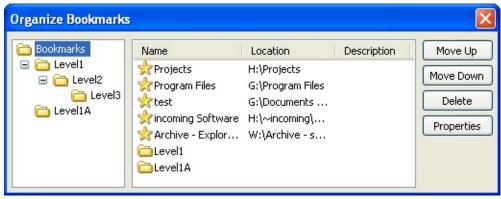
Checking this box (or menu item) forces the bookmark created to be shown on the <u>Bookmarks toolbar</u>. If this box is not checked at the time of bookmark creation, it may be checked later as part of the <u>Properties</u> dialog in the <u>Organize Bookmarks</u> tool. Folders housing bookmarks may also be designated to show on the Bookmarks toolbar.



## **Bookmarks**/**★** Organize Bookmarks...



**Click** or *Hover* on an item for more ...



#### Folders tree

This pane shows the hierarchical *tree* structure of the bookmarks collection. Folders can be expanded to show their contents (more folders only). Selecting a particular folder displays the contents (including bookmarks) in the **Bookmarks & Folders** pane to the right. The folder **Bookmarks** is the parent (or root) folder of all subfolders or bookmarks.

#### **Bookmarks & Folders**

This pane displays the contents of a selected folder in the **Folders tree** to the left. In addition to the bookmark or folder's name, it's location and any comment (Description) are displayed. The three columns may be resized (by dragging the edges of the column headers), but not dragged into a different order.

Double-clicking on a bookmark ( $\Rightarrow$ ) transfers the current tab to that location, ie. *goes* to the bookmark, while double-clicking on a folder ( $\stackrel{\frown}{}$ ) opens that folder and displays its contents.

#### **Context Menu**

#### **Click** or *Hover* on an item for more ...



Each bookmark item in this pane has a context (ie. right-click) menu which is quite similar to the context menu for items on the <u>Bookmarks toolbar</u>, with the addition of a <u>Show on Bookmarks Toolbar</u> item.



**Incomplete:** The *New Bookmark...* and *New Folder...* items on this menu are not yet coded, ie. they are non-functional.

#### Move Up, Move Down

These buttons move a selected bookmark (or folder) in the Bookmarks & Folders pane up or down in the bookmarks list. Only a single bookmark or folder may be selected at a time.

#### **Delete**

This button deletes (with a confirmation dialog) a single bookmark or folder selected in the Bookmarks & Folders pane. Deleting a folder obviously deletes all the bookmarks and folders it contains.

**Bug:** Deleting a folder does not update the Folders tree until the next opening of the **Organize Bookmarks** dialog.



It is possible to create a new folder, then save the bookmark elsewhere or cancel saving the bookmark, thereby creating an empty folder.

Attempting to subsequently delete an empty folder will cause a **fatal crash** 

**Workaround:** Prior to deleting a folder, select it in the Folders tree to ensure that it is not empty. If necessary, add a dummy bookmark to the

## **Properties**

You edit the properties for any item selected in the Bookmarks & Folders pane. If the item is a folder, then the **Location:** field is absent.





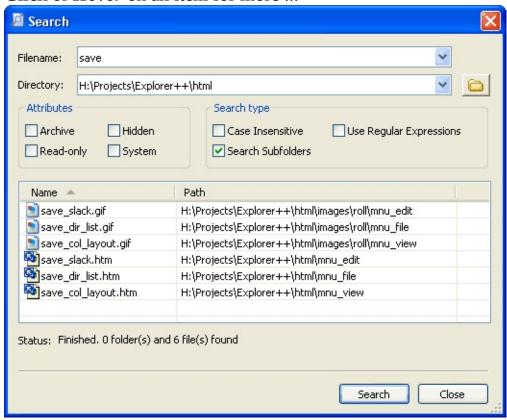
# **Navigation**/Tools Menu



## **Tools**/ **Search...**



Click or *Hover* on an item for more ...



The Search dialog provides a quick and convenient way to locate files or folders, based on a search *pattern* (partial name, etc.). The results area provides standard *Shell* context menus for each item found, allowing you to view, edit, copy, delete, etc. the files or folders.



**Info:** The Search routine can **only** find files/folders by name or attributes; no searching for text **within** a file can be done.

#### **Filename**

This field contains either

• the partial file name (or search *pattern*) to search for. Although <u>wildcard</u> <u>patterns</u> may be used, it is not strictly necessary to do so; the search implemented here will match a **partial** filename (similar to the built-in Windows search tool) without using wildcard characters. A *drop-down* list is available with quick access to previous search *patterns*. If using a partial file name (or wildcard) *pattern* here, make sure the <u>Use Regular</u> <u>Expressions</u> checkbox is not checked to prevent the pattern from being interpreted as a regular expression.

or

a regular expression to match. Using a regular expression requires the <u>Use</u>
 <u>Regular Expressions</u> checkbox be checked.



**Tip:** The **Filename:** field is also used for entering Regular Expressions, which can be quite long. Currently, this field does not scroll, so your long expression may not be possible to enter. Simply resize the whole window (larger) for more room in the edit box.

## **Directory**

This field should contain the folder in which to perform the search, or the parent folder, if the <u>Search Subfolders</u> box is checked. The button beside the field opens a Windows *Browse For Folder* dialog (see <u>tip</u> for a picture of this Windows dialog), allowing the user to navigate to and set the **Search Directory**. A *drop-down* list is available with quick access to previous search directories.

The **Search Directory** defaults to the folder/directory of the currently active tab.

#### **Attributes**

Checking any <u>attributes</u> provides a filtering mechanism; files searched must satisfy the Filename *pattern* AND the attributes if they are to be included in the results.

#### **Case Insensitive**

The state of this checkbox determines whether text case (i.e. *UPPER* or *lower* case) will be considered during the search.

- **checked** searches are case insensitive, that is, *UPPER* and *lower* case are considered the same. Searching for "gif", for example, will also find "GIF" and "Gif".
- **not checked** searches are case sensitive and the target and results case must match exactly, that is, "gif" ≠ "GIF" ≠ "Gif".

#### **Search Subfolders**

Normally, the search would be done only in the scope of the folder shown as the <u>Directory</u>. However, if this box is checked, all subfolders (and subfolders of subfolders, etc.) will be included in the search. Results can be from either the search Directory, or any subfolder.

### **Use Regular Expressions**

If this box is checked, then the text entered in the <u>Filename</u> edit box is assumed to be a regular expression and the search is done using pattern matching instead of simple file name comparisons. Regular expressions, while appearing complicated to the user of text and wildcard expressions (e.g. "\*.jpg"), can be a more flexible and powerful approach to searching for files and folders. Having this tool available - as well as *conventional* (i.e. non regular expression) text searching - provides superior capabilities and choice to the user. For an introduction (and reference) to the use of regular expressions in Search, see the <u>Regular Expression Primer</u>. Regular Expression searches obey the settings of the **Attributes** and **Search type** checkboxes.

#### **Results pane**

When the search is completed, this list shows the name and path (ie. location) of all files found which matched the criteria for (partial) name and attributes. The **Name** and **Path** columns are resizable, and *sortable* (ascending or descending, by clicking on the column header) for convenience when numerous results are visible.

**Tip:** Each file in the Results pane has a context (ie. right-click) menu. Two items on this menu are of particular interest:

- **Open** this opens the file in any application registered to that file type or presents a dialog if the type is not registered. This may also be accomplished by double-clicking on the file.
- **Open file location** this opens a new tab at the folder which houses the file. The target file is already selected in the new tab. If multiple files were selected originally, only a single tab is opened and a single file selected.

This context menu is constructed from Windows *shell* associations; items present will vary with the file type.



**Info:** The Microsoft .NET framework, when present on a system, creates a subfolder in the Windows folder called "*assembly*". The nature of the .NET installation may interfere with **Explorer++** (Windows Explorer's exploration is *modified*) successfully browsing this folder. If this folder is included in your search (usually by virtue of using the <u>Search Subfolders</u> option), some results unusual results (eg. incorrect file names, locations) may be expected, but these erroneous results are usually obvious.

#### **Status:**

This area shows

- the folder being searched (quickly!), as the search progresses,
- "Cancelled." if the user stopped the search prematurely (by clicking the



Stop button or by pressing **Enter** or **spacebar**), or • the final count of folders and files found, when the search completes.



## **Tools**/ **Search...**/Regular Expression Primer

**Explorer**++'s **Search** tool can search for files and folders using regular expressions, but this concept might be foreign to some users. This primer hopes to shed enough light on the subject to allow you to use regular expressions - at least in a simple form - in the **Search** too. For more in-depth treatment of this subject, see other resources; the Internet has volumes of information available. Note that because only file and folder names are being searched for, regular expressions which involve multiple lines and replacing text are not used.



**Caution:** Be mindful of what you read on the Internet; regular Expressions are somewhat platform/application specific. While common behaviours exist, some platforms/applications introduce syntax which may not work in Explorer++. For the most part, the Search dialog uses a subset of TR1 Regular Expressions.

## What are Regular Expressions?

Regular expressions are a concise and flexible notation for finding and replacing patterns of text - the *replacing* part won't be covered here, as the nature of **Search** relies on *finding* instead. Regular expressions are written in text (letters, numbers and special symbols) using 2 distinct categories:

- literals these are characters (or groups of characters) which are to be found in the target string as-is. Any characters which are not used as metacharacters can be considered as literals; and
- meta-characters special characters which do not represent themselves, but are a *coded representation* of text sequences to find.

Meta-characters generally consist of the following characters:  $^{\$}$  .  $^{*}$  \[ ] { } ( ) + ? |

Some other characters might also be considered meta-characters when used in a special context. Meta-characters may also be used as literals (with a special syntax) if needed. Unfortunately, implementations of regular expression

handlers do vary in the language (based on the application and operating system), but the basic set of instructions should be the same. For the purposes of **Search**, we will only consider basic searching.

### Do I need to know Regular Expressions?

The short answer is probably not - since with **Explorer**++ we are only searching for file and folder names, likely the conventional method of searching (limited wildcards, text) may be sufficient. But regular expressions can accommodate that *weird* search that you might need to do and can also be used to combine what might otherwise have been multiple searches into a single search. Many other applications provide regular expression capability, particularly for searching text **within** files and search-and-replace situations. Once you learn regular expressions, you may never go back to *conventional* searching.

