# Multi Commander Documentation

This PDF documentation is auto generated from the documentation located online at http://multicommander.com/docs/
The most updated version of the document is found in the webbased version online

Since this PDF is auto generated the formatting and layout can sometimes be faulty.
If you find some layout or other issues please contact author of MultiCommander (http://multicommander.com/contact) so it can be corrected.

# What Is Multi Commander

Multi Commander is a file manager for Windows and is a complete replacement for Windows Explorer. It provides an efficient way of working with folders and files.
It uses the popular and efficient Dual-Pane layout, and is designed to be very keyboard friendly.
The mouse is fully supported, but its strength is that you can do everything with the keyboard alone. And that allows you to work quickly and efficiently.

Multi Commander offers a wide range of features:

- Supports both Windows Explorer-style *and* the popular Commander-style keyboard/mouse setup
- Supports Drag & Drop
- Copy/Move operations support filtering and plugins for special situations
- Zip, 7Zip, Tar, Gz can be browsed as if they were folders
- FTP, Portable Devices and the Registry are exposed in the file system
- MultiRename tool with powerful rename operations
- View text/logs files of ANY size with minimal memory usage (even if the files are many gigabytes in size)
- Powerful, built-in scripting language (MultiScript) for added customization and to extend functionality
- And very, very much more...

# System Requirements

Multi Commander works on most operating systems from Windows XP and Windows Server 2003 and newer.

**Client Operating System :** Windows 10, Windows 8.1, Windows 8, Windows 7, Windows Vista , Windows XP*, both 32bit and 64bit
**Server Operating System :** Windows Server 2012/R2, Windows Server 2008/R2, Windows Server 2003, both 32bit and 64bit
*Not all features are available on all operating systems. Note that from summer 2016, XP support is not support in latest version. But latest version supporting XP is available for download.*

**Minimal Hardware :** 32bit CPU with SSE2 support
**Screen Resolution :** A minimum resolution of 800x600 is recommended

# Download and Installation

## Download

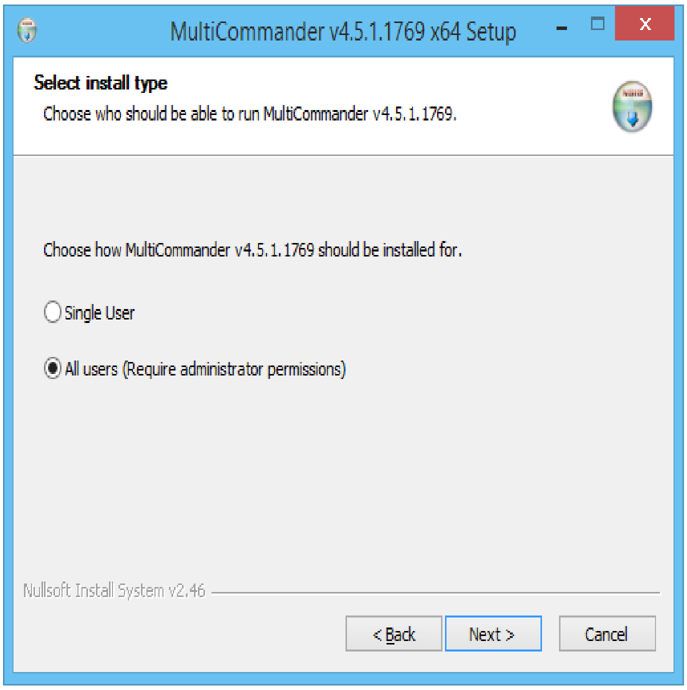
The official download location is http://multicommander.com/downloads. If you download it from another location make certain that you really trust that source: you never know if somebody has manipulated the package.
This is especially important with the portable version since the package is only a .zip. **Never** download the portable version from another source.

## Installation

### Full Installer (.exe)

The full installer is named **MultiCommander_x64_([version]).exe** or **MultiCommander_win32_([version]).exe**

You will be given two choices at the beginning of the installation: **Single User** or **All users**.



MultiCommander v4.5.1.1769 x64 Setup

**Select install type**

Choose who should be able to run MultiCommander v4.5.1.1769.

Choose how MultiCommander v4.5.1.1769 should be installed for.

○ Single User

● All users (Require administrator permissions)

If you choose **Single User** the installer will, by default, select an installation location that is under your private account. By doing this the installer will not require any administrator rights for the installation.

If you select **All users** the installer will, by default, select the shared Program Files folder as the install location. By installing it here *all* user accounts on the machine will have access to the program.
This installation option requires administrator rights and the installer will restart itself and ask for admin permission if needed.

All users that then run Multi Commander will get their own configuration. The configuration is always stored under the user account, located under the **Application Data Path**.
Eg. **C:\Users\<username>\AppData\Roaming\MultiCommander\Config\**

Hint

By typing "**:goconfig**" in the command line field inside Multi Commander. The active Explorer Panel will then open at the Multi Commander configuration folder

### Portable Installer (.zip)

The portable installer is named **MultiCommander_x64_Portable_([version]).zip** or **MultiCommander_win32_Portable_([version]).zip**

The portable package is a zip archive that you only need to unpack to a folder. Just make sure that you keep the folder structure from the zip package.
The portable version is the same as the installed version. The difference is that the portable version is configured to store all settings and configuration in the folder that Multi Commander is installed in and run from.
The portable version does not save anything to the registry or to the user account folder. Everything is saved in the Multi Commander folder. So the program must have write permissions to the folder that you start Multi Commander from.
This version is ideal to be installed to - and run from - a USB memory stick.

### Note for WinPE Users

If you want to use Multi Commander in WinPE 4.0, and assuming your WinPE directory is X:,
copy the folowing files to the following directories *before* you build WinPE:

C:\Windows\System32\en-EN\oledlg.dll.mui -> X:\Windows\System32\en-EN\
C:\Windows\Syswow64\en-EN\oledlg.dll.mui -> X:\Windows\SysWOW64\en-EN\
C:\Windows\Syswow64\oledlg.dll -> X:\Windows\SysWOW64\
C:\Windows\System32\oledlg.dll -> X:\Windows\System32\

Contributed by user Ulrich; tested on Windows 10 PE, x86 and x64.

## Installer Parameters

The installer accepts parameters that make it possible to run the installer silently or from a script.

```
MultiCommander_x64_(6.2.0.2147).exe /S /D=[Target Folder]
/PrevInstall=[Upgrade|Uninstall]
/InstallMode=[All|User] /Kill=[Ask|Auto|Abort]
```

- **/S** - Silent
  Do not show any UI or ask any questions
- **/D** - Destination
  The target where Multi Commander should be installed. If not specified the default path under the Program Files folder is used.
  Eg. /D="D:\MyPrograms\MultiCommander"
- **/PrevInstall** - Previous Installation
  What to do with existing installation. The options are "Upgrade" or "Uninstall"
  Eg. /PrevInstall=Upgrade
- **/InstallMode** - Installation Mode
  Install Multi Commander for All users or current user. If "All" is set and install path is under a protected location (eg. Program Files) make sure the installation is run as administrator. The options are "All" or "User"
  Eg. /InstallMode=All
- **/Kill** - Kill running instances of Multi Commander
  When doing an upgrade Multi Commander may be running. Use /Kill=Auto to automatically kill any running instance of MultiCommander
  /Kill=Ask will show a dialog asking what to do. /Kill=Abort will abort the upgrade if Multi Commander is running.
  Eg. /Kill=Auto
- **/CLEAR=Uninstall** - Clear Uninstall Data
  Clear all entries of Multi Commander from the Installed Programs locations in the registry
  Eg. /CLEAR=Uninstall
- **/FORCEDEST="Path"** - Force a new path
  Force a new path even if a previous path was found in the registry
  Eg. /FORCEDEST="D:\NewInstallPath\"

**Example**

```
# Upgrade Current
MultiCommander_x64_(6.2.0.2147).exe /S /D="C:\Bin\MultiCommander"
```

```
/PrevInstall=Upgrade /InstallMode=All /Kill=Auto
```

# Upgrading

## Update Tool

When Multi Commander starts it will check to see if a new version is available. If a new version is found, you will be asked if you want to upgrade. If you select that option then the update tool is started. You can also do a manual check by either: selecting **Menu > Help > Check for Updates** or by launching the update tool via **Menu > Help > Launch MultiUpdate**.

The Update tools can also be started manually by running **MultiUpdate.exe**, located in the installation folder of Multi Commander.

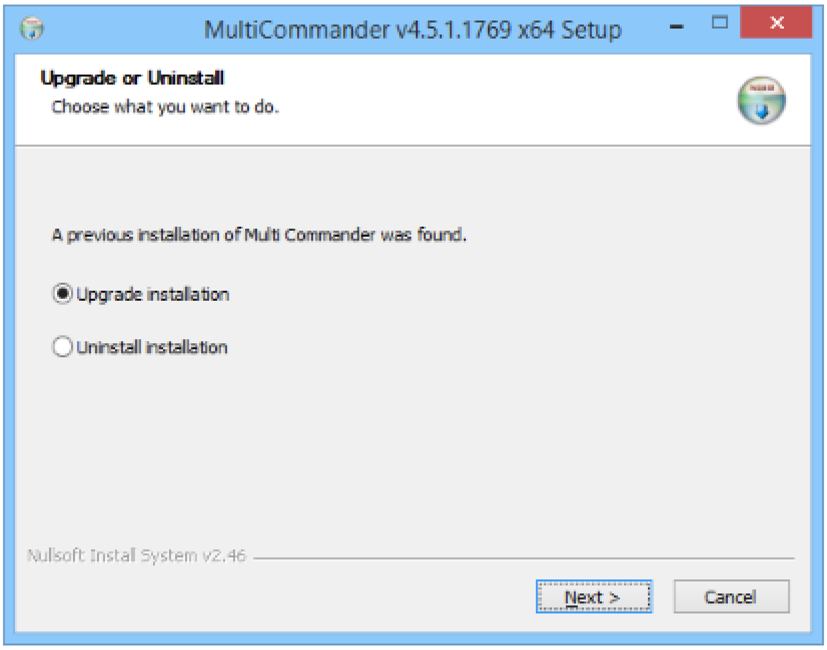
The Update tool will download the correct update package and then replace all necessary files. The tool works for both the installed and portable versions.

When doing an upgrade be sure to close any running instances of Multi Commander before running the tool. The Update tool **cannot** replace files that are in use.
If you have configured Multi Commander to exit to the system tray as an icon, then Multi Commander is not actually closed if you just press the 'X' button. To fully close the program, right click on the tray icon and select **Close Multi Commander**.

The update tool can (optionally) also download beta versions and has some advanced options that can be set if you have issues with it.
Check the document page for MultiUpdate for more information about this tool.

## Upgrade Using Installer

You can also upgrade using the installer package. If the installer detects that you already have Multi Commander installed you will be given two options:
**Upgrade installation** or **Uninstall installation**.



MultiCommander v4.5.1.1769 x64 Setup

**Upgrade or Uninstall**

Choose what you want to do.

A previous installation of Multi Commander was found.

● Upgrade installation

○ Uninstall installation

Nullsoft Install System v2.46

If you select Upgrade it will replace all necessary existing files with the new, updated versions.

# License

This version (1.0 - 11.x) of Multi Commander can be used for free (without paying for a license) for personal, commercial and government use.

You are allowed to install this version of Multi Commander on multiple computers.

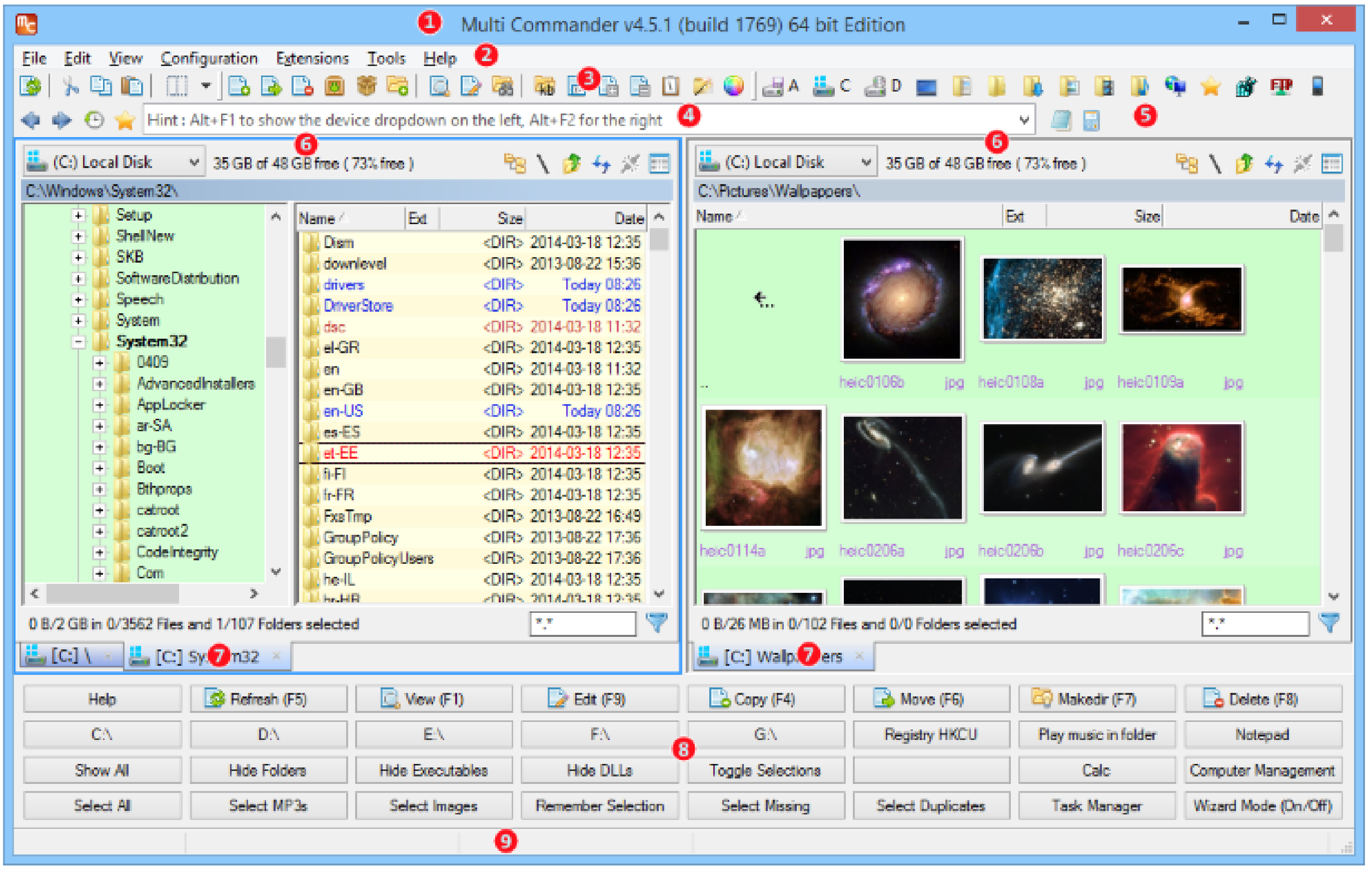
Multi Commander is not allowed to be used in situations and systems in which the failure of the Multi Commander software could lead to death, personal injury or severe physical or environmental damage.

Multi Commander and Mathias Svensson (the author of Multi Commander) are not responsible for what you do with Multi Commander after you have installed it.
It is up to you to be careful. And *always keep backups of your important data*.

MultiCommander is software that is designed to copy/move and delete files.
Using this software without proper knowledge of what you are doing could result in the destruction and/or loss of data.
So **always keep backups of important data**.

Mathias Svensson reserves the right to change this license in a future version in any way.

# Main Application Layout



| Name | Ext | Size | Date |
|---|---|---|---|
| Dism | | &lt;DIR&gt; | 2014-03-18 12:35 |
| downlevel | | &lt;DIR&gt; | 2013-08-22 15:36 |
| drivers | | &lt;DIR&gt; | Today 08:26 |
| DriverStore | | &lt;DIR&gt; | Today 08:26 |
| dsc | | &lt;DIR&gt; | 2014-03-18 11:32 |
| el-GR | | &lt;DIR&gt; | 2014-03-18 12:35 |
| en | | &lt;DIR&gt; | 2014-03-18 11:32 |
| en-GB | | &lt;DIR&gt; | 2014-03-18 12:35 |
| en-US | | &lt;DIR&gt; | Today 08:26 |
| es-ES | | &lt;DIR&gt; | 2014-03-18 12:35 |
| et-EE | | &lt;DIR&gt; | 2014-03-18 12:35 |
| fi-FI | | &lt;DIR&gt; | 2014-03-18 12:35 |
| fr-FR | | &lt;DIR&gt; | 2014-03-18 12:35 |
| FxsTmp | | &lt;DIR&gt; | 2013-08-22 16:49 |
| GroupPolicy | | &lt;DIR&gt; | 2013-08-22 17:36 |
| GroupPolicyUsers | | &lt;DIR&gt; | 2013-08-22 17:36 |
| he-IL | | &lt;DIR&gt; | 2014-03-18 12:35 |

1. Title Bar
2. Menu Bar
3. Toolbar Area
4. Command Line Field
5. Quick Launch Bar
6. Presentation Area
7. Tab Area
8. Button Panel / Log Panel
9. Status Bar

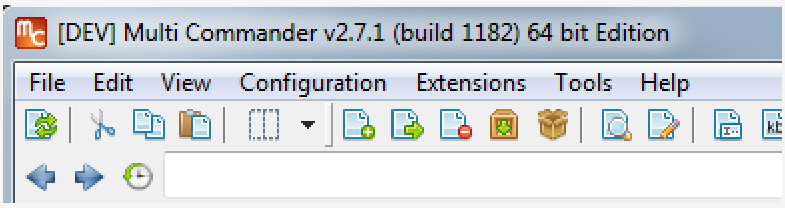
## 1. Title Bar

The topmost line of the MultiCommander window is the **Title Bar**; it shows the *version number* and *build number* of MultiCommander.

You can also add custom text to be shown at the beginning of the title. This is done using the -T command line parameter when invoking MultiCommander.exe

Hint

```
MultiCommander.exe -T=DEV.
```



[DEV] Multi Commander v2.7.1 (build 1182) 64 bit Edition
File Edit View Configuration Extensions Tools Help

## 2. Menu Bar

The second line (when visible) shows the **Menu Bar**. The default entries are: **File**, **Edit**, **View**, **Configuration**, **Extensions**, **Tools** and **Help**. You can create and modify additional menus and entries for user-defined commands by following the procedures outlined in Create User Defined Commands.
Clicking on any menu opens a list of submenus, as described in the Menu Bar detail section here.

Hint

The display of the Menu Bar can be toggled by the shortcut key **Ctrl+M**.

## 3. Toolbar Area

The Toolbar Area contains buttons for some of the most-used commands that you find in the menu. It also contains Buttons for available drives to open in the Explorer Panel. The Command Line Bar and the Quick Launch Bar are also here.

**Read more about**
Command Line Bar
Quick Launch Bar
Drive Bar
File Commands Bar

## 4. Command Line Field

## 5. Quick Launch Bar

## 6. Presentation Area

The next part of the display is the **presentation area.** This displays one or more GUIs that are controlled by extensions and plug-ins, such as the Explorer Panel and File Search.

## 7. Tab Area

The tab can be drag and dropped to either side. And you can also right click on a tab for additional commands. like Close tab, Duplicate Tab, Load Tabs, Save tabs and more. Read more about the Panel Tabs.

## 8. Button Panel / Log Panel

Under the main presentation area there is, by default, a button panel. This panel can be toggled on and off with Ctrl+B.
You can also have a Log Panel shown here. By default this is not visible, but it can be toggled by pressing Ctrl+L.

Read more about the Button Panel.

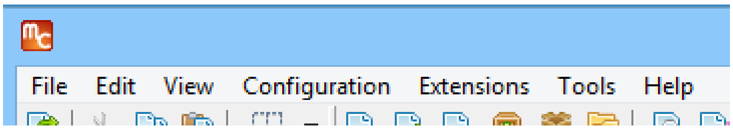
Hint

Toggle Button Panel on/off with **Ctrl+B**.
Toggle Log panel on/off with **Ctrl+L**

## 9. Status Bar

The status bar shows various pieces of status information. For example, when copying files you will see the progress of the copy process here

# Menu Bar



The default menu entries are: **File**, **Edit**, **View**, **Configuration**, **Extensions**, **Tools** and **Help**.
You can add additional menus and menu entries for user-defined commands by following the procedures outlined in Create User Defined Commands.
Clicking on any menu brings up a submenu, as described below.

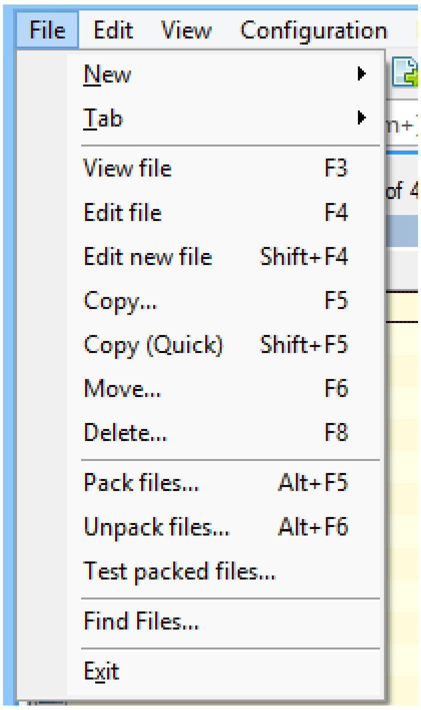
## Menus

- Menu - File
- Menu - Edit
- Menu - View
- Menu - Configuration
- Menu - Extensions
- Menu - Tools
- Menu - Help

Hint

The display of the Menu Bar can be toggled by the shortcut key **Ctrl+M**.

## Menu - File



displays a submenu of **File**-related items.

### New

displays a submenu where you can create a new:

- *Multi Commander window*
- *Multi Commander window (as Administrator)*
- *Explorer Panel tab* (in the active panel)

## Tab

displays a submenu where you can:

- *Close the current tab* (in the active panel)
- *Close all tabs but this one* (in the active panel)
- *Duplicate a tab*
- *Move a tab*

  This displays another submenu where you can:

  1. *Swap the location of the left/right panels*
  2. *Move the active panel to the other side*
- *Lock a tab*

## View file

allows you to view the selected file using the **MultiDataViewer**.

## Edit file

allows you to edit the selected file(s) using your associated file editor (**Notepad** is the default).

## Copy...

displays the **Copy files and folders** dialog. (See Copy/Move Operations.)

## Copy (Quick)

creates a copy of the file/folder in focus in the same folder with a ".bak" extension added. *Only the file/folder in focus is copied, even if there are other files/folders selected.* (Default shortcut key is Shift+F5).

## Move...

displays the **Move files and folders** dialog. (See Copy/Move Operations.)

## Delete...

displays the **Delete Files** dialog. (See Delete Operations.)

## Pack files...

displays the **Pack files** dialog. (See Pack Files.)

## Unpack files...

displays the **Unpack archives** dialog (but only if the file in focus is an archive.)

## Test packed files...

**tests** the selected packed files for certain types of errors.

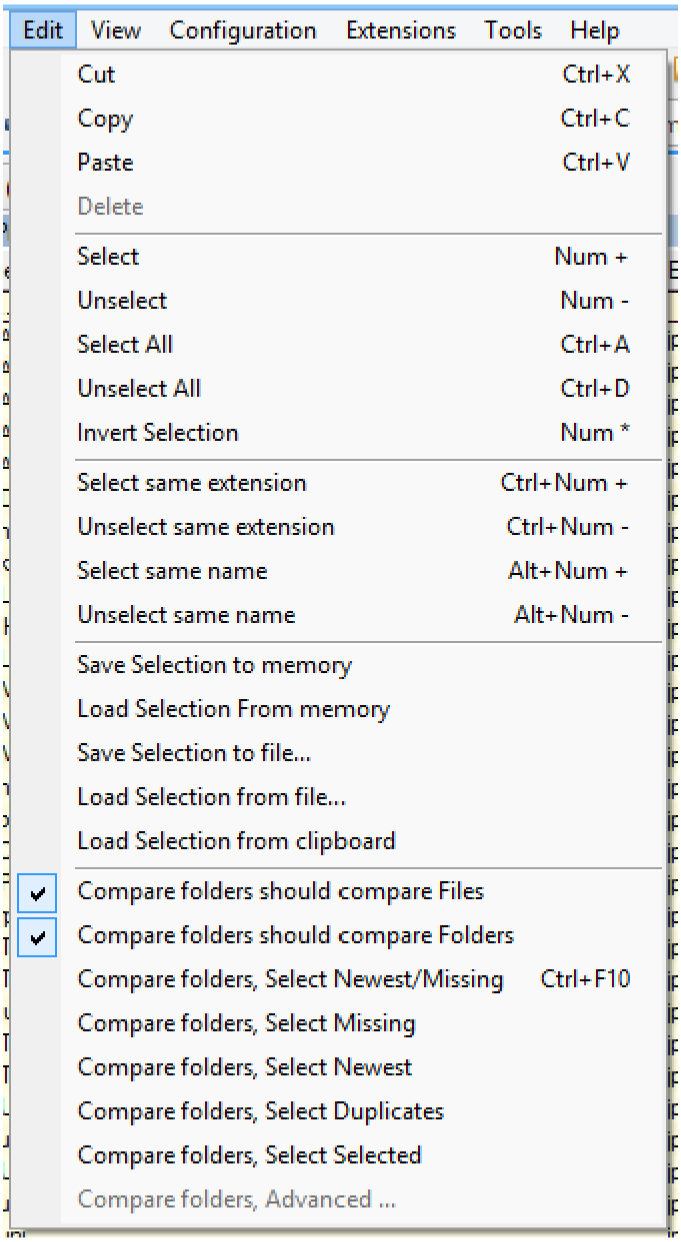
## Find Files...

displays the **Find Files** dialog.

## Exit

closes **Multi Commander.**

# Menu - Edit


Edit
View
Configuration
Extensions
Tools
Help
Cut Ctrl+X
Copy Ctrl+C
Paste Ctrl+V
Delete
Select Num +
Unselect Num -
Select All Ctrl+A
Unselect All Ctrl+D
Invert Selection Num *
Select same extension Ctrl+Num +
Unselect same extension Ctrl+Num -
Select same name Alt+Num +
Unselect same name Alt+Num -
Save Selection to memory
Load Selection From memory
Save Selection to file...
Load Selection from file...
Load Selection from clipboard
✓ Compare folders should compare Files
✓ Compare folders should compare Folders
Compare folders, Select Newest/Missing Ctrl+F10
Compare folders, Select Missing
Compare folders, Select Newest
Compare folders, Select Duplicates
Compare folders, Select Selected
Compare folders, Advanced ...

displays a submenu of **Edit**-related items.

## Cut

Designates the currently selected files/folders/text to be **moved** when **Paste** is selected.

## Copy

Designates the currently selected files/folders/text to be **copied** when **Paste** is selected.

## Paste

**Copies** or **Moves** the files/folders/text that were previously designated by **Edit->Copy** or **Edit->Cut**.

## Delete

Deletes selected text.

## Select

displays the **Expand Selection** dialog.

## Unselect

displays the **Shrink Selection** dialog.

## Select All

**selects** all files and folders in the active panel.

## Unselect All

**deselects** all files and folders in the active panel.

## Invert Selection

**inverts** all selections in the active panel, i.e. switches all *selected* files and folders to *unselected*, and all *unselected* files and folders to *selected*..

## Select Same Extension

**selects** all files in the active panel having the **same extension** as the file currently in focus.

## Unselect Same Extension

**deselects** all files in the active panel having the **same extension** as the file currently in focus.

## Select Same Name

**selects** all files in the active panel having the **same filename** as the file currently in focus.

## Unselect Same Name

**deselects** all files in the active panel having the **same filename** as the file currently in focus.

## Save Selection to Memory

**saves a list** of the currently selected files/folders. The list is saved internally, and will be lost if Multi Commander is closed before the list is reloaded.

## Load Selection from Memory

**selects** all files/folders designated in the currently saved **selection list**.

## Save Selection to file...

displays a **Save As** dialog to let you designate a file to which to save a list of the currently selected files/folders.

## Load Selection from file...

displays an **Open** dialog to let you choose a file from which to load a list of files/folders to select. The list can be one that was previously saved, or a manually-created list of file and folder specifications.

## Compare folders should compare files

is a checkbox option that toggles whether compare folders functions should compare the **files** within the folders. This option will be applied to all folder comparison functions.

### Compare folders should compare folders

is a checkbox option that toggles whether compare folders functions should compare the **subfolders** within the folders. This option will be applied to all folder comparison functions.

### Compare folders, Select Newest/Missing

**compares** the folder open in the active panel with the one open in the opposite panel, and selects (depending on the current options) any files/folders in either panel that are either **missing** from the opposite panel, **or** have the **same name** as *and* are **newer** than the file/folder in the opposite panel.

### Compare folders, Select Missing

**compares** the folder open in the active panel with the one open in the opposite panel, and selects (depending on the current options) any files/folders in either panel that are **missing** from the opposite panel.

### Compare folders, Select Newest

**compares** the folder open in the active panel with the one open in the opposite panel, and selects (depending on the current options) any files/folders in either panel that have the **same name** as *and* are **newer** than the file/folder in the opposite panel.

### Compare folders, Select Duplicates

**compares** the folder open in the active panel with the one open in the opposite panel, and selects (depending on the current options) any files/folders in either panel that are **duplicates**.

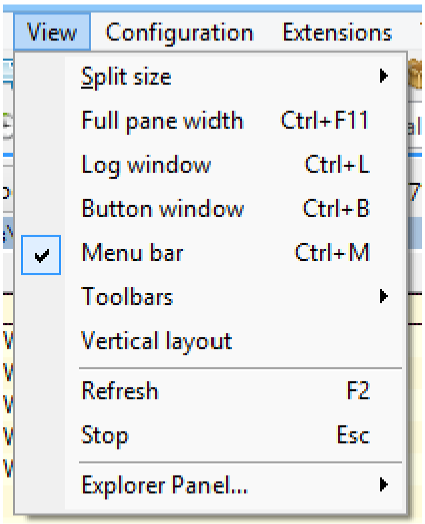
### Compare folders, Select Selected

**compares** the folder open in the active panel with the one open in the opposite panel, and selects (depending on the current options) any files/folders in either panel that are **selected** in both panels.

### Compare folders, Advanced ...

**compares** the folder open in the active panel with the one open in the opposite panel, and selects (depending on the combination of options selected) any files/folders in either panel that meet the comparison options.  Comparisons can be done using any combination of Date, File size and File content.  There is a dropdown of comparison Profiles to make the selection of commonly-used comparisons easier to select.

## Menu - View



displays a submenu of **View**-related items.

## Split size

displays a dialog that lets you choose one of the following **split-sizes** for the two explorer panels: **0/100, 25/75, 50/50, 75/25, 100/0**.

## Full pane width

expands the currently active panel to **full pane width**. (Shortcut key is **Ctrl+F11**.)

## Log window

is a checkbox option that toggles showing the **Log window**. (Shortcut key is **Ctrl+L**.)

## Button window

is a checkbox option that toggles showing the **Button window**. (Shortcut key is **Ctrl+B**.)

## Menu bar

is a checkbox option that toggles showing the **Menu bar**. (Shortcut key is **Ctrl+M**.)

## Toolbars

shows a list of selectable toolbars. Some of these are not really separate lines, but are subsections of the tool list line. Uncheck the boxes of those you don't wish to have visible:

- **Command Line Bar**

  selects whether to display the *Command Line* toolbar. When present, this is a separate line. The tools shown here are **Back**, **Forward**, **History**, **Command Line**, and **user-selected tools** (if any). (For details, see Command Line Bar.)

  **Standard**

  selects whether to show the *standard* tools in the **Tool Bar**. These are **Refresh**, **Cut to Clipboard**, **Copy to Clipboard**, **Paste from Clipboard**, and **Split**. (See Standard Command Bar.)

  **File Commands**

  selects whether to show the *file command* tools in the **Tool Bar**. These are **Copy Selected Files**, **Move Selected Files**, **Delete Selected Files**, **Pack Selected Files**, **Unpack Selected Files**, **View File**, **Edit File**, **Rename Current File/Folder**,  **Calculate folder size**, **Select**, **Unselect**, and **Copy the file/folder pathname to the clipboard**. (See File Commands.)

  **Drives**

  selects whether to show the *drives* that are present on the system. (For details on the use of this subset, see Drive Bar.)

## Vertical layout

toggles between **vertical split** and **horizontal split**.

## Refresh

**refreshes** the display. (Shortcut key is **F2** for Commander style, **F5** for Windows Explorer style.)

## Stop

**stops** the current activity. (Shortcut key is **Esc**.)

### Explorer Panel

selects a format or mode to configure for the Explorer Panel. The choices are

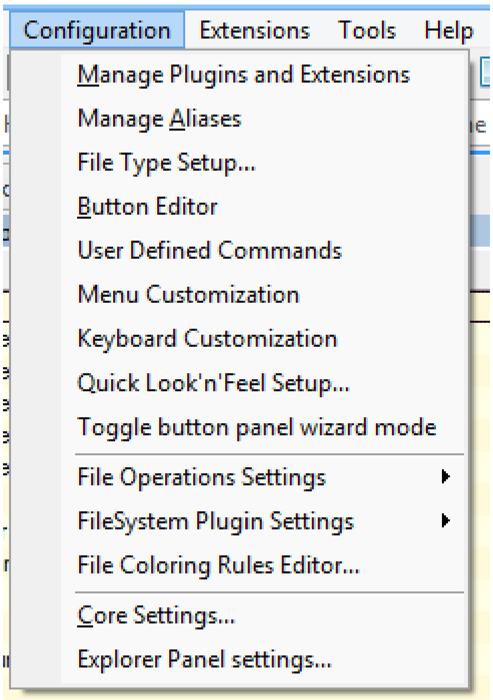
1. **Date format**

   choices are: *Standard*, *Week days*, or *File age*.

   **View Mode**

   choices are: *Details*, *List*, or *Thumbnail List*.

## Menu - Configuration



displays a submenu of **Configuration**-related items.

### Manage Plug-ins and Extensions

displays the **Extension Manager** dialog. This lets you manage **Application Extensions**, **File System Plug-ins**, **File Operations Plug-ins** and **File Properties Plug-ins**.

### Manage Aliases

displays the **Alias Manager** dialog. This lets you create and modify aliases. (See Managing Aliases.)

### File Type Setup...

displays the **File Type Setup** dialog. This lets you configure viewers/editors/launchers to be used for various file types. (See File Type Setup.)

### Button Editor

displays the **Button Editor** dialog. This lets you configure the Button Panel. (See Using The Button Editor To Customize The Button Panel.)

### User Defined Commands

displays the **User Commands** dialog. This lets you define or modify User Commands. (See Create User Defined Commands.)

### Menu Customization

displays the **User Menu Editor** dialog. (See User Menu Editor).

### Keyboard Customization

displays the **Customize Keyboards Setup** dialog. This lets you modify the keyboard shortcut commands in the menu. (See Customize Keyboard Shortcuts.)

### Quick Look'n'Feel Setup...

displays the **Quick Look'n'Feel Setup** dialog. This lets you quickly change the look and feel of the file manager. (See Change To Windows Explorer Look and Feel.)

### Toggle Button Panel Wizard Mode

is a checkbox option that toggles whether the Button Panel is in **Wizard mode**. (See Button Panel - Wizard Mode.)

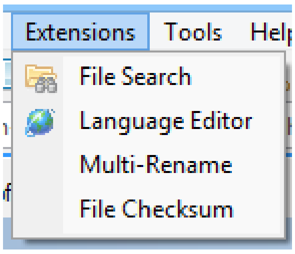
### Core Settings...

opens a new tab that lets you modify the Multi Commander **Core Settings**. (See Core Settings.)

### Explorer Panel Settings...

opens a new tab that lets you modify the Multi Commander **Explorer Panel Settings**. (See Explorer Panel Settings.)

## Menu - Extensions



displays a submenu of **Extensions**-related items.

### File Search

displays the **Find Files** dialog. (See File Search.)

### Language Editor

opens a new tab that lets you edit various Multi Commander messages.

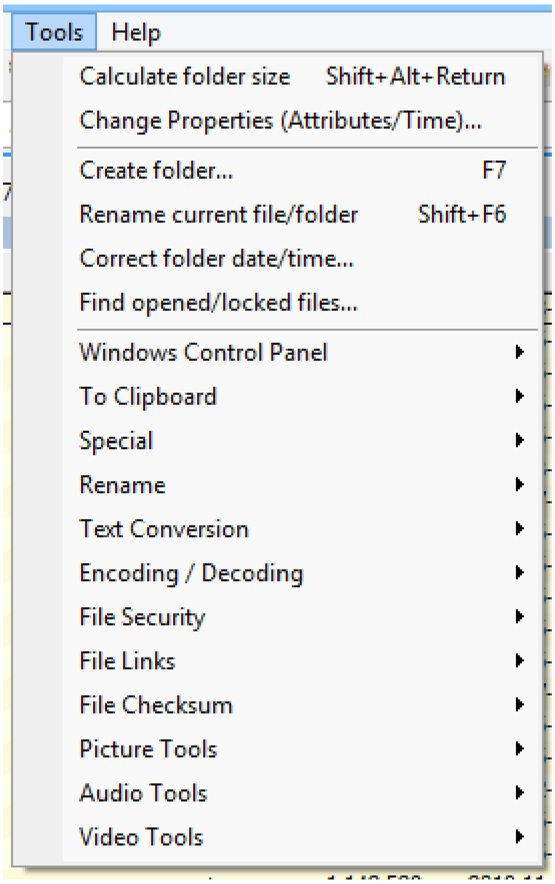
### MultiRename

displays the **MultiRename** dialog. (See MultiRename.)

### File Checksum

opens a new tab that lets you verify checksums. (See File Verifier (CRC/SFV/MD5).)

# Menu - Tools



displays a submenu of **Tools**-related items.

## Calculate folder size

calculates folder sizes. (See Calculate Folder Size.)

## Change Properties (Attributes/Time)

displays the **Change attributes and/or time** dialog. This allows you to change the properties and date/time of the selected files and folders.

## Create folder...

displays the **Create new folder** dialog.

## Rename current file/folder

lets you modify the name of the file or folder that is currently in focus.

## Correct folder date/time...

displays the **Correct Folder Date/Time** dialog. (See Correct Folder Date/Time.)

## Find opened/locked Files...

displays the **Find opened/locked Handle/File/DLL** dialog. (See Find Opened/Locked Files.)

## Windows Control Panel

displays a submenu of commonly-used Windows Control Panel applets.

## To Clipboard

displays a submenu of items that can be copied to the clipboard:

1. Files/Folders path and name
2. Files/Folders name
3. Files/Folders path
4. File version
5. File/Folder Date
6. Name, Size, Date
7. Path, Name, Size, Date
8. Comma-separated List
9. Comma-separated list, with full paths
10. File content as text

## Special

lets you select the **oldest duplicates based on version** in the filename.

## Rename

displays a submenu of renaming styles:

1. Uppercase
2. Lowercase
3. Capitalize
4. Replace text in name
5. Similar name, different extension

## Text Tools

displays a submenu of text conversions:

1. To Unix format (LF)
2. To Windows Format (CRLF)
3. To Mac format (CR)
4. Tab to Space
5. Reformat XML to Structured
6. Reformat XML to Compact
7. Sort Lines...
8. Find and Replace...

## Encoding / Decoding

displays a submenu of text encoding/decoding options:

1. Base64 Encode
2. Base64 Decode

## File Security

displays a submenu of **file security** options:

1. Take Ownership (Admin)
2. Remove all file/folder permissions (Admin)
3. Add file/folder permissions for user (Admin)

## File Links

displays the **Create Links to File/Folder** dialog.

## Picture Tools

displays a submenu of **Picture tools**:

1. Convert picture format...
2. Rotate picture...
3. Resize picture...
4. Strip EXIF Metadata from pictures
5. Export EXIF Metadata from pictures
6. Adjust EXIF Date/Time Information...

For more information, see Picture Tools.

## Audio Tools

displays a submenu of **Audio tools**:

1. Remove Metadata Tags from audio files
2. Export Metadata from audio files
3. Show MP3 File Information

For more information, see Audio Tools.

## Video Tools

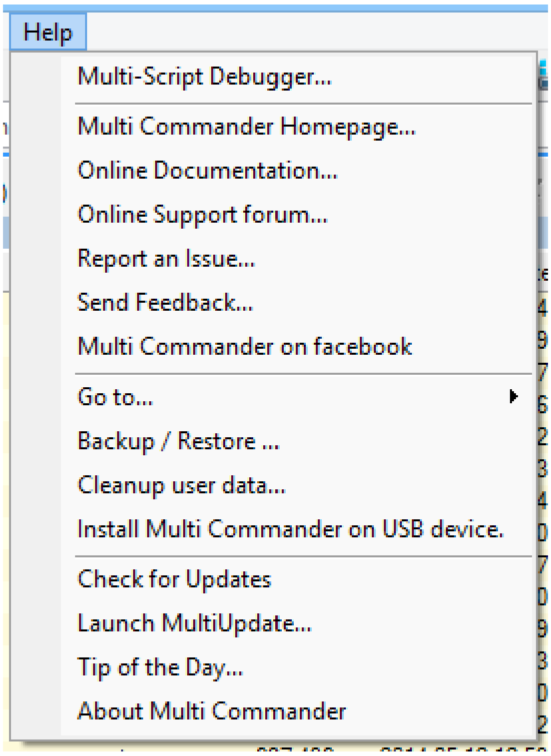
displays a submenu of **Video tools**:

1. ### Scan for Media Information

   displays the **Scan Media Information** dialog, which lets you scan the selected files/folders for media information. For more information, see Video Tools.

# Menu - Help

displays a submenu of **Help**-related items.



## Multi-Script Debugger...

opens an editing and debugging environment for the testing, running and debugging of MultiScripts. (This tool is functional but still in the Beta stage of development.)
See a screenshot here.

## Multi Commander Homepage...

displays the **Multi Commander Homepage** in your default web browser.

## Online Documentation...

displays the **Multi Commander Documentation** web page in your default web browser.

## Online Support forum...

displays the **Multi Commander Support Forum** web page in your default web browser.

## Report an Issue...

displays the **Multi Commander Send Issue Report** web page in your default web browser.

## Send Feedback...

displays the **Send Feedback** dialog so that you can submit feedback about Bugs, Problems or Feature requests.

## Donate...

Opens a web page in your default web browser where you may support the development of Multi Commander by donating.

## Multi Commander on facebook...

Opens the **Multi Commander Facebook** web page in your default web browser.

## Go to...

displays a submenu of places you can **Go To**:

1. Multi Commander Config folder
2. Multi Commander Log folder
3. Multi Commander Application folder

## Backup/Restore ...

displays the **Backup/Restore** dialog, where you can backup or restore your Multi Commander configuration.

## Cleanup user data...

displays the **Cleanup leftover User Data** dialog.

## Check for Updates

checks to see if an **updated version** of Multi Commander is available.

## Launch MultiUpdate...

prompts for execution of the **MultiUpdate** plug-in, which checks for the current version of Multi Commander. (See MultiUpdate.)

## Tip of the Day...

opens the **Tip of the Day** window, where you can see the current Tip of the Day, and cycle through the complete set.

## Register...

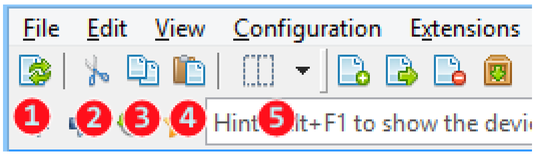
opens the **Multi Commander - Register License** dialog.

## About Multi Commander

opens the **About Multi Commander** window. This contains Build information and links to Support websites.

# Standard Command Bar

The *Standard Command* Toolbar is a subset of the toolbar that is shown if the corresponding checkbox in View->Toolbars is checked. It has a number of standard commands the extension can support. If the extension in the currently active panel supports any if these commands, the commands will be enabled; otherwise they are disabled.



## 1. Refresh

Button 1 refreshes the content in the active panel.

## 2. Cut

Button 2 cuts the selected content to the clipboard.

## 3. Copy

Button 3 copies the selected content to the clipboard.

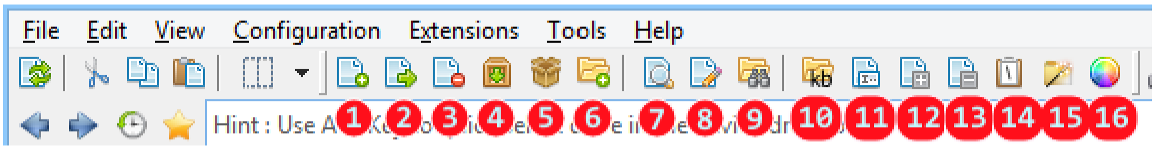
## 4. Paste

Button 4 pastes the clipboard into the active panel.

## 5. Resize Panel

Button 5 provides a dropdown list from which you can select how you want to split the panel. Clicking on the icon itself reverts to a 50/50 split.

# File Commands



The *File Commands toolbar* contains tools related to working with files. Most of them only work if the active panel is an Explorer Panel. The toolbar is displayed whenever **View->Toolbars->File Commands** is checked. and it can also be disabled altogether in Explorer Panel settings. (See Explorer Panel Settings).

## 1. Copy

Displays a dialog for launching a *Copy* operation. (See Copy/Move Operations)

## 2. Move

Displays a dialog for launching a *Move* operation. (See Copy/Move Operations)

## 3. Delete

Launches a *Delete* operation. (See Delete Operations)

## 4. Pack Selected Files

Opens the *Pack Files* dialog. (See Pack Files.)

## 5. Unpack Selected Files

Opens the *Unpack Archives* dialog. (See Unpack Files.)

## 6. Create Folder

Show the Create folder dialog.
Right click and a popup menu with a list of folders to create is shown. This list can be customized by selecting "Customize..."/p>

## 7. View File

Opens the current file to be *viewed* in the default viewer for that file type. (See File Type Setup)

## 8. Edit file

Opens the current file to be *edited* in the default editor for that file type. (See File Type Setup)

## 9. Find Files

Find Files

## 10. Calculate Folder Size

Causes *folder sizes* to be calculated. (See Calculate Folder Size)

## 11. Rename Current File/Folder

Renames the current file or folder using the operating system renaming protocol.
Right click and a popup menu with Quick Rename options opens.

## 12. Expand selection

Lets you specify a *filter* for selecting additional files/folders.

Right click and a popup menu with some dynamic selection items opens (built from items shown in the current path). The entries of a pre-defined list of types are also shown in this list. They can be changed, or more can be added, by selecting "Customize..."

## 13. Shrink selection

Lets you specify a *filter* for de-selecting files/folders.

Right click and a popup menu with some dynamic selection items opens (built from items shown in the current path). The entries of a pre-defined list of types are also shown in this list. They can be changed, or more can be added, by selecting "Customize..."

## 14. Copy PathName

Copies the file/folder *pathname* to the clipboard.

Right click and a popup menu opens with commands for other copy path alternatives.

## 15. Show/Hide Hidden and System files

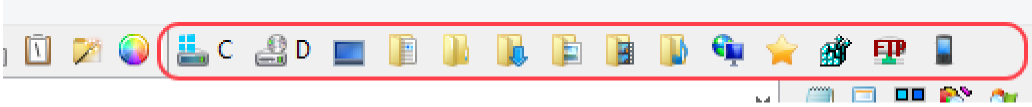
Show or hide hidden and system files.

Right click and a popup menu opens with options to only show/hide hidden files or show/hide system files.

## 16. File Coloring

A popup menu opens where Rule-based file coloring can be configured.
It is possible to enable/disable file coloring from the menu. A list of all the file coloring profiles is also shown so the file coloring profile to use can be easily changed.

# Drive Bar



The *Drive toolbar* is the rightmost subset of the toolbar, and is displayed whenever **View->Toolbars->Drives** is checked and it is enabled in the Explorer Panel Settings.

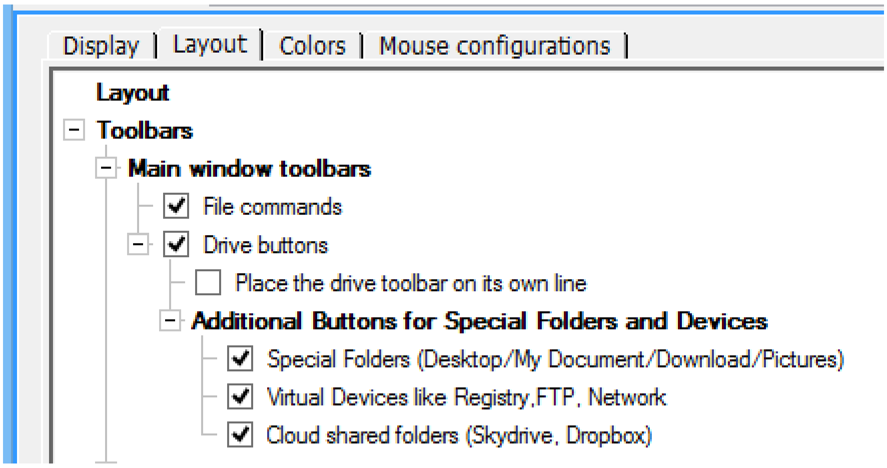
The Drive toolbar shows a list of drives that the user can choose from. It also show common folder locations like desktop, pictures, download and more. All the virtual filesystems (like REG, FTP: WPD: ) are also here.
Clicking on one of the icons causes the current tab to switch to that location.

You can also right click on a drive button to show the Windows Shell Context Menu (the "Right-click" menu) for that drive.

## Add more buttons

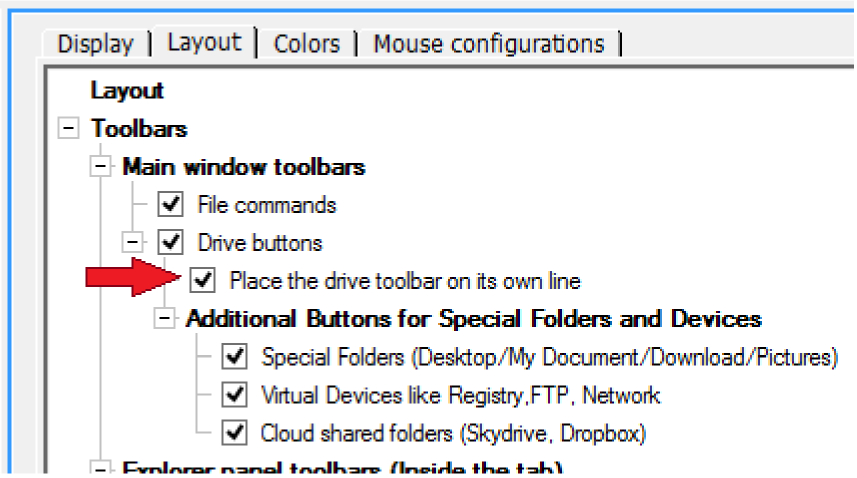
It is possible to configure which of the special folders and virtual devices to show on the drive toolbar.

To configure the drive toolbar go to **Menu -> Configuration -> Explorer Panel Settings** and click on the **Layout** tab



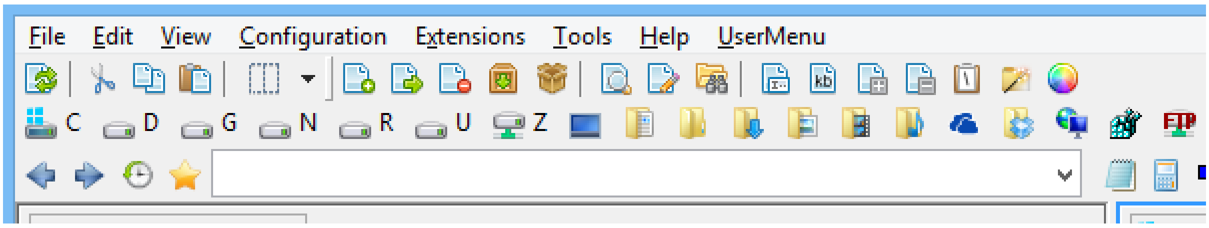
Layout
- Toolbars
  - Main window toolbars
    - ☑ File commands
    - ☑ Drive buttons
      - □ Place the drive toolbar on its own line
    - Additional Buttons for Special Folders and Devices
      - ☑ Special Folders (Desktop/My Document/Download/Pictures)
      - ☑ Virtual Devices like Registry,FTP, Network
      - ☑ Cloud shared folders (Skydrive, Dropbox)

If you enable all of them the toolbar might grow very long and the system will try to auto-rearrange it to its own line if it does not fit in the Window.
On some systems this causes the toolbar area to rearrange itself incorrectly and may look unsightly.
This can be avoided if, in settings, you allow the drive toolbar to be placed on its own line.



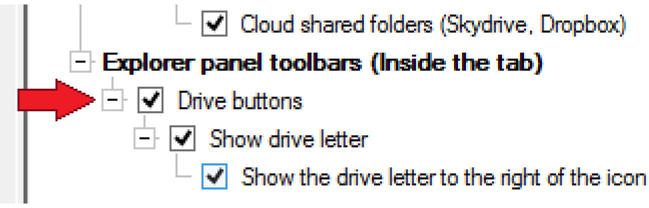
Layout
- Toolbars
  - Main window toolbars
    - ☑ File commands
    - ☑ Drive buttons
      - ☑ Place the drive toolbar on its own line
    - Additional Buttons for Special Folders and Devices
      - ☑ Special Folders (Desktop/My Document/Download/Pictures)
      - ☑ Virtual Devices like Registry,FTP, Network
      - ☑ Cloud shared folders (Skydrive, Dropbox)
  - Explorer panel toolbars (Inside the tab)

Enabling this option causes the drive toolbar to be placed on its own line and, if there are many drive buttons, they will fit better.



## Drivebar Inside Explorer Panel

It is also possible to place the drivebar inside an Explorer Panel.
This is enabled by checking the option "Drive buttons" under the "Explorer Panel toolbars" section

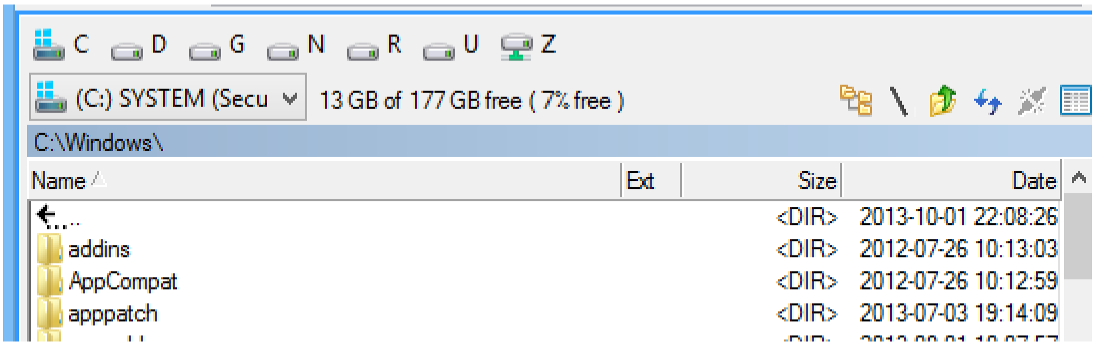


☑ Cloud shared folders (Skydrive, Dropbox)

**Explorer panel toolbars (Inside the tab)**

- ☑ Drive buttons
  - ☑ Show drive letter
    - ☑ Show the drive letter to the right of the icon

There will now be a drive buttons bar inside the Explorer Panel.



(C:) SYSTEM (Secu    13 GB of 177 GB free ( 7% free )

C:\Windows\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. |  | <DIR> | 2013-10-01 22:08:26 |
| addins |  | <DIR> | 2012-07-26 10:13:03 |
| AppCompat |  | <DIR> | 2012-07-26 10:12:59 |
| apppatch |  | <DIR> | 2013-07-03 19:14:09 |

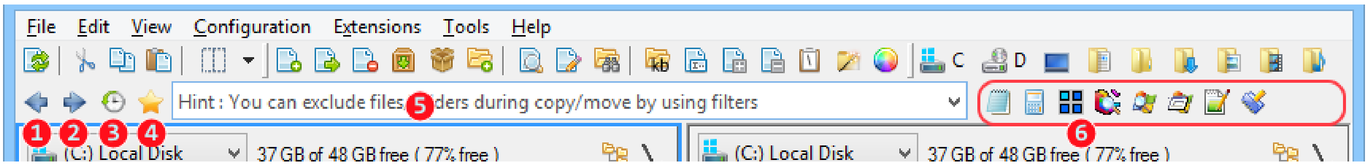
*note that the drive bar inside an Explorer Panel is limited in that it does not support showing special folders or virtual devices.*

## Other Configuration

If you have a drive bar active (application global or inside an Explorer Panel) you can remove the Device Dropdown list. However, if you are a user who likes to use hotkeys for fast access then this is not recommended.

# Command Line Bar

The fourth line in the Main Application Layout is the **Command Line Bar**, shown below. This toolbar can be removed from the display by unchecking the check box in **View->Toolbars**.


File
Edit
View
Configuration
Extensions
Tools
Help
Hint : You can exclude files 5 ders during copy/move by using filters
1
2
3
4
6
(C:) Local Disk
37 GB of 48 GB free ( 77% free )
(C:) Local Disk
37 GB of 48 GB free ( 77% free )

The buttons are enabled if the active extension (panel) supports back/forward/history. If the active extension does not support these commands, the buttons are disabled.

## 1. Back

Button **1** tells the extension to go back one step. If this button is held down for 2 seconds, a list of previous locations that you can select from is displayed. If the active extension is an Explorer Panel it will go back to the previously visited path.

## 2. Forward

Button **2** tells the extension to go forward one step. This can only be done if you have previously gone backwards. If this button is held down for 2 seconds, a list of all available forward locations is shown.

## 3. History

Button **3** shows a list of the previous 40 locations that the currently active extension has visited. From this list a previous location can be accessed quickly.

The default keyboard shortcut for Back is Alt+Left Arrow, Forward is Alt+Right Arrow and History is Alt+Down Arrow. In the Explorer Panel the Back and Forward mouse button can also be used if your mouse supports these buttons.

## 4. Favorites Window

The button shown as a *star* at the left end of the *Command Line*. Clicking the *star* button brings up the **Favorites** window. This window contains three sections:

- ### Quick Paths (F1)

  **Quick Paths** are paths that can be selected by pressing *Ctrl+num*. There can be only 10 *Quick Paths* defined.

- ### Favorites (F2)

  **Favorites** are paths that can be defined and stored as a list. To select a Favorite path, simply select it and press Enter.

- ### Web (F3)

  **Web** paths are URLs that can be defined in a list of web addresses. To select a web address, simply select it and press Enter.

## 5. Command Line field

The Command Line field (number **5**) allows you to enter commands for the active extension or plug-in. If the extension or plug-in does not handle the command it is sent to Windows to handle. If the command is a filename and is sent to Windows to be handled, Windows will launch that program. If the command is a URL, a browser is opened for it.

If you type a command for Windows to launch, you can insert a "*" in front of it to run it as Administrator. For example, **"*cmd"** will launch the command prompt as Administrator.

The Explorer Panel supports commands such as the command prompt's **"cd"** command. Thus if an Explorer Panel is currently active you can type **"cd .."** , **"mkdir myfolder"** and the Explorer Panel will create this folder.

## Special Internal Commands

The Command Line field supports some special internal commands:

| | | |
|---|---|---|
| *<external program> | Start an external program as administrator, e.g. "*cmd" starts an admin prompt at the current path | |
| !<cmd / path> | Normally Multi Commander will go to a path if it is entered. Typing ! in front of the path will force the path/cmd to be opened by the Windows Shell | |
| cd <path> | Change directory | |
| mkdir <path> | Create a folder | |
| cf <file> | Create a new, empty file | |
| alias <name>=<expanded to> | Create a new alias, eg. "alias d=d:\bin" | |
| alias2 <name> | Create a new alias for the current path, eg. "alias2 d" | |
| topmost 1 | Change whether Multi Commander is always on top of other windows. Use 1 to enable, any other value to disable | |
| addlanguage | Used to add support for another language so that you can create new translations | |
| importcmd | Used to import a script command quickly | |
| dbg folog | Enable full file operations logging | |
| dbg fslog | Enable full file system logging | |
| dbg applog | Enable full application logging | |
| :save | Save all autoload settings for all tabs. This is the same save as is done before exit | |
| :showhidden | Change the settings to show all system and hidden files and folders | |
| :hidehidden | Change the settings to hide all system and hidden files and folders | |
| :goapp | Go to the path from which Multi Commander is started | |
| :userdata | Go to the path under the Windows user account where Multi Commander saves data | |
| :gomcreg | Go to the registry path used by Multi Commander | |
| :golog | Go to the path where Multi Commander stores its log files | |
| :goconfig | Go to the path where Multi Commander reads/writes its settings files | |
| :box | Go to the location where you have your DropBox folder (if you have DropBox installed) | |
| :sky | Go to the location where you have your SkyDrive folder (if you have SkyDrive installed) | |
| :one | | Go to the location where you have your OneDrive folder (if you have OneDrive installed) |

| | |
|---|---|
| :desk | Go to the desktop |
| :dl | Go to the Windows Download folder (not available on Windows XP/Server 2003) |
| :doc | Go to the My Documents folder |
| :ctc | Clear Thumbnail Cache - Will remove all thumbnail cache information stored in memory |
| :rdrive | Refresh all devices in Device dropdown and Device Toolbar |
| :hex2dec <num> | Convert a hex value to decimal. eg. ":hex2dec ff" |
| :winerr <num> | Show the error message of an internal windows error code. Eg. ":winerr 5" |
| :sysinfo | Get some system information |

## 6. Quick Launch Buttons

The area following the *Command Line Field* is used for **Quick Launch Buttons**. If you right-click in that area, a menu will open with the following entries:

For further information, see Quick Launch Bar.

- ### Allow - Insert button by dropping file/folder

  If selected, this allows the use of drag and drop to insert a file or folder.

- ### Allow - Rearrange of buttons

  If selected, this allows the buttons to be rearranged using drag and drop.

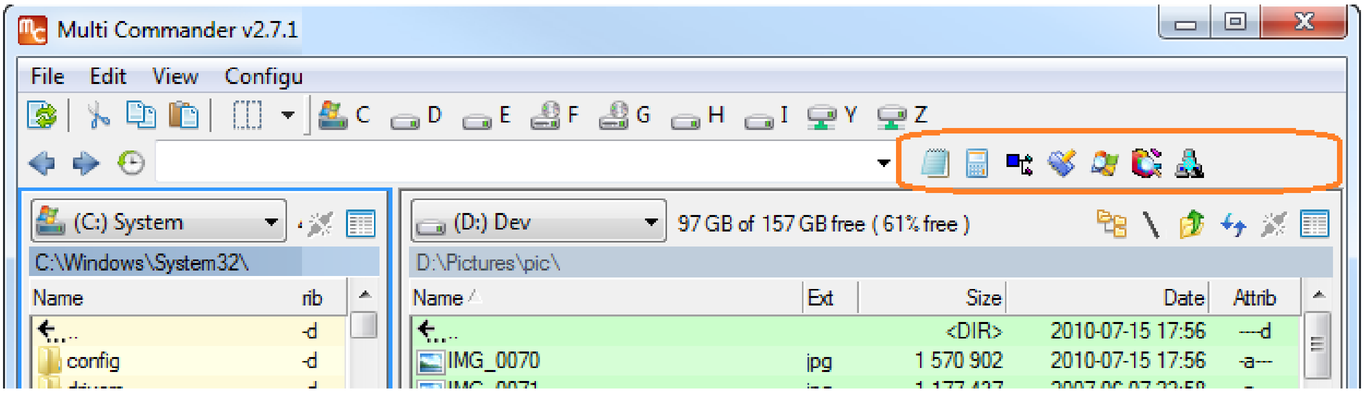
- ### Insert User Defined Command

  Opens the *User Defined Command* menu, where you can select an existing User Defined Command (or create a new one) to be inserted.

- ### Insert Separator

  Inserts a vertical separator line.

# Quick Launch Bar



| Name | rib |
|---|---|
| ... | -d |
| config | -d |

| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| ... |  | <DIR> | 2010-07-15 17:56 | ---d |
| IMG_0070 | jpg | 1 570 902 | 2010-07-15 17:56 | -a-- |

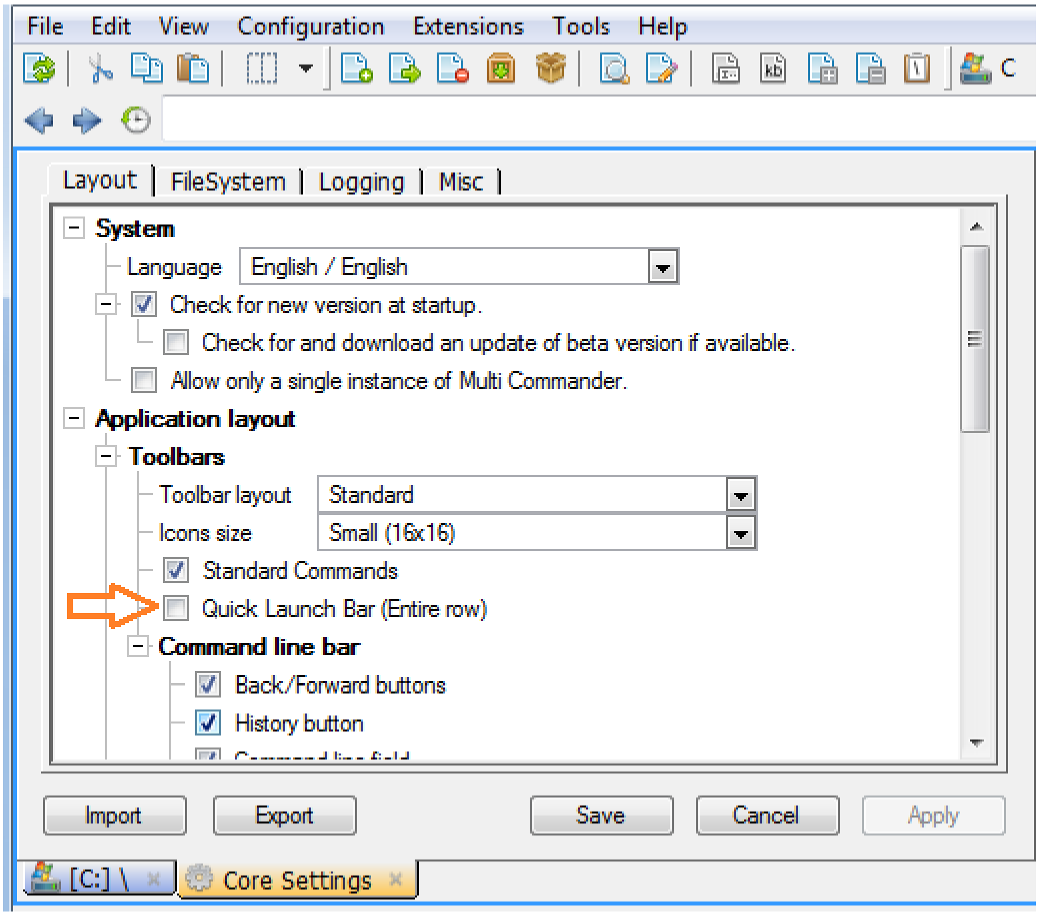
The **Quick Launch Bar** is located after the *command line field* and the more buttons that are added the shorter the command line field will be.

Here is a list of some of the features of the Quick Launch bar:

- If you drop a file or folder on the Quick Launch bar area, a button for it will be automatically added for it.
- You can rearrange the buttons in the Quick Launch bar by dragging them around.
- If a file is dropped on a program button, that file is sent as a parameter to the program it is dropped on. For example, if you drop a text file on the notepad button, the text file will be opened in notepad.
- If you click on a folder button, that folder will be opened inside Multi Commander.
- If you (left-) click on a program button, that program will be started. If you right-click on it, a menu will be opened that allows you to:
  1. Start it normally
  2. Start it as Administrator (Vista/Win7 +)
  3. Go to the folder containing the program file
  4. Remove the button from the Quick Launch bar
  5. Customize the way the program is opened, or what icon or tooltip to show for it, etc.
  6. Insert a user-defined command button on its left
  7. Insert a separator to its left. (This lets you group Quick Launch buttons.)

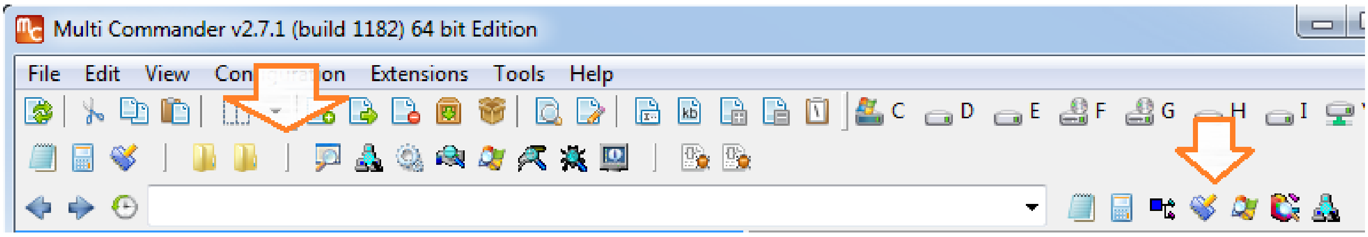
## Entire Quick Launch Row

To add an entire Quick Launch row, go to *Configuration* > *Core Settings* > *Application Layout* > *Toolbars* > *Quicklaunch bar (Entire row)* and click on the checkbox. (Clear the checkbox to remove the extra row.)


File Edit View Configuration Extensions Tools Help
Layout | FileSystem | Logging | Misc |
Import
Export
Save
Cancel
Apply
[C:] \
Core Settings

- **System**
  - Language: English / English
  - ☑ Check for new version at startup.
    - □ Check for and download an update of beta version if available.
  - □ Allow only a single instance of Multi Commander.
- **Application layout**
  - **Toolbars**
    - Toolbar layout: Standard
    - Icons size: Small (16x16)
    - ☑ Standard Commands
    - □ Quick Launch Bar (Entire row)
  - **Command line bar**
    - ☑ Back/Forward buttons
    - ☑ History button
    - ☑ Command line field

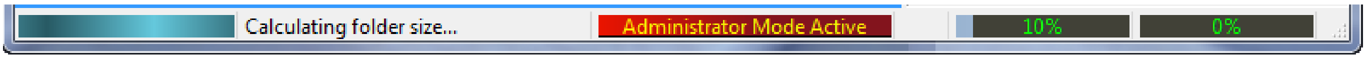
You will now have two Quick Launch Bars.


Multi Commander v2.7.1 (build 1182) 64 bit Edition
File Edit View Configuration Extensions Tools Help
C D E F G H I

## Enable/Disable

If the Quick Launch Bar items are unchecked under Core Settings, then they are not created or loaded during startup. But if they are checked in Core Settings, they can still be hidden if *Configuration* > *Core Settings* > *Application Layout* > *Toolbars* > *CommandLine Bar* > *Quick Launch bar* is unchecked.
You should only use that option to temporarily hide them. If you want to permanently remove them, then uncheck them under Core Settings. If they are just hidden they are still using memory resources and are loaded and created during startup. To minimize resource usage, disable them under Core Settings.

# Status Bar



Calculating folder size...

Administrator Mode Active

10%

0%

At the very bottom of the Multi Commander window is an area where the application can show status information about background tasks like folder sizing, copy operations and more.

The progress status for copy/delete/move operation is shown to the right in the status bar area. If you double-click on the progressbar the progress dialog window for that operation will be brought to the foreground and shown.

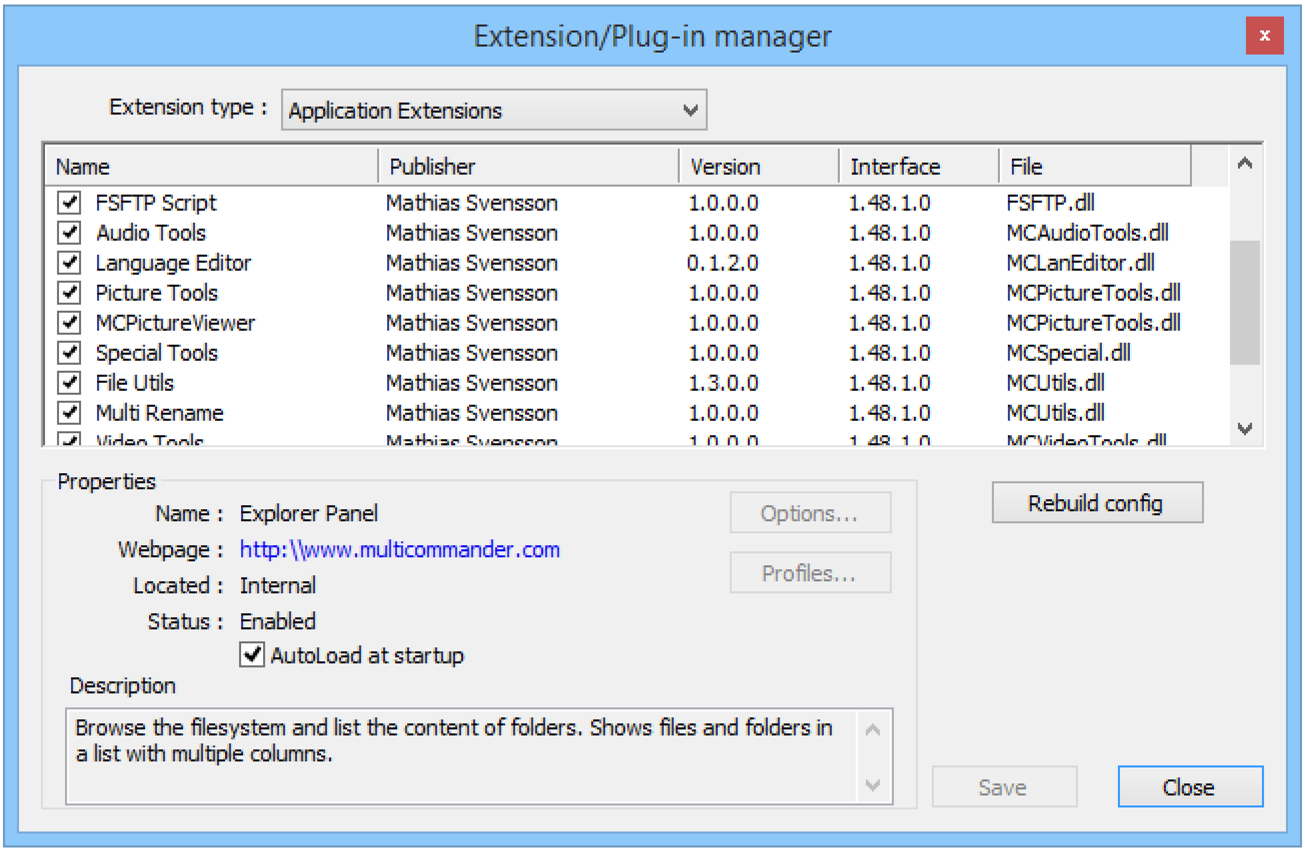
When Administrator Mode is active you will see an indication of that in the status bar. Administrator Mode will turn itself off when it has been idle for a couple of minutes, but if you right-click on the status text for it a popup menu will be shown where you can turn off Administrator Mode without waiting.

# Extensions and Plug-ins

Multi Commander is built around **extensions** and **plug-ins**.
Some of the extension are built directly into Multi Commander and some of them are located as external DLL files.

This allows for Multi Commander to grow with new features in an easy way and for other developers to create plugins to extend Multi Commander.

With the **Manage Plugins and Extensions** selection in the *Configuration* menu you can enable and disable extensions and plugins.



Extension type : Application Extensions

| Name | Publisher | Version | Interface | File |
|---|---|---|---|---|
| ☑ FSFTP Script | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | FSFTP.dll |
| ☑ Audio Tools | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | MCAudioTools.dll |
| ☑ Language Editor | Mathias Svensson | 0.1.2.0 | 1.48.1.0 | MCLanEditor.dll |
| ☑ Picture Tools | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | MCPictureTools.dll |
| ☑ MCPictureViewer | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | MCPictureTools.dll |
| ☑ Special Tools | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | MCSpecial.dll |
| ☑ File Utils | Mathias Svensson | 1.3.0.0 | 1.48.1.0 | MCUtils.dll |
| ☑ Multi Rename | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | MCUtils.dll |
| ☑ Video Tools | Mathias Svensson | 1.0.0.0 | 1.48.1.0 | MCVideoTools.dll |

Properties

Name : Explorer Panel
Webpage : http:\\www.multicommander.com
Located : Internal
Status : Enabled
☑ AutoLoad at startup

Description

Browse the filesystem and list the content of folders. Shows files and folders in a list with multiple columns.

There are 4 types of extensions and plug-ins:

## Application Extensions

These are extensions that have GUIs and create new tabs with functions in Multi Commander. Examples of Application Extensions are the Explorer Panel and File Search.

## FileSystem Plug-ins

All filesystems and archives that Multi Commander supports are handled by plug-ins. There are plug-ins for Zip, 7-Zip, RAR, FTP and the Registry.

## File Operations Plug-ins

These are plug-ins that are used when copying and moving files. These plug-ins can change how and where files are read and written.

## FileProperties Plug-ins

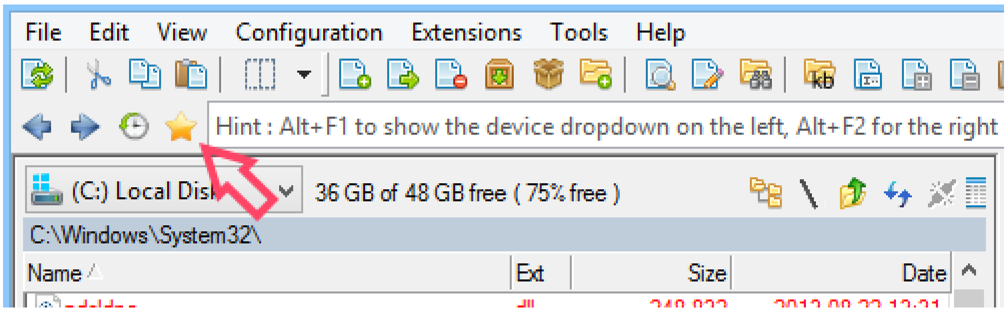
These plug-ins allow for more data to be shown about files in new columns in the Explorer Panel. For Example the filesystem plug-in FS-Registry also has a FileProperties Extension allowing you to see the special registry information in the Explorer Panel.

## Configuration of Virtual FileSystem Plug-ins

Configuration of which file extension a file system plug-in uses are configured here.
Read more about that under the Virtual FileSystem pages

# Favorites

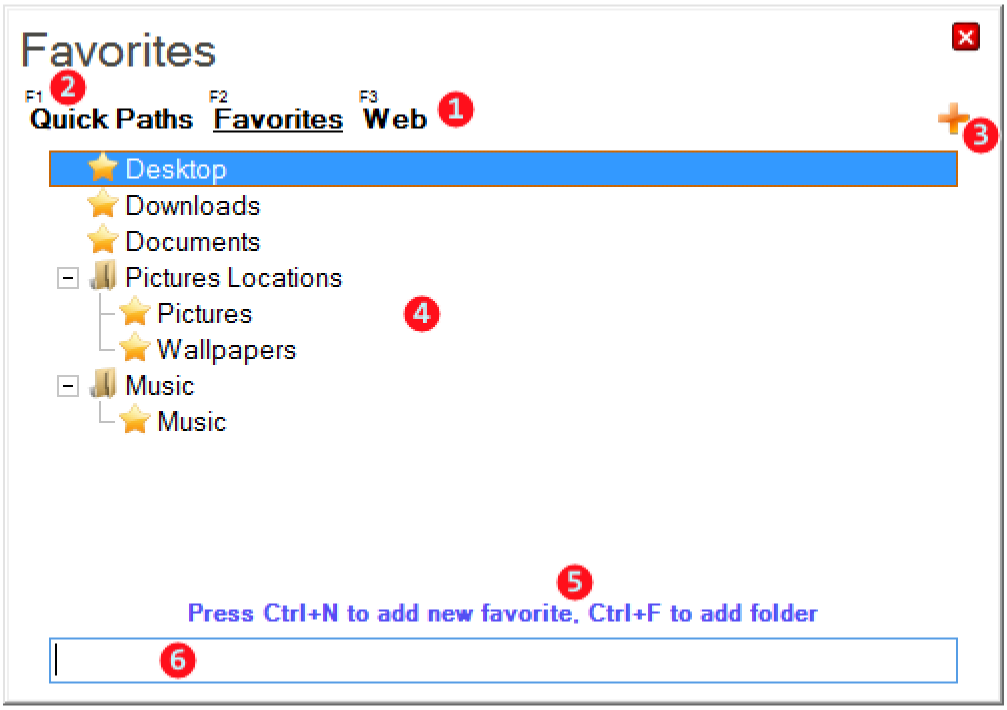
The Favorites window will be shown if you press the Favorites button on the toolbar.


File Edit View Configuration Extensions Tools Help
Hint : Alt+F1 to show the device dropdown on the left, Alt+F2 for the right
(C:) Local Disk
36 GB of 48 GB free ( 75% free )
C:\Windows\System32\
Name
Ext
Size
Date

Shortcuts

ALT+Backspace - Show Favorites Window

When the Favorites window is shown it will open with the section that you had opened last.



Favorites is a path to location that can be access faster. It can be a path to a filesystem location, but also path to a web address is possible.
The Favorites window is automatically close if it loses input focus, So you do not have to click the X button. pressing ESC or clicking anywhere outside the window will automatically close it.

## 1. Favorites Sections

It is possible to have multiple sections of Favorites for easier management.
In many sections it is possible to have different lists of Favorites for different purposes

Above the section name you will see F1, F2 and so on. This is the shortcut key to switch to that section.

## 2. QuickPaths

The first section is special. This section has 10 fixed Favorites that are assigned to the QuickPath shortcut keys.
The QuickPaths may be accessed from almost anywhere by pressing **Ctrl+1**, **Ctrl+2** and so on up to **Ctrl+0**

Right click on a QuickPath item and select the actin you need: Clear/Modify/Copy/Set Current

To set the current active path to a QuickPath item, select the path and press **Ctrl+S**

## 3. Add Section

Press this to add a new section to the list.

Right click on existing section titles to rename or remove them

## 4. Favorites list

All Favorites for the active section are listed here. With right click a menu is shown with actions that can performed in the list
It is also possible to create subsections where favorites can be placed or moved to. Subsections are useful when you have many Favorites and theyneed to be better organized.

To Add a new Favorite to the list press **Ctrl+N**.  The Favorite's name and path are by default the path of the active panel.
Press **Ctrl+F** to create a new subsection. **Ctrl+E** will edit and allow the current selected Favorite item to be modified.

Pressing **Ctrl+Q** and the list will toggle between showing the Favorites name and the target path.

**Ctrl+C** and **Ctrl+V** can be use to copy and paste Favorites. They can be used to copy a Favorite from one section and paste it into another.
It is also possible to drag and drop Favorites to rearrange their order and placement inside the current section.

## 5. Help/Hint Texts

This field will show hints and help text

## 6. Filter

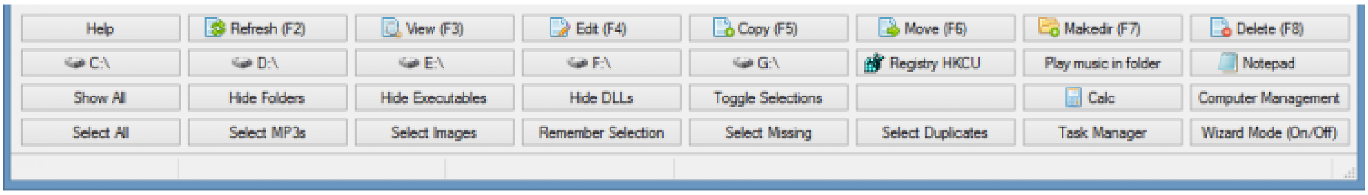
Type here and the list result will be filtered. It is a way to minimize the list if there are a lot of Favorites.

# Browse Favorites like a FileSystem

Favorites are also exposed as a virtual filesystem under the virtual device **FAV:** and also found in the device dropdown or folder tree

Read more about that here

# Button Panel



The button panel is shown at the bottom of the main program screen. All of these buttons can be customized in the Button Editor

A button can be configured to change the location that an Explorer panel is showing or to call an internal or external command or script.
Since the button panel can run any of the built-in scripts, buttons customization can be a very powerful tool.

By default there are 4 rows of button and 8 button per row, every button can have 4 actions assigned to it giving you up to 128 commands for easy access.
The number of rows can also be change from 1 to 6 and the entire Button Panel can also be disabled.

When holding Ctrl, Shift or Ctrl+Shift (or having the Right or Middle mouse button pressed) the button panel is switched to its alternative buttons. This allows easy access to the alternative button functions.

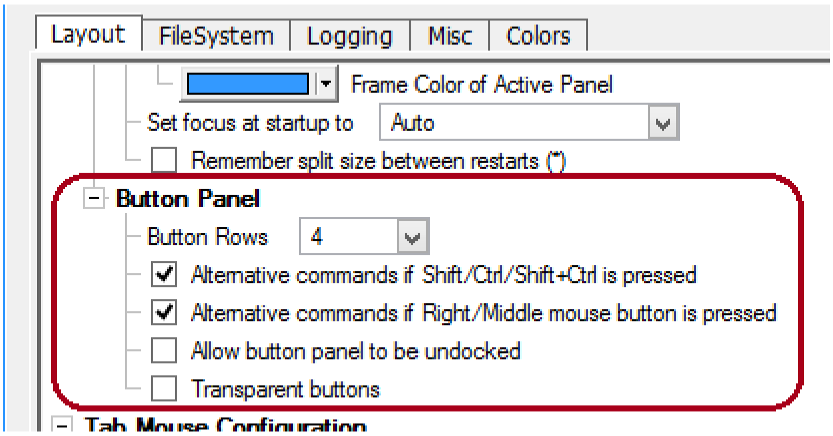
If alternative buttons are not used they can be disabled in settings.

Shortcuts

Ctrl+B - Toggle the button panel on/off

## Button Panels Settings

The settings for the button panel are found under the Core Settings. ( Menu > Configuration > Core Settings).



Frame Color of Active Panel

Set focus at startup to: Auto

□ Remember split size between restarts (*)

Button Panel

Button Rows: 4

☑ Alternative commands if Shift/Ctrl/Shift+Ctrl is pressed

☑ Alternative commands if Right/Middle mouse button is pressed

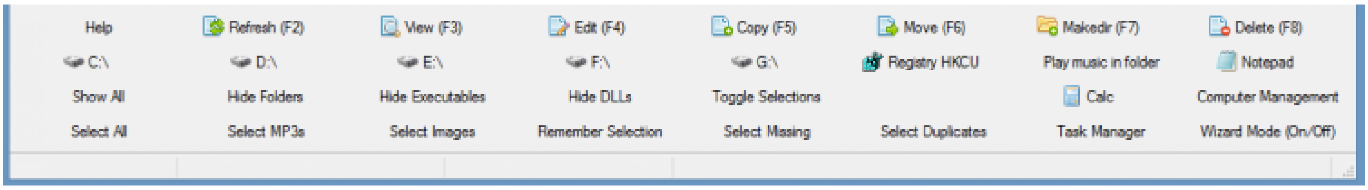
□ Allow button panel to be undocked

□ Transparent buttons

Tab Mouse Configuration

**Option - Alternative Button**
The first two button panel options enable/disable the switching of the button panel to show the alternative button actions.
NB: If both if these options are disabled there is no way to access the alternative button actions.