## **How do Regular Expressions work?**

The regular expression is a set of *mini-rules*, describing what is to be found in the target string. The *mini-rules* are applied to the string in sequence - left to right - and if the described text is found, a *pattern match* is accomplished (success). Once a match is made to an element (mini-rule), the text - in the target string - that caused the match is considered *thrown away*, and is not used again.. If **any** of the rules fail - that is, the anticipated pattern of text is not found - then the whole regular expression is considered to have failed (no pattern match). In **Explorer**++'s **Search** tool, if a pattern match is made (subject to a match also with file attributes and case as set in the dialog), the file is listed in the results pane. Also, in this context (matching file/folder names), the regular expression must describe the **entire** file/folder name, minus the path, of course. This is not as difficult as it sounds since regular expressions have wildcards, repeats, etc. to accommodate unknown characters. Some other aspects of regular expressions - handling multiple lines, replacing text, etc. are not applicable and are not covered here.

## Elements (or Mini-rules) - short list

The following table contains a **few** meta-characters and elements to demonstrate the power of Regular Expressions. Refer to the <u>Regular Expression Reference</u> (Appendix C) for more elements and details.

EXPRESSION	SYNTAX	ORDINARY NAME	DESCRIPTION	EXAMPLES
Any character			This is the wildcard character - matches any single character (except a newline - not used in file/folder names)	s.s matches <b>sys</b> (system) and <b>ses</b> (session), but not <b>sores</b>
Zero or more	*		matches zero or more occurrences of the preceding expression, and makes all possible matches	a*b matches <b>b</b> (bat) and <b>ab</b> (about) .* matches any sequence of characters
One or more	+	plus	matches at least one occurrence of the preceding expression, same as {1,} (see Repetition below)	rol+ matches <b>rol</b> and <b>rolllll</b> , but not <b>ro</b>
Or		pipe, vertical	matches either the expression before or the one after the OR symbol ( ).	AL TE matches <b>ALE</b> or <b>ATE</b>

			Mostly used in a group.	
Group	()	parentheses		a(jpg jpeg) matches <b>ajpg</b> or <b>ajpeg</b>
Escape	\	backslash	when it precedes a meta-character, the combination is taken as a literal. Some meta-characters, namely ^\$.[]{} ()+, may be used in file/folder names.	a\.txt matches <b>a.txt</b>

#### **Demonstrations**

- Navigate to the <u>C:\Windows</u> folder. Your drive letter may be different, depending on your installation.
- Open the Search dialog (Ctrl+F)
- Clear all attribute checkboxes and the Search Subfolders checkbox. Check the Case Insensitive checkbox. Check the Use Regular Expressions checkbox.
- 1. Use .\*\.(ini|log) as the **Filename:**, and do a search. What did it do? It should have returned all **ini** and log files; here's a breakdown of what happened...
- .+ This is the wildcard (any character) followed by "one of more repeating one!) until...
- \. This is the meta-character "." but escaped; this considered the "." as between the file name and the file extension.
- (ini|log) This is a group (parentheses), just to avoid any possible misinterpre other words, match "ini" **or** "log" as the extension (or at least, the n

#### "ini" or "log", they won't match the expression.

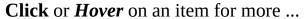
- 2. Use .\*\d+.\*\.\D+ as the **Filename:**, and do a search. This one is a little more complex refer to <u>Appendix C</u> for a bit more detail on each element. Here's a breakdown first...
- .\* This is the wildcard followed by "zero or more repeats". This skips element.
- \d+ \d is a character class (shorthand notation for digits), repeated one c else (at least one digit).
- .\* Again, this skips/matches y everything (**if** it exists) until the next el
- \. The dot/period character (escaped) is match, just before the extension
- \D+ \D is a character class (shorthand for **not** a digit) repeated at least there are no digits.

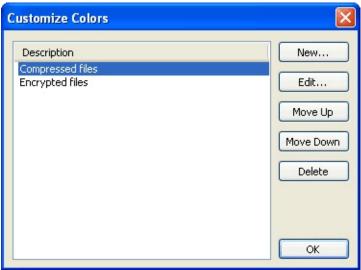
#### So what did it find?

- all files with at least one digit in the filename, but no digits in the extension. And it must have an extension. Try doing that with a conventional wildcard search!
- 3. Here's one more demonstration, for keeners! This time
  - Navigate to your Windows folder (usually C:\Windows).
  - Again, no attribute filtering and check Case Insensitive. Check the Search Subfolders checkbox - we want to scan all of Windows subfolders (it is relatively quick!).
  - Use \{[[:xdigit:]]{8}-([[:xdigit:]]{4}-){3}[[:xdigit:]]{12}\}
     as the **Filename:**, and do a search. Don't type it, just copy from here
     (select it, Ctrl+C careful that you don't pick up any leading spaces)
     and paste (Ctrl+V). You will have to break it down yourself, if you
     want, but what did it find?
    - all folders in the Windows folder (or subfolder thereof) named with a GUID (Globally Unique IDentifier - see Wikipedia <a href="here">here</a>).

## **Tools/** Customize Colors...

This tool allows **Explorer**++ to display files in different colors, according to *rules* which modify the display of files by filename and/or attributes. Like the <u>Filter</u> routine, coloring certain files or folders aids in quickly finding what you want.





#### **Rules list**

This list shows all color rules, by their description (ie. *name*). Their application to files in the <u>Files pane</u> is by their order of appearance in this list; the first rule (top) is applied first, the bottom of the list is applied last. Individual rules (ie. one at a time) may be selected for re-ordering, editing or deletion.

#### New...

This opens the **New Color Rule** dialog for creation of a new rule. The dialog is virtually identical in form and function to the <u>Edit Color Rule</u> dialog, buts adds to the rule list rather than editing an existing rule.

### Edit...

This function edits the currently selected rule.

**Click** or *Hover* on an item for more ...

Edit Color Rule	×
Description:	Compressed files
Color:	Change color
Filename pattern:	
Attributes	
✓ Compresse	d Encrypted Archive Hidden
Indexed	Read-only System
	OK Cancel

### **Description:**

Enter a description in this field; this is the name that will identify the rule in the Rules list.

#### Color:

The color assigned to files which match this rule is shown in a small *swatch*.

## Change color...

This button opens a standard Windows Color dialog which allows you to set a new color. You may

- choose a color from some common colors, or
- define one using
  - RGB (Red/Green/Blue) notation
  - Hue, Saturation and Luminescence values, or
  - visual selection

#### Filename pattern:

Rules may specify a filename pattern in addition to, or instead of, attributes. If a file name matches this pattern, then that portion of the rule is satisfied. Filename patterns are entered using wildcard patterns, in a manner similar to the old DOS wildcards. For example, the filename pattern

would match any file containing an underscore character. The most common usage would likely be to match certain files by file extension, as in a pattern of

which would match any GIF image files.

If attributes are also checked, then both the filename pattern AND the attributes must match in order for the rule to succeed and the file be colored.

**Bug:** In the current version of **Explorer++**, entering a **Filename pattern**, or editing an existing pattern, is broken. Filename patterns always revert to a null string.



**Workaround:** enter the filename pattern manually using Regedit.exe (advanced!) after the rule is created. You must close **Explorer++**, edit the registry, then reopen **Explorer++**. The registry key for the rule will be located under HKEY\_CURRENT\_USER\Software\Explorer++\ColorRules. XML files - if using **Explorer++** in <u>portable mode</u> - may be edited using a text or XML editor.

#### **Attributes**

File **attributes** may be specified in addition to, or instead of, a <u>Filename</u> <u>pattern</u>. Attributes may be the *common* <u>attributes</u> (as can be changed from the File menu), or may also be NTFS specific, namely

- Compressed file is compressed using native Windows compression, or
- **Encrypted** file is encrypted using native Windows encryption.

Note that checking any attribute box in this dialog does not affect the attributes for any file, it merely reads the attributes as part of this rule.

**Bug:** In the current version of **Explorer++**, unchecking any existing attribute as part of a rule, does not work; the attribute remains applied to the rule.

**Workaround:** create a new rule with the correct attributes applied, then delete the original rule. If desired, advanced users may also edit the attributes in the registry or XML file, in a manner similar to the method described in <u>Filename pattern</u> (Bug). Attributes are additive, with the following values:



Attribute	Hex Value	Decimal Value
Compressed	0x800	2048
Encrypted	0x4000	16384
Archive	0x20	32
Hidden	0x2	2
Indexed	0x2000	8192
Read-only	0x1	1
System	0x4	4

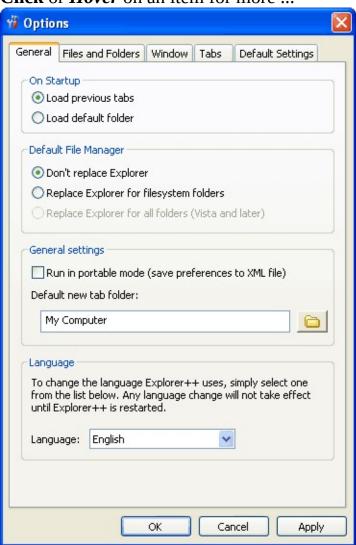
The **Move Up** and **Move Down** buttons move a selected rule up or down in the list. Priority of application of rules to the Files pane is determined by their order in the list.

## **Delete**

Clicking the **Delete** button deletes a rule (currently selected) from the list; a confirmation dialog is issued prior to deletion. There is no way to recover a deleted rule.

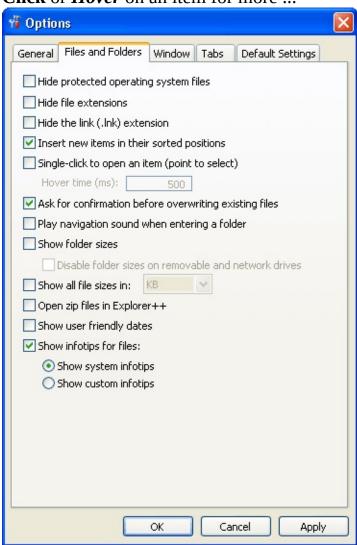


# **Tools**/ \* Options... (General)



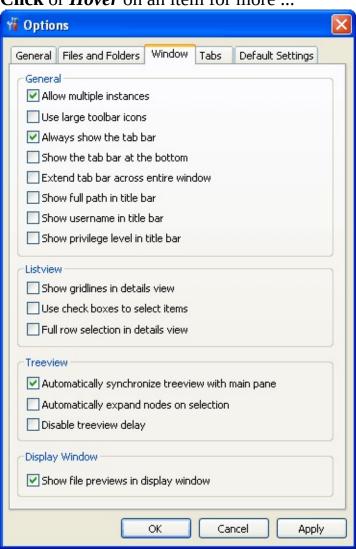


# **Tools**/ **\*\* Options...** (Files and Folders)



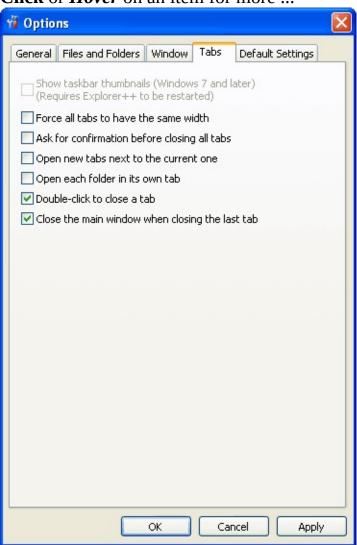


# **Tools**/ \*\* Options... (Window)





# **Tools**/ \*\* Options... (Tabs)





# **Tools**/ \*\* Options... (Default Settings)





# **Navigation**/Help Menu

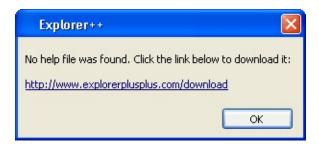


## Help/ @ Help



This menu item opens the help file (this file) at its default page.

You might see the following dialog instead:



which means that you haven't yet *installed* the help file. Click on the link in the dialog to open your browser at the **Explorer++** download page, and download the file (**Explorer++ Help.chm**) using the **Help File** link. It may be in an archived (i.e. zip file) format; if that is the case, extract it first, then follow the next steps:

- the help file **must** be named **Explorer++ Help.chm** (its default name), and
- the help file must be located in the installation directory, i.e. the directory housing the executable (**Explorer++.exe**). Move it to that location.
- You may need to "*Unblock*" (i.e., right-click file → Properties → Unblock) the help file after extracting. The file may be blocked from usage by Windows' security routines. It is a **safe** file.

As of the <u>current version</u> of **Explorer**++, (context sensitive) help using the **F1** hotkey is not implemented. Only the Help menu item is functional.



# **Help/About Explorer++...**





## **Toolbars/Overview**

**Explorer++** has 5 internal toolbars, any of which may be enabled (made visible) by checking one of the <u>menu</u> items. They are

Toolbar	ID*	Customizable	Comments
<u>Address</u> <u>Bar</u>	1	no	set or displays the address of the currently active tab (folder)
<u>Main</u>	0	<u>yes</u>	provides 19 (in the current version) common tools or actions which may be quickly accessed by clicking a button's icon
Bookmarks	2	limited	displays selected bookmarks as buttons/icons along with their name
<u>Drives</u>	3	no	shows and accesses all available volumes (ie. drives)
<b>Application</b>	4	yes	houses shortcuts to selected applications

<sup>\*</sup> IDs are maintained internal to **Explorer**++, but may be useful when editing the Windows registry, or the "config.xml" (ie. <u>portable</u> settings) file.

## **Moving toolbars**

When <u>unlocked</u>, he toolbars may be relocated (ie. *docked*) and *resized*, and placed on separate *rows* or combined on a *row* to save space.

Using a toolbar's *grip* (found at the left side of the toolbar), it may be dragged-and-dropped to a new row, or moved along that row effectively resizing the toolbar to its left. Moving a toolbar along a row is only possible when there is more than one toolbar per row.

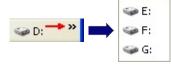
Dragging a toolbar **up** will place it on a row with another toolbar, while dragging a toolbar **down** (to the bottom-most row) places it on its own row.

Toolbar positions are preserved by **Explorer++** for the next session.



**Bug:** If the **Address Bar** has a second toolbar on the same line to the right of it, it may be partially obscured, even after restarting **Explorer++**.

#### **Chevrons**



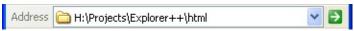
If there is insufficient room to display all toolbar items, a *chevron* symbol (») is used; clicking on the *chevron* opens the rest of the toolbar, as a menu.



## **Toolbars**/Address Bar



Click or *Hover* on an item for more ...



For general information about **Explorer**++'s toolbars, ie. moving, resizing, customizing, etc., see the toolbars <u>Overview</u>.

The **Address Bar** serves 3 general purposes:

- 1. it **displays the icon** associated with the current folder (tab),
- 2. it **displays the address** of the current folder (tab); this address can be copied to the clipboard (if desired), and
- 3. it allows the user to **enter an address** and, using the <u>Go</u> button, **jump to that address**.

#### Folder icon

This area displays any folder icon associated with a particular folder; the default is usually as shown in the image. Most special folders on the <u>Go menu</u> have distinct icons associated with them and will display those icons here.



**Tip:** Dragging and dropping the **Address Bar**'s icon to a folder (in the Folders or Files pane) - or to another tab - creates a Windows shortcut (ie. a LNK file) in that folder. The shortcut points to the original location.

### Address/text field

#### **Address display**

If a location for the active tab is selected, by any valid means, the

address/text field of the **Address Bar** displays the current address. If the address is too long to fit in the space allotted (ie. the **Explorer++** window has been resized, and the **Address Bar** is now too small to display the full address, or the address is *deeply nested* in subfolders), the text in the address/text field can be scrolled by placing the cursor in the field, then moving the curser (left/right arrow, Ctrl+left/right arrow, etc.).

Text in the address/text field may be selected and manipulated (eg. copied to the clipboard), by using Windows hotkeys (eg. Ctrl+C for copy), or through the use of a small context (ie. right-click) menu. The <u>Copy Folder Path</u> operation copies the entire address to the clipboard.

#### **Address entry**

You may enter an address in the address/text field and jump to that address by pressing Enter or clicking the <u>Go button</u>. The address must one of either

• a fully qualified path, ie. <drive letter>:\<folder>\<folder>\... etc. An example might be:

C:\WINDOWS\system32\drivers

Note that fully qualified paths should not end in the backslash (\) character.



**Tip:** Every time you enter backslash (\) character, **Explorer++** opens a special (resizable) window and displays a list of the contents (files and folders both) of the path as typed so far (if valid). You may select a folder from this list; **Explorer++** will jump to that folder. Selecting a file will attempt to open it in any *registered* application, the same as if you tried to open the file using a double-click (or single-click, with an <u>option</u> set). A <u>refresh</u> will restore the true address.

- the name of a subfolder in the current location. The folder must already exist. This is the only time **Explorer**++ will accept less than a fully qualified path, except for special locations (following).
- the name of a special location. **Explorer**++ recognizes the following

locations in the **Address Bar** as special:

Special location	Target
Desktop	<pre><drive>:\Documents and Settings\<user>\Desktop</user></drive></pre>
Documents	<a href="mailto:drive"><drive< a="">:\Documents and Settings\<user<\my documents<="" td=""></user<\my></drive<></a>
Pictures	<a href="mailto:drive"><drive< a="">:\Documents and Settings\<user< a="">\My Documents\My Pictures</user<></drive<></a>
Music	<a href="mailto://www.news.ncbe.news.ncbe.news" mailto:<a="">drive&gt;:\Documents\My Videos</a> Documents\My Videos

Entering one of the above locations (case-insensitive) in the address/text field and clicking the **Go** button (or pressing Enter) jumps to the target location. **Explorer++** also recognizes several <u>virtual</u> <u>folders</u>, as shown on the <u>Go menu</u>, namely

- My Computer
- o Recycle Bin
- Control Panel
- *Printers and Faxes* (opens in Windows Explorer)
- My Network Places

although, it is likely easier just to use the Go menu for these locations.

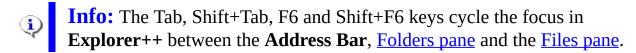
## Address drop-down



The *drop-down* list for the **Address Bar** shows all subfolders (folders only - no files) in the current location. You may click on any folder in the list to put its name in the address/text field; pressing Enter or clicking the **Go** button will take you there.

#### Go button

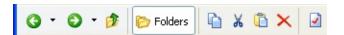
The **Go** button, when clicked, set the address for the current tab to the address shown in the address/text field of the **Address Bar**. Pressing Enter is the same as clicking the **Go** button when the **Address Bar** has the focus. The **Go** button has a context (ie. right-click) menu identical to the <u>Toolbars menu</u>.





## **Toolbars**/Main Toolbar

For general information about **Explorer**++'s toolbars, ie. moving, resizing, customizing, etc., see the toolbars <u>Overview</u>.



The **Main** toolbar provides access to some commonly used **Explorer**++ functions. The following buttons are available on the **Main** toolbar, using the <u>Customize</u> dialog; your toolbar may not contain all buttons. The table below shows the buttons *loosely* organized by function; your toolbar may have buttons in any order.