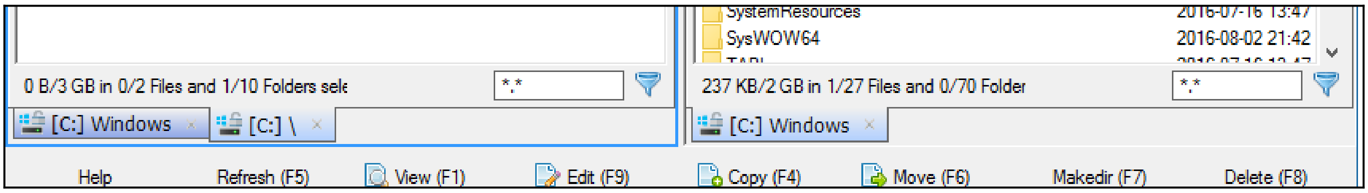
**Option - Transparent/Flat**
The Transparent option will remove the button background and make the button transparent, giving a "flat" look.



**More**

Read more about how to customize buttons with the Button Editor and how the button wizard works.

# Panel Tabs

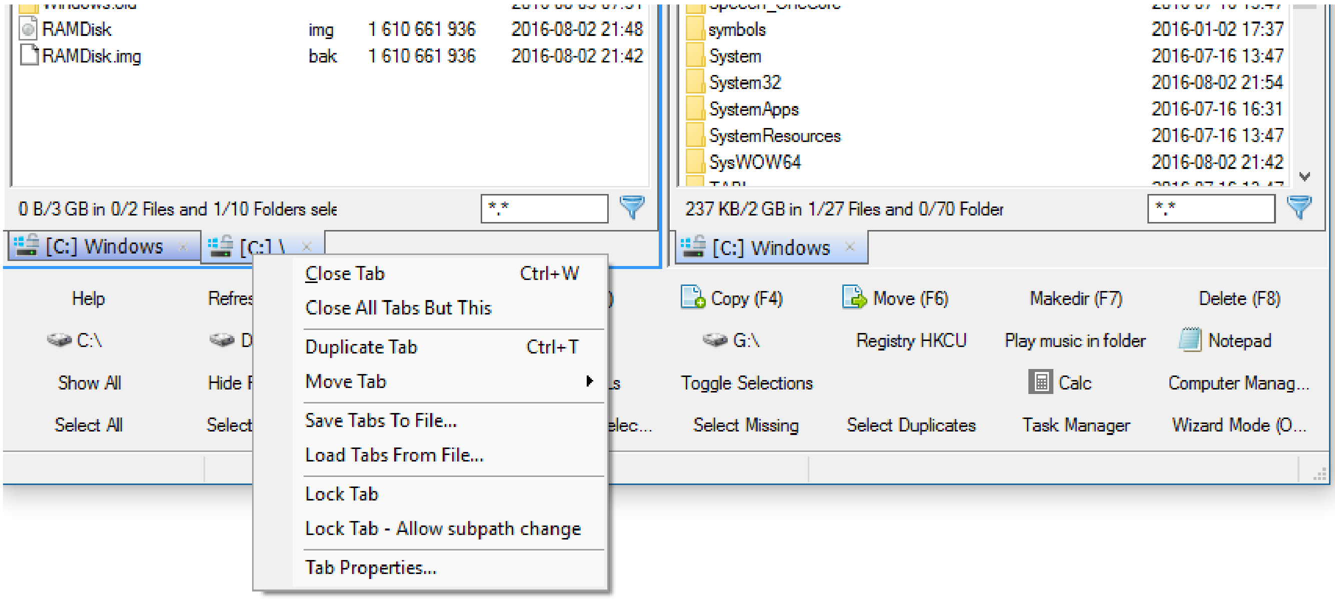

SystemResources 2016-07-16 13:47
SysWOW64 2016-08-02 21:42
0 B/3 GB in 0/2 Files and 1/10 Folders sele
*.*
237 KB/2 GB in 1/27 Files and 0/70 Folder
*.*
[C:] Windows
[C:] \
[C:] Windows
Help
Refresh (F5)
View (F1)
Edit (F9)
Copy (F4)
Move (F6)
Makedir (F7)
Delete (F8)

Each Multi Commander tab holds an instance of an Explorer Panel or another module, for example Settings or Search.

By clicking on an inactive tab that tab will become active.
Double-clicking on empty area in the tab area will open a new Explorer Panel. It is possible to configure which module is opened by default in Core Settings.

It is also possible to move tabs from one side to the other by dragging and dropping them.

Right-clicking on the tab will show a popup menu with some tab options.



The list of options will change depending on which module is open in the tab.

For an Explorer Panel the following options will be availible:

1. Close Tab
2. Close All Tabs But This
3. Duplicate Tab
4. Move Tab
5. Save Tabs To File...
6. Load Tabs From File...
7. Lock Tab
8. Lock Tab - Allow subpath change
9. Tab Properties

## 1. Close Tab

Close the current tab.

Shortcuts

Ctrl-W - Close Current Tab

## 2. Close All Tabs But This

Close all tabs except the current one. The current tab will remain open.

## 3. Duplicate Tab

Duplicate the current tab. Open a new Explorer Panel tab showing the same path as the current tab.
This only works if the current tab is an Explorer Panel.

> Shortcuts
>
> Ctrl-T - Duplicate Tab (Create new based on current tab)

## 4. Move Tab

1. **Swap the location of left/right panel**

   Swap the locations of the active panels in the two panel sides. The tab on the left will move to the right, that on the right will move to the left.

2. **Move Active panel to other side**

   The current panel will be moved to the other side. A panel on the left side will be moved to the right and vice versa.

## 5. Save Tabs To File

Save the layout of the current tab (or all tabs) to a file. This file can then be used to load a new set of tabs, either by selecting "Load Tabs From File" or by creating a User Defined Command.

> Hint
>
> Tab layouts can be saved from a User Defined Command using the Custom Command MC.SaveTabs

## 6. Load Tabs From File

Loads the layout of tabs from a file that was saved using the "Save Tabs To File" command.

> Hint
>
> Tab layouts can be loaded from a User Defined Command using the Custom Command MC.LoadTabs

## 7. Lock Tab

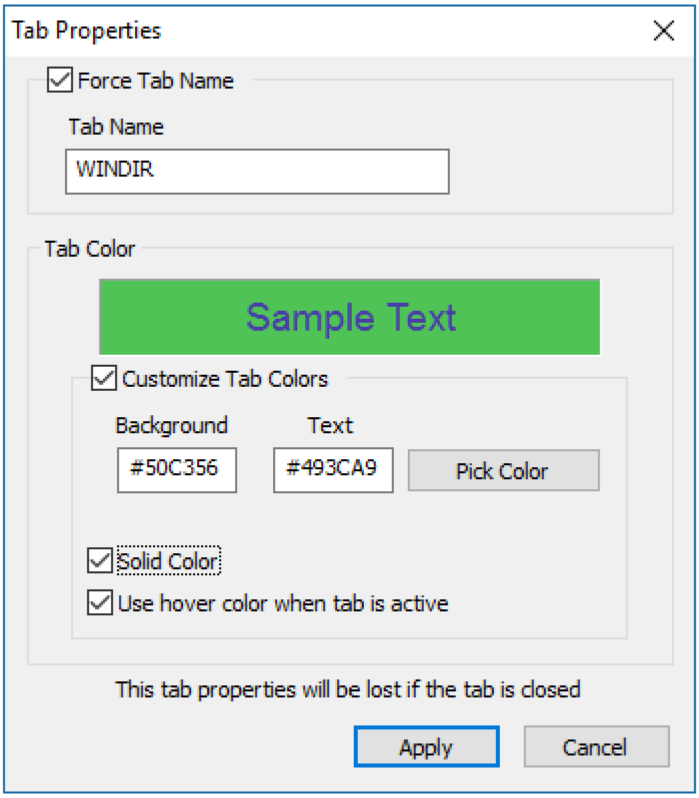
If the tab is an Explorer Panel then it will be locked to its current path: it will not be possible to navigate away from this path.
In Explorer Panel settings it is possible to configure whether a new tab should be open instead or if the new path navigation should simply be ignored.
A * will be shown before the tab name to indicate that the tab is locked.

## 8. Lock Tab - Allow subpath change

If the tab is an Explorer Panel and "Lock Tab - Allow subpath change" is enabled, the Explorer Panel is locked to a path, but it will allow a change of path to a subfolder under the locked path. For example, if the path is locked to C:\Windows it will allow navigation to any subfolder and sub-subfolder under C:\Windows\.

# 9. Tab Properties

In Tab Properties you can can customize the look of an Explorer Panel tab, for example to change colors or force a tab name.



Tab Properties

☑ Force Tab Name

Tab Name: WINDIR

Tab Color

Sample Text

☑ Customize Tab Colors

Background: #50C356

Text: #493CA9

☑ Solid Color

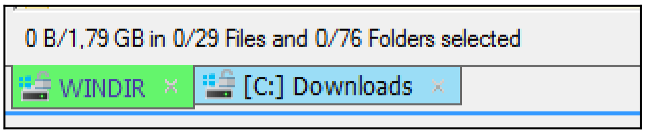
☑ Use hover color when tab is active

This tab properties will be lost if the tab is closed

If **"Solid Color"** is selected the tab will be drawn with one solid colorotherwise it will be rendered with a color gradient, starting with the standard UI color (often greyish) that fades into the selected color.

If the Core settings for "Allow tab colors" is disabled, this color setting will have no effect.

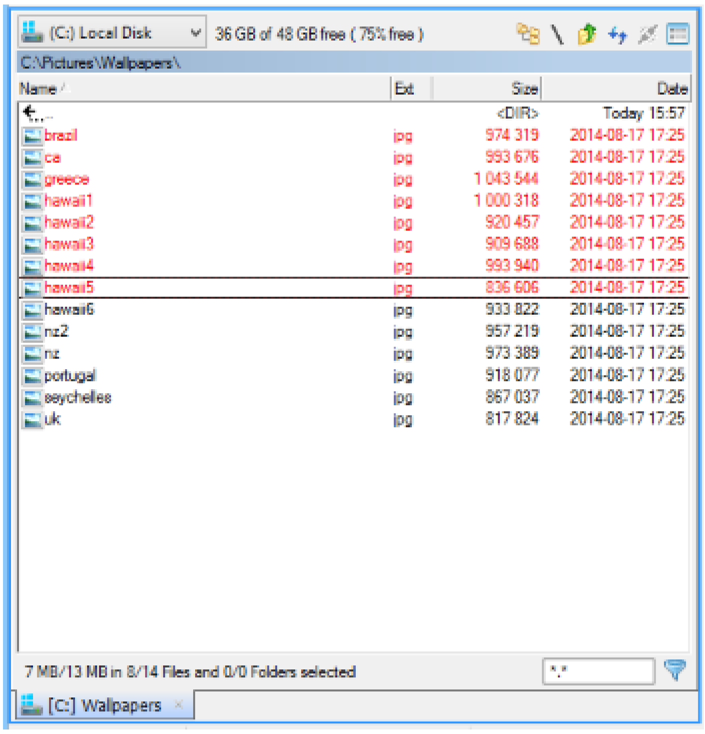
If **"Use Hover Color when tab is active"** is active, then when the tab is active the color will be the same as when hovering over it.
It will be shown a little lighter than the selected color to make it stand out.
If the color should always be the same as the selected color, uncheck this option.



0 B/1,79 GB in 0/29 Files and 0/76 Folders selected

# Explorer Panel

The **Explorer Panel** is the main panel in Multi Commander.
It is from here that you browse the filesystem and select files or folders for copying, moving, renaming, deleting, viewing and so forth.



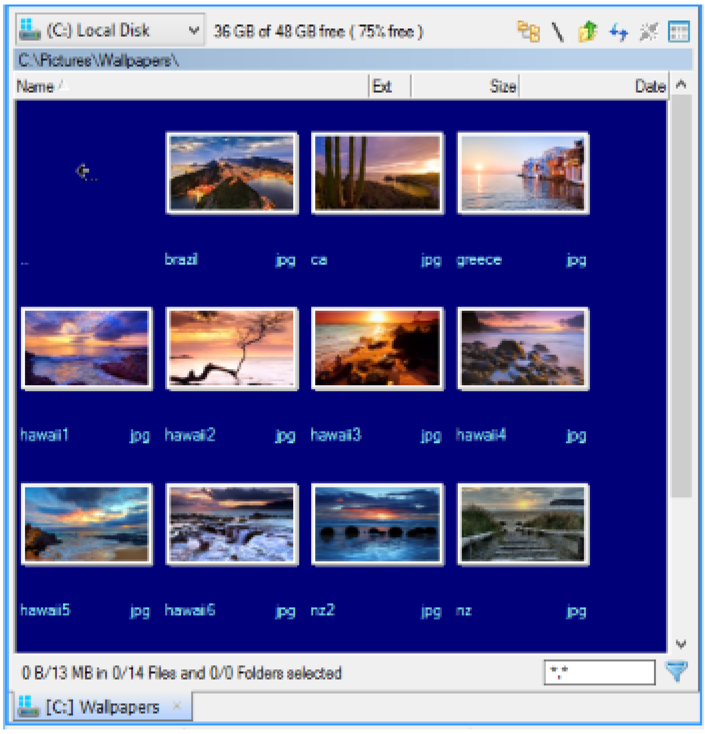
36 GB of 48 GB free ( 75% free )

C:\Pictures\Wallpapers\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 15:57 |
| brazil | jpg | 974 319 | 2014-08-17 17:25 |
| ca | jpg | 993 676 | 2014-08-17 17:25 |
| greece | jpg | 1 043 544 | 2014-08-17 17:25 |
| hawaii1 | jpg | 1 000 318 | 2014-08-17 17:25 |
| hawaii2 | jpg | 920 457 | 2014-08-17 17:25 |
| hawaii3 | jpg | 909 688 | 2014-08-17 17:25 |
| hawaii4 | jpg | 993 940 | 2014-08-17 17:25 |
| hawaii5 | jpg | 836 606 | 2014-08-17 17:25 |
| hawaii6 | jpg | 933 822 | 2014-08-17 17:25 |
| nz2 | jpg | 957 219 | 2014-08-17 17:25 |
| nz | jpg | 973 389 | 2014-08-17 17:25 |
| portugal | jpg | 918 077 | 2014-08-17 17:25 |
| seychelles | jpg | 867 037 | 2014-08-17 17:25 |
| uk | jpg | 817 824 | 2014-08-17 17:25 |

7 MB/13 MB in 8/14 Files and 0/0 Folders selected

*.*



36 GB of 48 GB free ( 75% free )

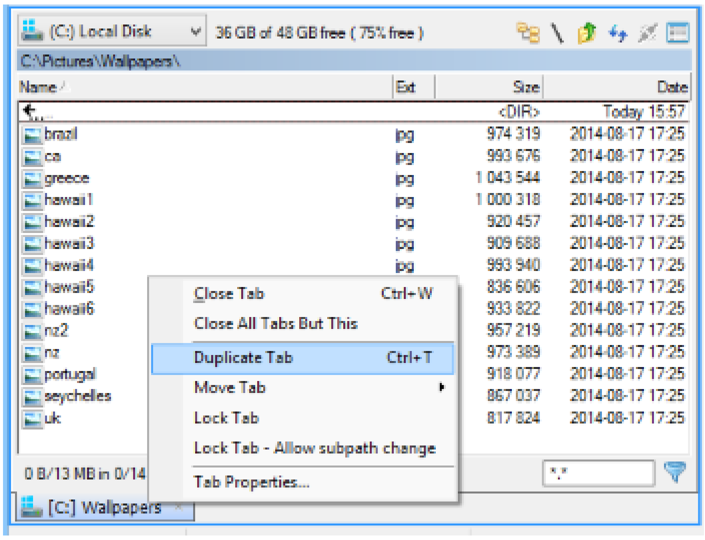
C:\Pictures\Wallpapers\

0 B/13 MB in 0/14 Files and 0/0 Folders selected

*.*

You can have multiple tabs that each contain one Explorer Panel. Each Explorer Panel is a separate file browser.

The Explorer Panel also adds a couple of additonal commands to the context menu on the Panel tab. It adds supports for actions like *Duplicate Tab, Lock Tab, Tab Properties.*



| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 15:57 |
| brazil | jpg | 974 319 | 2014-08-17 17:25 |
| ca | jpg | 993 676 | 2014-08-17 17:25 |
| greece | jpg | 1 043 544 | 2014-08-17 17:25 |
| hawaii1 | jpg | 1 000 318 | 2014-08-17 17:25 |
| hawaii2 | jpg | 920 457 | 2014-08-17 17:25 |
| hawaii3 | jpg | 909 688 | 2014-08-17 17:25 |
| hawaii4 | jpg | 993 940 | 2014-08-17 17:25 |
| hawaii5 | | 836 606 | 2014-08-17 17:25 |
| hawaii6 | | 933 822 | 2014-08-17 17:25 |
| nz2 | | 957 219 | 2014-08-17 17:25 |
| nz | | 973 389 | 2014-08-17 17:25 |
| portugal | | 918 077 | 2014-08-17 17:25 |
| seychelles | | 867 037 | 2014-08-17 17:25 |
| uk | | 817 824 | 2014-08-17 17:25 |

By selecting "**Duplicate Tab**" from the Context Menu on the Tab or with the keyboard shortcut **CTRL+T**, a new Explorer Panel will be shown. It will display the same location as the current, active Explorer Panel.

"**Lock Tab**" allows an Explorer Panel to be locked at the location it currently displays. If you try to go to another location a new Explorer Panel will be opened for that location.

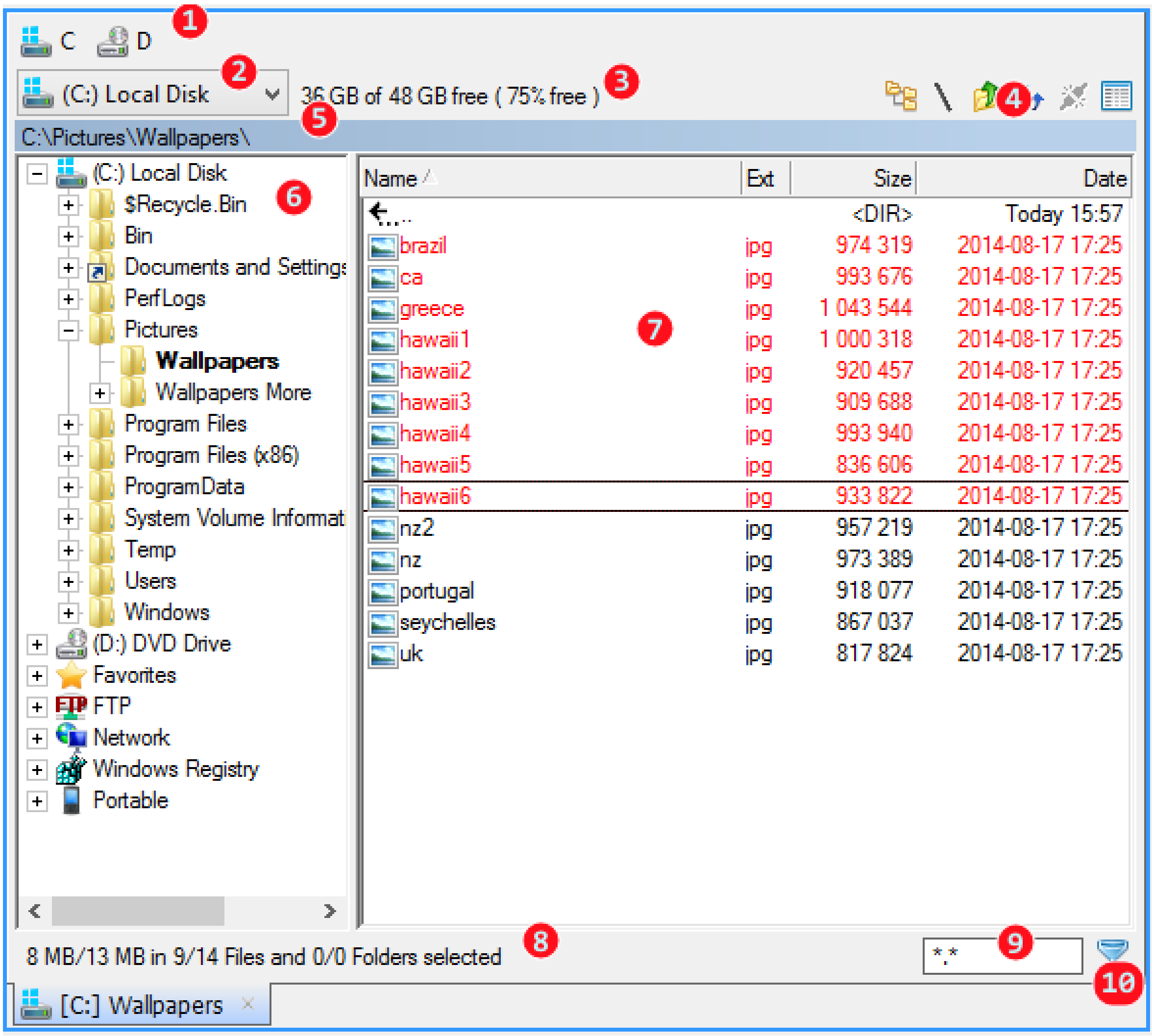
**Tab Properties** will show a window where you can customize the tab color and override the tab name,

Read more about the Layout of the Explorer Panel.
Read more about the functionality of the Explorer Panel.

# Explorer Panel - Layout

The layout of the Explorer Panel is similar to that in otherfile managers that you may be familiar with, although it has many more features than most.
Below is a description of the various parts of the display.

The image below shows an example of how the Explorer Panel can look with all of its user interface options enabled. Most of the user interface items can be configured and turned on/off in settings.



36 GB of 48 GB free ( 75% free )

C:\Pictures\Wallpapers\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 15:57 |
| brazil | jpg | 974 319 | 2014-08-17 17:25 |
| ca | jpg | 993 676 | 2014-08-17 17:25 |
| greece | jpg | 1 043 544 | 2014-08-17 17:25 |
| hawaii1 | jpg | 1 000 318 | 2014-08-17 17:25 |
| hawaii2 | jpg | 920 457 | 2014-08-17 17:25 |
| hawaii3 | jpg | 909 688 | 2014-08-17 17:25 |
| hawaii4 | jpg | 993 940 | 2014-08-17 17:25 |
| hawaii5 | jpg | 836 606 | 2014-08-17 17:25 |
| hawaii6 | jpg | 933 822 | 2014-08-17 17:25 |
| nz2 | jpg | 957 219 | 2014-08-17 17:25 |
| nz | jpg | 973 389 | 2014-08-17 17:25 |
| portugal | jpg | 918 077 | 2014-08-17 17:25 |
| seychelles | jpg | 867 037 | 2014-08-17 17:25 |
| uk | jpg | 817 824 | 2014-08-17 17:25 |

8 MB/13 MB in 9/14 Files and 0/0 Folders selected

*.*

## 1. Device toolbar

Here you can see a list of available devices. This toolbar is very similar to the global device toolbar, except that this toolbar will only show drives. Special folders and virtual devices that the global toolbar can show is not shown in this Explorer Panel device toolbar.

You can enable/disable this toolbar in Explorer Panel Settings by checking/unchecking the "Drive buttons" options.

## 2. Device Dropdown list

This dropdown list shows not only drivesbut all available Devices, Special Folders, Virtual Devices. When an item in the dropdown list is selected the Explorer Panel will change to that location and show the content of the new path.
For fast access to drives when the list is shown you can press (for example) the letter E to make the Explorer Panel go to the E: drive.
If the **SHIFT** key is pressed while selecting a location, that location is then opened in a new Explorer Panel tab.

In settings it is possible to configure what extended location types should be shown in the dropdown list.

Hint

By pressing **Alt+F1** the Device Dropdown in the left panel will be shown. **Alt+F2** and the one on the right is shown

## 3. Free Space area

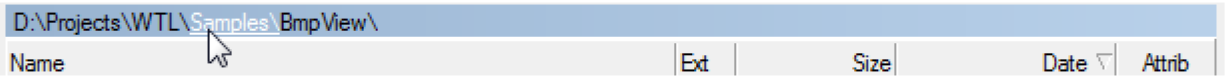
Shows the available free space on the drive, and the total capacity of the volume (where appropriate).
It also shows the percentage of the total volume capacity that is available.

If you double click on the Free Space message, it will show *used* space instead of *available* space. You can also set which of the two space figures you want as default by going to *Configuration->Explorer Panel settings->Layout->GUI Components->Show free/used space*.

## 4. Command Buttons

These buttons affect only the active Explorer Panel when they are pressed.
**Folder Tree**
Splits the panel to show the *folder tree* in the left portion. (shortcut key *Alt + Num** (See Folder tree.)
**Go To Root Button**
Click on the backslash symbol ("\") to go to the root of the device (shortcut key *Ctrl + Back*).
**Go Up**
Click on this icon to go up to the parent level in the file structure (shortcut key *Back*).
**Refresh / Reload**
Click on this icon to force a refresh of the current path; hold down the **CTRL** key to force a flush of the cache as well as a forced reload of the current path. All selections will be lost.
**Disconnect**
This icon will disconnect the current device. If the current device is an external USB drive it will be prepared for safe removal. If the device is an FTP connection then the FTP connection will be dropped.
**View Mode**
This icon will display a menu of possible **View Modes**. Currently these consist of ***Details***, ***List***, ***Thumbnail List*** and ***Thumbnail Details***.

## 5. Path field

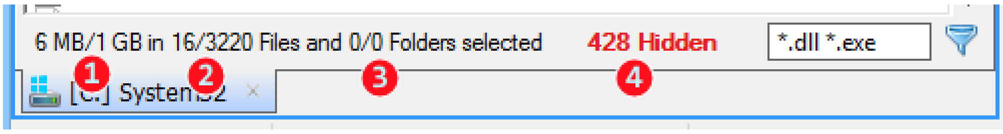


The path field shows the current path displayed in the Explorer Panel. Sub folders in the path that is shown are clickable.
Clicking on a subpath causes the Explorer Panel to try to change to that path.
The path field has many options and feature. Read more about the Path field.

## 6. Folder Tree

## 7. File list view

## 8. Selection Status bar


6 MB/1 GB in 16/3220 Files and 0/0 Folders selected

The Panel Status bar appears at the bottom of the panel. The various parts are described below:

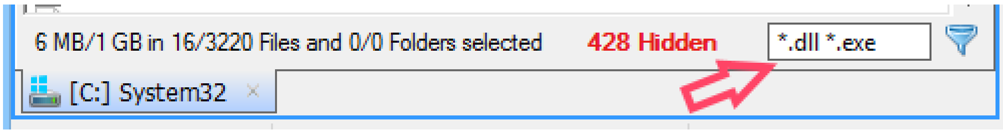
**1 - Select / Total Size**
The size of all the selected files and folders (if folders are showing file size) and the total size of all visible files and folders.

**2 - Selected / Total Files**
Number of selected files and the total visible files.

**3 - Selected / Total Folders**
Number of selected folders and the total visible folders.

**4 - Hidden files / Folders**
Number of files and folders that are hidden by the view filter.

## 9. View Filter



6 MB/1 GB in 16/3220 Files and 0/0 Folders selected 428 Hidden *.dll *.exe

Filter the view to only show certain files or folders. Prefixing a filter with "-" will exclude those files. To create a filter to target folders only, prefix it with "/".

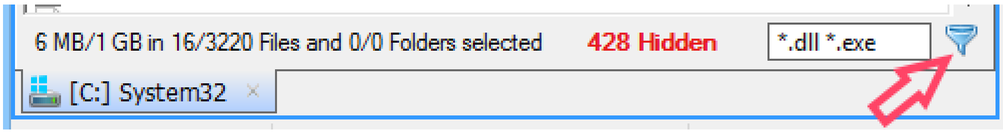
You can edit the View Filter from a keyboard shortcut by pressing **CTRL+F** (if using the default commander-style setup).

Examples

| | |
|---|---|
| *.* -*.jpg | Show all files, except .jpg files. |
| *.* -/backup | Do not show the "backup" folder |
| *.jpg *.tiff | Show only jpg and tiff files. |

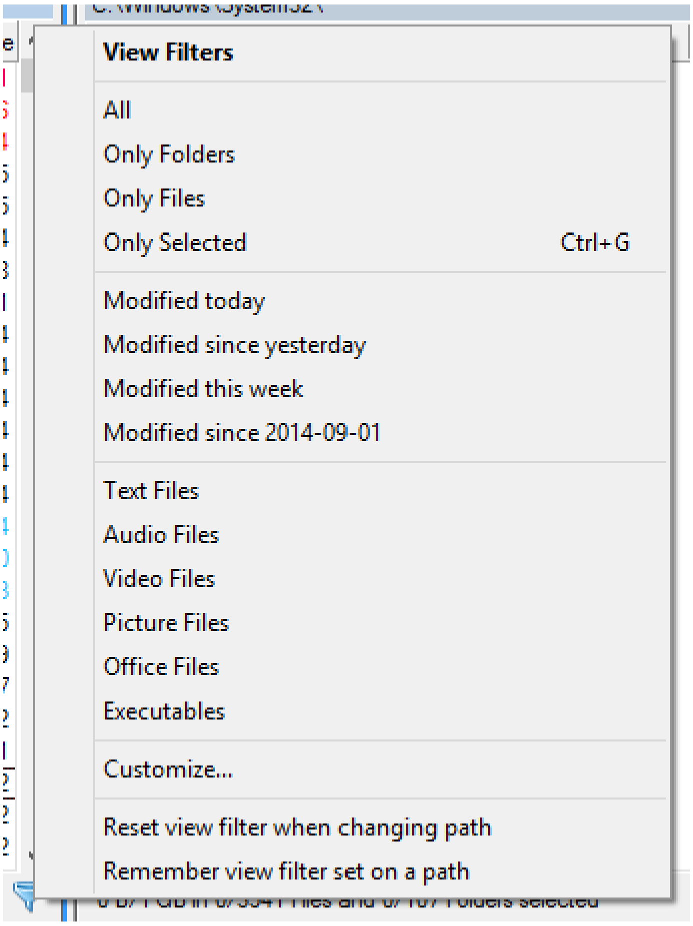
It is also possible to change the view filter from a CustomCommand.

## 10. Reset Filter and Quick Filters



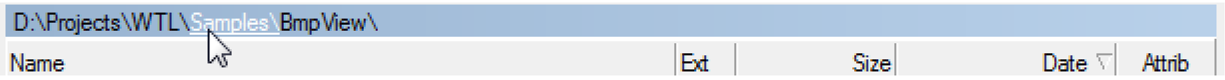
6 MB/1 GB in 16/3220 Files and 0/0 Folders selected 428 Hidden *.dll *.exe

Click to toggle quick filter. Right click to show a popup menu with pre defined set of View Filters. By selecting "Customize..." it is possible to edit the list of quick filters and to add new filters to the list.

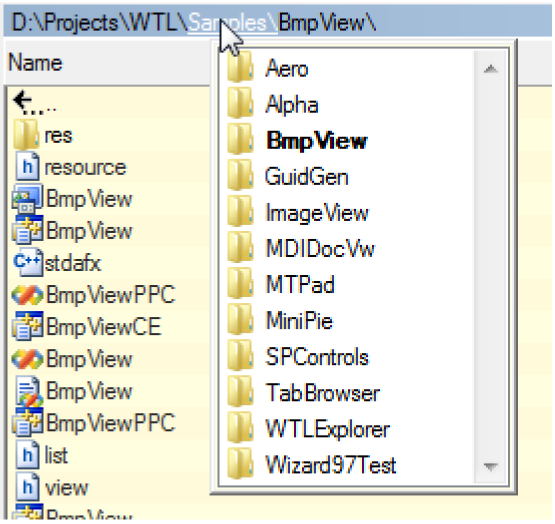


View Filters
All
Only Folders
Only Files
Only Selected Ctrl+G
Modified today
Modified since yesterday
Modified this week
Modified since 2014-09-01
Text Files
Audio Files
Video Files
Picture Files
Office Files
Executables
Customize...
Reset view filter when changing path
Remember view filter set on a path

# Path Field



The Path Field shows the current path displayed in the active Explorer Panel . Sub folders in the path that is shown are clickable. Clicking on a subpath causes the Explorer Panel to try to change to that path.

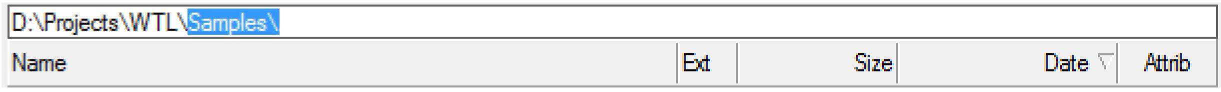


If you hold down the **CTRL** key while clicking on a sub folder a list of all the sub-folders under that path will be shown. You can then select a sub-folder that you want to go to from that list.

Special Feature

A special feature is that if you hold down both **SHIFT** and **CTRL** keys while clicking on a sub-folder in the path field, and then select a sub folder from the folder list, it will try to go to the same sub-path under that folder as the one in which you are currently located. Eg. if you are currently located in the path **"D:\Projects\MyApp\Version_1.0.0\Source\Includes\"** and you click on the **"MyApp"** sub path while holding down **Shift+Ctrl**, then in the folder list that is shown you Select **"Version_2.0.0"**, it will try to go to "D:\Projects\MyApp\**Version_2.0.0**\Source\Includes\". If that path does not exist it will go to the closest path that does exist.

## Editing the Path Field



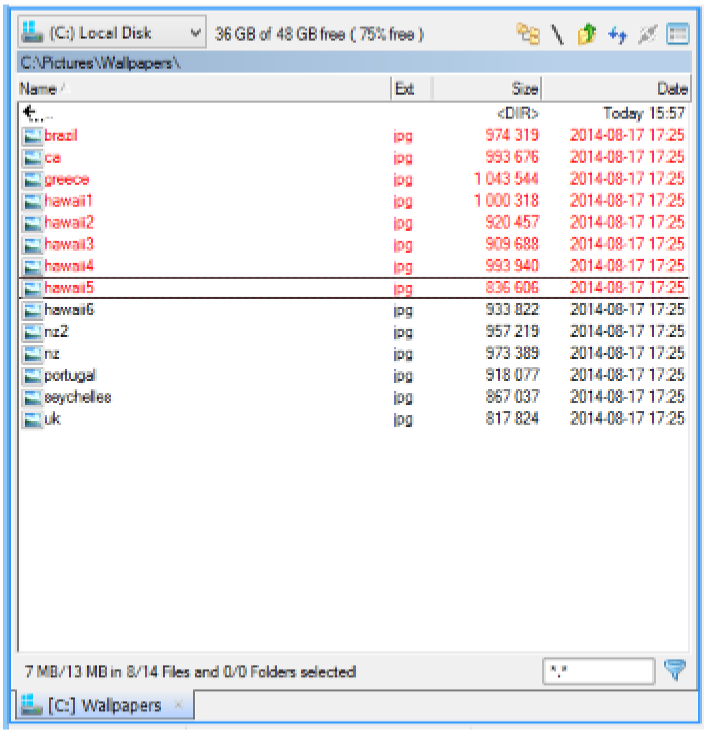
By double clicking on the empty space in the path field, it will become an editable path. If the path is changed the Explorer Panel will try to change to the new path.

Shortcuts

**Ctrl+E** Will force the Path Field to be editable and input focus will be moved to it.

# Explorer Panel - Navigation

The **Explorer Panel** is the primary panel in Multi Commander. It is from here that you browse the filesystem and select files to copy, move, rename, delete or view.



| Name | Ext | Size | Date |
|---|---|---|---|
| .. |  | <DIR> | Today 15:57 |
| brazil | jpg | 974 319 | 2014-08-17 17:25 |
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| greece | jpg | 1 043 544 | 2014-08-17 17:25 |
| hawaii1 | jpg | 1 000 318 | 2014-08-17 17:25 |
| hawaii2 | jpg | 920 457 | 2014-08-17 17:25 |
| hawaii3 | jpg | 909 688 | 2014-08-17 17:25 |
| hawaii4 | jpg | 993 940 | 2014-08-17 17:25 |
| hawaii5 | jpg | 836 606 | 2014-08-17 17:25 |
| hawaii6 | jpg | 933 822 | 2014-08-17 17:25 |
| nz2 | jpg | 957 219 | 2014-08-17 17:25 |
| nz | jpg | 973 389 | 2014-08-17 17:25 |
| portugal | jpg | 918 077 | 2014-08-17 17:25 |
| seychelles | jpg | 867 037 | 2014-08-17 17:25 |
| uk | jpg | 817 824 | 2014-08-17 17:25 |

7 MB/13 MB in 8/14 Files and 0/0 Folders selected

**All References to Keyboard and Mouse commands below assume that you are using the default Commander-Style setup, unless otherwise specified.**

## Commander-Style-Setup vs WindowsExplorer-Style Setup

By default Multi Commander uses the **Commander-Style** setup, meaning that mouse and keyboard shortcuts are similar to the file manager named NortonCommander that existed before Windows on MS-DOS. This setup has become very popular and is used in many other file managers on many platforms. It is popular because it is optimized for keyboard use and provides the ability to do everything from the keyboard in a efficient way.

If you are more comfortable with the way **Windows Explorer** operates, it is possible to configure Multi Commander to work like Explorer. You will, however, lose some of the efficiency that you get from the Commander-Style setup.

Read more about how to change Multi Commander to the Windows Explorer-Style Setup

## Navigate the FileSystem

You can use both the keyboard and mouse to navigate in the Explorer Panel.

The files/folders that are currently in focus are highlighted by way of a border drawn around them. These are the files/folders that will be affected by your action if no other files/folders are selected. You can navigate up and down the list with the up and down arrow keys. The *HOME* and *END* keys will change the focus to the first or last item in the list.

If there are more files and folders than will fit on the screen you can use the page up and page down keys to scroll up and down in steps.

To choose a subfolder to browse either **double-click** it or, if the folder is already in focus, press the **RETURN** key. The Explorer Panel will then try to show you the content of that path. You are also able to browse archives if there are filesystem plugins installed that expose that archive format as a filesystem. For example .zip and .rar files can be browsed as if they were unpacked into normal folders.

To go back to the parent folder you can either double-click on the ".." icon or press the **BACKSPACE** key. Holding down **CTRL** while pressing **BACKSPACE** will send you to the root of the current volume or device.

Holding **CTRL** and pressing the **LEFT** or **RIGHT** arrow key can synchronize the current path or folder in focus to the panel on the left or right. For example if you are in the left panel and focus is on a folder and you press the **CTRL+RIGHT ARROW** key, the path for the folder in focus will be sent to the right panel, and if the right panel is an Explorer Panel it will now show that path location. If the **CTRL+LEFT ARROW** key is pressed when the active panel also is the left one, the Explorer Panel on the left will get the current path location of the right panel and show that location in the left panel.

If you hold **CTRL** while pressing the **PAGE DOWN** or **PAGE UP** key you will go to the next or previous sibling folder of the current location. For example If you have some **A to Z** folders in **C:\MyFolders\** and you are currently located in **C:\MyFolders\D**, then when you press the **CTRL+PAGE DOWN** keys the Explorer Panel will now go to the **C:\MyFolders\E** folder. If instead **CTRL+PAGE UP** were pressed, it would have gone to the **C:\MyFolders\C** folder. This however requires that sorting in the Explorer Panel is set to the *name* column. It will go to whichever previous (or next) sibling folder that the current sorting determines.

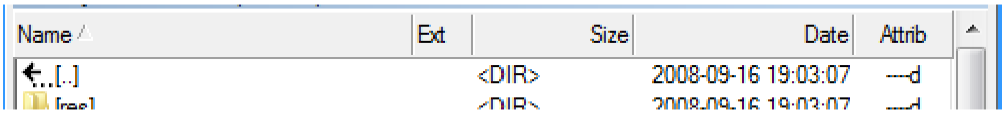
If you have an Explorer Panel both in the source and target panel and want to show the same location in the target as the source panel has, then press the keyboard shortcut key **CTRL+.** (dot) in the source panel. The target and source panel will then show the same location.

Hint

**Go To Sibling**
A quick way to go to a sibling folder is by way of the shortcut keys

- **Ctrl+Page Up** goes to the *preceding* sibling folder (in sort order)
- **Ctrl+Page Down** goes to the *next* sibling folder.

## Sorting



| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| ..[..] | | <DIR> | 2008-09-16 19:03:07 | ----d |
| [res] | | <DIR> | 2008-09-16 19:03:07 | ----d |

To sort the files and folders shown, click on the header of the column that you want to sort the contents by. Clicking on it again will reverse the sort order. You will see an arrow in the header of the column that currently has sorting activated, indicating if sorting is *ascending* or *descending*.

Sorting can also be changed using shortcut keys: **CTRL+F1** to sort by first column, **CTRL+F2** for second column and so on, up to **CTRL+F5**. Selecting the column that is already the sort column will reverse the sort order of that column.

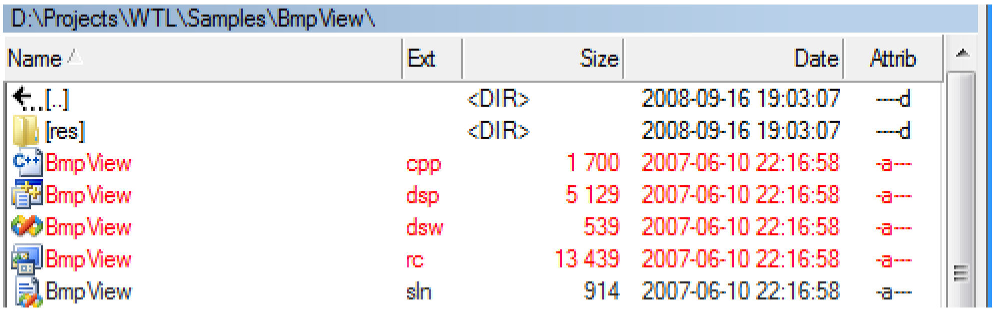
If the configuration option **Sort Files Logical** for the Explorer Panel is checked, files and folders will be sorted so that numeric subfields are treated as numbers. E.g. instead of files being shown as

```
file_0011.txt
file_1.txt
file_10.txt
file_2.txt
```

They will be sorted as

```
file_1.txt
file_2.txt
file_10.txt
file_0011.txt
```

# Select files and folders



D:\Projects\WTL\Samples\BmpView\

| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| [..] | | <DIR> | 2008-09-16 19:03:07 | ----d |
| [res] | | <DIR> | 2008-09-16 19:03:07 | ----d |
| BmpView | cpp | 1 700 | 2007-06-10 22:16:58 | -a--- |
| BmpView | dsp | 5 129 | 2007-06-10 22:16:58 | -a--- |
| BmpView | dsw | 539 | 2007-06-10 22:16:58 | -a--- |
| BmpView | rc | 13 439 | 2007-06-10 22:16:58 | -a--- |
| BmpView | sln | 914 | 2007-06-10 22:16:58 | -a--- |

There are many ways to select files and folders in the Explorer Panel, and Multi Commander also remembers which files and folders you had selected if you return to a location you had previously opened since Multi Commander was last started. (If Multi Commander is closed this information is lost).

## Mouse (Commander-Style Setup)

Right click on the file or folder that you want to select or deselect. You can also hold down the right mouse button and drag the mouse up and down to change the selection on multiple files and folders. When changing selections on multiple files or folders, the first selection performed determines whether it should select or deselect all the files/folders that are under the mouse cursor until the mouse button is released.

## Mouse (Windows Explorer-Style Setup)

Selection works as it does in Windows Explorer. You Select files/folders with the *left mouse button*, and to select multiple files and folders you hold down the *shift* key to select/unselect a range of items. Holding down *CTRL* will let you toggle the selection of items without deselecting already selected items.

## Mouse Selection Rectangle

If the option **Selection Rectangle** is checked in Explorer Panel Settings, you can also drag out a rectangle on the display. All files and folder that are touched by the rectangle will be selected. To use the selection rectangle you must start a drag operation *outside* any file or folder name.

## Expanding / Shrinking Selection by Filter

Using the shortcut key **NUM+** or "**Select**" from the Edit Menu, an "Expand Selection" dialog will be shown where you can insert a filter and all files and folders matching that filter will be *selected*.

Using the shortcut key **NUM-** or "**Unselect**" from the Edit Menu, a "Shrink Selection" dialog will be shown where you can insert a filter and all files and folders matching that filter will be *deselected*.

## Invert Selection

By pressing the shortcut key **NUM*** or selecting **"Invert Selection**" from the Edit Menu, the selection of all the files and folders at the current location will be *inverted*. (Selected files and folders will be deselected, and unselected ones will be selected.)

## Select All / Unselect All

Use the shortcut key **CTRL+A** or choose "**Select All**" from the Edit Menu to select *all* files and folders at the current location. Use **CTRL+D** or choose "**Unselect All**" from the Edit Menu to deselect all files and folders.

## Quick Select Matching Extension or Filename

Using the shortcut key **CTRL** + **NUM+** or "Select same extension" from the Edit Menu, all files with the same file extension as the file currently in focus will be selected. **Similarly, CTRL** + **NUM-** deselects the files.

Using the shortcut key **ALT** + **NUM+** or "Select same name" from the Edit Menu causes all Files with the same name, except those having the same file extension as the file currently in focus, to be selected. **ALT + NUM-** similarly deselects matching files.

### Toggle Selection from keyboard shortcuts

You can toggle the selection of files and folder with the **INSERT** key; this key will toggle the selection of the current items in focus and then move down to the next item.

Toggling the selecting files and folders can also be performed with the **SPACE** bar. If a selection is performed on a folder an action to calcuate the folder size is also issued.

## Quick Search

Quick Search allows you to start typing a name and the focus will change to files or folders starting with that name. Using the default commander-style setup you need to hold down **ALT** and **CTRL** key while typing. This can be configured in the settings for the Explorer Panel.

When the Quick Search window is active you can press the **UP** and **DOWN ARROW** keys to move to the previous or next file or folder that matches the current quick search.

With Windows Explorer-Style Setup you can just start typing without holding any other key down. However, this setup will disable the feature that forwards all key-presses to the command line bar.

In the settings for the Explorer Panel you can configure the Quick Search window to be activated with **ALT+CTRL+<any letter>** or **ALT+<any letter>** or simply **<any letter>**. If configured to be activated by any letter typed, then the *Forward Keys to the command line* feature will be disabled.

## Forward Keys

With the default Commander-Style Setup, key-presses are forwarded to the command line bar. This make it possible for you to start typing a command without having to first manually change input focus to the command line bar.

It is possible to change the input focus to the command line bar with the shortcut key **?**. (This key may have a different character depending on keyboard layout or language. It is the key to the left of the '1' key on a normal keyboard. Laptop keyboards can be different). This key can be reconfigured in the keyboard customization manager.

## Context Menu

The *context menu* is the *right click menu* that you see in Windows Explorer. In MultiCommander this can be shown in different ways and additional actions can be shown in the menu. If MultiCommander is set to Window Explorer style the context menu is shown using the right mouse button. However, for the default commander-style setup the right mouse button toggles the selections of files and folder with. But if you hold the right button down for 2 seconds it will show the context menu. Double clicking with the right button will also bring up the context menu.

## Drag and Drop

You can drag and drop selected files using the left mouse button. If files are dropped on the same drive the file operation will default to a *Move* Operation instead of a *Copy* Operation. To avoid  this hold down the **SHIFT** key while dropping the files.

## Copy / Paste

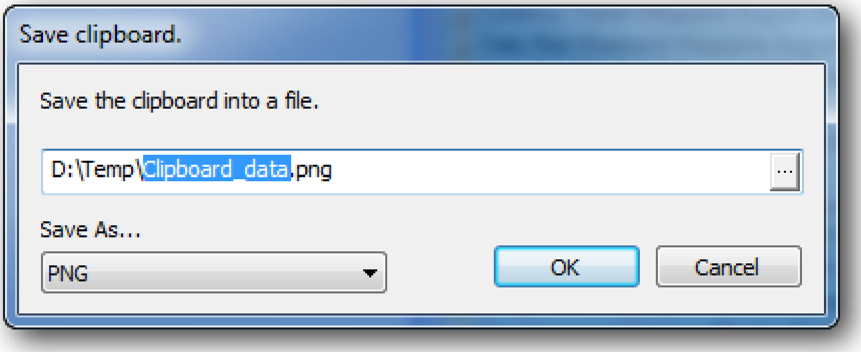
Copying and pasting of files and folders can be performed just as in Windows Explorer, but there is also a function to copy the path of a file to the clipboard so that you can paste that path or filename into another program.

### Copy to the Clipboard

**CTRL+P** will copy the complete path with the name of the selected file or folder to the clipboard.
**CTRL+SHIFT+P** will copy only the name of the selected files or folders to the clipboard.
**SHIFT+ALT+P** will copy only the path of the selected files or folders to the clipboard.

## Paste from the Clipboard

If you have a path to a file or folder already in the clipboard you can paste that path into the Explorer Panel with **CTRL+V**. It will then show you that path so you can continue browsing that location.


Save clipboard.

Save the clipboard into a file.

D:\Temp\Clipboard_data.png

Save As...

PNG

If the data in the clipboard is not a file path, MultiCommander will attempt to identify what type of data it is. If it is an image (e.g. a screen capture) then you will be presented with a dialog to save the content from the clipboard as an image and you can choose which image format you want to save it as **(BMP/JPG/PNG)**.

If the data is identified as text you will be presented with a dialog to save the content from the clipboard as a text file and you can choose to save the text content as **ASCII** or **Unicode.**

# Keyboard shortcuts

- Default Keyboard Shortcuts (Commander style setup)
- Default Keyboard Shortcuts (Windows Explorer style setup)

# Favorites/Bookmarks

There are several ways to have Favorites/Bookmarks in Multi Commander

- User Defined Command in the Button Panel
- Alias for the command line field
- User Command in the Menu Bar
- Quick Launch Bar
- Favorites Window
- Quick Paths

### User Defined Command in the Button Panel

Using **User Defined Commands** you can easily create a **Button Panel** button to change the current path. First activate *Wizard mode* by pressing the **Wizard Mode (On/Off)** button. (It is the last button to the right on the bottom row) or from the *configuration menu* by selecting **Toggle button panel wizard mode**

When ***Wizard Mode*** is active the button panel will have a red background around the buttons. You can now **drag and drop** a file or folder to any button and the *Button Panel Wizard* dialog will be shown. Click on **Go to file / path in Multi Commander** in the dialog and then press **OK**. You now have a button that when pressed will take you to that file or location.

## Alias for the Command Line Field

An *alias* is a shortcut you type into the Multi Commander command line field that will expand into one or more longer commands. If you enter a path location in the Multi Commander command line field and then press return, Multi Commander will go to that location. So by creating an *alias* for a *path* you can go to that path by just typing the alias you assigned it. For people who like to be able to go to different paths quickly using the keyboard this is very useful and efficient.

You create an alias in the **Alias Editor** that you find under the **Configuration** menu. But there are also two quick commands, *Alias* and *Alias2*, that can create an alias directly from the command line field. For example,  if you wish to create a command line shortcut that takes you to your folder "*D:\my music\mp3\*" you can type **alias mp3="d:\my music\mp3\"**. (The quotes are only needed if there are spaces in the the path). Now when you type **mp3** in the command line field and press return, Multi Commander will expand the "mp3" alias to the full path and execute that. Since it is a path it will go to that location.

But there is an even easier way to create this alias, and that is to use the *alias2* command. This command only takes the alias name as a parameter and assumes that the current path in the Explorer Panel will be the target path for that name. So if the path *D:\my music\mp3\* is open and in the command line field you type **alias2 mp3**, you will create an alias named **mp3** that will take you to the path **D:\my music\mp3\**.

Read more about aliases

## User Defined Commands in the Menu Bar

The custom command for changing the path is MC.Explorer.GoTo. If you want a command that takes you to the MP3 folder we used in the alias example above you write

```
MC.Explorer.GoTo PATH="D:\My Music\MP3"
```

You can also specify LEFT/RIGHT (instead of PATH) if you want to control in which panel side the path should be opened.

After you have written your command and saved it, you can press the Menu button. From here you can add the newly created command to the menu bar.

Read more about User Defined Commands

## Quick Launch Bar

You can Drag and Drop files and folders to the Quick Launch Bar. When a folder that is placed on the Quick Launch Bar is clicked, It will change the current panel to that path. You can also place a User Defined Command in the Quick Launch Bar by right-clicking on it and selecting *Insert User Defined Command*.

Read more about Quick Launch Bar.

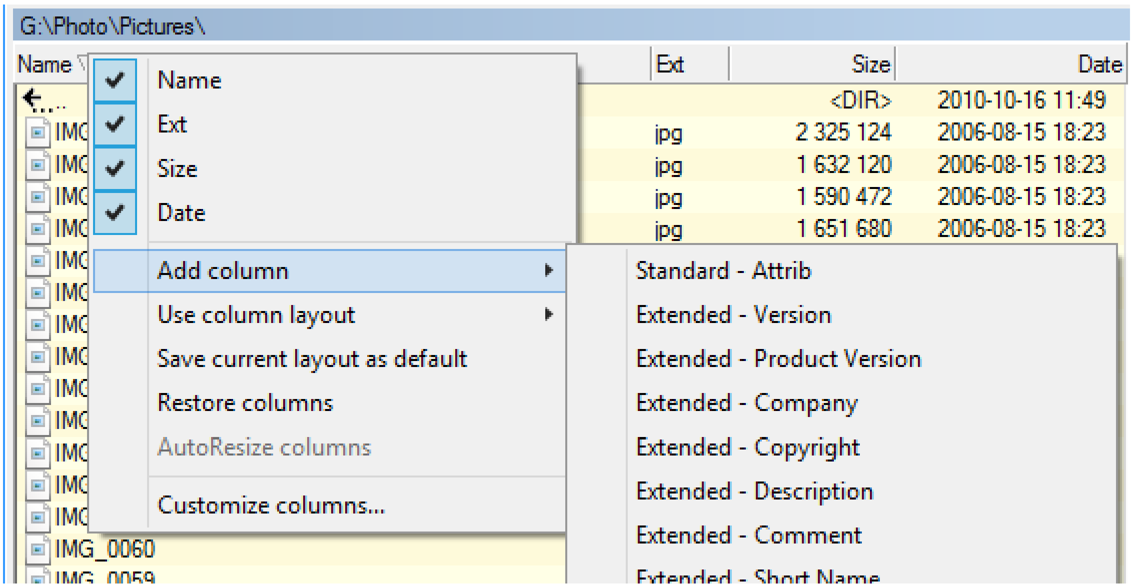
# Explorer Panel - Customize Columns

Which columns that should be shown can be customized. It is possible to remove existing columns or add new ones. There are many columns that will show a lot of extra information to choose from.

It is also possible to create new column layouts, save them and have Explorer Panels switch to that layout automatically when browsing to a certain locations. Or you can switch the entire layout when pressing a hotkey or selecting a layout manually.

## Customize Columns

Right click on the column header to show the context menu from which you can customize the columns.



All existing column are shown in the popup menu first. To remove any of the existing (ticked) columns just click on that item in the context menu and it will be removed.

### Add Columns

Add columns by selecting which column to add from the list of columns under "**Add columns**". This list shows the most commonly used columns, but there are many more columns available. To access them select the "**More...**" item at the bottom of the column list. Then the "**Customize Columns..**" dialog will be shown. From this dialog all columns are available.

### Use Layout

If you have created multiple column layouts they are listed here. Select one and it will replace the current layout.

By default there are three "standard" layouts available: "**Default**", "**Picture**" and "**Music**".
The "**Default**" layout is the standard layout that is used of no other is selected. If you want to modify the standard column layout it is the "**Default**" layout that should be changed.
The "**Picture**" and "**Music**" layout are alternative layouts that will show extended file information for picture and music files.

### Save Current Layout as Default

This will save the current column layout and setting to the "**Default**" layout.
Select this option if columns are modified and the current layout (columns and size) should be used as the default layout for all Explorer Panels.

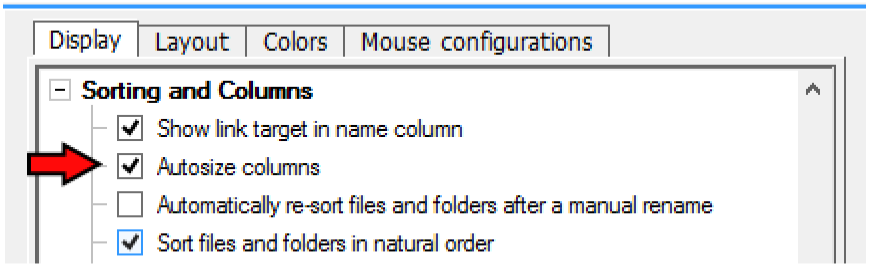
### Restore Columns

This restores all columns to the saved state of the current column layout.
If "**Default**" layout is selected and columns are then modified, selecting "**Restore Columns**" will revert to the saved state

of the "**Default**" layout.
If "**Picture**" layout is used and columns are manually changed, selecting "**Restore Columns**" will revert to the saved state of the "**Picture**" layout.

## Autosize Columns

If the Explorer Panel setting "**Autosize Columns**" option is checked this option will **not** be available.



Sorting and Columns
☑ Show link target in name column
☑ Autosize columns
□ Automatically re-sort files and folders after a manual rename
☑ Sort files and folders in natural order

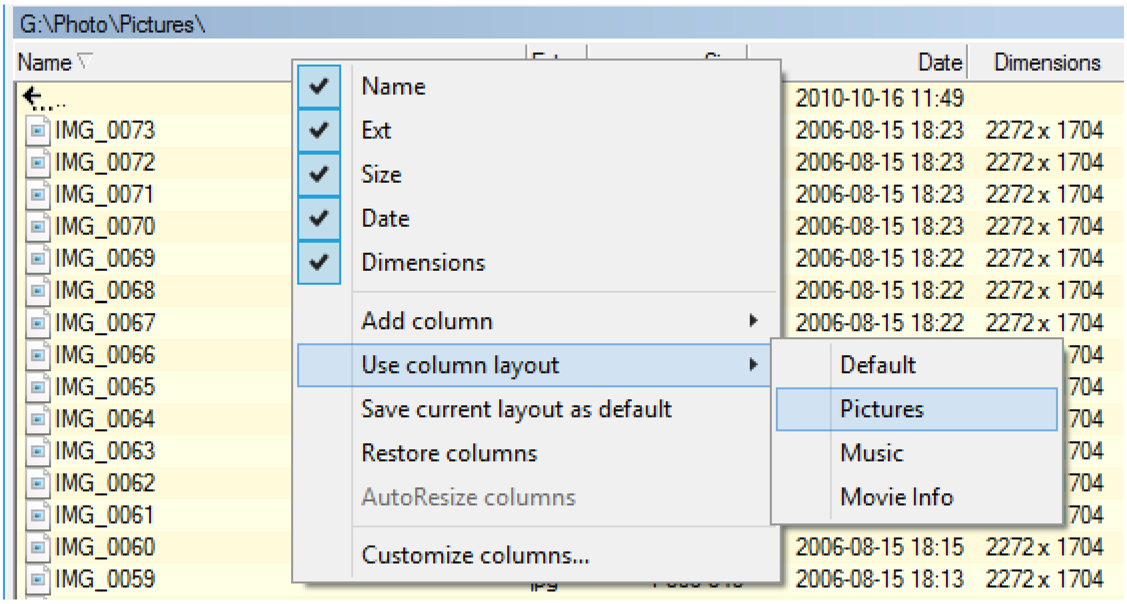
If the option in the picture above in not enabled (checked) then you can use the "**Autosize Columns**" option in the column header menu to manually resize all columns to their optimum width.

## Customize Columns

This option will open the Customize Column Layouts window.
There new layout can be created and existing ones can be modified. It is also here that all the columns that do not fit in the Add Columns list are available.
See Customize Column Layouts for more information.

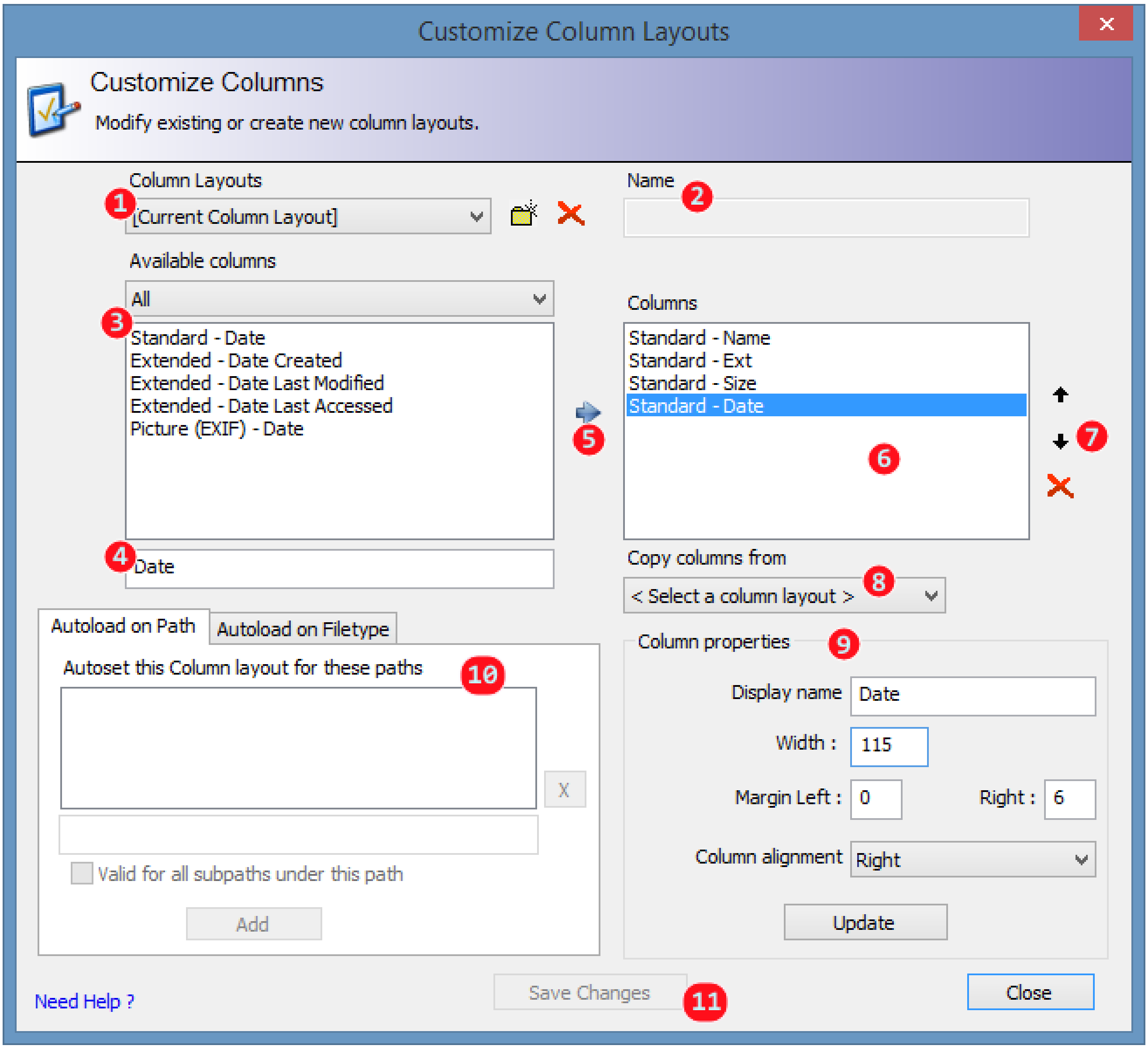
# Explorer Panel - Customize Column Layouts

A **Column Layout** is a saved set of a column layouts that can be selected  from the column header menu. A Column layout can also be applied automatically if you go to a folder that was specified in the Column layout definition.



| Name | Date | Dimensions |
|---|---|---|
| ... | 2010-10-16 11:49 | |
| IMG_0073 | 2006-08-15 18:23 | 2272 x 1704 |
| IMG_0072 | 2006-08-15 18:23 | 2272 x 1704 |
| IMG_0071 | 2006-08-15 18:23 | 2272 x 1704 |
| IMG_0070 | 2006-08-15 18:23 | 2272 x 1704 |
| IMG_0069 | 2006-08-15 18:22 | 2272 x 1704 |
| IMG_0068 | 2006-08-15 18:22 | 2272 x 1704 |
| IMG_0067 | 2006-08-15 18:22 | 2272 x 1704 |
| IMG_0066 | | 704 |
| IMG_0065 | | 704 |
| IMG_0064 | | 704 |
| IMG_0063 | | 704 |
| IMG_0062 | | 704 |
| IMG_0061 | | 704 |
| IMG_0060 | 2006-08-15 18:15 | 2272 x 1704 |
| IMG_0059 | 2006-08-15 18:13 | 2272 x 1704 |

From the **"Customize columns..."** option a dialog will open where you can create or modify and remove Column Layouts.



Column Layouts: [Current Column Layout]

Name:

Available columns: All

Standard - Date
Extended - Date Created
Extended - Date Last Modified
Extended - Date Last Accessed
Picture (EXIF) - Date

Filter: Date

Columns:
Standard - Name
Standard - Ext
Standard - Size
Standard - Date

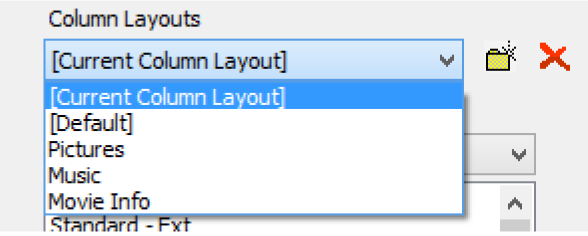
Copy columns from: < Select a column layout >

Column properties
Display name: Date
Width : 115
Margin Left : 0
Right : 6
Column alignment: Right

1. Column Layouts
2. Column Layout Name
3. Available Columns
4. Column Filter
5. Add Column
6. Columns List
7. Modify Column Order
8. Copy Column Layout from...
9. Column Properties
10. Autoload on Path
11. Save Changes

# 1. Column Layouts

All available columns layouts are listed in a dropdown list. After the list there are two button: "Create New" and "Delete". Use them to to create new layouts or to delete existing ones.



Column Layouts: [Current Column Layout]

[Current Column Layout]
[Default]
Pictures
Music
Movie Info
Standard - Ext

The first item in the column layout list named "**[Current Column Layout]**" is special.
It represents your current layout and modifying and saving it will only change the look for the current, active Explorer Panel. No others will be affected and changes are *not* saved between restarts.

In order to change the Standard column layout (that all Explorer Panel tabs will use), the **[Default]** column layout needs to be modified. Changing and saving this layout will cause all Explorer Panel tabs' column layouts to be updated when closing the window.

## 2. Column Layout Name

When creating a new column layout enter the name by which you want to identify the column layout. This name will be listed in the Use Column Layout submenu when right clicking on the column header.

## 3. Available Columns

This is the list of all the available columns which can appear in your layout. From the dropdown list above the list it is possible to limit which columns to list (by type).

## 4. Column Filter

There are a lot of columns and it can be hard to find the correct column to add. In the filter field it is possible to filter the list of available columns.
When you start typing, the available columns list will only show columns whose name includes what has been typed.

## 5. Add Column

Press the Arrow button add the selected column to the list of columns for the currently-selected layout.

## 6. Column List

This list shows all the columns that have been assign to the currently selected layout.
The order of the columns in the list is the order they will be shown in the Explorer Panel.

## 7. Modify Column Order

The Up and Down arrows here allow column to be moved up and down the list. Select the column to move and then press the Up/Down button.

Press the X button to remove a column from the list.

## 8. Copy Column Layout From...

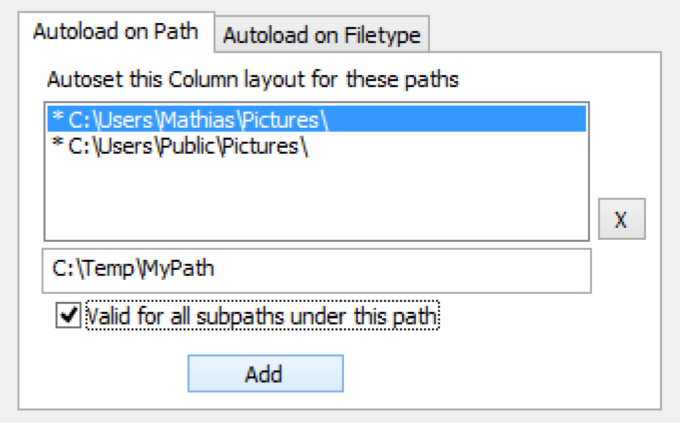
Often when creating a new column layout it is similar to another existing layout. This drodown list will list all available layouts, and the selected one will be copied into the layout being modified.

## 9. Column Properties

All column have some standard properties. These properties can be modified here.
'Display name' is the name that will be shown in the Explorer Panel column header.
'Width' is the default width of the column. However if autoresize columns settings is enabled this width might be ignored if needed.
'Margin left' and 'Right' allow you to add extra blank space to the column left/right sides (both to the header and the content).
'Column alignment' specifies how the content of the column will be displayed: right / left / center.
After any properties are changed be sure to press the "Update" button so that the properties are updated

## 10. Autoload on Path

This allows a column layout to be automatically applied under path that you specify here



Autoset this Column layout for these paths

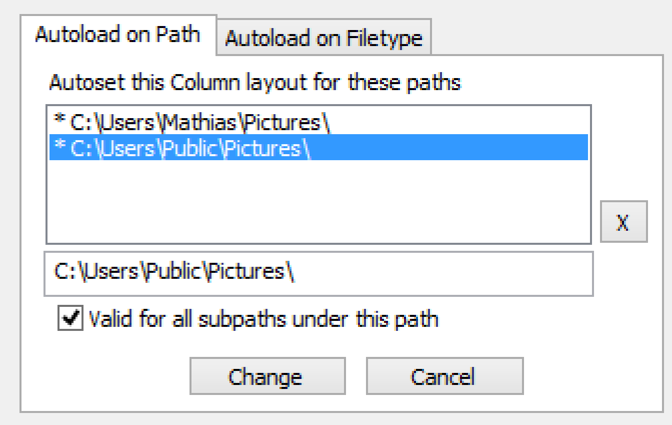
* C:\Users\Mathias\Pictures\
* C:\Users\Public\Pictures\

C:\Temp\MyPath

☑ Valid for all subpaths under this path

Enter the path for which the column layout should be autoloaded, Check the "**Valid for subpaths under this path**" if you want the Column layout to also apply for subpaths under this path. Press the "**Add**" button to keep your changes.
Paths in this list preceded with a * have the subpath option checked.

To modify any path in the list, simply double-click it.



Autoset this Column layout for these paths

* C:\Users\Mathias\Pictures\
* C:\Users\Public\Pictures\

C:\Users\Public\Pictures\

☑ Valid for all subpaths under this path

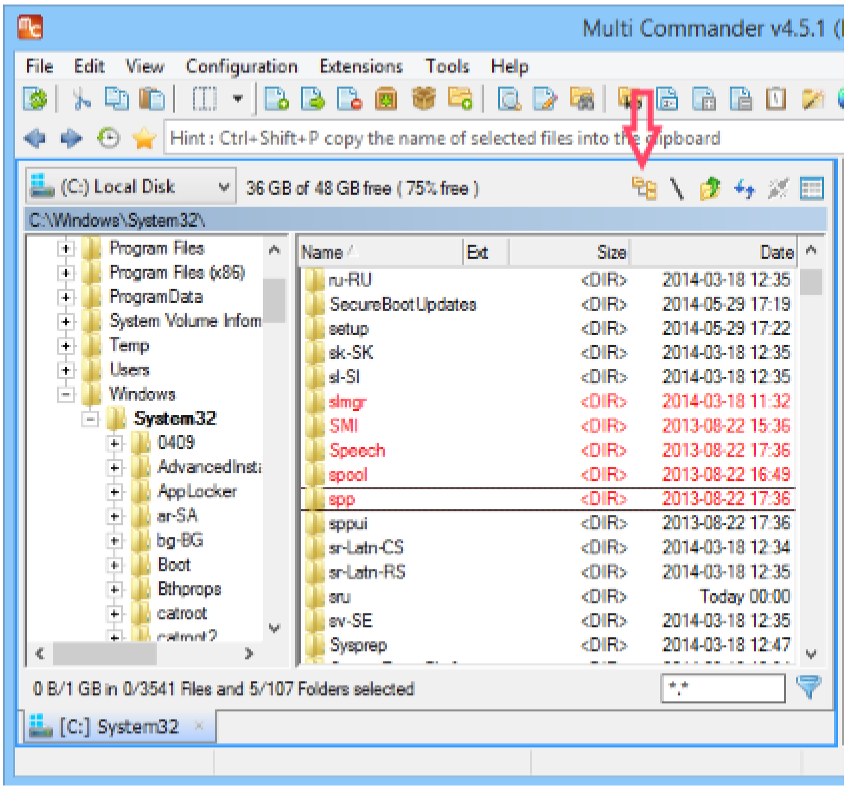
Change the path, and/or subpath settings and then click "**Change**".

Select a path in the list and press the X button to remove it.

## 11. Save Changes

When all modification are complete for the selected column layout press the "**Save Changes**" button. If this button is not pressed *all changes made will be lost*.

# Folder Tree



Hint : Ctrl+Shift+P copy the name of selected files into the clipboard

36 GB of 48 GB free ( 75% free )

C:\Windows\System32\

| Name | Ext | Size | Date |
|---|---|---|---|
| ru-RU | | <DIR> | 2014-03-18 12:35 |
| SecureBootUpdates | | <DIR> | 2014-05-29 17:19 |
| setup | | <DIR> | 2014-05-29 17:22 |
| sk-SK | | <DIR> | 2014-03-18 12:35 |
| sl-SI | | <DIR> | 2014-03-18 12:35 |
| slmgr | | <DIR> | 2014-03-18 11:32 |
| SMI | | <DIR> | 2013-08-22 15:36 |
| Speech | | <DIR> | 2013-08-22 17:36 |
| spool | | <DIR> | 2013-08-22 16:49 |
| spp | | <DIR> | 2013-08-22 17:36 |
| sppui | | <DIR> | 2013-08-22 17:36 |
| sr-Latn-CS | | <DIR> | 2014-03-18 12:34 |
| sr-Latn-RS | | <DIR> | 2014-03-18 12:35 |
| sru | | <DIR> | Today 00:00 |
| sv-SE | | <DIR> | 2014-03-18 12:35 |
| Sysprep | | <DIR> | 2014-03-18 12:47 |

0 B/1 GB in 0/3541 Files and 5/107 Folders selected

*.*

The first of the buttons on the *Explorer Panel* Embedded Toolbar is the **Toggle Folder Tree** command, This button will show/hide the Folder Tree.

Shortcuts

ALT+Num* - Show/Hide the Folder Tree panel
ALT+Num/ - Change the input focus between the Folder Tree panel and the file list view

The Folder Tree can be scrolled independently of the Explorer Panel, and clicking on any node of the Folder Tree will change the Explorer Panel to display that subfolder. The nodes of the Tree are shown with "+" or "-" symbols to show whether the subtree is expanded or collapsed.
You can also drop files on a folder in the Folder Tree and then a copy operation will begin. The copy operation will use the folder on to which the file was dropped as the suggested target folder.

Pressing the refresh shortcut command (F2/F5 depending on setup) while a folder in the Folder Tree is in focus will refresh that Tree node .

NOTE

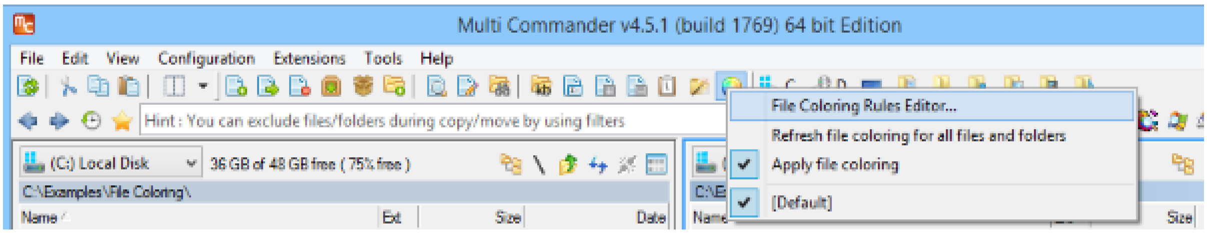
*If you have "**Autosize columns**" set, the Folder Tree will obscure part of the file listing in the Explorer Panel. To turn this setting off, click on **Configuration > Explorer Panel Settings**, scroll down to "**Sorting and Columns**", and click on "**Autosize columns**" to clear the checkbox.*

# Rule Based File Coloring

Rule Based File Coloring make it possible to create rules that will define what color a file or folder should be shown as in an Explorer Panel.

It is also possible to have multiple color profiles each of which has its own setup of different rules and it is possible to switch to a different profile from a toolbar button.
You can also create user defined commands that will switch to a specific profile; these commands can be assigned to a hotkey or a menu.

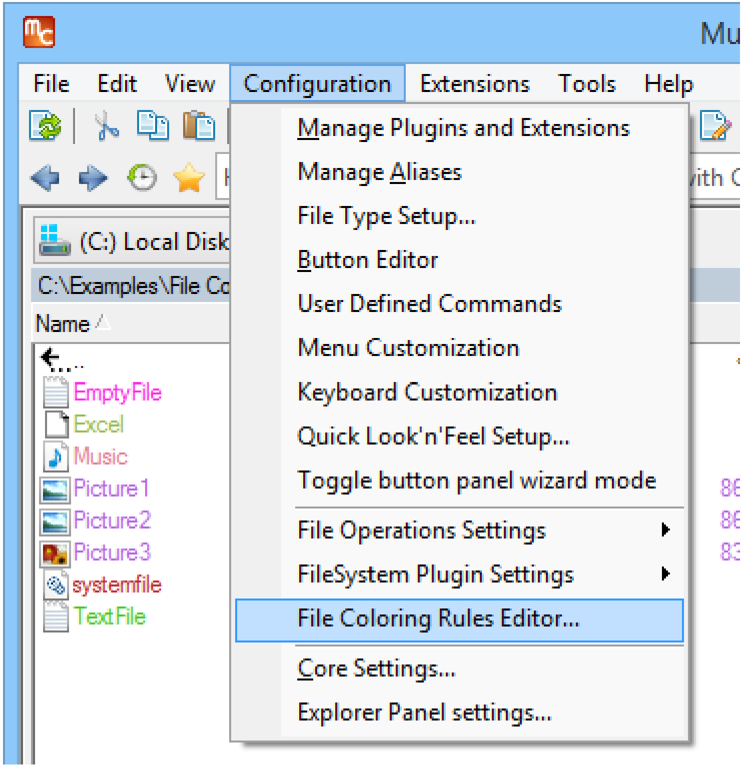
## Where to Create the Rules


Multi Commander v4.5.1 (build 1769) 64 bit Edition
File
Edit
View
Configuration
Extensions
Tools
Help
Hint : You can exclude files/folders during copy/move by using filters
(C:) Local Disk
36 GB of 48 GB free ( 75% free )
C:\Examples\File Coloring\
Name
Ext
Size
Date
File Coloring Rules Editor...
Refresh file coloring for all files and folders
Apply file coloring
[Default]

The File Coloring Rules Editor is opened by clicking on the Color Wheel icon on the toolbar.

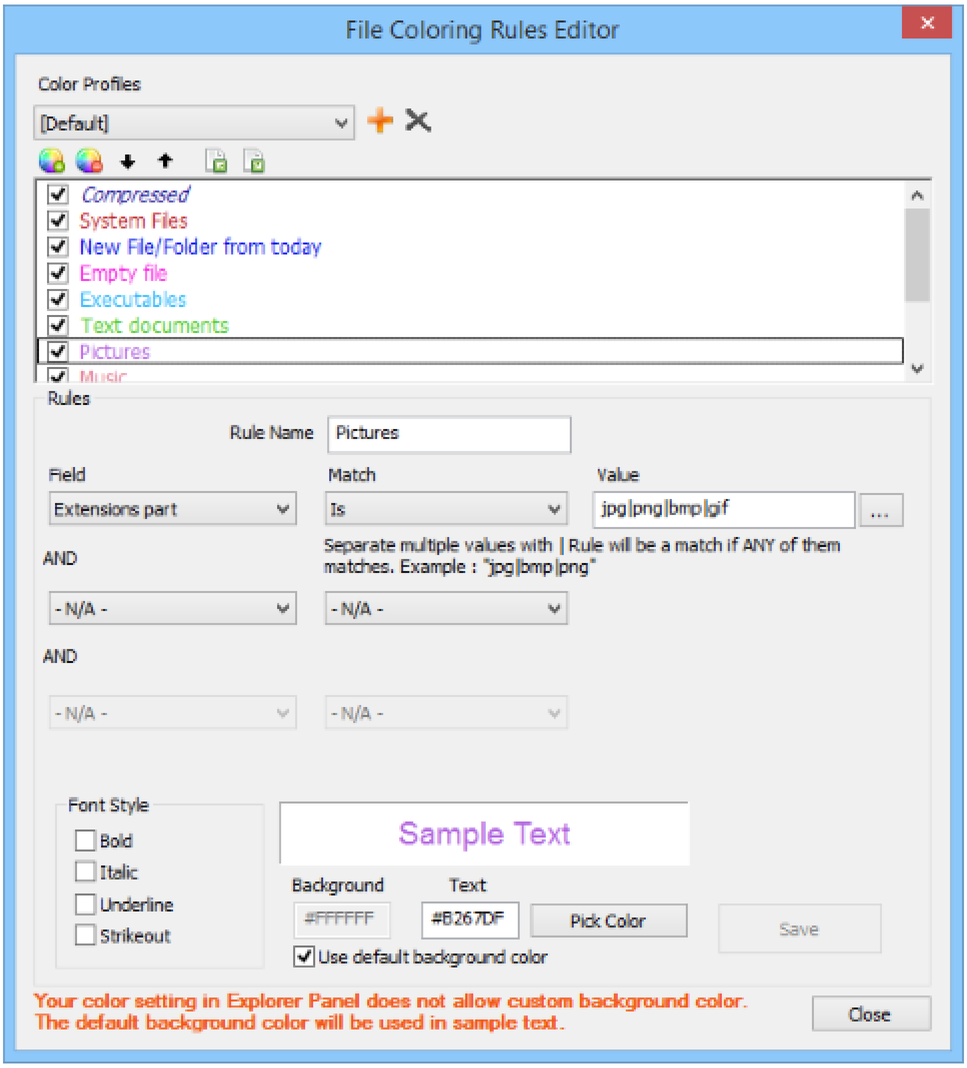
There are also options to enable/disable File Coloring and a list of available profiles.  By default there is only the "[Default]" profile. But if you create own profiles they will also be listed here.
Clicking on "**Refresh file coloring for all files and folders**" will remove all coloring information and reapply it for all files and folder.

The File Coloring Rules Editor can also accessed from the Configuration menu.



## Rules Editor

In the File Coloring Rules Editor, It is possible to add/remove or modify existing rules or entire Color Profiles.



File Coloring Rules Editor

Color Profiles: [Default]

- ☑ Compressed
- ☑ System Files
- ☑ New File/Folder from today
- ☑ Empty file
- ☑ Executables
- ☑ Text documents
- ☑ Pictures
- ☑ Music

Rules

Rule Name: Pictures

Field: Extensions part
Match: Is
Value: jpg|png|bmp|gif

Separate multiple values with | Rule will be a match if ANY of them matches. Example : "jpg|bmp|png"

AND: - N/A - / - N/A -

AND: - N/A - / - N/A -

Font Style

- ☐ Bold
- ☐ Italic
- ☐ Underline
- ☐ Strikeout

Background: #FFFFFF
Text: #B267DF
☑ Use default background color

Your color setting in Explorer Panel does not allow custom background color.
The default background color will be used in sample text.

The list with its rules also acts as a preview: the rule name will be listed in the colors set for it.

Files and Folders are colored by rules *from top to bottom*. And *the first matching rule will be the one that decides the color*.
If you have multiple rule that can conflict with each other,  you can use the Up and Down button above the list to move rules up and down the list.

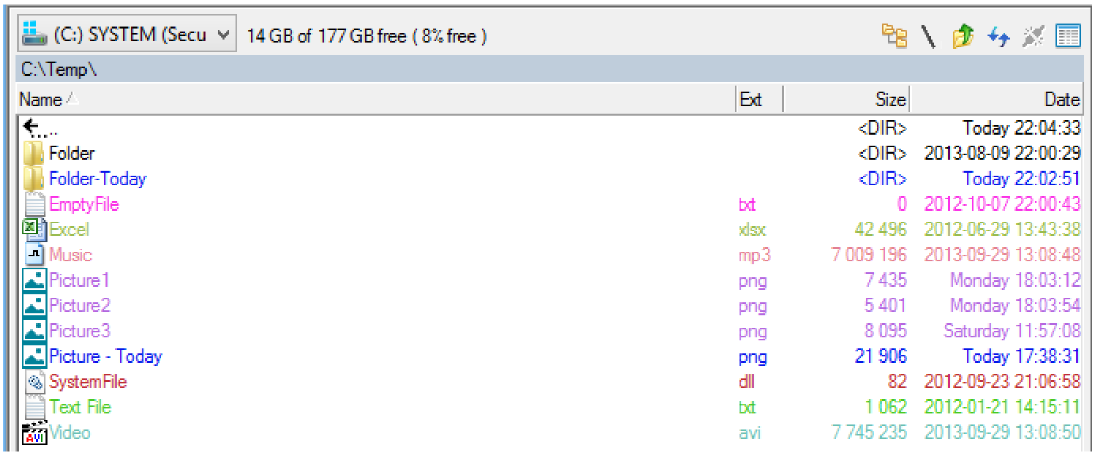
Every rule can have 3 criteria that must be true for the color rule to be applied. Only if *all parts* of the rule are true is the color rule applied.

The checkboxes in the list of rules shows if a rule is enabled or not. If you uncheck a rule then it will not be applied when coloring files and folders.

You can export rules to a file that you can later import. When exporting you are ask if you want to export all the rules or only the active rules. If any rules that are disabled will not be exported when you choose to export 'Only Active rules'.

## Example

Example how the default color profile can color files and folders.