Button	Tooltip	<b>Brief Description</b>
<b>G</b> -	Back	returns the tab to the previous location in the tab's history, if one exists
•		this (separate) button - part of the <b>Back</b> button - opens a menu showing a list of history locations, in the <i>Back direction</i> . Clicking on an item returns the tab to that location directly.
<b>6</b>	<u>Forward</u>	returns the tab to the newest, but previously visited location in the tab's history, if one exists. This location only exists if the <b>Back</b> function has been used; ie. the <i>Forward history</i> is only created by the Back function.
•		this (separate) button - part of the <b>Forward</b> button - opens a menu showing a list of history locations, in the <i>Forward direction</i> . Clicking on an item returns the tab to that location directly.
<b></b>	<u>U</u> p	goes to the parent folder of the current location
Polders	Folders (enabled)	clicking this button toggles the Folders pane off (hidden)
Polders	Folders (disabled)	clicking this button toggles the Folders pane on (visible)
		places selected items (files and folders) on the

	Copy	clipboard
×	<u>Cut</u>	<i>removes</i> selected files and folders and places them on the clipboard. Removal is done at the time of <i>pasting</i> .
(I)	<u>Paste</u>	pastes data or files/folders from the clipboard
×	<u>Delete</u>	deletes files/folders to the Recycle bin (except for removable drives)
*	<u>Delete</u> <u>permanently</u>	deletes files/folders without sending them to the Recycle bin
	<u>Properties</u>	displays properties of a file or folder. Multiple files/folders (mixed) may also be used.
	<u>Search</u>	finds files/folders by name and/or attributes
E*	New Folder	creates a new folder in the current folder (tab)
<b>3</b>	Copy To	copies selected files and folders to a different location
	Move To	moves selected files and folders to a different location
-	<u>Views</u>	cycles through available views for the current tab
•		this (separate) button - part of the <b>Views</b> button - opens a menu showing available views and allows the user to select a view directly (menu item is checked)
C:/	Show Command Prompt	opens a command prompt (ie. <i>DOS box</i> ) in the current directory
2	Refresh	re-sorts and re-displays the current Files pane, subject to current settings (ie. Sort By, etc.)
*	Bookmark the current tab	creates a new bookmark
*	<u>Organize</u> <u>Bookmarks</u>	opens the <b>Organize Bookmarks</b> dialog
	Create a new tab	creates a new tab in the files pane



## **Toolbars/Bookmarks Toolbar**

For general information about **Explorer**++'s toolbars, ie. moving, resizing, customizing, etc., see the toolbars <u>Overview</u>.



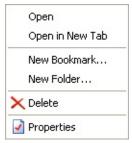
The **Bookmarks** toolbar displays bookmarks (previously created) which have been optionally designated to show on the toolbar by checking the <u>Show on Bookmarks Toolbar</u> box. Clicking on the button for a bookmark opens that bookmark (ie. location) in the current tab. Hovering over a bookmark button displays the name and location of that bookmark as a *tooltip*.

Bookmark <u>folders</u> may also be shown on the **Bookmarks** toolbar; clicking on the button for a folder opens that folder's bookmarks in a menu.

# **Context Menu (button)**

Each button on the **Bookmarks** toolbar presents the following context (ie. right-click) menu:

**Click** or *Hover* on an item for more ...



## New Bookmark...

This function is *similar* to the <u>Bookmark This Tab...</u> item on the Bookmarks

menu, but does not operate on the current tab's location. Therefore, the dialog opens with

- no bookmark name the user must supply this, and
- no location the location may be entered manually (if known) or copied/pasted from somewhere else (perhaps from the <u>Address Bar</u> on another tab). Any bookmark created with no location will open in the <u>default new tab folder</u>.



**Bug:** Bookmarks created by this routine do not show on the <u>Bookmarks</u> menu until **Explorer**++ is *re-started*.

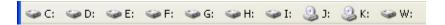


**Tip:** Using the middle-mouse button on a bookmark shown on the **Bookmarks** toolbar opens that bookmark in a new tab.



# **Toolbars**/Drives Toolbar

For general information about **Explorer**++'s toolbars, ie. moving, resizing, customizing, etc., see the toolbars <u>Overview</u>.



The **Drives** toolbar displays all available <u>volumes</u> currently available on your computer. Clicking a button on the toolbar changes the address of the current tab in the Files pane to the root of that drive letter (eg. clicking C: opens C:\ in the current tab). Hovering over a drive button displays the free space and total size of the drive as a *tooltip*, if available (not available if the drive is not ready).



Some users may find it helpful to resize the **Drives** toolbar to its smallest, and dock it on the same row as the <u>Main</u> toolbar (right-hand edge). This frees up space, while still providing the functionality of quickly accessing every drive. When the toolbar is docked in this way, only the *chevrons* are visible; clicking on the *chevrons* opens the toolbar as a menu.



**Tip:** Using the middle-mouse button on a toolbar drive opens that drive in a new tab, however, docking the **Drives** toolbar in this way does not allow this usage on a menu item (see tip here).

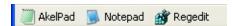
## **Context Menu (button)**

Each button on the **Drives** toolbar has a context (ie. right-click) menu, with the same functions that would be available from Windows Explorer, or from My Computer (opened in Windows Explorer). In addition, you may open the drive in a new tab from this menu. The functions available on the context menu may vary depending on

- the type of drive (ie. Removable, Local, CD, etc.), and
- other applications you may have installed which affect the context menu.

# **Toolbars**/Application Toolbar

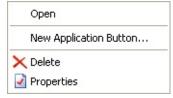
For general information about **Explorer**++'s toolbars, ie. moving, resizing, customizing, etc., see the toolbars <u>Overview</u>.



The **Application** toolbar shows a collection of your favorite applications; each button shows the application name and icon, if any. Buttons on the **Application** toolbar are similar to shortcuts to the applications themselves, providing *instant* access to your favorite tools. Unlike true Windows shortcuts, application toolbar buttons may have **no** parameters.

## **Context Menu (button)**

Click or *Hover* on an item for more ...



## **Open**

Clicking this menu item opens the application (corresponding to the button, of course). This function is the same as clicking the button.



**Tip:** Files from the <u>Files pane</u> may be dragged-and-dropped onto an application button to open them in that application. Selecting multiple files and using drag-and-drop will open all selected files, providing the application supports this behavior. **Example:** multiple text files may be dragged-and-dropped onto the application button for a multi-tab text editor to open all files.

## **New Application Button...**

**Click** or *Hover* on an item for more ...

ation Button	X
ow name on application toolbar	
OK	Cancel
	ow name on application toolbar

#### Name:

The text entered here is the name for the application that could be shown on the toolbar along with the icon (application specific or Windows default).

#### **Command:**

This field is the URL to the executable for the application. You may enter the URL manually, if it is known, or <u>browse</u> for the executable using the **Open** dialog. If the target file is not an executable (eg. a text or .txt file), clicking the application's button on the Application toolbar will open the file in any registered application. For example, selecting this CHM file (eg. *C:\Program Files\Explorer++\Explorer++ Help.chm*) will open the file using the Windows **hh.exe** (Html Help executable) application.

# **Open (find executable)**

This button opens a *standard* Windows dialog (Open) which allows the user to browse for the application executable file. Note that the default file type is EXE, but selecting All Files will browse for other types of files (.com,

.txt, etc.). The *Open as read-only* checkbox serves no purpose.

#### Show name on application toolbar

This box (checked by default) enables/disables the display of the Name: field for the target application. Clear this box if the icon is self-explanatory, ie. the nature of the application is clear.



**Info:** This item (*New Application Button...*) also appears on the **Application** toolbar context menu (ie. right-click over blank space on toolbar).

#### **Delete**

This menu item deletes the application button from the toolbar, with a confirmation dialog. It cannot be recovered.

# **Properties**

This function opens the properties for the application *shortcut* and button. A dialog (*Edit Application Button*) is opened which is identical in function to the New Application Button, with all pertinent fields (for the button) already filled in. Fields may be edited from this dialog.

**Tip:** Re-ordering buttons on the toolbar (advanced - be careful!) Application buttons are normally placed on the Application toolbar in the order they are created. Through judicious use of the Regedit application, they may be re-ordered.

- open Regedit and navigate to HKEY\_CURRENT\_USER\Software\Explorer++\ApplicationToolbar
- 2. select the **ApplicationToolbar** key in the left panel, and **Export** its contents to a suitable location using the context menu
- 3. edit the file to renumber the sub-keys (application buttons). They must always be numbered 0, 1, 2, etc. The first button is 0, the second is 1, and so on. The actual order they appear in (inside the file) is not important.
- 4. make sure Explorer++ is closed
- 5. Double-click on the edited file to re-enter the data into the registry.
- 6. That's it!

A similar technique applies to using **Explorer**++ as a portable application - edit the **config.xml** file to re-order the application button lines. A number is not used; the order of the lines (under <ApplicationToolbar>) determines the button order.



# **Toolbars/Lock Toolbars**

This menu item - whether on the *Main* menu (*View/Toolbars*), or on the context menu of one of the toolbars themselves - toggles the **locked** state of all toolbars.

- **Locked** toolbars are not movable, and have no grips (see <u>Moving toolbars</u> for image of *grip*)
- **Unlocked** all toolbars have grips, and are movable.

Although it does not affect functionality, it is recommended that toolbars are locked, once positioned, to avoid any accidental movement, etc.



**Tip:** The *Main* toolbar may be <u>customized</u>, even in the locked state.



# **Toolbars**/Customize...

Click or *Hover* on an item for more ...



The **Customize Toolbar** dialog manages buttons on the <u>Main</u> toolbar by

- adding a button
- removing a button or separator bar
- re-ordering buttons.

#### Available toolbar buttons

This pane shows the toolbar buttons that are available, ie. have not been included in the current toolbar configuration. The *Separator* item is always available. For more information on available buttons, see the <u>Main</u> toolbar.

#### Add ->

Clicking this button adds the currently selected tool (in the **Available** pane) to the toolbar. The button is inserted above the selected item in the **Current** pane.

#### <- Remove

Clicking this button removes the currently selected button (in the **Current** pane). The button removed becomes available in the **Available** pane, but is no longer shown on the toolbar.

#### **Current toolbar buttons**

This pane shows the buttons (and *Separators*) currently assigned to the Main toolbar. The button at the top will show as the left-most button on the toolbar.

#### Close

This button closes the dialog, preserving the current layout of the Main toolbar.

#### Reset

This button resets the Main toolbar to its default button set.

#### Move Up

This button moves the selected item (in the **Current** pane) up in the list. This has the effect of moving that item one position to the left on the Main toolbar.

#### Move Down

This button moves the selected item (in the **Current** pane) down in the list. This has the effect of moving that item one position to the right on the Main toolbar.

# **Navigation**/Tab bar

The **Tab bar** displays tabs which are currently available for use; each tab is essentially a separate <u>Files pane</u>, viewing a specific location.



The user may quickly switch from location to location simply by selecting the appropriate tab.

Each tab has a (right-click) context menu.

## Viewing tabs

If more tabs are open than will fit on the tab bar (depending on current sizing of **Explorer**++'s window and other panes), a set of scrolling buttons are available, allowing you to scroll left or right to view/select other tabs which are currently not visible.



**Tip:** The Tab bar may be extended to the full window width using an option.



**Info:** Hovering the mouse over a tab displays it's true location, regardless of the tab's title. Tab's opened at <u>virtual folders</u> show their *CLSID* (class ID), Windows' internal representation of their location. Practically, these *CLSID*s are of no use, except to a programmer.

# **Opening new tabs**

A new tab may be opened using a variety of methods, as listed <u>here</u>. From the **Tab bar**, the easiest methods may be

- double-clicking empty space on the bar. This opens a file displaying the <u>default contents</u>.
- using the tabs **context** menu

## **Closing tabs**

When hovering the mouse over the "X" on the right side of the **Tab bar**, it becomes a "Close" button which will close the current tab. Tabs may also be closed by double-clicking on a tab, subject to an options <u>setting</u>. Other methods of closing a tab are:

- from the <u>File menu</u>
- from the tab's context menu. The tab need not be the current (ie. selected) tab.



**Tip:** Be careful closing tabs - the **current** tab may not be visible! A tab closed in error must be re-opened and re-configured, as necessary.

## **Re-arranging tabs**

Tabs may re re-arranged using *drag-and-drop*, that is

- click on a tab and hold the left mouse button down
- move the cursor to the new (desired) position on the Tab bar
- release the left mouse button

# Moving files and folders

Files and folders in a tab's file view (ie. the <u>Files pane</u>) may be moved from one folder to another simply by *dragging* and *dropping* them onto a tab. If you pause slightly before *dropping* the items onto the tab, that tab will become active, but this is not necessary in order to complete the move.

## Tab bar/Context-menu

Click or Hover on an item for more ...



# **Duplicate Tab**



This item opens/creates a <u>new tab</u> on the tab bar, but duplicates the tab from which this item was called. Placement of the tab is dependent on an option setting.



**Info:** Duplicating a tab does not duplicate it's location <u>history</u>.

#### **Open Parent in New Tab**

This item opens/creates a new tab on the tab bar, using the location of the current folder's immediate parent. This is the folder that *houses* the current folder.

**Info:** The <u>Desktop</u> has no parent; this operation will **not** open a new tab if the current location is Desktop.

#### Refresh All

This item performs a <u>refresh</u> on all tabs currently open.

#### Rename Tab...



Ordinarily, a newly created tab assumes the name of the actual folder it displays (minus the drive and path information). This item, however, allows you to rename the tab to something more suitable to your needs. For example, while working on a programming project, you may have a tab open at

"C:\Project\today\revisions\code", but other folders of the name "code" may also exist for that project (eg. different versions, dates). You can rename the folder to "Today's code" by selecting this item, choosing "Use custom name:" and typing in "Today's code". Renamed tabs are *persistent*, that is, they will remain renamed even during other sessions.



**Info:** On first opening the *Rename Tab* dialog, the "Use custom name:" setting is always selected as a convenience; it is assumed that you want to set a custom name.

#### **Lock Tab**

This item locks the tab, preventing it from being closed. The tab's icon is changed, and the menu item becomes checked, reminding the user that the tab is locked. Locked tabs can still be re-arranged or renamed. Locked tabs must be manually unlocked to restore default behavior. Tab locked status is preserved between sessions.

#### **Lock Tab and Address**

This item locks the tab, as above (ie. can't be closed), but also prevents the address from being changed by double-clicking on a folder or drive. A new tab is opened instead, displaying the desired new address.

#### **Close Other Tabs**

This item closes all tabs on the Tab bar **except** the tab whose context menu you are using, even if that tab is not active. Of course, when all other tabs are closed, the remaining tab becomes active.



# Appendix A/SuperHidden Tool

This page contains a custom tool which uses **ActiveX** technology and **JavaScript**. If a pop-up message occurs which warns you of a security risk - it is **SAFE** to allow both.

<u>Display</u> of *superhidden* files - files or folders which have **both** the hidden and system attribute set - may be inhibited by a Windows registry setting. An **Explorer++** <u>Options</u> setting may also be non-functional unless this registry setting is set to **Show**. Without this setting enabled, **Explorer++** (since it uses Windows enumeration techniques) can display hidden files, but **only** those without the System attribute set.

The following tool may be used instead of the **Control Panel** applet (**Folder Options**) to enable display of *superhidden* files. This tool changes the setting of the registry key at

HKEY\_CURRENT\_USER\Software\Microsoft\Windows\CurrentVersion\Explorer



Use of the above buttons changes a registry setting for the current user; this may affect Windows Explorer and/or other Windows programs which rely on file visibility settings.

**Explorer**++ must be closed and re-opened (ie. *restarted*) for any changes to have an effect.



# Appendix B/Accelerator, Modifier keys

Following is a list of Accelerator keys, etc. which are active in **Explorer++**. Some keys are also listed which are modifiers to mouse actions (ie. drag-and-drop).

<u>Alphanumeric</u> eg. A, B, 1, 2 **Keys Function Keys** eg. F1, F2 Page Navigation eg. Home, PageUp **Keys Cursor Keys** Left, Right, Up Enter, Backspace, **Editing Keys** Tab **Miscellaneous** Apps, [, ] **Keys** Mouse Keys, etc.

# **Alphanumeric Keys**

	MOD	IFIER K	EYS	
KEY	+SHIFT	+CTRL	+ALT	FUNCTION
A		C		Select All
В		C		Organize Bookmarks
C		C		Copy
C	S	C		Copy to Folder
D		C		<b>Bookmark This Tab</b>
D	S	C		Wildcard Deselect
D			A	Select Address Bar
${f E}$		C		<u>Duplicate Tab</u>
${f F}$		C		Search
${f F}$	S	C		Set Filter

G		C	Apply Filter
H		C	Show Hidden Files
$\mathbf{I}$		C	Invert Selection
${f L}$		C	Select Address Bar
$\mathbf{M}$	S	C	Move To Folder
$\mathbf{N}$		C	New Folder
$\mathbf{N}$	S	C	Select None
P	S	C	Copy Folder Path (to clipboard)
R		C	Refresh
S	S	C	Wildcard Select
${f T}$		C	New Tab
${f V}$		C	<u>Paste</u>
${f V}$	S	C	Paste Shortcut
$\mathbf{W}$		C	Close Tab
$\mathbf{X}$		C	<u>Cut</u>
$\mathbf{Z}$		C	<u>Undo</u>
18		C	Select Tabs 18
9		C	Select Last Tab

# **Function Keys**

	MODIFIER K	EYS
KEY	+SHIFT+CTRL	+ALTFUNCTION
F1		<u>Help</u>
<b>F2</b>		<u>Rename</u>
<b>F2</b>		Cycle during Rename
<b>F3</b>		<u>Search</u>
<b>F4</b>		Address drop-down
<b>F4</b>	С	<u>Close Tab</u>
<b>F5</b>		<u>Refresh</u>
<b>F6</b>		Next Pane
<b>F6</b>	S	<b>Previous Pane</b>
F10	S	Main Context Menu

# Page Navigation Keys

#### **MODIFIER KEYS**

KEV	<b>TCHILL T</b>	+ALT FUNCTION
KEY	+5HIF1+C1KL	+ALIFUNCTION

**Delete** <u>Delete</u>

**Delete** S <u>Delete Permanently</u>

**Home** A Navigate to Default Folder

PageDownCNext TabPageUpCPrevious Tab

# **Cursor Keys**

#### **MODIFIER KEYS**

**KEY +SHIFT+CTRL+ALTFUNCTION** 

Left A Back

arrow Right

arrow A Forward

Up A Up One Level

# **Editing Keys**

#### **MODIFIER KEYS**

# **KEY** +SHIFT+CTRL+ALTFUNCTION

**Enter** A <u>Properties</u>

Enter C Open Folder In New Tab

Backspace Up One Level

**Backspace** C Root Folder of Tab

**Tab** In Rename mode, start rename of next item

Tab <u>Next Pane</u>

Tab	S		<u>Previous Pane</u>
Tab		C	Next Tab
Tab	S	С	<b>Previous Tab</b>

# Miscellaneous Keys

# MODIFIER KEYS KEY +SHIFT+CTRL+ALTFUNCTION Win Apps C Next Tab C Previous Tab



Windows Menu or Applications key

# Mouse Keys, etc.

#### **MODIFIER KEYS** +SHIFT+CTRL+ALTFUNCTION **KEY** Drag-and-Drop - force move S C Drag-and-Drop - force copy C Drag-and-Drop - create shortcut(s) S Drag-and-Drop - create shortcut(s) **Double-**C Open Folder In New Tab (in Files pane) **Click** Double-**Properties** (in Files pane) **Click** Scroll S Back, Forward Cycle through **Views** Scroll C



# **Appendix C/Regular Expression Reference**

The Regular Expression elements below are a subset of TR1 Regular Expressions, used by the Search tool to match regular expressions to file/folder names. Some elements of the regular expression parser are not functional in that context (e.g. elements for detecting words boundaries, line ends, etc., elements for text replacement) and are for that reason, not included. Also, a few functional elements have no useful value here and have been omitted from the reference. The user of regular expressions is encouraged to experiment and discover any additional functionality embedded with the Search tool.

Some of the examples may not be ideally constructed - they are there just to demonstrate individual elements. Keep in mind that there is often more than one way to construct a regular expression which does a certain task.