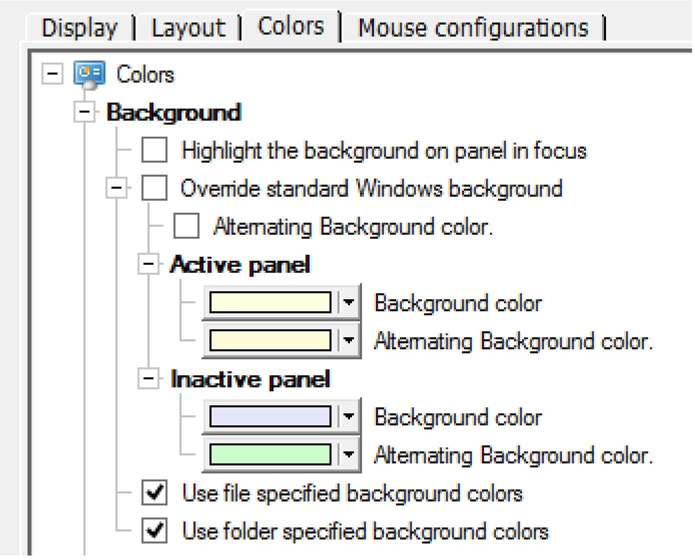
(C:) SYSTEM (Secu 14 GB of 177 GB free ( 8% free )

C:\Temp\

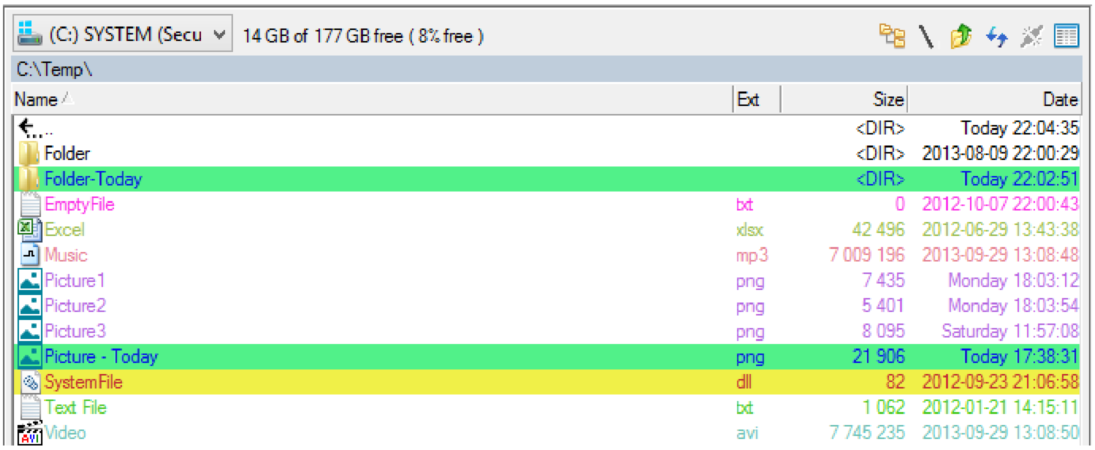
| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 22:04:33 |
| Folder | | <DIR> | 2013-08-09 22:00:29 |
| Folder-Today | | <DIR> | Today 22:02:51 |
| EmptyFile | txt | 0 | 2012-10-07 22:00:43 |
| Excel | xlsx | 42 496 | 2012-06-29 13:43:38 |
| Music | mp3 | 7 009 196 | 2013-09-29 13:08:48 |
| Picture1 | png | 7 435 | Monday 18:03:12 |
| Picture2 | png | 5 401 | Monday 18:03:54 |
| Picture3 | png | 8 095 | Saturday 11:57:08 |
| Picture - Today | png | 21 906 | Today 17:38:31 |
| SystemFile | dll | 82 | 2012-09-23 21:06:58 |
| Text File | txt | 1 062 | 2012-01-21 14:15:11 |
| Video | avi | 7 745 235 | 2013-09-29 13:08:50 |

# Coloring of Background

In roder for File Coloring to be able to change the background color of files/folders the Explorer Panel setting options "**Use file specified background colors**" and/or "**Use folder specified background colors**" must be enabled.
(*See the two checked items in the image below*)



Colors
- **Background**
  - □ Highlight the background on panel in focus
  - □ Override standard Windows background
    - □ Alternating Background color.
  - **Active panel**
    - Background color
    - Alternating Background color.
  - **Inactive panel**
    - Background color
    - Alternating Background color.
  - ☑ Use file specified background colors
  - ☑ Use folder specified background colors



(C:) SYSTEM (Secu 14 GB of 177 GB free ( 8% free )

C:\Temp\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 22:04:35 |
| Folder | | <DIR> | 2013-08-09 22:00:29 |
| Folder-Today | | <DIR> | Today 22:02:51 |
| EmptyFile | txt | 0 | 2012-10-07 22:00:43 |
| Excel | xlsx | 42 496 | 2012-06-29 13:43:38 |
| Music | mp3 | 7 009 196 | 2013-09-29 13:08:48 |
| Picture1 | png | 7 435 | Monday 18:03:12 |
| Picture2 | png | 5 401 | Monday 18:03:54 |
| Picture3 | png | 8 095 | Saturday 11:57:08 |
| Picture - Today | png | 21 906 | Today 17:38:31 |
| SystemFile | dll | 82 | 2012-09-23 21:06:58 |
| Text File | txt | 1 062 | 2012-01-21 14:15:11 |
| Video | avi | 7 745 235 | 2013-09-29 13:08:50 |

# User Defined Commands

The File Coloring profile to use can be controlled by using user defined commands.
Create a user defined command of "CustomCommand" and use the MC.Explorer.SetColoringRules command.

Example

```
MC.Explorer.SetColoringRules Name="MyColorProfile"
```

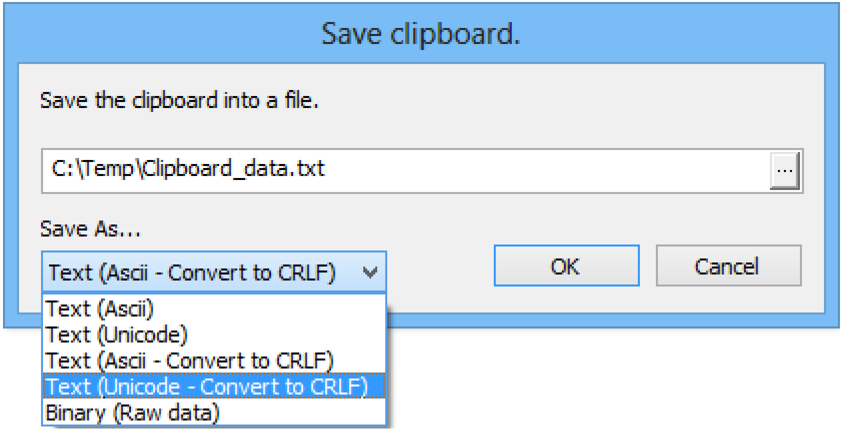
After the command is created it can be assigned to a hotkey or to a menu.

# Paste from Clipboard into Explorer Panel

If the data in the clipboard is text or picture data and you try to paste it into the Explorer Panel you will be asked to save the clipboard data as a text or image file.

## Saving Text Data

If the data in your clipboard is *text* and you press Ctrl+V (or Menu > Edit > Paste) while the focus in Multi Commander is in an Explorer Panel, you will be shown a dialog where you can save the text content from the clipboard to a file.



Save clipboard.

Save the clipboard into a file.

C:\Temp\Clipboard_data.txt

Save As...

Text (Ascii - Convert to CRLF)

...
OK
Cancel
Text (Ascii)
Text (Unicode)
Text (Ascii - Convert to CRLF)
Text (Unicode - Convert to CRLF)
Binary (Raw data)

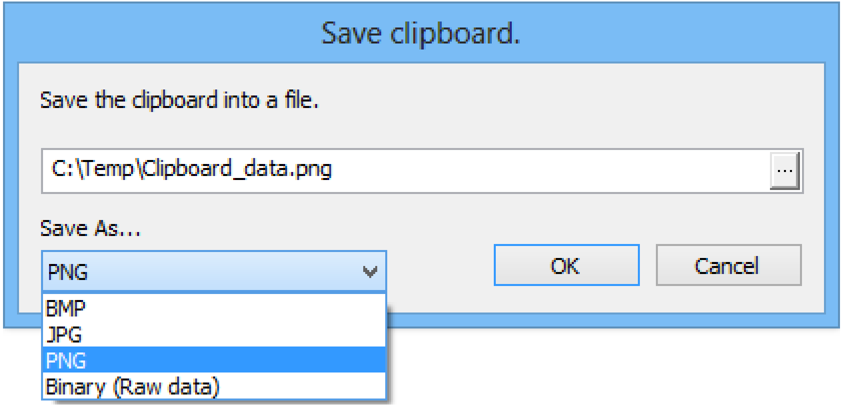
The dialog lets you choose the format to save the text in

- Ascii
- Unicode
- Ascii - convert to CRLF
- Unicode - convert to CRLF
- Binary (Raw data)

Some special handling is done for text data. If the text data in your clipboard looks like a *path* for an existing folder or file, then instead of opening a dialog, Multi Commander will immediately change the current location to that path you have in your clipboard data. If the path in the clipboard has a file specified then the focus will be set to that file.

## Saving Image Data

If the clipboard data is an *image* (for example if you pressed print screen to take a screenshot), you will be given the option to select the image format to save it in.



Save clipboard.

Save the clipboard into a file.

C:\Temp\Clipboard_data.png

Save As...

PNG

You can save the image the following format

- jpg
- png
- bmp

# File Search

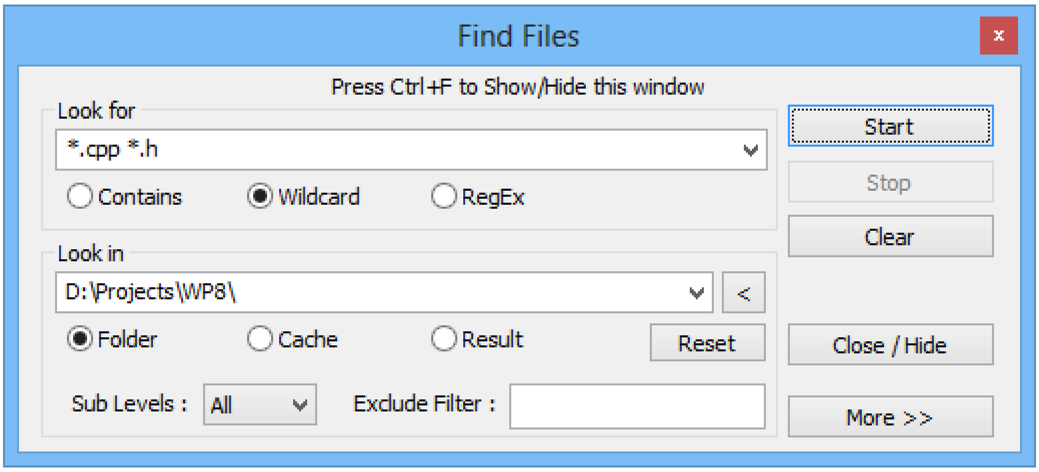
Multi Commander provides facilities to search for files and folders, along with a number of options to control the search.

To perform a search, go to the path where you want the search to start and then press hot key for starting search or or select "**File Search**" in the Extensions menu or Find Files from the File menu.

## Shortcuts

Start an instance of the Find Files (Search) Panel.
Alt+F7 - For Commander-Style Setup
F3 - For Explorer-Style Setup

The search dialog will open in a new tab in the *opposite* panel from that in which you are positioned.



Press Ctrl+F to Show/Hide this window

Look for: *.cpp *.h

○ Contains ● Wildcard ○ RegEx

Look in: D:\Projects\WP8\

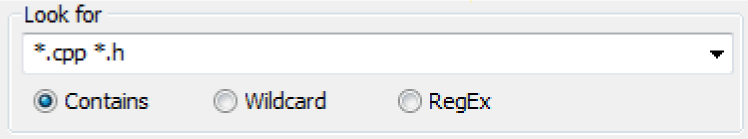
● Folder ○ Cache ○ Result

Sub Levels : All

Exclude Filter :

Specify what to look for and how you want to look for it.
You can specify multiple search terms by separating them with *spaces*.
*(If you need to include a space in the search target, put quotes around it. e.g. "Images 23.jpg" .)*

You also need to specify how to look for matches. There are three methods provided:



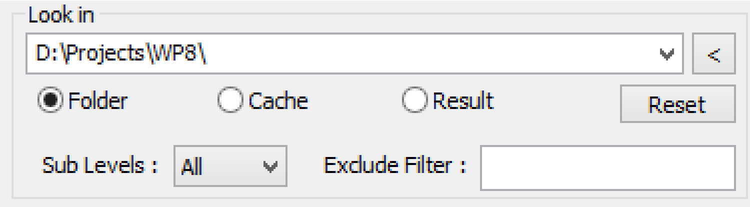
Look for: *.cpp *.h

● Contains ○ Wildcard ○ RegEx

**Contains** : files and folder names must *contain* any of the search terms you specify in order to match.
**Wildcard** : the search terms that are specified contain *wildcard* characters, e.g. "*.jpg" to find all files ending with ".jpg".
**RegEx** : the specified search terms are *regular expressions*.

Using wildcard search you can also specify an exclusion filter by including a - in front of the filter.
For example if you search for "*.cpp -base*"

This will find file named AlphaClass.cpp but it will not match BaseClass.cpp



Look in: D:\Projects\WP8\

● Folder ○ Cache ○ Result

Sub Levels : All

Exclude Filter :

Next you need to specify where to **Look In** when starting to search for matches. Normally this path is already set to the path that the file browser showed when you opened the search dialog. You can press the **Reset button** to reset the **Look In** path to the path that is currently shown in the opposite view.

*(You can specify multiple location to search in by separating them with **;** for example "D:\Project;F:\Downloads\;C:\Temp\" )*

You can also press the **"<"** button to add all local harddrive, or paths from open tabs.

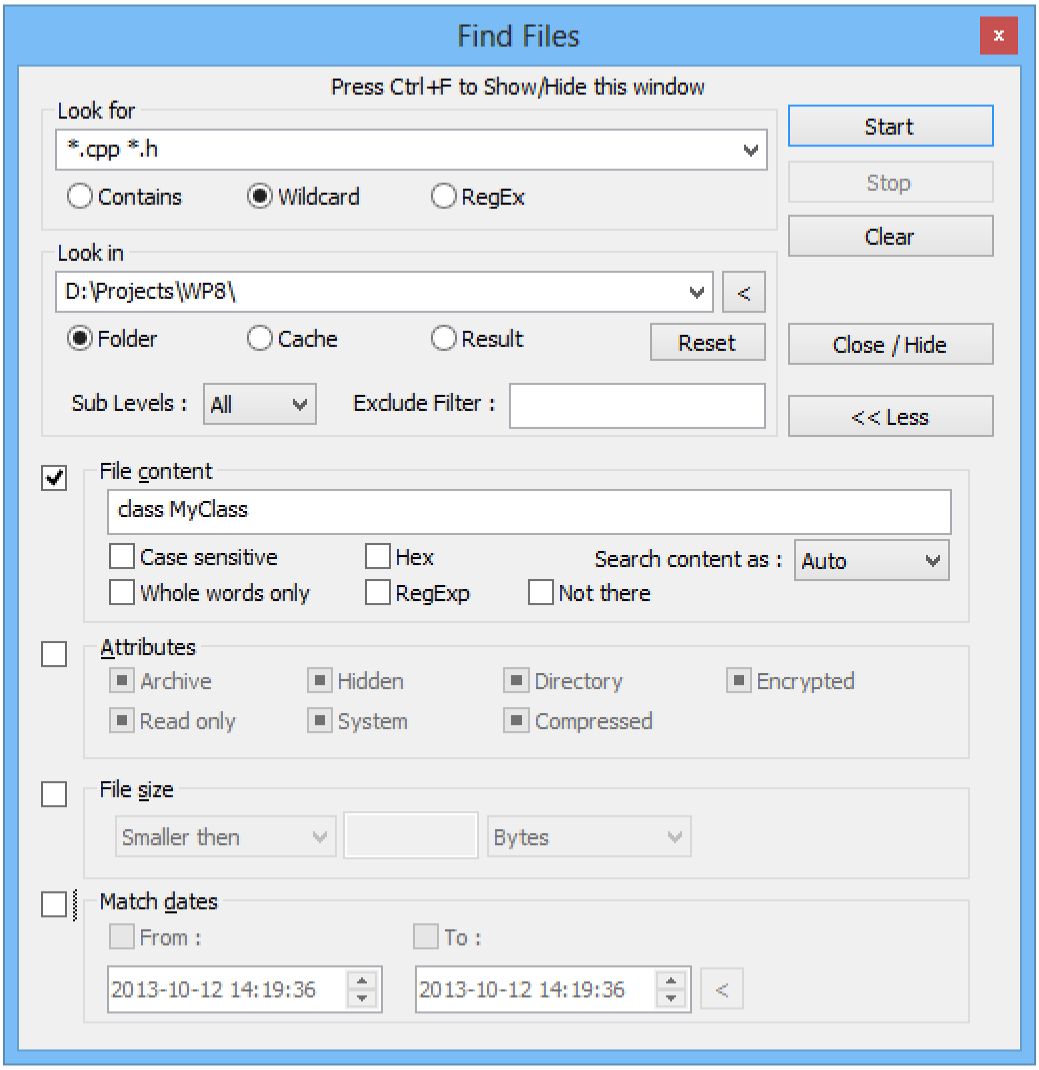
You can also specify how many **Sub Levels** down in the file hierarchy to search for files. By default as many levels as exist are searched.

It is possible to exclude folders from the search in the **Exclude Filter**. You can enter a space-separated list of folder names that you want to ignore when searching.
(Foe example if you enter ".svn tmp data" then no folder named ".svn" or "tmp" or "data" will be searched).

If you have previously searched for something you can specify that a new search should search the **Results** of the first search.
This way you are doing a search on the previous search result. This is a useful way to filter files from searches that produce too many results.

## More Options

By pressing the "More >>" button you can specify more advanced search options.



Find Files

Press Ctrl+F to Show/Hide this window

Look for: *.cpp *.h
○ Contains ● Wildcard ○ RegEx

Look in: D:\Projects\WP8\
● Folder ○ Cache ○ Result

Sub Levels : All
Exclude Filter :

☑ File content: class MyClass
□ Case sensitive □ Hex Search content as : Auto
□ Whole words only □ RegExp □ Not there

□ Attributes
▣ Archive ▣ Hidden ▣ Directory ▣ Encrypted
▣ Read only ▣ System ▣ Compressed

□ File size
Smaller then Bytes

□ Match dates
□ From : 2013-10-12 14:19:36
□ To : 2013-10-12 14:19:36

You can find files with a specific **File Content** and you can specify how the search should try to find that content. (See the screenshot above for available options).

It is also possible to match files on **Attribute**, **Size** and **Date**. (See above).

## Date Match Help

Date matching includes some predefined date ranges that can selected. By pressing the **<** Button in the Match dates section you will get a list of date ranges. When one of them is selected the From and To date fields are automatically populated.

## Load / Save Presets

The Find Files window can load and save presets of previously-configured searches using the function keys F1 to F10.
To save a search to a preset press Ctrl+Function key (eg. Ctrl+F1).
To load a preset press a function key that has a preset saved to it, (eg. F2).

## Hot Keys in the Find Files Window

- Ctrl+F - Show / Hide the Find Files window.
- Alt+Z - Clear all search fields.
- Ctrl+X - Expand / Shrink the Find Files Dialog
- F1-F12 - Load Preset
- Ctrl+F1-F12 - Save Preset

## Search Result

When right-click on items in the result list you will see a list of options. Here you can filter out files from the result list based on their paths. This can be useful if the result list is very large.

If you double-click on a file in the result list, the opposite panel will open at that files path the file will have focus. You can also press View and Edit files directly from the search result panel and it is possible to copy files from the search results.

## Scripting

File Search can be scripted by creating your own user defined command to start a search. By assigning a hotkey to your command you can start searches you use often with a single keypress.

The search is controlled by Custom Command script. More information about the search script command is found here

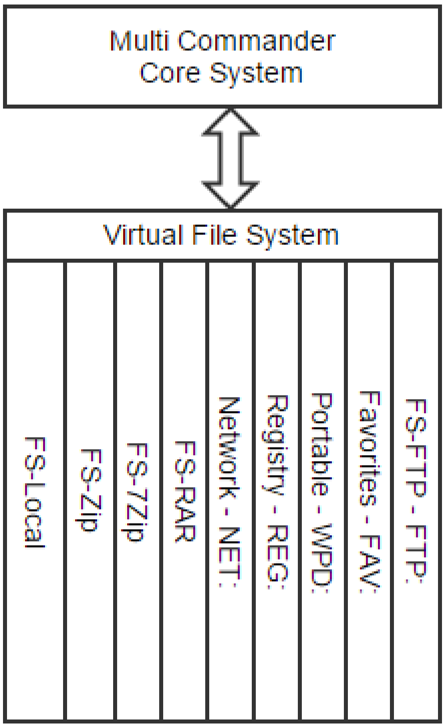
Scripting example:

```
MC.FileSearch.Search SEARCHIN="${sourcepath}" SEARCHFOR="*.xml *.txt" AUTOSTART
```

# Virtual FileSystem

Multi Commander uses a virtual filesystem layer.
The virtual filesystem has different plug-ins that extend the elements of the filesystem that Multi Command can show. An example of a plug-in is FS-Zip that will allow zip archives to be part of the virtual filesystem, so that they can be browsed and handled just like a folder. Other plug-include the FS-REG plug-in that will add a new filesystem prefix, REG:, that allows the Windows Registry to be browsed and handled as if it were a filesystem (even though it is not).

Not all filesystem plug-in support all filesystem functions. This depends on what each plug-in can support.



There are two types of filesystem plug-in: Devices and Containers.

The devices filesystem plug-ins will add new device prefixes to the virtual filesystem, eg. FTP: , REG: , NET:
This will present things that are not normally part of a filesystem as if they were, like the Windows Registry, for example.

Containers are files that contain filesystem objects that have structures that can be represented as if they were a filesystem.
Typical examples are archives like Zip, RAR or 7-Zip. The plug-ins for them will handle the archive files as they were folders opened in Multi Commander. Handling archives as if they were folders allow files to be inserted into the archive by simply copying file into the virtual folder. When viewing a file inside a archive that file will automatically first be copied to a temporary location before opening.

## FS-Local

The built-in filesystem plug-in **FS-Local** is special. It is handled in a special way within Multi Commander.
FS-Local handles all the normal filesystem objects on the machine, like single-letter devices (A-Z), such as C:,D:,E:, and so on, and network file paths likes \\Server\share.It is also the only filesystem plug-in that cannot be disabled.

## Container/Archive Plug-ins

Included with Multi Commander is a couple of archive filesystem plug-in that will handle different archives.
**FS-Zip** for Zip archive. Zip archives can be read/modify/write/create.
**FS-RAR** for rar archives, Only Read mode is supported. RAR archives can't be modified or created.
**FS-7Zip** handles the 7Zip archives. Read/Write/Create is supported.
**FS-TarGZ** handled both Tar and GZ archives.Read/Write/Create is supported.
**FS-BZip2** handles BZip2 archives. Read/Write/Create is supported.

See more about archive plug-ins

# Device Plug-ins

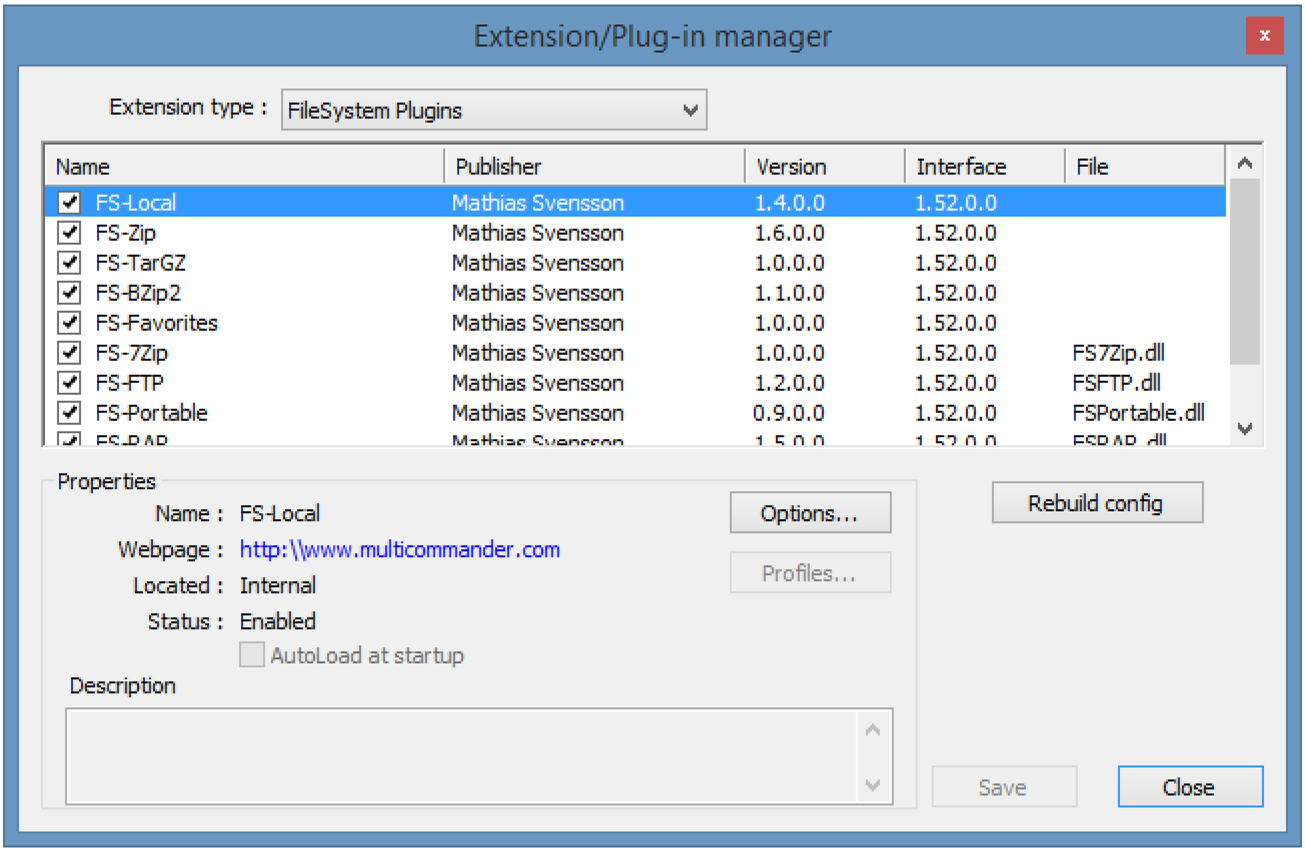
Included with Multi Commander is a couple of device plug-in
**FS-Favorites (FAV:)** Allows the favorites in Multi Commander to be browsed like a filesystem.
**FS-Portable (WPD:)** exposes the Windows Portable Device interface that gives access to portable devices connected to the machine.
**FS-Registry (REG:)** make it possible to access the Windows Registry
**FS-FTP (FTP:)** adds FTP support

# Configuration

The way that the plug-in is connected into the virtual filesystem is configured in "Manage Plug-ins and Extensions". There you can enable/disable plug-ins and configure the file extension and/or byte markers and device prefix that a filesystem plug-in should be associated with.

Changing how plug-in are connected into the virtual filesystem is for **experts only**. You are able to configure the plug-ins in a such way that will Multi Commander my not act the way you want or expect.
Pressing the "Rebuild Config" button will reset all extension/plug-in setups to their defaults.

The "Manage Plug-ins and Extensions" window is found under Menu -> Configuration. Select "FileSystem Plug-ins" in the 'Extension Type' dropdown list.

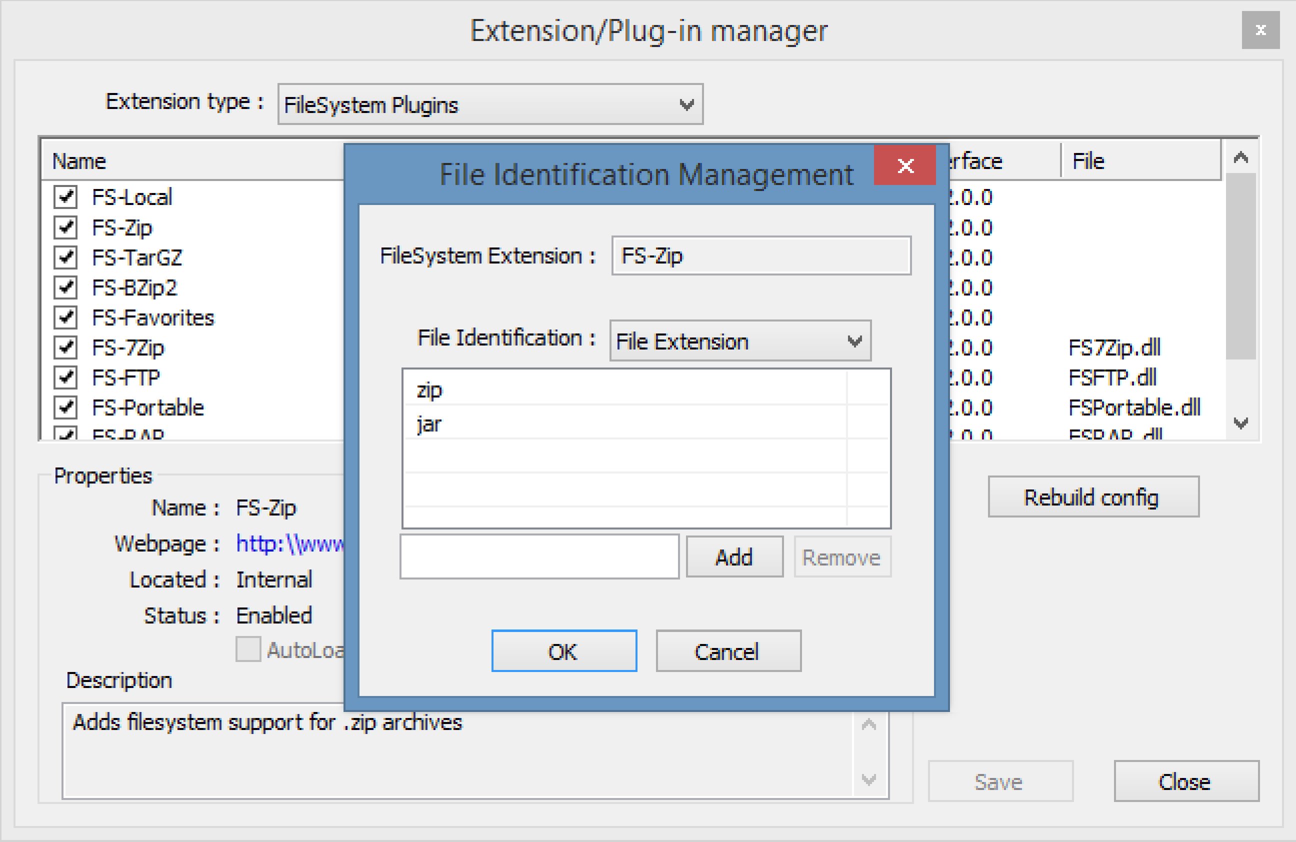


Extension type : FileSystem Plugins

| Name | Publisher | Version | Interface | File |
|---|---|---|---|---|
| ☑ FS-Local | Mathias Svensson | 1.4.0.0 | 1.52.0.0 | |
| ☑ FS-Zip | Mathias Svensson | 1.6.0.0 | 1.52.0.0 | |
| ☑ FS-TarGZ | Mathias Svensson | 1.0.0.0 | 1.52.0.0 | |
| ☑ FS-BZip2 | Mathias Svensson | 1.1.0.0 | 1.52.0.0 | |
| ☑ FS-Favorites | Mathias Svensson | 1.0.0.0 | 1.52.0.0 | |
| ☑ FS-7Zip | Mathias Svensson | 1.0.0.0 | 1.52.0.0 | FS7Zip.dll |
| ☑ FS-FTP | Mathias Svensson | 1.2.0.0 | 1.52.0.0 | FSFTP.dll |
| ☑ FS-Portable | Mathias Svensson | 0.9.0.0 | 1.52.0.0 | FSPortable.dll |
| ☑ FS-RAR | Mathias Svensson | 1.5.0.0 | 1.52.0.0 | FSRAR.dll |

Properties
Name : FS-Local
Webpage : http:\\www.multicommander.com
Located : Internal
Status : Enabled
□ AutoLoad at startup
Description

Set or clear the checkboxes to the left to enable/disable a plug-in. To configure how it connects with the virtual filesystem press the **Options** button.



Extension/Plug-in manager

Extension type : FileSystem Plugins

| Name | ...rface | File |
|---|---|---|
| ☑ FS-Local | .0.0 | |
| ☑ FS-Zip | .0.0 | |
| ☑ FS-TarGZ | .0.0 | |
| ☑ FS-BZip2 | .0.0 | |
| ☑ FS-Favorites | .0.0 | |
| ☑ FS-7Zip | .0.0 | FS7Zip.dll |
| ☑ FS-FTP | .0.0 | FSFTP.dll |
| ☑ FS-Portable | .0.0 | FSPortable.dll |
| ☑ FS-RAR | .0.0 | FSRAR.dll |

Properties

Name : FS-Zip

Webpage : http:\\www...

Located : Internal

Status : Enabled

□ AutoLoa...

Description

Adds filesystem support for .zip archives

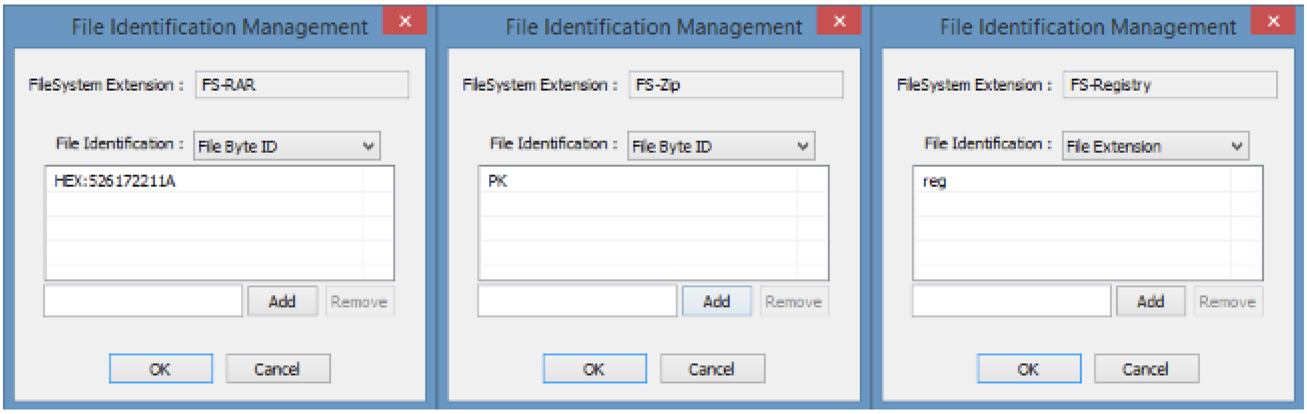
File Identification Management

FileSystem Extension : FS-Zip

File Identification : File Extension

zip
jar

In the image above FS-Zip was select and it is associated with file extensions zip and jar.
To remove an association with a file extension select the extension to remove and press the Remove button.
Adding a new file extension is done by adding the file extension (*without the dot*) to the input field above the Add button. Press the Add button to add it.



File Identification Management

FileSystem Extension : FS-RAR

File Identification : File Byte ID

HEX:526172211A

File Identification Management

FileSystem Extension : FS-Zip

File Identification : File Byte ID

PK

File Identification Management

FileSystem Extension : FS-Registry

File Identification : File Extension

reg

In the "File Identification" dropdown list you can also identify a file type by specifiying its byte marker. The byte marker is also used when trying to identify if a file should be opened by a container/archive plug-in.
The byte marker is special sequence of bytes that the file content always starts with. For example, PK are the two bytes that .zip archives always begin with.

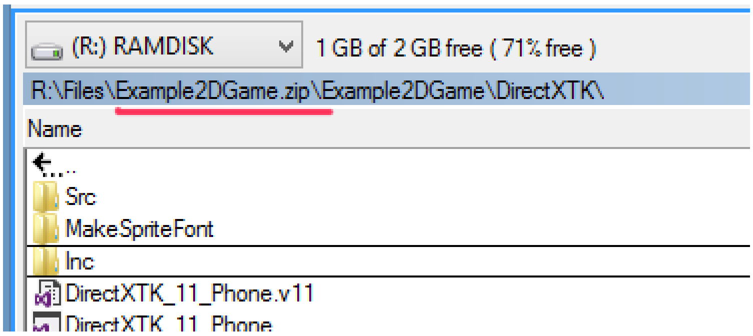
The byte marker can be entered as a hexadecimal value (see FS-RAR in the image above) or as ASCII text (see FS-Zip in image above).
Enter the byte marker in the input field and press the Add button. Select a byte marker in the list and press the Remove button to remove it.

Device prefixes for device plug-ins are configured under the "File Extensions". Add the prefix without the "**:**" (See "reg" device for FS-Registry in the image above).

# FileSystem - Archives

There are virtual filesystem plug-ins to allow archive files like Zip, RAR, or 7Zip to be opened and handled by Multi Commander.

Multi Commander sees the archive first as a normal file, but when opening it, will browse the content of the archive as if it were a folder.



(R:) RAMDISK 1 GB of 2 GB free ( 71% free )

R:\Files\Example2DGame.zip\Example2DGame\DirectXTK\

| Name |
|---|
| .. |
| Src |
| MakeSpriteFont |
| Inc |
| DirectXTK_11_Phone.v11 |
| DirectXTK_11_Phone |

Since archives are handled as folders it is possible to browse an archive and select files and then press copy (or drag them) and only the selected files will be unpacked and copied.
If the virtual filesystem supports writing, it is possible to copy files into the archive just as if the archive were a folder. The archive will then be updated with the new files.
Delete and Rename are also supported (if the plug-in for that archive format supports it). Not all archive plug-ins support write/modify operations.

Most operation that can be preformed on normal files can be performed on files inside an archive. The virtual filesystem will unpack the files to a temporary location if needed.
When viewing or editing a file inside an archive the virtual filesystem layer will automatically extract and update the archive as needed.

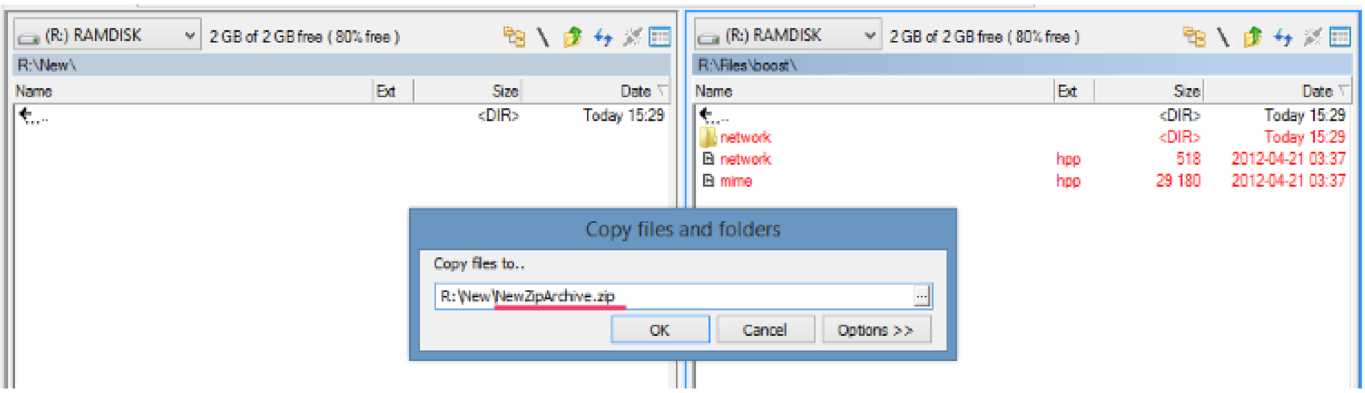
In many places inside Multi Commander it is possible to reference a file that is located inside an archive. The virtual file system will then automatically open the file inside the archive.

## Pack / Unpack

With Pack and Unpack it is possible to quickly pack or unpack files within an archive file.
Unpacking can also be done by browsing the archive, selecting what to copy and then copying the content to a target location.

## Create New Archive Automatically

Because the virtual filesystem will automatically open or create archives it is possible to create a new archive by copying files to an archive that does **not** yet exist. If it does exist, however, the existing archive will be updated instead.



(R:) RAMDISK 2 GB of 2 GB free ( 80% free )

R:\New\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 15:29 |

(R:) RAMDISK 2 GB of 2 GB free ( 80% free )

R:\Files\boost\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | Today 15:29 |
| network | | <DIR> | Today 15:29 |
| network | hpp | 518 | 2012-04-21 03:37 |
| mime | hpp | 29 180 | 2012-04-21 03:37 |

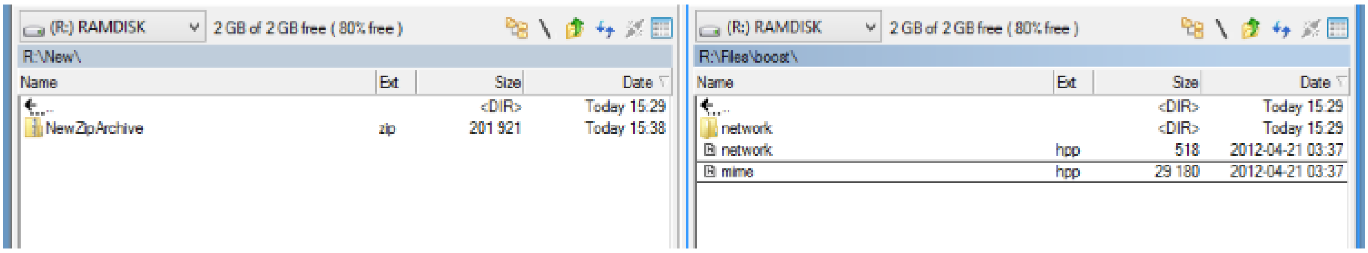
Copy files and folders

Copy files to..

R:\New\NewZipArchive.zip

In the image above the right panel has the folder **"Network"** and the files **"Network.hpp"** and **"mine.hpp"** selected.
A copy operation of the selected files and folders to the target panel to the left is then issued. In the "Copyfile to..." confirmation window an archive file name ( **NewZipArchive.zip**) is added to the target path.

The copy operation will now copy the selected file into the new zip archive named NewZipArchive.zip.



(R:) RAMDISK
2 GB of 2 GB free ( 80% free )

R:\New\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. |  | <DIR> | Today 15:29 |
| NewZipArchive | zip | 201 921 | Today 15:38 |

(R:) RAMDISK
2 GB of 2 GB free ( 80% free )

R:\Files\boost\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. |  | <DIR> | Today 15:29 |
| network |  | <DIR> | Today 15:29 |
| network | hpp | 518 | 2012-04-21 03:37 |
| mime | hpp | 29 180 | 2012-04-21 03:37 |

After the copy is completed there is now a new zip archive in the target location: **"NewZipArchive.zip"**

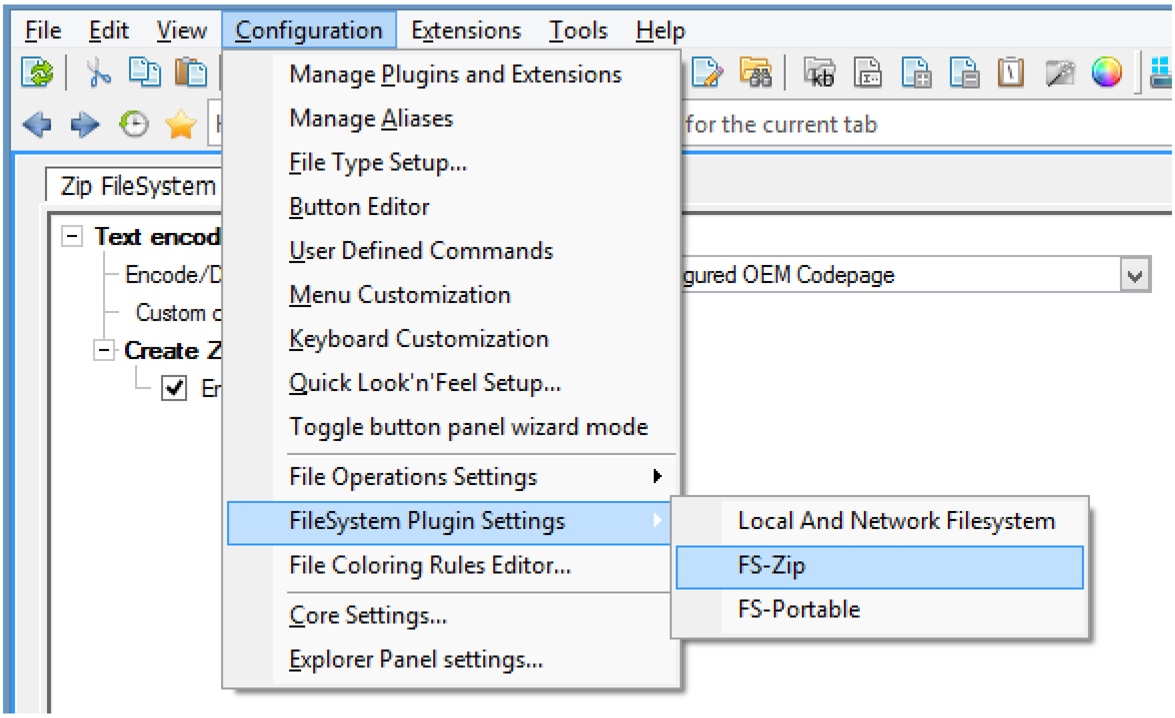
The virtual Filesystem knows that the .zip extension is a virtual file system object. Therefore, when the target location is a path that ends in an archive, the virtual filesystem layer will create that archive file if it can. If the file already exists the existing file will be updated instead.

*Just as if the target archive file was actually a folder.*

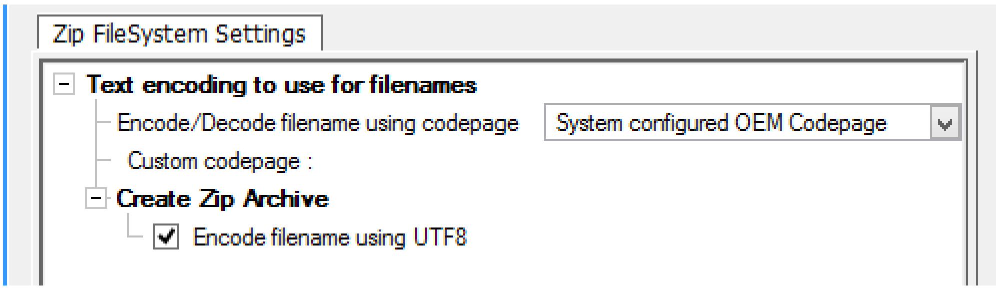
# FS-Zip

This virtual filesystem plug-in adds support for opening and modifying and creating zip archives.
Zip is a very old format and because of that it does not handle well filenames that have characters that do not fit into the 7-Bit Ascii Table. The Zip standard has been updated to support UTF-8 encoded filenames, and FS-Zip does support that, but many other programs that create/read zip files to not support UTF-8 encoding. This can make the filenames look differently if zip archives are moved between computers with different language settings or capabilities.

In the settings for the Zip FileSystem plug-in it is possible to configure which codepage should use when opening zip archives (those that are not encoded using UTF-8).
The settings page is found under the Configuration menu.



Is is also possible to enable/disable whether a new zip archive should  be created using UTF-8 encoding.



Text encoding to use for filenames

Encode/Decode filename using codepage: System configured OEM Codepage

Custom codepage :

Create Zip Archive

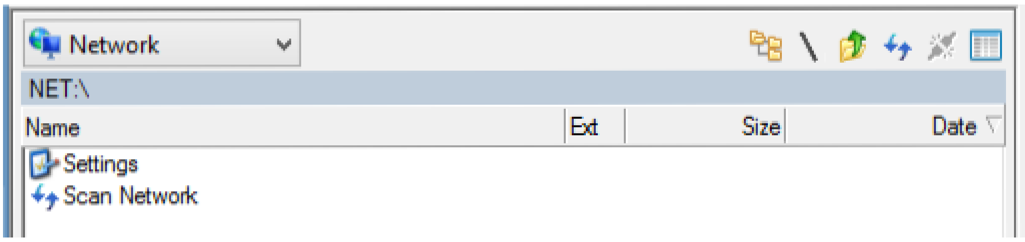
☑ Encode filename using UTF8

## FS-Rar

This virtual filesystem plug-in provides **read only** support for RAR files. It will allow browsing and unpacking rar archives, but files cannot be added.

# FileSystem - Network (NET:)

The virtual filesystem device extension **Network (NET:)** allows the local network the be scanned for computers or network-attached devices.
All found devices will then be listed.



To scan the network for computers and devices execute the "**Scan Network**" command (a progress window will be shown during the scan). The scan can take a couple of minutes if the network is large. When finished all discovered devices within a shared filesystem will be listed.

The list of devices is by default remembered between restarts of Multi Commander.

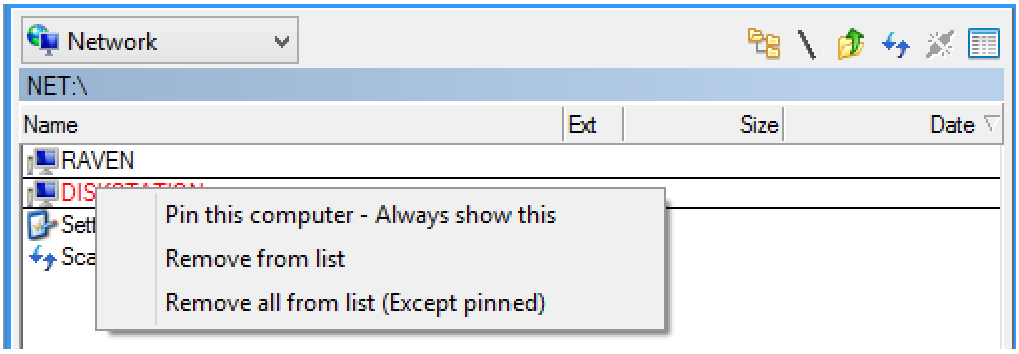
Opening a computer in the list will cause Multi Commander to browse that server path. The server path browsing is then handled by the normal FS-Local virtual file system plug-in. Just as if the path was entered manually.

## TS Client - Remote Desktop

Running on a computer that is logged in from Remote Desktop, the local drives can be accessed on the remote machine under \\TSClient (If Remote Desktop is configured to show drives on the remote computer).
The Network virtual filesystem plug-in will detect if Multi Commander is running in a Remote Desktop session. If it is, and there are remote connected drives, a **TSClient** entry will also listed. It works in the same way as any other computer entry listed.

## Network Commands

Right-clicking on a computer in the list will open a popup window is shown with some additinal commands.


Network
NET:\
Name
Ext
Size
Date
RAVEN
DISKSTATION
Sett
Sca
Pin this computer - Always show this
Remove from list
Remove all from list (Except pinned)

### Pin this Computer

This command will pin the selected computer. If a new scan of the network is done this computer will not be removed from the list even if it was not found.

### Remove from list

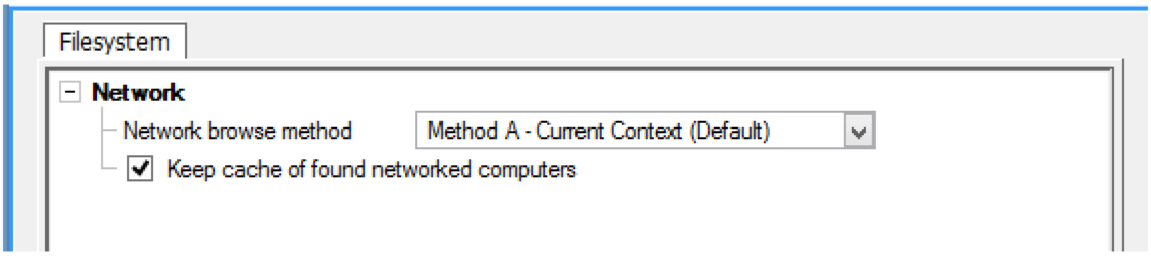
This command will remove the selected computer from the list.

### Remove all from list (Except pinned)

This will remove all computers from the list (with the exception of pinned computers - these will not be removed).

# Settings

Execute the "**Settings**" command to open the settings page



Filesystem

⊟ **Network**

Network browse method: Method A - Current Context (Default)

☑ Keep cache of found networked computers

### Network browse method

There are three methods (Current Context, Global and Shell) available to use to scan the network. If computer is not found in the list after a scan, try changing Network browse method and then scan the network again.

### Keep cache of found networked computers

If this is checked, discovered computers will be remembered between restarts of Multi Commander.

# FileSystem - Portable (WPD:)

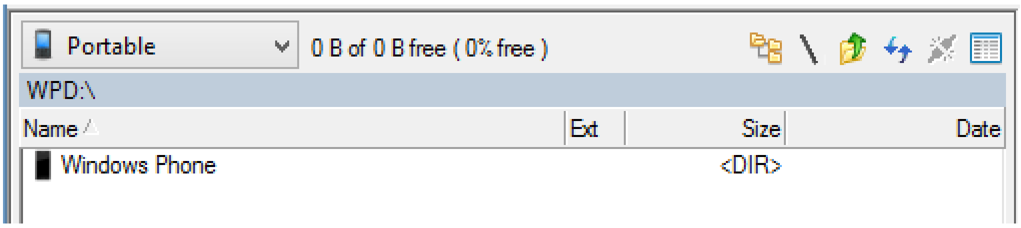
The virtual filesystem device extension **Portable (WPD:)** allows portable devices like cameras and phones to be accessed.

When connecting a phone, tablet or camera to the computer that device may allow full filesystem access and Windows will then provide a drive letter for the device and it is accessed as any other device. However, many modern devices do not support this and require that the device is accessed via a special protocol called MTP. Windows provide access to MTP devices via the Windows Portable Device interface. This file system extension will expose the WPD interface to Multi Commander providing access to MTP device.

When full filesystem access to the device is not allowed some filesystem operations might not be accessible. This may differ from device to device. Note that transferring files to and from an MTP connected device is a lot slower than using a mapped drive letter.

Some phones and tablets have a settings that will allow the device to be detected as a 'mass storage device' instead. Windows will then get full filesystem access to the device and will provide a drive letter for it. This way of accessing the device is a lot faster then using MTP/WPD and is recommended if available.

Under WPD:\ all portable device are listed. If the device is not shown try to refresh the view by pressing the refresh button or F5/F2 (depending on setup).



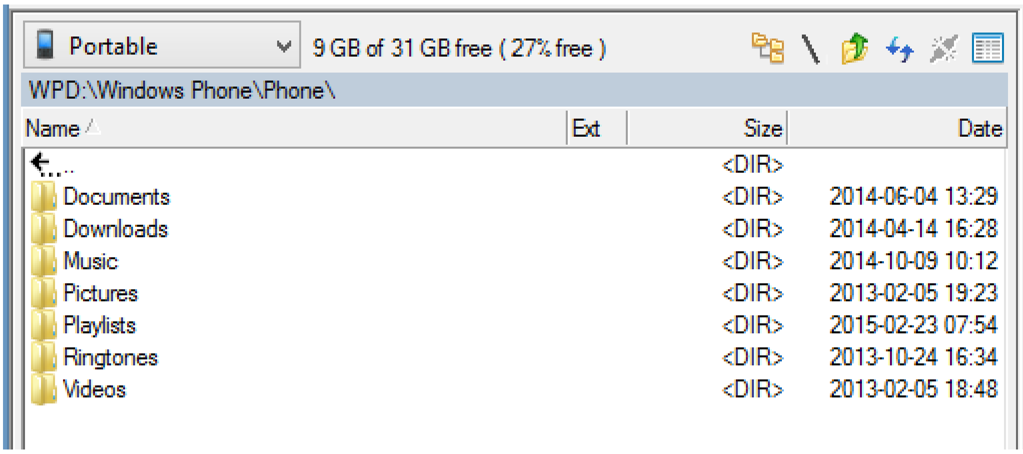
Portable

0 B of 0 B free ( 0% free )

WPD:\

| Name | Ext | Size | Date |
|---|---|---|---|
| Windows Phone | | <DIR> | |

The content of a portable device will be shown as a filesystem.



Portable

9 GB of 31 GB free ( 27% free )

WPD:\Windows Phone\Phone\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | |
| Documents | | <DIR> | 2014-06-04 13:29 |
| Downloads | | <DIR> | 2014-04-14 16:28 |
| Music | | <DIR> | 2014-10-09 10:12 |
| Pictures | | <DIR> | 2013-02-05 19:23 |
| Playlists | | <DIR> | 2015-02-23 07:54 |
| Ringtones | | <DIR> | 2013-10-24 16:34 |
| Videos | | <DIR> | 2013-02-05 18:48 |

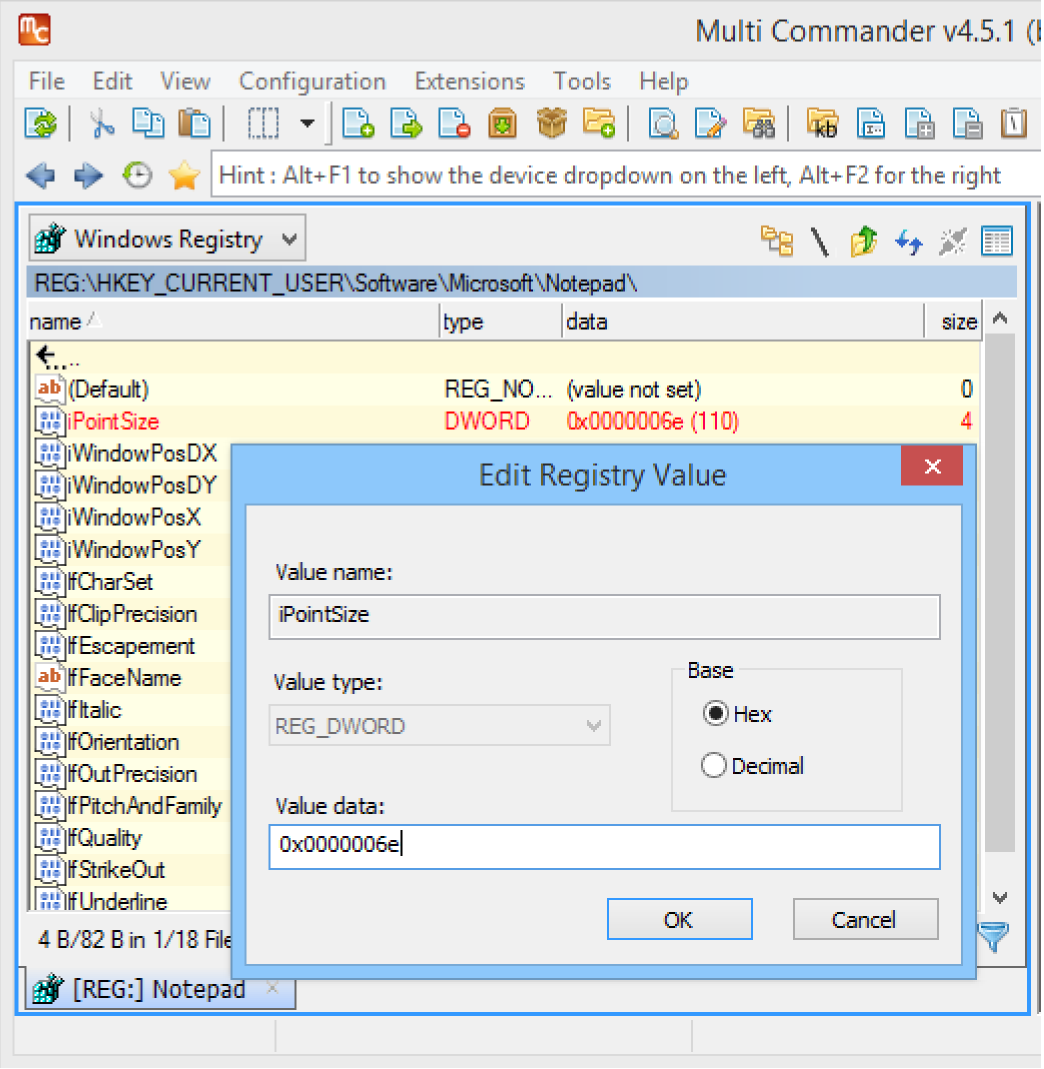
# FileSystem - FS-Reg (REG:)

The virtual filesystem device extension **FS-Reg (REG:)** allows the Windows Registry to be accessed as a filesystem under the device path REG:

Since Multi Commander treats it as a file system most things you can do in a filesystem can be done in the Windows Registry.

To browse the registry you select "Windows Registry" from the device list dropdown, or you can type in a registry path in the command line field e.g. "HKEY_CURRENT_USER\Software\Microsoft\Windows\CurrentVersion\" and it will go to the path you specified. You can also type REG: if you want to browse to the registry location yourself.

When you create a ***new folder*** in the registry you are actually creating a new registry key. You can also **Delete** keys and values or **Rename** them. You are able to **copy** keys and values from one place in the registry to another and you can also copy keys and values to disk where they will be represented as folders and files. You can also copy them back from the filesystem to the Registry.



Hint : Alt+F1 to show the device dropdown on the left, Alt+F2 for the right

REG:\HKEY_CURRENT_USER\Software\Microsoft\Notepad\

| name | type | data | size |
|---|---|---|---|
| .. | | | |
| (Default) | REG_NO... | (value not set) | 0 |
| iPointSize | DWORD | 0x0000006e (110) | 4 |
| iWindowPosDX | | | |
| iWindowPosDY | | | |
| iWindowPosX | | | |
| iWindowPosY | | | |
| lfCharSet | | | |
| lfClipPrecision | | | |
| lfEscapement | | | |
| lfFaceName | | | |
| lfItalic | | | |
| lfOrientation | | | |
| lfOutPrecision | | | |
| lfPitchAndFamily | | | |
| lfQuality | | | |
| lfStrikeOut | | | |
| lfUnderline | | | |

4 B/82 B in 1/18 File

Edit Registry Value

Value name: iPointSize

Value type: REG_DWORD

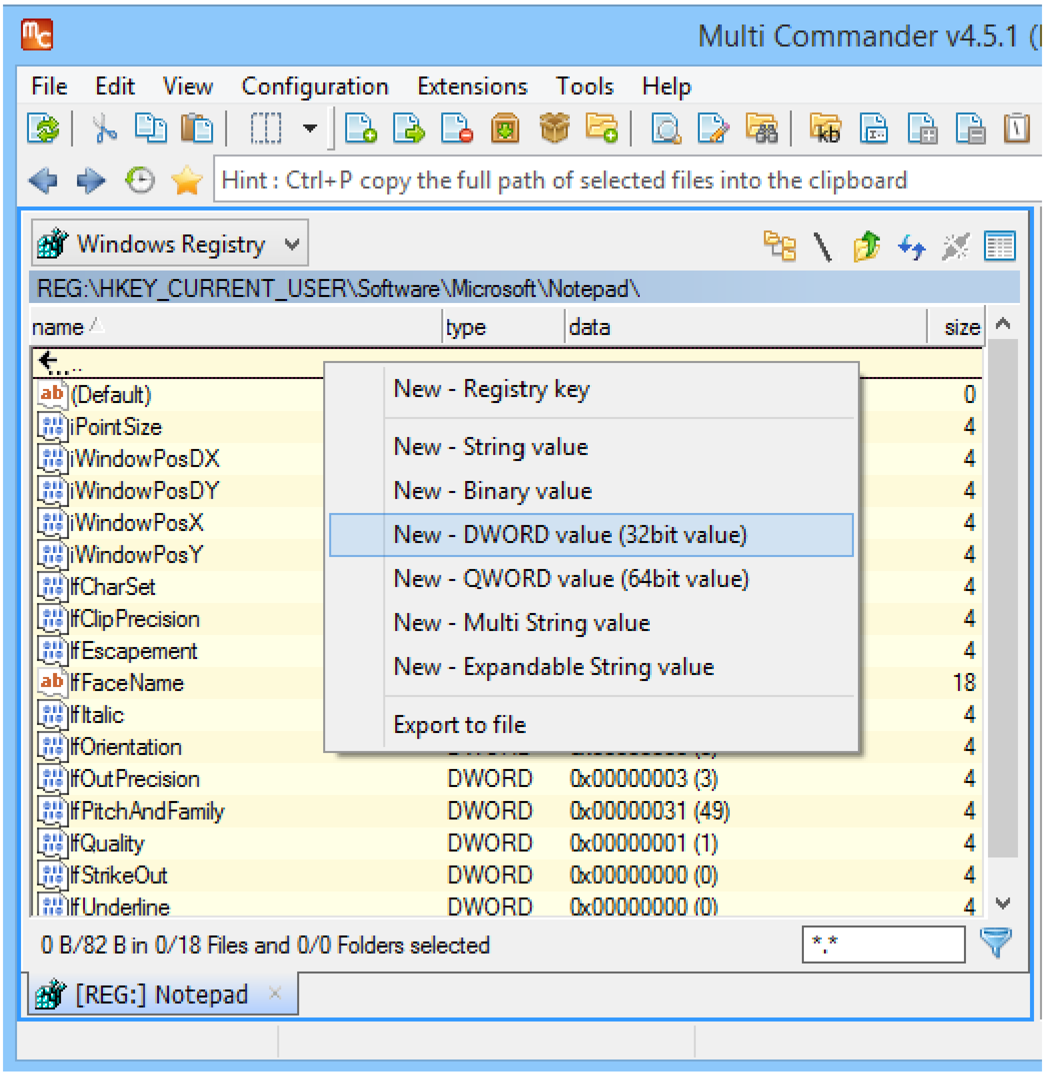
Base: ● Hex ○ Decimal

Value data: 0x0000006e

OK Cancel

## Create New Value

Select what type of value you want to add from the context menu (*normally triggered by the right mouse button or the context menu key on your keyboard*).



REG:\HKEY_CURRENT_USER\Software\Microsoft\Notepad\

| name | type | data | size |
|---|---|---|---|
| .. | | | |
| (Default) | | | 0 |
| iPointSize | | | 4 |
| iWindowPosDX | | | 4 |
| iWindowPosDY | | | 4 |
| iWindowPosX | | | 4 |
| iWindowPosY | | | 4 |
| lfCharSet | | | 4 |
| lfClipPrecision | | | 4 |
| lfEscapement | | | 4 |
| lfFaceName | | | 18 |
| lfItalic | | | 4 |
| lfOrientation | | | 4 |
| lfOutPrecision | DWORD | 0x00000003 (3) | 4 |
| lfPitchAndFamily | DWORD | 0x00000031 (49) | 4 |
| lfQuality | DWORD | 0x00000001 (1) | 4 |
| lfStrikeOut | DWORD | 0x00000000 (0) | 4 |
| lfUnderline | DWORD | 0x00000000 (0) | 4 |

0 B/82 B in 0/18 Files and 0/0 Folders selected

*.*

## Export Values

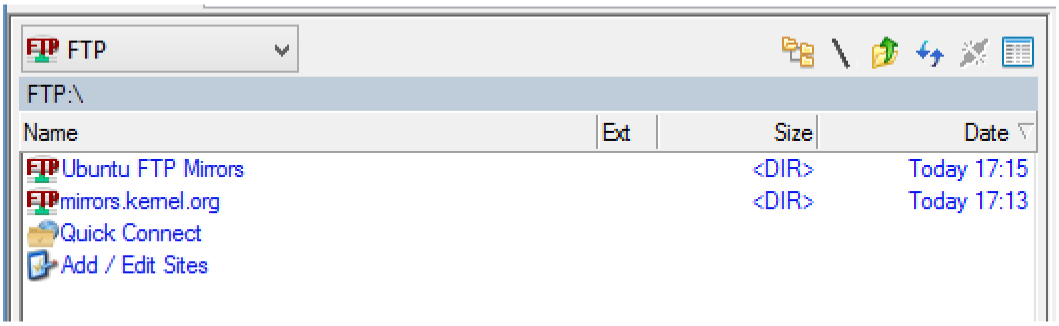
Selecting *export* from the context menu will allow you to export registry values to a standard *.reg* file. The difference between this and  the export function in Windows' Registry editor is that here it will only export the values that you have selected. You do not need to export the entire key contents.

# FileSystem - FTP (FTP:)

The virtual filesystem device extension **FTP (FTP:)** allows network connections to other machines using the FTP protocol.

An FTP connection will be integrated into Multi Commander's virtual filesystem and the connection can then be access as a normal filesystem.

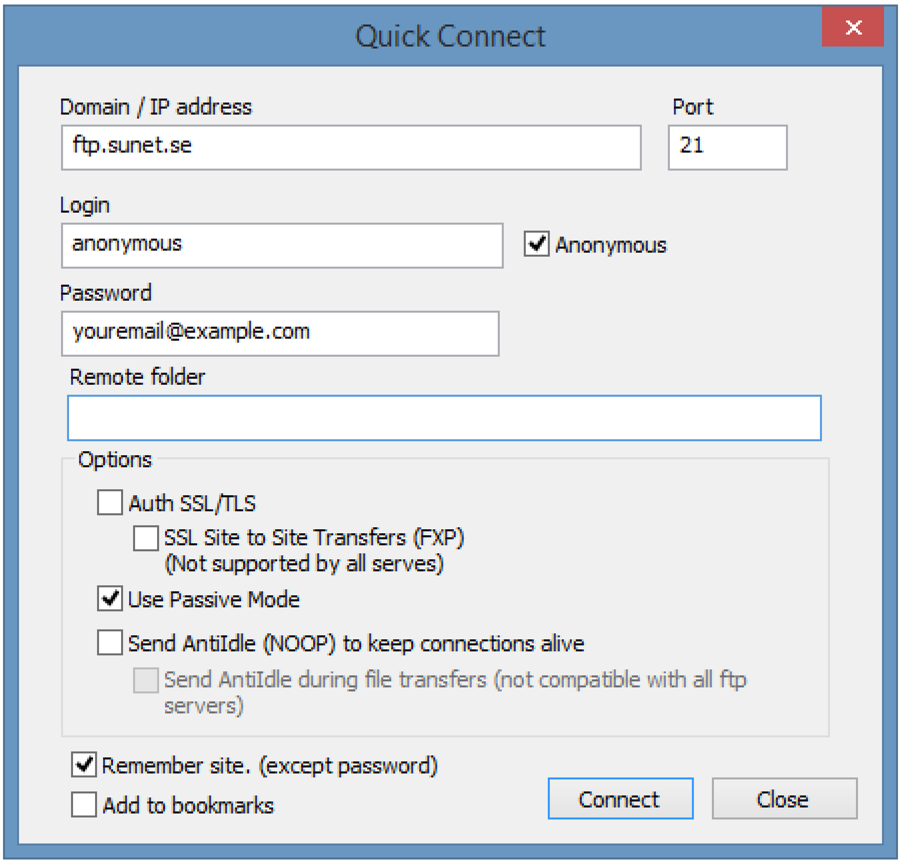
The filesystem location FTP: is special; special FTP commands and all FTP bookmarks exists there. When an FTP connection is established the virtual filesystem will connect that location to a numbered device, between 0: and 9:. The first FTP connection will be 0:, the next 1:, and so on.



| Name | Ext | Size | Date |
|---|---|---|---|
| Ubuntu FTP Mirrors | | <DIR> | Today 17:15 |
| mirrors.kernel.org | | <DIR> | Today 17:13 |
| Quick Connect | | | |
| Add / Edit Sites | | | |

## Quick Connect

The Quick Connect command will open the Quick Connect window, allowing a connection to be created without adding an FTB bookmark.



Domain / IP address: ftp.sunet.se
Port: 21
Login: anonymous
☑ Anonymous
Password: youremail@example.com
Remote folder:

Options
☐ Auth SSL/TLS
☐ SSL Site to Site Transfers (FXP) (Not supported by all serves)
☑ Use Passive Mode
☐ Send AntiIdle (NOOP) to keep connections alive
☐ Send AntiIdle during file transfers (not compatible with all ftp servers)

☑ Remember site. (except password)
☐ Add to bookmarks

Enter the information needed to connect to an FTP site. Press the Connect button to complete the connection.

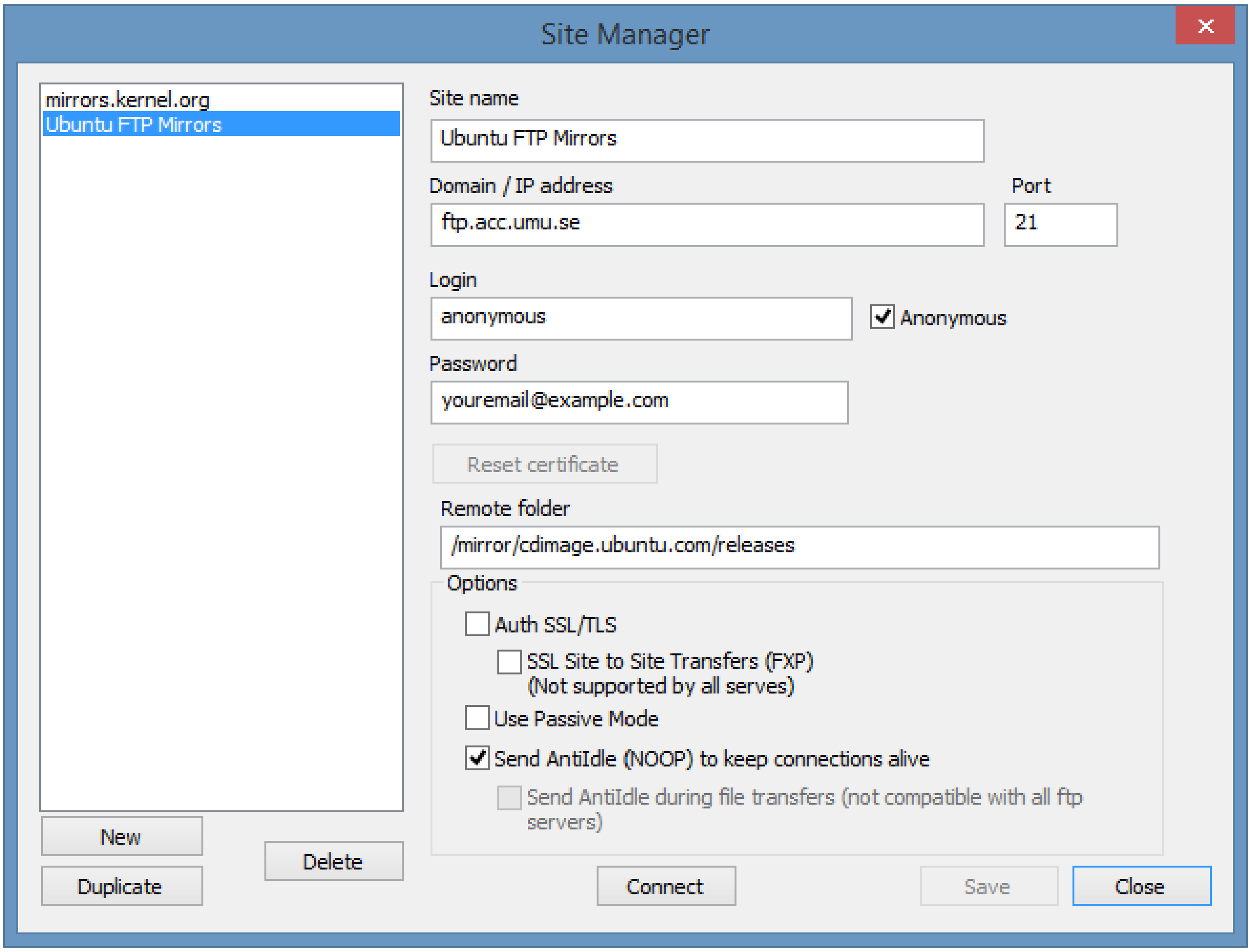
By checking the option "**Add to bookmarks**" a bookmark for this site will also be created.

The quick connection information (but not the password) is remembered for the next time you need to connect to the site.

Uncheck the option "**Remember site**" and the Quick Connect window will not remember anything entered into it.

# Add/Edit Bookmark

This command will show the Site Manager window. In this window new bookmarks for sites can be added, removed or changed.



Site Manager

mirrors.kernel.org
Ubuntu FTP Mirrors

Site name: Ubuntu FTP Mirrors

Domain / IP address: ftp.acc.umu.se

Port: 21

Login: anonymous

☑ Anonymous

Password: youremail@example.com

Remote folder: /mirror/cdimage.ubuntu.com/releases

Options

□ Auth SSL/TLS

□ SSL Site to Site Transfers (FXP) (Not supported by all serves)

□ Use Passive Mode

☑ Send AntiIdle (NOOP) to keep connections alive

□ Send AntiIdle during file transfers (not compatible with all ftp servers)

Create a new bookmark by pressing the "**New**" button. Then enter all the information needed for that bookmark and the press the "**Save**" button.

The "**Duplicate**" button will create a duplicate of the selected bookmark. Change the Name and edit the new bookmark and then press the "**Save**" button.

Too delete a bookmark, first selected the bookmark to delete and then press the "**Delete**" button.

When closing the Site Manager window the FTP: view should refresh and show the new sites. If this does not happen do a manual refresh by pressing the refresh button or the press F2/F5 (depending on setup).

# Connect

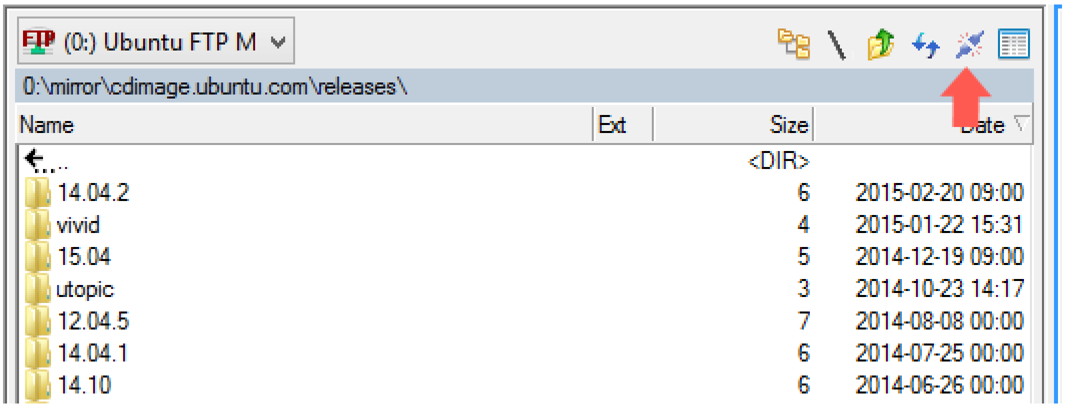
Connecting to an FTP site can be done from the Site Manager by selecting the bookmark to connect to and pressing "**Connect**".

Executing a bookmark in the list by double-clicking it or by selecting it and pressing the return/enter key will also initiate a connection to the site.

Logging is very important in FTP. The FTP Logs are used to store error messages, but the FTP server also uses the logs to show shows information about the site you are connecting to. Most FTP servers will save a lot of important connection information here.
A log tab will be created for every site or bookmark for which a connection is made.

## Disconnect

Press the disconnect button located in the Explorer Panel to disconnect from the FTP server.



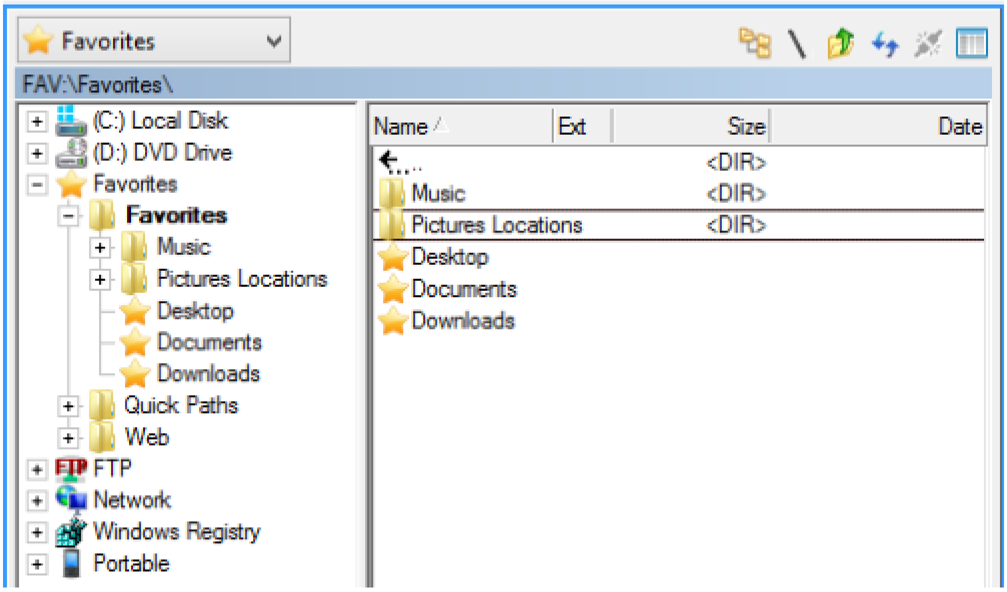
(0:) Ubuntu FTP M

0:\mirror\cdimage.ubuntu.com\releases\

| Name | Ext | Size | Date |
|---|---|---|---|
| .. | | <DIR> | |
| 14.04.2 | | 6 | 2015-02-20 09:00 |
| vivid | | 4 | 2015-01-22 15:31 |
| 15.04 | | 5 | 2014-12-19 09:00 |
| utopic | | 3 | 2014-10-23 14:17 |
| 12.04.5 | | 7 | 2014-08-08 00:00 |
| 14.04.1 | | 6 | 2014-07-25 00:00 |
| 14.10 | | 6 | 2014-06-26 00:00 |

# FileSystem - Favorites (FAV:)

The virtual filesystem device extension **Favorites (FAV:)** allows favorites in Multi Commander to be browsed like a filesystem.



Accessing the favorites from the filesystem you can you drag and drop to add new favorites or to copy files to another target as a favorite.

Drag a file/folder and drop it on an empty space or on another section to place a favorite there.

Drag a file/folder and drop it on a existing favorite and a copy operation of the dragged files to that favorites target location will be started

Right-clicking a favorites item will allow you to edit or remove favorites. Normal file operations like rename/delete will also work on favorites.

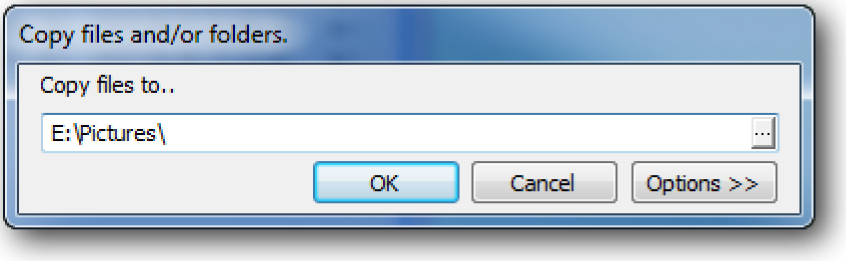
Read more about Favorites here

# Copy/Move Operations

To **copy** or **move** files and folders you first have to select the desired items; then there are a number of ways to start the copy/move operation:

1. You can drag and drop the selected files to where you want them copied or moved
2. You can select "Copy..." or "Move..." from the File menu
3. You can press the Copy or Move Button in the button panel, or in the File Commands toolbar
4. You can press the shortcut key for the Copy or Move command
   *(The default for Commander-style setup is **F5/F6**, for Explorer-style it is **F4/F6**)*

When a Copy or Move operation has been requested a dialog asking where to copy/move the files to is shown.



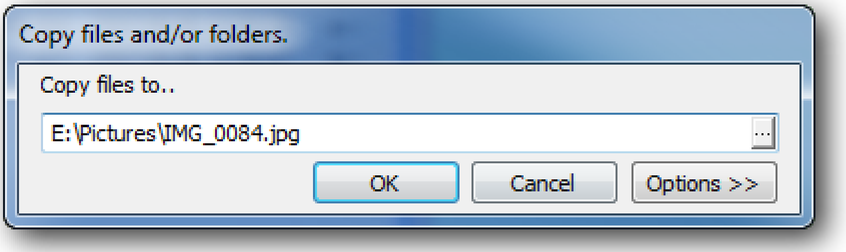
The default target for the copy/move operation will be the path of the target panel.

To start the Copy or Move operation simply press the OK button.

Running multiple copy/move operations concurrently on the same disks can affect performance.
Therefore, if another Copy or Move operation is already in progress a dialog will be shown asking if the new Copy/Move operation should be added to the queue of operations that are already running.

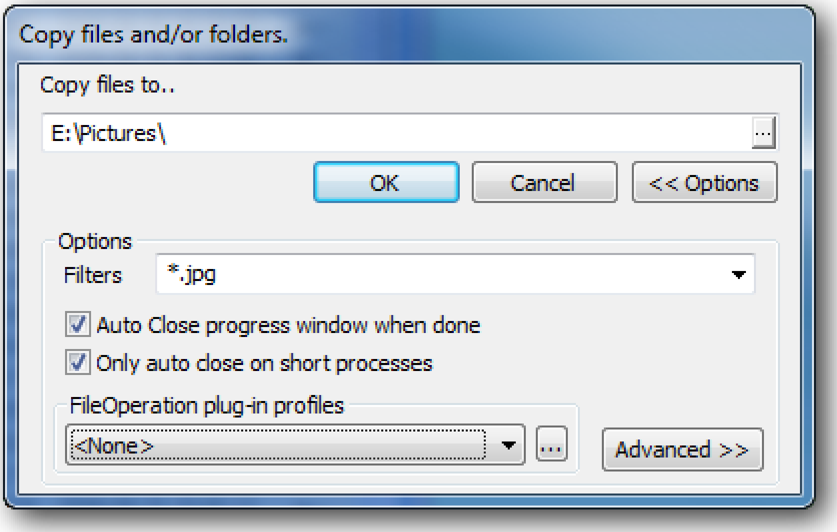
Read more about the Progress Window that will be shown during the copy/move operation.

## Exceptions for a Single File



If you are copying/moving a single file then the file name will also be shown in the target path field. This allows you to change the target name of the file if you wish.
If the target path is removed and only a filename is entered, then the file is written to the same path that it is read from but it is written using its new name.

## Options



Filters *.jpg

☑ Auto Close progress window when done

☑ Only auto close on short processes

E:\Pictures\

<None>

Pressing the **Options** button causes the dialog to expand and show the basic file operation options.

## Filters

**Filters** can be used to exclude files and folders from being copied/moved. Prefix the filter with "-" to exclude files and "/" to target only folders. Separate filters with spaces; if a space is needed in the filter then put quotes (") around the filter.

Examples..

| | |
|---|---|
| *.jpg *.tiff | Only copy jpg and tiff files. Subfolders will be copied but only files matching the filter will be copied. |
| -*.jpg | Do not copy/move any jpg files. |
| -/Img -*.txt | Do not copy/move any folder named "Img" (all files inside that folder will also be ignored).<br>Also exclude all .txt files. |

## Auto Close

These 2 options specify when the copy/move progress bar should be closed: automatically after the operation is complete, and if it should close only for short file operations. The default values for these options are configured in Core Settings. ( Menu -> Configuration -> Core Settings -> (tab) File System ).

When you only perform short copy operations such as copying a few images that will only take a few seconds, then you might want the progress dialog to auto-close when finished. However if the copy operation takes a very long time such as copying thousands of files, then you might want to keep it open after it is finished.

## FileOperation Plug-in profiles

**FileOperation Plug-ins** can be used when copying/moving files.These plug-ins can interact with the copy/move operation at difference stages of the process: when files are placed in the queue, before they are read, during data transfer, and after a file is written. Multiple plug-ins can be run consecutively, therefore the plug-ins can be assigned to profiles and you select which profile you want to use.

The **FileOperation Plug-in Profiles** are modified and configured in the "**FileOperation plug-in Profile manager**" dialog that is opened by clicking on the "**...**" button next to the FileOperation Plug-in profiles drop-down list.

By default 3 plug-ins are included in Multi Commander:

1. **Copy Content**

   This plug-in takes the content of selected folders and places them in the queue as if you selected all the files in those folders rather than the folders themselves.

   This plug-in is mainly used when merging multiple folders into a single target folder. For example, the folders

**D:\Images1, D:\Images2** and **D:\Images3** are selected and copied using the **Copy Content** plug-in to **D:\All-Images.** Thus all the content from those three folders will be merged together into **D:\All-Images**.

Without this plug-in you would get 3 folders in **D:\All-Images** named **Images1, Images2** and **Images3**, each containing all its respective files. To merge all the folders together you would have had to go into **D:\Images1**, select all its files and copy them to **D:\AllImages**, then repeat that process for each of the other folders you wanted to merge.

2. **AutoSort (A-Z)**

   This plug-in will effectively modify the target location of the selected files and folders and distribute them into an A-Z folder structure in the selected target location.

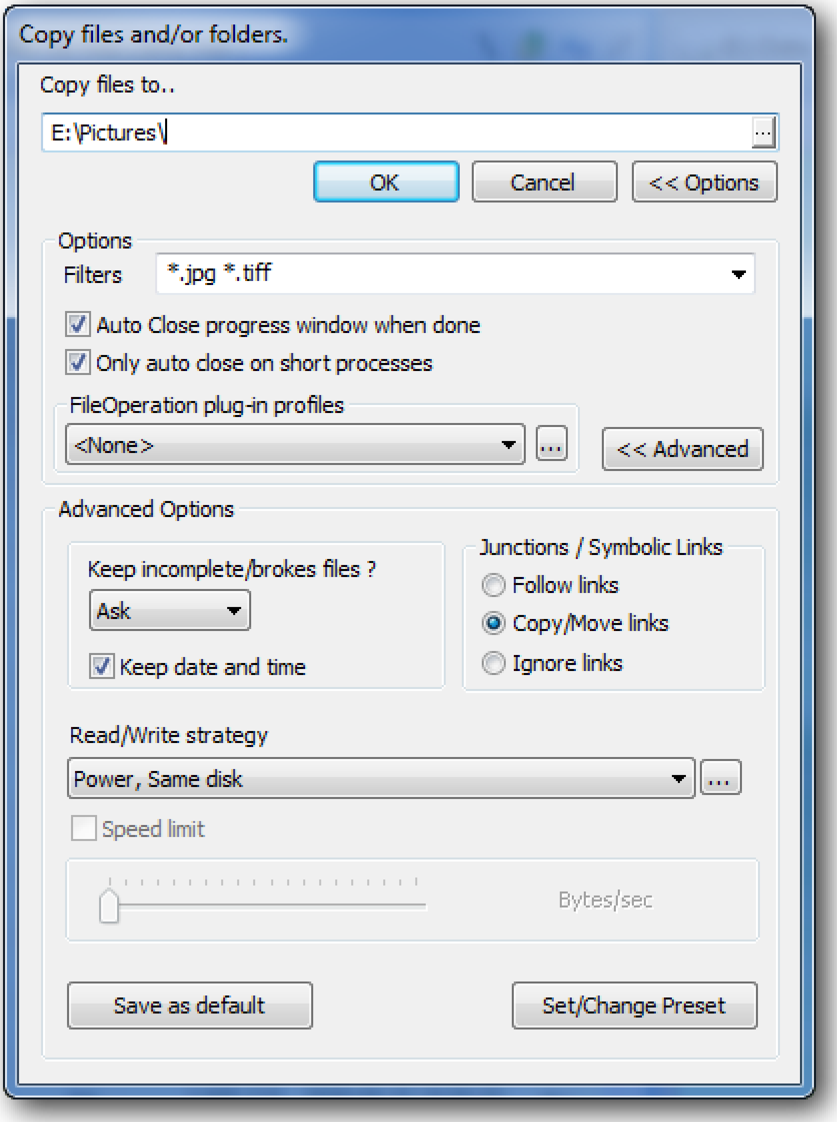
   For example if the file "**D:\Images1\Australia_001.jpg"** is specified to be copied to **D:\Images**, it will be placed in **D:\Images\A** instead.

3. **Unpacker**

   This plug-in will unpack all .zip/.rar files (depending on configuration) into the target folder instead of copying/moving them.

   For example if it is told to copy the file "**D:\Images_Collections\TripAustralia.zip**" into **D:\Trips**, then it will take all the files inside the .zip archive and copy them into **D:\Trips** instead.

## Advanced Options



Copy files and/or folders.

Copy files to..

E:\Pictures\

Options

Filters *.jpg *.tiff

☑ Auto Close progress window when done

☑ Only auto close on short processes

FileOperation plug-in profiles <None>

Advanced Options

Keep incomplete/brokes files ? Ask

☑ Keep date and time

Junctions / Symbolic Links

○ Follow links
● Copy/Move links
○ Ignore links

Read/Write strategy Power, Same disk

□ Speed limit

Bytes/sec

Pressing the **Advanced** button will expand the dialog and show the Advanced Options. These are options that are rarely changed; some options here should only be changed if you really know what you are doing.

- ## Keep incomplete/broken files

  If a file operation is interrupted when copying a file and the file is incomplete, or if an archive filesystem plug-in for .zip or .rar files informs you that the unpacked file is broken (the CRC check may have failed, for example), you can select if you always want to keep it, delete it or be asked what to do each time it happens.
  The default value for this option can be configured under the "Filesystem" tab in Core Settings (found under Menu ->Configuration).

- ## Keep date and time

  Check this if you want the original date and time of the files you copy/move to be retained.

- ## Junctions / Symbolic Links

  If the copy/move operation comes to a Junction or Symbolic link in the filesystem, you can configure how it should be handled. The default for this option can be configured under the "Filesystem" tab in Core Settings (found under Menu ->Configuration).

  (Symbolic links only exist on NTFS file systems, but not on Windows XP/2003 and older.)

- **Follow Links**

  This specifies that Multi Commander should copy the file/folder of the link target to the target folder.

- **Copy/Move Link**

  This will create a new link on the target and this link will point to the same location that the source link is pointing to. This requires you to have permissions in the filesystem to create Symbolic Links or Junctions.

- **Ignore Links**

  This will ignore all types of links, and will not follow or copy/move them.

- **Read/Write Strategy**

  This is a list of different read/write strategies that can be used when reading/writing data. The system tries to determine what read/write strategy is best for the current operation and it will automatically select it. It is possible to select another one and also configure the strategy using the "..." button. This is however not recommended unless you are an expert.

- **Speed Limit**

  This allows you to limit the maximum speed of the copy/move operation.
  **This feature is not yet enabled, and cannot be used at present**

## Save As Default

Pressing this button will save the settings you have currently chosen as the default values for all future copy/move operations. The next time you start a copy operation and this dialog is shown the configuration will be preset to what you have now.

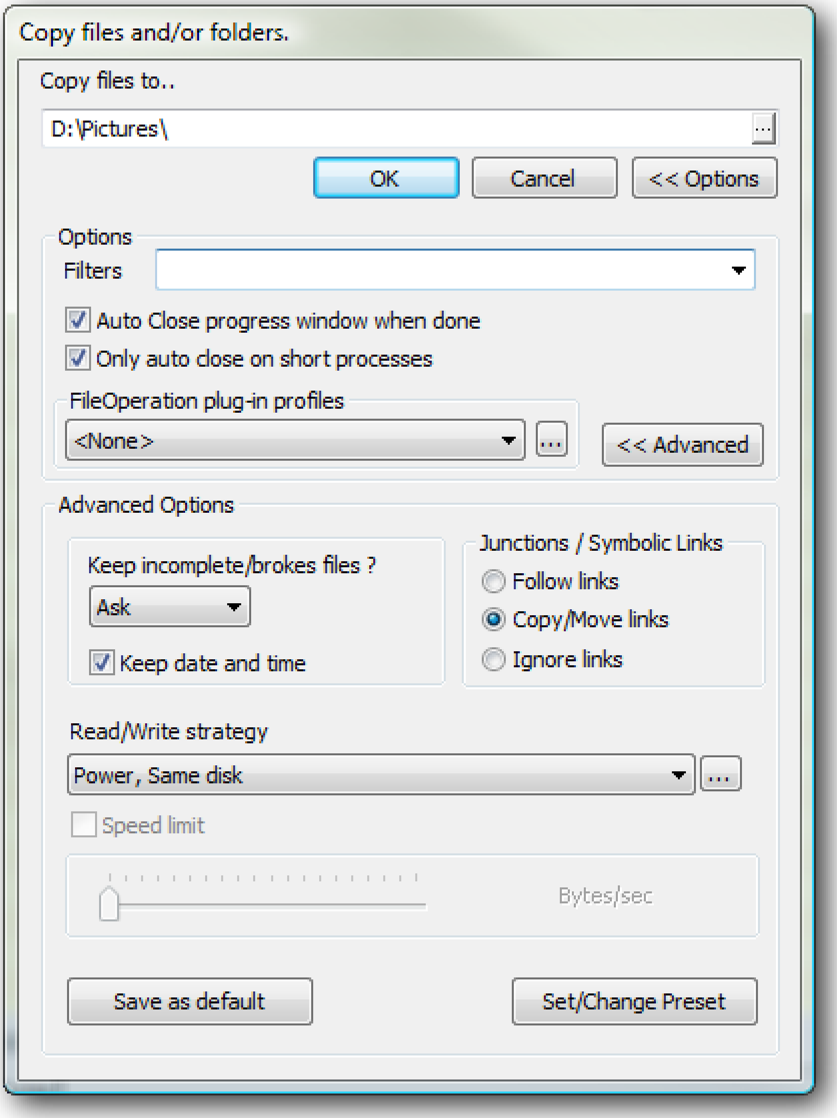
## Set/Change Presets

**Presets** are a special feature whereby you can save some or all configurations including filters and target locations. These configurations can then be loaded using the functions keys (F1 to F10). A preset can also be configured to be auto-loaded when you start a copy/move operation from a specific folder.
Read more about FileOperation Presets

# Copy/Move using Presets

Creating a **preset** is heplful if you frequently copy or move files from/to the same locations and are using filters or other settings that are not set by default. The preset will store those settings for you, and you can load that preset with a simple press of a button (F1 to F10 ). If you always want to load the preset when you start a copy or move from a certain path, you can make the preset auto-load and you do not even have to press a button to load it.

To create a preset begin your normal process of copying/moving the file. Set the **filter** and **FileOperations plug-in** and other **options** you want to use. Then expand the dialog to its maximum size and click on **Set/Change Preset.**


Copy files and/or folders.

Copy files to..

D:\Pictures\

Options

Filters

☑ Auto Close progress window when done

☑ Only auto close on short processes

FileOperation plug-in profiles: <None>

Advanced Options

Keep incomplete/brokes files ?: Ask

☑ Keep date and time

Junctions / Symbolic Links

○ Follow links

● Copy/Move links

○ Ignore links

Read/Write strategy: Power, Same disk

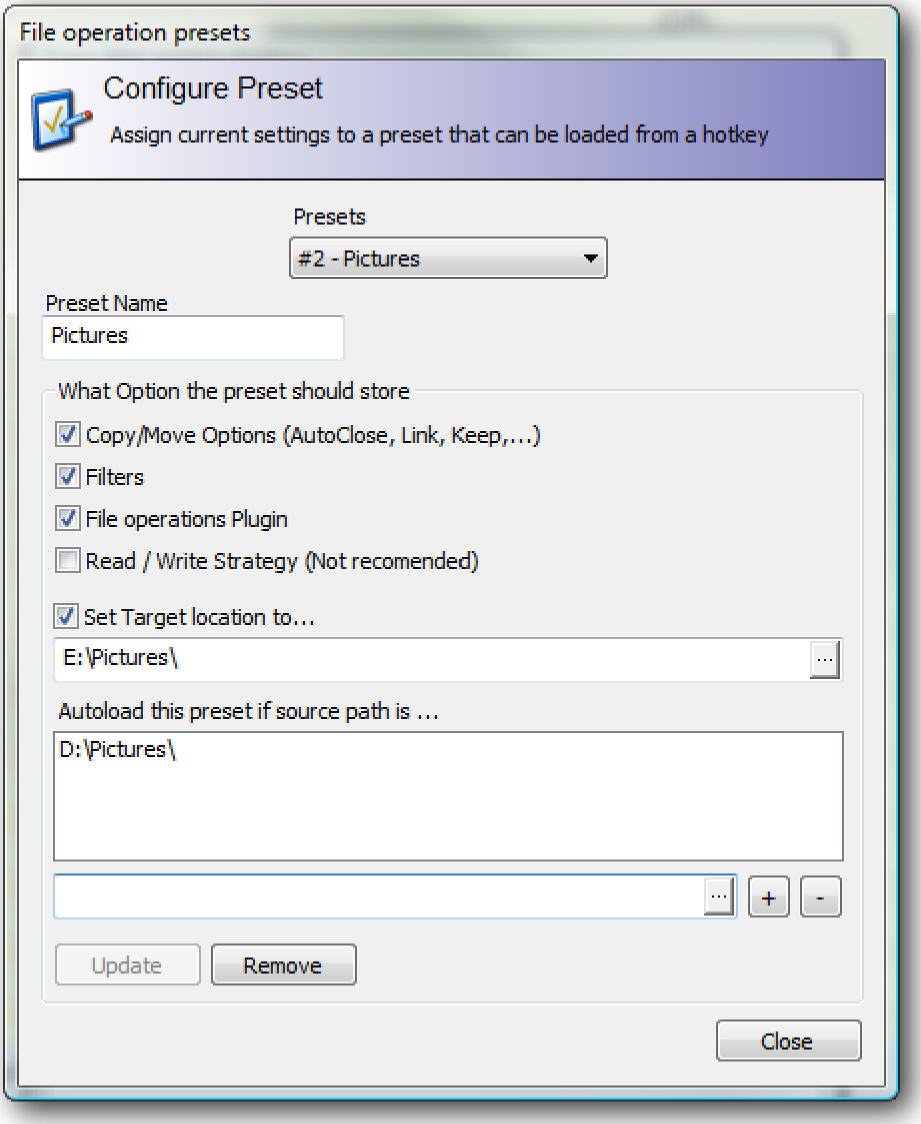
□ Speed limit

Bytes/sec

Select a free **Presets** slot and enter the name you want to use for the preset. Then check the options you want the preset to store.

You can also check the option to "**Set Target Location to...**" if you want the preset to store the target location and always set that location as target no matter what path you had as target when you started the copy/move process.

If you want to **Autoload** the preset, you need to add the source path it should be connected to. *(Wildcard for the path is supported.)*



File operation presets

Configure Preset

Assign current settings to a preset that can be loaded from a hotkey

Presets: #2 - Pictures

Preset Name: Pictures

What Option the preset should store

☑ Copy/Move Options (AutoClose, Link, Keep,...)

☑ Filters

☑ File operations Plugin

☐ Read / Write Strategy (Not recomended)

☑ Set Target location to...

E:\Pictures\

Autoload this preset if source path is ...

D:\Pictures\

In this example you will see that we have a preset that we named "**Pictures**", and we wish it to store all the Copy/Move **Options**, **Filters** and **FileOperation plugins** that we defined previously (before going into this dialog). We also want the target path to always be set to "**E:\Pictures\**" and the preset to be auto-loaded when we start a copy/move operation from "**D:\Pictures\**".

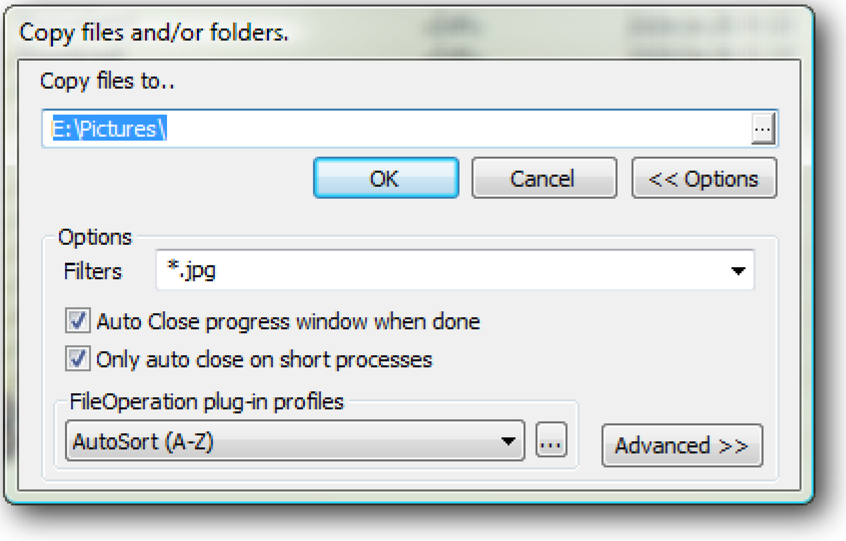
When you enter the Copy/Move dialog to start a copy/move operation and a preset is auto-loaded, you can unload the preset with **F12** or press the "**Unload Preset**" button that appears next to the OK button. *(not shown in screenshots)*

# Copy/Move files and folders using Filters

When copying or moving files and folders you can use a **filter** to limit the files and folders that should be processed.

If a filter should match a folder then prefix the filter with a slash "/" and if you want to exclude any files prefix it with a hyphen "-". If a folder should be excluded type the hyphen first ( eg "**-/MyFolder**" )

**Example #1**
*A number of folders were selected and we chose to copy them to E:\Pictures\. Using filters we also specify that we only want to copy the* ***.jpg** *files. We also select the AutoSort plugin so the files will be stored in A-Z named folders.*


Copy files and/or folders.

Copy files to..

E:\Pictures\

Options

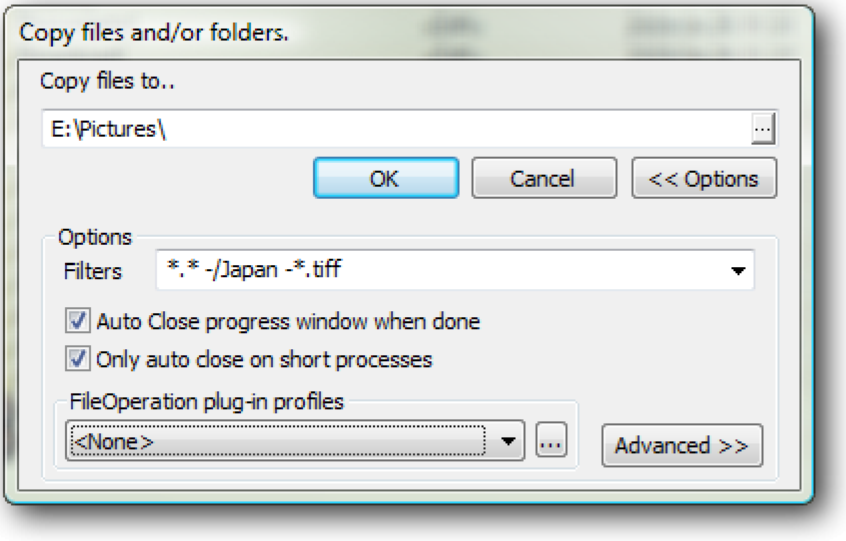
Filters: *.jpg

☑ Auto Close progress window when done

☑ Only auto close on short processes

FileOperation plug-in profiles: AutoSort (A-Z)

**Example #2**
*Some folders have been selected and we chose to copy them to E:\Pictures\. In filters we also specify that we want to include all files (*.*) but we want to exclude the folder named* ***Japan*** *and all *.**tiff** *files.*


Copy files and/or folders.

Copy files to..

E:\Pictures\

Options

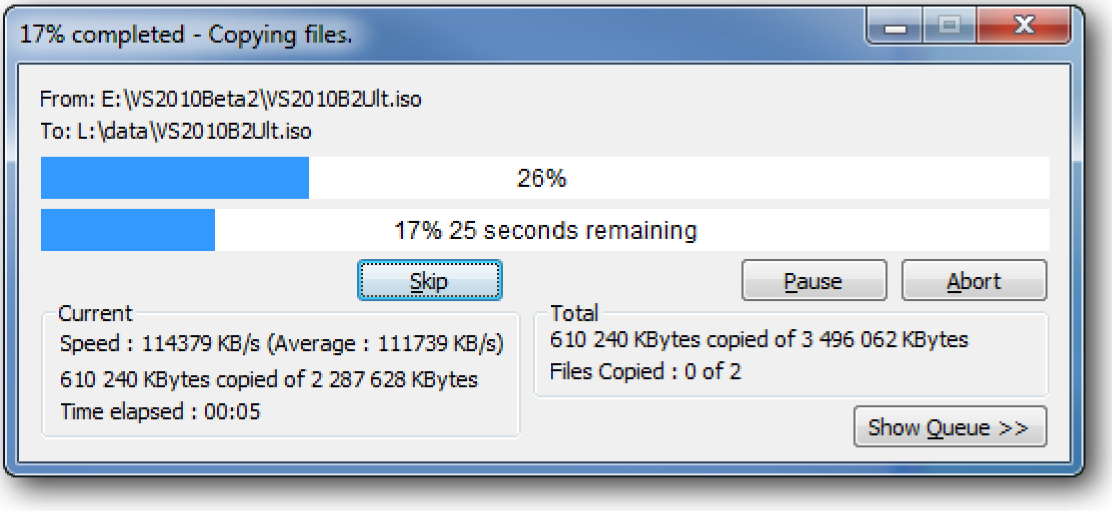
Filters: *.* -/Japan -*.tiff

☑ Auto Close progress window when done

☑ Only auto close on short processes

FileOperation plug-in profiles: <None>

# Copy/Move - Progress Window



17% completed - Copying files.

From: E:\VS2010Beta2\VS2010B2Ult.iso
To: L:\data\VS2010B2Ult.iso

26%

17% 25 seconds remaining

Current
Speed : 114379 KB/s (Average : 111739 KB/s)
610 240 KBytes copied of 2 287 628 KBytes
Time elapsed : 00:05

Total
610 240 KBytes copied of 3 496 062 KBytes
Files Copied : 0 of 2

When a copy/move operation is started a **progress window** is shown.

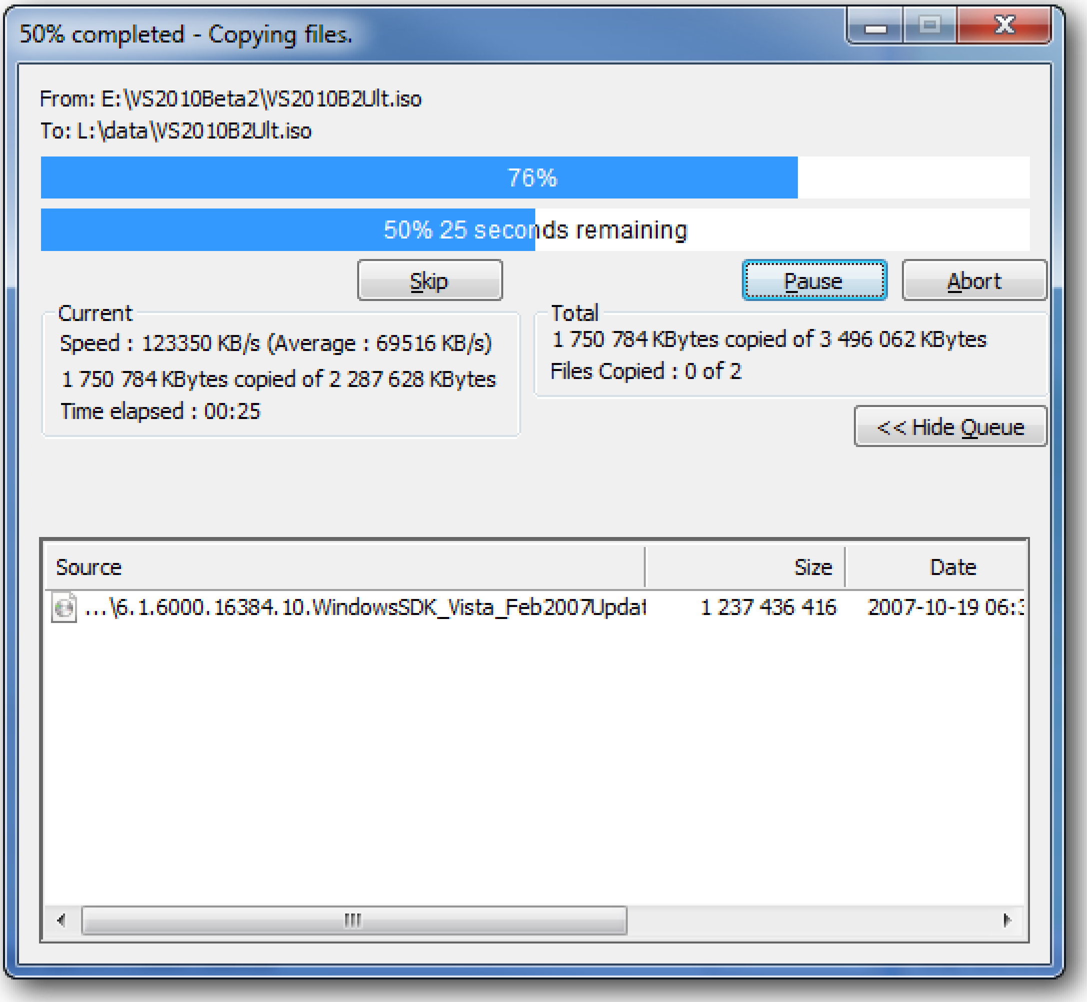
The progress window shows you the speed and progress of the current file/folder and the total progress of the entire operation.
You can pause the operation by pressing the "**Pause**" button. The button's name will then change to **"Continue**" and you can press it again to continue processing.

To stop the copy/move operation you can press the "**Abort**" Button or you can press the X button in the caption bar.

Pressing the "**Skip**" button will allow you to skip the current file. It will then continue on to the next file in the queue.

## Show Queue

Pressing the "**Show Queue >>**" button will allow you to see the copy/move queue.



50% completed - Copying files.

From: E:\VS2010Beta2\VS2010B2Ult.iso
To: L:\data\VS2010B2Ult.iso

76%

50% 25 seconds remaining

Current
Speed : 123350 KB/s (Average : 69516 KB/s)
1 750 784 KBytes copied of 2 287 628 KBytes
Time elapsed : 00:25

Total
1 750 784 KBytes copied of 3 496 062 KBytes
Files Copied : 0 of 2

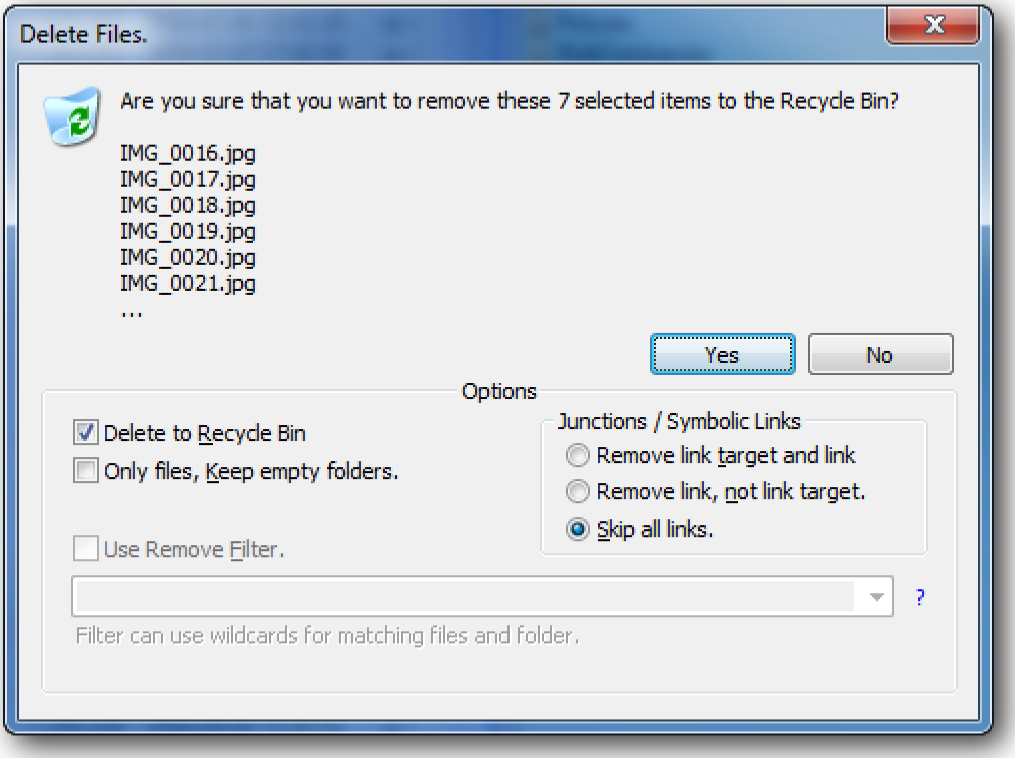
| Source | Size | Date |
|---|---|---|
| ...\6.1.6000.16384.10.WindowsSDK_Vista_Feb2007Updat | 1 237 436 416 | 2007-10-19 06:3 |

# Delete Operations

You can delete files or folders using any of the following methods:

1. The Delete Button in the File Operations toolbar.
2. The Delete Button in the Button Panel.
3. The Function Key F8 or Delete key
4. From the Menu -> File -> Delete

All these methods display a dialog that lets you modify options for the delete operation, as shown below:



Delete Files.

Are you sure that you want to remove these 7 selected items to the Recycle Bin?

IMG_0016.jpg
IMG_0017.jpg
IMG_0018.jpg
IMG_0019.jpg
IMG_0020.jpg
IMG_0021.jpg
...

Options

☑ Delete to Recycle Bin
□ Only files, Keep empty folders.
□ Use Remove Filter.

Junctions / Symbolic Links
○ Remove link target and link
○ Remove link, not link target.
● Skip all links.

Filter can use wildcards for matching files and folder.

The following options are available:

- ## Delete to Recycle Bin

  When checked, the selected files and folders are moved to the Recycle Bin and can be recovered if needed. When deleting files inside an archive or on a network device, this option will be disabled and cannot be selected.
  It is possible to configure if this should be enabled/disable by default under Menu -> Configuration -> Core Settings..
  Holding the shift key down before this window is shown. (Eg pressing Shift+Del), will toggle the Recyle Bin option.

- ## Only Files

  If checked, only files are deleted. Files in folders will be deleted but the empty folders will remain on the filesystem.

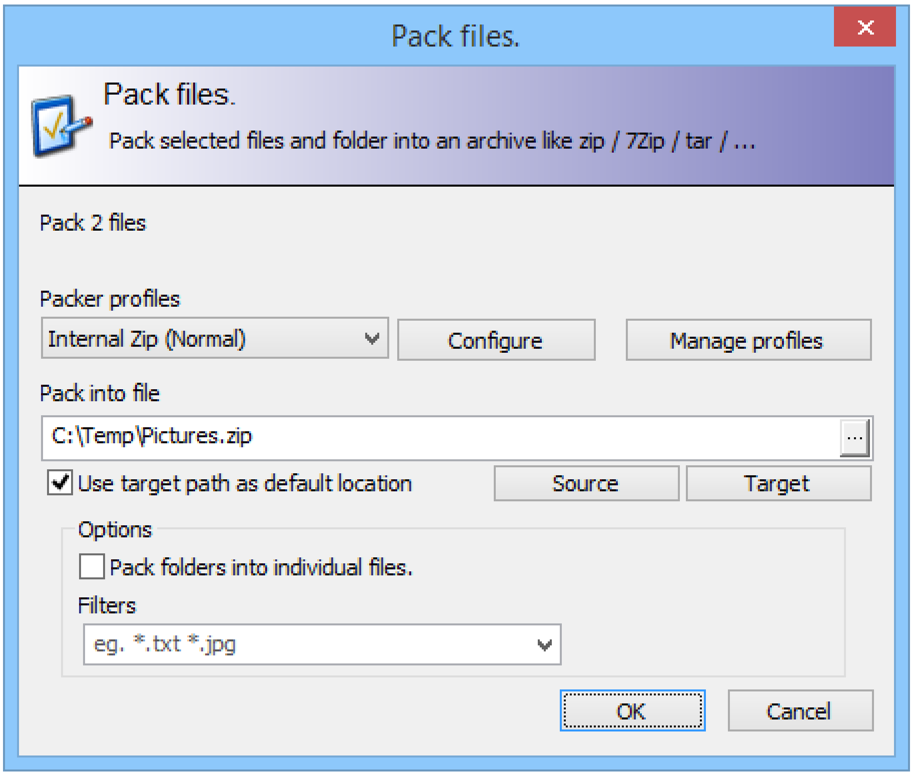
- ## Junctions and Symbolic Links

  This section controls how Multi Commander should react when it finds Junctions and Symbolic Links. The recommendation is to ignore or remove the link (if permissions allow it).
  It is **not** recommended to set **Follow links**, which should be used only if you really know what you are doing. A warning is shown if that option is selected.

# Pack Files

To pack files/folders into an archive you first need to select the files and folders you want to pack.

To start a pack operation, either press the shortcut (default Alt+F5 if running with Commander-style  setup) or select "Pack files..." from the File menu.



Pack files.

Pack files.

Pack selected files and folder into an archive like zip / 7Zip / tar / ...

Pack 2 files

Packer profiles: Internal Zip (Normal)

Pack into file: C:\Temp\Pictures.zip

☑ Use target path as default location

Options

□ Pack folders into individual files.

Filters: eg. *.txt *.jpg

From the Pack Files dialog you can select which packer profile you want to use. Different profiles can use a different packer with a different default configuration.

To reconfigure a profile, press the "**Configure**" button. You can then configure the selected Packer Profile, eg. change compression levels and whatever other options that packer supports.

Press "**Manage Profiles**" to Create or Delete Packer profiles.

## Source (Button)

This button changes the source path for the packed file to the path of the source Explorer Panel.

## Target (Button)

This button changes the target path for the packed file to the path of the target Explorer Panel.

## Pack folders into individual files

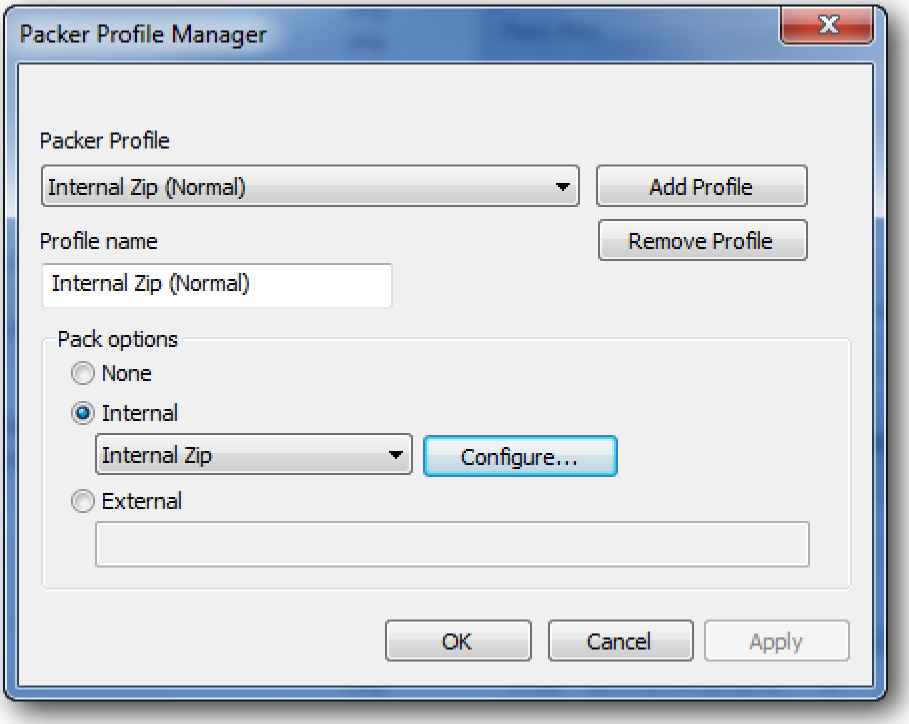
When this is checked, each of the selected folders will have its files packed into a separate archive file (using the source folder name as its filename). Otherwise, the selected folders will be combined into a single archive file. They will **not** be packed individually.

## Filter

You can specify Filters to include and/or exclude files/folders when packing. These filters work the same as filters in the Copy/Move options here.

# Packer Profiles

The Pack Files dialog lets you manage **Packer Profiles** by pressing the **Manage Profiles** button. This displays a **Packer Profile Manager** dialog that lets you create your own Packer Profiles or change the default values of any existing ones.



Packer Profile: Internal Zip (Normal)

Profile name: Internal Zip (Normal)

Pack options

○ None

● Internal

Internal Zip

○ External

Select the Packer Profile you want to change or press the "Add Profile" button to create a new one. Then select which packer you want to use (eg. Zip or 7-Zip) and press the "Configure..." button to configure the default values for this profile. The Default values are those values the packer should use if the user does not change any in the Pack Files dialog.

## External Packers

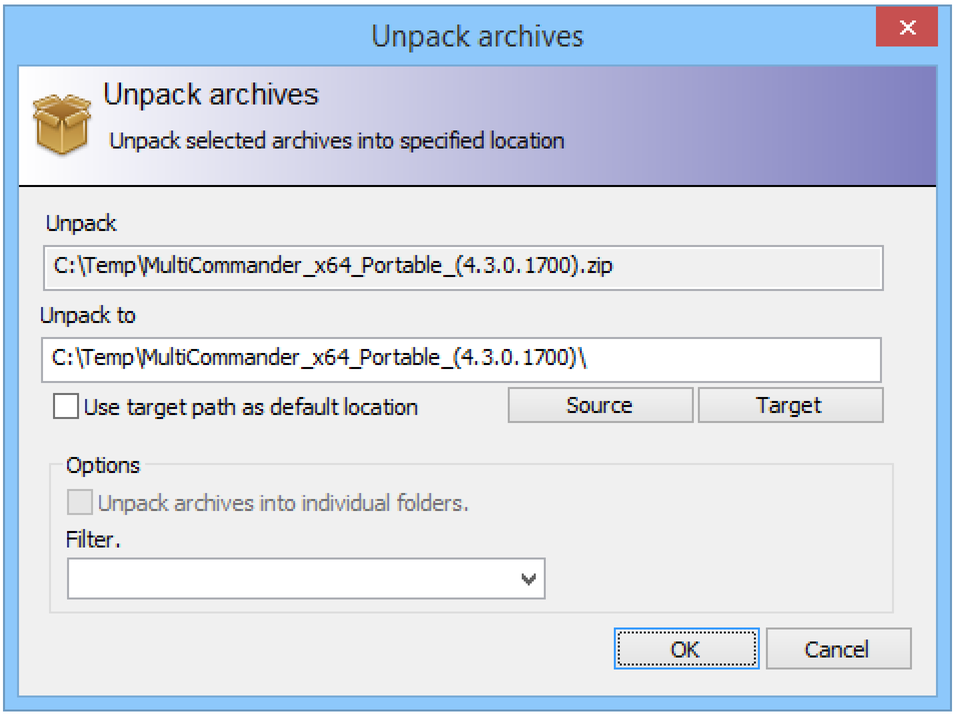
This is not activated yet.

# Packers - External Packer Profiles

The Packer Profiles do not yet support external packers. But this feature is on the roadmap and will be included.

# Unpack Files

Select the file or files that you want to unpack then select Unpack file from the File menu or press the keyboard shortcut (default: Alt+F6).



Unpack archives

Unpack archives

Unpack selected archives into specified location

Unpack

C:\Temp\MultiCommander_x64_Portable_(4.3.0.1700).zip

Unpack to

C:\Temp\MultiCommander_x64_Portable_(4.3.0.1700)\

□ Use target path as default location

Options

□ Unpack archives into individual folders.

Filter.

Shortcuts

Alt+F6 - Unpack selected files

A dialog will be shown where you can choose where the file should be unpacked. By default the path in the target panel is selected.
You can easily toggle between the source and target path by pressing the source/target buttons.

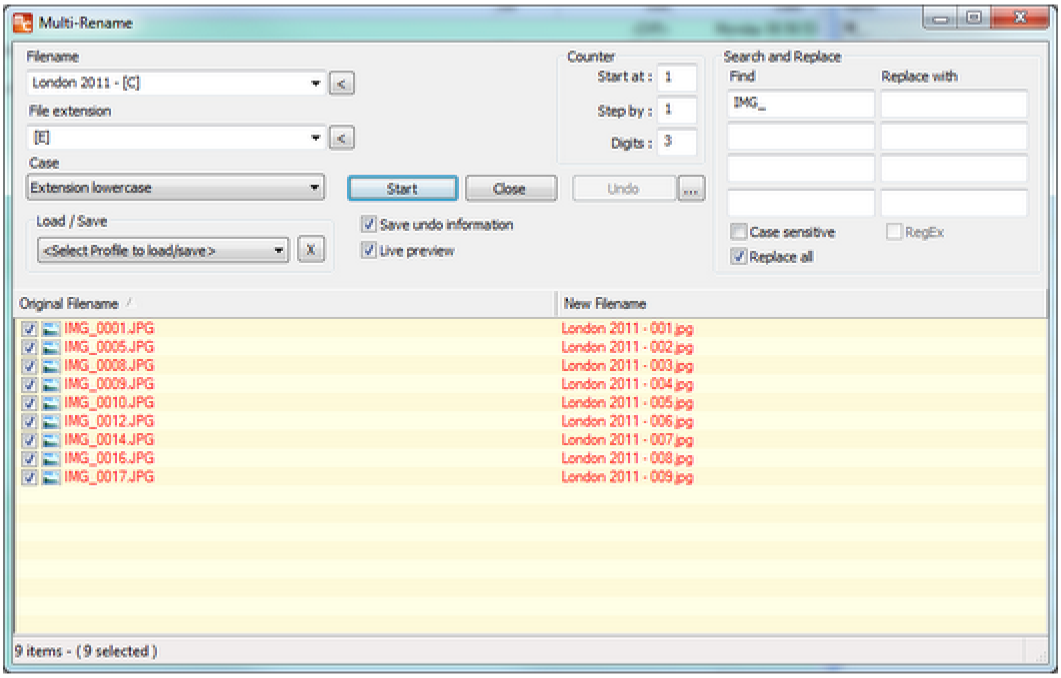
If the files are unpacked into the same folder they are located in (source folder) then they will be be unpacked into a folder with the same name as the packed file, but with no file extensions.

For example if you unpack *c:\temp\myfile.zip* into *c:\temp* then it will be unpacked into *c:\temp\myfile\*

## Filter

It is also possible to specify a **filter**. The filter will exclude and/or include files/folders from the unpacking. The filter works the same as the filter for file copy.

# MultiRename



Multi-Rename

Filename: London 2011 - [C]

File extension: [E]

Case: Extension lowercase

Load / Save: <Select Profile to load/save>

☑ Save undo information

☑ Live preview

Counter

Start at : 1

Step by : 1

Digits : 3

Search and Replace

| Find | Replace with |
|---|---|
| IMG_ | |
| | |
| | |
| | |

□ Case sensitive □ RegEx

☑ Replace all

| Original Filename | New Filename |
|---|---|
| ☑ IMG_0001.JPG | London 2011 - 001.jpg |
| ☑ IMG_0005.JPG | London 2011 - 002.jpg |
| ☑ IMG_0008.JPG | London 2011 - 003.jpg |
| ☑ IMG_0009.JPG | London 2011 - 004.jpg |
| ☑ IMG_0010.JPG | London 2011 - 005.jpg |
| ☑ IMG_0012.JPG | London 2011 - 006.jpg |
| ☑ IMG_0014.JPG | London 2011 - 007.jpg |
| ☑ IMG_0016.JPG | London 2011 - 008.jpg |
| ☑ IMG_0017.JPG | London 2011 - 009.jpg |

9 items - ( 9 selected )

## Overview

With MultiRename you can rename multiple files or folders by creating a *rename rule*.

You can easily select part of the existing file name, add text, replace characters or words, insert file property data in the file name, (eg. Date, Exif information for photos and much more )

*Undo* information is also saved so that if you rename files incorrectly or rename too many files by mistake, you can easily load a previously-renamed session and undo it.

If you are perform the same MultiRename many times you can save the rules and then load them when you need them again.

## Rename Rules

By inserting different tags you will insert different text parts into the name.
Pressing the [<] button next to the filename and file extension field will show a list of the most common tags you can use. If you press "Plugin and more..." you will see a list of all the extended tags you can add.

You also can specify parameters in the tag. The parameters determine which part of the tag text will be inserted.

| | |
|---|---|
| [<tag>] | Insert the complete text from the tag |
| [<tag><num>] | Insert the first specified number of characters from the tag.<br>Example [N4] will insert the first 4 letters of the filename |
| [<tag>,<num>] | (same as above)<br>Insert the first specified number of characters from the tag.<br>Example [N4] will insert the first 4 letters of the filename. |
| <tag>,<FromPos> ,<Length>] | Insert the text from position "FromPos" of the tag data. But with a max length of <Length>  Example [N,3,4] - If filename is "MyFile" then it will insert "File" |

## Special tag - Counter [C]

There are some special tags that works a bit differently. The counter tag [C] is one of them. By default it is controlled by the counter option specified in Multi-Rename window. But you can override that by using tag parameters.

| | |
|---|---|
| [C] | Insert a default counter tag |
| [C,<startnum>,<inc>] | Insert a default counter tag that will start counting at <startnum> and increment the value by <inc> for every file<br>Example [C,10,2] - will start at 10 and increment the value with 2 so you will get 10,12,14,16 |
| [C,<startnum>,<inc>,<digits>] | the two first parameters work as above, <digits> let you specify how many digits you want to have as a minimum<br>Example[C,10,2,3] - will start with 10, but since digits are 3 you will get 010 , 012, 014 |

## Special tag - Current Date/Time [Y],[M],...

Another special tag is the date/time tags. They will give you the date/time elements of the current time.

| | |
|---|---|
| [Y] | Insert current year as 4 digits, eg. 2016 |
| [Y,2] | Insert current year as 2 digits, eg. 16 |
| [M]<br>[D]<br>[h]<br>[m]<br>[s] | Inserts Day, Month, hour, minutes, second of the current time.<br>Month and days will be inserted as digits. If the month is April it will insert 4 |
| [M,<digits>]<br>[D,<digits>]<br>[h,<digits>]<br>[m,<digits>]<br>[s,<digits>] | Inserts Day, Month, hour, minutes, second of current time.<br>It will insert a minimum of specified digits. If month is 4 it and <digits> is set to 2 it will be inserted as 04 |

## Special tag - Date/Time property from Plugin.

If you want the file date/time then you need to select a tag from the plug-in list, for example the [?ExtendedProp.datecreate] tag.
(Note that all plug-in tags starts with a ?)

All file properties from plugi-ns that return a date/time will return the date/time formatted using system settings.
This can be a problem since if time is returned as **12:22:22** the rename will fail since ":" is an invalid character for filenames.
You then need to replace the : with some other character (or blank) in the **Search and Replace** section in the MultiRename windows.

You can also specify a custom date and time formatting for the tag.

| | |
|---|---|
| [?ExtendedProp.datecreate] | Insert current date/time from this date/time file property. The date/time is formated using current system settings, so it might return 2013-03-03 08:23:23 (see warning above)<br>Make sure you replace invalid characters in "Search and Replace" or you might get rename problems. |
| [?ExtendedProp.datecreate-{dateformat\|timeformat}] | Insert current date/time from this date/time file property using a custom date/time formatting<br>Example: [?ExtendedProp.datecreate-{yyyy-MM-dd\|HHmmss}] |
| [?ExtendedProp.datecreate-{dateformat}] | Insert only the date part using custom date formatting<br>Example: [?ExtendedProp.datecreate-{yyyy-MM-dd}] |
| [?ExtendedProp.datecreate-{\|timeformat}] | Insert only the time part using custom time formatting<br>Example: [?ExtendedProp.datecreate-{\|HHmmss}]<br>(Do not forget the \| before the time format.) |
| [?Ex...datecreate-{dateformat\|timeformat},<FromPos>,<Length>] | You can still use the FromPos and Length parameters<br>Example: [?ExtendedProp.datecreate-{yyyy-MM-dd\|HHmmss},1,5] |

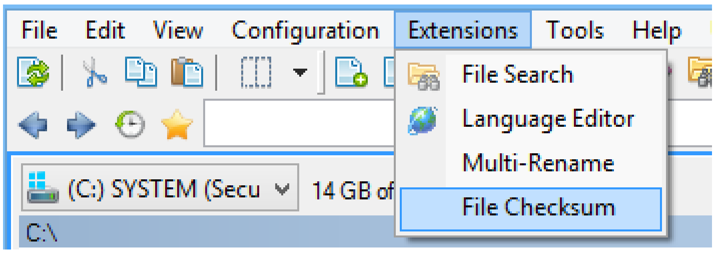
How the date and time format works Date Formatting - Time Formatting

## Examples

| Tags | Original filenames | New Filenames |
|---|---|---|
| File: Pre-[N,2,4]-[C,1,2,3]-X<br>Ext: [E] | Done.txt<br>MyFile.txt<br>Todo.txt | Pre-one-001-X.txt<br>Pre-yFil-003-X.txt<br>Pre-odo-005-X.txt |
| File: [C] - [N] - [?MCAudioProp.genre]<br>Ext: [E] | Song A.mp3<br>Song B.mp3<br>Song C.mp3 | 01 - Song A - Trance.mp3<br>02 - Song B - Pop.mp3<br>03 - Song C - House.mp3 |

# File Checksum - Create or Verify file CheckSum (CRC/SFV/MD5/SHA1)

Using the File Checksum extension you can create and verify checksum files.



Supported checksum files are: SFV(CRC32) , MD5 and SHA1.

You can both create and verify .sfv .md5 checksm files and also compare verification values directly.

You can verify multiple .sfv / md5 files at the same time. If you send a folder to the File Verifier it will scan that folder for all .sfv /.md5 files found.

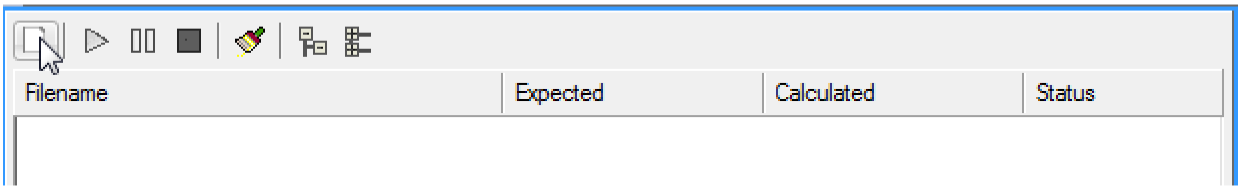
Read more about **Creating Checksum** files.

Read more about **Verifying Checksum** files.

Under the Tools menu you will find a couple of quick commands for File Checksum. Read more about them here

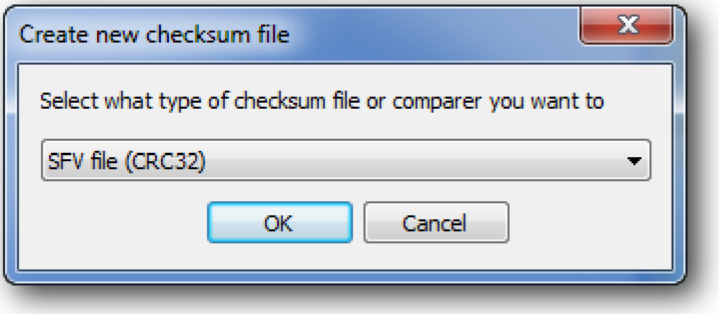
# File Verifier - Create

To create a new checksum file or to compare checksum values, first select File Verifier from the Extension menu, then click the New button in the File Verifier toolbar that is shown.



| Filename | Expected | Calculated | Status |
|---|---|---|---|

In the Create New Checksum dialog, select which type of checksum file you want to create, SFV or MD5.



Create new checksum file

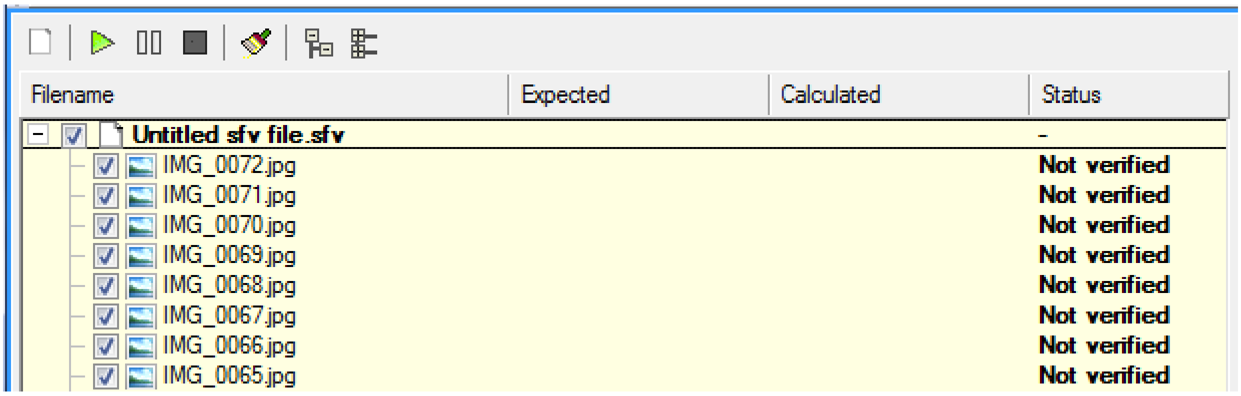
Select what type of checksum file or comparer you want to

SFV file (CRC32)

A new .sfv or .md5 item will be created and named "Untitled sfv file.sfv" for .sfv by default. To change the name you need to click to edit it. If the name is not changed, a new name will automatically be generated from the name of the first file that is added to this checksum file.

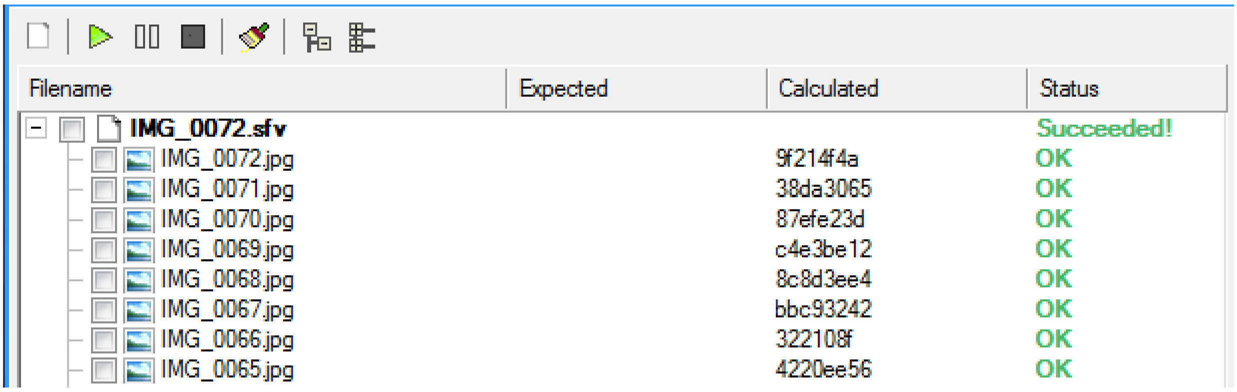
## Add Files

Add files to the checksum file by using the "copy" command or drag and drop the files you want to add.
(The default keyboard shortcut for copy is F5 if using CommanderStyle setup, or F2 for WindowsExplorer style.)



| Filename | Expected | Calculated | Status |
|---|---|---|---|
| ☑ **Untitled sfv file.sfv** | | | - |
| ☑ IMG_0072.jpg | | | **Not verified** |
| ☑ IMG_0071.jpg | | | **Not verified** |
| ☑ IMG_0070.jpg | | | **Not verified** |
| ☑ IMG_0069.jpg | | | **Not verified** |
| ☑ IMG_0068.jpg | | | **Not verified** |
| ☑ IMG_0067.jpg | | | **Not verified** |
| ☑ IMG_0066.jpg | | | **Not verified** |
| ☑ IMG_0065.jpg | | | **Not verified** |

When all the files have been added, press the start button in the File Verifier toolbar.
The checksum for all the files will now be calculated and saved into the checksum file you specified.



| Filename | Expected | Calculated | Status |
|---|---|---|---|
| ☐ **IMG_0072.sfv** | | | Succeeded! |
| ☐ IMG_0072.jpg | | 9f214f4a | OK |
| ☐ IMG_0071.jpg | | 38da3065 | OK |
| ☐ IMG_0070.jpg | | 87efe23d | OK |
| ☐ IMG_0069.jpg | | c4e3be12 | OK |
| ☐ IMG_0068.jpg | | 8c8d3ee4 | OK |
| ☐ IMG_0067.jpg | | bbc93242 | OK |
| ☐ IMG_0066.jpg | | 322108f | OK |
| ☐ IMG_0065.jpg | | 4220ee56 | OK |

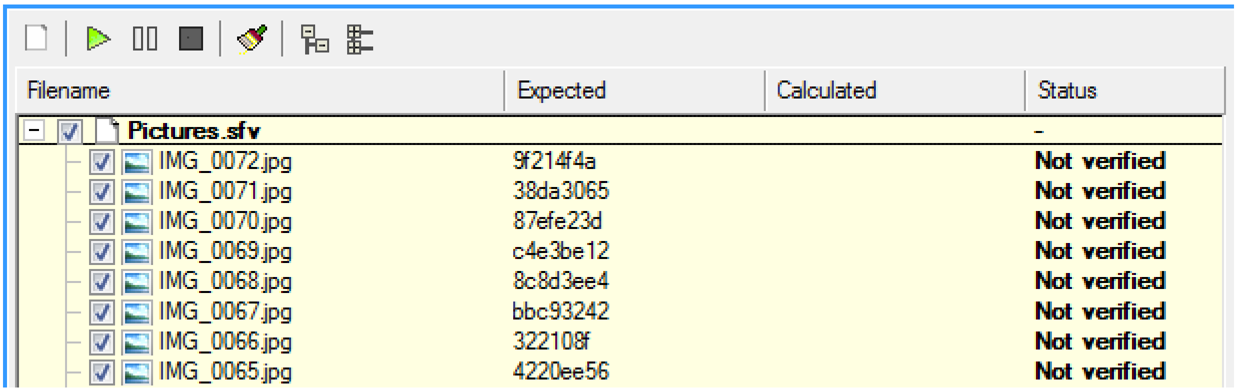
# File Verifier - Verify

There are two ways to verify checksums: *Verify Checksum Files* or *Verify a Checksum Value* directly.

## Verify Checksum Files (.SFV .MD5)

If you have a .sfv or .md5 file and want to verify the checksum for the files that this file references, simply launch the checksum file from within MultiCommander and the File Verifier will automatically start a verify process.

You can also start the File Verifier Extension you select and then copy or drag and drop the .sfv or .md5 files to the panel with the File Verifier open. If you copy or drag and drop folders the verifier will scan those folders for .sfv or .md5 and automatically add them to the file verifyer layout.



| Filename | Expected | Calculated | Status |
|---|---|---|---|
| ☑ **Pictures.sfv** | | | - |
| ☑ IMG_0072.jpg | 9f214f4a | | **Not verified** |
| ☑ IMG_0071.jpg | 38da3065 | | **Not verified** |
| ☑ IMG_0070.jpg | 87efe23d | | **Not verified** |
| ☑ IMG_0069.jpg | c4e3be12 | | **Not verified** |
| ☑ IMG_0068.jpg | 8c8d3ee4 | | **Not verified** |
| ☑ IMG_0067.jpg | bbc93242 | | **Not verified** |
| ☑ IMG_0066.jpg | 322108f | | **Not verified** |
| ☑ IMG_0065.jpg | 4220ee56 | | **Not verified** |

Press the Start button in the file verifier toolbar to start the verify process

## If Errors found

You will be presented with a dialog asking what to do with the offending files. You have the option to rename or delete them, or to do nothing.

## Context Menu

From the context menu (right mouse button click) you can choose to rescan files that previously failed or to remove from the list all files that were successfully scanned.

## Verify Values

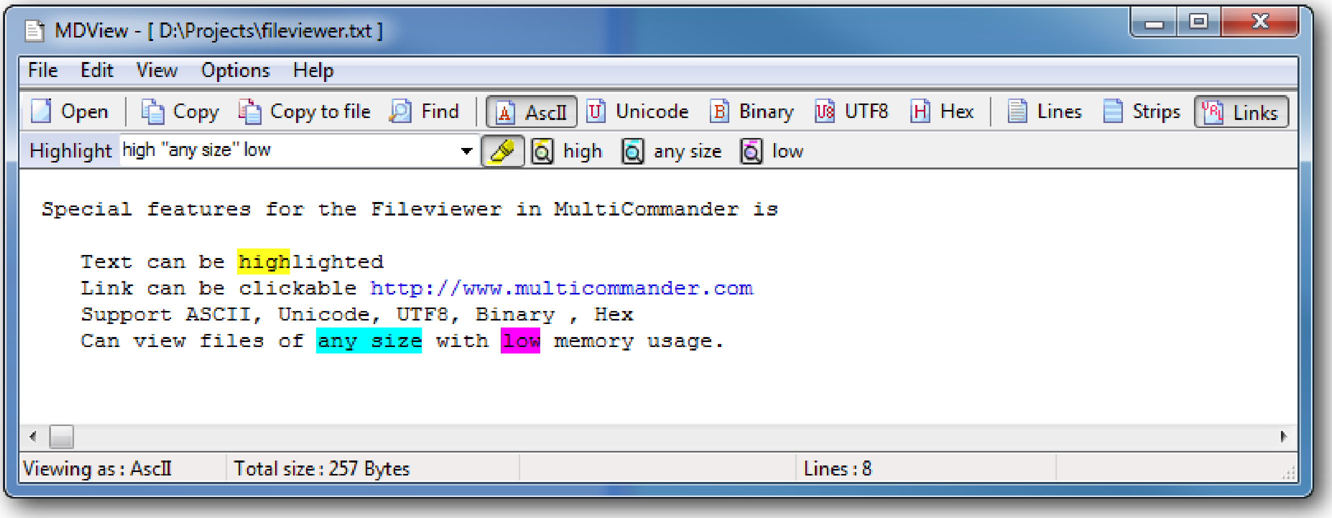
Sometimes you want to verify a file you for which know the checksum values but have no .sfv/.md5 file for. In this case you can create a new file verification with the New button and select "compare value".

You then copy or drag the file you want to verify, click in the "expected value" column and fill in the expected value. Finally, press start to begin verifying.

# MultiDataViewer - The File Viewer

To view the content of a file, select "**View File**" from the File menu, or press the keyboard shortcut key **F3** (the default if using the Commander-style setup).

The Default File Viewer in Multi Commander is MultiDataViewer. It is a file viewer that has some unique features.



Highlight: high "any size" low

```
Special features for the Fileviewer in MultiCommander is

   Text can be highlighted
   Link can be clickable http://www.multicommander.com
   Support ASCII, Unicode, UTF8, Binary , Hex
   Can view files of any size with low memory usage.
```

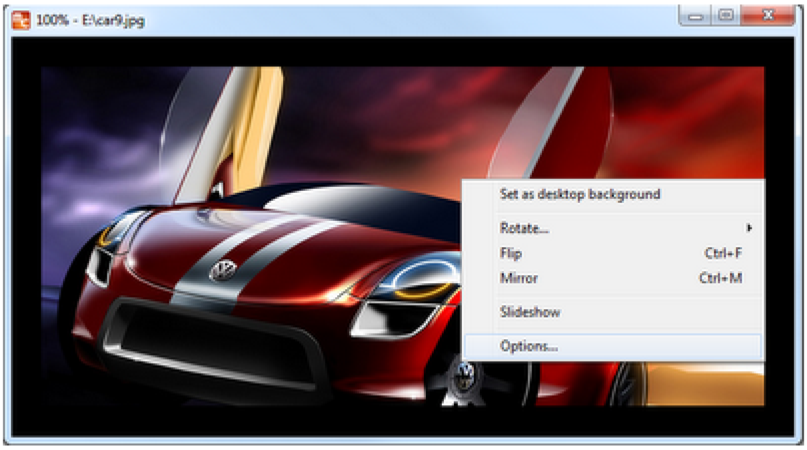
Viewing as : AscII | Total size : 257 Bytes | Lines : 8

## MultiDataViewer Features

MultiDataViewer can:

- **View files of any size**, even if the file is several **gigabytes,** using very little memory
- View files as **ASCII / Unicode / UTF8 / Binary** and **Hex**
- Be extensively **customized**. **Font / Color / Background / Gridlines / Strip and more** can be changed using different profiles that are loaded for different files based on format or file type
- Support **syntax coloring**
- Support **links**. Links in the text are **clickable**, so you can click on the link and a browser will be opened for that location
- **Highlight** all the words in different colors
- **AutoSelect** an entire word when double clicking on it (It is possible to customize what special characters are allowed in a word)
- Copy selections to the **clipboard** or save selections to a file
- **Support Drag & Drop.** Drop a file on MultiDataViewer to view it
- Provide **MouseWheel Zoom:** hold **CTRL** down when using the **mouse wheel** and it will **increase / decrease** font size
- **Queue files to view** and Go to next/previous file with **CTRL+ PAGEUP / PAGEDOWN**
- **Auto-reload** files if changed (very useful when viewing a live log file)

# Multi Commander Internal Picture Viewer



The Multi Commander Picture Viewer supports most common picture formats, such as *jpg, png, gif, bmp, tiff, psd* and many raw formats.

If the picture has an *exif* tag with rotation information it will auto-rotate the picture for you when it is viewed. You can also manually rotate and flip the picture if you wish. You can also re-save the picture after it has been rotated.

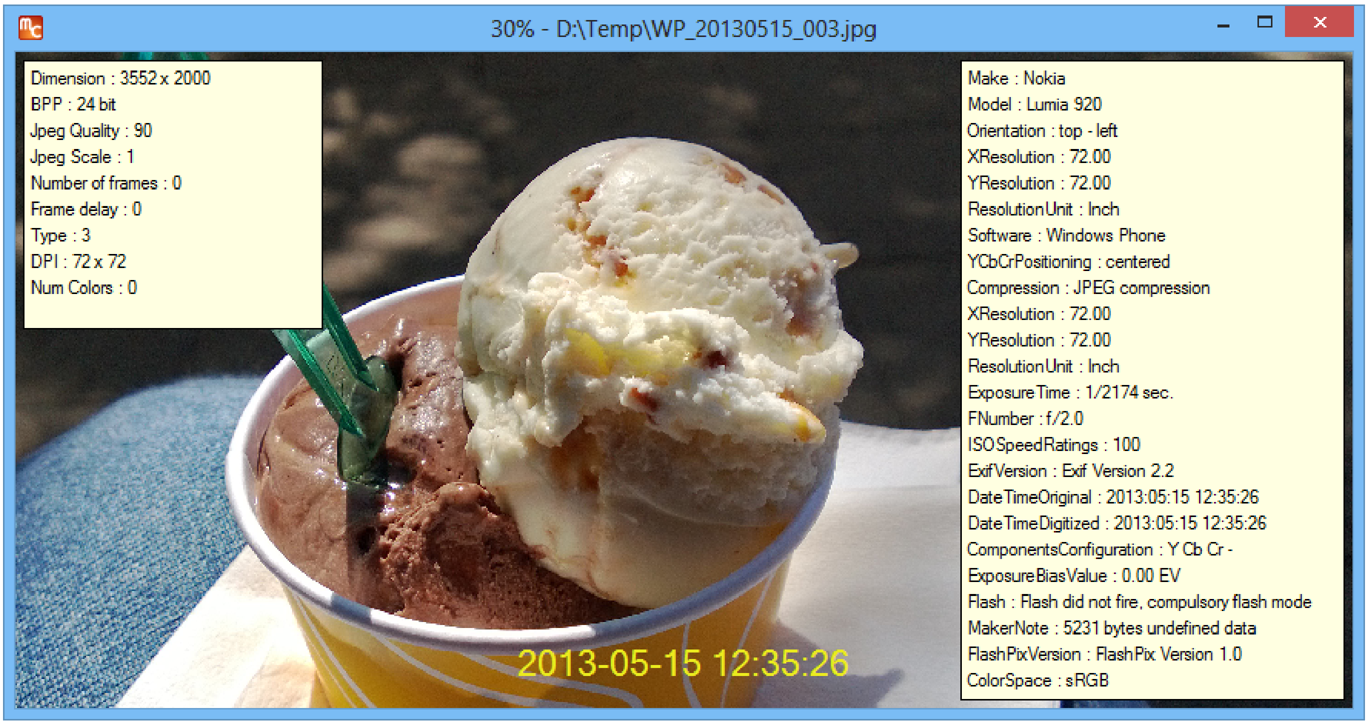
JPG pictures will be saved using lossless operations, so that the quality of the picture is not degraded.

It is also possible to set a picture as your *desktop background*, and if multiple files are viewed you can select *slideshow* mode and it will automatically load the next image every couple of seconds.

*Fullscreen* mode is supported by pressing F11, and you can also *zoom* the picture using the + / - keys or the mouse wheel.

## Show Picture Information

EXIF and picture information can be shown above the picture.



Dimension : 3552 x 2000
BPP : 24 bit
Jpeg Quality : 90
Jpeg Scale : 1
Number of frames : 0
Frame delay : 0
Type : 3
DPI : 72 x 72
Num Colors : 0

Make : Nokia
Model : Lumia 920
Orientation : top - left
XResolution : 72.00
YResolution : 72.00
ResolutionUnit : Inch
Software : Windows Phone
YCbCrPositioning : centered
Compression : JPEG compression
XResolution : 72.00
YResolution : 72.00
ResolutionUnit : Inch
ExposureTime : 1/2174 sec.
FNumber : f/2.0
ISOSpeedRatings : 100
ExifVersion : Exif Version 2.2
DateTimeOriginal : 2013:05:15 12:35:26
DateTimeDigitized : 2013:05:15 12:35:26
ComponentsConfiguration : Y Cb Cr -
ExposureBiasValue : 0.00 EV
Flash : Flash did not fire, compulsory flash mode
MakerNote : 5231 bytes undefined data
FlashPixVersion : FlashPix Version 1.0
ColorSpace : sRGB

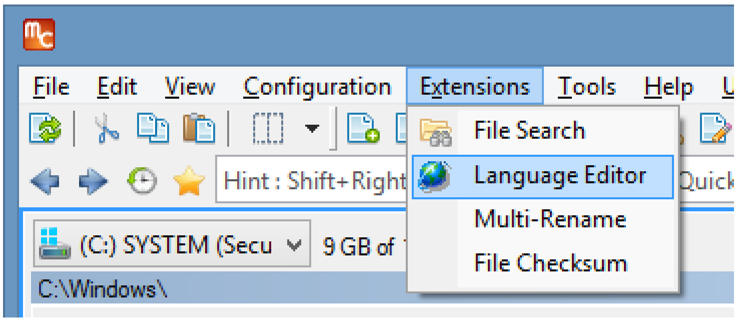
2013-05-15 12:35:26

- Pressing I will toggle the display of Picture **I**nformation (Left)
- Pressing E will toggle the display of **E**XIF information (Right)
- Pressing T will toggle the display of **t**imestamp information from the EXIF data (Bottom center)
- Pressing P will toggle the display of Photo Information taken from EXIF data (such as Exposure, Bias, F/Num, ISO)

## Shortcut Keys

- ESC - Close Picture Viewer
- Ctrl-R - Rotate 90 degree
- Ctrl-F - Flip image Up/Down
- Ctrl-M - Mirror image Left/Right
- Ctrl-S - Save changes to image
- Ctrl-C - Copy image to the clipboard
- Ctrl-0 - Auto zoom - Stretch to fit
- Ctrl-1 - Zoom to 50%
- Ctrl-2 - Zoom to 100%
- Ctrl-3 - Zoom to 150%
- Ctrl-4 - Zoom to 200%
- + - Zoom In
- - - Zoom Out
- Ctrl+Shift+R - Resize
- Ctrl+Shift+S - Save As...
- Ctrl+Shift+G - Make Greyscale
- Ctrl+Shift+I - Invert colors
- Arrow Keys - Move zoomed in image inside the window
- I - Show Picture Information
- E - Show Exif Information
- T - Show Timestamp
- P - Show Photo Information

# Language Editor



The built-in language editor allows the creation of new language packs or the correction of language texts in an existing pack.

## How Language Files Are Used

Language packs are stored in the Languages folder where MultiCommander.exe is located. Each language pack is a zip archive; one per language. Each zip files contains all the language files for all the extension/plug-ins for that language.

Multi Commander always reads the English language pack first and store all of the language texts in memory. Then the language that was configured is read and it will overwrite all of its translated texts. If any text item is not translated then the English text is used.

Each language pack only contains language files for the built-in Core and any Extensions/Plug-ins that are delivered with Multi Commander. So an Extension/Plug-in created by a user in their own language will not be found here. If Multi Commander does not find a matching language file in the language pack, it will search for the language files in the folder where the extensionor plug-in is located

Having the language files in a zip archive is not optimal when creating translations or modifying them. They are harder to test and verify. Also the built-in language editor needs to have them unpacked.
When started Multi Commander will first look for the unpacked language packs in the "**Languages**" folder and if a version match is found they will beused.  If Multi Commander is newer than the unpacked language files, they will not be used.

Tip

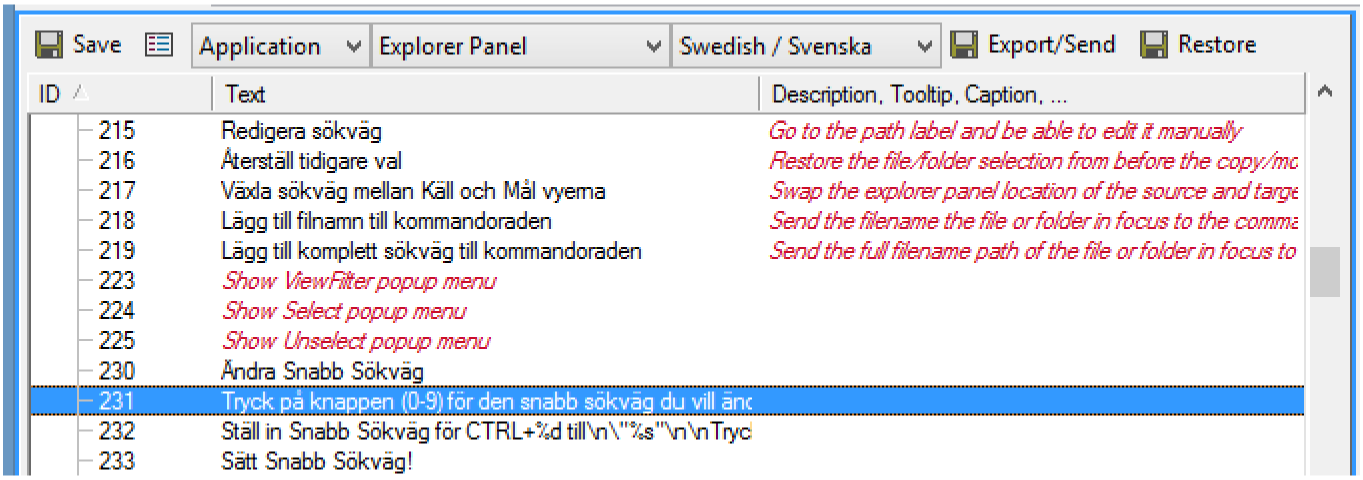
Type "**:gouserdata**" in the command line bar to take you to the Multi Commander UserData folder (eg. "C:\Users\Mathias\AppData\Roaming\MultiCommander\UserData\")

When starting the Language Editor it will ask if it should unpack the language pack to the UserData folder.

The next time that Multi Commander is started it will read the unpacked language files from the UserData folder, allowing modifications and additions to be verified

When the unpacked language files in the "UserData\Languages" folder are no longer needed or wanted they can be deleted. Multi Commander will then automatically revert to loading them from the zipped language packs again.

## Language Editor Panel



| ID | Text | Description, Tooltip, Caption, ... |
|---|---|---|
| 215 | Redigera sökväg | Go to the path label and be able to edit it manually |
| 216 | Återställ tidigare val | Restore the file/folder selection from before the copy/mc |
| 217 | Växla sökväg mellan Käll och Mål vyerna | Swap the explorer panel location of the source and targe |
| 218 | Lägg till filnamn till kommandoraden | Send the filename the file or folder in focus to the comma |
| 219 | Lägg till komplett sökväg till kommandoraden | Send the full filename path of the file or folder in focus to |
| 223 | Show ViewFilter popup menu | |
| 224 | Show Select popup menu | |
| 225 | Show Unselect popup menu | |
| 230 | Ändra Snabb Sökväg | |
| 231 | Tryck på knappen (0-9) för den snabb sökväg du vill änc | |
| 232 | Ställ in Snabb Sökväg för CTRL+%d till\n\"%s"\n\nTryc | |
| 233 | Sätt Snabb Sökväg! | |

The language editor panel allow text items to be modified. It is also possible to add support for new language and to export a language pack.

## Save Button

The save button will save all the changes for the currenly selected language.

## Language Properties Button

this opens a dialog showing properties for the selected language, for example the language name and language code it should use.

## Type Dropdown

This lists which extension/plug-in types existis in Multi Commander. Select one and the next dropdown will update with all the extension/plug-ins for that type.
Each extension/plug-in has its own language file.

## Extension/Plug-in Dropdown

List all extensions/plug-ins for the selected type. Select an extension/plug-in here and all text items for it will be shown using the language that is set in the Language Dropdown

## Language Dropdown

List all available languages and (at the bottom) there is an option to add a new language.
Change language here and the list will reload with the text item for the selected extension/plug-in for that language

## Export/Send Button

The Export/Send button will allow a language pack to be exported (or to be sent to Multi Commander staff for inclusion into next release).

## Restore Button

The Restore button allows previous versions of language files to be restored. Each time you press Save it will backup the previous version and you can retore to a previously-exported language pack.

## Text Item List

There are three columns in the text items list: ID , Text and Description/Tooltip/Caption/...

The ID is the Text ID used to identify the text item. It consists of a letter + a number. The letter is a way to categorize different text IDs. Often **M** is used for text items for Menu Items, **D** for Dialog, **E** for Rrror Messages, **C** for Commands. The Text item in the picture above is under **C**, ie. 231 that is selected is actually C-231.

The Text column is the main text that shown for that Text ID.

The Last Column is the secondary text item . Every Text ID can have two text items, one main and one secondary. The secondary is often used for the Tooltip ("hover" text), but can also be used for the descriptive text for script commands, or as a caption for an error message.

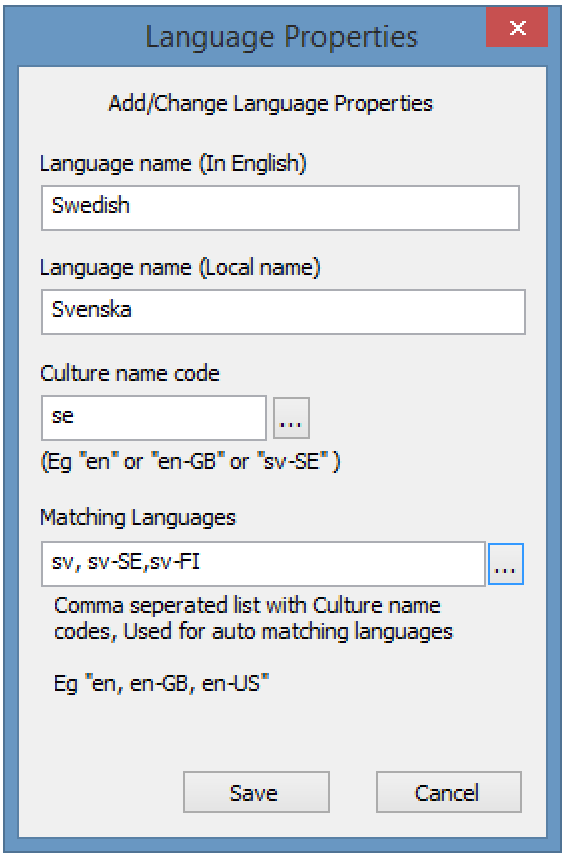
Text items in *Red and Italic* are text items that are **NOT** translated; the core English text is shown instead. The red items are NOT saved to the localized language files. The localized language files should not contain any English texts. The English text for untranslated text is automatically picked up (since the English language file are always read first).

Items shown **in BOLD** are text items that are modified but not yet saved.

By clicking the right mouse button it is possible to opt to show only untranslated items: no translated items are shown and only red, untranslated items remain.

## Create New Language Pack

Start the language editor and from the language dropdown select the last option "-- Add New Language --".
The Language Properties window will open.



Language Properties

Add/Change Language Properties

Language name (In English)

Swedish

Language name (Local name)

Svenska

Culture name code

se

(Eg "en" or "en-GB" or "sv-SE" )

Matching Languages

sv, sv-SE,sv-FI

Comma seperated list with Culture name codes, Used for auto matching languages

Eg "en, en-GB, en-US"

There are two language name fields. The first is the language name in English and the second is language name as spelt in the language that is being added.

Under "Culture name code" enter the two or five letter code for that language. If several variations of the language exist, you should add using the five letter code, so there will be no conflicts.

In "Matching Languages" enter all the language codes that match this language's codes. This field will be used to auto-select the correct language. So a user running Windows set to any of the matching languages, that language will be auto-selected the first time Multi Commander is run for that user.

As an example from the image above: if a user has Windows language set to "sv-FI" it will pick the language pack that is about to be created.
"Matching Languages" can be changed later by pressing the Language Properties button next to the Save button

Press Save to create support for that language. The file UserData\Lanaguge\SupportedLanguages.xml is then updated and Multi Commander will use this file next time it starts.

It is not possible to start translating using the language editor.

## Special Characters

Some text items can contain control characters and these must be retained.

The most common such character is **\n**, meaning "new line" and is most often used for text shown in text blocks or message boxes. Make sure there is no space after the control character.

"Line1 \n Line2" = Wrong - "Line2" text would then have an extra space before the text "Line2" text.
"Line1\nLine2" = Correct - There is no extra space character before the "Line2" text

There are also **%s** and **%d** , meaning that strings or numbers will be inserted at these positions and so these control characters must also be kept

For example, in an Explorer Panel there is a Text ID "**L-31"** that looks like: %s/%s in %d/%d Files and %d/%d Folders selected

All the %s and %d control characters will be replaced with strings and numbers when the text item is used.

Another common control character is the & (ampersand) character. This control character is a text item used in menubar or popup menu items and is used to underline automatic Shortcut (hotkey or accelerator) characters.

## Automatic Shortcuts

Menu items and popup menus can be activated using the keyboard. For example, if you press the Alt key, the "File" menu on the menu bar is highlighted.
Note that the File menu now has an underscore under the F and the Edit menu has the E underscored.
The menu bar options now read: File, Edit, View, and so on.

The underscore below V in the View menu means that you can now press V to drop that menu. The menu that opens can also have underscores for many of its menu items such that they, too, can be accessed them quickly using the keyboard.

The decision on which letter is used as a shortcut (accelerator) is decided by the menu item text. Any & characters in a menu item text will underscore the followin character and it will be used as a shortcut (accelerator) automatically. For Example, "&View" will be shown as "View", and "Vie&w" would be shown as "View.

This is not unique to Multi Commander, but is a long-standing Windows behaviour. For every menu that is shown there should be no duplicated shortcuts. For items within a menu there should not be more than two (where possible) items that have the same underscored letter. The shortcut will activate the first one.
To avoid this situation the & character may need to be moved to precede another character in the translated text.

## Edit Language Files With External Editor

Some people find it easier to translating with their favourite text editor. To do that you first need to follow the same steps as above when creating a new language.

Since language files do not contain untranslated text you need copy the English files to the new languages which you are creating. This requires a bit of manual work.

- Unpack the english language pack file manually MC_LangPack_en.zip
- Rename all of the files to match your new language. If your new language culture code is "se" (as in the example image above) you should rename then *_en.xml part of all the language files to *_se.xml
- Then zip them all together again to a file called MC_LangPack_se.zip and place that archive in the standard language pack folder
- Go to UserData\Languages\ folder and delete everything EXCEPT "**SupportedLanguages.xml**". Do not delete that file since this file will be updated with your new language
- Start the Internal Language Editor again and it will unpack all language packs again to UserData\Languages\
- Start editing the new language files located in UserData\Languages\ in your favourite editor
- When done, start the Internal Language Editor and select Export/Send to export or send the language pack

Editing new language files in the UserData\Lanauges location is going to make the export function work without any problems. So then you can create a language pack for sending to be included into the next version of Multi Commander.

### Be aware...

When editing the language files with an external editor the files are in a format called xml and they are encoded using UTF8. Be careful not to remove xml tags. If xml tags are destroyed the entire xml file will be unreadable. Also special characters like **&** and **"** might need special encoding.

If a language files is not readable by Multi Commander try to open the xml file in a webbrowser. If some xml tags have been lost the browser can often report that it found an xml error on line xx and you can locate and correct the error.

## Submit Language Pack

After modifying an existing language or created a new one, a new language pack for that language may be required; so that it can be moved to another machine easily or sent to the developer of Multi Commander to be included in the next release. To create an updated language pack, first make sure that the Language dropdown is set to the language you want to create a language pack for. Then press the "Export/Send" button.

A window will open that has a dropdown with three options. This is to select which type of language pack you want to create.

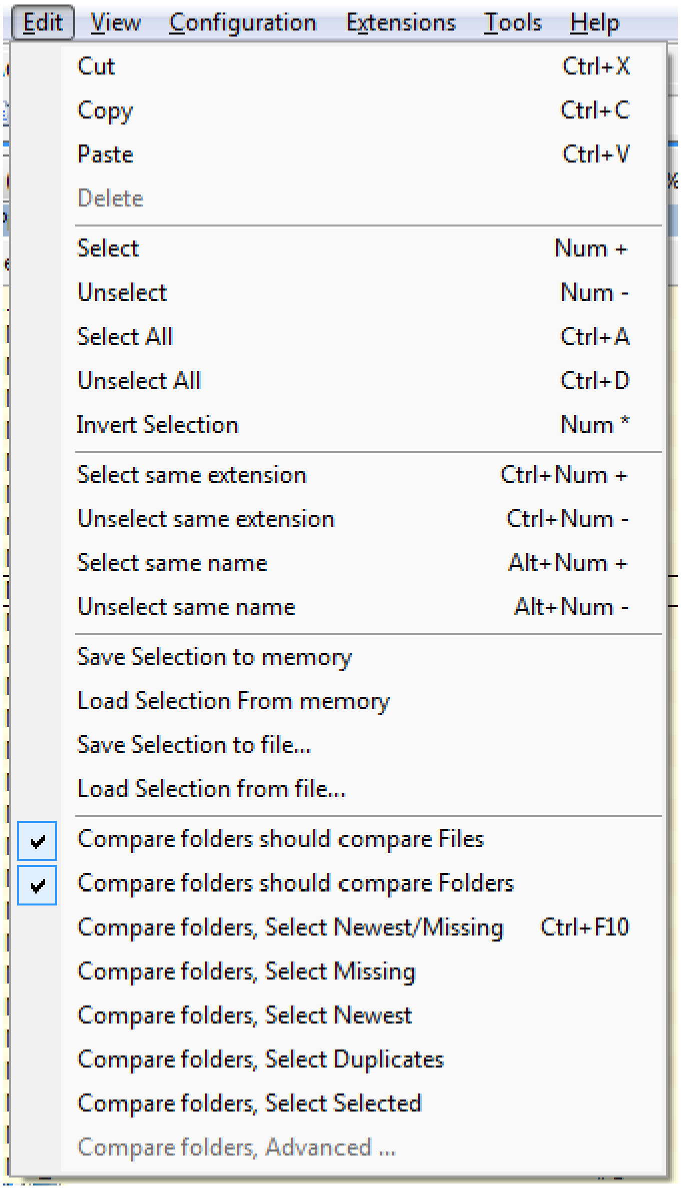
- **Internal format (Submit to developer using e-mail)**
  This will create a Language pack in the internal format. This is used if you are sending the Language pack to the developers of Multi Commander via email.
- **Internal format (Submit to developer using HTTP)** ***(this is the recommended option)***
  This will create a Language pack in the internal format and this will then be sent to the MultiCommander web service and there is no need for email.
  However, using this method you need a Submit key that you can get by contacting Multi Commander staff.
  A key is needed so that not just anybody can submit incorrect changes that could destroy a language pack.
  This process is entirely automatic and language packs received this way will automatically be included in the next version. If you have a Submit key you can submit language changes as often at you like.
- **Export to Public Language Pack Format**
  This will export the language pack in the public format. this is the same format as the language files found in the install folder. This format is used if the language pack created should be shared with somebody else or if you want to test it on another machine.

## Incomplete Translation Work

Multi Commander contains many text items and translating them can be a very long, intensive process.
So if you start a translation but give up because it is too much work, then submit what you have. Somebody else might continue with where you left off.
A partial translations is better than none at all!

# Select/Unselect Files and Folders

Under the **Edit** menu there are a number of special commands for selecting files and folders.


Edit
View
Configuration
Extensions
Tools
Help
Cut Ctrl+X
Copy Ctrl+C
Paste Ctrl+V
Delete
Select Num +
Unselect Num -
Select All Ctrl+A
Unselect All Ctrl+D
Invert Selection Num *
Select same extension Ctrl+Num +
Unselect same extension Ctrl+Num -
Select same name Alt+Num +
Unselect same name Alt+Num -
Save Selection to memory
Load Selection From memory
Save Selection to file...
Load Selection from file...
✓ Compare folders should compare Files
✓ Compare folders should compare Folders
Compare folders, Select Newest/Missing Ctrl+F10
Compare folders, Select Missing
Compare folders, Select Newest
Compare folders, Select Duplicates
Compare folders, Select Selected
Compare folders, Advanced ...

## Select using filters

The **Select** and **Unselect** options show a select/unselect dialog where you select files using filters. You can enter a **wildcard** filter to select/unselect files, eg. "*.jpg *.tiff" for all jpg and tiff files.  Separate multiple filers with a space.

## Save/Load Selection to/from File or Memory

**Save selection to file** will save all the selected files to a filename you specify. You can then load that file and recover all of your selections at any time.

**Load selection from file** will load a file and treat every line in that file as a selection filter. Each line can be an exact match for a file/folder that you want to select or it can be a selection filter containing wildcards.