#### **Meta-characters**

Some meta-characters have more than one meaning, depending on their context (e.g. ^ as a <u>negation</u> symbol when used inside [], or as an <u>anchor</u> when used outside []). Using the <u>escape</u> character (\) immediately before a meta-character matches the character itself as a literal (no special meaning), for example \^ matches the actual "^" symbol when it occurs in the target (i.e. file/folder name) string.

#### **Elements**

The following table contains meta-characters and elements useful in the **Search** tool as part of regular expressions; there may also be additional useful information in the <u>Regular Expressions Primer</u>. Note that the case (i.e. upper/lower case) is important in some expressions (e.g. \s, \S).

EXPRESSION	SYNTAX	ORDINARY NAME	DESCRIPTION	EXAMPLES
Any character	•	dot or period	matches any single character (except a newline - not used in file/folder names)	s.s matches sys (system) and ses (session) but not sores
Zero or more (quantifier)	*	asterisk	matches zero or more occurrences of the preceding expression, and makes all possible matches	a*b matches <b>b</b> (bat) and <b>ab</b> (about) .* matches any sequence of characters
Zero or one (quantifier)	?	question mark	matches zero or one occurrence of the preceding expression, same as {0,1} (see Repetition below)	
One or more (quantifier)	+	plus	expression, same	rol+ matches <b>rol</b> and <b>rolllll</b> but not <b>ro</b>
			In the first form, {n} matches <b>n</b> or more occurrences (n is inside the braces) of the preceding	

Repetition (quantifier)	{n} {min,max}	braces	{min,max}	rol{2} matches roll and rollll but not rol z{2,3} matches zz and zzz but not zzzz z{2,} matches zz and zzz, zzzz, etc.	
Any one character in the set	[]	(square) brackets	matches any one of the characters in the []. To specify a range of characters, list the starting and ending characters separated by a dash (-), as in [a-z]. Also see Character Classes below.	be[srn]t matches <b>best, bert</b> or <b>bent</b>	
Any one character not in the set	[^]	circumflex accent, exponent	Not that this	be[^r]t matches <b>best</b> or <b>bent</b> but not bert	

		symbol	alternate meaning when used outside the square brackets.	
Or		<i>pipe</i> , vertical line	matches either the expression before or the one after the OR symbol ( ). Mostly used in a group.	AL TE matches <b>ALE</b> or <b>ATE</b>
Group	()	parentheses	isolates an Or expression, also used by capture techniques	a(jpg jpeg) matches <b>ajpg</b> or <b>ajpeg</b>
Escape		backslash	when it precedes a meta-character, the combination is taken as a literal. Some meta-characters, namely \\$.[]{} ()+, may be used in file/folder names. To match the actual "\" character, escape it as you would any other character (e.g. \\). This symbol, however, is forbidden for use in a Windows file or folder name (used in	a\.txt matches <b>a.txt</b>

			path construction).	
Any one whitespace character	\s	backslash s	matches a single whitespace character (space, tab, newline). Note: tab and newline cannot used in file/folder names. s is actually a class ([:space:] or [:s:]), but is not listed under classes; use this syntax instead.	hi\sbob matches <b>hi bob</b> but not <b>hi-bob</b>
Any one non- whitespace character	\S	backslash S	matches a single non-whitespace character.	hi\Sbob matches <b>hi-bob</b> but not <b>hi bob</b>
Any one digit	\d	backslash d	matches a single numeric character. This is the same as using [0-9]. See classes below.	file\d matches <b>file2</b> and <b>file9</b> but not <b>files</b>
Any one non- digit	\D	backslash D		file\D matches <b>files</b> and <b>filed</b> but not <b>file1</b>
Any alphanumeric (word character)	\w	backslash w	matches a single alphanumeric character (a-z, A-Z, 0-9). See classes below.	1234\w matches <b>12345</b> and <b>1234a</b> but not <b>1234!</b>
Any non-			matches a single	1234\W matches

alphanumeric (non- <i>word</i> character)	\W	backslash W	non- alphanumeric character	<b>1234!</b> but not <b>12345</b> or <b>1234a</b>
One Unicode character	\u####		matches a single Unicode character. #### represents 4 hexadecimal digits - the character code; hex digits in the A-F range may be upper or lower case.	flamb\u00E9 matches <b>flambé</b> but not <b>flambe</b>

# **Anchors**

Anchors are elements which match specific locations in the target string. Knowing that the search pattern has arrived at one of these locations might be useful in narrowing down the search by incorporating that location into the regular expression. Anchors have zero width, that is, they do not advance the text *pointer* in the target string.

EXPRESSION	SYNTAX	ORDINARY NAME	DESCRIPTION	EXAMPLES
			matches when the current position in the target string is immediately after a word boundary. In other words, at this point, there	

Word boundary	\b	backslash b	is a word (alphanumeric) character on one side of the pointer, but not on the other. This might be • at the start of the file name • at a space in the file name • at a "." character anywhere in the name, or at the start of the file extension The "\b" element matches either a start or end of a word.	.*\bhp.* matches "abc hp.txt", "hp abc.txt", "hp.txt" and "hpabc.txt" but not "abchp.txt"
Non-word boundary	\B		matches when the current position in the target string is <b>not</b> a word boundary (see \b above)	.*\Bhp.* matches " <b>abchp.txt</b> " but not all the others matched in \b above
String start	٨	circumflex accent, exponent symbol	matches when the current position is the string matches when	.*^ex.* matches explorer.htm but not index.htm

String end	\$	dollar sign		.*hp\$.* matches abchp and hp but not hpabc
------------	----	-------------	--	---

#### **Character Classes**

Character classes are a *shorthand* way of representing a range of characters and may be used directly in the construction of character <u>sets</u> (or negation sets, e.g. [^...]) in regular expressions. Each class below is shown in usable form - they require delimiting ":" characters, and must be enclosed in brackets. They may then be used in character sets - as if they were a single character - which requires double sets of brackets (see examples below). Using classes may reduce the size of your expression, but the same functionality can be added in other ways. Note: that classes are locale dependent and *may* **include** foreign language characters which are in common locale usage, e.g. **é**; to exclude those characters, use a constructed character set instead, such as [a-zA-Z]. A few select classes have short names, e.g. see **digits** and **alphanumeric** below, and \s in expressions above.

CLASS	SYNTAX	DESCRIPTION	EXAMPLES
uppercase	[:upper:]	upper case characters	[[:upper:]]* matches <b>FILE</b> but not <b>File</b>
lowercase	[:lower:]		[[:lower:]]* matches <b>file</b> but not <b>File</b>
alphabetic	[:alpha:]	all upper/lower case letters	[[:alpha:]]* matches <b>abgh</b> but not <b>doc1</b>
digits	[:digit:] [:d:]	ig alternate i	[[:digit:]]* matches <b>134679</b> but not <b>134679a</b>
hexadecimal digits	[:xdigit:]		[[:xdigit:]]* matches <b>1a2b9F</b> but not <b>1g4b</b>
alphanumeric	[:alnum:]	·	[[:alnum:]]* matches <b>12ex</b> and <b>flambé</b>

		alternate syntax is [:w:]	but not <b>87_a</b> or <b>12ex.txt</b>
punctuation	[:punct:]	IIDHINCHIAHOH I	[[:punct:]]* matches <b>_!~.@@</b> but not <b>_!~.@@.txt</b>
		upper/lower case letters, digits, and punctuation	[[:graph:]]* matches <b>textdoc.txt</b> but not <b>text doc.txt</b>
	[:print:]	upper/lower case letters, digits, punctuation and space	same as <u>.</u> - matches every character

# **Capture Groups**

If an element matches a portion of the target string, the characters that it matched (in the target string) may be *captured* and re-used in the same regular expression. *Capture* is accomplished by

- forming the capturing element inside parentheses, e.g. (.) captures a single character then
- using escape (\) followed by an integer to represent the captured text. Integers start at 1 (left-most or first capture) and increase as captures are done (left to right).

For example, the regular expression  $ab(.\{2\})(.\{2\})(.\{2\})\setminus 1\setminus 2\setminus 3$  may be broken down as follows:

ab literal	matches "ab" as the first 2 characters in the target	
	iittiai	string
$(.{2})$	wildcard x 2	matches and captures the next 2 characters, i.e. 3-4
$(.{2})$	wildcard x 2	matches and captures the next 2 characters, i.e. 5-6
$(.{2})$	wildcard x 2	matches and captures the next 2 characters, i.e. 7-8
\1	capture	represents characters 3-4 in the target string, and tries
/T	group 1	to match them starting at character 9 (i.e. 9-10)

\2	capture	represents characters 5-6 in the target string, and tries
\_	group 2	to match them starting at character 11 (i.e. 11-12)
\3	capture	represents characters 7-8 in the target string, and tries
	group 3	to match them starting at character 11 (i.e. 11-12)

This expression matches the file named **ab12ed4f12ed4f**, but not the file named **ab12ed4f12ed4g** (the 2 character repeating patterns are not satisfied at the last character).

#### Concatenation

Regular expression elements, with or without repetition counts, can be concatenated to form longer regular expressions, simply by writing the individual elements concurrently. The resulting expression is a result of applying the individual elements, in sequence left to right, in order to determine a match.

**Example:** the expression  $a+(b|c)\{2,\}\.doc$  is a result of concatenating

a+ match one or more "a"s, then
(b|c){2,} match "b" or "c", 2 or more times, then match the "." (dot) character (part of the file extension), then
doc match "doc"

This expression would match file names of **acc.doc** and **abbb.doc**, but would not match **acc.txt** or **ac.doc**.



# **View/Views**

The <u>Files pane</u> may present files and folders using a variety of display methods. Each has its own merit, depending on the content being displayed, and may display different amounts of file information.

**Views** may be also accessible from a button on the <u>Main toolbar</u>.



**Info:** In most views, the name may appear to be the primary display item. Actually, it the leftmost information column (as shown in <u>details</u> view) which is displayed! In <u>icons</u> view, for example, the file size could be displayed instead. See <u>Select Columns...</u> for more information.

#### **Thumbnails**



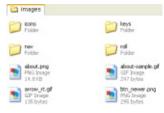
This view displays thumbnail images for each file. Using **Thumbnails** is primarily useful when displaying images; other files may simply display a *generic* image assigned by Windows.