**Save/Load to/from memory** options work the same way but will not survive a restart of Multi Commander.

## Compare Folders

**Compare Folders** will compare the paths in the source and target panel and select differences depending on which compare command is called

It is possible to enable or disable whether the compare command should work on only files or only folders.

## Compare Folders, Select Newest/Missing

Will select the files that are missing in the other panel or, if folders/files are found in both panels, the newest file/folder is selected

## Compare Folders, Select Missing

Will select only the files that are missing from the other panel.

## Compare Folders, Select Newest

Will find files/folder that exist in both panels and select only the newest of them.

## Compare Folders, Select Duplicates

Will select only files/folders that exist in both panels.

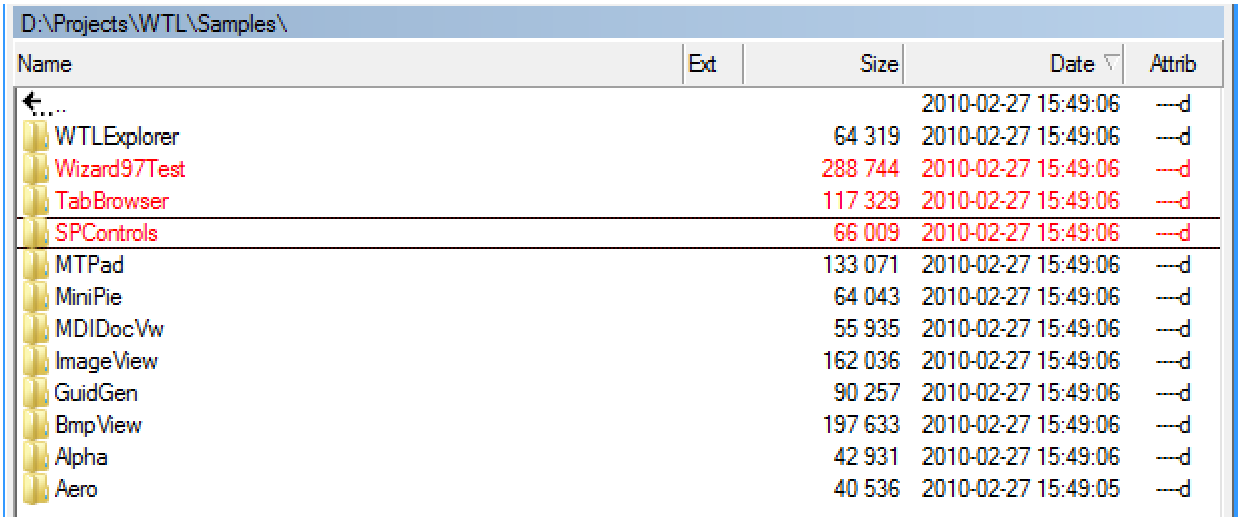
## Compare Folders, Select Selected

The files that are currently selected in the source panel will also be selected in the target panel if they exist.

# Calculate Folder Size

To determine the size of folders, you can do any of the following:

1. Select "Calculate folder size" under the Tool menu
2. Press the "Calculate folder size" button in the File Commands toolbar
3. Press Shift + Alt + Return



D:\Projects\WTL\Samples\

| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| .. | | | 2010-02-27 15:49:06 | ----d |
| WTLExplorer | | 64 319 | 2010-02-27 15:49:06 | ----d |
| Wizard97Test | | 288 744 | 2010-02-27 15:49:06 | ----d |
| TabBrowser | | 117 329 | 2010-02-27 15:49:06 | ----d |
| SPControls | | 66 009 | 2010-02-27 15:49:06 | ----d |
| MTPad | | 133 071 | 2010-02-27 15:49:06 | ----d |
| MiniPie | | 64 043 | 2010-02-27 15:49:06 | ----d |
| MDIDocVw | | 55 935 | 2010-02-27 15:49:06 | ----d |
| ImageView | | 162 036 | 2010-02-27 15:49:06 | ----d |
| GuidGen | | 90 257 | 2010-02-27 15:49:06 | ----d |
| BmpView | | 197 633 | 2010-02-27 15:49:06 | ----d |
| Alpha | | 42 931 | 2010-02-27 15:49:06 | ----d |
| Aero | | 40 536 | 2010-02-27 15:49:05 | ----d |

Size calculation will be performed on all the selected folders. If no folders are selected then the size of all folders will be calculated.

Selecting folders with the **space-key** will automatically calculate the size of those folders.

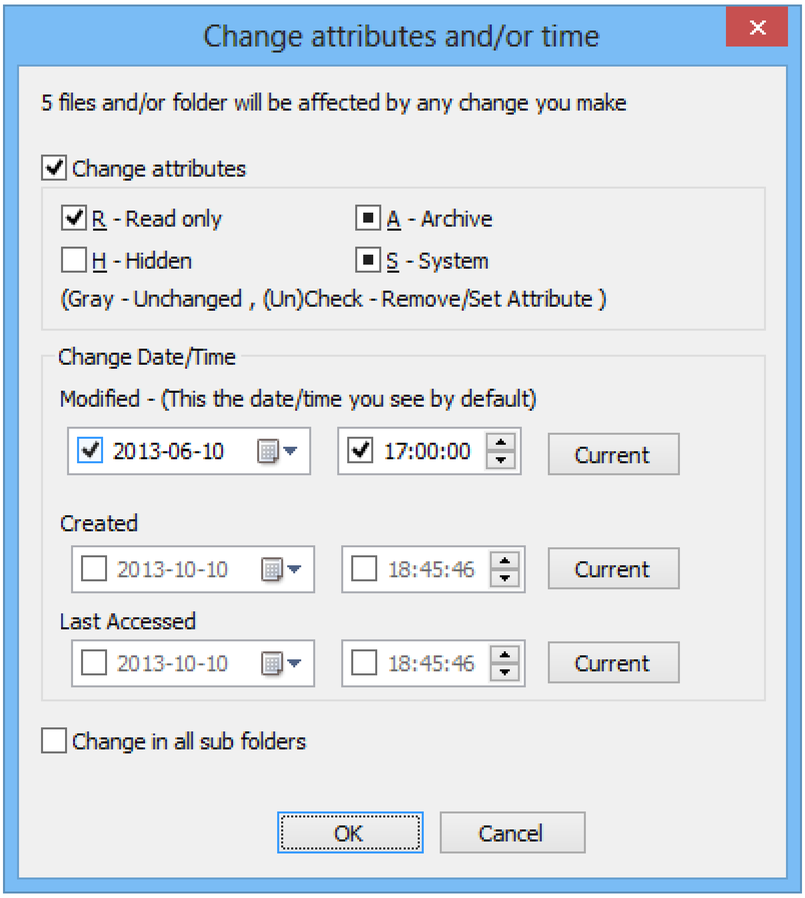
The size calculation is done in the background and can be aborted by pressing the **ESC** key.

If a folder's size has been calculated, and files are **deleted** from that folder from within Multi Commander, the folder size will be automatically recalculated and updated.

The default shortcut key for calculating folder sizes is **Shift+Alt+Return**.

# Change File Properties

Attributes and Date/Times of files and folders can be changed from the Change attributes dialog.



Change attributes and/or time

5 files and/or folder will be affected by any change you make

☑ Change attributes

☑ R - Read only ■ A - Archive

□ H - Hidden ■ S - System

(Gray - Unchanged , (Un)Check - Remove/Set Attribute )

Change Date/Time

Modified - (This the date/time you see by default)

☑ 2013-06-10 ☑ 17:00:00

Created

□ 2013-10-10 □ 18:45:46

Last Accessed

□ 2013-10-10 □ 18:45:46

□ Change in all sub folders

Select the files or folders whose properties you want to change, then select "Change Properties (Attributes/Time)..." under the Tools menu.

Multiple files and folders can be changed at once. It is also possible to change all the files in folders and sub-folders.

Each attribute checkbox can have one of 3 states:

If **Unchecked,** the attribute will be turned off.

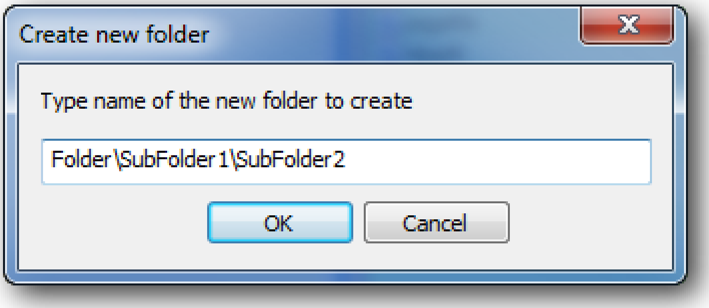
If **Checked**, the attribute will be turned on.

If **Blocked** (as 'Archive' and 'System', seen in the image above), the attribute will not be changed: the current attribute will be kept.

If you hold down **CTRL** and **Double Click** in the date or attribute column for a file/folder, the Change attributes window will be shown, but *only* for that file/folder, even if multiple files are selected.

# Create Folders

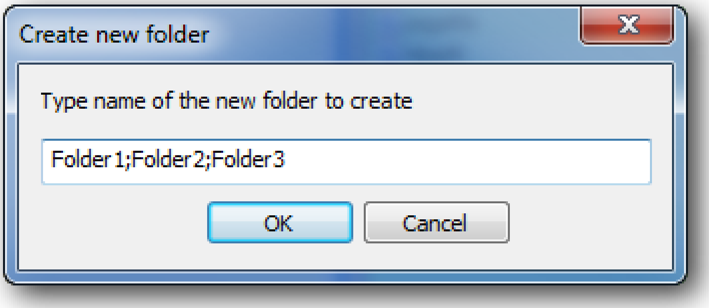
Using the **Create Folder** command found under the Tools menu, you can create new folders at the current path in an Explorer Panel.


Create new folder

Type name of the new folder to create

Folder\SubFolder1\SubFolder2

The folder specified can be a complete folder path. Intermediate sub-folders will be created as needed.


Create new folder

Type name of the new folder to create

Folder1;Folder2;Folder3

You can also create multiple folders at once as long as you separate the folder names with ";".

Shortcuts

The default shortcut key for Create Folder is F7.
Shift+F7 will insert the text from the clipboard into the folder name field when the dialog is shown.

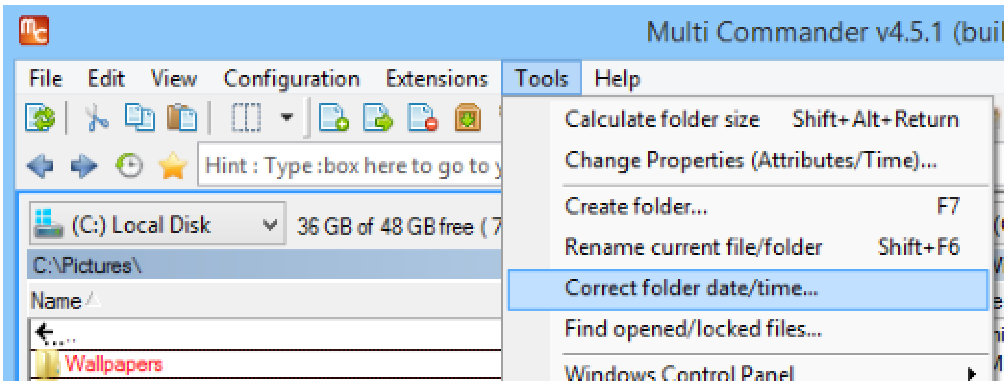
When the Create Folder Dialog is shown there are some optional actions that can be performed:
F5 - Insert the text from the clipboard into the folder name field
F8 - Remove all dots in the text name field
F9 - Insert todays date as YYYY-MM-DD in the folder name field
Shift+F9 - Append today's date as YYYY-MM-DD in the folder name field

# Correct Folder Date/Time

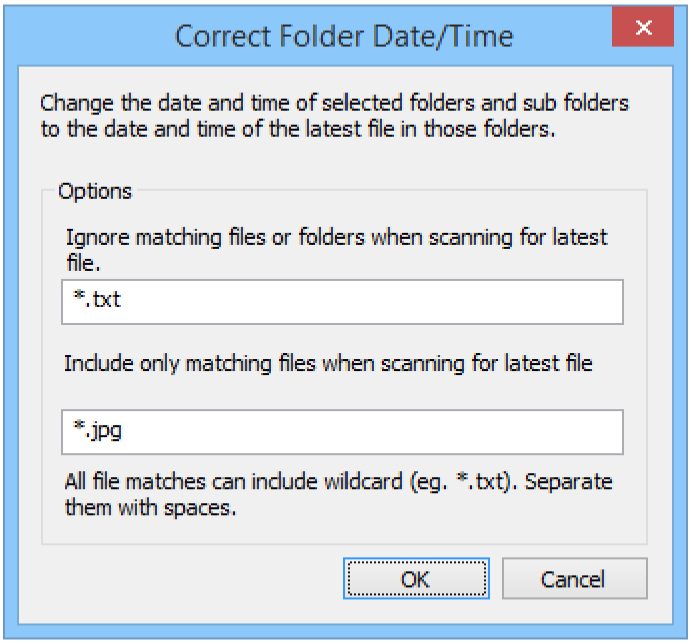
The date/time of a folder is changed whenever you copy a file into it, delete a file from it, or change a file in it. In some situations this may not be what you want.

For example, you might list and sort those folder by date, and you want the date/time of the folder to show the date/time of the most recent file in that folder rather than when something was last changed in the folder.

This tool will scan the selected folder and subfolders and set the date/time of the folders to that of the most recent file it finds.


Multi Commander v4.5.1 (bui
File
Edit
View
Configuration
Extensions
Tools
Help
Hint : Type :box here to go to y
(C:) Local Disk
36 GB of 48 GB free ( 7
C:\Pictures\
Name
Wallpapers
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel

Select the folder you want to change then select "Correct folder date/time" from the Tools menu.



Correct Folder Date/Time

Change the date and time of selected folders and sub folders to the date and time of the latest file in those folders.

Options

Ignore matching files or folders when scanning for latest file.

*.txt

Include only matching files when scanning for latest file

*.jpg

All file matches can include wildcard (eg. *.txt). Separate them with spaces.

You can specify two kind of filters for the scanning: Ignore and Include filters.

## Ignore Filter

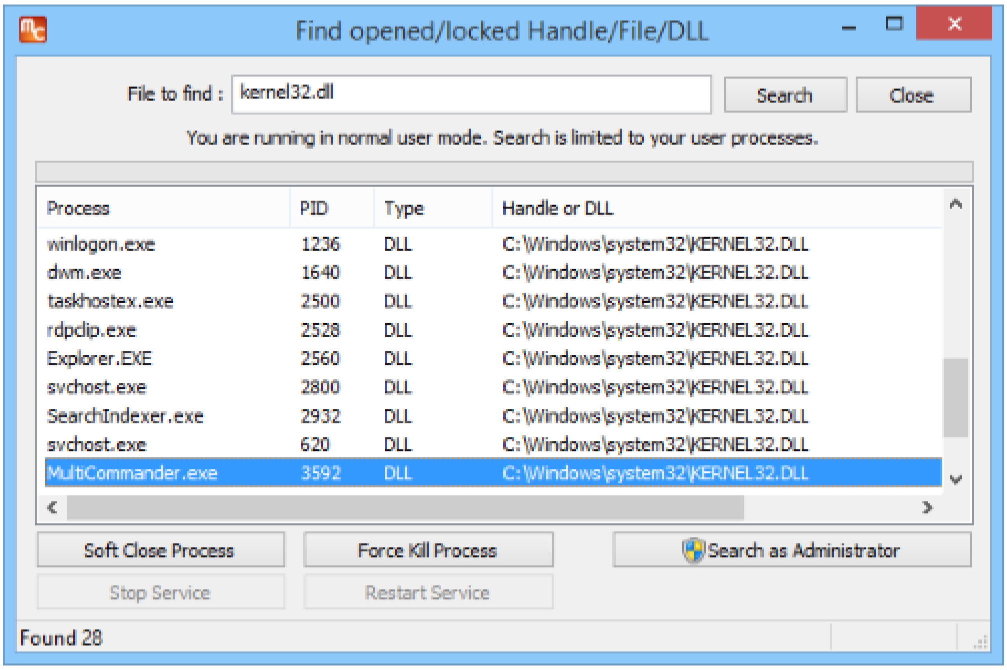
The first filter is the *ignore* filter. It specifies the files and folders that you want to ignore when finding the most recent date/time.
If you enter *.txt here. It will ignore all *.txt files, even if they have a date/time that is more recent than other files.

## Include Filter

If you specify an *include* filter then only files matching this filter will be checked. Eg. if you enter *.jpg here it will only check the date/time on *.jpg files.

# Find Opened/Locked Files

If you are unable to rename or delete a file or folder it is possible it is already in use by another program. A program that uses something in a sub-folder can also lock the parent folder, so that it cannot be renamed or deleted. Which program has a particular file open is often not obvious, and it can be hard to figure out which program you need to close to be able to rename or delete the file or folder.



File to find : kernel32.dll

You are running in normal user mode. Search is limited to your user processes.

| Process | PID | Type | Handle or DLL |
|---|---|---|---|
| winlogon.exe | 1236 | DLL | C:\Windows\system32\KERNEL32.DLL |
| dwm.exe | 1640 | DLL | C:\Windows\system32\KERNEL32.DLL |
| taskhostex.exe | 2500 | DLL | C:\Windows\system32\KERNEL32.DLL |
| rdpclip.exe | 2528 | DLL | C:\Windows\system32\KERNEL32.DLL |
| Explorer.EXE | 2560 | DLL | C:\Windows\system32\KERNEL32.DLL |
| svchost.exe | 2800 | DLL | C:\Windows\system32\KERNEL32.DLL |
| SearchIndexer.exe | 2932 | DLL | C:\Windows\system32\KERNEL32.DLL |
| svchost.exe | 620 | DLL | C:\Windows\system32\KERNEL32.DLL |
| MultiCommander.exe | 3592 | DLL | C:\Windows\system32\KERNEL32.DLL |

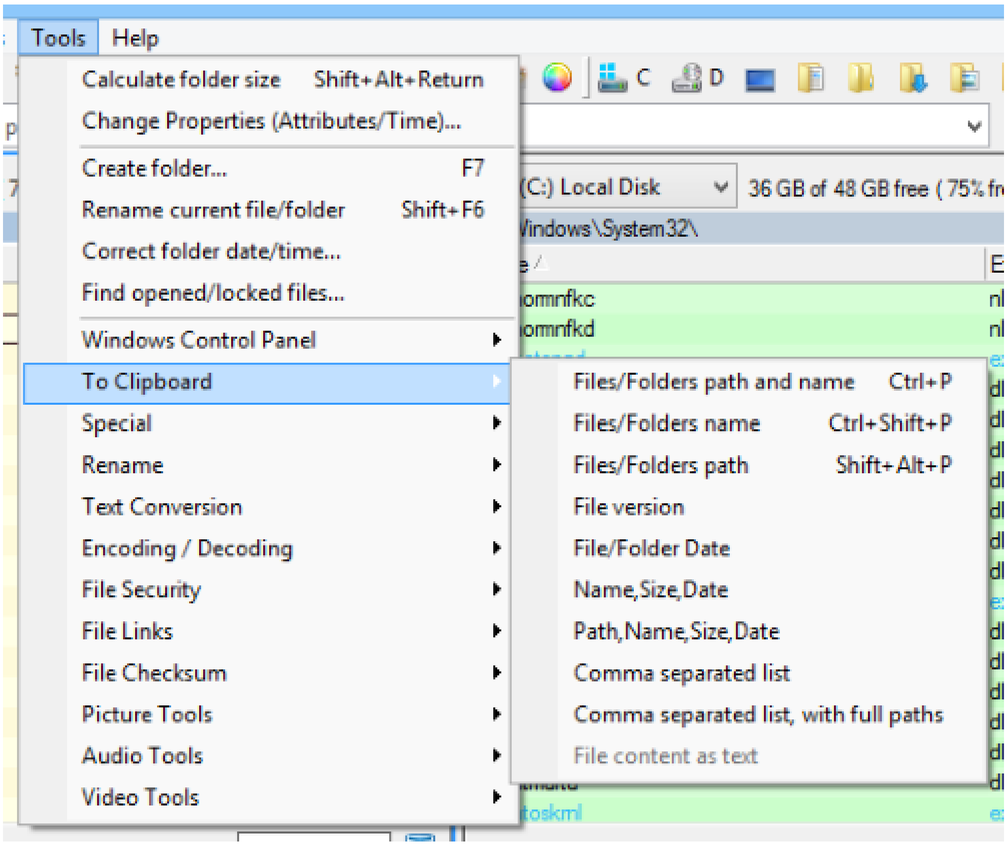
Found 28

Under the Tools menu you can select "**Find Opened/Locked Files**" to find what program has a file/folder locked so that you can close or kill it. If you are running with standard user permission you will only be able to scan the system for processes that are running under your account: System & Service processes will not be found.

Running Multi Commander as an Administrator will allow you to also find Services and System processes that have files open or locked.

# Send to Clipboard

Selecting **To Clipboard** under the Tools menu opens a submenu that allows you to select and copy various file properties directly to the clipboard. You then can paste that information wherever you wish.


Tools
Help
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel
To Clipboard
Special
Rename
Text Conversion
Encoding / Decoding
File Security
File Links
File Checksum
Picture Tools
Audio Tools
Video Tools
Files/Folders path and name Ctrl+P
Files/Folders name Ctrl+Shift+P
Files/Folders path Shift+Alt+P
File version
File/Folder Date
Name,Size,Date
Path,Name,Size,Date
Comma separated list
Comma separated list, with full paths
File content as text
(C:) Local Disk
36 GB of 48 GB free ( 75% fr
Windows\System32\

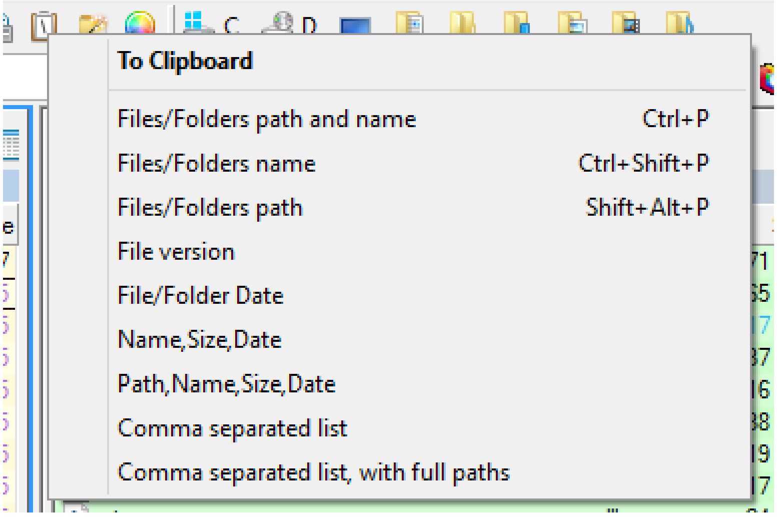
Properties for all selected files/folders will be sent to the clipboard. If no files/folders are selected the file/folder in focus will be used.

Which properties to send depends on which command you select. The most commonly-used are the full path including filename or just the filename of the selected files or folders.

## Shortcuts

The default keyboard shortcut for copying the complete path is **Ctrl+P**
For copying only the file/folder name it is **Shift+Ctrl+P**

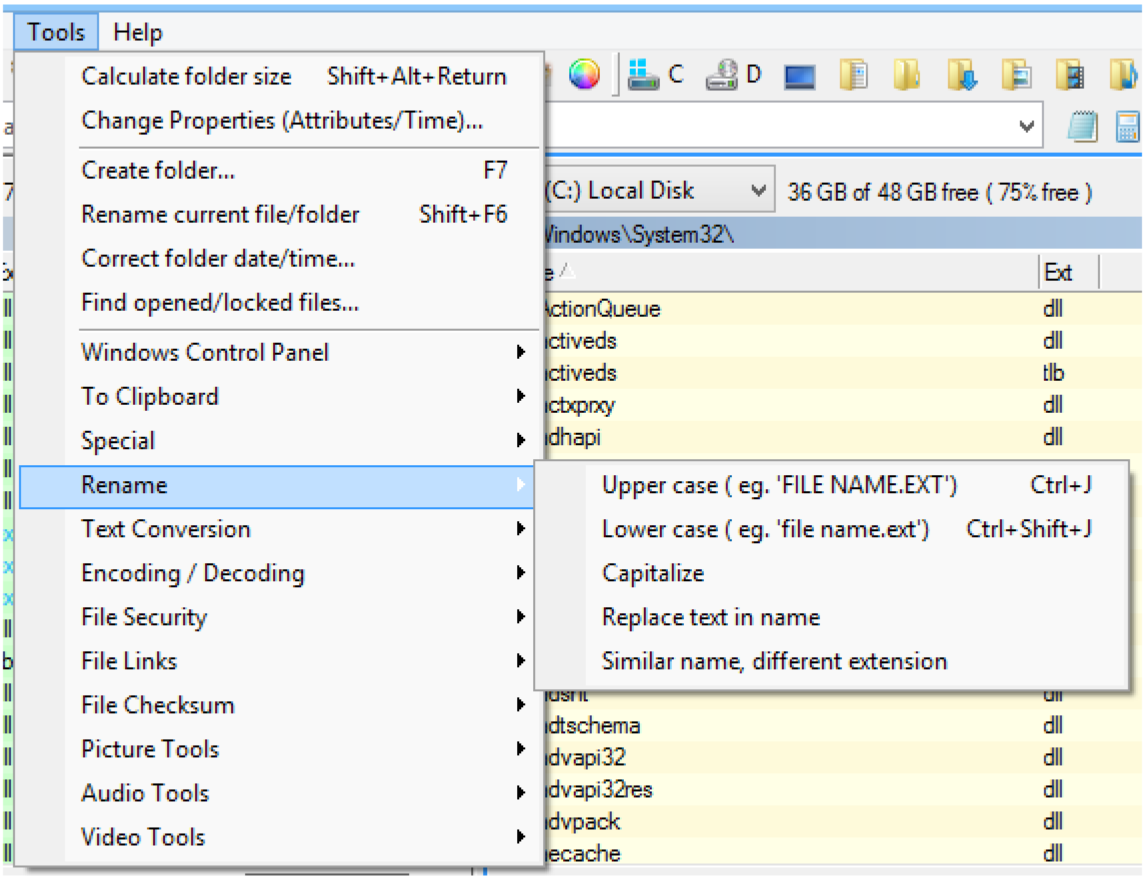
Send to Clipboard is also available on the toolbar and when clicked, the complete paths of selected files/folders are copied to the clipboard.
If the right mouse button is pressed on the toolbar button a popup menu with the other options is shown.



To Clipboard
Files/Folders path and name Ctrl+P
Files/Folders name Ctrl+Shift+P
Files/Folders path Shift+Alt+P
File version
File/Folder Date
Name,Size,Date
Path,Name,Size,Date
Comma separated list
Comma separated list, with full paths

# Rename Tools

Under "Rename" in the Tools menu there are a number of extended rename operations that can be performed.


Tools
Help
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel
To Clipboard
Special
Rename
Text Conversion
Encoding / Decoding
File Security
File Links
File Checksum
Picture Tools
Audio Tools
Video Tools
Upper case ( eg. 'FILE NAME.EXT') Ctrl+J
Lower case ( eg. 'file name.ext') Ctrl+Shift+J
Capitalize
Replace text in name
Similar name, different extension
(C:) Local Disk
36 GB of 48 GB free ( 75% free )
Windows\System32\
Ext

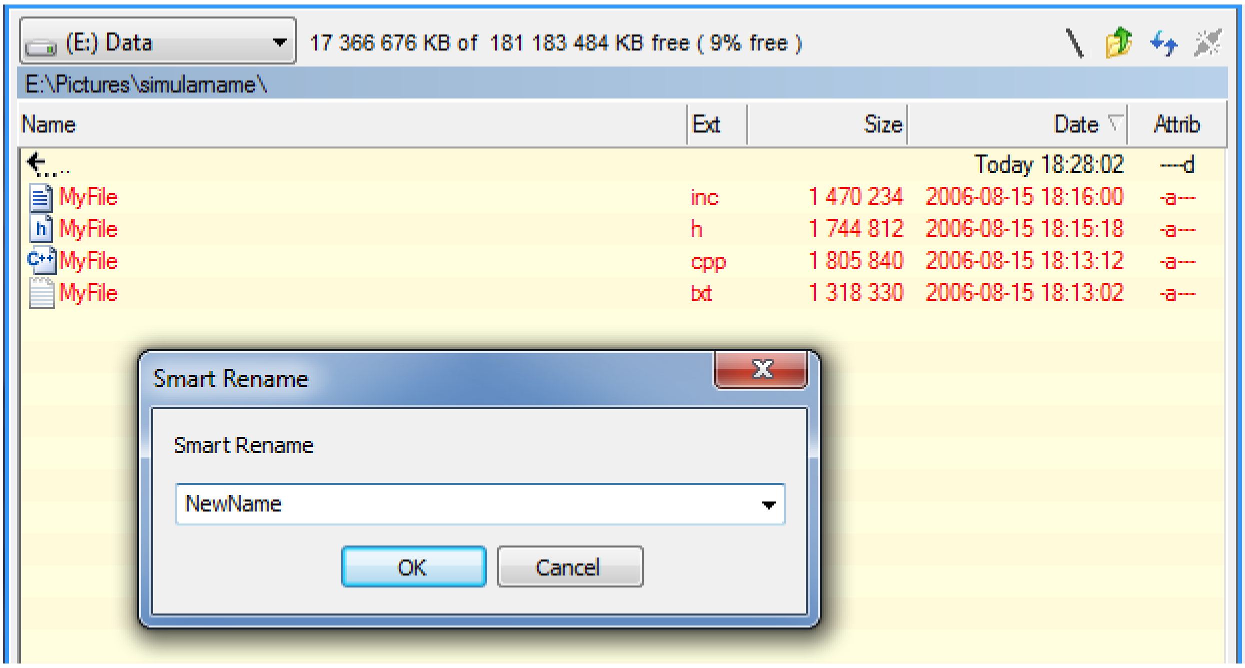
These Rename commands are performed on all selected files and folders.

**Uppercase / Lowercase** renames the selected files/folders to the same name but with all uppercase or all lowercase letters.

**Capitalize** renames all selected files and folders to lowercase, with only the first letter in each word uppercase. A word is defined as a string of characters preceded by space, dot or underscore.

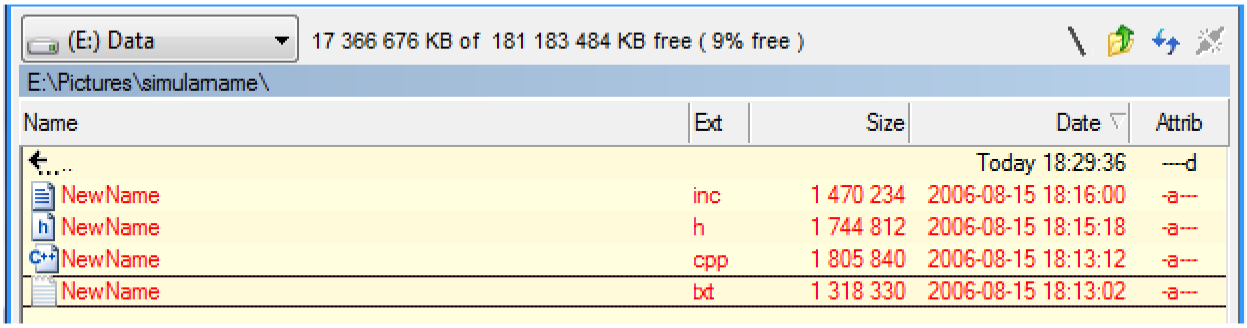
**Replace text in name** will replace a substring in all the selected file/folder names with other text.

**Similar name, different extension** is a special rename operation that will only rename selected files (*not* folders).



| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| .. | | | Today 18:28:02 | ----d |
| MyFile | inc | 1 470 234 | 2006-08-15 18:16:00 | -a--- |
| MyFile | h | 1 744 812 | 2006-08-15 18:15:18 | -a--- |
| MyFile | cpp | 1 805 840 | 2006-08-15 18:13:12 | -a--- |
| MyFile | txt | 1 318 330 | 2006-08-15 18:13:02 | -a--- |

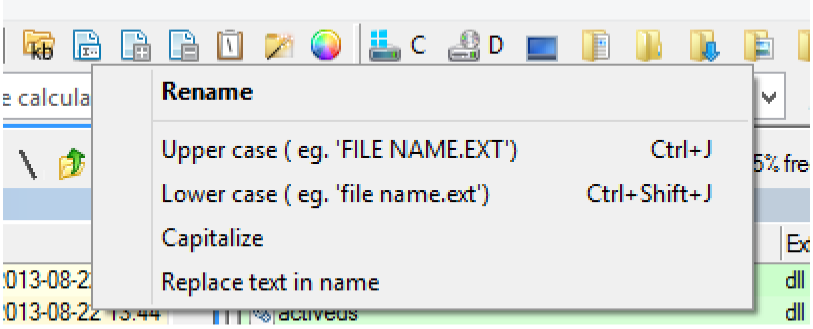
All the selected files should have the same name but with different file extensions.



| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| .. | | | Today 18:29:36 | ----d |
| NewName | inc | 1 470 234 | 2006-08-15 18:16:00 | -a--- |
| NewName | h | 1 744 812 | 2006-08-15 18:15:18 | -a--- |
| NewName | cpp | 1 805 840 | 2006-08-15 18:13:12 | -a--- |
| NewName | txt | 1 318 330 | 2006-08-15 18:13:02 | -a--- |

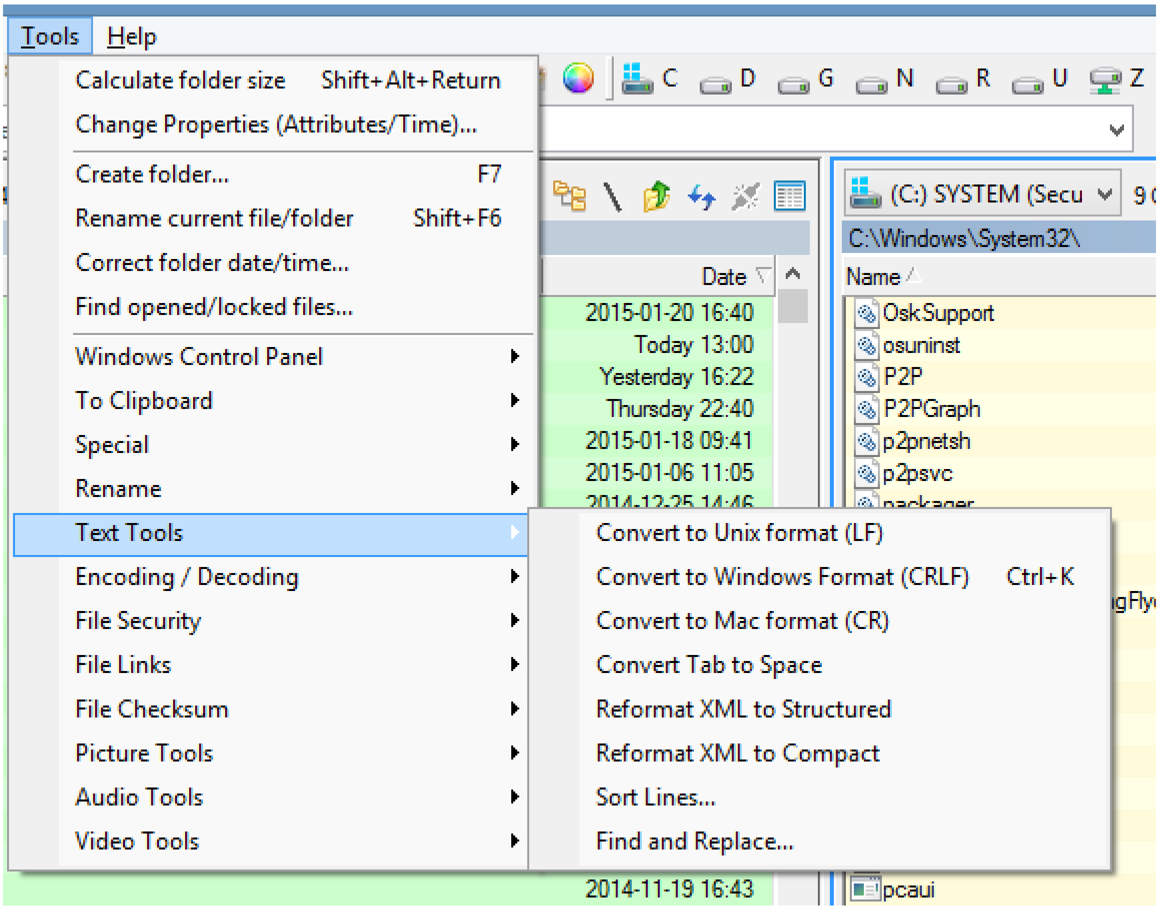
The selected files will be renamed with the new name, but the file extensions are left unchanged.

Some of these tools are also availible when right clicking on the Rename button on the toolbar


Rename
Upper case ( eg. 'FILE NAME.EXT') Ctrl+J
Lower case ( eg. 'file name.ext') Ctrl+Shift+J
Capitalize
Replace text in name

# Text Tools

Under the Tools menu you can find some special **Text Tools**.



There are tools for converting the line endings of text files to those different platforms and a tool for converting tab characters to spaces.

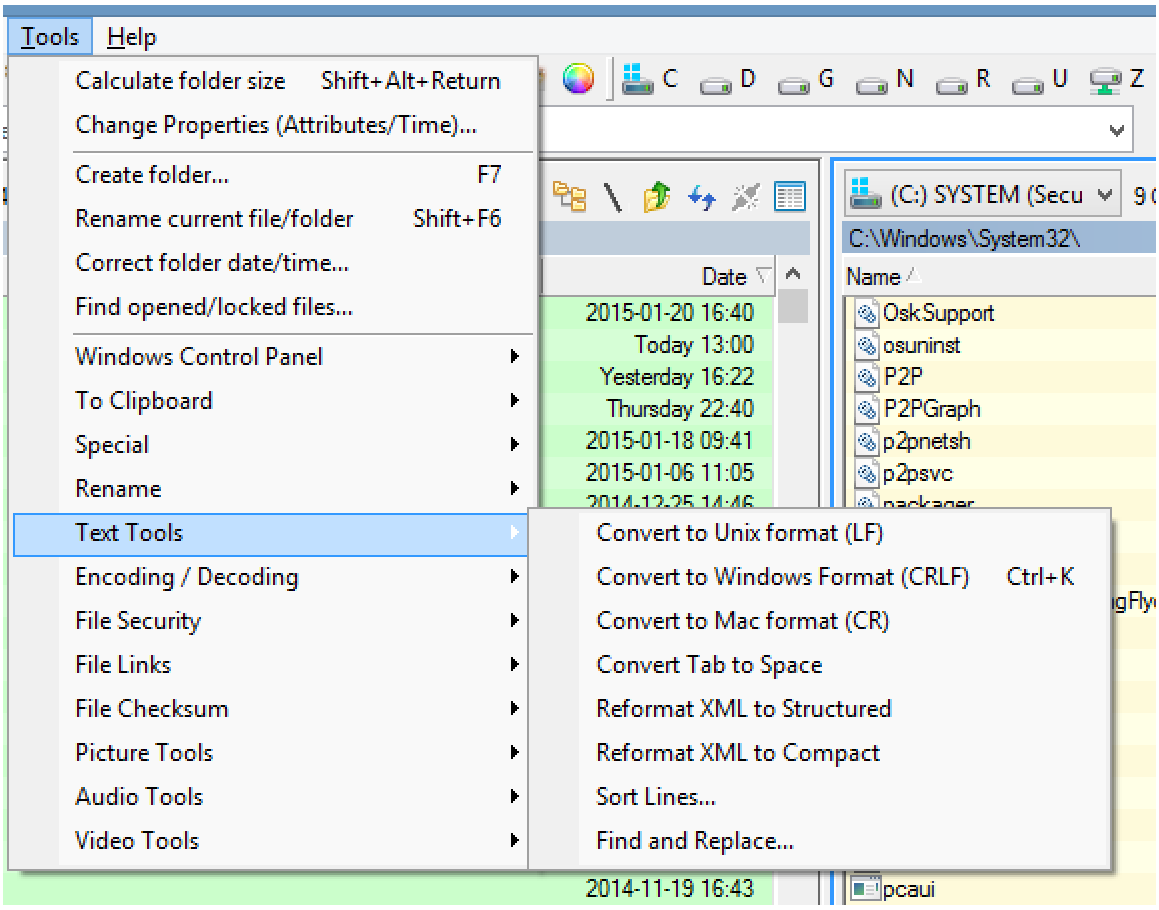
And you can also reformat XML files to structured layout or compact layout.

You can find more information about them under Text Conversion Tools.

Sort Lines will sort the lines in text files using many advanced options.

Find and Replace will allow you find find and replace text in files. It support MultiLine find/replace matches and many other options.

# Convert Tools



## Convert Text Files

The contents of all selected files will be converted. The following options are available in the submenu:

**Convert To Unix Format (LF)**
Convert text files to Unix format, making sure that newline is a single Linefeed (LF) character.

**Convert To Windows Format (CRLF)**
Convert text files to Windows format, making sure that newline is a Carriage Return(CR) followed by a Linefeed (LF) character.

**Convert To MAC OS Format (CR)**
Convert text files to MAC OS format, making sure that newline is a single Carriage Return (CR) character.

**Convert Tab to Space**
Replace all tab characters with a specified number of space characters.

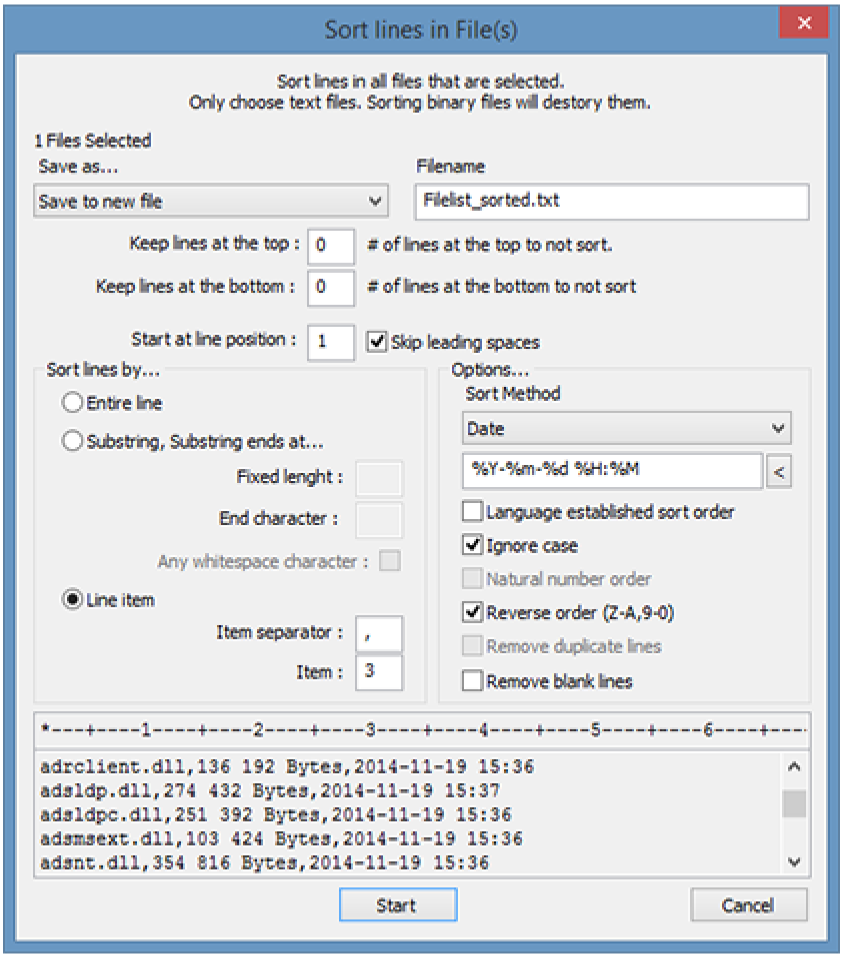
**Reformat XML to Structured**
Reformat xml files so they are more readable, by including indentation after the xml items.

**Reformat XML to Compact**
Reformat xml files so they are compact, by removing all unnecessary newlines and indentations.

**Sort Lines..**
Sort lines in a file. Read more about this at Sort Lines.

**Find and Replace...**
Find and Replace text in files. Read more about this at Find and Replace.

# Sort Lines in Files



Sort lines in all files that are selected.
Only choose text files. Sorting binary files will destory them.

1 Files Selected

Save as... Save to new file

Filename: Filelist_sorted.txt

Keep lines at the top : 0 # of lines at the top to not sort.

Keep lines at the bottom : 0 # of lines at the bottom to not sort

Start at line position : 1 ☑ Skip leading spaces

Sort lines by...

- ○ Entire line
- ○ Substring, Substring ends at...
  - Fixed lenght :
  - End character :
  - Any whitespace character : □
- ● Line item
  - Item separator : ,
  - Item : 3

Options...

Sort Method: Date

%Y-%m-%d %H:%M

- □ Language established sort order
- ☑ Ignore case
- □ Natural number order
- ☑ Reverse order (Z-A,9-0)
- □ Remove duplicate lines
- □ Remove blank lines

```
*---+----1----+----2----+----3----+----4----+----5----+----6----+---
adrclient.dll,136 192 Bytes,2014-11-19 15:36
adsldp.dll,274 432 Bytes,2014-11-19 15:37
adsldpc.dll,251 392 Bytes,2014-11-19 15:36
adsmsext.dll,103 424 Bytes,2014-11-19 15:36
adsnt.dll,354 816 Bytes,2014-11-19 15:36
```

Sort Lines has many options to control how the sorting should be done. It will sort lines in all selected text files. The number of files it will try to sort is shown in the dialog.

Sort Lines will automatically identify file formats: files encoded in ASCII/Unicode/UTF8 are supported. Note that files identified as binary **will be ignored**.
The newline character(s) that the file currently has will be kept, So if a file has only CR (carriage return) as a newline character the new file will also have only CR.

In the Filename field you set what the name of the sorted file will be. Sorted files will always be saved in the same folder as the original and only the Filename can be set: the original extension will be kept.

If multiple files are select you will see a "*" in the Filename field. The * represents the original Filename and file extension. If you have two files select named "MyFile1.txt" and "MyFile2.txt" and the Filename field has the value "*_sorted.*" the new Filenames will be "MyFile1_sorted.txt" and "MyFile2_sorted.txt".

In the Save as... dropdown list you can select to save the new file with a different name. You can also choose to keep the original name (but rename the original files by adding .bak to its name), or it can delete the original file.

## Lines and Position limits

### Keep lines at the top

This defines how many line at the top of each file that should not be sorted. For example, if you have a header in the text file that is 2 lines high you can set this to "2". The new, sorted file will then still have a 2-line header.

### Keep lines at the bottom

This defines how many lines at the bottom of each file that should not be sorted. For example, if you have a 3-line footer text this option will ensure that those 3 lines are not moved by sorting.

### Start at line position

Where on each line the sorting should begin. If lines should not be sorted beginning at character 1, you can control at which position it should begin. Changing this settings will change the position of the "*" character in the preview ruler at the bottom of the dialog. This shows clearly at what position sorting will begin.

### Skip Leading spaces

By checking this option all leading white spaces will be ignored when comparing lines during search.

## Sort lines by

There are 3 different ways to sort lines: Entire line, Substring or by Line item (record)

### Entire line

This will compare the entire line from the defined start position to the end.

### Substring, Substring ends at

This can be used if sorting should be based on a specific substring in a text.
Use the option above "Start at line position" to set the beginning of the substring.
Then use any of the following settings to set where the end of the string is.

### Fixed length

If the substring that the sorting is based on has a fixed length you can define it here.

### End character

If the substring that the sorting is based on should end when it comes to a specific character.

### Any white space character

If the substring that the sorting is based on ends when any white space character is found.

### Line Item

If every line has items (records) that are separate by a special character you can defined which item/record it should be sorted by.

### Item separator

Which character will separate the items (records) from each other. (Eg. for a comma-separated list, that would be comma "," ).

### Item

Which item on the line the sorting should be based one First item is 1, second is 2, and so on.

## Options

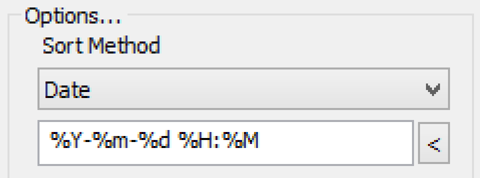
## Sort Method

There are three methods to sort by: Text,Date and Number.

### Text

The text to be compared for sorting is plain text.

### Date



%Y-%m-%d %H:%M

The text that will be compared for sorting is actually a date or time written as text.
To be able to compare date/time correctly the correct date/time formatting of the date/time must be provided. If the date/time matching format is not correct the sorting will not be correct.
Press the "<" button under the dropdown list for examples of date/time matching formats to use.

Date Format - Time Format

### Number

The text that will be compare is actually numbers: the number will be compared as a digital value and *not as text*. Leading zeros (0) will be ignored: only digits will be used.

## Language-based sort order

Use the sorting rule that the current language uses. Different languages sort characters in different orders. Checking this option will cause the sort to be done using the current language settings. This sorting is slower and can affect performance for very large files.
This options will also disable the "Ignore case" option. Language-based sort order always ignores case.

## Ignore case

Ignore case when sorting. "A" and "a" will be treated as the same character (but see 'Language-based sort order' above).

## Natural number order

Sort numbers in a natural order. This option also requires the option "Language-based sort order".
Instead of being sorted in the order "Text1","Text10","Text2" it will be "Text1", "Text2", "Text10".
(This option is is not used if sort method is Numbers).

## Reverse order

Reverse the sort order. By default sorting will be A to Z and 0 to 9.
Enabling this will cause sort order to be Z to A, and 9 to 0

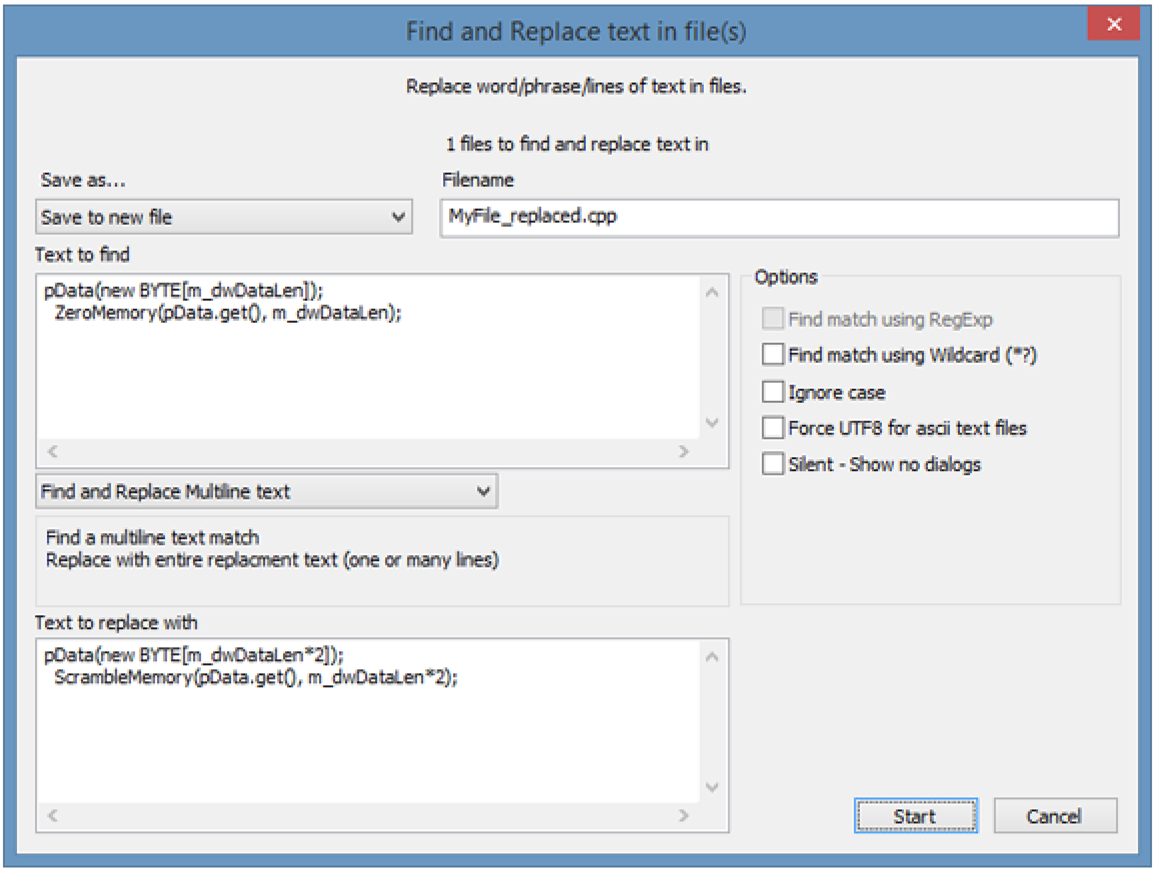
## Remove duplicate lines

This option is not yet enabled

## Remove blank lines

After sorting the lines, remove all blank lines.

# Find and Replace in Files



Find and Replace text in file(s)

Replace word/phrase/lines of text in files.

1 files to find and replace text in

Save as... Save to new file

Filename: MyFile_replaced.cpp

Text to find

```
pData(new BYTE[m_dwDataLen]);
 ZeroMemory(pData.get(), m_dwDataLen);
```

Options

- ☐ Find match using RegExp
- ☐ Find match using Wildcard (*?)
- ☐ Ignore case
- ☐ Force UTF8 for ascii text files
- ☐ Silent - Show no dialogs

Find and Replace Multiline text

Find a multiline text match
Replace with entire replacment text (one or many lines)

Text to replace with

```
pData(new BYTE[m_dwDataLen*2]);
 ScrambleMemory(pData.get(), m_dwDataLen*2);
```

Find and Replace will find one or many substrings in files and replace them with one or many new substrings.

Find and Replace will search and replace in all selected files. The number of files selected is shown in the dialog.

It will automatically identify file formats. Files encoded in ASCII/Unicode/UTF8 are supported.

Files identified as binary *will be ignored*, however, the identification of binary files can never be 100% accurate so be careful and do not select any binary files.

The newline character that each processed file uses will be kept. When doing Multiline find/replace the newline inserted will be the same as the file already has.

In the Filename field you will see what the name of the processed file will be. Files will always be saved in the same folder: only Filename can be changed

If multiple files are select you will see a "*" in the Filename field. The "*" represents the original file name plus file extension.
If two files are selected named "MyFile1.txt" and "MyFile2.txt" and the Filename field contains "*_replaced.*" the new Filenames will be "MyFile1_replaced.txt" and "MyFile2_replaced.txt".

In the Save as... dropdown list you can select if the new file should be saved with a different name; or it should keep the original name but as a backup by renaming (adding .bak to it); or if the original file should be deleted.

## Text to find

In the field the text part(s) to be replaced is entered.
Exactly how the find will work depends on which find and replace mode is selected (see below).

## Text to replace with

This fields contains the text(s) that the identified text part(s) will be replaced with.
Exactly how the replace will work depends on what find and replace mode is selected (see below).

# Find and Replace Modes

There are a 4 possible Find and Replace modes:

## Find one, Replace with one

Only first line from the Find and Replace fields is used.
It will replace all instances found that match the first line in the 'Text to find' field with the first line in the 'Text to replace with' field.

## Find many , Replace with many

Every line in the 'Text to find' field will replace the matching line in the 'Text to replace with' field when doing Find and Replace.
Example: Line 3 in the 'Text to find' field will be replaced with line 3 in the 'Text to replace with' field.

## Find Many, Replace with same

If many lines exist in the 'Text to find' field, all of them will be replaced with the *first line* in the 'Text to replace with' field.

## Find and Replace Multiline text

Only 1 find and replace match can be entered, but texts entered in the find and replace fields support Multiline text (ie., can contain newline characters).
You can enter text in the 'Text to find' field that spans multiple lines and if a match is found the entire multiline text entered in the 'Text to replace with' field is inserted.
The newline character the file has when entering a find match is unimportant: the replace text will be inserted using the same newline character that the file already uses.

# Options

## Find match using RegExp

Finding text using regular expressions is not yet enabled.

## Find match using Wildcard

Enable wildcard matching in the find field. * and ? can be used to match text.
Using * at the beginning and end of the find expression can give match that you did not expect so make sure you test so it is correct before overwriting original file.

## Ignore case

Ignore case when finding matches

## Force UTF8 for ASCII text files

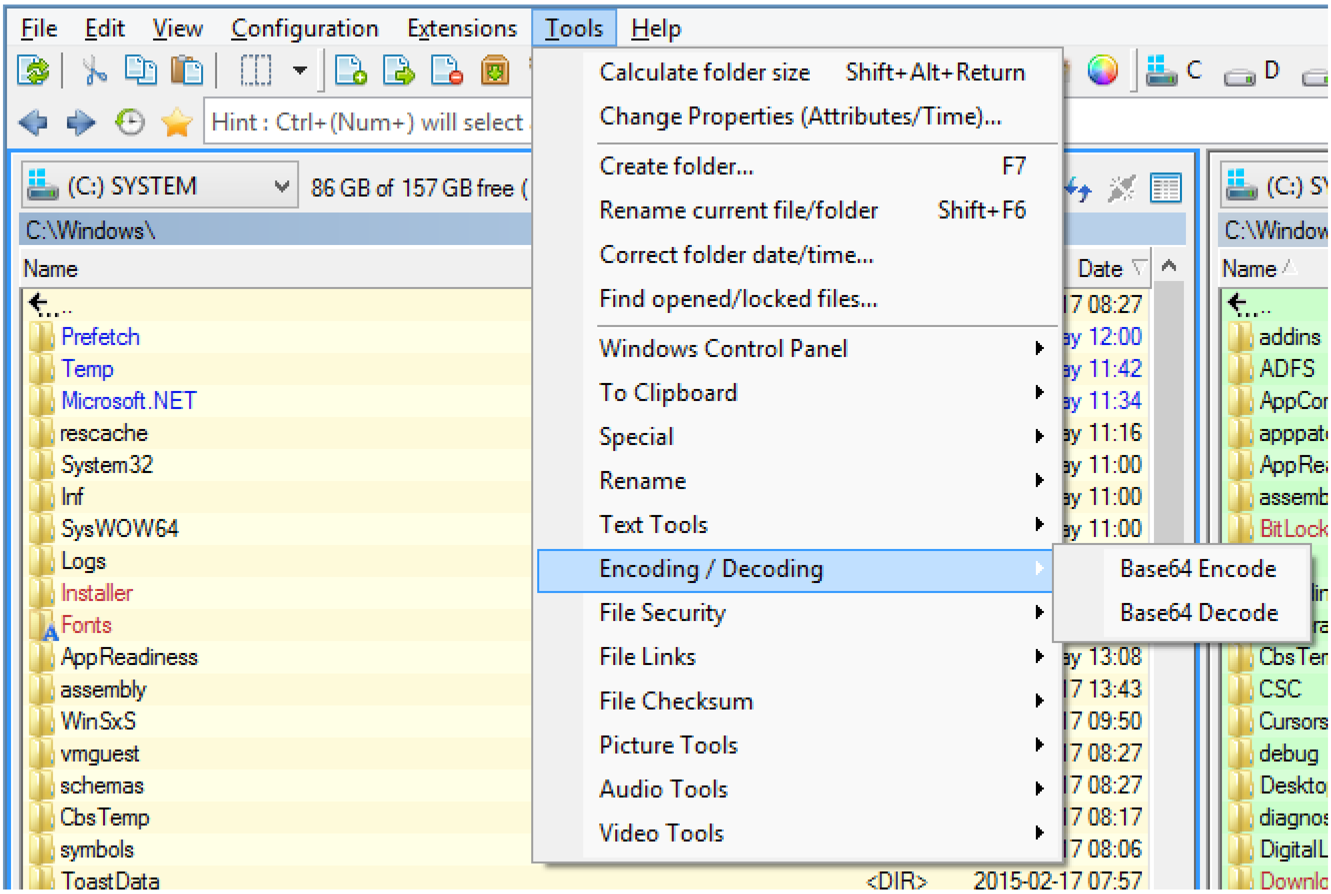
Enable this if you want to use UTF8 encoding for all files identified as ASCII.
File encoding is auto-detected but sometimes it is not possible to accurately detect whether a file is ASCII or UTF8. This options will force the usage of UTF8.

## Silent - Show no dialogs

When enabled there will be no confirmation dialogs shown for any match found. "Replace All" is assumed and no error dialog will be shown.
Errors will still be logged to the application log.

# Base 64 - Encoding and Decoding

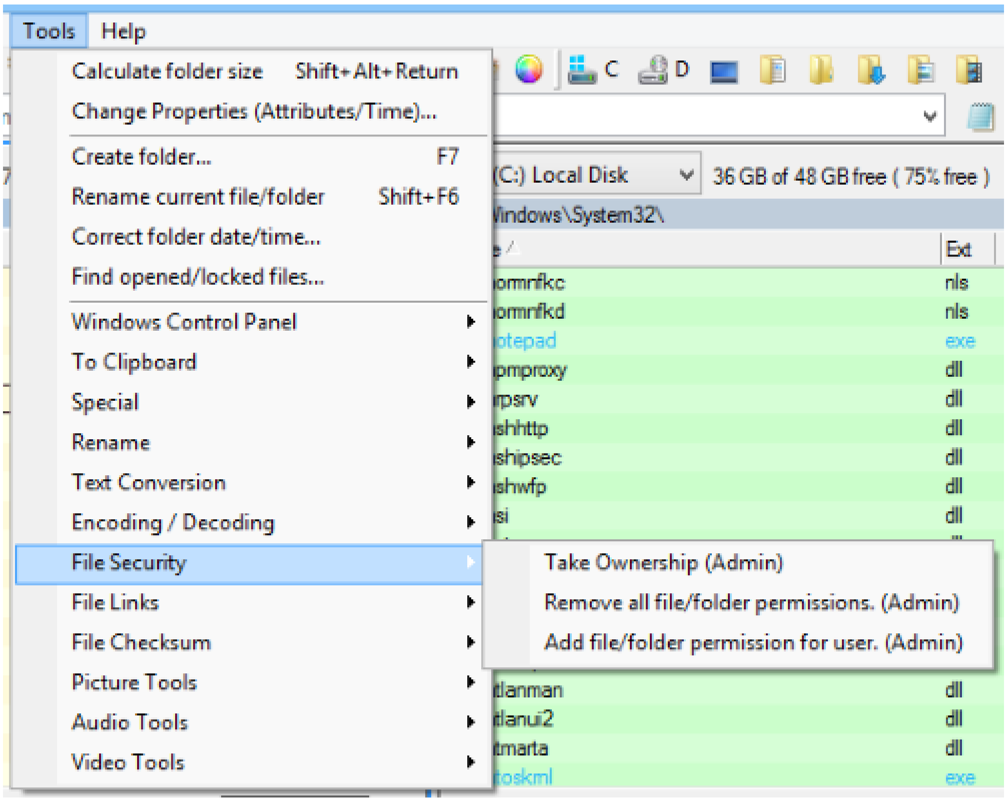
The Encoding and Decoding commands are found under the Tools menu.
There are commands to encode or decode all the selected files into/from BASE64 format.



Encoding a file into base64 format is done if you want to convert a binary file into a format that is text-friendly. Base64 encoded files grow about 25-50% in size compared to their binary format.
Decoding a base64 file will turn the file back into its original form.

Read more about base64 at wikipedia here.

# File Security


Tools
Help
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel
To Clipboard
Special
Rename
Text Conversion
Encoding / Decoding
File Security
File Links
File Checksum
Picture Tools
Audio Tools
Video Tools
Take Ownership (Admin)
Remove all file/folder permissions. (Admin)
Add file/folder permission for user. (Admin)
(C:) Local Disk
36 GB of 48 GB free ( 75% free )
Windows\System32\
Ext

Under the Tools menu is a **File Security** entry with which you can change permissions for files and folders. This function requires Administarator permission to operate, so you may need to run Multi Commander as an Administrator.

The File Security submenu provides the following options:

## Take Ownership

Allows you become the owner of the selected files and folders.

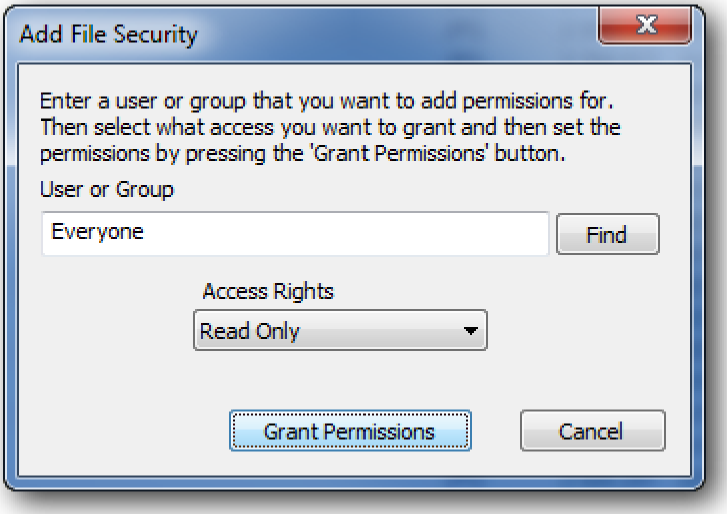
## Remove all permissions

This removes permissions for all users and groups from the selected files and folders. Note: *no-one will have access to the files after this change*. Use the *Add Permissions* command to add permission for yourself and/or others if needed.

## Add Permissions

This adds permissions for users to the selected files and folders. You can easily add read-only access or read/write or full-control.

If you want to give everyone access to a file/folder you can add read/write or full-control access to the group **Everyone** for the selected files/folders.



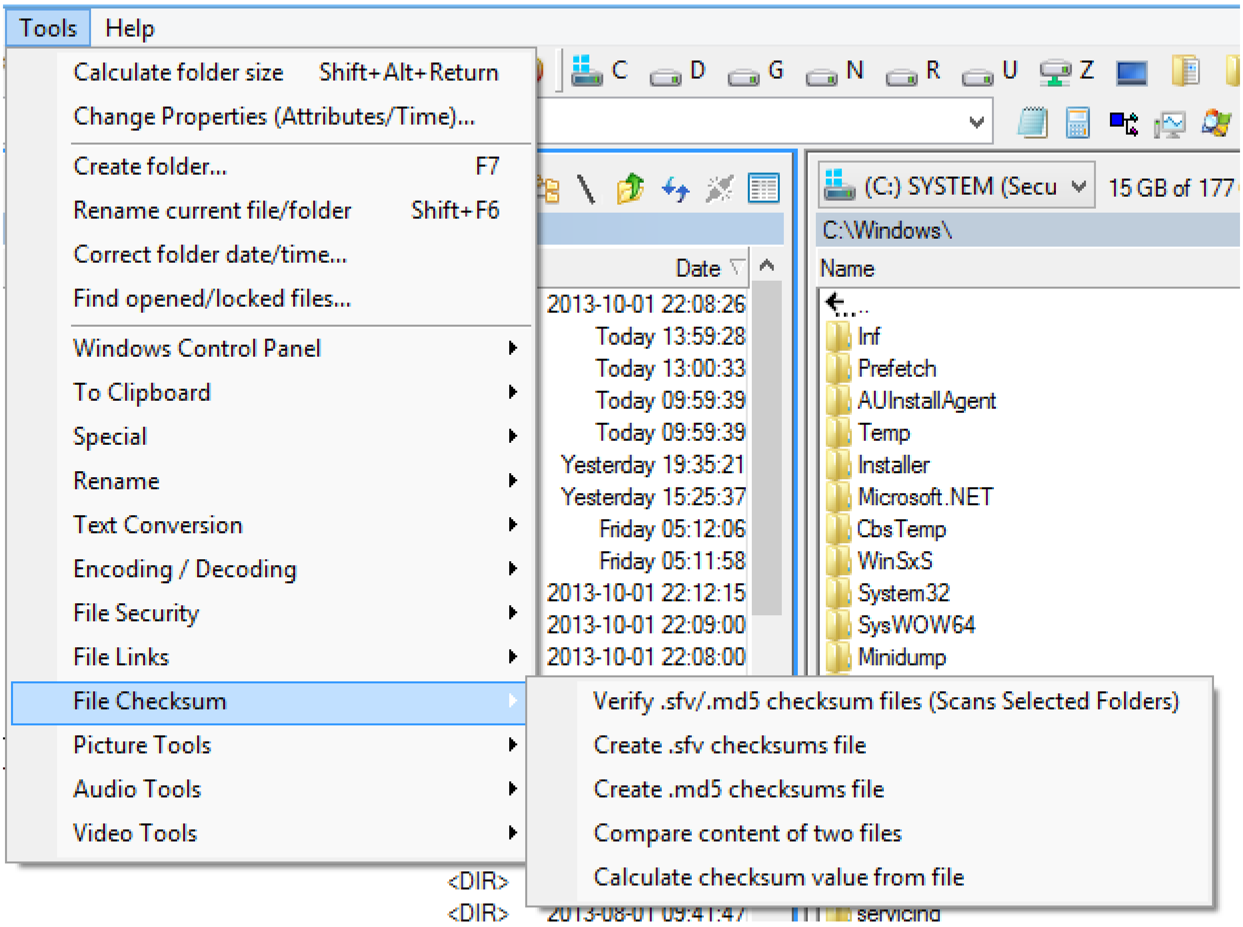
Enter a user or group that you want to add permissions for. Then select what access you want to grant and then set the permissions by pressing the 'Grant Permissions' button.

User or Group: Everyone

Access Rights: Read Only

# File Checksum Tools

The File Checksum tools under the Tools menu are quick commands for the File CheckSum Extension


Tools
Help
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel
To Clipboard
Special
Rename
Text Conversion
Encoding / Decoding
File Security
File Links
File Checksum
Picture Tools
Audio Tools
Video Tools
Verify .sfv/.md5 checksum files (Scans Selected Folders)
Create .sfv checksums file
Create .md5 checksums file
Compare content of two files
Calculate checksum value from file
(C:) SYSTEM (Secu
15 GB of 177
C:\Windows\
Name
Date
Inf
Prefetch
AUInstallAgent
Temp
Installer
Microsoft.NET
CbsTemp
WinSxS
System32
SysWOW64
Minidump
servicing

## Verify .sfv/.md5 Checksum files (Scans Selected Folders)

This will scan all selected folder recursively for .sfv/.md5 checksum files. It will then start the File Checksum Extension in the opposite panel and add to it all the .sfv/.md5 files that are found. It will then automatically start a verify process of the added checksum files.

## Create .sfv checksums file

This will start the File Checksum Extension in the opposite panel and automatically add all the selected files to a new file checksum of .SFV (CRC32) type.

## Create .md5 checksums file

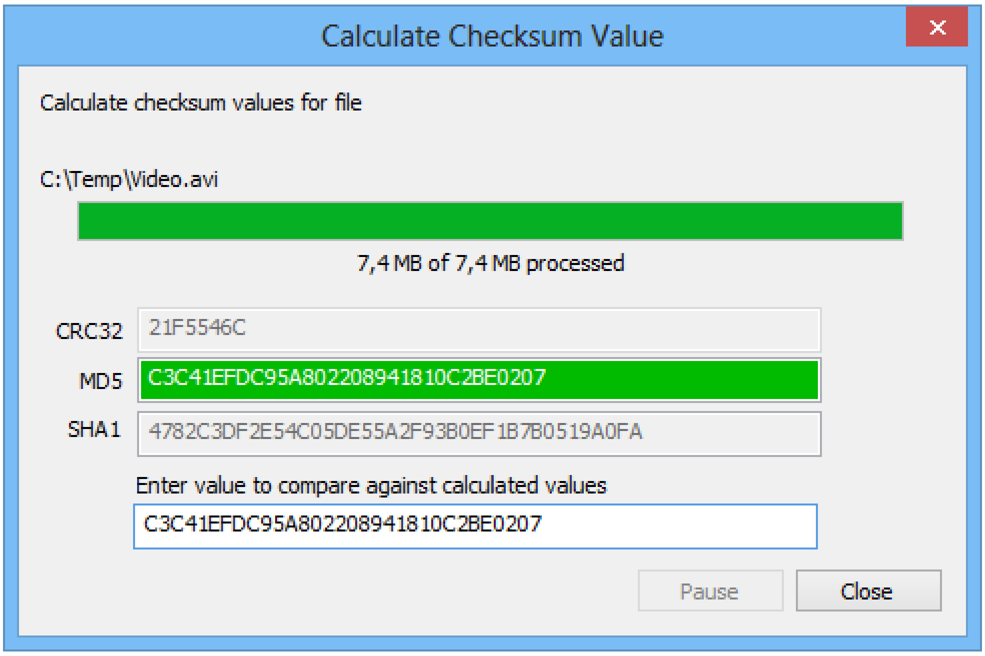
This will start the FileChecksum extension in the opposite panel and automatically add all the selected files to a new file checksum of MD5 type.

## Compare content of two files

This will compare the content of two files by by calculating checksum values. It will take the first selected from the source panel and the first selected file from the target panel and compare them.

## Calculate checksum value from file

This will calculate all supported checksum values for the selected file.
It will calculate CRC32, MD5 and SHA1 values. If you enter a checksum value in the input field it will compare that value aginst the calcuated values and if a match is found the appropriate field will turn green.



Calculate Checksum Value

Calculate checksum values for file

C:\Temp\Video.avi

7,4 MB of 7,4 MB processed

CRC32 21F5546C

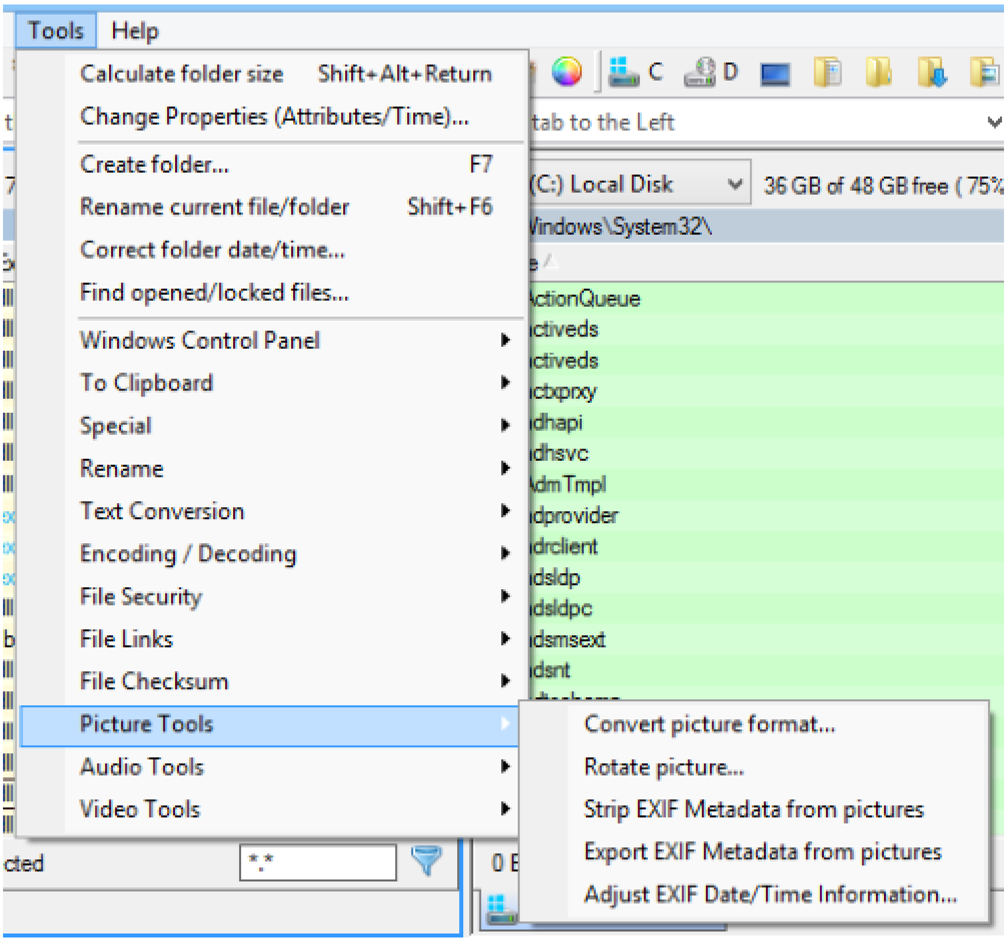
MD5 C3C41EFDC95A802208941810C2BE0207

SHA1 4782C3DF2E54C05DE55A2F93B0EF1B7B0519A0FA

Enter value to compare against calculated values

C3C41EFDC95A802208941810C2BE0207

# Picture Tools


Tools
Help
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel
To Clipboard
Special
Rename
Text Conversion
Encoding / Decoding
File Security
File Links
File Checksum
Picture Tools
Audio Tools
Video Tools
Convert picture format...
Rotate picture...
Strip EXIF Metadata from pictures
Export EXIF Metadata from pictures
Adjust EXIF Date/Time Information...
(C:) Local Disk
36 GB of 48 GB free ( 75%
Windows\System32\

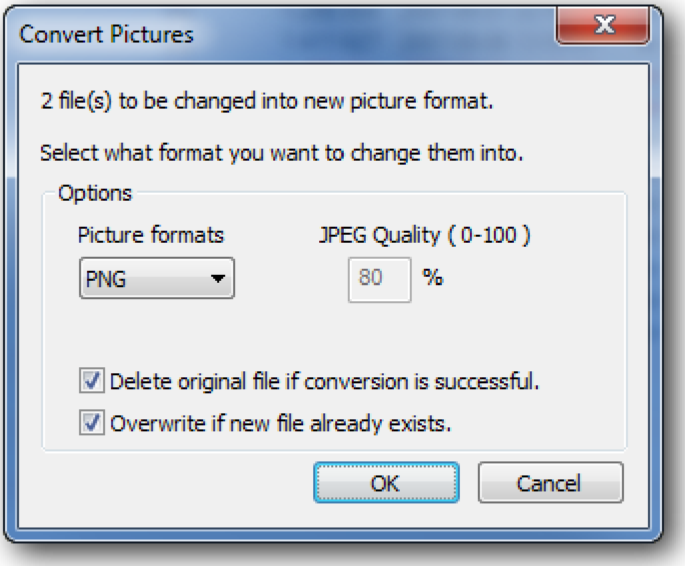
Under the Tools menu is a **Picture Tools** option that opens a submenu containing the following options:

## Convert Picture Format...

This converts all selected picture files into a specified format.

Supported target picture formats are: *JPEG*, *PNG* and *Bitmap (BMP)*.

Options that may be selected allow you to delete the original file if successful, and/or overwrite if the target file already exists.



Convert Pictures

2 file(s) to be changed into new picture format.

Select what format you want to change them into.

Options

Picture formats: PNG

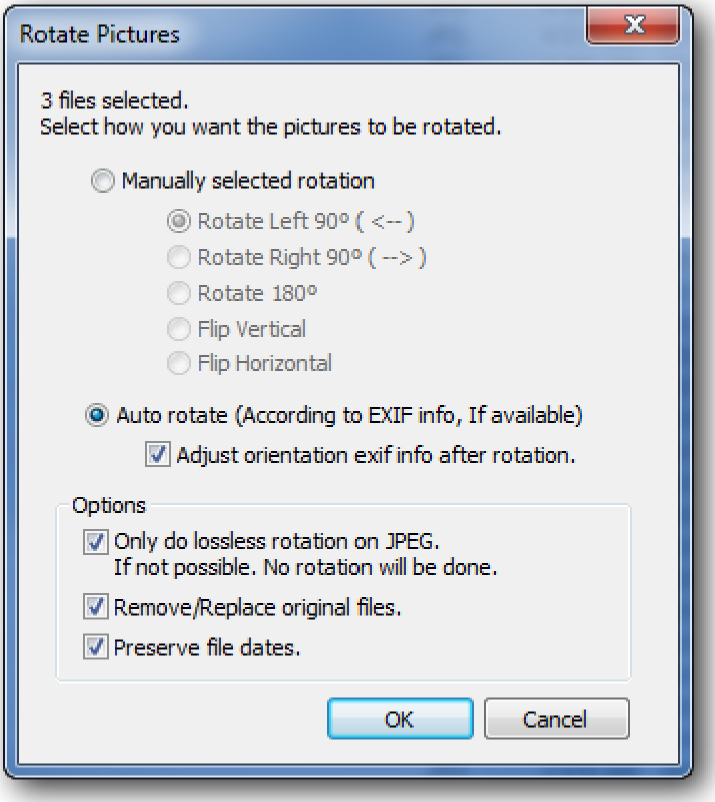
JPEG Quality ( 0-100 ): 80 %

☑ Delete original file if conversion is successful.

☑ Overwrite if new file already exists.

# Rotate Pictures

This rotates the selected picture(s) according to the selected rotation or flip settings.



Rotate Pictures

3 files selected.
Select how you want the pictures to be rotated.

○ Manually selected rotation

● Rotate Left 90º ( <-- )
○ Rotate Right 90º ( --> )
○ Rotate 180º
○ Flip Vertical
○ Flip Horizontal

● Auto rotate (According to EXIF info, If available)

☑ Adjust orientation exif info after rotation.

Options

☑ Only do lossless rotation on JPEG.
If not possible. No rotation will be done.

☑ Remove/Replace original files.

☑ Preserve file dates.

## Auto Rotate

**Auto Rotate** reads the *EXIF* information from the picture file; if orientation information is present the image is rotated according to that information.

## Lossless JPEG Rotation

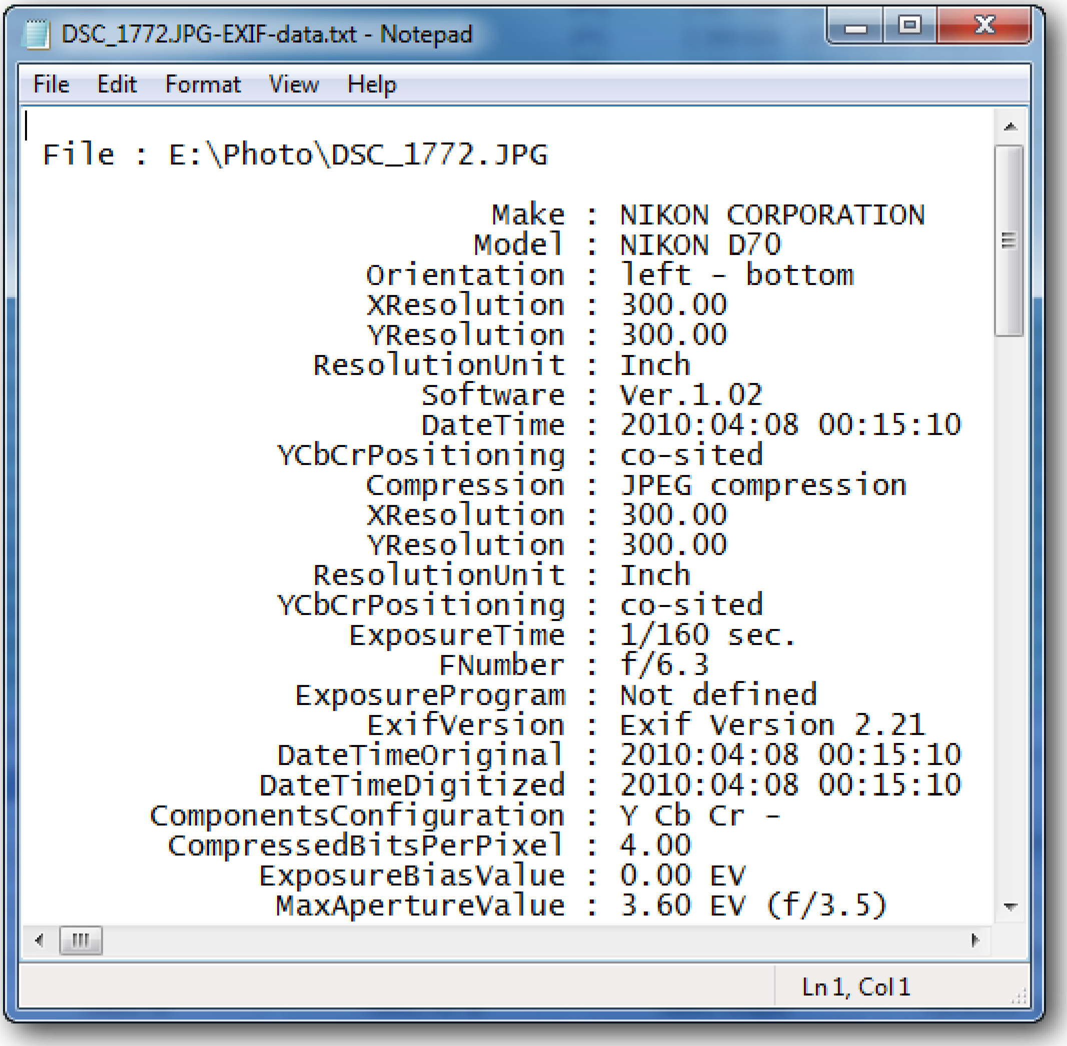
If a picture's height and width are divisible by 16 then it is possible to rotate the image without re-encoding it and without loss of quality. If the option **Only do lossless rotation on JPG** is enabled it will rotate pictures only if it is possible to do so without quality loss; otherwise it will skip rotating that picture.

# Strip EXIF Information

Removes all *EXIF* information from the selected picture files.

# Export EXIF Information

Exports all *EXIF* information from the selected pictures into text files. The text files will have the same name as the picture files but with 'EXIF-data' appended to them.