**Explorer**++ presents a view of each folder, as well, showing a few thumbnails of images (if any) contained therein.

Currently, the thumbnail size is fixed (internal to **Explorer++**) at 120x120 pixels. **Explorer++** does **not** cache thumbnails as Windows Explorer does (optionally creates "Thumbs.db" file).

#### **Tiles**

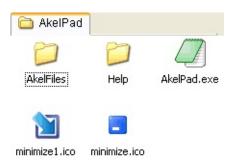
**Tiles** view displays the files and folders, using the Windows *generic* images for



file types. In addition, the file type and size is displayed.

Files and folders are displayed in a manner similar to **Thumbnails** - in as many columns as the width of the Files pane will allow.

#### **Icons**

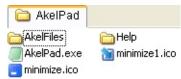


**Icons** view uses embedded (resource) icons from files and, as with **Thumbnails** and **Tiles**, displays the files and folders in columns, as space allows.

**Icons** view is perhaps better suited to displaying executable files, and icon files (of course). Icons are displayed in 32x32 bit size.

Note: Windows Vista / 7 presents 4 different sized icons for <u>View</u> choices.

# **Small Icons**



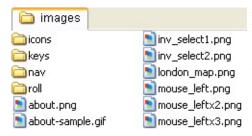
The **Small Icons** view is similar to **Icons** view, but the icons are displayed in 16x16 bit size allowing more files/folders to be displayed in the same space.

Note: Windows Vista / 7 presents 4 different sized icons for View choices.



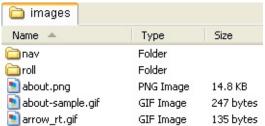
**Bug:** The **Small Icons** view currently has some acknowledged deficiencies in layout behavior.

#### List



**List** view displays files using *generic* icons and a single piece of information, usually the file name (see <u>above</u>). Items are displayed in columns to fit the available space.

#### **Details**



The **Details** view shows textual information and generic icons, in a single vertical list. It can display multiple columns of information, as <u>set</u> by the user.

Information, but usually takes up the most pane width. Columns not displayed due to lack of pane width may be scrolled into view as needed.

Items displayed in this view may be re-arranged using drag-and-drop. This has no effect on their actual order in the folder, but may aid the user in selections, editing, etc.



# **Tools/Options...**/Run in portable mode

**System Default:** 

No (if no config.xml file present)

Enabling this option (ie. checking the box) tells **Explorer**++ to save and fetch all its settings in an XML (config.xml) file, located in the installation folder, usually ...\Program Files\Explorer++ v1.2 (your version might be different). An XML file is a text file, structured hierarchically to enable **Explorer**++ to re-construct its settings, etc. at program startup.



**Info:** At <u>startup</u>, **Explorer++** (v1.2) always looks for a valid XML file in the correct location, and if it is found loads it and uses those settings. The actual setting value for portable mode **is not saved**, either in the Windows registry, or in the XML.

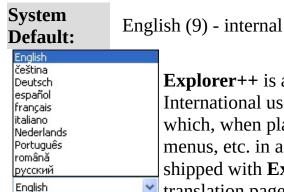
If **Explorer**++ is currently using portable mode (ie. XML file), and it is desired to switch back to using the Windows registry, the XML file must be either

- deleted, or
- renamed (eg. config.xml.bak)

and the portable mode option must be disabled (ie. clear the checkbox) prior to closing **Explorer++**, to avoid re-writing the XML file. Note that **Explorer++** creates the XML file (if this setting is enabled) immediately upon closing the options dialog.



# **Tools/Options...**/Language



**Explorer**++ is a native English language application, but International users have contributed translation DLLs which, when placed in the <u>installation folder</u>, present the menus, etc. in a different language. The DLLs are not shipped with **Explorer**++, but may be downloaded from the translation page of **Explorer**++'s site at

#### http://www.explorerplusplus.com/translations

Once the DLLs are placed in the **Explorer**++ installation folder, the languages will appear as choices on the language drop-down (or drop-*up*!) control for this option. You may need to install additional fonts, or East-Asian language support prior to using some alternate languages.

The translations are incomplete, but are an excellent start to the *globalization* of **Explorer++**.

As of this version, the status of translations available is as follows:

Language	Code (ISO 639-1)	Lang. # (Windows)	Appears as (in drop- down)	Completion (approximate)
Catalan	CA	0x03	català	91%
Czech	CS	0x05	čeština	74%
Danish	DA	0x06	dansk	100%
German	DE	0x07	Deutsch	91%
English	EN	0x09	English	100% (internal)
Spanish Farsi (Persian)	ES FA	0x0A 0x29	español ىسراف	100% 100%

French	FR	0x0C	français	97%
Italian	IT	0x10	italiano	98%
Japanese <sup>1</sup>	JA	0x11	日本語	49%
Korean <sup>1</sup>	KO	0x12	한국머	92%
Dutch	NL	0x13	Nederlands	94%
Norwegian	NO	0x14	norsk (bokmål)	93%
Polish	PL	0x15	polski	97%
Portuguese	PT	0x16	Português	95%
Romanian	RO	0x18	română	73%
Russian	RU	0x19	русский	93%
Sinhala (Sri Lanka) <sup>2</sup>	SI	0x5B	සිංහල	48%
Turkish	TR	0x1F	Türkçe	86%
Ukrainian	UK	0x22	україньска	90%
Chinese (Simplified) <sup>1</sup>	ZH	0x04	中文(简体)	92%

#### **Notes:**

- 1. requires support for East Asian languages to be installed. This installation is available from the Control Panel *Regional and Language Options* applet.
- 2. requires installation of either the SinhalaTamil Kit (Windows XP) or possibly a Sinhala LIP (Language Interface Pack Windows Vista/7, untested), available from Microsoft Sri Lanka.

For anyone wishing to aid in the effort, the source files (CSV - comma separated values, XLS - Excel spreadsheet) are available for download on the translation page; completing the missing portions and re-submitting would be welcome.



# **Tools/Options.../Open new tabs next to the current one**

System Default:

No

New tabs on the <u>Tab bar</u> are normally created/opened at the extreme right position. This option, when checked, forces new tabs to be created to the **immediate right** of the **active** tab. This position for the tab is used even if the tab is created by a non-active tab elsewhere on the Tab bar using the <u>Context menu</u>, for example.



# **Tools/Options...**/Default new tab folder

System Default:

My Computer

This option allows the user to select a default folder to be used when a <u>new tab</u> is opened. The option presents a typical Windows *Browse For Folder* dialog, allowing the user to choose a folder. Prior to using this option, the default folder is *My Computer*.



If a folder is set by this option, then subsequently is renamed or deleted (ie. folder cannot be found), new tabs default back to *My Computer*.

**Tip:** The *Browse For Folder* dialog is an native Windows dialog and, as such, respects the settings from the **Control Panel/Folder Options** - **View** tab. Specifically, the

- Do not show hidden files and folders, and the
- *Hide protected operating system files (Recommended)* setting if enabled will prevent display of some folders by this dialog. This behavior exists even if **Explorer**++ is set to <u>display hidden</u> items, since



**Explorer**++ has no control over this dialog.

It is recommended that both of the above settings be changed to display all files and folders when using **Explorer++**, and to use its own control of these attributes.



# **Tools/Options...**/Allow multiple instances

System Default:

Yes

By default, **Explorer**++ allows multiple instances of itself, that is, you may open more a one copy of **Explorer**++. Each new copy can have its own set of tabs and settings, etc., subject to information below. If this option is disabled (box unchecked), ie. *do not allow multiple instances*, then attempting to open a second copy of **Explorer**++ (eg. by double-clicking on a shortcut) will open a new tab instead.



**Info:** While multiple instances of **Explorer**++ are open, each copy maintains tab and settings information in its own memory space. However, on closing, each copy will write complete settings information to the Windows registry (or config.xml file). Closing the next copy will **also** do this, overwriting the settings from the first. This means that the **last** closed instance of **Explorer**++ ultimately determines the settings (and tab information) saved for the next session. This behavior is by design.



**Tip:** If you have multiple copies of **Explorer++** open, the one with your **preferred tabs** (and settings) should be **closed last**. If multiple instances are being used along with <u>portable</u> mode, you can make a backup copy of your config.xml file.



# **Tools/Options...**/Close the main window when closing the last tab

System Default:

Yes

**Explorer**++ usually disallows closure of the last open tab, but with this option enabled, this can be done, and results in **Explorer**++ closing completely.

With this setting active, you cannot use the <u>close</u> button on the <u>Tab bar</u>; you must use double-click (subject to <u>option</u>), a key combination (Ctrl+W, Ctrl+F4), or a menu item.



# **Tools/Options...**/Full row selection in details view

System No **Default:** 

Normal selection of an item in details view just highlights the left-most column (usually Name). In order to select that item, the left-most column must be clicked; clicking on another column has no effect.



However, when this option is enabled, the full row is highlighted; selection may be done on any column.





### **Tools/Options...**/Show folder sizes

System Default:

No

Checking this box forces **Explorer**++ to calculate and display folder sizes in the <u>Files pane</u>. The feature might be useful if, for example, you were *house-cleaning* your drive and wanted to merge smaller folders with larger ones; folder sizes would be listed is the **Size** column, if <u>enabled</u>.



**Caution:** Although it sounds obvious, when this option is enabled, **Explorer++** calculates folder sizes - **always**. If you are *walking* through your folder tree to get to a particular location, large folders in the files pane will be calculated, even if they are only momentarily displayed. Windows is a multi-tasking, multi-threaded operating system; calculations continue even though the folder is no longer displayed. This may **greatly** impact your system's performance - use this option with care.

#### Disable folder sizes on removable and network drives

When folder size calculation and display is enabled, you may check this box to turn off the feature for removable and network drives, as a time-saving convenience. For network drives, this is a safety feature, as the system may not know ahead of time just how large the network drive is; time will be saved. In addition, network and removable drives are transitory - it may not be useful to know the sizes since tomorrow, the drives may not be connected.