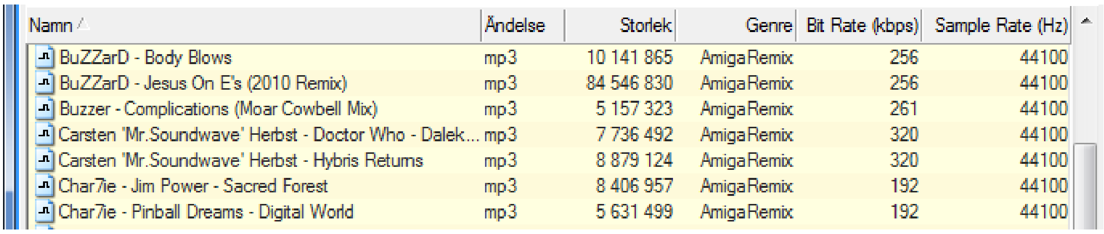
DSC_1772.JPG-EXIF-data.txt - Notepad
File Edit Format View Help
Ln 1, Col 1

```
File : E:\Photo\DSC_1772.JPG

                   Make : NIKON CORPORATION
                  Model : NIKON D70
            Orientation : left - bottom
            XResolution : 300.00
            YResolution : 300.00
         ResolutionUnit : Inch
               Software : Ver.1.02
               DateTime : 2010:04:08 00:15:10
       YCbCrPositioning : co-sited
            Compression : JPEG compression
            XResolution : 300.00
            YResolution : 300.00
         ResolutionUnit : Inch
       YCbCrPositioning : co-sited
           ExposureTime : 1/160 sec.
                FNumber : f/6.3
        ExposureProgram : Not defined
            ExifVersion : Exif Version 2.21
       DateTimeOriginal : 2010:04:08 00:15:10
      DateTimeDigitized : 2010:04:08 00:15:10
ComponentsConfiguration : Y Cb Cr -
 CompressedBitsPerPixel : 4.00
      ExposureBiasValue : 0.00 EV
       MaxApertureValue : 3.60 EV (f/3.5)
```

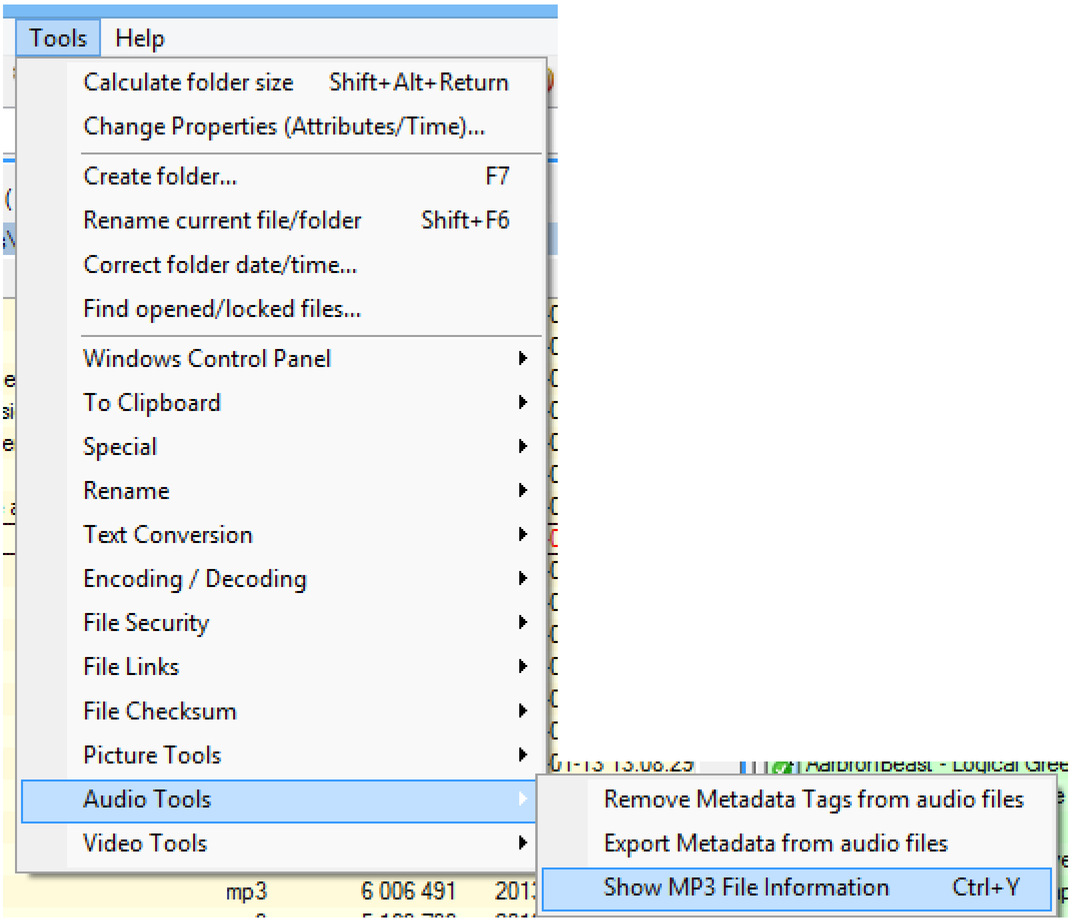
# Audio Tools

*Multi Commander Audio Tools* is a default extension included with Multi Commander.
This extension will add audio properties like ID3 tags as columns for file browsing.

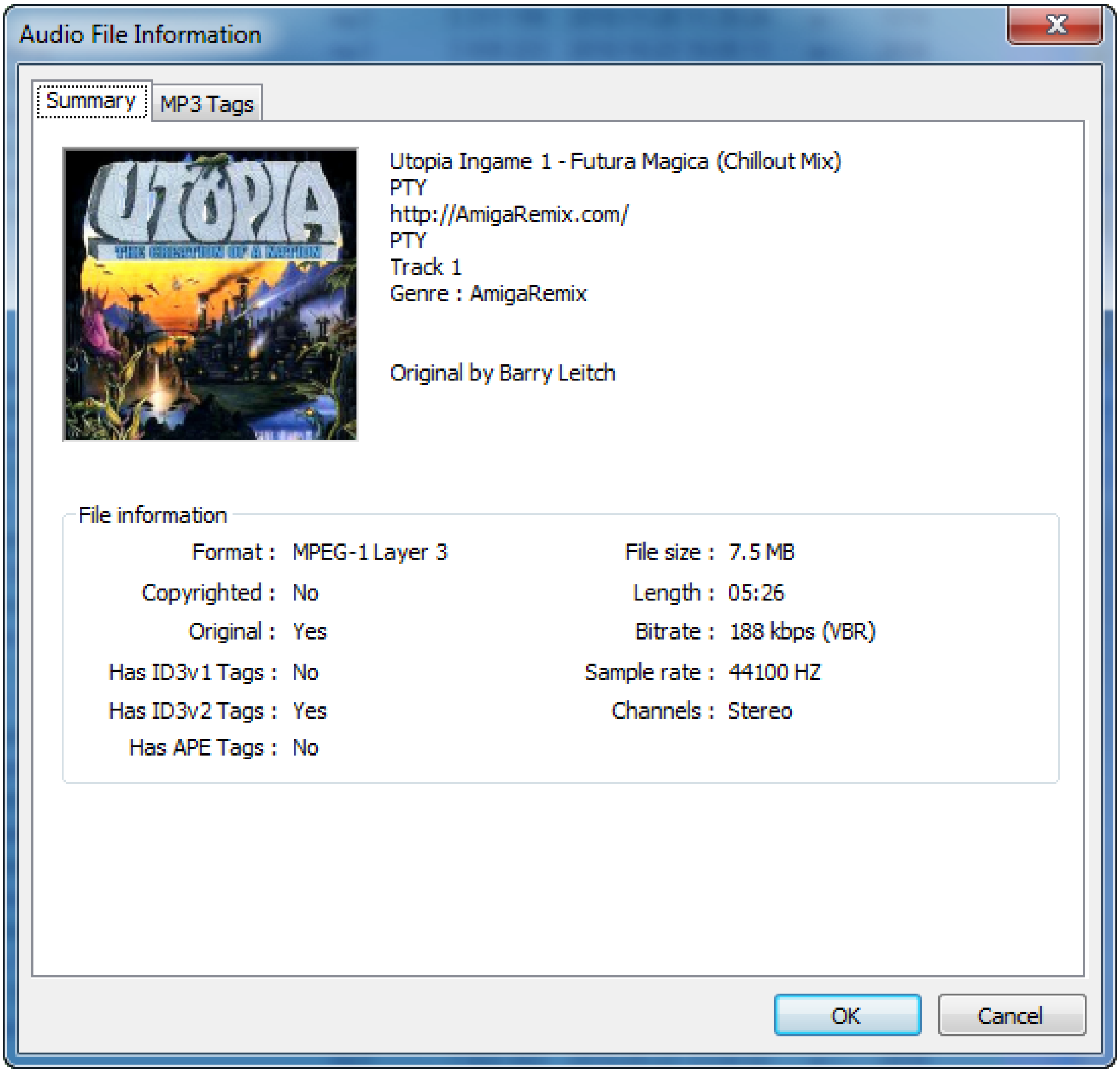


| Namn | Ändelse | Storlek | Genre | Bit Rate (kbps) | Sample Rate (Hz) |
|---|---|---|---|---|---|
| BuZZarD - Body Blows | mp3 | 10 141 865 | AmigaRemix | 256 | 44100 |
| BuZZarD - Jesus On E's (2010 Remix) | mp3 | 84 546 830 | AmigaRemix | 256 | 44100 |
| Buzzer - Complications (Moar Cowbell Mix) | mp3 | 5 157 323 | AmigaRemix | 261 | 44100 |
| Carsten 'Mr.Soundwave' Herbst - Doctor Who - Dalek... | mp3 | 7 736 492 | AmigaRemix | 320 | 44100 |
| Carsten 'Mr.Soundwave' Herbst - Hybris Returns | mp3 | 8 879 124 | AmigaRemix | 320 | 44100 |
| Char7ie - Jim Power - Sacred Forest | mp3 | 8 406 957 | AmigaRemix | 192 | 44100 |
| Char7ie - Pinball Dreams - Digital World | mp3 | 5 631 499 | AmigaRemix | 192 | 44100 |

It also provides several audio-related tools, for example removing all ID3/APE tags from an MP3 file, and exporting all meta data like ID3 or APE tags and audio properties from an audio file into a text file.


Tools
Help
Calculate folder size Shift+Alt+Return
Change Properties (Attributes/Time)...
Create folder... F7
Rename current file/folder Shift+F6
Correct folder date/time...
Find opened/locked files...
Windows Control Panel
To Clipboard
Special
Rename
Text Conversion
Encoding / Decoding
File Security
File Links
File Checksum
Picture Tools
Audio Tools
Video Tools
Remove Metadata Tags from audio files
Export Metadata from audio files
Show MP3 File Information Ctrl+Y

MP3 file information will be shown in a Window where the ID3 tags can be viewed and edited.



Utopia Ingame 1 - Futura Magica (Chillout Mix)
PTY
http://AmigaRemix.com/
PTY
Track 1
Genre : AmigaRemix

Original by Barry Leitch

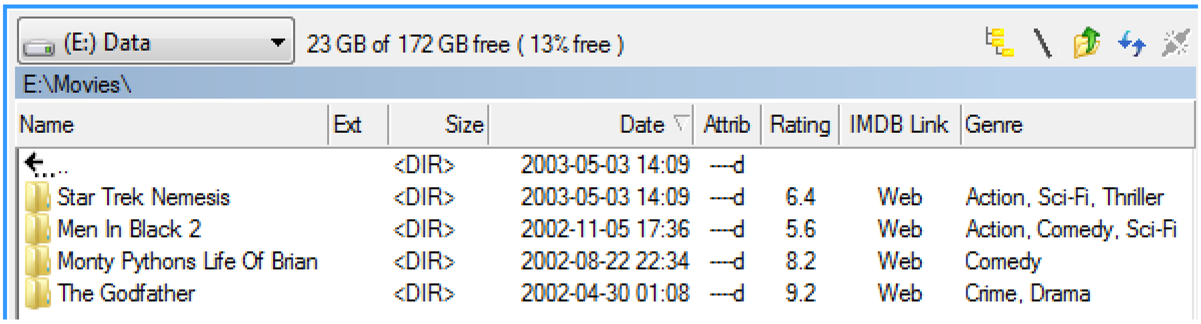
File information

| | | | |
|---|---|---|---|
| Format : | MPEG-1 Layer 3 | File size : | 7.5 MB |
| Copyrighted : | No | Length : | 05:26 |
| Original : | Yes | Bitrate : | 188 kbps (VBR) |
| Has ID3v1 Tags : | No | Sample rate : | 44100 HZ |
| Has ID3v2 Tags : | Yes | Channels : | Stereo |
| Has APE Tags : | No | | |

# Video Tools

## Movie information in columns

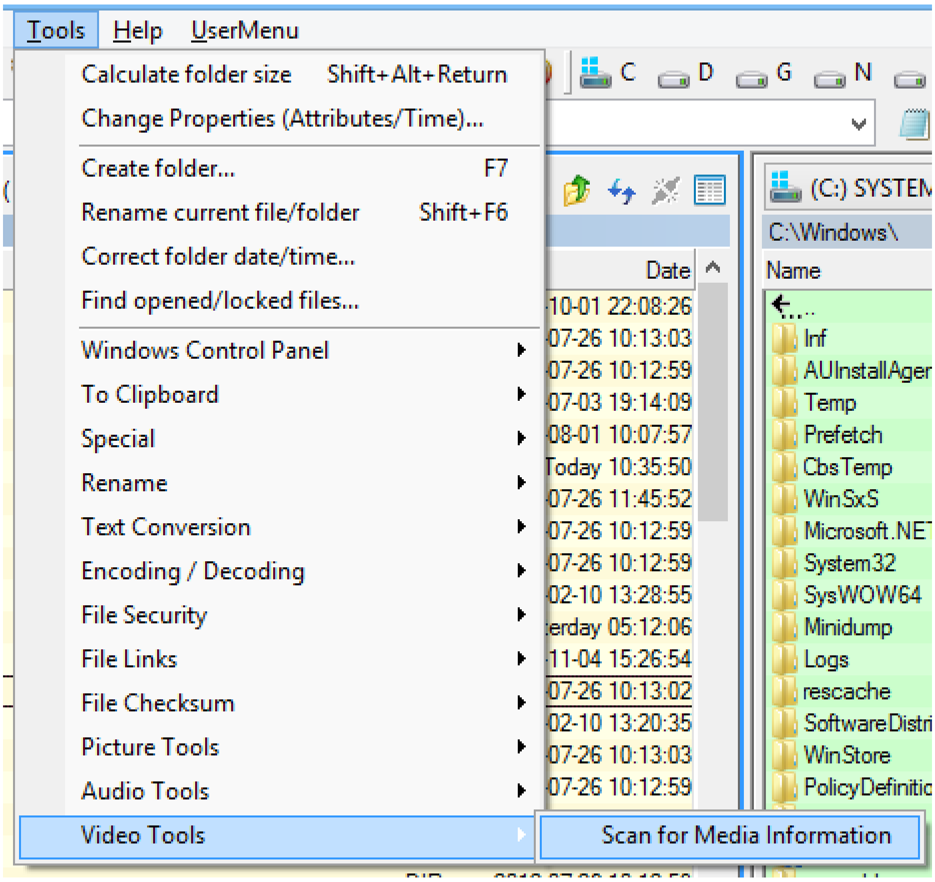
Several users have asked for a way to show columns with movie information on movie files they have on their drives. With the help of some of you there is now a version of this feature working.



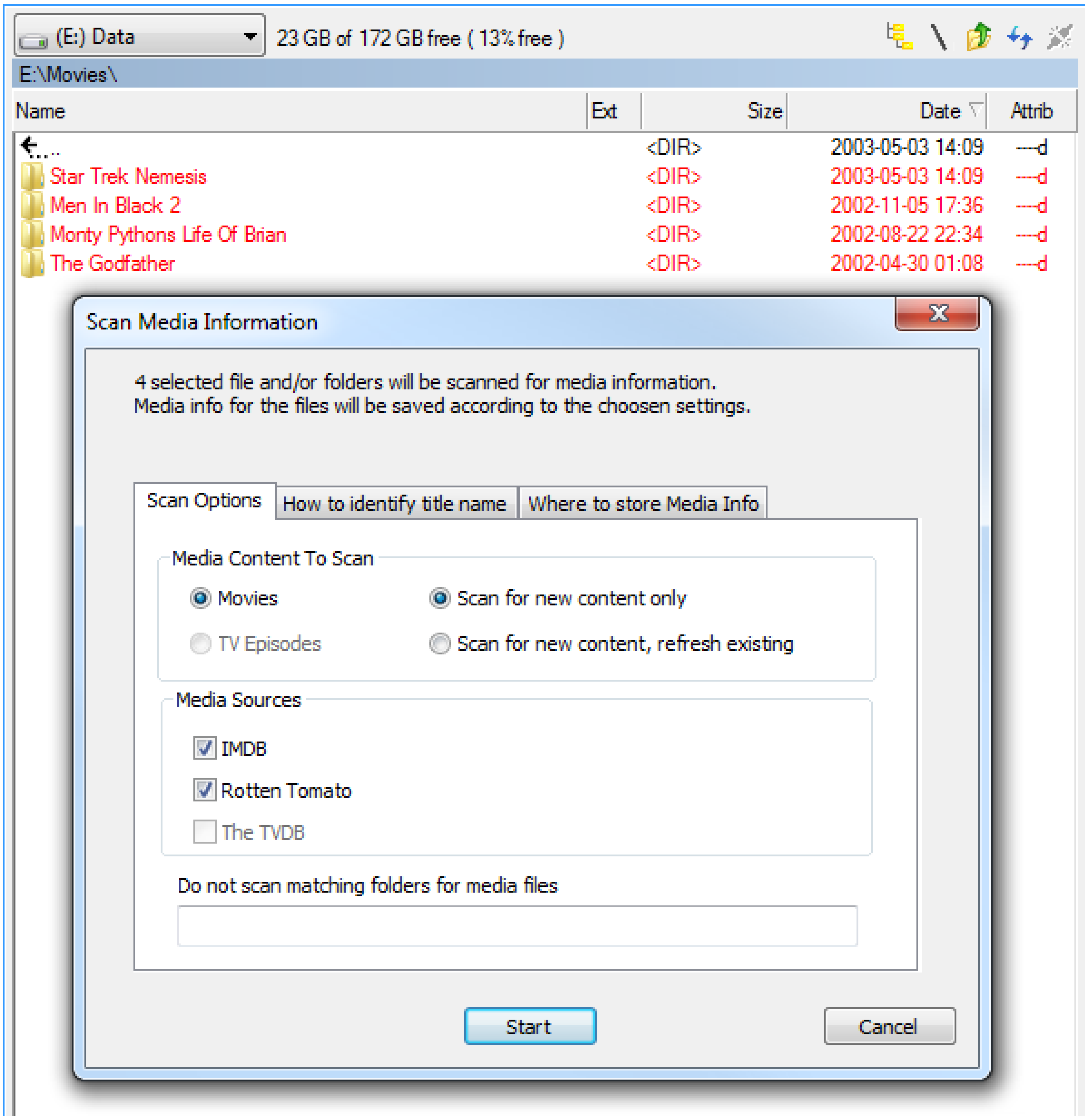
| Name | Ext | Size | Date | Attrib | Rating | IMDB Link | Genre |
|---|---|---|---|---|---|---|---|
| .. | | <DIR> | 2003-05-03 14:09 | ---d | | | |
| Star Trek Nemesis | | <DIR> | 2003-05-03 14:09 | ---d | 6.4 | Web | Action, Sci-Fi, Thriller |
| Men In Black 2 | | <DIR> | 2002-11-05 17:36 | ---d | 5.6 | Web | Action, Comedy, Sci-Fi |
| Monty Pythons Life Of Brian | | <DIR> | 2002-08-22 22:34 | ---d | 8.2 | Web | Comedy |
| The Godfather | | <DIR> | 2002-04-30 01:08 | ---d | 9.2 | Web | Crime, Drama |

(If you Ctrl+double-click on "Web" in the IMDB Link column, the browser will open to the page for that movie on imdb.com.)

Before you can show the movie information in columns, it must be retrieved and cached locally.
This is done by selecting **Menu->Tools->Video Tools->Scan for Media Information**.



You then need to configure how the tool should identify movies, how to store the media information and more...



(E:) Data 23 GB of 172 GB free ( 13% free )

E:\Movies\

| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| .. |  | <DIR> | 2003-05-03 14:09 | ----d |
| Star Trek Nemesis |  | <DIR> | 2003-05-03 14:09 | ----d |
| Men In Black 2 |  | <DIR> | 2002-11-05 17:36 | ----d |
| Monty Pythons Life Of Brian |  | <DIR> | 2002-08-22 22:34 | ----d |
| The Godfather |  | <DIR> | 2002-04-30 01:08 | ----d |

Scan Media Information

4 selected file and/or folders will be scanned for media information.
Media info for the files will be saved according to the choosen settings.

Scan Options | How to identify title name | Where to store Media Info

Media Content To Scan

● Movies ● Scan for new content only

○ TV Episodes ○ Scan for new content, refresh existing

Media Sources

☑ IMDB

☑ Rotten Tomato

□ The TVDB

Do not scan matching folders for media files

To be able to identify your movies you must configure how to identify the movie title: from the file or folder name, for example. (To make it easier for the system to figure out the Movie Title it is recommended to store the movie file in a folder that is named the same as the movie title.)
Two sources are available for getting movie information, *IMDB* and *Rotten Tomatoes*.
(Retrieving information for TV Episodes is not supported yet.)

If you only want to scan for new movies that you have not already indexed, select **Scan for new content only**. If a movie already has a *.mediainfo file or is listed in the local MediaDB, then the movie is skipped.

If you want to re-scan movies you have previously scanned, select **Scan for new content, refresh existing**.

## Where and How to store the Media Information

You can store the Media information either: as a *.mediaInfo file (located in the same folder as the movie file with the same name as the movie filesbut with the file extension ".mediainfo") or in a MediaDB or both.

Storing information in a MediaDB allows faster access when showing the columns, especially if you want to show movie information on the folder that contains the movie. But if you have your movie files on a NAS or access them over the network from another computer and you access these movies from multiple computers, then you need to rescan your movie archive on every computer you access it from, then store them as *.mediaInfo files that are stored with the movie files.

To get the best of both worlds, ie. the speed of access and without the need to re-index the movies on multiple computers, you can elect to store them in both locations. If you scan for new content and both *.mediaInfo storage and MediaDB storage are selected and an existing *.mediainfo fileis found, it will be copied to the MediaDB on the current computer. Just make sure that the option "Scan for new content only" is selected, or the tool will try to update it.

## Tips and Tricks

If you always want to view particular columns for movie information when you open your movie folder, you can create a column set. This column set can then be automatically applied when going to that location.

Read about Column Sets

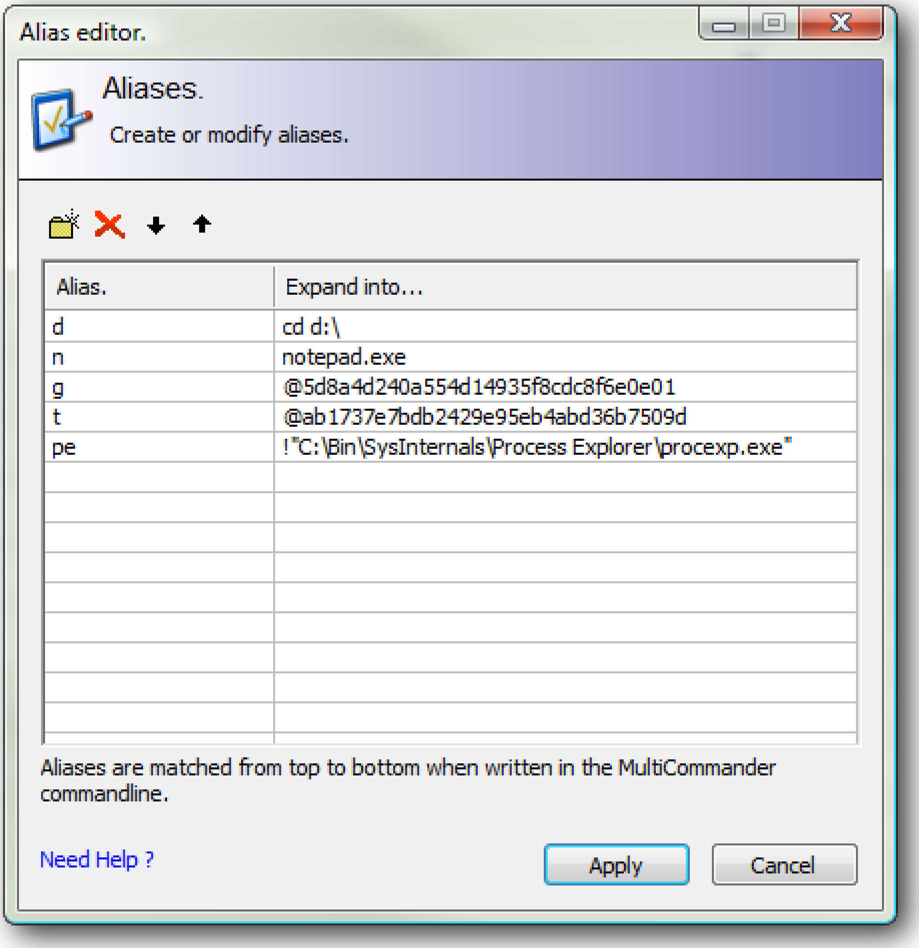
# Managing Aliases

**Aliases** are abbreviations for commands that can be used on the Multi Commander Command Line

Instead of writing a long command or path you can use the Alias Manager to create an *alias* for that command. An *alias* is a one-word abbreviation that can be automatically expanded into the complete command. Everything that is written after the alias is appended as a parameter to the expanded command.

For example, if you create an alias for **notepad.exe** and call it "**n**", then you can write "**n mytext.txt**" in the Multi Commander Command Line and it will be expanded into "**notepad.exe mytext.txt**" before it is executed.

The Alias Manager is found under **Configuration** in the Menu Bar.



Alias editor.

Aliases.

Create or modify aliases.

| Alias. | Expand into... |
|---|---|
| d | cd d:\ |
| n | notepad.exe |
| g | @5d8a4d240a554d14935f8cdc8f6e0e01 |
| t | @ab1737e7bdb2429e95eb4abd36b7509d |
| pe | !"C:\Bin\SysInternals\Process Explorer\procexp.exe" |

Aliases are matched from top to bottom when written in the MultiCommander commandline.

## Run a User Defined Command

If the 'expand into' text is prefixed with "@" followed with the unique id for a **User Defined Command**, it will run that command. (Eg.  @8c83a15a69394bd3a0ad4ba3a58515a0).

## Force File To Be Executed

'Expand into' text that is prefixed with "!" will be launched by the Windows Shell. In the example image above, the alias "**pe**" would expand into a full path to a file, and if that text were not prefixed with "**!**", then instead of launching procexp.exe it would go to that path and set the focus to the procexp.exe file.

## Quick command

From the command line field it is possible to use the built-in quick command "alias" or "alias2" to create an alias command.

```
Usage Syntax
alias <alias>=<expand into>
alias2 <alias>
```

The command **alias2** takes the current path and assigns it to the specified alias.

Example

```
alias pic=E:\MyPictures
```

If the current folder is E:\MyPictures then it is enough to write

```
alias2 pic
```

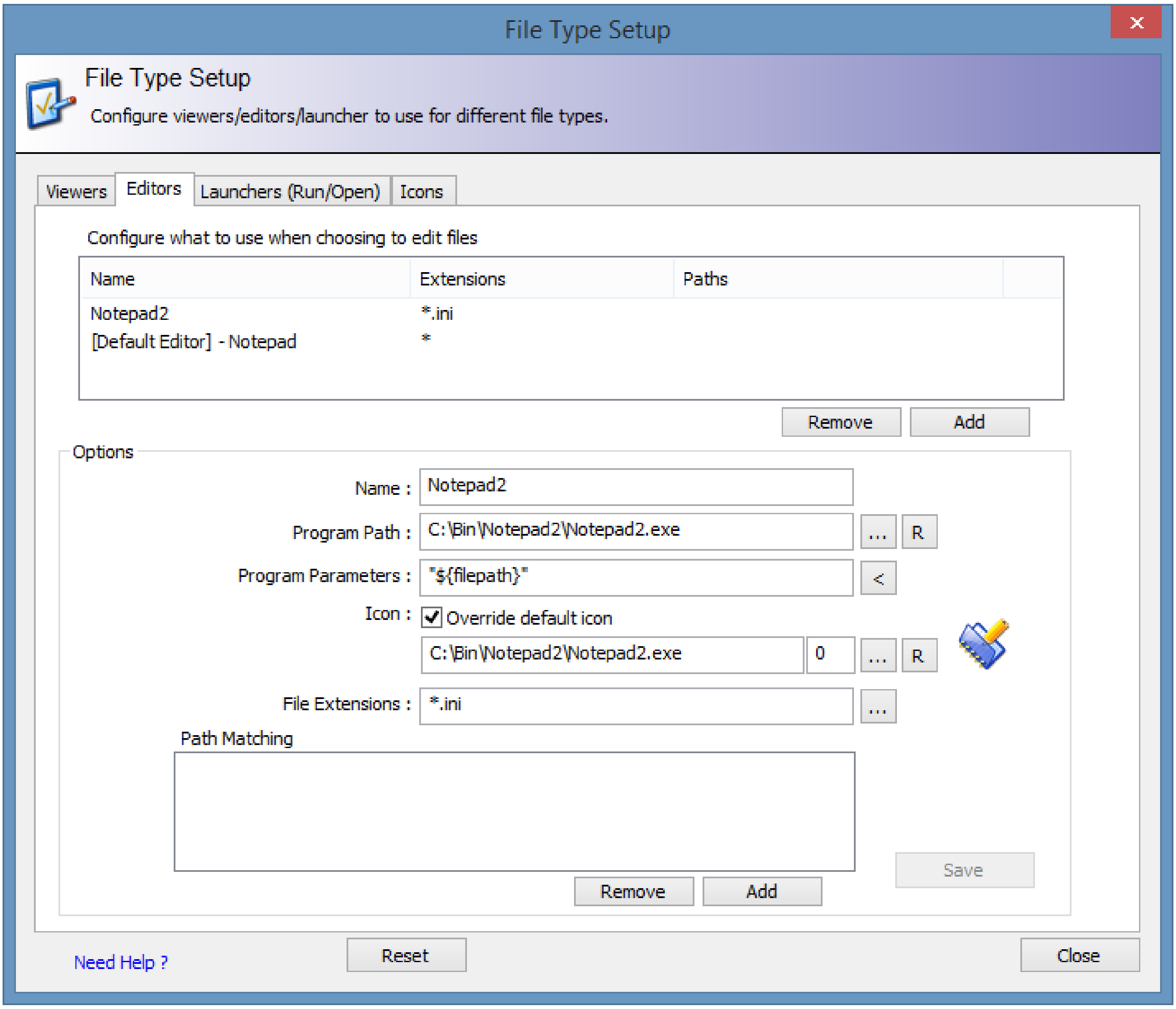
# File Type Setup

**File Type Setup** is used to configure how Multi Commander should handle different file types. The configuration here will override the file associations settings set in Windows.

The setup is divided into separateconfigurable actions: View, Edit, Run/Open and Icon.

Info

The configuration of which FileSystem Extensions should be associated with different file extension is NOT configured here.
(Eg. what file extensions the Zip FileSystem extensions should use)
It is configured under each File Extension in the Extensions and Plug-ins Manager.



File Type Setup

File Type Setup

Configure viewers/editors/launcher to use for different file types.

Configure what to use when choosing to edit files

| Name | Extensions | Paths |
|---|---|---|
| Notepad2 | *.ini | |
| [Default Editor] - Notepad | * | |

Options

Name : Notepad2

Program Path : C:\Bin\Notepad2\Notepad2.exe

Program Parameters : "${filepath}"

Icon : ☑ Override default icon

C:\Bin\Notepad2\Notepad2.exe 0

File Extensions : *.ini

Path Matching

Normally, when a file is run/opened, Windows will decide which program should be started for that file type.
What you The configure here is used before Windows gets involved and if running Multi Commander as a portable installation you can configure what other portable programs Windows should use.

When you decide to **View/Edit** or **Run/Open** a file from Multi Commander it will go through the list of configurations and try to find a matching one. It will match configurations based on the "Extensions" field. You can also specify that a specific program should be valid only for certain paths.
For example, two different viewers are used for viewing jpg files, but for files located in "*D:\Photos*" perhaps you want to use a particular one. For all other locations the other viewer is used.

If no matching configuration entry is found the **[Default Editor] / [Default Viewer]** program is used.

To change the default viewers/editors that are used change the **[Default Editor] / [Default Viewer]** entries under Viewers/Editors.

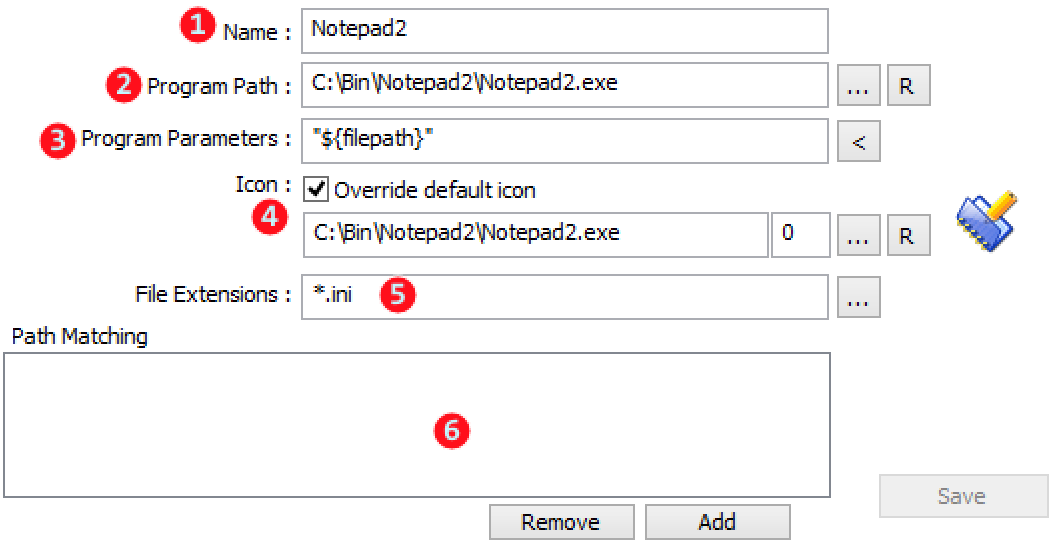
Icon setup is used if the default program icon should be overridden. Viewers/Editors can also override the icon. I so it will be listed in the icon page. Running Multi Commander in portable mode you can make sure that the icons always look the same.

Press the **Add** button under the list of setup entries to add a new one. Select existing entry and press the **Remove** the button to remove an entry. **[Default ... ]** Entries cannot be deleted.

Pressing the **Reset** button will reset all configurations.

## Viewer / Editor / Run/Open

The following fields can be modified when configuring a Viewer/Editors/Run entry



Name : Notepad2

Program Path : C:\Bin\Notepad2\Notepad2.exe

Program Parameters : "${filepath}"

Icon : ☑ Override default icon

C:\Bin\Notepad2\Notepad2.exe 0

File Extensions : *.ini

Path Matching

### 1. Name

Name of this setup item.

### 1. Program Path / Internal Extension / Windows Action

This field is changed depending on what type is selected. Press "..." then select the program.

- **External Program**

  Any external program can be run.

- **Internal Extension**

  Internal Extensions can register themselves as viewers/editors/launchers. They will then be list as extensions that you can select from.
  For Viewer there exist two default extensions: "MC Picture Viewer" and "MultiDataViewer"

- **Windows Action**

  Choose this if Windows should decide what to do with the file.
  Windows has 3 actions to choose from: default, open, edit.

If an external program has been set, you can press the **[R]** button to convert the path to a relative (to Multi Commander.exe) path.
This is necessary if you are running in portable mode. The selected program must be located on the same drive as Multi Commander.exe.

## 3. Program Parameters / Options

If an internal extension was set, this field will be "**Options**". Then extension-specific options may be entered here.

If an external program was set, this field will be "**Program Parameters**". Here you can add any program-specific parameters that should be passed to the program. Pressing the "**[<]**" button will open a list of special tags that can be added. These tags will be expanded when the external program is run.

## 4. Icon

By checking the option "**Override default icon**" a new icon can be configured. This icon will be used for all matching file extensions and override the default icons that would be used

However, if you have Multiple FileType Setup entries that match the same file extensions, and all of them have the override default icon enabled, then only the first will be used.

## 5. File Extensions

A space-separated list of all file extensions that this setup should affect.

Pressing the "**...**" button will open a window that allows for easier editing of the file extension list.

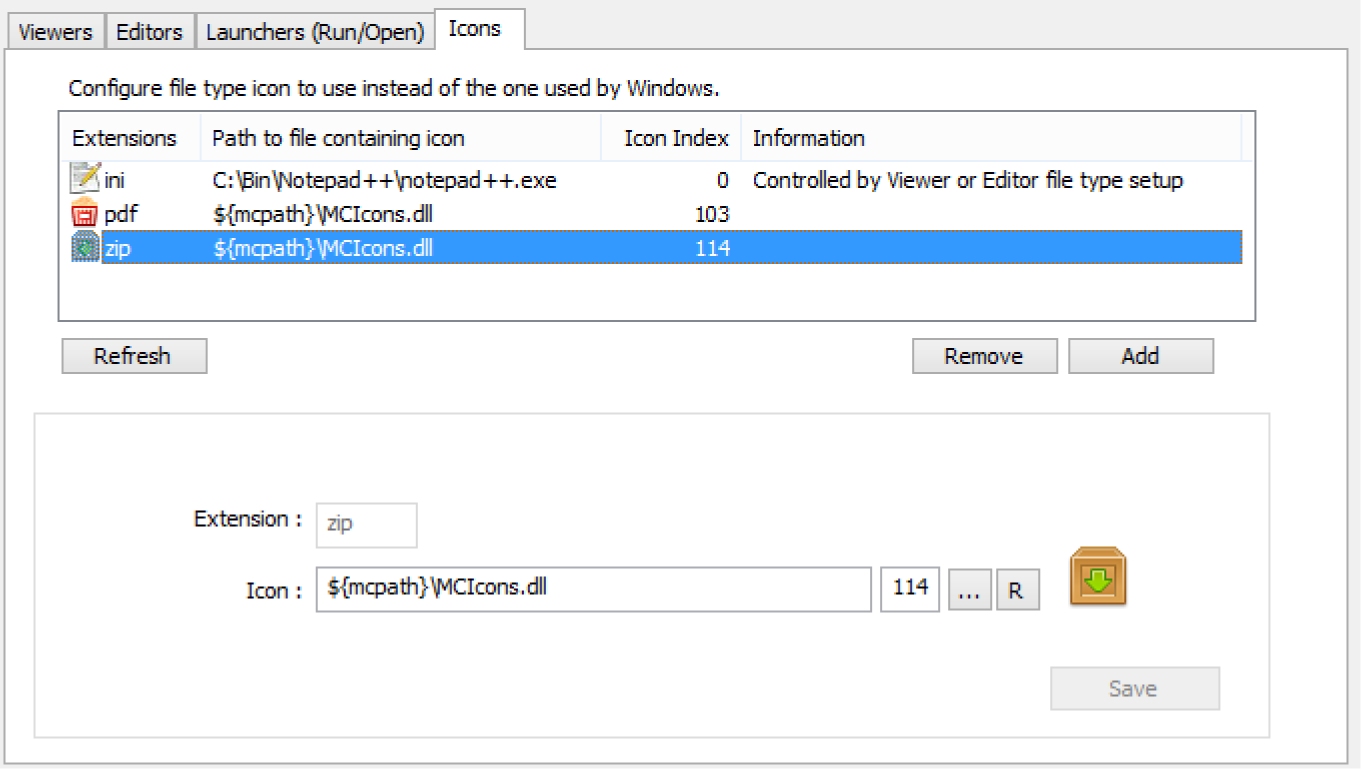
## 6. Path Matching

A file type setup entry can be set to be valid only for a special path(s).
Press the [**Add**] button under the "**Path Matching**" box and add that path there. If you see an "*" in front of the path it means that the Path Matching rules are valid for that path and all its sub-paths.

To remove a Path Matching select it and press [**Remove**]

# Icon

By default Multi Commander will use the icon that Windows has defined for a file type. On this page it is possible to override that.
The list will show all the icons that Multi Commander is overriding



Configure file type icon to use instead of the one used by Windows.

| Extensions | Path to file containing icon | Icon Index | Information |
|---|---|---|---|
| ini | C:\Bin\Notepad++\notepad++.exe | 0 | Controlled by Viewer or Editor file type setup |
| pdf | ${mcpath}\MCIcons.dll | 103 | |
| zip | ${mcpath}\MCIcons.dll | 114 | |

Extension : zip

Icon : ${mcpath}\MCIcons.dll 114

If an icon is overridden by a viewer/editor file type entry then it will be listed here. It is not possible to remove the icon here - that must be done on the Viewer/Editor file type page.

To add an entry press the "**[Add]**" button then enter the file extension that the icon should be shown for.
Enter the path to a .exe/dll/.ico and select the icon idx from that file that should be used.

Pressing the "**[...]**" button opens an Icon Picker window that allows .exe/.dll/.ico files to be browsed and viewed. This makes it easier to find the correct icon.

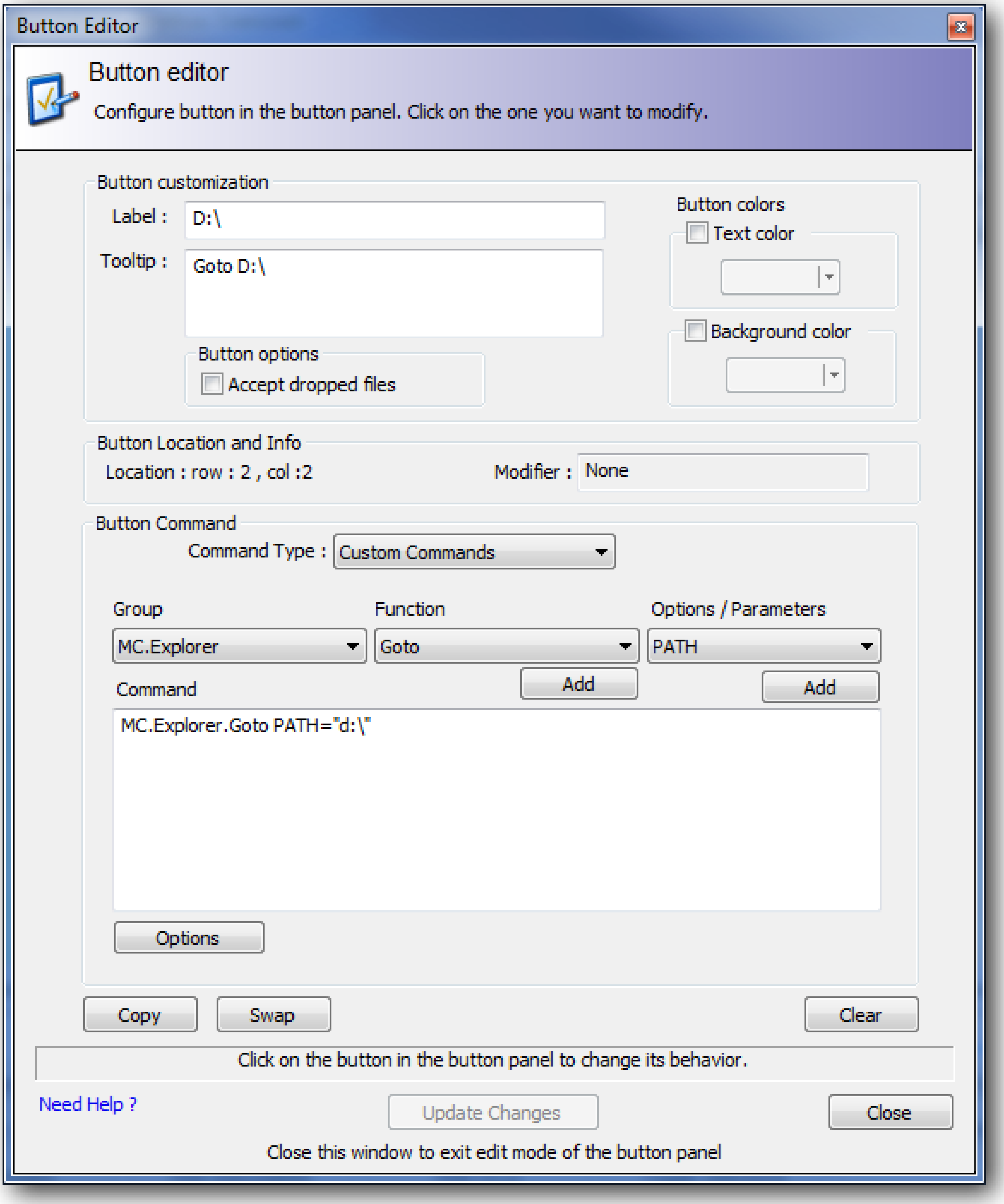
Press the **[R]** button to convert the path to a relative (to Multi Commander.exe) path. This is useful if you are running in portable mode and want to have relative paths.

All internal icons used by Multi Commander are stored in MCIcons.dll, This files also contains some extra icons that can be useful. This file is found at the same location as Multi Commander.exe.

# Button Editor

The Button Editor is used to change and customize the buttons on the Button Panel.

To change how the buttons in the button panel work you must open the **Button Editor** by clicking on **Button Editor in** the **Configuration** menu.



Button Editor

Button editor

Configure button in the button panel. Click on the one you want to modify.

Button customization

Label : D:\

Tooltip : Goto D:\

Button options

□ Accept dropped files

Button colors

□ Text color

□ Background color

Button Location and Info

Location : row : 2 , col :2

Modifier : None

Button Command

Command Type : Custom Commands

Group: MC.Explorer

Function: Goto

Options / Parameters: PATH

Command

```
MC.Explorer.Goto PATH="d:\"
```

Click on the button in the button panel to change its behavior.

Close this window to exit edit mode of the button panel

When the Button Editor is shown the button panel changes to edit mode. **Click on the button** you want to edit. To edit a button in one of its alternative modes hold down a mouse or key modifier to toggle the button panel state to see the button you want to change. *(Ctrl / Shift/ Ctrl+Shift or Right/Middle mouse button).*

There are six kinds of command you can create for a button. These are the same types of command that you can create in the "user defined command" window.

- User Defined Commands
- Internal Commands

- External Commands
- Custom Commands
- Batch Script (.BAT)
- MultiScript

## User Defined Commands

The commands listed are User Defined Commands that you have already created with the User Defined Commands dialog.

Select which command you want to have run when the button is clicked.

## Internal Commands

These are Commands that are either internal to Multi Commander or are extensions (mostly commands that you find in the menu bar).

Two dropdowns will be shown in order. In the first select which module contains the command; in the second select the required command within the module.

## External Commands

These are external programs to be executed.

## Custom Commands

Custom commands are simple commands that are exposed by **Multi Commander** or by an **Extension** or **Plug-in**.

You can also use the helper function list boxes to create the command.

To use them, you first select what **group** of functions you want to add a command from. All Extensions and Plug-ins are located in separate groups. When a group is selected the function list is updated with all functions that are available from that group. Select the **function** that you want to use and press the **'Add'** button; this will add the function to the "**Command**" field. Then select the **option** or **parameter** you want to add. If the parameter ends with an "**=**" sign, then you are required to add additional parameter information.

Examples of some of the most command quick command:

- How to change the view filter
- How to select files and folder
- Launch external program
- Launch External program with file in focus as parameter to it

## Batch Script (.bat)

This is a .bat script that will be generated and run when the button is clicked.

You can insert dynamic tags into the script that will be expanded when the script is generated.

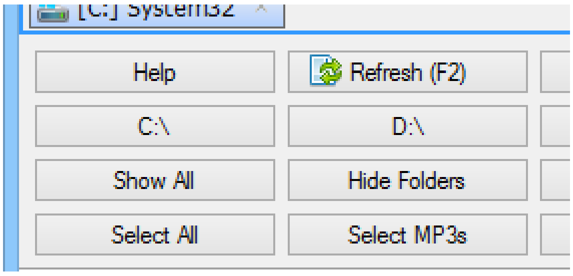
## MultiScript

This is the most advanced type of command you can create. It uses scripts that run under the Multi Commander Script Engine.

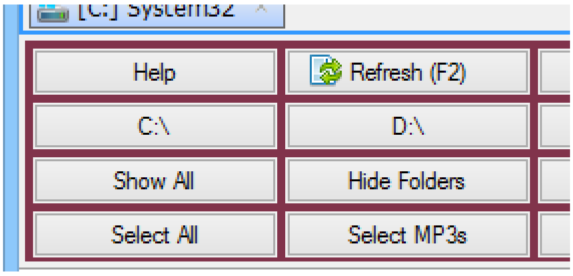
# Button Panel - Wizard Mode

To more easily create commands for the Button Panel, you can can turn on the Button panel *wizard mode*.
When the wizard mode is on, a file or folder can be dropped on to a button and a Wizard window will open in which you can specify how the dropped file should be connected to the button.

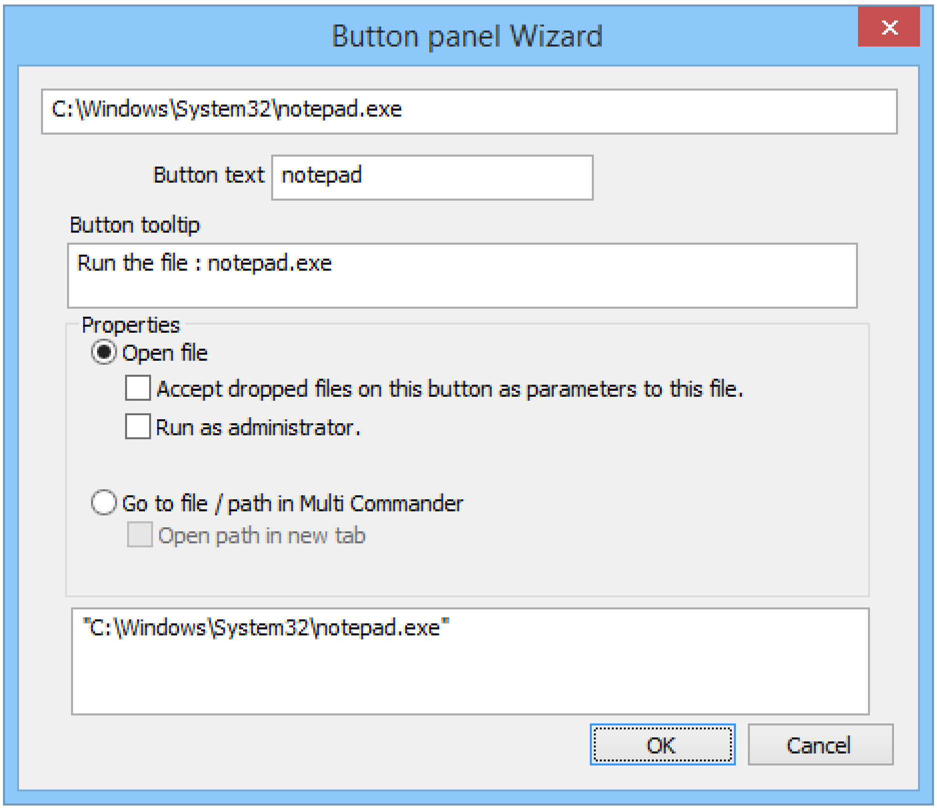
When the Wizard Mode is active you will see that the Button Panel will change its background color.
From



To



When a file or folder now is dropped on to a button the Wizard Window will be shown:



Button panel Wizard

C:\Windows\System32\notepad.exe

Button text: notepad

Button tooltip: Run the file : notepad.exe

Properties
● Open file
□ Accept dropped files on this button as parameters to this file.
□ Run as administrator.

○ Go to file / path in Multi Commander
□ Open path in new tab

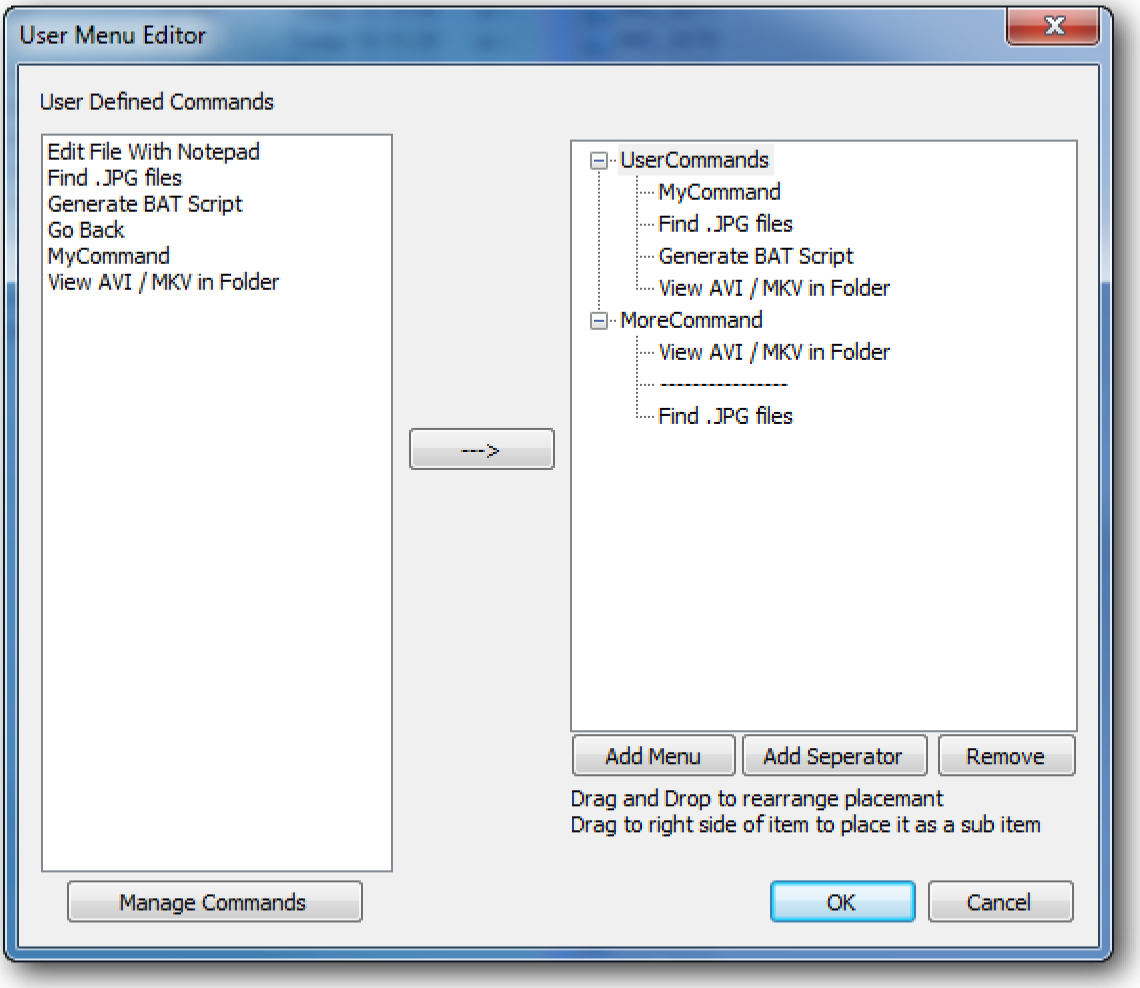
"C:\Windows\System32\notepad.exe"

The name and tooltip are generated automatically but you can change them if you wish. Then you need to specify whether it should generate an Open File command or a Go to File/Path command for the button, so that when the button is pressed the file you dropped on the button either should be launched or the Explorer Panel should go to that file or path.

Pressing the Wizard Mode button again will turn off the Wizard Mode for the Button Panel.

# User Menu Editor

To add your own **User Defined Commands** to the menu you need to start the Menu Customization editor from the Configuration menu.



Edit File With Notepad
Find .JPG files
Generate BAT Script
Go Back
MyCommand
View AVI / MKV in Folder

- UserCommands
  - MyCommand
  - Find .JPG files
  - Generate BAT Script
  - View AVI / MKV in Folder
- MoreCommand
  - View AVI / MKV in Folder
  - ----------------
  - Find .JPG files

Drag and Drop to rearrange placemant
Drag to right side of item to place it as a sub item

This will list all of your User Defined Commands on the left and on the right will show your user-defined menus.

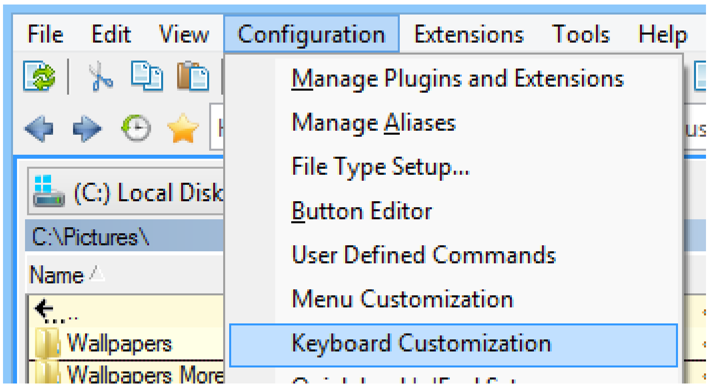
The menu is shown as a tree list with the top level being menus on the menu bar.

You can drag and drop menu items in the tree list to rearrange how you want to display items.
The Add Menu button adds a new top-level menu or sub-Menu.

Select the User Defined Command you want to add on the left, and select under which menu you want that command added on the right. Then press the "-->" to add that command to the menu tree.

# Customize Keyboard Shortcuts

To customize the keyboard shortcuts in Multi Commader, open **Keyboard Customization** under the **Configuration** menu.

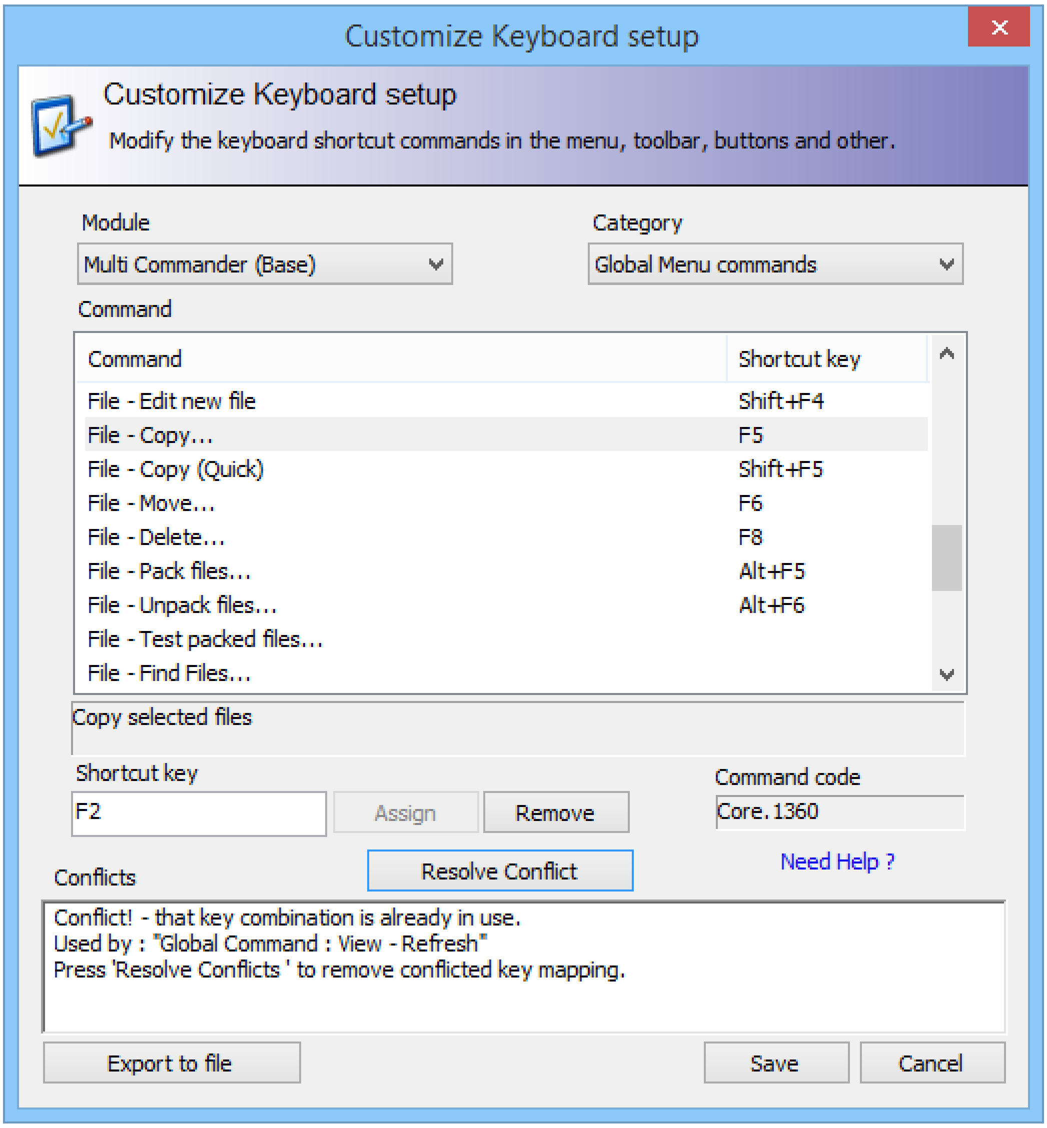


Most of the shortcut keys in Multi Commander can be changed. The shortcuts are split up into different sections:  each module/extension has its own list of commands, split between global and module-specific commands.

Global commands can be called from any module. These are generally menu commands, and are available in all modules and extensions that support them. Since the commands are global within Multi Commander, shortcut keys must be unique across extensions.

Module-specific commands are only available when that extension is currently in focus. Multiple extensions can have the same shortcut assigned.

## Change Shortcut key



Customize Keyboard setup

Customize Keyboard setup
Modify the keyboard shortcut commands in the menu, toolbar, buttons and other.

Module: Multi Commander (Base)

Category: Global Menu commands

Command

| Command | Shortcut key |
|---|---|
| File - Edit new file | Shift+F4 |
| File - Copy... | F5 |
| File - Copy (Quick) | Shift+F5 |
| File - Move... | F6 |
| File - Delete... | F8 |
| File - Pack files... | Alt+F5 |
| File - Unpack files... | Alt+F6 |
| File - Test packed files... | |
| File - Find Files... | |

Copy selected files

Shortcut key: F2

Command code: Core.1360

Conflicts

Conflict! - that key combination is already in use.
Used by : "Global Command : View - Refresh"
Press 'Resolve Conflicts ' to remove conflicted key mapping.

To find the command you want to change, first select the Module it belongs to, and then choose the Category (global or module-specific).

When you have found the command you wish to change, click to select it and then click on the Shortcut key field below the list. Press the key combination that you want to assign to the command, then press "**Assign**" to set the shortcut.
If the command you have chosen is already assigned the Conflicts field informs you about the conflict and which command already uses that shortcut. You need to resolve the conflict before you can assign your key combination.

To remove a shortcut, select the command and then press the "**Remove**" button. Alternatively, choose a new key combination.

"**Command code**" is the internal name of the command. It is used if a command should be executed from the custom command **MC.RunCmd**

Tips

To get a list of all the shortcuts, you can export them to a text file by pressing the "Export to file" button.
If you hold **SHIFT** while clicking on the "Export to file" button, the exported list will also contain the internal command codes.

## References

- Default keyboard shortcut (Commander styled setup)
- Default keyboard shortcut,(Windows Explorer styled setup)

# Default Keyboard Shortcuts (Commander-Style)

## Multi Commander Core shortcuts

These are global shortcuts that work the same way no matter which extension you are in.

| Command | Shortcut |
|---|---|
| Go Back | Alt + Left |
| Go Forward | Alt + Right |
| Show History | Alt + Down |
| Tab - Close Tab | Ctrl + W |
| Tab - Duplicate Tab | Ctrl + T |
| File - View File | F3 |
| File - Edit File | F4 |
| File - Edit New File | Shift+F4 |
| File - Copy | F5 |
| File - Copy (Quick) (Copy to same location) | Shift + F5 |
| File - Move | F6 |
| File - Delete | F8, Delete |
| File - Pack Files | Alt + F5 |
| File - Unpack Files | Alt + F6 |
| Edit - Cut | Ctrl + X |
| Edit - Copy | Ctrl + C |
| Edit - Paste | Ctrl + V |
| View - Full width | Ctrl + F11 |
| View - Log Panel | Ctrl + L |
| View - Menu Bar | Ctrl + M |
| View - Button Panel | Ctrl + B |
| View - Refresh | F2 |

## File Manager

**Global** file manager hotkeys are also valid when focus is in another extension, if the extension supports it.

| Command | Shortcut |
|---|---|
| File Tools - Calculate folder sizes | Shift + Alt + Return |
| File Tools - Create Folder | F7 |
| File Tools - Rename | Shift + F6 |
| Send to clipboard - File/Folder path and name | Ctrl + P |
| Send to clipboard - File/Folder name | Ctrl + Shift + P |
| Send to clipboard - File/Folder path | Shift + Alt + P |
| Select using filter | Num + |
| Unselect using filter | Num - |
| Select All | Ctrl + A |

| | |
|---|---|
| Unselect All | Ctrl + D |
| Invert Selection | Num * |
| Select all with same file extension | Ctrl + Num+ |
| Unselect all with same file extension | Ctrl + Num- |
| Select all with same name | Alt + Num+ |
| Unselect all with same name | Alt + Num- |
| Compare Source and Target, Select Missing/Newest | Ctrl + F10 |

**File Manager-specific** hotkeys are only available when focus is in the file manager view.

| Command | Shortcut |
|---|---|
| Show drive selection box (Left side) | Alt + F1 |
| Show drive selection box (Right side) | Alt + F2 |
| Set View filter | Ctrl + F |
| Start a Search from current path | Alt + F7 |
| Edit path | Ctrl + E |
| Go to Quick Path #1 | Ctrl + 1 |
| Go to Quick Path #2 | Ctrl + 2 |
| Go to Quick Path #3 | Ctrl + 3 |
| Go to Quick Path #4 | Ctrl + 4 |
| Go to Quick Path #5 | Ctrl + 5 |
| Go to Quick Path #6 | Ctrl + 6 |
| Go to Quick Path #7 | Ctrl + 7 |
| Go to Quick Path #8 | Ctrl + 8 |
| Go to Quick Path #9 | Ctrl + 9 |
| Go to Quick Path #10 | Ctrl + 10 |
| Sync path to the Left | Ctrl + Left |
| Sync path to the Right | Ctrl + Right |
| Force Refresh (and flush cache) | Shift + F2 |
| Go to parent folder (Go up) | Back |
| Go to the root of the device | Ctrl + Back |
| Go to same path as target view | Ctrl + . |
| Show file properties | Alt + Return |

## File Search

| Command | Shortcut |
|---|---|
| Show / Hide Search window | Ctrl + F |
| Save a Search | Ctrl + S |
| Load a Search | Ctrl + O |
| Start a Search | Ctrl + Return |
| Pause a Search | Ctrl + P |

# Customize your own keys

You can easily customize your own hotkeys by using the Keyboard Customization entry in the Configuration menu.
There you can also export all your hotkeys to a text file.

- How Do I ... Customize keyboard shortcuts

# Default Keyboard Shortcuts (Windows Explorer-Style)

## Multi Commander Core shortcuts

These are global shortcuts that work the same way no matter what extension you are in.

| Command | Shortcut |
|---|---|
| Go Back | Alt + Left |
| Go Forward | Alt + Right |
| Show History | Alt + Down |
| Tab - Close Tab | Ctrl + W |
| Tab - Duplicate Tab | Ctrl + T |
| File - View File | F1 |
| File - Edit File | F9 |
| File - Copy | F4 |
| File - Copy Quick | Shift + F5 |
| File - Move | F6 |
| File - Delete | F8, Delete |
| File - Pack Files | Alt + F5 |
| File - Unpack Files | Alt + F6 |
| Edit - Cut | Ctrl + X |
| Edit - Copy | Ctrl + C |
| Edit - Paste | Ctrl + V |
| View - Full width | Ctrl + F11 |
| View - Log Panel | Ctrl + L |
| View - Button Panel | Ctrl + B |
| View - Refresh | F5 |

## File Manager

**Global** file manager hotkeys are also valid when focus is in another extension, if the extension supports them.

| Command | Shortcut |
|---|---|
| File Tools - Calculate folder size | Shift + Alt + Return |
| File Tools - Create Folder | F7 |
| File Tools - Rename | F2 |
| Send to clipboard - File/Folder path and name | Ctrl + P |
| Send to clipboard - File/Folder name | Ctrl + Shift + P |
| Send to clipboard - File/Folder path | Shift + Alt + P |
| Select using filter | Num + |
| Unselect using filter | Num - |
| Select All | Ctrl + A |
| Unselect All | Ctrl + D |
| Invert Selection | Num * |

| | |
|---|---|
| Select all with same file extension | Ctrl + Num+ |
| Unselect all with same file extension | Ctrl + Num- |
| Select all with same name | Alt + Num+ |
| Unselect all with same name | Alt + Num- |
| Compare Source and Target, Select Missing/Newest | Ctrl + F10 |

**File Manager-specific** hotkeys are only available when focus is in the file manager view.

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| Show drive selection box (Left side) | Alt + F1 |
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| Go to Quick Path #1 | Ctrl + 1 |
| Go to Quick Path #2 | Ctrl + 2 |
| Go to Quick Path #3 | Ctrl + 3 |
| Go to Quick Path #4 | Ctrl + 4 |
| Go to Quick Path #5 | Ctrl + 5 |
| Go to Quick Path #6 | Ctrl + 6 |
| Go to Quick Path #7 | Ctrl + 7 |
| Go to Quick Path #8 | Ctrl + 8 |
| Go to Quick Path #9 | Ctrl + 9 |
| Go to Quick Path #10 | Ctrl + 10 |
| Sync path to the Left | Ctrl + Left |
| Sync path to the Right | Ctrl + Right |
| Force Refresh (and flush cache) | Shift + F5 |
| Go to parent folder (Go up) | Back |
| Go to the root of the device | Ctrl + Back |
| Go to same path as target view | Ctrl + . |
| Show file properties | Alt + Return |

## File Search

| Command | Shortcut |
|---|---|
| Show / Hide Search window | Ctrl + F |
| Save a search | Ctrl + S |
| Load a Search | Ctrl + O |
| Start a Search | Ctrl + Return |
| Pause a Search | Ctrl + P |

## Customize your own keys

You can easily customize your own hotkeys by using the Keyboard Customization selection in the Configuration menu.
There you can also export all your hotkeys to a text file.

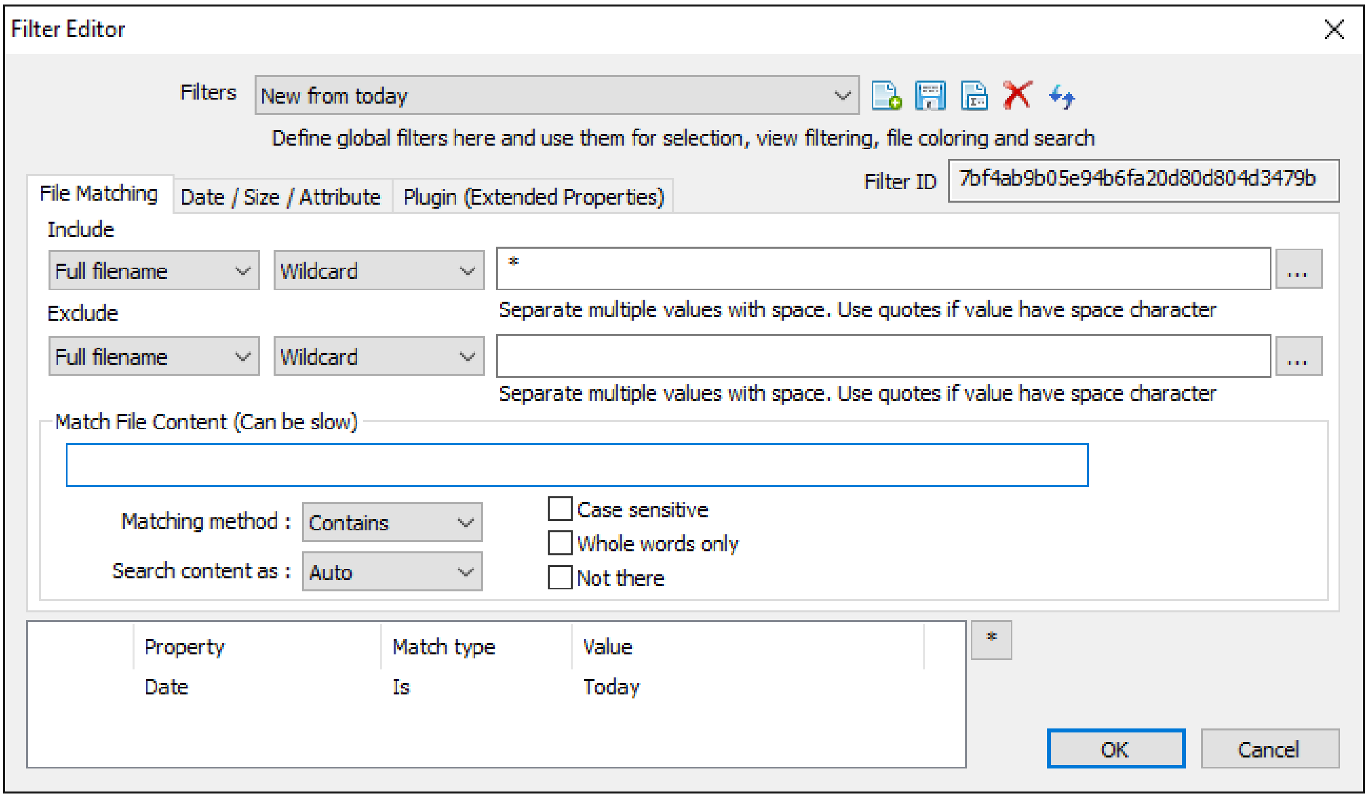
- How Do I ... Customize keyboard shortcuts

# Custom ContextMenu Editor

Sorry.

The documentation for this has not been written yet.

# Filters



Filter Editor

Filters: New from today

Define global filters here and use them for selection, view filtering, file coloring and search

Filter ID: 7bf4ab9b05e94b6fa20d80d804d3479b

Include: Full filename | Wildcard | *

Separate multiple values with space. Use quotes if value have space character

Exclude: Full filename | Wildcard |

Separate multiple values with space. Use quotes if value have space character

Match File Content (Can be slow)

Matching method : Contains

Search content as : Auto

□ Case sensitive

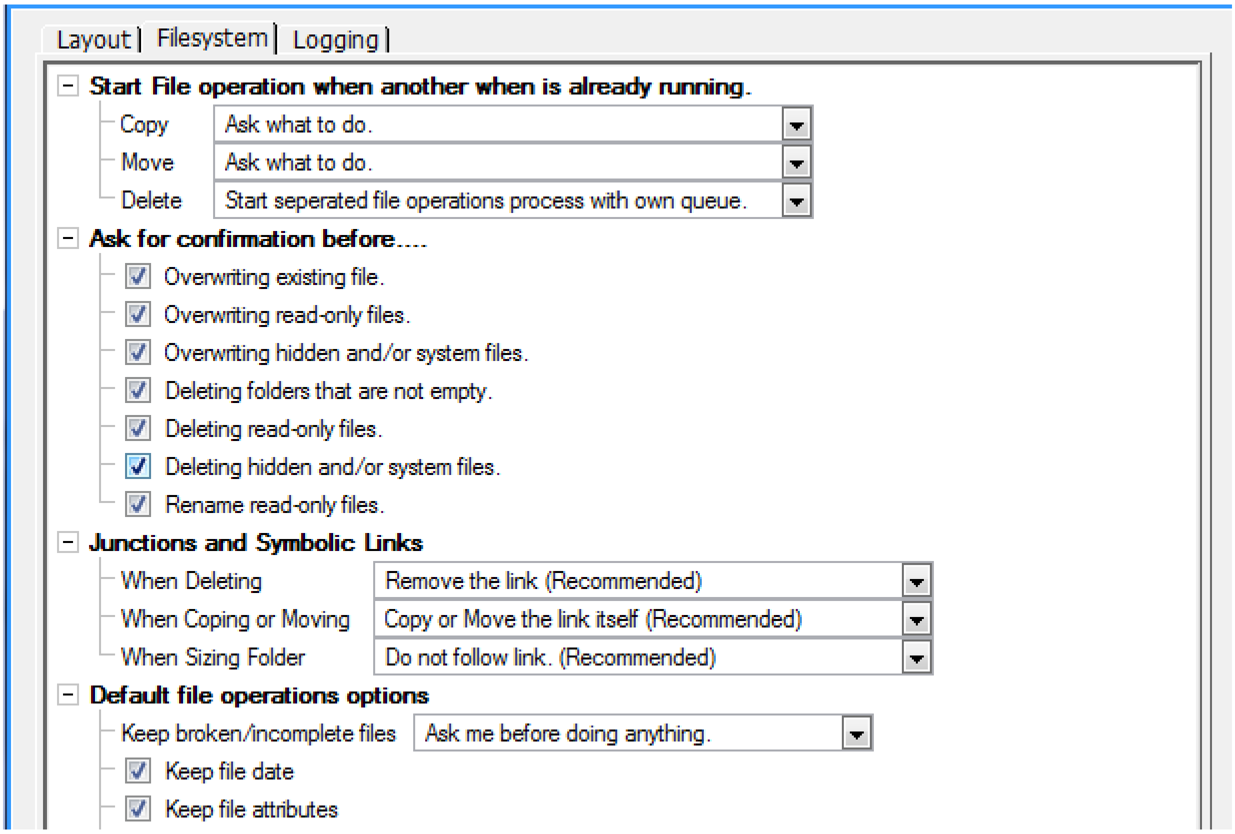
□ Whole words only

□ Not there

| Property | Match type | Value |
|---|---|---|
| Date | Is | Today |

# Core Settings

The Core Settings are settings in Multi Commander that affect how the core behaviour works. To configure these, select "Core Settings" under the Configuration menu.



Start File operation when another when is already running.
- Copy: Ask what to do.
- Move: Ask what to do.
- Delete: Start seperated file operations process with own queue.

Ask for confirmation before....
- ☑ Overwriting existing file.
- ☑ Overwriting read-only files.
- ☑ Overwriting hidden and/or system files.
- ☑ Deleting folders that are not empty.
- ☑ Deleting read-only files.
- ☑ Deleting hidden and/or system files.
- ☑ Rename read-only files.

Junctions and Symbolic Links
- When Deleting: Remove the link (Recommended)
- When Coping or Moving: Copy or Move the link itself (Recommended)
- When Sizing Folder: Do not follow link. (Recommended)

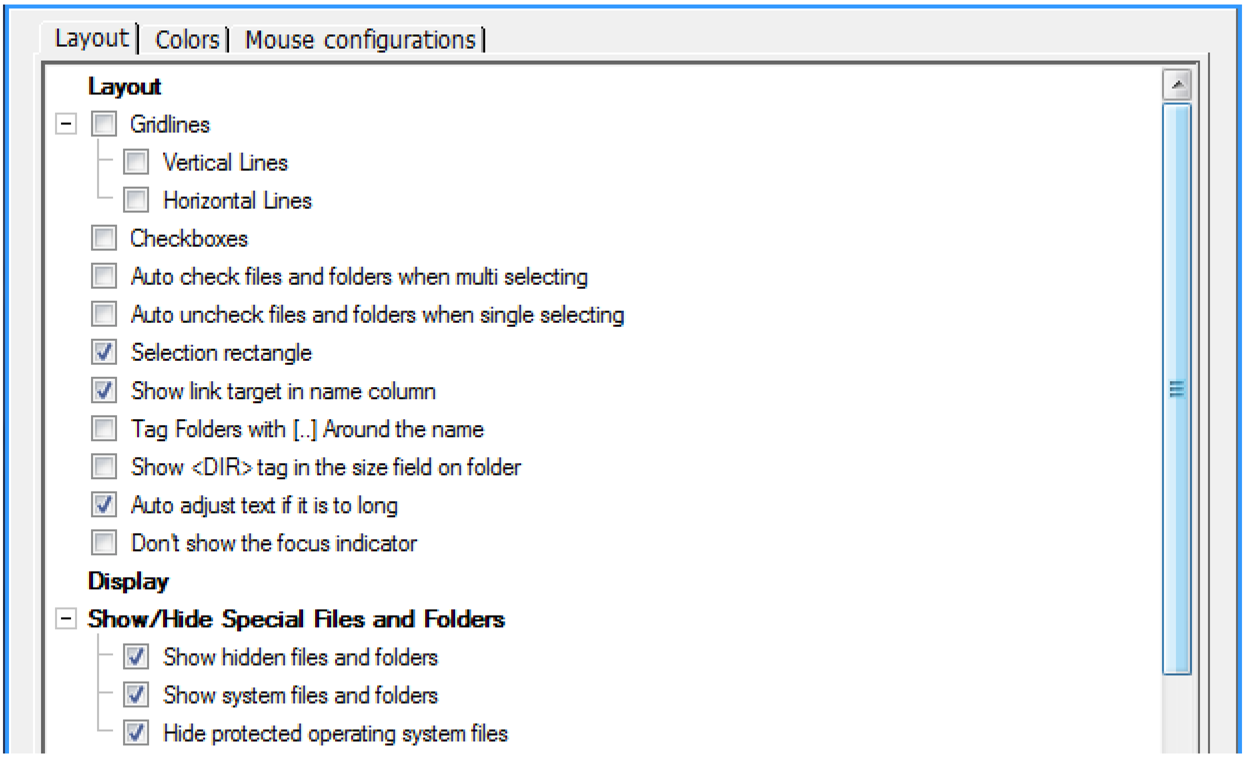
Default file operations options
- Keep broken/incomplete files: Ask me before doing anything.
- ☑ Keep file date
- ☑ Keep file attributes

Settings like Language, Tab Location, File System Operations and Logging can be found here. These are settings that are not affected by extensions or plug-ins.

Tooltips are available to explain the effect of most settings.

# Explorer Panel Settings

The settings for the Explorer Panel let you configure the look and feel of the Explorer Panel.



**Layout**

- □ Gridlines
  - □ Vertical Lines
  - □ Horizontal Lines
- □ Checkboxes
- □ Auto check files and folders when multi selecting
- □ Auto uncheck files and folders when single selecting
- ☑ Selection rectangle
- ☑ Show link target in name column
- □ Tag Folders with [..] Around the name
- □ Show <DIR> tag in the size field on folder
- ☑ Auto adjust text if it is to long
- □ Don't show the focus indicator

**Display**

**Show/Hide Special Files and Folders**

- ☑ Show hidden files and folders
- ☑ Show system files and folders
- ☑ Hide protected operating system files

You can change the Layout, the colors , how the mouse should work, etc.

Tooltips are available to explain the effect of most settings.

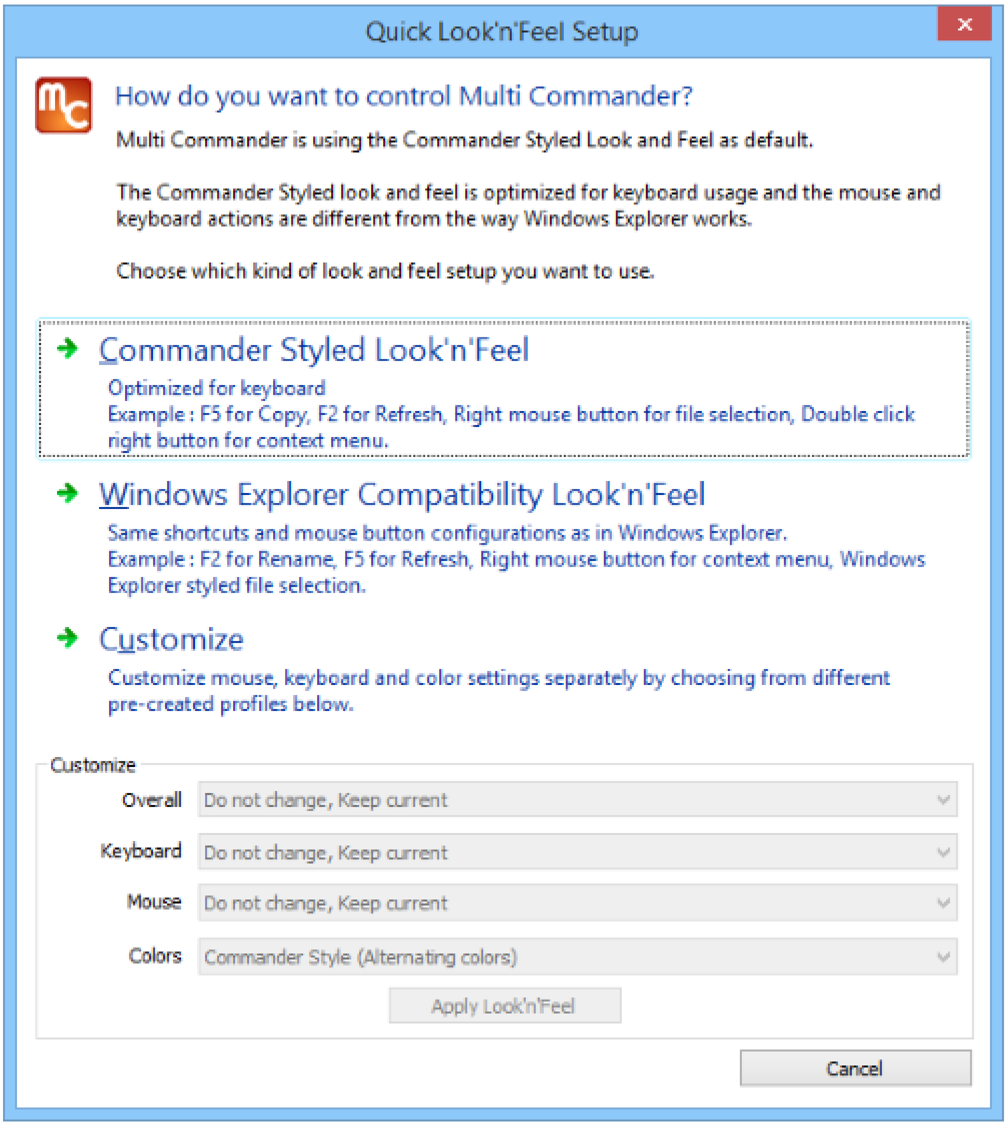
For examples of different layouts and color setups, see screenshots here.

# Change To Windows Explorer Look and Feel

Multi Commander by default uses the popular Commander-Style mouse and keyboard layout.

Users who have never used this style before might feel more comfortable with the way **Windows Explorer** works. Since Multi Commander is very configurable it can be changed to look and feel like Windows Explorer. That can be tedious work because there is a lot of configuration that needs to be changed. However, the **Quick Look'n'Feel Setup** makes it possible to change this quickly and easily.

To access this, select "**Quick Look'n'Feel Setup**" from the **Configuration** menu.



Quick Look'n'Feel Setup

How do you want to control Multi Commander?

Multi Commander is using the Commander Styled Look and Feel as default.

The Commander Styled look and feel is optimized for keyboard usage and the mouse and keyboard actions are different from the way Windows Explorer works.

Choose which kind of look and feel setup you want to use.

Commander Styled Look'n'Feel

Optimized for keyboard
Example : F5 for Copy, F2 for Refresh, Right mouse button for file selection, Double click right button for context menu.

Windows Explorer Compatibility Look'n'Feel

Same shortcuts and mouse button configurations as in Windows Explorer.
Example : F2 for Rename, F5 for Refresh, Right mouse button for context menu, Windows Explorer styled file selection.

Customize

Customize mouse, keyboard and color settings separately by choosing from different pre-created profiles below.

Customize

Overall: Do not change, Keep current

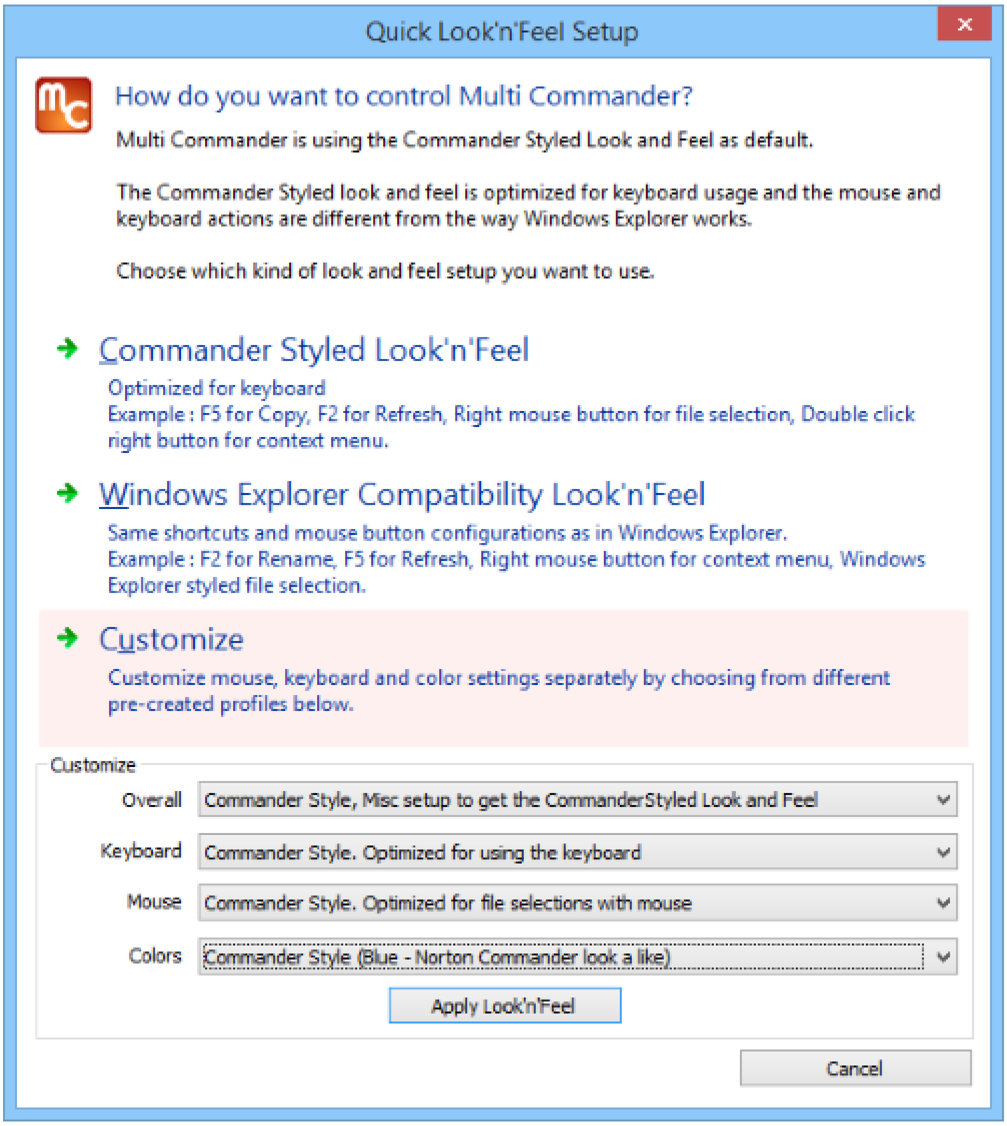
Keyboard: Do not change, Keep current

Mouse: Do not change, Keep current

Colors: Commander Style (Alternating colors)

To Change everything to Windows Explorer look and feel, select **Windows Explorer Compatibility Look'n'Feel**.