# **Tools/Options...**/Show all file sizes in:

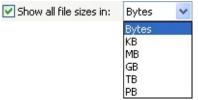
# System Default:

Flexible, Bytes if option enabled

Show all file sizes in:

Bytes

When this box is cleared, drive and file sizes (and folder sizes, if enabled) are displayed in a *flexible* format, that is, in bytes, kilobytes (KB - 10<sup>3</sup> bytes), megabytes (MB - 10<sup>6</sup> bytes), etc., depending on file size.



Checking the box allows the user to choose from a variety of units, from bytes up to terabytes ( $10^{12}$  bytes) and even petabytes ( $10^{15}$  bytes)! File sizes will be displayed in the chosen units, even if files are small. This might prove useful in viewing the sizes of larger drives, etc. or media files (DVD files could be in the gigabyte ( $10^9$  bytes) range



# **Tools/Options.../Default Columns...**

System Default:

see Folder types, varies with type

You may set the <u>columns</u> (and <u>column order</u>) to be shown on **new tabs**; default column widths are always reset to 150 pixels. Default column widths may be changed, however, by the <u>Save Column Layout as Default</u> menu item.

# **About Default Columns and Column Widths**

**Info:** Explorer++ keeps 2 different sets of *default* columns for use, each with its own column order, visibility and column widths for the 7 different types of folders.

- one set of system defaults. This set is the set used to create new tabs. It can be altered by the Default Columns... setting (this setting column order and visibility only) and the Save Column Layout as Default setting (order, visibility and width). Column widths are only changed when the current tab layout is saved as default. New tabs, when created, adopt this set of columns and widths. These settings are persistent, maintained in either the config.xml file or the Windows registry.
- one set for **each tab**. This set is used when the tab is switched to one of the 7 different types of folders, but is never used for another tab. Column display settings and width changes are only maintained for this tab. If the **Save Column Layout as Default** option is used, the current column settings and widths (this type of folder only) is saved to the system defaults. Once the tab is closed, these settings are lost.



# **Tools/Options...**/Insert new items in their sorted positions

System Default:

Yes

**Explorer**++ sorts items in the current Files pane (ie. tab) when a Refresh is done, or when refreshing is done automatically by changing the column sorting, etc. When new items are added to the tab by drag-and-drop, or by using the **New** item of the context (right-click) menu, newly added items are (by default) inserted in the correct location - folders at the top (or bottom, depending on the column header status), files in position by alphabetic order. Disabling this option, however, causes all new items to be placed at the bottom the of current list. This may be of benefit when editing folders, etc. and new files/folders can be determined at a glance.

Of course, automatic refresh (and sorting) is still done when column sorting is changed and at startup, etc.



# **Tools/Options...**/Show user friendly dates

System Default:

Yes

Setting this option presents the

- Date Created,
- Date Modified and
- Date Accessed

<u>columns</u> in the Files pane with *user friendly* dates, such as "Today, *time*" and 'Yesterday, *time*" instead of the usual format. The usual format is determined by your system settings for Date and Time display and can be modified in the **Regional and Language Options** Control Panel applet.

You may open the Control Panel applet here:

to customize your settings (Short Date

format, Time).



**Incomplete:** To date, only "Today" and "Yesterday" have been implemented as user friendly dates.



# **Tools/Options...**/Single-click to open an item

System Default:

No

Windows' default mode of operation (in most situations) is

- single-click on an item to select it (give it *focus*)
- double-click to activate it or execute it

The **X Window System** graphical user interface, popular with Unix/Linux-type operating systems, uses a different approach

- hover over an item to select it (give it *focus*)
- click once to activate it or execute it

Enabling this option causes **Explorer**++ to behave like an X Window application - in the <u>Files pane</u> only. Some users may find this more comfortable (less mouse clicks) or faster.

#### Hover time (ms)

#### incomplete



**Info:** This behavior is available in Windows as a *system-wide* setting. The **General** page of the *Folder Options* Control Panel applet provides this functionality. **Explorer**++, as it is not a native Windows component, does not obey this setting.



#### **Go/User: Data**

The top portion of the **Go** menu allows quick access to special locations, providing access to data which the user may require.

For a definition of *virtual folder*, see <u>here</u>.

#### My Computer

This is a virtual folder which displays

- all *volumes* on the computer. A volume is a single storage location, usually with a single, drive letter unique to the computer. It can be an entire hard (or floppy) drive, a partition within a drive, a removable (eg. USB) drive, an optical drive (ie. CD, DVD or *Blu-Ray Disc*<sup>TM</sup>, or a "drive" (with a drive letter) assigned to a folder in the NTFS file system.
- virtual folders, such as **Control Panel**
- renamed real locations such as Bob's Documents (probably *C:\Documents* and *Settings\Bob\My Documents*) and Shared Documents (probably *C:\Documents* and *Settings\All Users\Documents*); drive letters may vary with different installations of Windows.

Note that **My Computer** may contain different items, or may display differently in each version of Windows.

#### **My Documents**

This is a real folder (probably *C:\Documents and Settings\<username>\My Documents* - drive letters may vary) which Windows creates as part of its installation. The purpose for this folder, at least as intended by Windows, is to act as a parent folder for all the user's documents and data. This may not suit each user's purposes, but many programs default to this location for data storage.

#### My Music

This is a real folder (probably *C:\Documents and Settings\<username>\My Documents\My Music* - drive letters may vary) which Windows creates as a subfolder of <u>My Documents</u>, intended to house digital music files (eg. MP3, WAV, etc.).

#### **My Pictures**

This is a real folder (probably *C*:\Documents and Settings\<username>\My Documents\My Pictures - drive letters may vary) which Windows creates as a subfolder of My Documents, intended to house digital image files (eg. JPG, GIF, PNG, etc.).

#### **Desktop**

**Desktop** is a *virtual folder*, considered by Windows to be the parent (ie. the topmost item in the hierarchy) of all items in the *virtual tree* shown in the <u>Folders pane</u>. The practical use for **Desktop** is that it always contains all items shown on the user's actual desktop (ie. the Windows screen when no application windows are visible).

Although **Desktop** is considered to be a virtual folder (for purposes of the computer's *virtual tree*), it is really comprised of 2 real folders

- *C*:\Documents and Settings\<username>\Desktop, and
- C:\Documents and Settings\All Users\Desktop

The (root) drive letter may vary with different installations of Windows.



# **Tools/Options...**/Tab bar settings

#### Always show the tab bar

**System Default:** 

Yes

Disabling this option causes the <u>Tab bar</u> to disappear (ie. not displayed) when only 1 tab is open. If 2 or more tabs are open, this setting has no effect.

#### Show the tab bar at the bottom

**System Default:** 

No

The <u>Tab bar</u> is normally displayed at the top of the <u>Files pane</u>; enabling this option (ie. checking the box) displays tabs at the bottom, just above the **Status** Bar (if enabled).

#### Extend tab bar across entire window

System

No

**Default:** 

With this option disabled, the <u>Tab bar</u> extends only the width of the <u>Files pane</u>. Enabling this option displays the Tab bar the full width of the window; more tabs can be displayed in this mode.



# **Tools/Options.../Double-click to close a tab**

System
Default:

Yes

When this option is enabled (ie. checked), tabs may be closed by double-clicking on the tab in the <u>Tab bar</u>. If disabled, the tab must be closed by an <u>alternate</u> <u>method</u>, such as the Tab bar's close button.



# **Go/User: Special**



The bottom portion of the **Go** menu allows quick access to special locations, for computer configuration, etc.

For a definition of *virtual folder*, see <u>here</u>.

#### **Recycle Bin**

This is a *virtual folder* that displays deleted files and folders from various locations. This is the same **Recycle Bin** usually shown on your <u>Desktop</u>. Selected items may be restored by using the "Restore" menu item on the context (ie. right-click) menu. Note that files deleted from a **Local** USB (ie. external) drive will not be visible in **Recycle Bin** unless the drive is physically and logically connected to your system. Files deleted from a Removable USB drive (eg. *flash* or *jump* drive) do not appear in the **Recycle Bin**.

#### **Control Panel**

This is a *virtual folder* which displays various tools (ie. *applets*, or small applications) used to configure your system or other applications. Most *applets* are physically housed in the WINDOWS\system32 folder, but some may be elsewhere. This is the same **Control Panel** usually shown on your *Start Menu*.

#### **Printers and Faxes**

This is a *virtual folder* which displays *links* to all printers and faxes connected to your system. This location may also show drivers which control various devices. The context (ie. right-click) menu for each device or driver may show various control items including <u>Properties</u>, which usually allows some setup

procedures.

#### **CD Burning**

Windows XP and higher (Vista, 7) has built-in routines for native *burning* (ie. writing) of CDs. This burning requires a buffer where data is kept that will be written to the CD; this buffer location is a folder reserved especially for this purpose - "**CD Burning**". Files and folders contained in this folder are slated for writing to CD, but could be removed (ie. deleted) if necessary prior to the actual write.

#### **My Network Places**

This is a *virtual folder* which displays frequently visited network locations which have been added; these locations are essentially "network bookmarks". These network places may be added using the **Add Network Place** wizard, displayed in the Files pane. Two other network *tasks* (wizards) are also available from the Files pane - the **Network Setup Wizard**, and the **Wireless Network Setup Wizard**. **Explorer++** displays these three wizards in the Files pane along with previously set up network places, while Windows Explorer shows them (under expanded titles) as tasks, when the Folders pane is turned off.



**Incomplete:** *My Network Places* currently does not provide access to the actual network, except through the Folders (*treeview*) pane. Network places are housed under the *Entire Network\Microsoft Windows Network* item.

#### **Network Connections**

This is a *virtual folder* which displays networks which your computer is connected to, or *can* connect to.



**Incomplete: Network Connections** currently does not provide information about the *Type*, *Status* or *Owner* (available <u>columns</u> for display). This information (and more) can be viewed by selecting **Control Panel** in the Folders pane, right clicking **Network Connections** in the Files pane (for the context menu), and selecting **Explore** - this opens Windows Explorer which will display this information.