If you only want to Change some part of the configuration Like the mouse or colors settings. Choose the **Customize** option.



Quick Look'n'Feel Setup

How do you want to control Multi Commander?

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The Commander Styled look and feel is optimized for keyboard usage and the mouse and keyboard actions are different from the way Windows Explorer works.

Choose which kind of look and feel setup you want to use.

Commander Styled Look'n'Feel

Optimized for keyboard
Example : F5 for Copy, F2 for Refresh, Right mouse button for file selection, Double click right button for context menu.

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Same shortcuts and mouse button configurations as in Windows Explorer.
Example : F2 for Rename, F5 for Refresh, Right mouse button for context menu, Windows Explorer styled file selection.

Customize

Customize mouse, keyboard and color settings separately by choosing from different pre-created profiles below.

Customize

Overall: Commander Style, Misc setup to get the CommanderStyled Look and Feel

Keyboard: Commander Style. Optimized for using the keyboard

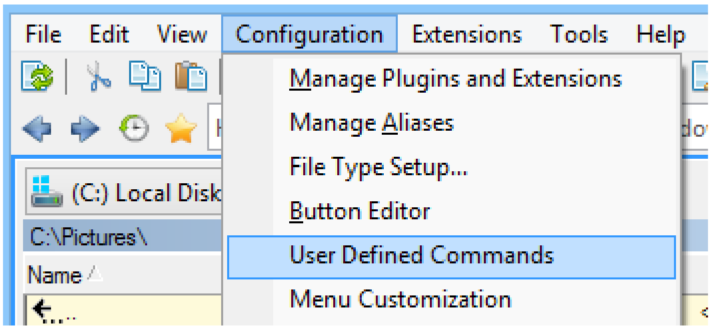
Mouse: Commander Style. Optimized for file selections with mouse

Colors: Commander Style (Blue - Norton Commander look a like)

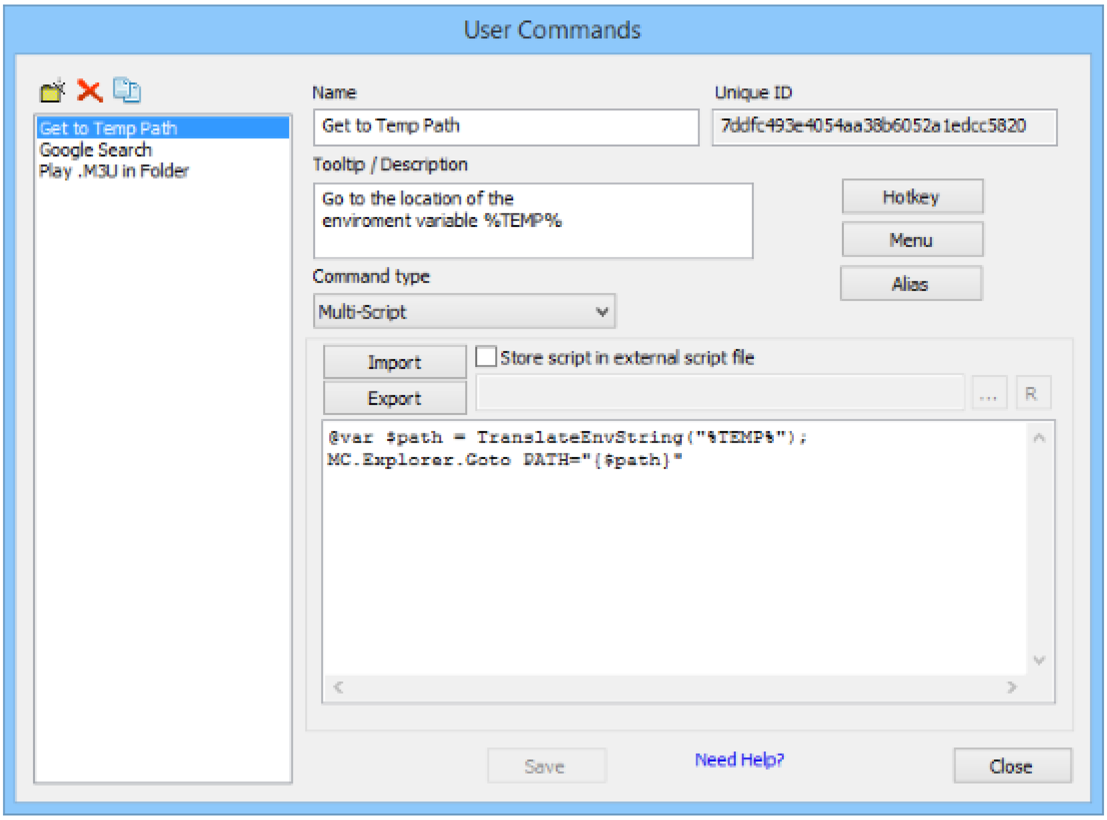
There you can select between different configurations for keyboard, mouse and color setup.

# Create User Defined Commands

Multi Commander allows you to create your own **commands**, which can then be run from the *menubar*, *button panel*, a *hotkey* or the *command line*.



Open the User Defined Commands dialog by selecting "**User Defined Commands**" from the **Configuration** menu.



Name: Get to Temp Path

Unique ID: 7ddfc493e4054aa38b6052a1edcc5820

Tooltip / Description: Go to the location of the enviroment variable %TEMP%

Command type: Multi-Script

□ Store script in external script file

```
@var $path = TranslateEnvString("%TEMP%");
MC.Explorer.Goto PATH="{$path}"
```

## Create Command

Follow these instructions to create a command:

1. Click on the new button and enter the name you want to give your command. (The name can be changed later by editing the name property and re-saving the command.)
2. Fill in the tooltip / description for the command. This text will be shown as a tooltip when you hover over a command (if the command is assigned to a button on the button panel) or as a menu entry or description when needed.
3. Next select which type of command you want to create. There are five types of command available:
    1. Internal Commands
    2. External Commands
    3. Custom Commands
    4. Batch Script (.BAT)
    5. MultiScript
4. When you are done, press the **Save** button to save the command.

5. You now need to assign the command to a button, hotkey, menu item or alias so you will have a way to access the command.

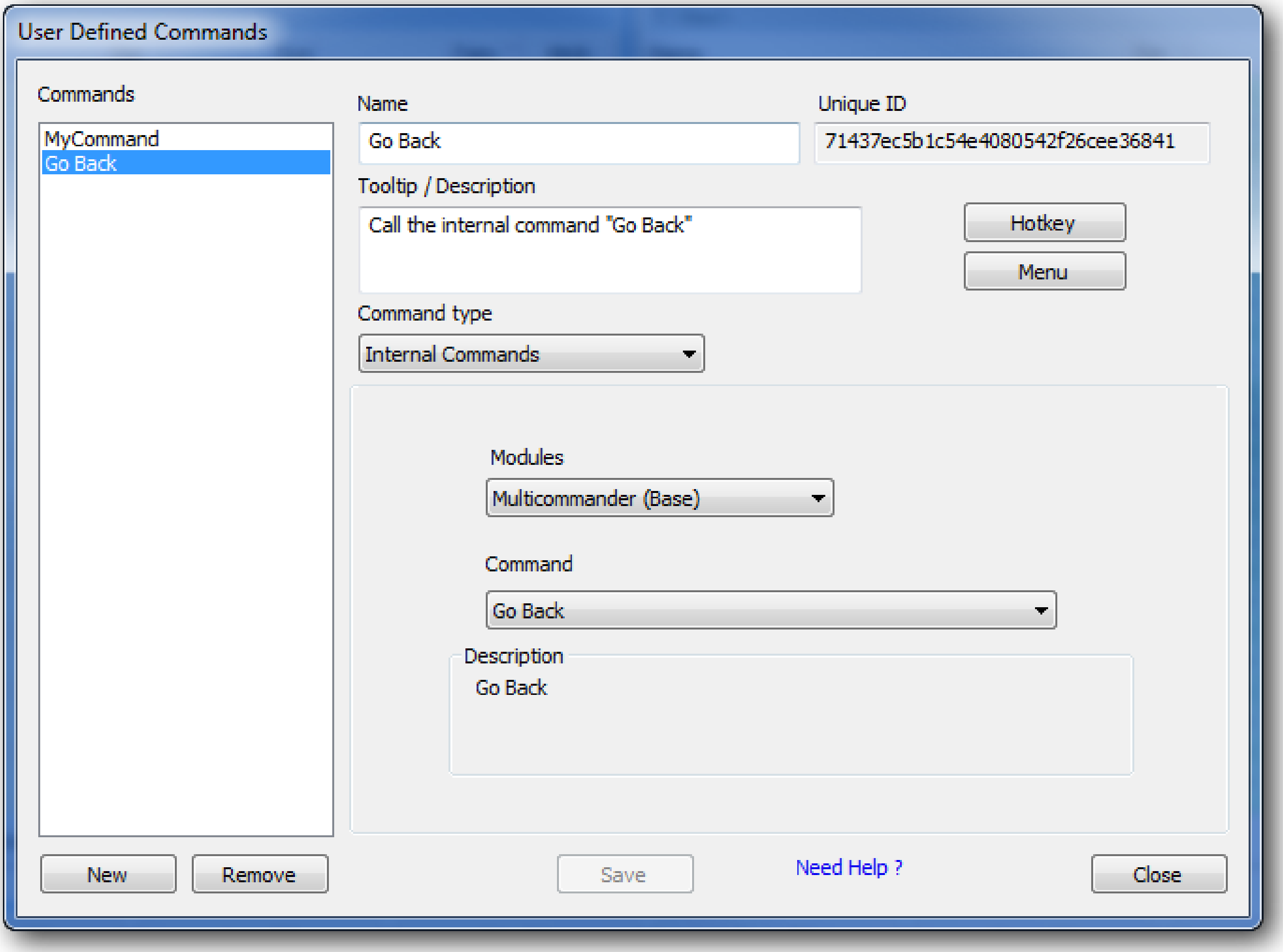
   From the Button Editor you can configure a button to use a "User Defined Command" and then choose which of your commands to assign to it.

   From the Menu button you can add your command to a *menu item* that will be shown on the menu bar. The HotKey button will open the Keyboard customization window with your command pre-selected so that you can assign a hotkey to it.

   The unique ID that is shown in the Unique ID field at the top right of the screen (generated when the command was saved) allows you to access this command from the *command line* bar. The easiest way to do that is to create an *alias* for that id with a name you can more easily remember, using the Alias Editor (found under the **Configuration** menu).

# User Defined Commands - Internal Commands

**Internal commands** are commands that Multi Commander or an Extension or Plug-in has provided. For example, the menu and tool bars use these commands. They are simple commands that just tell Multi Commander or the Extension that the command has been called, and no parameters or customization for that command can be added.



Name: Go Back

Unique ID: 71437ec5b1c54e4080542f26cee36841

Tooltip / Description: Call the internal command "Go Back"

Command type: Internal Commands

Modules: Multicommander (Base)

Command: Go Back

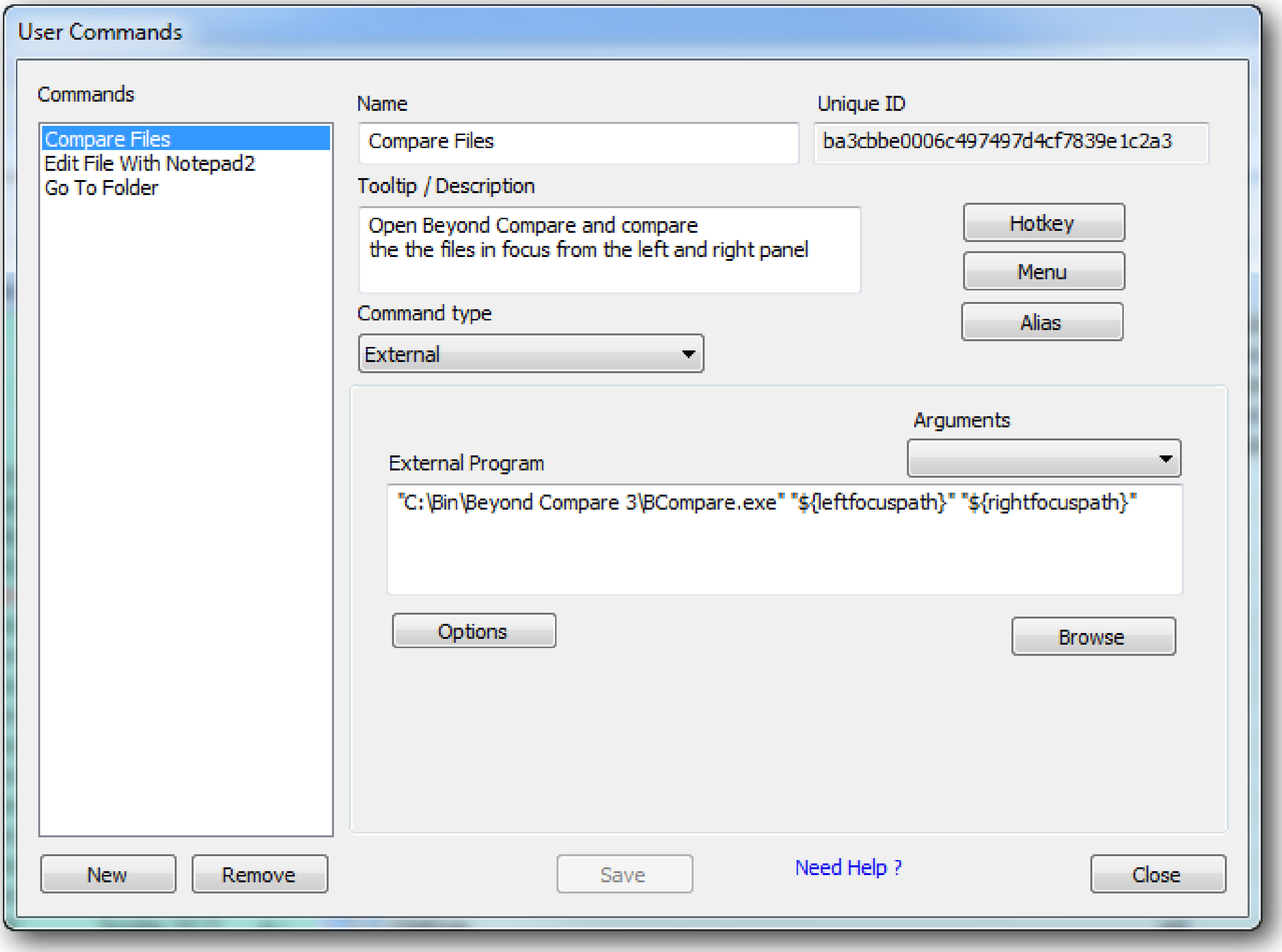
Description: Go Back

One reason to create a User Defined Command that uses *internal commands* is to create an *alias* for that command so you can call that command from the command line bar. Another use would be to assign that command to a button on the button panel.

The command might also be something that is not normally visible in the menu bar, but you would like to put it there. In this case, you can create a User Defined Command that calls the internal command, then add the User Defined Command to the menu bar using the *User Menu* Configuration.

# User Defined Commands - External Commands

**External commands** let you choose an external program to be launched when the command is called.



User Commands

Commands
- Compare Files
- Edit File With Notepad2
- Go To Folder

Name: Compare Files

Unique ID: ba3cbbe0006c497497d4cf7839e1c2a3

Tooltip / Description:
Open Beyond Compare and compare
the the files in focus from the left and right panel

Command type: External

External Program:

```
"C:\Bin\Beyond Compare 3\BCompare.exe" "${leftfocuspath}" "${rightfocuspath}"
```

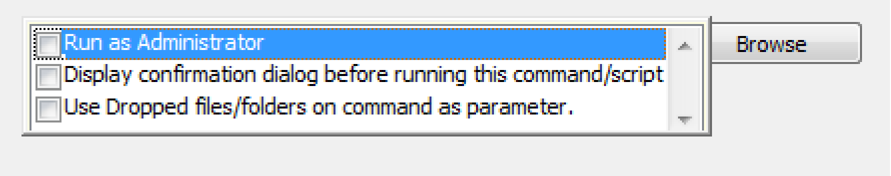
## MultiTags

MultiTags are specially formatted texts that will be replaced with dynamic information. For example, the MultiTag **${focusfilepath}** will be replaced by the full file path to the file currently in focus. The command is run through a process that will translate **MultiTags** before it is executed.

Paths are not quoted by default, so if you need quotes around the path you have to put them around the MultiTag, e.g. **"${focuspath}"**

Read more about MultiTags

## Options



- ☐ Run as Administrator
- ☐ Display confirmation dialog before running this command/script
- ☐ Use Dropped files/folders on command as parameter.

When you press the **Options** button you will get a list of options you can assign to the command, as shown above.

### Run as Administrator

When this option is checked the program will be run with Administrator privileges. If you are running as a normal user you will be presented with a UAC dialog asking for permission to run the program as Administrator. You might also need to enter an Administrator login and password, depending on your user account permissions.

If you run with UAC disabled then the system will launch the program as Administrator without showing you a UAC dialog.

(This option is not valid on Windows XP and Windows 2003.)

### Display Confirmation

This option will display a dialog asking the user to confirm that the command really should be run. This is recommended to be used if the program to be started could change anything on the computer, such as removing or modifying files. If the command is shown in the menu bar for example, it is very easy to accidentally call the command, and you might make changes to your system when you do not want to.

### Use Dropped Files as Parameters

This is a special option in case the command is assigned to a button on the Button Panel that accepts files dropped on to it. The dropped files will be transformed into parameters for the command, and are accessed with the multi-tag **${param:<num>}**.

## Command Arguments

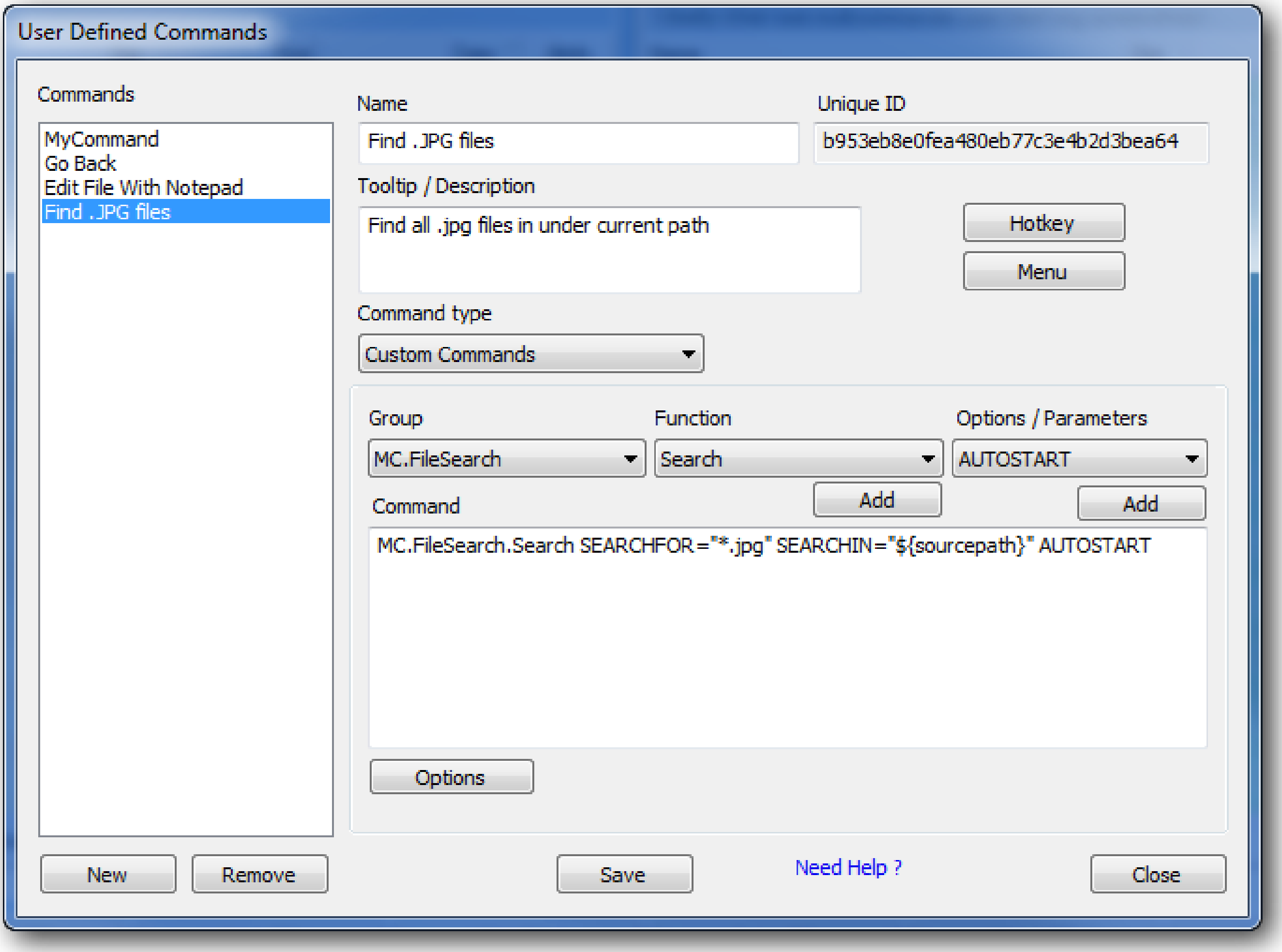
The dialog allows arguments (parameters) to be sent to the command. These are sent to it if the command is called from the Command line bar or if files are dropped on a button and the command has enabled the option "Use Dropped files as parameter", or if this command is called from a Custom Command or MultiScript command.

The parameters are accessed by using the MultiTags **${param:<num>}** where <num> identifies which argument to use. **${param:0}** will be the first parameter, **${param:1}** the second, **${param:2}** the third and so on.

# User Defined Commands - Custom Commands

**Custom commands** are commands that Multi Commander or its Extensions or Plug-ins provide. These commands often expose features you already have, but you can call them with special settings and options available to them.

Custom Commands can also be called from MultiScript and that combination allows you to create *very* advanced and powerful commands.



Commands:
- MyCommand
- Go Back
- Edit File With Notepad
- Find .JPG files

Name: Find .JPG files

Unique ID: b953eb8e0fea480eb77c3e4b2d3bea64

Tooltip / Description: Find all .jpg files in under current path

Command type: Custom Commands

Group: MC.FileSearch

Function: Search

Options / Parameters: AUTOSTART

Command:

```
MC.FileSearch.Search SEARCHFOR="*.jpg" SEARCHIN="${sourcepath}" AUTOSTART
```

(The example in the image above will start a filesearch for *.jpg file in the path of the current source panel. Furthermore, the search will autostart.)

## Create a command

**Custom commands** are created by choosing *Custom Commands* in the Command Type dropdown of the *User Commands* dialog. To help you create the Custom Command there are three dropdown boxes from which you choose *Group*, *Function* and *Options/Parameters*. Using these dropdowns you can find all the functions and options that are provided for each group.

The *Group* dropdown shows all the modules that have registered Custom Commands. The commands are separated into groups showing which module, extension or plug-in they belong to.

When a module is selected the *Function* drop down list is updated to show the functions that module supports. When a function is selected the Options/Parameters drop down list is updated with the options and parameters you can send to that function.

If you know the command you want you can write it directly into the editor. You do not have to use the drop down lists; they are just there to help you.

Custom Commands Examples

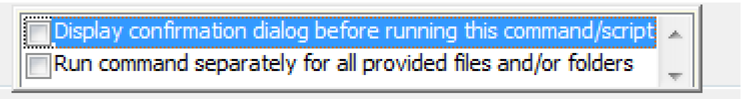
List And Description of Custom Commands

# MultiTags

MultiTags are specially formatted texts that will be replaced with dynamic information. For example, the MultiTag **${sourcepath}** will be replaced with the full path of the source panel (the currently active panel). The Custom Command is run through a process that will translate **MultiTags** before it is executed.

Read more about MultiTags

# Options



□ Display confirmation dialog before running this command/script
□ Run command separately for all provided files and/or folders

When you press the **Options** button you get a list of options that can be assigned to the command, as shown above.

1. ## Display Confirmation

   This option displays a dialog asking the user to confirm that the command really should be run. This is recommended if the program to be started could change anything on the computer, such as removing or modifying files. If the command is for example shown in the menu bar, it is very easy to accidentally call the command, and you might make changes to your system when you do not want to.

2. ## Run Separately

   When this option is enabled the command is run separately for each file that is selected, with the MultiTag **${currentfilepath}** changed to match that file path.

# Command Parameters

The script supports parameters to be sent to the command if it is called from the Commandline bar.

The parameters are accessed by using the MultiTags **${param:<num>}** where <num> is the index of the parameter to use. **${param:0}** will be the first parameter, **${param:1}** the second, **${param:2}** the third and so forth.

# List of Custom Commands

| | |
|---|---|
| MC.Run | Run an external program |
| MC.RunUserCmd | Run a User Defined Command |
| MC.RunCmd | Run an Internal or User Defined Command |
| MC.CmdLineSet | Set a text in the Command Line field |
| MC.CmdLineRun | Run a command via the Command Line field |
| MC.View | View file. Viewer is selected by finding a match in the file type setup |
| MC.Edit | Edit file. Editor is selected by finding a match in the file type setup |
| MC.SetActivePanel | Set what panel side should be active |
| MC.SetActiveTab | Set what tab should be active |
| MC.CloseAllTabs | Close all tabs |
| MC.SaveTabs | Save current tabs panel layout |
| MC.LoadTabs | Load a tabs panel layout |
| MC.ChangeTabSession | Change to a preconfigured tab session |
| MC.XChangeSettings | Change a Multi Commander UI setting. (See online doc for supported settings to change) |
| MC.BindKey | Bind a keyboard key combination to a command (eg. BindKey CMD=Core.1360 KEY=Ctrl+N) |
| MC.UnBindKey | Unbind a keyboard key combination from a command (eg. UnbindKey CMD=Core.1360) |
| MC.ShowFavWindow | Show Favorites Window |
| MC.ShowFavPopup | Show Favorites Popup menu |
| MC.ShellPaste | Paste clipboard data using Windows Shell |
| MC.LoadButtonPanelLayout | Load a button panel layout from file |
| MC.Filesystem.Rename | Rename a file or folder. Current file will be used if FILE parameter is not used |
| MC.Filesystem.Delete | Delete a file(s) or folder(s). If no PATH parameter is given the current selected file(s)/folder(s) will be used |
| MC.Filesystem.Makedir | Create a new folder |
| MC.Filesystem.PackFiles | Pack files into an archive (eg. .zip file). If no FILES parameter is giving the current selected files/folders are used |
| MC.Filesystem.Unpack | Unpack archives into a folder |
| MC.Explorer.NewBrowser | Open a new Explorer Panel tab |
| MC.Explorer.CloseAll | Close all Explorer Panel tabs |
| MC.Explorer.Goto | Show path in the Explorer Panel |
| MC.Explorer.Select | Select files and folders in the Explorer Panel |
| MC.Explorer.Deselect | Deselect files and folders in the Explorer Panel |
| MC.Explorer.Refresh | Refresh the Explorer Panel |
| MC.Explorer.RefreshTree | Refresh the Explorer Panel |
| MC.Explorer.Copy | Start a Copy operation |

| | |
|---|---|
| MC.Explorer.Delete | Start a Delete operation |
| MC.Explorer.Move | Start a Move operation |
| MC.Explorer.Makedir | Create folder |
| MC.Explorer.SetViewFilter | View filter for the Explorer Panel |
| MC.Explorer.GetViewFilter | View filter for the Explorer Panel |
| MC.Explorer.SetColumns | Change what columns to show, change to a defined column set |
| MC.Explorer.SetViewMode | Change view mode of Explorer Panel that is in focus |
| MC.Explorer.SetTabProp | Change tab properties of active Explorer Panel tab |
| MC.Explorer.Sort | Change which column data is sorted by |
| MC.Explorer.SizeFolder | Size current selected folder(s) |
| MC.Explorer.SetItemFocus | Change focus to specified a file/folder in the current path |
| MC.Explorer.SetColoringRules | Set Color Rules profile to use. Do not specify a name if you want to use the default color profile |
| MC.Explorer.RefreshColoringRules | Refresh file coloring for all files and folders |
| MC.Explorer.ChangeSetting | Change an Explorer Panel settings for the current active tab temporarily. Settings will NOT be saved See documentation for more information |
| MC.Explorer.Selection.Select | Select items by filter (Support all views) |
| MC.Explorer.Selection.Unselect | Unselect items by filter (Support all views) |
| MC.Explorer.Selection.SelectAll | Select all items |
| MC.Explorer.Selection.UnselectAll | Unselect all items |
| MC.Explorer.Selection.InvertSelection | Invert selections of items |
| MC.Explorer.Selection.SelectByColor | Select by color (Color set by File Coloring Rules) |
| MC.Explorer.Selection.UnselectByColor | Unselect by color (Color set by File Coloring Rules) |
| MC.Explorer.Selection.SaveSelectionToMemory | Save selection to memory |
| MC.Explorer.Selection.LoadSelectionFromMemory | Load selection from memory |
| MC.Explorer.Selection.SaveSelectionToFile | Save selection to file |
| MC.Explorer.Selection.LoadSelectionFromFile | Load selection from file |
| MC.Explorer.Selection.LoadSelectionFromClipboard | Load selection from clipboard |
| MC.Explorer.Selection.CompareFoldersForDuplicates | Compare target and source views and select duplicates |
| MC.Explorer.Selection.CompareFoldersForSelected | Compare target and source views and select selected on target |
| MC.Explorer.Selection.CompareFoldersForMissingAndNewer | Compare target and source views and select missing and newest |
| MC.Explorer.Selection.CompareFoldersForMissing | Compare target and source views and select missing |
| MC.Explorer.Selection.CompareFoldersForNewest | Compare target and source views and select newest item |
| MC.FileSearch.Search | Search for files and folders |
| MC.Special.SelectOldestByName | Select oldest based on file/folder name |
| MC.Utils.CreateLink | Create a File System Link, Symbolic, Hardlink, Junction or Shortcut |
| MC.Utils.SortLines | Sort Lines in text file |
| MC.Utils.FindAndReplace | Find and Replace in file |

| | |
|---|---|
| MC.CheckSum.Verify | Start CheckSum Tab and verify file(s) |
| MC.CheckSum.Create | Start CheckSum Tab and create checksum file |
| MC.DataViewer.View | Open a file for viewing |
| MC.PictureTools.Convert | Convert one or many pictures to another picture format |
| MC.PictureTools.Resize | Resize one or many pictures |

## MC.Run

Run an external program
If command is run from a MultiScript. the execution return code is available in $__CMDRESULT. (Only if the WAIT option was used)

### Options

| | |
|---|---|
| ADMIN | Run program as Administrator |
| ARG | Arguments to sent to program |
| CMD | Path to program to run |
| SHELL | Determine how the file should be started |
| STARTIN | Path to folder in which the program should be started |
| WAIT | Wait for program to close before continuing |

## MC.RunUserCmd

Run a User Defined Command

### Options

| | |
|---|---|
| ID | GUID of the command to run (eg. "ID=fg3432f1ab4aBD422DAB3") |

## MC.RunCmd

Run an Internal or User Defined Command

### Options

| | |
|---|---|
| ASYNC | Run the command asynchronously |
| ID | ID name of the command to run (eg. "ID=Core.1234") |

## MC.CmdLineSet

Set a text in the Command Line field

### Options

| | |
|---|---|
| SETFOCUS | Change focus to the Command Line field |
| TEXT | Text to set in the Command Line field |

## MC.CmdLineRun

Run a command via the Command Line field

### Options

| | |
|---|---|
| CMD | Command to be run as if it was written in the Command Line field |

## MC.View

View file. Viewer is selected by finding a match in the file type setup

### Options

| | |
|---|---|
| FILE | Path to file to view. If not specified, the file in focus will be used |
| VIEWAS | When looking for viewer to use, select as if file is this file type (eg. VIEWAS=".txt") |

## MC.Edit

Edit file. Editor is selected by finding a match in the file type setup

### Options

| | |
|---|---|
| EDITAS | When looking for editor to use, select as if file is this file type (eg. EDITAS=".jpg") |
| FILE | Path to file to view. If not specified, the file in focus will be used |

## MC.SetActivePanel

Set what panel side should be active

### Options

| | |
|---|---|
| PANEL | What panel should be active. LEFT, RIGHT, TOP, BOTTOM, TOGGLE |

## MC.SetActiveTab

Set what tab should be active

### Options

| | |
|---|---|
| PANEL | Which panel side the tabs are located in: LEFT, RIGHT, TOP, BOTTOM, ACTIVE, INACTIVE |
| TAB | Tab to activate, starting with 1 and increasing. (Eg. TAB=2 or NEXT, PREV) |

## MC.CloseAllTabs

Close all tabs

### Options

| | |
|---|---|
| DONOTASK | Do not ask if locked tab should be closed |
| KEEPLOCKED | Do not close locked tabs |
| LEFTONLY | Close all tabs on the left/top side only |
| RIGHTONLY | Close all tabs on the right/bottom side only |

## MC.SaveTabs

Save current tabs panel layout

### Options

| | |
|---|---|
| CURRENT | Only current tab |
| FILENAME | File path to a tab definition file |

## MC.LoadTabs

Load a tabs panel layout

### Options

| | |
|---|---|
| ADD | Add tab panels to current layout |
| FILENAME | File path to a tab definition file |
| REPLACE | Replace all current tabs panels |

## MC.ChangeTabSession

Change to a preconfigured tab session

### Options

| | |
|---|---|
| ID | ID of the tab session to activate |

## MC.XChangeSettings

Change a Multi Commander UI setting. (See online doc for supported settings to change)

### Options

| | |
|---|---|
| NAME | Name of setting |
| VALUE | Value of the new setting |

## MC.BindKey

Bind a keyboard key combination to a command (eg. BindKey CMD=Core.1360 KEY=Ctrl+N)

### Options

| | |
|---|---|
| CMD | Command to bind to key (eg. Core.1360) |
| KEY | Key to bind to (eg. Ctrl+N ) |
| SAVE | (Optional) should the keybinding be saved between restarts |

## MC.UnBindKey

Unbind a keyboard key combination from a command (eg. UnbindKey CMD=Core.1360)

### Options

| | |
|---|---|
| CMD | Command to unbind from key (eg. Core.1360) |
| SAVE | (Optional) should the keybinding be saved between restarts |

## MC.ShowFavWindow

Show Favorites Window

### Options

| | |
|---|---|
| SECTION | Favorite section to show (Name or Number) |
| SHOWPATH | Show target path instead of favorite name |

## MC.ShowFavPopup

Show Favorites Popup menu

### Options

| | |
|---|---|
| POS | Where to show the popup (Mouse, CenterScreen, CenterMC, "X,Y" pos ) |
| SHOWPATH | Show target path instead of favorite name |

## MC.ShellPaste

Paste clipboard data using Windows Shell

### Options

| | |
|---|---|
| PATH | Path where to paste the data. If not set current active path is used |

## MC.LoadButtonPanelLayout

Load a button panel layout from file

### Options

| | |
|---|---|
| FILE | Path to a button panel layout file |

## MC.Filesystem.Rename

Rename a file or folder. Current file will be used if FILE parameter is not used

### Options

| | |
|---|---|
| ASKNAME | Show a dialog asking for the new name. If 'NEWNAME' is also specified, it will be used as a suggested name |
| FILE | Specify file you want to rename |
| NEWNAME | The name you want the file/folder renamed to |

## MC.Filesystem.Delete

Delete a file(s) or folder(s). If no PATH parameter is given the current selected file(s)/folder(s) will be used

### Options

| | |
|---|---|
| FILTER | Filter what to delete. Separate with ';' eg. "*.jpg;*.bmp;*.tif" |
| PATH | The file or folder to delete |

## MC.Filesystem.Makedir

Create a new folder

### Options

| | |
|---|---|
| PATH | Full path to the folder you want to create |

## MC.Filesystem.PackFiles

Pack files into an archive (eg. .zip file). If no FILES parameter is giving the current selected files/folders are used

### Options

| | |
|---|---|
| FILES | Which files or folders to pack. Separate multiple files and folders with ';' |
| FILTER | Filter to use. Separate filters with space eg. '*.txt -readme.txt *.info' |
| METHOD | Pack method to use Zip, 7Zip, Tar |
| SEPARATE | Pack the selected files/folders into separate archives. (TARGET must have wildcard in name. eg "e:\file_*.zip") |
| TARGET | Target name of the archive. (Set to auto to auto-generate a name) |

## MC.Filesystem.Unpack

Unpack archives into a folder

### Options

| | |
|---|---|
| FILE | Which archives to unpack. Separate multiple archives with ';' |
| FILTER | Filter to use. Separate filters with space eg. '*.txt -readme.txt *.info' |
| PASSWORD | Password to use if the archive is password protected. (If not set, a dialog will be shown if password is needed during unpacking) |
| TARGET | Folder where the archives should be unpacked |

## MC.Explorer.NewBrowser

Open a new Explorer Panel tab

### Options

| | |
|---|---|
| FLAT | Show path flat. Path and subfolders will be flattened and shown together |
| PATH | The path you want to show |
| SIDE | Open the new Explorer Panel tab on the LEFT, RIGHT, SOURCE, TARGET or AUTO |
| TABCOLORS | Tab Colors to use. Comma-separated list TABCOLORS=<background>,<textcolor>,<Gradient (0/1)>,<HotWhenActive (0/1)> |
| TABLOCK | Lock Tab |
| TABLOCKALLOWSUBCHANGE | Lock Tab - Allow subpath change |
| TABNAME | Force the tab to be named using the provided text |

## MC.Explorer.CloseAll

Close all Explorer Panel tabs

## MC.Explorer.Goto

Show path in the Explorer Panel

### Options

| | |
|---|---|
| FLAT | Show path flat. Path and subfolders will be flattened and shown together |
| LEFT | Left Path |
| PATH | The path you want to show |
| RIGHT | Right Path |
| SOURCE | Source Path |
| TARGET | Target Path |
| ITEMFOCUS | Name of file/folder to set focus on |

## MC.Explorer.Select

Select files and folders in the Explorer Panel

### Options

| | |
|---|---|
| FILTER | Filter of the files and folder to select |
| ONLYFILES | Only filter files |
| ONLYFOLDERS | Only filter folders |

## MC.Explorer.Deselect

Deselect files and folders in the Explorer Panel

### Options

| | |
|---|---|
| FILTER | Filter of the files and folder to select |
| ONLYFILES | Only filter files |
| ONLYFOLDERS | Only filter folders |

# MC.Explorer.Refresh

Refresh the Explorer Panel

## Options

| | |
|---|---|
| AUTO | Automatic detection of refresh method |
| FORCEREBUILD | Rescan and Rebuild (Remove all caches and rebuild them) |
| FORCEUPDATE | Rescan and Update (Update current caches) |
| REDRAWUI | Redraw UI only |
| UPDATEUICACHE | Update View Cache only |

# MC.Explorer.RefreshTree

Refresh the Explorer Panel

# MC.Explorer.Copy

Start a Copy operation

## Options

| | |
|---|---|
| NEWQUEUE | Always start a new file operations queue |
| NODIALOG | Do not show the 'Copy To' dialog. Use default settings |
| OVERWRITE_ALL | Auto overwrite, Overwrite All |
| OVERWRITE_AUTORENAME_EXISTING | Auto overwrite, Keep both - Rename existing file |
| OVERWRITE_AUTORENAME_NEW | Auto overwrite, Keep both - Rename new file |
| OVERWRITE_IFNEWER | Auto overwrite, Overwrite If date is newer |
| OVERWRITE_IFSIZEDIFF | Auto overwrite, Overwrite If size is different |
| OVERWRITE_IFSIZELARGER | Auto overwrite, Overwrite If size is larger |
| OVERWRITE_IFSIZESMALLER | Auto overwrite, Overwrite If size is smaller |
| SKIPEMPTYFOLDERS | Skip Empty folders |
| USEEXISTINGQUEUE | Use existing file operations queue if one exists |

# MC.Explorer.Delete

Start a Delete operation

## Options

| | |
|---|---|
| NEWQUEUE | Always start a new file operations queue |
| NODIALOG | Do not show the 'Delete' dialog. Use default settings |
| USEEXISTINGQUEUE | Use existing file operations queue if one exists |

## MC.Explorer.Move

Start a Move operation

### Options

| | |
|---|---|
| NEWQUEUE | Always start a new file operations queue |
| NODIALOG | Do not show the 'Move To' dialog. Use default settings |
| OVERWRITE_ALL | Auto overwrite, Overwrite All |
| OVERWRITE_AUTORENAME_EXISTING | Auto overwrite, Keep both - Rename existing file |
| OVERWRITE_AUTORENAME_NEW | Auto overwrite, Keep both - Rename new file |
| OVERWRITE_IFNEWER | Auto overwrite, Overwrite If date is newer |
| OVERWRITE_IFSIZEDIFF | Auto overwrite, Overwrite If size is different |
| OVERWRITE_IFSIZELARGER | Auto overwrite, Overwrite If size is larger |
| OVERWRITE_IFSIZESMALLER | Auto overwrite, Overwrite If size is smaller |
| SKIPEMPTYFOLDERS | Skip Empty folders |
| USEEXISTINGQUEUE | Use existing file operations queue if one exists |

## MC.Explorer.Makedir

Create folder

### Options

| | |
|---|---|
| FOLDERNAME | Folder name |
| GOTO | Go to folder path when created |

## MC.Explorer.SetViewFilter

View filter for the Explorer Panel

### Options

| | |
|---|---|
| FILTER | The View Filter you want to set |
| FILTERID | The Filter ID of an Advanced Filter that is already defined |

## MC.Explorer.GetViewFilter

View filter for the Explorer Panel

## MC.Explorer.SetColumns

Change what columns to show, change to a defined column set

### Options

| | |
|---|---|
| NAME | ColumnSet name |

## MC.Explorer.SetViewMode

Change view mode of Explorer Panel that is in focus

### Options

| | |
|---|---|
| MODE | (1 = Detail, 2 = List, 3 = Thumbnail List, 4 = Thumbnail Detail) |

## MC.Explorer.SetTabProp

Change tab properties of active Explorer Panel tab

### Options

| | |
|---|---|
| RESET | Reset all tab properties. No other parameter used if this is set |
| TABCOLORS | Tab Colors to use. Comma-separated list TABCOLORS=<background>,<textcolor>,<Gradient (0/1)>,<HotWhenActive (0/1)> |
| TABLOCK | Lock Tab |
| TABLOCKALLOWSUBCHANGE | Lock Tab - Allow subpath change |
| TABNAME | Force the tab to be named using the provided text |

## MC.Explorer.Sort

Change which column data is sorted by

### Options

| | |
|---|---|
| COL | Number of the column to sort by (starting from 1) |
| COLNAME | Name of the column to sort by (eg. COLNAME=name) |
| ORDER | Sort order. ASC for ascending, DES for descending |

## MC.Explorer.SizeFolder

Size current selected folder(s)

### Options

| | |
|---|---|
| ALL | Force sizing of all folders in current location |
| ONLYFOCUS | Only size folder that is in focus |

## MC.Explorer.SetItemFocus

Change focus to specified a file/folder in the current path

### Options

| | |
|---|---|
| ITEM | Name of the file/folder |

## MC.Explorer.SetColoringRules

Set Color Rules profile to use. Do not specify a name if you want to use the default color profile

### Options

| | |
|---|---|
| NAME | Name of the color profile |

## MC.Explorer.RefreshColoringRules

Refresh file coloring for all files and folders

## MC.Explorer.ChangeSetting

Change an Explorer Panel settings for the current active tab temporarily. Settings will NOT be saved See documentation for more information

### Options

| | |
|---|---|
| NAME | Setting name |
| TOGGLE | Will toggle the named setting (if possible) |
| VALUE | New Settings Value |

## MC.Explorer.Selection.Select

Select items by filter (Support all views)

### Options

| | |
|---|---|
| FILTER | Filter of what to match against |
| FILTERID | The Filter ID of an Advanced Filter that is already defined |
| ONLYFILES | Only filter files |
| ONLYFOLDERS | Only filter folders |

## MC.Explorer.Selection.Unselect

Unselect items by filter (Support all views)

### Options

| | |
|---|---|
| FILTER | Filter of what to match against |
| ONLYFILES | Only filter files |
| ONLYFOLDERS | Only filter folders |

## MC.Explorer.Selection.SelectAll

Select all items

## MC.Explorer.Selection.UnselectAll

Unselect all items

## MC.Explorer.Selection.InvertSelection

Invert selections of items

## MC.Explorer.Selection.SelectByColor

Select by color (Color set by File Coloring Rules)

### Options

| | |
|---|---|
| RULE | Name of the color rule to select files/folder by. (File coloring profile having the specified rule must be active) |

## MC.Explorer.Selection.UnselectByColor

Unselect by color (Color set by File Coloring Rules)

### Options

| | |
|---|---|
| RULE | Name of the color rule to unselect files/folder by. (File coloring profile having the specified rule must be active) |

## MC.Explorer.Selection.SaveSelectionToMemory

Save selection to memory

### Options

| | |
|---|---|
| NAME | Name that you want to save the selection as (Optional) |

## MC.Explorer.Selection.LoadSelectionFromMemory

Load selection from memory

### Options

| | |
|---|---|
| NAME | Name that you want to load the selection from (Optional) |

## MC.Explorer.Selection.SaveSelectionToFile

Save selection to file

### Options

| | |
|---|---|
| FILE | File to save selection to |

## MC.Explorer.Selection.LoadSelectionFromFile

Load selection from file

### Options

| | |
|---|---|
| FILE | File to load selection from |

## MC.Explorer.Selection.LoadSelectionFromClipboard

Load selection from clipboard

### Options

| | |
|---|---|
| WILDCARD | Do wildcard selection, (Will insert * before and after every part before doing the selection) |

## MC.Explorer.Selection.CompareFoldersForDuplicates

Compare target and source views and select duplicates

### Options

| | |
|---|---|
| FILES | Compare files |
| FOLDERS | Compare folders |

## MC.Explorer.Selection.CompareFoldersForSelected

Compare target and source views and select selected on target

### Options

| | |
|---|---|
| FILES | Compare files |
| FOLDERS | Compare folders |

## MC.Explorer.Selection.CompareFoldersForMissingAndNewer

Compare target and source views and select missing and newest

### Options

| | |
|---|---|
| FILES | Compare files |
| FOLDERS | Compare folders |

## MC.Explorer.Selection.CompareFoldersForMissing

Compare target and source views and select missing

### Options

| | |
|---|---|
| FILES | Compare files |
| FOLDERS | Compare folders |

## MC.Explorer.Selection.CompareFoldersForNewest

Compare target and source views and select newest item

### Options

| | |
|---|---|
| FILES | Compare files |
| FOLDERS | Compare folders |

## MC.FileSearch.Search

Search for files and folders

### Options

| | |
|---|---|
| ATTRIBUTE | Match file attributes. Any of the following characters are valid: ARHSDCE |
| AUTOSTART | Auto-start the search when the command is run |
| CONTENT | Search for this content in matching files |
| EXCLUDE | Path(s) to exclude. if folder with matching name is found, it is not searched |
| HIDE | Hide the 'Find Files' Dialog |
| IGNORECASE | Ignore case difference when matching content |
| NOTTHERE | File is a match if content is missing from the file |
| PANEL | What panel to open the search in. (LEFT, RIGHT, ACTIVE, INACTIVE) |
| SEARCHFOR | Match files or folder that has this substring in the name, (or use wildcard) |
| SEARCHFOR_REGEXP | Match files or folder against this regular expression |
| SEARCHIN | Path(s) to where to search. Separate by space or ; |
| SIZE | Match files with a file size. Use > or < for more or less then. Eg: ">2000000" |
| SUBLEVELS | Search only # subfolders down |
| TIME | Set a time range from now. (Valid values: TODAY, YESTERDAY, THISWEEK, THISMONTH) |
| TIMEFROM | Match files with a date from this time. (Format date/time as YYY-MM-DD HH:MM:SS) |
| TIMETO | Match files with a date to this time. (Format date/time as YYY-MM-DD HH:MM:SS) |
| WORDS | Match content against whole words |

## MC.Special.SelectOldestByName

Select oldest based on file/folder name

### Options

| | |
|---|---|
| SOURCE | Select in source view |
| TARGET | Select in target view |

## MC.Utils.CreateLink

Create a File System Link, Symbolic, Hardlink, Junction or Shortcut

### Options

| | |
|---|---|
| ASADMIN | Run as Administrator |
| LNKSRC | Link Source |
| LNKTRG | Link Target |
| LNKTYPE | Link type. 1 = Hardlink, 2 = Junction, 3 = Symlink, 4 = Shortcut |

## MC.Utils.SortLines

Sort Lines in text file

### Options

| | |
|---|---|
| DATEFORMAT | Date format |
| DELETE | Overwrite original file |
| ENDATWHITESPACE | End at any whitespace character |
| ENDCHAR | End character |
| FILE | File to sort lines in |
| IGNORECASE | Ignore case |
| ITEM | Item to sort by |
| ITEMSEP | Item separator |
| KEEPBACKUP | Keep a backup of original file (*.bak) |
| KEEPBOTTOM | Lines at the bottom to keep |
| KEEPTOP | Lines at the top to keep |
| LANGUAGEORDER | Use language-established sort order |
| LINEOFFSET | Where on the line to start sorting from (1-based; first position is 1, not 0) |
| NATRUALNUMORDER | Natural number order |
| OVERWRITE | Overwrite if target file already exists |
| REVERSE | Reverse sort order |
| SILENT | Silent. No error/done dialogs are shown |
| SKIPLEADINGSPACE | Skip leading spaces |
| SORTAS | Sort as Text, Number or Date (Default is: Text) |
| SORTBY | Sort lines by Line, SubString or Item. (Default is Line) |
| SUBSTRLEN | Substring length |
| TARGET | Name of the new file. (Name filter like "*_New.*". Don't include path) |

## MC.Utils.FindAndReplace

Find and Replace in file

### Options

| | |
|---|---|
| DELETE | Overwrite original file |
| FILE | File to replace text in |
| FIND | Text to find |
| FORCEUTF8 | Force file format to UTF-8 if detected as ASCII |
| IGNORECASE | Ignore case |
| KEEPBACKUP | Keep a backup of original file (*.bak) |
| MODE | Find and Replace Mode. One, Many, ManySame, Multiline (Default: One) |
| OVERWRITE | Overwrite if target file already exists |
| REPLACEALL | Replace All |
| REPLACEWITH | Text to replace with |
| SILENT | Silent. No error/done dialogs are shown |
| TARGET | Name of the new file. (Name filter like "*_New.*". Don't include path) |
| WILDCARD | Use wildcard matching |

## MC.CheckSum.Verify

Start CheckSum Tab and verify file(s)

### Options

| | |
|---|---|
| ALLSELECTED | Verify all selected files (and files inside selected folders) |
| FILE | Path to file to verify. If folder then all checksum files in that folder will be used |

## MC.CheckSum.Create

Start CheckSum Tab and create checksum file

### Options

| | |
|---|---|
| ALLSELECTED | Add all selected files |
| AUTOSTART | Auto-start the creation of the checksum file |
| CHECKSUM | Checksum Mode to use: CRC32 or MD5 (default: CRC32) |
| ENCODING | Text Encoding of the SFV/MD5 file: ASCII/UTF-8/UNICODE (default: ASCII) |
| FILENAME | Filename of the SFV/MD5 file to create. If name is not set it name is auto-generated |

## MC.DataViewer.View

Open a file for viewing

### Options

| | |
|---|---|
| ASCII | View file as ASCII |
| AUTORELOAD | Enable AutoReload |
| BGCOLOR | Background Color |
| BINARY | View file as BINARY |
| COLOR | Text Color |
| FILE | Path to file to view |
| FONT | Font you want to use |
| FONTSIZE | Font size you want to use |
| FORMAT_1 | Add formatting. Add FORMAT_2 and so on for more formats |
| HEX | View file as HEX |
| HIGHLIGHT | Highlight words |
| UNICODE | View file as UNICODE |

## MC.PictureTools.Convert

Convert one or many pictures to another picture format

### Options

| | |
|---|---|
| DELETE | Delete the original file if it was converted |
| FILE | File to convert |
| FILES | List of files to convert, Separate with Semicolon (";") |
| FOCUS | Convert file in focus only |
| FORMAT | Target format for conversion. Can be one of the following: PNG, JPG, GIF, BMP, TIF |
| JPGQUALITY | JPG Quality to use (0-100). (Only valid if FORMAT is JPG) |
| OVERWRITE | Overwrite target file if it already exists |
| SAVEAS | Save new file as. (Only valid if you also used FILE ) By default the file name is kept but with the new file extension |
| SELECTED | Convert all selected files |

# MC.PictureTools.Resize

Resize one or many pictures

## Options

| | |
|---|---|
| FILE | File to resize |
| FILES | List of files to resize. Separate with Semicolon (";") |
| FOCUS | Resize file in focus only |
| HEIGHT | Height of target image in pixels or percent Use * to auto-calculate when keeping aspect ratio |
| OVERWRITE | Overwrite target file if it already exists |
| REPLACE | Replace original image file |
| SAVEAS | Save new file as. (Only valid if you also used FILE ) By default the file name is kept but with the new file extension |
| SELECTED | Resize all selected files |
| WIDTH | Width of target image in pixels or percent Use * to auto-calculate when keeping aspect ratio |

# Custom Commands - Examples

Examples of Custom commands

- Set View filter for the Explorer Panel
- Select files and folder in the Explorer Panel
- Run an external program
- Pack Files
- Search For Files

## Set View Filter

Set a filter to determine which files and/or folders are visible in the Explorer Panel:

```
MC.Explorer.SetViewFilter FILTER="*.jpg"
```

```
MC.Explorer.SetViewFilter FILTER="*.jpg *.gif *.png *.tiff"
```

Exclude folders named ".svn":

```
MC.Explorer.SetViewFilter FILTER="-/.svn"
```

## Select Files and Folders

Select files and/or folders in the Explorer Panel:

```
MC.Explorer.Selection.Select FILTER="*.jpg *.png"
```

## Run Application

Run an External Application:

```
MC.Run CMD="Notepad.exe"
```

Run an Application with Parameters:

```
MC.Run CMD="Notepad.exe" ARG="C:\myFile.txt"
```

Run an External Application as Administrator:

```
MC.Run CMD="Notepad.exe" ADMIN
```

Let Windows decide how the file should be opened. In the example below, Windows will open it in your default browser:

```
MC.Run CMD="http://www.google.com" SHELL
```

Run external application with the file in focus as argument:

```
MC.Run CMD="MyApp.exe" ARG="${focusfilepath}"
```

```
MC.Run CMD="MyApp.exe" ARG="-a -f -i:${focusfilepath}"
```

## Pack Files

Pack all files in "D:\MyFiles" using zip into a file named Backup.zip in the target location:

```
MC.Filesystem.PackFiles FILES="D:\MyFiles\*.*" METHOD="Zip"
TARGET="${targetpath}Backup.zip"
```

Pack all files in "D:\MyFiles" using zip into a file named "Backup-2010-03-10-12:22:22.zip" and store the file in the current target location. The date and time will be the date/time at the moment the command is run:

```
MC.Filesystem.PackFiles FILES="D:\MyFiles\*.*" METHOD="Zip"
   TARGET="${targetpath}${date:yyyy-MM-dd}-${time:hh:mm:ss}.zip"
```

## Search for Files

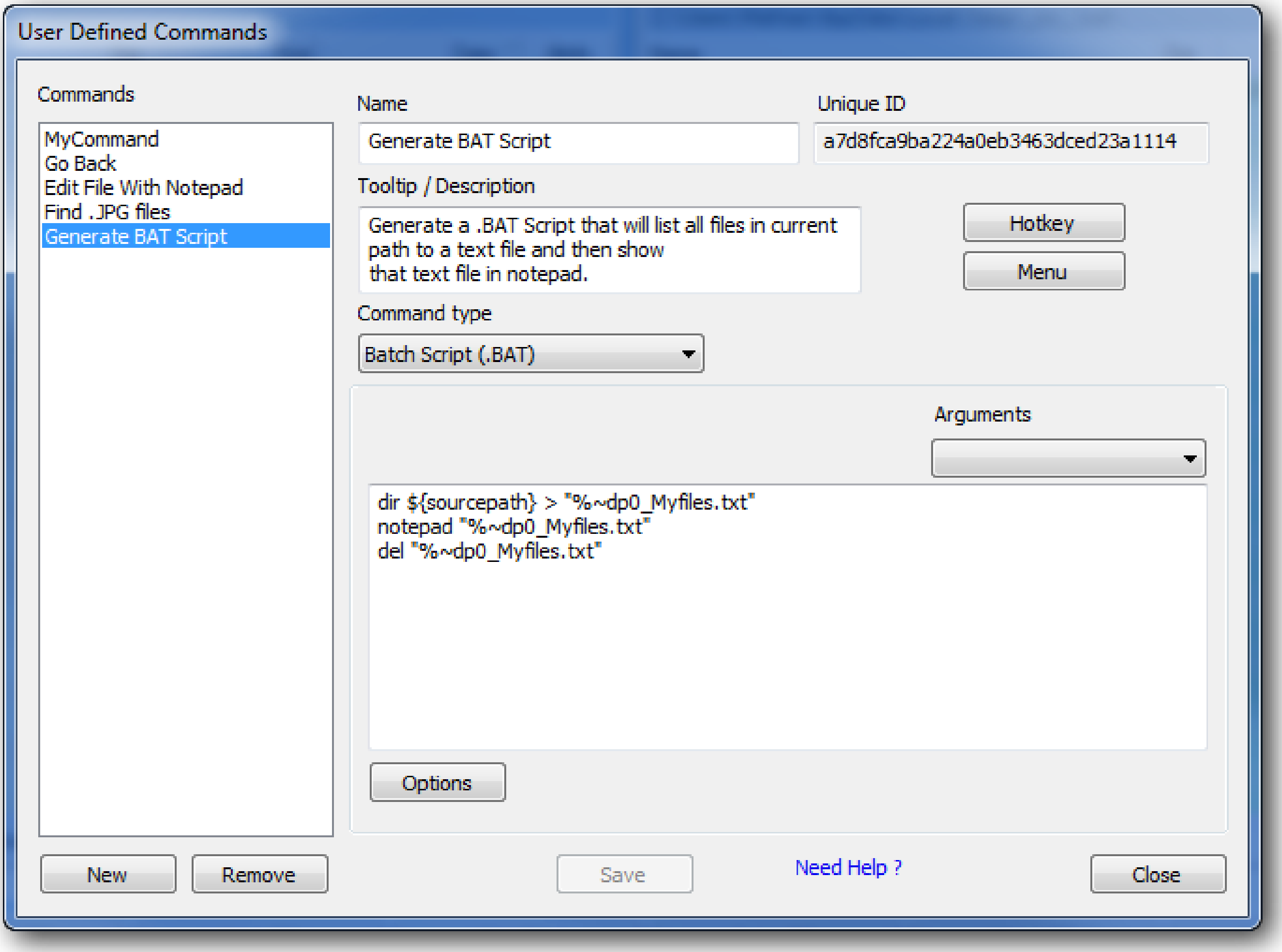
Find all *.jpg and *.tiff files in the current source path; do not search in the ".backup" folder; auto-start the search when the command is run;

```
MC.FileSearch.Search SEARCHIN="${sourcepath}" SEARCHFOR="*.jpg *.tiff"
EXCLUDE=".backup" AUTOSTART
```

# User Defined Commands - Batch Script (.BAT)

This command will generate a batch script (.bat) and run it.

Batch Scripts are based on the executable script system in Windows that goes back to the old DOS days. It is still used and is quite useful, especially if you want to run a lot of external programs one after the other. In addition, you can send the output of one program to be used as input to another.



Name: Generate BAT Script

Unique ID: a7d8fca9ba224a0eb3463dced23a1114

Tooltip / Description: Generate a .BAT Script that will list all files in current path to a text file and then show that text file in notepad.

Command type: Batch Script (.BAT)

```
dir ${sourcepath} > "%~dp0_Myfiles.txt"
notepad "%~dp0_Myfiles.txt"
del "%~dp0_Myfiles.txt"
```

When a Batch Script command is run a .bat file is generated from this command; the script is then run with its working folder set to the current source path.

## MultiTags

*MultiTags* are specially formatted texts that will be replaced with dynamic information. For example, the MultiTag **${focusfilepath}** will be replaced by the full file path to the file currently in focus. The command is run through a process that will translate *MultiTags* before it is executed.

Paths are not quoted by default, so if you need quotes around the path you have to put them around the MultiTag, e.g. **"${focuspath}"**.

Read more about MultiTags

## Options

When you press the Option button you will get a list of options you can assign to the command.

(This list of options for Batch Script is not finalized yet)

## Command Arguments

The dialog supports arguments to be sent to the command. These are sent to it if the command is called from the Command line bar or if files are dropped on a button and the command has enabled the option "Use Dropped files as parameter", or if this command is called from a Custom Command or MultiScript command.

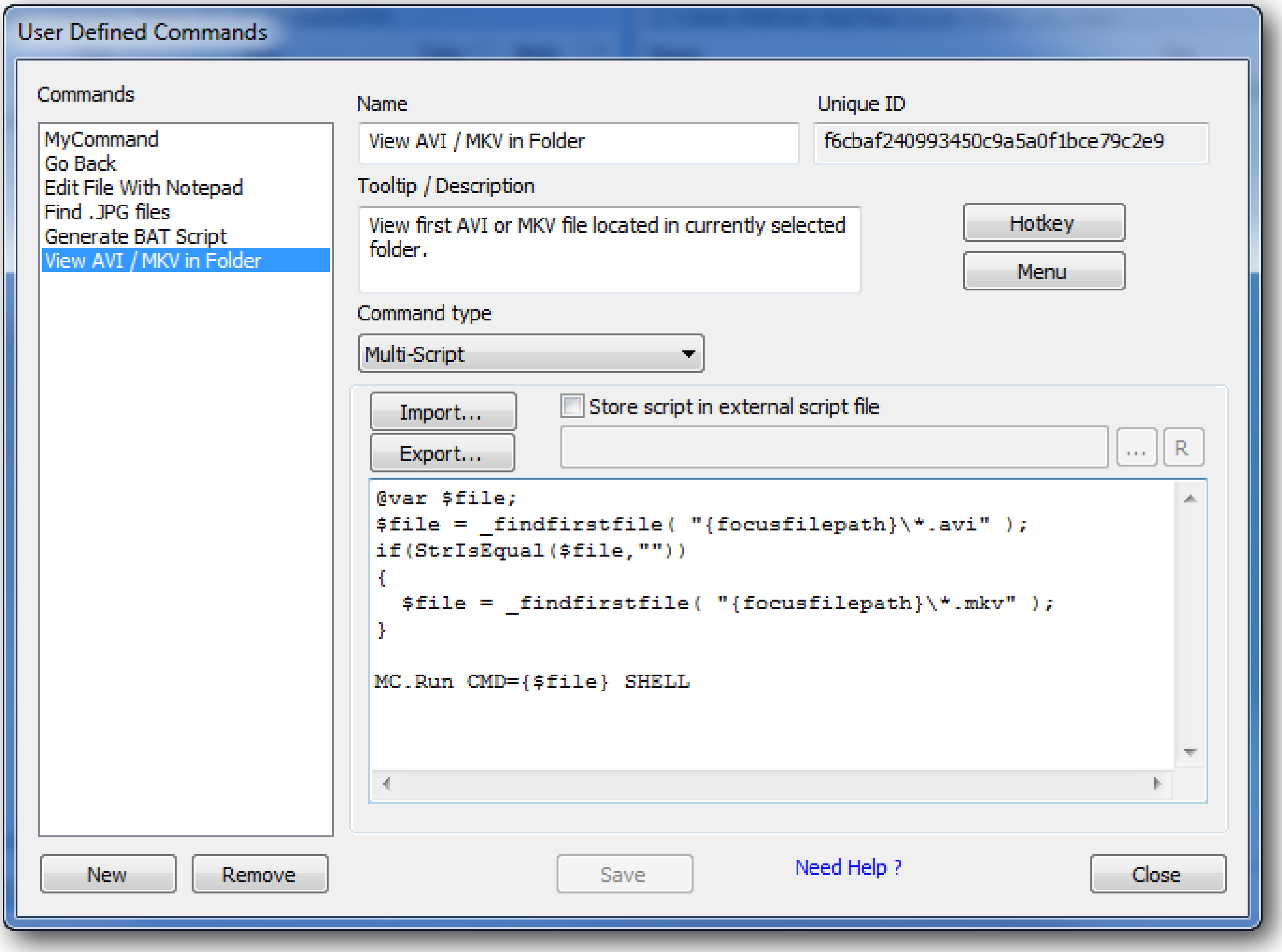
The parameters are accessed by using the MultiTags **${param:<num>}** where <num> identifies which argument to use. **${param:0}** will be the first parameter, **${param:1}** the second, **${param:2}** the third and so on.

# User Defined Commands - MultiScript

**MultiScript** commands are the most advanced type of User Defined Commands that can be created in Multi Commander. MultiScript uses the built-in **MultiScript Engine**, which provides a wide variety of functions. Furthermore, it can be extended with more functions through Extensions and Plug-ins.

With **MultiScript**, advanced scripts that use variables, functions and conditions can be created. While Custom Commands access core Multi Commander functionality in the same way that the user would access it via the UI, **MultiScript** accesses the functions at a lower level, giving more control. It will also not always show the standard UI for the operation since the core functions are accessed directly.

MultiScript can call Custom Commands, so it is possible to create scripts that combine the flexibility of MultiScript with the simplicity of Custom Commands.



Name: View AVI / MKV in Folder

Unique ID: f6cbaf240993450c9a5a0f1bce79c2e9

Tooltip / Description: View first AVI or MKV file located in currently selected folder.

Command type: Multi-Script

☐ Store script in external script file

```
@var $file;
$file = _findfirstfile( "{focusfilepath}\*.avi" );
if(StrIsEqual($file,""))
{
  $file = _findfirstfile( "{focusfilepath}\*.mkv" );
}

MC.Run CMD={$file} SHELL
```

(The example in the image above will find the first *.avi or *.mkv in the folder in focus, and then send that file to the Windows Shell to be opened by the default video player).

## Script Engine

The **MultiScript Engine** is a relatively simple but powerful script engine. It has support for everything you would expect in a script engine such as variables, script-defined functions, arrays and more. Furthermore, Extensions and Plug-ins can easily extend the script language with more functions.

There are, however, some restrictions when writing MultiScripts. The MultiScript Engine is a line-by-line engine, meaning it executes the script one line at the time, so commands cannot be split across multiple lines.
Also it does not prioritize operators, therefore "2 + 4 * 8" will result in 48 and not 34. However it does support parentheses so operations can be prioritized. To achieve the expected result of 34 in the previous example, you would re-write it as "2 + ( 4 * 8 )".

Read more on how to write MultiScripts

List of Built-In MultiScript Functions

List of Extensions And Plug-in Defined Functions

MultiScript Examples

## Using Custom Commands in a MultiScript

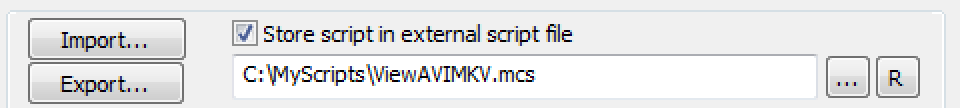
MultiScripts can call Custom Commands directly as long as the entire line is a Custom Command. Lines that are Custom Commands are executed by the Custom Command Engine which does not understand MultiScript variables. So if a variable should be passed to a Custom Command it must be enclosed with **{ }**. Everything inside the **{ }** is evaluated and resolved before the Custom Command Engine executes the command:

```
@var $path = GetSourcePath();
@var $file = "MyFile.exe";
$file = path ^ $file;
if( FileExists($file ) == 1 )
{
 MC.Run CMD={$file}
}
```

The **MC.Run** line is a Custom Command and does not know what variables are. So the $file variable is enclosed in **{ }** and translated before the line is executed by the Custom Command Engine.

Since Custom Commands are simple commands, they do not return results and from MultiScript there is no way to know if a Custom Command was successful or not.
If the success or failure status is required then use the low-level functions provided by MultiScript.

## Store MultiScript in External File


Import...
Export...
☑ Store script in external script file
C:\MyScripts\ViewAVIMKV.mcs
...
R

By enabling this option you can store the script in an external file.

## Import / Export

**Import** will let you open a file and load the content of that file into the editor.

**Export** will let you save your script into an external file.

# MultiScript Language Syntax

## Supported Language Features

- Language Syntax
- Reserved Keywords
- Data Types
- Variables
- Constants
- Escape Sequences
- Arrays
- Operators ( +, /, *, -, ...)
- Index Operator
- Assignment Operators ( =, +=, -= )
- Comparison Operators ( ==, >, <, >=, <= )
- Negation Operator ( ! )
- Special Path Operators ( ^ )
- IF - Condition
- FOR - Loop
- WHILE - Loop
- Functions
- Classes

## Language Syntax

The MultiScript script engine is a line-by-line engine, meaning that every script command must be on a single line. A command cannot be split across multiple lines.

Every script command should end with "**;**". (This is not strictly required yet, but will be in the future. at that time it will then be possible to split commands over multiple lines.)

New scope is declared with **{ }** and is used for conditions, loops, functions and classes.

Example:

```
$len = StrLen($str);
if( $len > 10 )
{
  $str = "Too long";
}
```

Lines starting with **//** or **#** are handled as comment lines and are ignored.
Comments are **not** allowed to be on the same line as valid code.

```
$len = StrLen($str); // Get string length (Comments and code on the same line are
not allowed)
```

The script engine evaluates expressions from left to right, but parentheses are evaluated first. Because of this, parentheses **must** be used if multiple expressions are used within a line, to guarantee that they are evaluated in the correct order.

```
@var $result;

// INCORRECT
$result = 10 + 5 * MyFunc_GetMultiplyFactor();
```

```
// CORRECT
$result = 10 + (5 * MyFunc_GetMultiplyFactor());
```

Function parameters can be variables, constants or expressions. Function parameters are evaluated *before* they are sent to the function. Variables are always passed *by value*, meaning a copy of the variable is actually passed.

```

@var $result;

$result = CalculateResult( 4 + 5, "Parameter2" );

$result = CalculateResult( MyFunc_GetValue("hight") + 2 );
```

## Reserved Keywords

The following words are *reserved* and cannot be used for variables or function names.

| | | | |
|---|---|---|---|
| **if** | **for** | **while** | **break** |
| **continue** | **return** | **function** | **class** |
| **new** | **@var** | | |

## Data Types

Variables and constants can be of different *data types*. Valid data types are *String*, *Number*, *Array*, *Object* and *Handle*.

Conversions from string to number and number to string are often done automatically, making it possible to concatenate a number variable or constant to a string.

## Variables

*Variables* are declared with the special keyword **@var**. The variable name must start with a **$**, and can only have the characters a-z, A-Z and 0-9 in the name. Special characters are not allowed.

```

@var $v1;
```

Multiple variables can be declared on the same line.

```

@var $v1, $v2, $v3;
```

Variables can also be assigned a value when declaring them, either from a constant value or from a function call.

```

@var $v1 = 0;
@var $v2 = MyFunc();
```

Declaring a variable with a name that already exists is allowed as long as the variable exists in a different scope.

```
@var $v1 = 0;
if( $v1 == 0 )
{
 @var $v1;

 // $v1 outside the if statement is not changed
 $v1 = 20;
}
```

*Arrays* must be declared with a size, although you can manipulate the size later.

```
@var $arr[2];
```

Arrays can also be declared with values. In this case the size is implicit.

```
@var $arrStr[] = {"String1", "String2", "String3"};
@var $arrNum[] = {1, 2, 3};
```

## Constants

Variables can be declared using number and string constants. Functions can also return constant arrays.

```
@var $v1 = 2;
@var $v2 = "string";
if($v2 == "string")
{
...
```

}

### Escape Sequences

To be able to type constant strings containing special characters such as the *newline* character, *double quotation mark*, *tab*, etc., they need to be written in a special way, using an *escape sequence*.

An escape sequence consists of a backslash (\) followed by a letter. Each escape sequence is regarded as a single character.

| Escape Sequence | Represents |
|---|---|
| \n | Newline |
| \r | Carriage return |
| \t | Tab |
| \" | Double quote mark (") |
| \\ | Backslash (\) |

If you want an actual backslash in your constant string you need to write "\\". This will translate into "\".

```
$var = "C:\\Temp\\MyFolder\\File.txt";
```

Escape sequences are only translated inside string constants enclosed in double quotes. Using single quoted strings will not translate escape sequences. Using single quoted strings may make the code more readable, but some characters like newline and single (or double) quotes cannot be used inside these strings.

```
$var = 'C:\Temp\MyFolder\File.txt';
```

## Arrays

*Arrays* can hold multiple values. The values can be Strings, Numbers, Handles or other arrays.

The *index* operator ( [ ] ) is used to access array items. It can be used to get or to set values.
If using it to set a value you must be sure that you are not trying to set an item outside the bounds of the array.

When accessing array items the index value is 0-based. Thus the first item is index 0, the second is index 1. and so forth.

```
@var $arr[3];
$arr[0] = 2;
$arr[1] = 6;
$arr[2] = 8;

//This will fail (out-of-bounds).
$arr[4] = 10;
```

When assigning one array to another, a copy of each item in the original array is created.

```
@var $arr[3];
$arr[0] = 2;
$arr[1] = 6;
$arr[2] = 8;

@var $arr2;
$arr2 = $arr;
```

## Array Functions

There are several built-in array functions.
Read more about array functions

```
@var $arr = $arr[2] = {"item0", "item1"};
@var $count = arrayCount($arr);
// $count is 2

// Replace item 0 and 1
$arr[0] = "item1";
$arr[1] = "item2";

@var $str = $arr[1];
// $str is now "item2";

// Add and increase size of array
arrayAdd($arr, "item3");
$count = arrayCount($arr);
// $count is now 3

@var $idx = arrayFind($arr, "item3");
// $idx is 2

arrayRemove($arr, 0);
$count = arrayCount($arr);
// $count is now 2 and item "item1" has been removed
```

# Operators

The usual arithmetic operators (+, -, *, /) are supported.

```
@var $v1, $v2;
$v1 = 5 + 2;
$v1 = $v1 - 1;
$v2 = $v1 * 2;
$v1 = $v2 / $v1;
```

Since the script engine does not do any operator prioritization, parentheses **must** be used if multiple operators are used on one line to guarantee that they are evaluated correctly. On number values, mathematical operations are used. The **+** operator for two strings will concatenate the right string with the left.

```
@var $result;

$result = 5 + 4 * 2;
// $result is now 18

$result = 5 + (4 * 2);
// $result is now 13

$result = "StringA" + " " + "String B";
// $result "StringA StringB";
```

## Index Operators

The *index operator* ( [ ] ) is supported for both Arrays and strings. On Arrays it is used to get/set an array item. On strings it is used to get/set a character in the string.

```
@var $str = "MyString";
$str[0] = "Z";
// $str is now "ZyString";

$str = "abcdef";
@var $str2 = "12345";
$str[1] = $str2[3];
// $str is now "a4cdef";
```

## Assignment Operators

The *assignment operators* (=, +=, -=) are used to assign the left side from the result of the expression to the right side.

```
@var $val = 1;
$val = 5;

// += is increment
$val += 2;
// $val is now 7

// -= is decrement
$val -= 2;
// $val is now 5
```

## Comparison Operators

*Comparison operators* are used to compare two values. The result of a comparison operator is 0 for false or 1 for true. The following comparison operators are supported: == (equal), > (greater than), < (less than), >= (greater than or equal), <= (less than or equal)

```
@var $val = 3;
$val = $val > 2;
// $val is now 1
$val = 4;
if( $val >= 4 )
{
 ...
}
```

## Negation Operators

The *negation* operator (!) is used to negate a true/false value. The result of a negation is either 0 or 1.

```
@var $val = 1;
if( !$val )
{
 // if $val is false
 ...
}
```

## Special Path Operator

**"^"** is used as a special path operator. It will assume that both the left and right side are path items, and will insert a path separator (\) if needed.

```
@var $path;
$path = "C:\\Path";
$path = $path + "MyFile.txt";
// $Path is now "C:\PathMyFile.txt"

$path = "C:\\Path";
$path = $path ^ "MyFile.txt";
// $Path is now "C:\Path\MyFile.txt"

$path = "C:\\Path\\";
$path = $path ^ "\\MyFile.txt";
// $Path is now "C:\Path\MyFile.txt"
```

# IF - Condition

The *IF condition* will evaluate its test expression. If the expression is greater than or equal to 1 (true) then it will execute the scope after the if statement. If it is less then 1 (false) it it will jump over the scope or go to the else statement if present.

New variables created inside the IF scope will only exist within that scope. New scope variables can be named the same as variables in the outer scope (but this is not best practice).

```
@var $v = 2;
@var $s = 1;
if($v == 2)
{
 // Local scope variable
 @var $s = 10;
 $v = 1;
}
else if( $v >= 3)
{
 $v = 3;
}
else
{
 $v = 4;
}

if( MyFync($v) )
{
 $v = 6;
}
```

# FOR - Loops

A **FOR** loop statement has 3 expressions that are evaluated.

```
for( <init expression>; <condition expression>; <loop expression>)
{
  <statement>
}
```

The **Init Expression** is evaluated once, before any other element of the **for** loop.

The **condition expression** is evaluated and tested each time it is about to enter the **for** scope.

The **loop expression** is evaluated each time it has ended a scope execution of the **for** loop.

The Initialization variable in the init-expression **must** be declared outside the **for** loop.

```
// Valid for expression
@var $n;
for( $n = 0; $n < 5; $n++ )
{
  ...
}

// Invalid for expression
for( @var $n = 0; $n < 5; $n++ )
{
 ...
}
```

A **for** loop terminates when the condition expression evaluates to 0 (false), or a **break** or **return** statement is executed within the loop. A **continue** statement in a **for** loop terminates only the current iteration.

```
@var $n;
for( $n = 0; $n < 5; $n++ )
{
  if($n == 2)
  {
   continue;
  }
  if($n == 4)
  {
   // break out of the loop
   break;
  }
}
```

## WHILE - Loops

A **While** loop has 1 expression that is evaluated every time through the loop until it is 0 (false).

```
while( <expression> )
{
  <statement>
}
```

A **while** loop can terminate when a **break**, or **return** within the statement body is executed. Use **continue** to terminate the current iteration without exiting the **while** loop. **Continue** passes control to the next iteration of the **while** loop.

```
@var $n = 10;
while( $n > 0 )
{
  $n--;
}

@var $success = 1;
while( $success )
{
  $success = MyFunc_DoWork();
}
```

## Functions

With the **function** keyword it is possible to define a function that is called by the script.
The function must be defined before it is called. Therefore it is recommended to define all the script functions first in the script.

Functions support arguments. Parameters sent to a function will be passed *by value*, meaning they are passed as copies. If a variable passed as a parameter to a function is changed within the function, the original variable is *not* changed.

The function will return when it reaches the end of the function definition. It will by default always return 1 in this case. If some other return value from the function is wanted then a **return** statement must be used.

```
function MyFunc( $a1, $a2 )
{
 @var $result = $a1 + $a2;
 $result = $result * 2;
 return $result;
}

@var $n = 0;
$n = MyFunc( 2, 6 );
```

The **return** statement can also be used to exit from the function *before* it reaches the end.

```
function MyFunc( $a1, $a2 )
{
 @var $result = $a1 + $a2;
 if( $result > 10 )
 {
   return $result;
 }
 $result = $result * 2

 return $result;
}

@var $n = 0;
$n = MyFunc( 4, 8 );
```

# Classes

With the **class** keyword it is possible to define a *class*. A class is a group of variables and functions that are collected together within an *object*. Objects in MultiScript are very simple variations of the "object" you find in languages like C++, but without the support for public/private. Everything is public here.

A class is created from a definition using the **new** keyword. This will create a new instance of a class.

It is not possible to delete objects while running the script.

To access a function or variable in an object a dot ("**.**") is used to as separator between the object variable and the class variable name or function name.

When referring to a variable in an object variable the **$** of the class variable is not written.

```
// INCORRECT
@var $n = $obj.$a;

// CORRECT
@var $n = $obj.a;
```

```
class MyClass
{
  @var $a = 0;
  @var $b = 1;

  function( $v1, $v2 )
  {
    $b = $v1 + $v2;
    return $b;
  }
}

@var $obj = new MyClass;
@var $result = $obj.MyFunc( 2, 5 );
@var $n = $obj.a;
```

# MultiScript - Core built-in functions

## Data Type Description

| Type | Description |
|---|---|
| <num> | A variable or constant of type *number* |
| <str> | A variable or constant of type *string* |
| <array> | A variable or constant of type *array* |
| <handle> | A variable of type *handle* |
| <var> | A variable of any type |

## Script Language Functions

| Return Value | Function Definition | Description |
|---|---|---|
| <num> | IsTypeString( <var> ) | Returns 1 if <var> is of type *string* |
| <num> | IsTypeNum( <var> ) | Returns 1 if <var> is of type *number* |
| <num> | IsTypeArray( <var> ) | Returns 1 if <var> is of type *array* |
| <num> | IsTypeHandle( <var> ) | Returns 1 if <var> is of type *handle* |
| <num> | strtonum( <str> ) | Converts a number of type *string* to *number* |
| <str> | numtostr( <num> ) | Converts a number of type *number* to *string* |

## See Also

Array Functions
String Functions

# MultiScript - Array functions

**Array** is an internal data type in MultiScript.
An array can contain multiple values of type **string**, **number** or **array**.

The following is a list of supported array functions:

| | |
|---|---|
| array initialization | Initialize an array with values when declared. |
| arrayCount | Count the items in an array. |
| arrayAdd | Add an item to an array. |
| arrayRemove | Remove an item from an array. |
| arrayFind | Find a string item in an array. |
| arrayIFind | Find a string item in an array, Ignoring case differences. |
| ArraySort | Sort the items in an array. |
| ArrayToString | Concatenate all string in an array to a string. |
| StrLines2Array | Transform a string with multiple lines into an array of lines. |
| StrLinesArray2String | Transform an array of strings into a multi-line string. |
| StrTokenize2Array | Tokenize a string into an array. |
| operator [] | Get or Set an array item at a specified index position. |

## See also

SaveArray
LoadArray

## Initialize Array

You can **initialize** an array when it is declared.

```
@var $arr[] = {<str>|<num>, <str>|<num>, ..., ... };
```

### Parameters

***<str>|<num>***
String or Number values to insert into the array

### Return value

An array with values inserted into it

### Example

```
@var $arr[] = {"String1", "String2", "String3"};
@var $len = arrayCount($arr);
// $len is 3.
```

## arrayCount

**Count** the items in an array.

```
<num> arrayCount( <array> input );
```

### Parameters

***input***
Array to count items in

### Return value

The number of items that are currently in the array

### Example

See 'Initialize Array', above

## arrayAdd

**Add** an item to an array.

```
<none> arrayAdd( <array> input, <str>/<num> value );
```

### Parameters

***input***
Array to add value into

***value***
String or Number value that should be added to the array

### Return value

Nothing

## arrayRemove

**Remove** an item from an array.

```
<none> arrayRemove( <array> input, <num> index );
```

### Parameters

***input***
Array to remove item from

***index***
The position in the array from which to remove the item, beginning at index 0

### Return value

Nothing

## arrayFind

**Search** an array for a string value (case-sensitive).

```
<num> arrayFind( <array> input, <str> string );
```

### Parameters

***input***
Array to be searched for the string

***string***
The string item to look for

### Return value

Index position of the found string, or -1 if the string is not found

## arrayIFind

**Find** a string value in an array, ignoring case differences.

```
<num> arrayIFind( <array> input, <str> string );
```

### Parameters

***input***
Array to be searched for the string

***string***
The string item to look for

### Return value

Index position of the found string, or -1 if string is not found

## ArraySort

Sort the items in an array.

```
<arr> ArraySort( <arr> arr );
```

### Parameters

***arr***
Array that should be sorted

### Return value

A new array that is sorted

### Example

```
@var $arr[] = {3, 5, 2};
@var $arrNew = ArraySort( $arr );
// arrNew = 2,3,5

@var $arr[] = {"DD", "CC", "AA"};
@var $arrNew = ArraySort( $arr );
// arrNew = "AA", "CC", "DD"
```

## ArrayToString

Join all string in an array to a string.

```
<str> ArraySort( <arr> arr, <str> delimiter, <num> escape);
```

### Parameters

***arr***
Array with strings

***delimiter***
What delimiter to use between the string, Eg " , " if you want space then comma then a space

***aescaper***
Set to 1 if you want all the string to have " around them. like if they are paths.

### Return value

A string

### Example

```
@var $arr[] = { 'c:\MyFile1.txt', 'c:\MyFile2.txt', 'c:\MyFile3.txt'};
@var $arrNew = ArrayToString( $arr, " , ", 0 );
// arrNew = c:\MyFile1.txt , c:\MyFile2.txt , c:\MyFile3.txt

@var $arr[] = { 'c:\MyFile1.txt', 'c:\MyFile2.txt', 'c:\MyFile3.txt'};
@var $arrNew = ArrayToString( $arr, " , ", 1 );
// arrNew = "c:\MyFile1.txt" , "c:\MyFile2.txt" , "c:\MyFile3.txt""
```

## StrLines2Array

**Transform** a string with multiple lines into an array.

```
<array> StrLines2Array( <str> input );
```

### Parameters

***input***
Multi-line string (all forms of newline are supported)

### Return value

An array where the strings in *input* have been split at the line breaks

## StrLinesArray2String

**Transform** an array of strings into a multi-line string.

```
<str> StrLinesArray2String( <array> input, [<num> eol] );
```

### Parameters

***input***
Array of strings

***eol* (*Optional*)**
what kind of line break to use:
0 = CRLF (Windows) (this is the default if none is specified)
1 = LF (Linux)
2 = CR (Mac)

### Return value

A multi-line string where the strings in the array *input* have been appended together with line breaks inserted between the strings; the line break type is determined by the *eol* value

### Example

```
@var $arr[] = {"String1", "String2", "String3"};
@var $strLines = StrLinesArray2String( $arr );
@var $strLinesLF = StrLinesArray2String( $arr, 1 );
```

## StrTokenize2Array

**Tokenize** a string into an array, splitting it at specified delimiters.

```
<array> StrTokenize2Array( <str> input, <str> delimiter );
```

### Parameters

***input***
String to tokenize

***delimiter***
Characters at which to split the string

### Return value

An array of strings based on the string *input* after it is split. It is split wherever there are characters that match those in *delimiter*. The *delimiter* character(s) will *not* appear in the new array (ie., they will be lost)

## operator [ ]

**Index** operator for setting or getting a value from an array.

```
<any> operator [<num>] <any>;
```

### Parameters

***[<num>]***
The index position to set or get a value, beginning at index 0

### Return value

The item at the selected index position

### Example

```
@var $arr[] = {"Str1", "Str2", "Str3"};
$arr[1] = "Frog";
// string now contain the strings "Str1","Frog","Str3";
@var $str = $var[2];
// $str now contain the value "Str3"
```

# MultiScript - String Functions

The following string functions are supported in MultiScript:

| | |
|---|---|
| StrLen | Return the length of a string. |
| StrSub | Return a substring from a string. |
| StrFind | Return the position of a substring in a string. |
| StrRFind | Return the position of a substring using reverse find (back-to-front search). |
| StrReplace | Replace a substring in a string. |
| StrReplaceChars | Replace all characters found with one new character. |
| StrReplaceCharsPairs | Replace all characters found with a new characters. |
| StrToUpper | Return a string in uppercase. |
| StrToLower | Return a string in lowercase. |
| StrTrim | Return a string that has been trimmed of unwanted characters both at the beginning and end. |
| StrTrimLeft | Return a string that has been trimmed of unwanted characters from the left. |
| StrTrimRight | Return a string that has been trimmed of unwanted characters from the right. |
| StrSplit | Split a string and return the separated substrings as an array. |
| StrCompareNoCase | Return the difference of two strings ignoring case differences. |
| operator == | Return the difference of two strings (case-sensitive comparison). |
| StrIsEqual | Return 1 if two strings are equal, otherwise 0 (case-sensitive). |
| StrIsEqualNoCase | Return 1 if two strings are equal, ignoring case differences. |
| StrIsWildMatch | Return 1 if two strings match using a case-sensitive wildcard algorithm. |
| StrIsWildMatchNoCase | Return 1 if two strings match using a case-insensitive wildcard algorithm. |
| StrIsRegExpMatch | Return 1 if two strings match using regular expressions (case-sensitive). |
| StrIsRegExpMatchNoCase | Return 1 if two strings match using regular expressions, ignoring case difference. |
| StrRegExpFind | Find a substring using a regular expression. |
| StrRegExpReplace | Find a substring using a regular expression and replace it using regexp. |

## See also

SaveStringToFile
LoadStringFromFile

## StrLen

Return the length of a string.

```
<num> StrLen( <str> string );
```

### Parameters

***string***
A string to get the length of

### Return Value

The number of characters in *string*

### Example

```
@var $str = "MyString";
@var $len = StrLen( $str );
// $len is 8
```

## StrSub

Return a substring beginning at a specified location and having a specified length

```
<str> StrSub(<str> input, <num> offset, <num> length);
```

### Parameters

***input***
A string from which the substring is extracted

***offset***
Initial position to begin the search (starting with 0)

***length***
The number of characters to include in the returned substring, or -1 to include all characters through to the end of the string *input*

### Return Value

A string that is the substring of *input* beginning at the specified location

## StrFind

Find the position of a substring in a string (case-sensitive).

```
<num> StrFind(<str> input, <str> find, <num> offset);
```

### Parameters

***input***
The string to be searched

***find***
The string to be found

***offset***
Initial position to begin the search (starting with 0)

### Return Value

The position in the *input* string in which the search string *find* is found (the first character position is 0), or -1 if *find* is not found

## StrRFind

Find the position of a substring in a string, searching the string in reverse (case-sensitive).

```
<num> StrRFind(<str> input, <str> find);
```

### Parameters

***input***
The string to be searched

***find***
The string to be found

### Return Value

The position in the *input* string in which the search string *find* is found (the first character position is 0), or -1 if *find* is not found

# StrReplace

Replace a substring within a string (case-sensitive).

```
<str> StrReplace(<str> input, <str> find, <str> with );
```

## Parameters

***input***
A string within which to replace the substring

***find***
The substring to be replaced

***with***
The string that the substring *find* should to be replaced with

## Return Value

The string *input* with the substring *find* replaced by the string *with*

## Example

```
@var $str = "MyString";
@var $str2 = StrReplace( $str, "My" , "New" );
// $str2 is "NewString"
```

# StrReplaceChars

Replace a any specified character with one new character (case-sensitive).

```
<str> StrReplaceChars(<str> input, <str> find, <str> with );
```

## Parameters

***input***
A string within which to replace the substring

***find***
A string of character to find

***with***
The character that any of the found characters should be replaced with

## Return Value

The string *input* with the characters replaced, If any. If no characters was replace the string is returned unmodified

## Example

```
@var $str = "MyString";
@var $str2 = StrReplaceChars( $str, "ryg" , "_" );
// $str2 is "M_St_in_"
```

## StrReplaceCharsPairs

Replace a any specified character with a matching characters (case-sensitive).
the find and with parameter must be same in length. Ex character 2 in "find" will when found be replaced with character 2 from "with"

```
<str> StrReplaceCharsPairs(<str> input, <str> find, <str> with );
```

### Parameters

***input***
A string within which to replace the substring

***find***
A string of character to find

***with***
The string of characters to replace a found character with

### Return Value

The string *input* with the characters replaced, If any. If no characters was replace the string is returned unmodified

### Example

```
@var $str = "MyString";
@var $str2 = StrReplaceChars( $str, "ryg" , "_23" );
// $str2 is "M2St_in3"
```

## StrToUpper

Transform a string into all uppercase characters.

```
<str> StrToUpper(<str> input);
```

### Parameters

***input***
A string that should be transformed

### Return Value

An uppercase version of the string *input*

## StrToLower

Transform a string into all lowercase characters.

```
<str> StrToLower(<str> input);
```

### Parameters

***input***
A string that should be transformed

### Return Value

A lowercase version of the string *input*

## StrTrim

Remove unwanted characters from both the left and right side of a string (case-sensitive).

```
<str> StrTrim(<str> input, <str> trimchars);
```

### Parameters

***input***
A string that should be trimmed

***trimchars***
A string specifying all characters to be removed

### Return Value

A string where **all** characters in *trimchars* have been removed from both the left side (beginning) and the right side (end) of the string *input*

## StrTrimLeft

Remove unwanted characters from the left side of a string (case-sensitive).

```
<str> StrTrimLeft(<str> input, <str> trimchars);
```

### Parameters

***input***
A string that should be trimmed

***trimchars***
A string specifying all characters to be removed

### Return Value

A string in which **all** characters in *trimchars* have been removed from the left side (beginning)

## StrTrimRight

Remove unwanted characters from the right side of a string (case-sensitive).

```
<str> StrTrimRight(<str> input, <str> trimchars);
```

### Parameters

***input***
A string that should be trimmed

***trimchars***
A string specifying all characters to be removed

### Return Value

A string in which **all** characters in *trimchars* have been removed from the right side (end)

## StrSplit

Split a string into an array of strings (case-sensitive).

```
<array> StrSplit(<str> input, <str> delimiter);
```

### Parameters

***input***
A string that should be split

***delimiter***
A string containing the character(s) that will be used as a delimiter

### Return Value

The string *input* split into multiple strings in an array of type string. The string is split wherever the character(s) in the string *delimiter* are located

If the characters in *delimiter* are not found, the original string *input* is returned

## StrCompareNoCase

Compare two strings, ignoring case differences.

```
<num> StrCompareNoCase(<str> string1, <str> string2);
```

### Parameters

***string1***
First string to compare

***string2***
Second string to compare

### Return Value

A number showing the differences between the strings *string1* and *string2*. The return value indicates the lexicographic relation of string1 to string2

< 0 if *string1* is less than *string2*.
0 if *string1* is equal to *string2*.
> 0 if *string1* is greater than *string2*.

## Operator ==

Compare two strings (case-sensitive).

```
<num> <str> == <str>;
```

### Parameters

***string1***
First string to compare

***string2***
Second string to compare

### Return Value

1 if the string are the same, and 0 if the are different.

### Example

```
@var $str1 = "ABCDEF";
@var $str2 = "ABCDEF";
@var $val = $Str1 == $Str2;
// $val == 1
@var $str3 = "AbcDeF";
@var $val = $Str2 == $Str3;
// $val == 0
```

## StrIsEqual

Check whether two strings are equal (case-sensitive).

```
<num> StrIsEqual(<str> string1, <str> string2);
```

### Parameters

***string1***
First string to compare

***string2***
Second string to compare

### Return Value

A value of 1 if *string1* is equal to *string2*, 0 if the strings are not identical

## StrIsEqualNoCase

Check whether two strings are Equal, ignoring case differences.

```
<num> StrIsEqualNoCase(<str> string1, <str> string2);
```

### Parameters

***string1***
First string to compare

***string2***
Second string to compare

### Return Value

A value of 1 if *string1* is equal to *string2*, 0 if the strings are not identical (ignoring case)

## StrIsWildMatch

Check if a string matches a wildcard criterion (case-sensitive).
Wildcard is a string containing "*" (for anything) and "?" (for any single character).

```
<num> StrIsWildMatch(<str> input, <str> wildcard);
```

### Parameters

***input***
A string to check

***wildcard***
A wildcard string to check against

### Return Value

1 if *wildcard* matches the string *input*, 0 if no match is found

### Examples

```
@var $str = "123def567";
// If the character sequence "def" is in the string $str, $val1 will be 1
@var $val1 = StrIsWildMatch( $str , "*def*");

// The two first characters can be anything,
// But the third character must be a 3.
// And anything can be after it. then $val1 will be 1
@var $val1 = StrIsWildMatch( $str , "??3*");
```

## StrIsWildMatchNoCase

Check if a string matches wildcard criteria, ignoring case differences.
Wildcard is a string containing "*" (for anything) and "?" (for any single character).

```
<num> StrIsWildMatchNoCase(<str> input, <str> wildcard);
```

### Parameters

***input***
A string to check

***wildcard***
A wildcard string to check against

### Return Value

1 if *wildcard* matches the string *input*, 0 if no match is found

## StrIsRegExpMatch

Check if a string matches a regular expression (case-sensitive).

```
<num> StrIsRegExpMatch(<str> input, <str> regexp);
```

### Parameters

***input***
A string to check

***regexp***
A regular expression to check against

### Return Value

1 if the regular expression *regexp* matches the string *input*, 0 if no match is found

## StrIsRegExpMatchNoCase

Check if a string matches a regular expression, ignoring case differences.

```
<num> StrIsRegExpMatchNoCase(<str> input, <str> regexp);
```

### Parameters

***input***
A string to check

***regexp***
A regular expression to check against

### Return Value

1 if the regular expression *regexp* matches the string *input*, 0 if no match is found

## StrRegExpFind

Find a substring using a regular expression.

```
<num> StrRegExpFind(<str> input, <str> regexp);
```

### Parameters

***input***
String to find a substring in

***regexp***
Regular expression to find the substring

### Return Value

Position in the string *input* where a match was found, or -1 if no match is found

### Example

```
@var $str = "Program v3.10";
@var $len = StrRegExpFind( $str , ".v[0-9].[0-9][0-9]" );
// $len is 7
```

# MultiScript - Core Functions - RowList functions

The *RowList functions* are special functions to make it easier to work with text lists.

## Example

Suppose the content of the file "d:\temp\list.txt" looks like the following:

```
Person Z        0202-1111111        Fake Street 1
Person A        0202-2222222        Fake Street 2
Person B        0303-3333333        Fake Street 3
Person C        0202-4444444        Fake Street 4
Person D        0202-5555555        Fake Street 5
```

The columns are separated with a tab character "\t".

This script will load that file into a rowlist and then get each column item one-by-one.

```
@var $list = RowListLoad("d:\\temp\\list.txt", "\t");
@var $rowcnt = RowListCount($list);
@var $idx = 0;
for( $idx = 0; $idx < $rowcnt; $idx++)
{
 @var $Name   = RowListItem($list, $idx, 0));
 @var $Phone  = RowListItem($list, $idx, 1));
 @var $Street = RowListItem($list, $idx, 2));
}
```

## RowList Functions

| | |
|---|---|
| RowListLoad | Load a rowlist |
| RowListClose | Close a rowlist |
| RowListCount | Get the number of rows in the rowlist |
| RowListColumnCount | Get the number of columns |
| RowListArray | Return a specifed row as an array |
| RowListItem | Get a row item. |
| ReplaceTagsInString | Replace the tags in a string with values from a rowlist. |

## RowListLoad

Load a file as a rowlist.

```
<handle> RowListLoad(<str> filename, <str> delimiter);
```

### Parameters

***filename***
File to load as a rowlist

***delimiter***
Columns are split using this character.

### Return value

A handle to a rowlist, or 0 if the load failed.

## RowListClose

Close a rowlist

```
<num> RowListClose(<handle>);
```

### Parameters

***handle***
Handle to a rowlist

### Return value

1 for success, 0 for failure.

## RowListCount

Count the number of rows in a list

```
<num> RowListCount(<handle>);
```

### Parameters

***handle***
Handle to a rowlist

### Return value

The number of rows in the list.

## RowListColumnCount

Count the number of columns in a list.

```
<num> RowListColumnCount(<handle>);
```

### Parameters

***handle***
Handle to a rowlist

### Return value

The number of columns in the list.

## RowListArray

Get a row from a list as an array

```
<array> RowListArray(<handle> <num> row);
```

### Parameters

***handle***
Handle to a rowlist

***row***
Index of the row to return as an array.

### Return value

An array with all the columns of the specified *row*.

## RowListItem

Get a single item from a list.

```
<string> RowListItem(<handle> <num> row, <num> col);
```

### Parameters

***handle***
Handle to a rowlist

***row***
Row index

***col***
Column index

### Return value

The value of the specified *column* in the specified *row*.

## ReplaceTagsInString

Replace tags in a string with values from a rowlist

```
<string> RowListItem(<str> tagString, <str> tag, <handle> rowlist, <handle>
rowIdx);
```

### Parameters

***tagString***
A string with tag that should be replace with values from the rowlist

***tag***
The tags used in *tagString*

***rowlist***
Handle to a rowlist

***rowIdx***
Index of what row to use when replacing values in string

### Return value

A string with tags replaced with values from the rowlist

### Example

```
@var $list = RowListLoad("d:\\temp\\list.txt", "\t");

@var $strTemplate = "Name : %%TAG0%% - Address : %%TAG2%% - Phone : %%TAG1%%";
@var $rowIdx = 0;

@var $strOutput = ReplaceTagsInString($str, "%%TAG(#)%%", $list, $rowIdx);

// $strOutput == "Name : Person Z - Address : Fake Street 1 - Phone :
0202-1111111"
```

# MultiScript - Date/Time Functions

| | |
|---|---|
| GetTime | Get the current date and time |
| FormatDate | Format a date |
| FormatTime | Format a time |
| TimeLocal2UTC | Convert a time value from local to UTC |
| TimeUTC2Local | Convert a UTC time value to local time |
| ParseDateTime | Convert a Date/Time string to a time value |

## Related

GetFileTime / SetFileTime

## GetTime

Get the current date and time.

```
<num> GetTime([<num> getUTCTime]);
```

### Parameters

**getUTCTime**
(Optional, default: 0)
If 1, the time will be UTC else it will be local time. If not set, local time is used

### Return Value

The number of seconds since 1-Jan-1970 00:00:00

### Example

```
@var $nowLocal = GetTime();
@var $nowUTC = GetTime(1);
```

# FormatDate

Format a number to its date value.

```
<str> FormatDate(<str> format, <num> datevalue);
```

## Parameters

**format**
Date formatting string

**datevalue**
The number of seconds since 1-Jan-1970 00:00:00

## Notes

See Date Formatting to see how to format dates

## Return Value

A formatted date string

## Example

```
@var $now = GetTime();
@var $date = FormatDate( "yyyy-MM-dd" , $now );
```

## FormatTime

Format a number to its time value.

```
<str> FormatTime(<str> format, <num> timevalue);
```

### Parameters

**format**
Time formatting string

**timevalue**
The number of seconds since 1-Jan-1970 00:00:00

### Notes

See Time Formatting to see how to format times

### Return Value

A formatted time string

### Example

```
@var $now = GetTime();
@var $date = FormatTime( "HH:MM:SS" , $now );
```

## TimeLocal2UTC

Convert a time value from local to UTC.

```
<num> FormatTime(<num> timevalue);
```

### Parameters

**timevalue**
The number of seconds since 1-Jan-1970 00:00:00

### Return Value

A time value converted to UTC

### Example

```
@var $now = GetTime();
@var $utc = TimeLocal2UTC($now);
@var $date = FormatTime( "HH:MM:SS" , $utc );
```

## TimeUTC2Local

Convert a UTC time value to local time

```
<num> TimeUTC2Local(<num> timevalue);
```

### Parameters

**timevalue**
The number of seconds since 1-Jan-1970 00:00:00

### Return Value

A time value converted from UTC to local

### Example

```
@var $now = GetTime();
@var $utc = TimeLocal2UTC($now);
@var $local = TimeUTC2Local($utc);
// $local and $now should now be the same
@var $date = FormatTime( "HH:MM:SS" , $local );
```

## ParseDateTime

Convert a Date/Time string to a time value

```
<num> ParseDateTime(<str> strDateTime, <str> format);
```

### Parameters

**strDateTime**
A Date/Time as a string

**format**
A Date/Time formatting string

### Return Value

A Date/Time string converted to a numeric value
Formatting information is available here: http://pubs.opengroup.org/onlinepubs/009695399/functions/strptime.html

### Example

```
@var $str = "2012-01-01 12:32:11";
@var $val = ParseDateTime($str, "%Y-%m-%d %H:%M:%S");
```

# MultiScript - File system functions

## File and Folder Properties

| | |
|---|---|
| GetFileTime | Get the date/time of a file or folder. |
| SetFileTime | Set the date/time of a file or folder. |
| IsFolder | Check if a file item is a folder. |
| FileExists | Check if a file (or folder) exists. |
| GetFileSize | Get the size of a file. |
| GetFileProp | Get a file property. |
| GetFSLinkType | Get what link type a link is (Symbolic link, Shortcut, hardlink, Junction). |
| GetFSLinkTarget | Get the target path of a file system link. |
| GetWinShortcutTarget | Get the target path of a shortcut link (.lnk). |

## Filesystem Matching

| | |
|---|---|
| FindFirstFile | Return the first matching file. |
| FindFiles | Return an array of all matching files. |

## File Attributes

| | |
|---|---|
| GetFileAttributes | Return the attributes of a file or folder. |
| AddFileAttributes | Add an attribute(s) to a file or folder. |
| RemoveFileAttributes | Remove attribute(s) from a file or folder. |
| SetFileAttributes | Set attribute(s) of a file or folder (replace existing). |
| HasFileAttributes | Check if a file or folder has specified attribute(s). |

## Filesystem Operations

| | |
|---|---|
| CopyFile | Copy a file. |
| MoveFile | Move a file. |
| RenameFile | Rename a file. |
| UnpackFile | Unpack an archive (zip, 7z, rar, tar, tgz). |
| PackFile | Pack file(s) into an archive (zip, 7z, tar, gz). |
| DeleteFile | Delete a single file or folder. |
| DeleteFiles | Delete multiple files or folders. |
| MakeDir | Create a new folder. |

## Filesystem Filtering

| | |
|---|---|
| FilterCreate | Create a filter handle. |
| FilterAddRule | Add a filter rule. |
| FilterLoad | Load a filter from file. |

| | |
|---|---|
| FilterLoadById | Load an existing advanced filer by id. |
| FilterSave | Save a filter to file. |
| FilterIsMatch | Test if a file is a match against a filter. |

## File Path Operations

| | |
|---|---|
| PathGetPathPart | Get the path part of a full filename path. |
| PathGetNamePart | Get the name path of a full filename path. |
| PathGetFileExtPart | Get the file extension of a full filename path. |
| PathGetParts | Get an array of all file path parts. |

## File Path Conversion Operations

| | |
|---|---|
| PathMakeRelativeMC | Convert a path to be relative to where Multi Commander is started from. |
| PathMakeAbsoluteMC | Convert a relative path to an absolute path. |
| PathTranslatePath | Convert a relative path to absolute; also expand environment string. |

## Network File Operations

| | |
|---|---|
| NetWGet | Download web content to file. |

## GetFileTime

Get the date/time of a file or folder.

```
<num> GetFileTime( <str> path, [<num> utctime], [<num> filetimepart] );
```

### Parameters

**path**
Path to the file/folder of interest

**utctime**
(Optional, default: 0)
0 = Return time in local time 1 = Return time in UTC

**filetimepart**
(Optional, default: 0)
0 = Last Write time
1 = Create time
2 = Last Access time

### Return value

0 for failure, else the number of seconds since 1970-01-01 00:00:00

### Example

```
// Change the time of the file item in focus to 1h previous ( 3600 sec )
@var $time = 0;
@var $file = GetSourceFocusPath();
if( StrLen( $file ) > 0 )
{
  $time = GetFileTime( $file );
  $time = $time - 3600;
  SetFileTime( $file, $time );
}
```

## SetFileTime

Set the date/time of a file or folder.

```
<num> SetFileTime( <str> path, <num> time, [<num> utctime], [<num> filetimepart]
);
```

### Parameters

**path**
Path to the file/folder of interest

**time**
Time in seconds since 1970-01-01 00:00:00

**utctime**
(Optional, default: 0)
0 = Return time in local time
1 = Return time in UTC

**filetimepart**
(Optional, default: 0)
0 = Last Write time
1 = Create time
2 = Last Access time
4 = Last Write, Create and Last Access

### Return value

1 for success, else 0

### Example

```
// See GetFileTime
```

## IsFolder

Return 1 if the specified path is a folder.

```
<num> IsFolder( <str> path );
```

### Parameters

**path**
Path to a file or folder to be checked

### Return value

1 if the path exists and is a folder, else 0

### Example

```
@var $res = IsFolder( "C:\\temp" );
```

## FileExists

Return a value > 0 if the specified file exists.

```
<num> FileExists( <str> path );
```

### Parameters

**path**
Path to a file be checked

### Return value

1 if the path exists and is a file, 2 if the path exists and is a folder, 0 if the path does *not* exist

### Example

```
@var $res = FileExists( "C:\\temp\\MyFile.txt" );
```

# GetFileSize

Return the size of the file.

```
<num> GetFileSize( <str> path );
```

## Parameters

**path**
Path to a file or folder to be checked

## Return value

The file size in bytes, or 0 if the item is not a file or does not exist

## Example

```
@var $res = GetFileSize( "C:\\temp\\MyFile.txt" );
```

# GetFileProp

Return a file property of a file.

```
<num> GetFileProp( <str> path, <str> fileProp );
```

## Parameters

**path**
Path to the file or folder of interest

**fileProp**
File property name (eg. "MCAudioProp.genre")

## Return value

A string containing the file property

## Example

```
@var $res = GetFileProp( "C:\\temp\\MyPopSong.mp3", "MCAudioProp.genre" );
// res == "pop"
```

## Notes

See the File Property List for a list of all the available file properties.
(These are the same file properties as are used by the MultiRename tool.)

## GetFSLinkType

Get what link type a link is.

```
<num> GetFSLinkType( <str> path);
```

### Parameters

**path**
Path to the file or folder of interest

### Return value

0 - Not a link
1 - Junction
2 - Symlink
3 - MountPoint

### Example

```
@var $res = GetFSLinkType( 'C:\\Documents and Settings' );
// res == 1 // Junction
```

## GetFSLinkTarget

Get the target path of a file system link..

```
<str> GetFSLinkTarget( <str> path);
```

### Parameters

**path**
Path to the file or folder of interest

### Return value

The path of the linktarget.

### Example

```
@var $res = GetLinkTarget( 'C:\\Documents and Settings' );
// res == "C:\\Users"
```

## GetWinShortcutTarget

Get the target path of a shortcut (.lnk).

```
<str> GetWinShortcutTarget( <str> path);
```

### Parameters

**path**
Path to the file or folder of interest

### Return value

The path of the shortcut.

### Example

```
@var $res = GetWinShortcutTarget( 'C:\\MyFolder\\MyShortcut.lnk' );
// res == "C:\\Users"
```

## FindFirstFile

Return the first matching file name (this function also exists as "_findfirstfile" ).

```
<str> FindFirstFile( <str> path, [<num> nameOnly], [<num> dbgInfo] );
```

### Parameters

**path**
Path with filter. eg. "c:\\myfolder\\*.txt"

**nameOnly**
Optional. If 1, return only the name and extension; no path

**dbgInfo (Optional)**
If 1, output extra debugging information to the log window

### Return value

Full file path to the first matching file

### Example

```
@var $file = FindFirstFile( "C:\\temp\\Co*.txt" );
```

## FindFiles

Return array of matching files (this function also exists as "_findfiles" ).

```
<arr> FindFiles( <str> path, [<num> namesOnly], [<num> dbgInfo] );
```

### Parameters

**path**
Path with filter. eg. "c:\\myfolder\\*.txt"

**namesOnly**
Optional. If 1, return only the names and extensions; no paths

**dbgInfo**
Optional. If 1, output extra debugging information to the log window

### Return value

An array of full file paths of matching files

### Example

```
@var $files = FindFiles( "C:\\temp\\*.txt" );
```

## GetFileAttributes

Return a string of file attributes.

```
<str> GetFileAttributes( <str> path );
```

### Parameters

**path**
Path of the file or folder to get attributes for

### Return value

A string containing the attribute characters for the file or folder.
A - Archive
R - Read only
S - System
H - Hidden

### Example

```
$attributes = GetFileAttributes( $path );
```

## AddFileAttributes

Set an attribute for a file or folder.

```
<str> AddFileAttributes( <str> path, <str> attributes );
```

### Parameters

**path**
Path of the file or folder to get attributes for

**attributes**
A string containing the attributes to add. Valid attributes are: a, r, s, h

### Return value

1 if attributes was set, else 0.

### Example

```
// Add Read Only attribute
AddFileAttributes( $path, "r" );
```

## RemoveFileAttributes

Remove attributes from a file or folder.

```
<num> RemoveFileAttributes( <str> path, <str> attributes );
```

### Parameters

**path**
File or Folder to remove attribute from

**attributes**
A string containing the attributes to remove. Valid attributes are: a, r, s, h

### Return value

1 if attributes was set, else 0.

### Example

```
// Remove the Read Only attribute
RemoveFileAttributes( $path, "r" );
```

## SetFileAttributes

Set attributes for a file or folder, replacing existing attributes.

```
<num> SetFileAttributes( <str> path, <str> attributes );
```

### Parameters

**path**
File or Folder to set attribute for

**attributes**
A string containing the attributes to add. Valid attributes are: a, r, s, h

### Return value

1 if attributes was set, else 0.

### Example

```
// Set the Read Only and Hidden attribute
SetFileAttributes( $path, "rh" );
```

## HasFileAttributes

Check if a file or folder has particular attributes.

```
<num> HasFileAttributes( <str> path, <str> attributes );
```

### Parameters

**path**
File or Folder to check attributes for

**attributes**
A string containing the attributes to check for. Valid attributes are: a, r, s, h

### Return value

1 if the file or folder has the requested attributes, else 0. -1 for error

### Example

```
// Check if a file has a Read Only attribute
$isReadonly = HasFileAttributes( $path, "r" );
```

# CopyFile

Copy a single file or folder.

```
<num> CopyFile( <str> targetPath, <str> sourceFile, <str> options );
```

## Parameters

**targetPath**
Target Path to where the file/folder should be copied

**sourceFile**
Source Path of the file/folder to copy

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"NOWAIT" - Script will continue directly. Will not wait until copy is completed
"NOPROGRESS" - Show no progress window. No error dialog will be shown. It will always skip files on error
"NODIALOG" - Show no confirmation dialog
"SILENT" - Silent. Do not ask what to do: skip on errors and continue
"NEWQUEUE" - If a file operation already exists. Start a new queue (override default setting)
"USEEXISTINGQUEUE" - If a queued file operation already exists then use its queue (override default setting)
"OVERWRITE_ALL" - If a file already exists on the target path, overwrite it without asking
"OVERWRITE_IFNEWER" - Overwrite existing if date of the new file is newer
"OVERWRITE_IFSIZEDIFF" - Overwrite existing if size if different
"OVERWRITE_IFSIZELARGER" - Overwrite existing if size is larger
"OVERWRITE_IFSIZESMALLER" - Overwrite existing if size is smaller
"OVERWRITE_AUTORENAME_EXISTING" - Keep both - Autorename existing file
"OVERWRITE_AUTORENAME_NEW" - Keep both- Autorename the new file
** Multiple OVERWRITE_xxx flags are NOT allowed

## Return value

0 for failure, 1 for success

## Example

```
CopyFile( $targetPath, $sourceFile, "NODIALOG, OVERWRITE_ALL" );
CopyFile( 'D:\Temp\', 'R:\MyFile\File.txt', "NODIALOG, OVERWRITE_ALL" );
```

# MoveFile

Move a single file or folder.

```
<num> MoveFile( <str> targetPath, <str> sourceFile, <str> options );
```

## Parameters

**targetPath**
Target Path to where the file/folder should be moved

**sourceFile**
Source Path of the file/folder to move

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"NOWAIT" - Script will continue directly. Will not wait until copy is completed
"NOPROGRESS" - Show no progress window. No error dialog will be shown. It will always skip files on error
"NODIALOG" - Show no confirmation dialog
"SILENT" - Silent. Do not ask what to do: skip on errors and continue
"NEWQUEUE" - If a file operation already exists. Start a new queue (override default setting)
"USEEXISTINGQUEUE" - If a queued file operation already exists then use its queue (override default setting)
"OVERWRITE_ALL" - If a file already exists on the target path, overwrite it without asking
"OVERWRITE_IFNEWER" - Overwrite existing if date of the new file is newer
"OVERWRITE_IFSIZEDIFF" - Overwrite existing if size if different
"OVERWRITE_IFSIZELARGER" - Overwrite existing if size is larger
"OVERWRITE_IFSIZESMALLER" - Overwrite existing if size is smaller
"OVERWRITE_AUTORENAME_EXISTING" - Keep both - Autorename existing file
"OVERWRITE_AUTORENAME_NEW" - Keep both- Autorename the new file
** Multiple OVERWRITE_xxx flags are NOT allowed

## Return value

0 for failure, 1 for success

## Example

```
MoveFile( $targetPath, $sourceFile, "NODIALOG, OVERWRITE_ALL" );
MoveFile( 'D:\Temp\', 'R:\MyFile\File.txt', "NODIALOG, OVERWRITE_ALL" );
```

## RenameFile

Rename a file or folder using the Multi Commander virtual filesystem.

```
<num> RenameFile( <str> filepath, <str> newName, <str> options );
```

### Parameters

**filepath**
Full path of the file to rename (eg. "C:\\temp\\myfile.txt")

**Newname**
The new file name. **ONLY THE NAME**. No path parts may be included

**Options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"SILENT" - Show no error dialog. If any error occurs then abort and return then error code
"RENAME_RO" - Allow renaming of a file with readonly attribute (as long as the file system allows it)
"RENAMNE_OVR" - If a file with the new name already exists, overwrite it

### Return value

1 if rename succeeded, else error code.

### Example

```
@var $filename = "C:\\temp\\MyFile.txt";
@var $newname = "MyNewName.txt";

RenameFile( $filename, $newname, "SILENT, RENAME_OVR" );
```

## UnpackFile

Unpack an archive using the file operations in Multi Commander.

```
<num> UnpackFile( <str> fileToUnpack, <str> targetFolder, <str> filter, <str>
options, <str> password );
```

### Parameters

**fileToUnpack**
Full path to the file you want to unpack (eg. "C:\\temp\\myfile.zip")

**targetFolder**
Path to where you want the files to be unpack into (eg. "C:\\temp\\")

**filter**
Wildcard filter used to match files to unpack. Empty or *.* to unpack all

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"SILENT" - Show no error dialog. If any error occurs then abort and return then error code
"NOWAIT" - Script will continue directly. Will not wait until copy is completed
"NOPROGRESS" - Show no progress window. No error dialog will be shown. It will always skip files on error
"OVERWRITEALL" - If a file already exists on the target path, overwrite it without asking
"NOQUEUE" - If a file operation already exists. Start a new queue (override default setting)
"USEEXISTINGQUEUE" - If a queued file operation already exists then use its queue (override default setting)

**Password**
Optional parameter. Sets the password needed to unpack the archive, if archive is password protected

### Return value

1 if unpacking succeeded, else error code

### Example

```
@var $filename = "C:\\temp\\MyFile.zip";
@var $target = "C:\\temp\\Up\\";

UnpackFile( $filename, $target, "*.*", "NOWAIT, OVERWRITEALL", "password123" );
```

## PackFile

Pack files and/or folders into a archive (zip,7z,..) using the Multi Commander file operations.

```
<num> PackFile( <str> targetFile, <str> sourceFile, <str> filter, <str> method,
<str> options, <str> password );
```

### Parameters

**targetFile**
Full path to the file to create (eg. "C:\\temp\\myfile.zip")

**sourceFile**
Full path to file or folder to pack

**filter**
Wildcard filter to use when adding files to archive

**method**
compression profile to use or default method for that type (eg. "zip" )

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"SILENT" - Show no error dialog. If any error occurs then abort and return then error code
"NOWAIT" - Script will continue directly. Will not wait until copy is completed
"NOPROGRESS" - Show no progress window. No error dialog will be shown. It will always skip files on error
"OVERWRITEALL" - If a file already exists on the target path, overwrite it without asking
"NOQUEUE" - If a file operation already exists. Start a new queue (override default setting)
"USEEXISTINGQUEUE" - If a file operation already exists then use it (override default setting)

**Password**
Optional parameter. Password you want to set for the archive if you want to protect it

### Return value

1 if packing succeeded, else error code

### Example

```
@var $filename = "C:\\temp\\MyFile.zip";
@var $folderToPack = "C:\\temp\\MyFiles\\";

PackFile( $filename, $folderToPack, "*.*", "zip", "NOWAIT" );
// or
PackFile( $filename, $folderToPack, "*.txt", "Internal Zip (Max)", "NOWAIT",
"MyPassword" );
```

# DeleteFile

Delete a single file using the Multi Commander virtual filesystem.

```
<num> DeleteFile( <str> filename, <arr> options );
```

## Parameters

**filename**
file or folder to delete

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"RECYLE" - Delete to recycle bin
"NOPROGRESS" - Show no progress window
"NODIALOG" - Show no confirmation dialog
"SILENT" - Show no error dialog if delete fails

## Return value

0 for failure, 1 for success

## Example

```
@var $options[] = {"NODIALOG", "SILENT", "RECYLE"};
DeleteFile( $filename, $options );
```

## DeleteFiles

Delete multiple files using the Multi Commander virtual filesystem.

```
<num> DeleteFiles( <arr> filenames, <arr> options );
```

### Parameters

**filenames**
array of files or folders to delete

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"RECYLE" - Delete to recycle bin
"NOPROGRESS" - Show no progress window
"NODIALOG" - Show no confirmation dialog
"SILENT" - Show no error dialog if delete fails

### Return value

0 for failure, 1 for success

### Example

```
@var $filenames[] = {'e:\file1.txt', 'e:\file2.txt', 'e:\Folder1'};
@var $options[] = {"NODIALOG", "SILENT", "RECYLE"};
DeleteFile( $filenames, $options );
```

## MakeDir

Create a new folder using the Multi Commanders virtual filesystem.

```
<num> MakeDir( <str> path, <str> options );
```

### Parameters

**filename**
Full path to folder to create. Can also be any virtual path like WPD:\ REG:\ FTP:\ or inside zips or 7z

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
"LOCAL" - Hint to the virtual filesystem that the path is a normal local path
"RECURSIVE" - Create folders recursively. Only work if LOCAL also is specified

### Return value

0 for success, else error code

### Example

```
MakeDir( "C:\\Temp\NewFolder\\SubFolder\\", "LOCAL,RECURSIVE" );
MakeDir( "WPD:\\MyPhone\\SubFolder\\", "" );
MakeDir( "C:\\Temp\\MyFiles.zip\\Folder", "" );
```

## FilterCreate

Create a handle to a filter. This handle will reference all filter rules added with FilterAddRule (see below).

```
<handle> FilterCreate();
```

### Parameters

None

### Return value

Return a handle to a filter

### Example

```
@var $filter = FilterCreate();
```

# FilterAddRule

Add a Rule to filter.

```
<str> FilterAddRule( <handle> filter, <str> matchType, <str> value, [<num>
invert] );
```

## Parameters

**filter**
Handle to a filter created by FilterCreate()

**field to match**
The field to do the match against:
fullname
ext
namepart
size
date
attribute
filecontent
extendedproperty

**Match Type**
The type of matching the rule should attempt.
is (if field is a text or number, eg. filename or size)
lessthan (if field is number, eg. size)
morethan (if field is number, eg. size)
wildcard (if field is of text type)
contains (if field is of text type)
beginwith (if field is of text typ )
endwith (if field is of text type)
before (if field is of date type)
after (if field is of date type)
has (if field is of attribute type)
hasnot (if field is of attribute type)
regex (if field is of text type)
hex (if field is of filecontent type)

**Value**
The value that the filter should match against

**Invert**
Optional parameter. If set to 1 the result will be inverted

## Return value

1 if filter rule was added, else 0

## Example

```
@var $filter = FilterCreate();
FilterAddRule( $filter, "Fullname", "Contains", "Frog" );
FilterAddRule( $filter, "ext", "Wildcard", "*.txt" );
FilterAddRule( $filter, "date", "before", "2016-05-01" );
```

## FilterLoad

Load a filter from a file.

```
<handle> FilterLoad( <str> filename );
```

### Parameters

**filename**
Full path to the file with a filter

### Return value

Handle to a filter

### Example

```
@var $filter = FilterLoad( "D:\\MyFilter.xml" );
@var $isMatch = IsFilterMatch( $filter, $file );
```

## FilterLoadById

Load a filter from an existing advanced filter.

```
<handle> FilterLoadById( <str> FilterID );
```

### Parameters

**FilterID**
GUID of a existing filter id

### Return value

Handle to a filter

### Example

```
@var $filter = FilterLoad( "3790d1abd9e849dba01de220375bb196" );
@var $isMatch = IsFilterMatch( $filter, $file );
```

## FilterSave

Save a filter to a file.

```
<num> FilterSave( <str> filename );
```

### Parameters

**filename**
Full file path to the file to save

### Return value

1 if successful else 0

### Example

```
@var $filter = FilterCreate();
FilterAddRule( $filter, "Fullname", "Contains", "Frog" );
FilterAddRule( $filter, "ext", "Wildcard", "*.txt" );
FilterAddRule( $filter, "date", "before", "2016-05-01" );

FilterSave( $filter, "C:\\MyFilter.xml" );
```

## FilterIsMatch

Check if a file is a match against a filter.

```
<num> FilterSave( <handle> filter, <str> filepath );
```

### Parameters

**filter**
Handle to a filter

**filepath**
Full path of a file to check the filter against

### Return value

1 if file is a match, else 0

### Example

```
@var $filter = FilterCreate();
FilterAddRule( $filter, "Fullname", "Contains", "Frog" );
FilterAddRule( $filter, "ext", "Wildcard", "*.txt" );
FilterAddRule( $filter, "date", "before", "2016-05-01" );

@var $isMatch = FilterIsMatch( $filter, "C:\\Temp\\MyFrog.txt" );
```

## PathGetPathPart

Get the path part of a full filename path.

```
<str> PathGetPathPart( <str> path, [<num> stripEndingSlash] );
```

### Parameters

**path**
Full file/folder path

**stripEndingSlash**
Optional parameter. If 1, then the trailing backslash of the path will be removed

### Return value

The path part of a full file/folder path

### Example

```
@var $path = PathGetPartPath( "C:\\temp\\MyPopSong.mp3" );
// res == "C:\\temp\\"
```

## PathGetNamePart

Get the name path of a filename path.

```
<str> PathGetNamePart( <str> path, [<num> stripExtension] );
```

### Parameters

**path**
Full file/folder path

**stripExtension**
Optional parameter. If 1, the file extension will be removed

### Return value

The name part of a full file/folder path

### Example

```
@var $nameA = PathGetPartPath( "C:\\temp\\MyPopSong.mp3" );
// nameA == "MyPopSong.mp3"
@var $nameB = PathGetPartPath( "C:\\temp\\MyPopSong.mp3", 1 );
// nameB == "MyPopSong"
```

## PathGetFileExtPart

Get the file extension from a filename path.

```
<str> PathGetFileExtPart( <str> path, [<num> stripDot] );
```

### Parameters

**path**
Full file/folder path

**stripDot**
Optional parameter. If 1, the dot in the file extension will be removed

### Return value

The file extension of a filename path

### Example

```
@var $nameA = PathGetFileExtPart( "C:\\temp\\MyPopSong.mp3" );
// nameA == ".mp3"
@var $nameB = PathGetFileExtPart( "C:\\temp\\MyPopSong.mp3", 1 );
// nameB == "mp3"
```

## PathGetParts

Get an array of all the file path parts.

```
<arr> PathGetParts( <str> path );
```

### Parameters

**path**
Full file/folder path

### Return value

Return an array of all the filename part.
Array item 0 = Device
Array item 1 = Path
Array item 2 = Filename

### Example

```
@var $arr = PathGetParts( "C:\\temp\\MyPopSong.mp3" );
// $arr[0] == C:\
// $arr[1] == C:\temp\
// $arr[2] == MyPopSong.mp3
```

## PathMakeRelativeMC

Convert a path to be relative to where Multi Commander is started from.

```
<str> PathMakeRelativeMC( <str> path );
```

### Parameters

**path**
Path to convert

### Return value

The converted path

### Example

```
// MC is installed in "C:\Program\MultiCommander"
@var $path = PathMakeRelativeMC( "C:\\temp\\MyFile.txt" );
// $path == "..\Temp\MyFile.txt"
```

## PathMakeAbsoluteMC

Convert a relative path to absolute (relative to where Multi Commander is started from).

```
<str> PathMakeAbsoluteMC( <str> path );
```

### Parameters

**path**
Path to convert

### Return value

The converted path

### Example

```
// MC is installed in "C:\Program\MultiCommander"
@var $path = PathMakeAbsoluteMC( "..\\temp\\MyFile.txt" );
// $path == "C:\Temp\MyFile.txt"
```

## PathTranslatePath

Convert a relative path to absolute and also convert environmental tags.

```
<str> PathTranslatePath( <str> path );
```

### Parameters

**path**
Path to convert

### Return value

The converted path

### Example

```
// MC in installed in "C:\Program\MultiCommander" and ENVVAR is "MyFile.txt"
@var $path = PathTranslatePath( "..\\temp\\%ENVVAR%" );
// $path == "C:\Temp\MyFile.txt"

@var $path = PathTranslatePath( "%WINDIR%\\calc.exe" );
// $path == "C:\Windows\calc.exe"
```

# NetWGet

Download web content and save it as a file.

```
<str> NetWGet( <str> SaveAsPath,<str> Url, <str> options, <arr> Header );
```

## Parameters

**SaveAsPath**
Full path to where the file should be saved

**Url**
URL of the web content to save

**options**
Optional parameter (case-sensitive). Separate multiple options with commas.
OVERWRITE - Overwrite target file if it already exists
VERIFY_SSLCERT - Require valid SSL Certificate

**Headers**
An array of "Key=Value" strings that should be added to the Http Request header

## Return value

Number of bytes downloaded and written to the file SaveAsPath

## Example

```
@var $bw = NetWGet( "C:\\Temp\\MFile.zip", "http://www.example.com/file.zip",
"OVERWRITE,VERIFY_SSLCERT" );
```

# MultiScript - Registry Functions

| | |
|---|---|
| RegKeyExists | Check if a key exists. |
| RegKeyAdd | Create new registry key. |
| RegKeyDel | Delete registry key. |
| RegKeyFind | Find registry key. |
| RegKeyFindRegExp | Find registry key with a regular expression. |
| RegValueExists | Check if a registry value exists. |
| RegValueAdd | Create new registry value. |
| RegValueDel | Delete a registry value. |
| RegValueFind | Find registry value. |
| RegValueFindRegExp | Find registry value using regual expression. |
| RegValueGetSZ | Get string registry value. |
| RegValueGetDWORD | Get DWORD registry value. |

Where **regRoot** is required as a parameter use any of the specified short paths

| | |
|---|---|
| HKLM | HKEY_LOCAL_MACHINE |
| HKCU | HKEY_CURRENT_USER |
| HKCR | HKEY_CLASS_ROOT |
| HKUR | HKEY_USER |

## RegKeyExists

Check if a registry key exists.

```
<num> RegKeyExists(<str> regRoot, <str> regPath);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path of the key to check.

### Return value

1 if the key exists, else 0.

### Example

```
$exists = RegKeyExists("HKLM","Software\\Microsoft");
```

## RegKeyAdd

Add a new registry key.

```
<num> RegKeyAdd(<str> regRoot, <str> regPath);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path of the key to add.

### Return value

1 if key was added, 0 if failed to add key.

### Example

## RegKeyDel

Delete a registry key.

```
<num> RegKeyDel(<str> regRoot, <str> regPath);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path of the key to delete.

### Return value

1 if key was deleted, 0 if failed to delete key.

### Example

## RegKeyFind

Get all matching subkeys in a specified registry path. Match keys using wildcards.

```
<arr> RegKeyFind(<str> regRoot, <str> regPath, <str> match);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path of where you want to find a key.

**match**
Wildcard for matching key, e.g. "Version_5.*"

### Return value

An array with all matching key names.

### Example

## RegKeyFindRegExp

Get all matching subkeys in a specified registry path. Match key using regular expression.

```
<arr> RegKeyFindRegExp(<str> regRoot, <str> regPath, <str> regExp);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path where you want to find a key.

**regExp**
Regular expression used for matching keys.

### Return value

An array with all matching key names.

### Example

## RegValueExists

Check if a registry value exists.

```
<num> RegValueExists(<str> regRoot, <str> regPath, <str> valuename);
```

### Parameters

**regRoot**
Registry root, e.g."HKLM".

**regPath**
The registry path to the key that should have the value.

**valueName**
Name of the value to check for.

### Return value

1 if value exists. 0 if it does not.

### Example

```
$exists = RegValueExists("HLKM", "Software\\Microsoft", "installed");
```

## RegValueAdd

Add a new registry value.

```
<num> RegValueAdd(<str> regRoot, <str> regPath, <str> valueName, <str> value,
<str> type);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path to the key that the value should be created under.

**valueName**
Name of the registry value to create.

**value**
Value to set the registry value to.

**type**
Type of registry value to create. REG_SZ or REG_DWORD supported.

### Return value

Name of the newly-added value.

## RegValueDel

Delete registry value.

```
<num> RegValueDel(<str> regRoot, <str> regPath, <str> valuename);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
The registry path to the key that should have the value.

**valueName**
Name of the value to delete.

### Return value

1 if value is deleted. 0 if deletion failed.

## RegValueFind

Find all matching registry values under a registry key.

```
<arr> RegValueFind(<str> regRoot, <str> regPath, <str> valueMatch);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path to key under where you want to search for a value.

**valueMatch**
Wildcard for matching value. e.g. "Version_5.*"

### Return value

An array of matching registry values.

## RegValueFindRegExp

Find all matching registry value under a registry key, Using regular expression for matching

```
<arr> RegValueFindRegExp(<str> regRoot, <str> regPath, <str> valueRegExpMatch);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path to key under which you want to search for a value.

**valueRegExpMatch**
Regular expression for matching values.

### Return value

An array of matching registry values.

## RegValueGetSZ

Get the value of a REG_SZ registry value.

```
<str> RegValueGetSZ(<str> regRoot, <str> regPath, <str> valuename);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM".

**regPath**
Registry path to key under which the value exists.

**valuename**
Name of the registry key value to return. (Must be a REG_SZ value).

### Return value

The string value of the registry value. Returns an empty string if the value does not exist.

## RegValueGetDWORD

Get the value of a REG_DWORD registry value .

```
<num> RegValueGetDWORD(<str> regRoot, <str> regPath, <str> valuename);
```

### Parameters

**regRoot**
Registry root, e.g. "HKLM"

**regPath**
Registry path to key under where the value exists.

**valuename**
Name of the registry key value to return. (Must be a REG_DWORD value)

### Return value

The value of the registry DWORD value. Returns 0 if value does not exist.

# MultiScript - Get and Set Selection and Paths

Functions for getting focus/selected files and folder from source/target views.

| | |
|---|---|
| GetSelectedFileNames | Get an array of all currently selected files in the source panel. |
| GetSelectedPaths | Get an array with full paths of all currently selected files in the source panel. |
| GetSourceSelectedFileNames | Get an array with the names of selected items in the source panel. |
| GetTargetSelectedFileNames | Get an array with the names of selected items in the target panel. |
| GetSourceSelectedPaths | Get an array with the full paths of the selected items in the source panel. |
| GetTargetSelectedPaths | Get an array with the full paths of the selected items in the target panel. |
| GetSourcePath | Get the current source path. |
| GetTargetPath | Get the current target path. |
| GetSourceFocusPath | Get the full path of the item in focus in the source panel. |
| GetTargetFocusPath | Get the full path of the item in focus in the target panel. |
| GetSourceFocusName | Get the name of the item in focus in the source panel. |
| GetTargetFocusName | Get the name of the item in focus in the target panel. |
| GetSourceItems | Get an array with all filenames or full paths of all items in the source panel. |
| GetTargetItems | Get an array with all filenames or full paths of all items in the target panel. |

| | |
|---|---|
| SetSourceSelected | Set selection in the source panel. |
| SetTargetSelected | Set selection in the target panel. |

## GetSelectedFileNames

Get the filenames of all selected files/folders in the source view.

```
<arr> GetSelectedFileNames();
```

### Return value

An array of all the names of the selected files and folders in the source view.

### Example

```
@var $arr = GetSelectedFileNames();
LogDumpArray($arr);
```

## GetSelectedPaths

Get the complete filepaths of all selected files/folders in the source view.

```
<arr> GetSelectedPaths();
```

### Return value

An array of the complete paths for all the selected files and folders in the source view.

### Example

```
@var $arr = GetSelectedPaths();
LogDumpArray($arr);
```

## GetSourceSelectedFileNames

Get an array of the filenames of the selected items in the source view.

```
<arr> GetSourceSelectedFileNames([<str> flags]);
```

### Parameters

*flags*

Optional, If not provided not flags are assumed
IGNORE_FOCUS - Ignore focus item if no items are selected, By default of no items are selected the item in focus is returned

### Return value

An array of file names (names only - not complete paths).

### Example

```
@var $arr = GetSourceSelectedFileNames();
LogDumpArray($arr);

@var $arr = GetSourceSelectedFileNames("IGNORE_FOCUS");
LogDumpArray($arr);
```

## GetTargetSelectedFileNames

Get an array of all the filenames of the selected items in the target view.

```
<arr> GetTargetSelectedFileNames([<str> flags]);
```

### Parameters

*flags*

Optional, If not provided not flags are assumed
IGNORE_FOCUS - Ignore focus item if no items are selected, By default of no items are selected the item in focus is returned

### Return value

An array of file names (names only - not complete paths).

### Example

```
@var $arr = GetTargetSelectedFileNames();
LogDumpArray($arr);

@var $arr = GetTargetSelectedFileNames("IGNORE_FOCUS");
LogDumpArray($arr);
```

## GetSourceSelectedPaths

Get an array with the full paths of all selected items in the source view.

```
<arr> GetSourceSelectedPaths([<str> flags]);
```

### Parameters

*flags*

Optional, If not provided not flags are assumed
IGNORE_FOCUS - Ignore focus item if no items are selected, By default of no items are selected the item in focus is returned

### Return value

An array of full paths to files or folder.s

### Example

```
@var $arr = GetSourceSelectedPaths();
LogDumpArray($arr);

@var $arr = GetSourceSelectedPaths("IGNORE_FOCUS");
LogDumpArray($arr);
```

## GetTargetSelectedPaths

Get an array with the full paths of all selected items in the target view.

```
<arr> GetTargetSelectedPaths([<str> flags]);
```

### Parameters

*flags*

Optional, If not provided not flags are assumed
IGNORE_FOCUS - Ignore focus item if no items are selected, By default of no items are selected the item in focus is returned

### Return value

An array of full paths to files or folders.

### Example

```
@var $arr = GetTargetSelectedPaths();
LogDumpArray($arr);

@var $arr = GetTargetSelectedPaths("IGNORE_FOCUS");
LogDumpArray($arr);
```

## GetSourcePath

Get the complete path as currently shown in the source view.

```
<str> GetSourcePath();
```

### Return value

A string with the complete path shown in the source view.

### Example

```
@var $str = GetSourcePath();
// $str == "C:\MyFolder\";
```

## GetTargetPath

Get the complete path as currently shown in the target view.

```
<str> GetTargetPath();
```

### Return value

A string with the complete path shown in the target view.

### Example

```
@var $str = GetTargetPath();
// $str == "C:\MyFolder\";
```

## GetSourceFocusPath

Get the full path to the item in focus in the source view.

```
<str> GetSourceFocusPath();
```

### Return value

A string with the full path to the item in focus

### Example

```
@var $str = GetSourceFocusPath();
// $str == "C:\MyFolder\MyFile.txt";
```

## GetTargetFocusPath

Get the full path to the item in focus in the target view.

```
<str> GetTargetFocusPath();
```

### Return value

A string with the full path to the item in focus

### Example

```
@var $str = GetTargetFocusPath();
// $str == "C:\MyFolder\MyFile.txt";
```

## GetSourceFocusName

Get the name only of the item in focus in the source view.

```
<str> GetSourceFocusName();
```

### Return value

A string with the name of the item in focus

### Example

```
@var $str = GetSourceFocusName();
// $str == "MyFile.txt";
```

## GetTargetFocusName

Get the name only of the item in focus in the target view.

```
<str> GetTargetFocusName();
```

### Return value

A string with the name of the item in focus

### Example

```
@var $str = GetTargetFocusName();
// $str == "MyFile.txt";
```

## GetSourceItems

Get an array with all filename or fullpath of all the items in the source panel.

```
<arr> GetSourceItems([<num> fullpath]);
```

### Parameters

*fullpath*

Optional. If provided and set to 1, it will return full filepaths, else only filenames are returned. If not set, 0 is assumed

### Return value

An array with filename or path of all the items in the panel

### Example

```
@var $arr = GetSourceItems();
// Full paths
@var $arr = GetSourceItems(1);
```

## GetTargetItems

Get an array with all filename or full path of all the items in the target panel.

```
<arr> GetTargetItems([<num> fullpath]);
```

### Parameters

*fullpath*

Optional. If provided and set to 1, it will return full filepaths, else only filenames are returned. If not set, 0 is assumed.

### Return value

An array with filename or path of all the items in the panel

### Example

```
@var $arr = GetTargetItems();
// Full paths
@var $arr = GetTargetItems(1);
```

## SetSourceSelected

Set selection in the source panel

```
<int> SetSourceSelected(<arr> filenames, [<int> clear]);
```

### Parameters

*filenames*

An array of filenames. The filenames will be used to match against the existing file in the view. and matched files will be selected.

*clear*

Optional. If provided and set to 1, the selections the in source view will be cleared before new selections are added
If set to 0, the new selections will be added to existing. If not set, 1 is assumed.

### Return value

Number of files selected

### Example

```
@var $arr[] = {"file1.txt", "file2.txt"};
@var $num = SetSourceSelected( $arr , 1);
```

## SetTargetSelected

Set selection in the target panel

```
<int> SeTargetSelected(<arr> filenames, [<int> clear]);
```

### Parameters

*filenames*

An array with strings of filename. The filename will be used to match against the existing file in the view. and matched files will be selected

*clear*

Optional. If provided and set to 1, the selections in the source view will be cleared before new selections are added
If set to 0, the new selections will be added to existing. If not set, 1 is assumed.

### Return value

Number of files selected

### Example

```
@var $arr[] = {"file1.txt", "file2.txt"};
@var $num = SetTargetSelected( $arr , 1);
```

# TabPanel Functions

Functions for working with Panels Tabs.

| | |
|---|---|
| TabActivePanelSide | Get an array of all currently selected files in the source panel. |
| TabActiveTab | Get an array with full paths of all currently selected files in the source panel. |
| TabCount | Get an array with the names of selected items in the source panel. |
| TabGetPath | Get an array with the names of selected items in the target panel. |
| TabClose | Get an array with the full paths of the selected items in the source panel. |
| TabLoadTabSession | Get an array with the full paths of the selected items in the target panel. |

## TabActivePanelSide

Get or Set what panel side in active

```
<int> TabActivePanelSide();
<int> TabActivePanelSide( <int> panel );
<int> TabActivePanelSide( <string> panel );
```

When specifying tab any of the following values are valid
1 = Left, 2 = Right , "right", "left", "top", "bottom", "target", "source" , "active" "inactive"

### Return value

If no parameter is specified then it return 1 or 2 for left or right panel. else it return 1 for success or 0 for failure to set active panel

### Example

```
@var $panel= TabActivePanelSide();
TabActivePanelSide(1);
TabActivePanelSide(2);
TabActivePanelSide("left");
TabActivePanelSide("top");
```

## TabActiveTab

Get or Set what tab in a panel is active

```
<int> TabActiveTab( <int> panel );
<int> TabActiveTab( <string> panel );
<int> TabActiveTab( <string> panel , <int> tabIndex );
<int> TabActiveTab( <int> panel , <int> tabIndex );
```

When specifying tab any of the following values are valid
1 = Left, 2 = Right , "right", "left", "top", "bottom", "target", "source" , "active" "inactive"

### Return value

Return the tab index of the active tab in the specified tab panel. (first tab is 0, second 1, and so on)
If the SET alternatives are used it return 1 for success or 0 for failure to set active tab

### Example

```
@var $activeTabInPanel= TabActiveTab(1);
@var $activeTabInPanel= TabActiveTab("active");
@var $activeTabInPanel= TabActiveTab("source");
TabActiveTab(1, 0);
TabActiveTab(1, 3);
TabActiveTab("left", 3);
TabActiveTab("source", 2);
TabActiveTab("target", 2);
TabActiveTab("bottom", 2);
```

## TabCount

Return how many tabs a panel side has

```
<int> TabCount( <int> panel );
<int> TabCount( <string> panel );
```

When specifying tab any of the following values are valid
1 = Left, 2 = Right , "right", "left", "top", "bottom", "target", "source" , "active" "inactive"

### Return value

Return the number of tabs that exists in a panel side

### Example

```
@var $numTabs = TabCount(1);
@var $numTabs = TabCount("active");
@var $numTabs = TabCount("source");
```

## TabGetPath

Return the path of a tab. If the view inside that tab support that.

```
<int> TabGetPath( <int> panel , <int> tabIndex);
<int> TabGetPath( <string> panel , <int> tabIndex);
```

When specifying tab any of the following values are valid
1 = Left, 2 = Right , "right", "left", "top", "bottom", "target", "source" , "active" "inactive"

### Return value

Return the path for the path in the specified panel. If the view in that tab does not support the concept of a 'tabpath' empty path is returned (Eg Checksum view)

### Example

```
@var $path = TabGetPath(1, 2);
@var $path = TabGetPath("active", 3);
@var $path = TabGetPath("source", 3);
```

## TabClose

Close a specified tab

```
<int> TabClose( <int> panel , <int> tabIndex);
<int> TabClose( <string> panel , <int> tabIndex);
```

When specifying tab any of the following values are valid
1 = Left, 2 = Right , "right", "left", "top", "bottom", "target", "source" , "active" "inactive"

### Return value

Return 1 for success or 0 for failure

### Example

```
TabClose(1, 2);
TabClose("active", 3);
TabClose("source", 3);
```

## TabLoadTabSession

Close a specified tab

```
<int> TabLoadTabSession( <string> SessionName / SessionId);
```

### Return value

Return 1 for success or 0 for failure

### Example

```
TabLoadTabSession("MyTabSession);
TabLoadTabSession("46214bda3c8d4da093194ffa5c9578a6");
```

# MultiScript - Misc Core Functions

| | |
|---|---|
| Sleep | Pause the script for a specified number of milliseconds. |
| min | Return the minimum value of many values or from an array of values. |
| max | Return the maximum value of many values or from an array of values. |
| mod | Modulo, Returns the remainder after a division of the provided values . |
| GetRandomValue | generate a random value between a min and max value |
| Log | Log text to a log window. |
| LogDump | Dump the contents of a variable to the log. |
| LogDumpArray | Dump the contents of an array to the log. |
| LogAppInfo | Log text to the application log window. |
| MessageBox | Show a messagebox. |
| AskText | Ask the user for text via a dialog. |
| AskOption | Ask the user to pick one of  a list of items from a dropdown list. |
| SaveArray | Save an array of strings to a file. |
| LoadArray | Load a file of strings into an array. |
| SaveStringToFile | Save a string to a file. |
| LoadStringFromFile | Load a file into a string. |
| GetClipboardText | Get the text stored in the clipboard. |
| SetClipboardText | Set text in the clipboard. |
| GetTagValue | Expand a MultiTag value. |
| TranslateEnvString | Translate an environmental string. |

## Sleep

Pause the script for a specified number of milliseconds.

```
<none> Sleep( <num> mmsec );
```

### Parameters

***mmsec***
Milliseconds to wait before continuing.

### Return value

Nothing.

### Examples

```
Sleep( 10 );
```

# min

Returns the minimum value from two or more values passed to the function.
It is also possible to pass it an array that contains multiple number values.

```
<num> min( <num> val1, <num> val2, ... , ...  );
<num> min( <array> arrrayVal );
```

## Parameters

***val1***
A number value.

***val2***
A number value.

***arrayVal***
An array with multiple number values.

## Return value

The minimum values of all the values passed to the function.

## Examples

```
@var $v1 = 73;
@var $v2 = 52;
@var $v3 = 45;
@var $v4 = 87;
@var $res = min( $v1, $v2, $v3 , $v4 );
// $res == 45;

@var $vals[] = { 73, 52, 45, 87};
@var $res = min( $vals );
// $res == 45;
```

## max

Returns the maximum value from two or more values passed to the function.
It is also possible to pass it an array that contains multiple number values.

```
<num> max( <num> val1, <num> val2, ... , ...  );
<num> max( <array> arrrayVal );
```

### Parameters

***val1***
A number value.

***val2***
A number value.

***arrayVal***
An array with multiple number values.

### Return value

The maximum values of all the values passed to the function.

### Examples

```
@var $v1 = 73;
@var $v2 = 52;
@var $v3 = 45;
@var $v4 = 87;
@var $res = max( $v1, $v2, $v3 , $v4 );
// $res == 87;

@var $vals[] = { 73, 52, 45, 87};
@var $res = max( $vals );
// $res == 87;
```

## mod

Modulo - Return the remainder after division of the values.

```
<num> mod( <num> val1, <num> val2, );
```

### Parameters

***val1***
A number value.

***val2***
A number value.

### Return value

The remainder when the first value if divided by the another.
Used when you want to know if a values is even divided by a another value. If it is the reminder is 0

### Examples

```
@var $val = 17;
@var $res = mod( $val , 3 );
// $res == 2;

@var $val = 20;
@var $res = mod( $val , 5 );
// $res == 0;
```

## GetRandomValue

Generate a random values between a min and max value.

```
<num> GetRandomValue( <num> min, <num> max, [<num> seed] );
```

### Parameters

***min***
Minimum value.

***max***
Maximum value

***seed***
[OPTIONAL] Seed value for random value generator, If not specified a seed value will be generated.

### Return value

A random value between the specified min and max values

### Examples

```
@var $res = GetRandomValue( 10, 99 );
// $res == Anything from 10 to 99;

@var $res = GetRandomValue( 10, 99, 12345678 );
```

# Log

Log text to a log window.

```
<num> Log( <num> logID, <num> logLevel, <str> logText );
```

## Parameters

***logID***
ID of the logger that should receive the log text.
0 = Standard Application log
1 = File Operations Log
x = ID of user-created log

***logLevel***
Logging level for this log text. Logging can be set to only show info, warning or error.
10 = Info
20 = Warning
30 = Error

***logText***
Text that should be written to the log.

## Return value

1 if message is logged, 0 if the log is not found.

## Examples

```
Log( 0, 30, "Error - File Not found" );
```

## LogDump

Dump the content of a variable to the log. (Useful for debugging.)

```
<num> LogDump( <var> var );
```

### Parameters

***var***
Variable to dump to the log file.

### Return value

Always 1.

### Example

```
@var $str = "String1";
LogDump( $str );
// Log window output
// ==[ Name : $str ]==[ Type : variable:string ]==[ Value : "String1" ]==
```

## LogDumpArray

Dump the contents of an array to the log. (Useful for debugging.)

```
<num> LogDumpArray( <arr> array );
```

### Parameters

***array***
Array to dump to the log file.

### Return value

Always 1.

### Example

```
@var $arr[] = {"String1", "String2", "String3"};
LogDumpArray( $arr );
// Log window output
// ==[ Variable : $arr ]==
// [0] : "String1"
// [1] : "String2"
// [2] : "String3"
// ===========================
```

# LogAppInfo

Send text directly to the application log, with logging level 'Info'.

```
<num> LogAppInfo( <str> logText );
```

## Parameters

***logText***
Text that should be written to the log file.

## Return value

Always 1.

# MessageBox

Show a messagebox.

```
<num> MessageBox( <str> caption, <str> text, <num> options );
```

## Parameters

***caption***
The caption text for the messagebox.

***text***
The message text that should be shown.

***option***
One of the standard Win32 values for Button and Icon options. See MSDN here for a full list of values.

Button combinations and their option values are:

| | |
|---|---|
| OK | 0 |
| OK + Cancel | 1 |
| Abort + Retry + Ignore | 2 |
| Yes + No + Cancel | 3 |
| Yes + No | 4 |
| Retry + Cancel | 5 |

## Return value

Possible return values and their meanings are:

1 - OK button was selected
2 - Cancel button was selected
3 - Abort button was selected
4 - Retry button was selected
5 - Ignore button was selected
6 - Yes button was selected
7 - No button was selected (user cancelled with Esc)
8 - Close button was selected
9 - Help button was selected

## AskText

Show a dialog in which the user can input text.

```
<num> AskText( <str> label, <str> inputText, <num> option );
```

### Parameters

***label***
The dialog Label text that will be shown.

***inputText***
Text that will be pre-loaded into the input field when the dialog is first shown (can be: "").

***option***
Not yet used; can be set to 0.

### Return value

0 if user cancelled the dialog, else a string with the text from the dialog's input field.

## AskOption

Show a dialog in which the user can pick one of a list of items from a dropdown list.

```
<num> AskOption( <str> label, <arr> values, <num> selected );
```

### Parameters

***label***
The Label text that will be shown.

***values***
An array of strings or numbers that will be shown in the dropdown list.

***selected***
Index of the item in the list that should be selected by default, -1 for no default item selected.

### Return value

Index of the item selected, or -1 if user pressed Cancel.

### Examples

```
@var $options[] = {"Option1", "Option2", "Option3", "Option4" };
@var $o = AskOption( "Select Option", $options, 2 );
if( $o > -1 )
{
   @var $sel = $options[$o];
   @var $msg = "You selected option : \"" + $sel + "\"";
   MessageBox("Selected Item", $msg, 0);
}
```

# SaveArray

Save an array of strings to a file

```
<num> SaveArray( <str> filename, <arr> array, <num> overwrite, <num> format );
```

## Parameters

***filename***
Complete file path where the file should be saved.

***array***
The array to save

***overwrite***
0 = Do not overwrite existing file, 1 = Overwrite existing file.

***format***
0 = ASCII
1 = UTF8
2 = Unicode

## Return value

1 if array was saved successfully else 0.

# LoadArray

Load a text file into an array.

```
<arr> LoadArray( <str> filename );
```

## Parameters

***filename***
Complete path to the file to load.

## Return value

An array where every line in the file *filename* is an item in an array.

## SaveStringToFile

DESC

```
<num> SaveStringToFile( <str> filename, <str> string, <num> format );
```

### Parameters

***filename***
Complete file path to where the file should be saved.

***string***
Content to save.

***format***
0 = ASCII
1 = UTF8
2 = Unicode

### Return value

1 if *string* was saved successfully else 0.

## LoadStringFromFile

Load the content of a text file into a string.

```
<str> LoadStringFromFile( <str> filename );
```

### Parameters

***filename***
Complate file path of the file to load.

### Return value

The content of the file as a string.

## GetClipboardText

Get the text stored in the clipboard. If the clipboard content is *not text* then an empty string will be returned.

```
<str> GetClipboardText();
```

### Return value

A string containing the content of the clipboard.

## SetClipboardText

Store text in the global clipboard.

```
<num> SetClipboardText( <str> );
```

### Return value

Nothing.

### Example

```
@var $textClip = GetClipboardText();
// Replace all '-' with '_'
$textClip = StrReplace( $textClip, "-", "_" );
// set the clipboard text with the new modified text.
SetClipboardText( $textClip );
```

## GetTagValue

Expand a MultiTag.

```
<str> GetTagValue( <str> );
```

### Return value

Expanded MultiTag value.

### Example

```
@var $tag = GetTagValue("${mcinstallpath}");
```

## TranslateEnvString

Translate a Windows environment variable.

```
<str> TranslateEnvString( <str> );
```

### Return value

Expanded environmental string.

### Example

```
@var $tag = TranslateEnvString("%WINDIR%");
```

# Extension Defined MultiScript Functions

Before using **extension defined MultiScript functions** the functions must be imported into the script engine. This is done with the MultiScript **import** function. The import function *must* be called before any extension defined functions are called or the script engine will fail to find the function.

## Example

```
// Import the Extension defined function for FTP
import("FSFTPScript");

// Connect to the ftp site "site1" in the bookmarks
@var $ftp = FTPConnect("site1");

// change to the remote folder /pub
FTPChdir($ftp, "/pub");

// remove (delete) the file test.zip
FTPRemove($ftp , "test.zip" );

// upload the file d:\temp\test.zip to the current remote folder with the new name
test.zip
FTPPutFile($ftp , "d:\\temp\\test.zip" , "test.zip");
```

## Extension Defined MultiScript Functions - Examples

FS-FTP

# MultiScript - Extension Defined Functions - FS-FTP

## Import Directive

To be able to use any of the FS-FTP defined MultiScript functions the functions must first be imported into the MultiScript engine. This is done with *Import*:

```
import("FSFTPScript");
```

## FS-FTP Script Defined Functions.

| | |
|---|---|
| FTPConnect | Connect to an FTP site |
| FTPChdir | Change remote directory |
| FTPMkdir | Create remote folder |
| FTPRmdir | Remove remote folder |
| FTPRemove | Remove remote file |
| FTPRename | Rename remote file or folder |
| FTPList | List the current remote directory |
| FTPListCount | Number of items obtained from a previous FTPList command |
| FTPListGet | Get list item |
| FTPExists | Check if a remote file exists |
| FTPPutFile | Upload a file |
| FTPGetFile | Download a file |
| FTPCommandRaw | Send a raw FTP command |
| FTPQuit | Close an FTP Connection |

## FTPConnect

Connect to an FTP site that is defined in bookmarks.

```
<handle> FTPConnect(<str> sitename);
```

### Parameters

***sitename***
name of a site that is defined in FTP bookmarks.

### Return value

A handle to an FTP site, or 0 if it fails to connect or if the sitename is not found in FTP bookmarks.

## FTPChdir

Change remote directory.

```
<num> FTPChdir(<handle> conn, <str> path );
```

### Parameters

***conn***
Handle to an FTP connection.

***path***
path to a location on the remote connection.

### Return value

1 if successful or 0 if it fails.

## FTPMkdir

Create directory in current remote location.

```
<num> FTPMkdir(<handle> conn, <str> directory);
```

### Parameters

***conn***
Handle to an FTP connection.

***directory***
name of the directory to create.

### Return value

1 if successful, 0 if it fails.

## FTPRmdir

Remove a directory

```
<num> FTPRmdir( <handle> conn, <str> directory);
```

### Parameters

***conn***
Handle to an FTP connection.

***directory***
name of the directory to remove.

### Return value

1 if successful, 0 if it fails.

## FTPRemove

Remove a remote file

```
<num> FTPRemove(<handle> conn  <str> file);
```

### Parameters

***conn***
Handle to an FTP connection.

***file***
Name of the remote file to remove.

### Return value

1 if successful, 0 if it fails.

## FTPRename

Rename a remote file or folder

```
<num> FTPRename(<handle> conn, <str> oldFilename,  <str> newFilename);
```

### Parameters

***conn***
Handle to an FTP connection.

***oldFilename***
Name of the remote file to rename.

***newFilename***
Filename the file should be renamed to.

### Return value

1 if successful, 0 if it fails.

## FTPList

Get the current directory content.

```
<num> FTPList(<handle> conn);
```

### Parameters

***conn***
Handle to an FTP connection.

### Return value

1 if successful, 0 if it fails.

### Remarks

The result of a List command is cached in the FTP connection. Use FTPListGet to get the content if the list items.

## FTPListCount

The number of list items that are stored in the connection.

```
<num> FTPListCount(<handle> conn);
```

### Parameters

***conn***
Handle to an FTP connection.

### Return value

The number of items obtained in the directory listing from a previous FTPList command.

## FTPListGet

Get a list item.

```
<array> FTPListGet(<handle> conn, <num> index);
```

### Parameters

***conn***
Handle to an FTP connection.

***index***
Index of the list item to get.

### Return value

An array of 2 items where the first is the Name and the second is the size, or 0 if no item was found.

## FTPExists

Check if a file or directory exists

```
<num> FTPExists(<handle> conn, <str> file;);
```

### Parameters

***conn***
Handle to an FTP connection.

***file***
Filename or folder name to check for.

### Return value

1 if the file exists, 0 if it does not.

### Remarks

**An FTPList command must have been run before running this command.**

## FTPPutFile

Upload a file.

```
<num> FTPPutFile(<handle> conn, <str> filepath, <str> remotefile);
```

### Parameters

***conn***
Handle to an FTP connection.

***filepath***
filepath of the file to upload.

***remotefile***
The name of the file to store on the FTP server.

### Return value

1 if successful, 0 if it fails.

## FTPGetFile

Download file.

```
<num> FTPGetFile(<handle> conn, <str> remoteFile, <str> localfile);
```

### Parameters

***conn***
Handle to an FTP connection.

***remoteFile***
Path to a remote file to download.

***localfile***
Path to a local filename to save the downloaded file as.

### Return value

1 if successful, 0 if it fails.

## FTPCommandRaw

Send a RAW FTP command.

```
<handle> FTPCommandRaw(<handle> conn, <str> command );
```

### Parameters

***conn***
Handle to an FTP connection.

***command***
RAW FTP command to send.

### Return value

1 if successful, 0 if it fails.

### Example

```
FTPCommandRaw( $ftp, "site who");
```

## FTPQuit

Close a connection to an FTP server.

```
<handle> FTPQuit(<handle> conn);
```

### Parameters

***conn***

Handle to an FTP connection.

### Return value

1 if successful, 0 if it fails.

# MultiScript - Extension Defined Functions - File Checksum

## Import Directive

To be able to use any of the File Checksum MultiScript functions, these functions must first be imported into the MultiScript engine. This is done with the script directive *Import*:

```
import("MFTools-sfv");
```

## File CheckSum Script-Defined Functions

| | |
|---|---|
| ChkSum_Calculate | Calculate CheckSum of a file. |

## ChkSum_Calculate

Calculate CheckSum of a file.

```
<str> ChkSum_Calculate(<str> filename, <num> type);
```

### Parameters

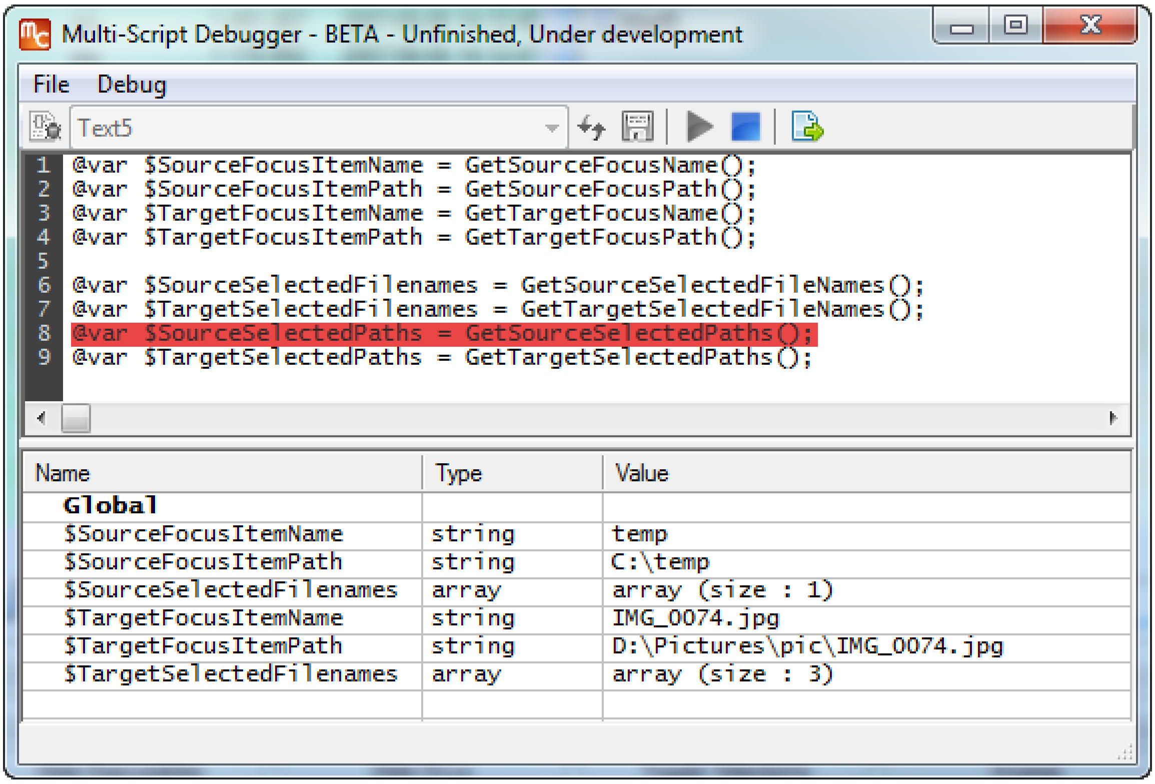
***filename***
name of the file you want to calculate the checksum of

***type***
0 = CRC32, 1 = MD5, 2 = SHA1

### Return value

Return a string with the hex hash value

# Multi-Script Debugger



Multi-Script Debugger - BETA - Unfinished, Under development
File
Debug
Text5

```
@var $SourceFocusItemName = GetSourceFocusName();
@var $SourceFocusItemPath = GetSourceFocusPath();
@var $TargetFocusItemName = GetTargetFocusName();
@var $TargetFocusItemPath = GetTargetFocusPath();

@var $SourceSelectedFilenames = GetSourceSelectedFileNames();
@var $TargetSelectedFilenames = GetTargetSelectedFileNames();
@var $SourceSelectedPaths = GetSourceSelectedPaths();
@var $TargetSelectedPaths = GetTargetSelectedPaths();
```

| Name | Type | Value |
|---|---|---|
| **Global** | | |
| $SourceFocusItemName | string | temp |
| $SourceFocusItemPath | string | C:\temp |
| $SourceSelectedFilenames | array | array (size : 1) |
| $TargetFocusItemName | string | IMG_0074.jpg |
| $TargetFocusItemPath | string | D:\Pictures\pic\IMG_0074.jpg |
| $TargetSelectedFilenames | array | array (size : 3) |

# MultiScript Examples

## Examples of MultiScripts

- Search on Google from the command line bar
- View first *.txt file found in the folder currently in focus
- Play first *.avi or *.mkv in the folder currently in focus

## Search on Google from the command line bar

Read the parameters (arguments) supplied to this command and build a search url for Google and then go to that url.

Create the command then go to the Alias Manager and assign 'g' to "@<Unique  command id>"

```
function CreateGoogleSearchQuery()
{
  @var $query = "";
  @var $n = 0;
  for( $n = 0; $n < $argcount; $n = $n + 1 )
  {
    if( $n > 0 )
    {
      $query = $query + "+";
    }
    $query = $query + $arg($n);
  }
  return $query;
}
@var $s = "";
$s = "http://www.google.com/search?g=" + CreateGoogleSearchQuery();
MC.Run CMD="{$s}" SHELL
```

## View first *.txt file found in the folder currently in focus

Connect this command to a hotkey, for example Alt+V. Then in an Explorer Panel with a folder in focus, if you press Alt+V - and if a *.txt file exists under that folder - that file will be shown.

```
MC.DataViewer.View FILE={_findfirstfile( "{focusfilepath}\\*.txt" )}
```

## Play First *.avi or *.mkv found in folder currently in focus

Connect this command to a hotkey, for example Alt+P. Then in an Explorer Panel with a folder in focus, if you press Alt+P, the first *.avi or *.mkv found will be played in your default movie player.

```
@var $file;
$file = _findfirstfile( "{focusfilepath}\\*.avi" );
if(StrIsEqual($file,""))
{
  $file = _findfirstfile( "{focusfilepath}\\*.mkv" );
}
MC.Run CMD={$file} SHELL
```

# MultiTags

**MultiTags** are text tags that can be used with some User Commands.

These tags are processed and translated before the command is executed.

MultiTags are supported by External Commands, Custom Commands and Batch Scripts.
MultiTags **CANNOT be used in MultiScript** directly. To use them from MultiScript you must use the GetTagValue() function.

| MultiTag | Description | Example Output |
|---|---|---|
| ${focusfilepath} | Full path to the file/folder in focus | C:\Programs Files\MultiCommander\MyFile.exe |
| ${date:<date-format>} | Current local date | ${date:yyyy-MM-dd} -> 2016-02-28 |
| ${time:<time-format>} | Current local time | ${time:hh:mm:ss} -> "15:23:01" |
| ${targetpath} | Current path of the target panel | D:\MyBackup\ |
| ${sourcepath} | Current path of the source panel | C:\Programs Files\MultiCommander\ |
| ${targetdevice} | Current device of the target panel | D |
| ${sourcedevice} | Current device of the source panel | E |
| ${sourcefocuspath} | Full path to item in focus, in the source view.<br>This MultiTag is the same as ${focusfilepath} | F:\my folder\filename.txt |
| ${targetfocuspath} | Full path to item in focus, in the target view. | D:\Temp\Folder 2\report.txt |
| ${sourcefocusname} | Name of item in focus, in the source view. | filename.txt |
| ${targetfocusname} | Name of item in focus, in the target view. | report.txt |
| ${sourcefocusext} | Extension of item in focus, in the source view. | txt |
| ${targetfocusext} | Extension of item in focus, in the target view. | txt |
| ${leftpath}, ${leftfocuspath}, ${leftfocusname} \| ${rightpath}, ${rightfocuspath}, ${rightfocusname}<br>Same as the ${sourcefocuspath} tags above, but referring to the left/right panel, independent of which panel is source or target. | | |
| $(pid) | The Process ID of MultiCommander | |
| $(mctemp) | Root temp folder used by MultiCommander | |
| ${param:<num>} | Script parameter.<br>where <num> is the index of the parameter | ${param:0} -> "D:\MyBackup\" |

All the paths below depend on how Multi Commander is installed, ie. for a Single User, Multi User, or a portable installation.

| | | |
|---|---|---|
| ${mcinstallpath} | The path from which Multi Commander is run. | C:\Program Files\MultiCommander |
| ${mcappdatapath} | Path to Multi Commander's application data folder. | C:\Users\<username>\AppData\Roaming\MultiCommander\ |
| ${mclogpath} | Path to Multi Commander's log folder | C:\Users\<username>\AppData\Roaming\MultiCommander\Logs\ |
| ${mcconfigpath} | Path to Multi Commander's main config folder. | C:\Users\<username>\AppData\Roaming\MultiCommander\Config\ |

| | | |
|---|---|---|
| ${mcuserappdata} | Path to Multi Commander's user data storage. Used by plugins and extensions to store user data. | C:\Users\<username>\AppData\Roaming\MultiCommander\UserData\ |

Paths that are expanded from MultiTags are **NOT quoted**, so you might need to put quotes around the MultiTag. You might also need to put single quotes around the entire command. (See the first MC.Run example below.)

## Examples

### Custom Commands

```
MC.Explorer.Goto PATH="${focusfilepath}"

MC.Run CMD="C:\bin\Compare.exe" ARG='-s "${sourcepath}" -d "${targetpath}"'
```

As you see in the **MC.Run** example. The **ARG** command has spaces and quote (") characters in it, so the entire ARG must then be encapsulated in single quote ( ' ) characters.

### External Commands

```
"C:\Program Files\Beyond Compare 3\BCompare.exe" -s "${leftfocuspath}" -d
"${rightfocuspath}"
```

### MultiScript Commands

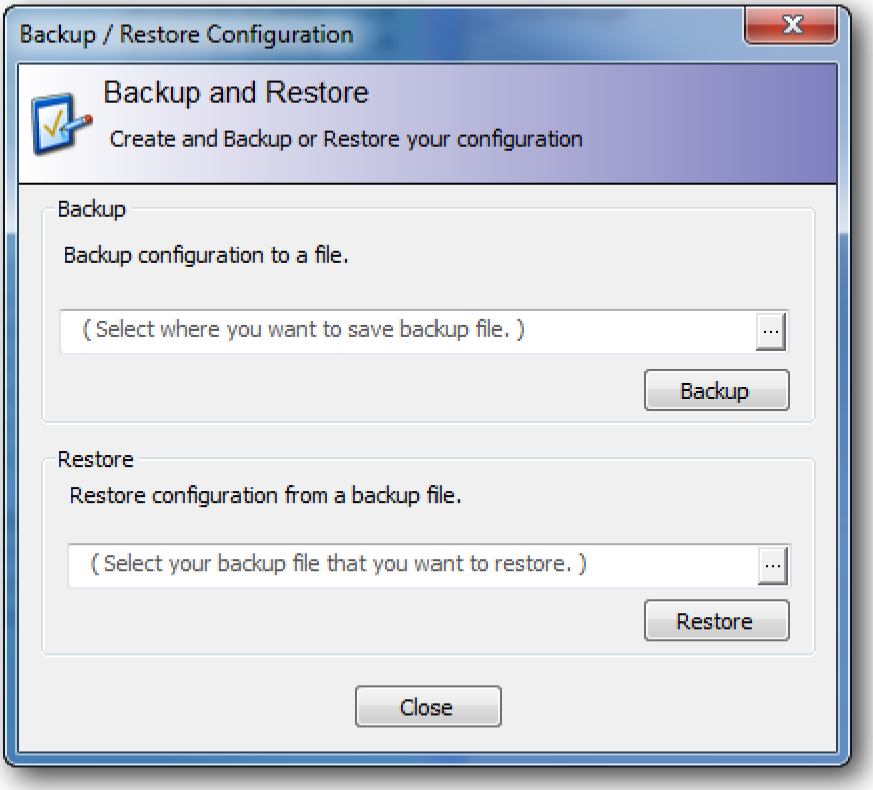
MultiTags are only supported in MultiScript on lines that are **Custom Command**s.

```
@var $cmd = "C:\\Bin\\Compare.exe";

// INCORRECT
@var $path1 = "${sourcepath}"; // Not supported
@var $path2 = "${targetpath}"; // Not supported
MC.Run CMD="{$cmd}" ARG='-s "{$path1}" -d "{$path2}"'

// CORRECT
@var $path1 = GetSourcePath();
@var $path2 = GetTargetPath();
MC.Run CMD="{$cmd}" ARG='-s "{$path1}" -d "{$path2}"'

// CORRECT
MC.Run CMD="{$cmd}" ARG='-s "${sourcepath}" -d "${targetpath}"'
```

*MultiScript calling a CustomCommand with Script variables*. Custom Commands that are run from MultiScript are run by the Custom Command engine, so script parts in the Custom Command line must be encapsulated with { } (as the variables are above). They will be evaluated and expanded before that line is sent to the Custom Command engine.

# Backup and Restore Configuration

The configuration for Multi Commander and all its plug-ins can be backed up and restored. Select **Backup/Restore** from the *Help* menu to open the Backup and Restore dialog.



Backup / Restore Configuration

Backup and Restore

Create and Backup or Restore your configuration

Backup

Backup configuration to a file.

( Select where you want to save backup file. )

Restore

Restore configuration from a backup file.

( Select your backup file that you want to restore. )

## Backup

Enter a file path for the backup file or click "..." to browse to the location where to you wish to save it; then click the **Backup** button.
All configuration files for Multi Commander and all its plug-ins will be backed up into a .zip file at that location.

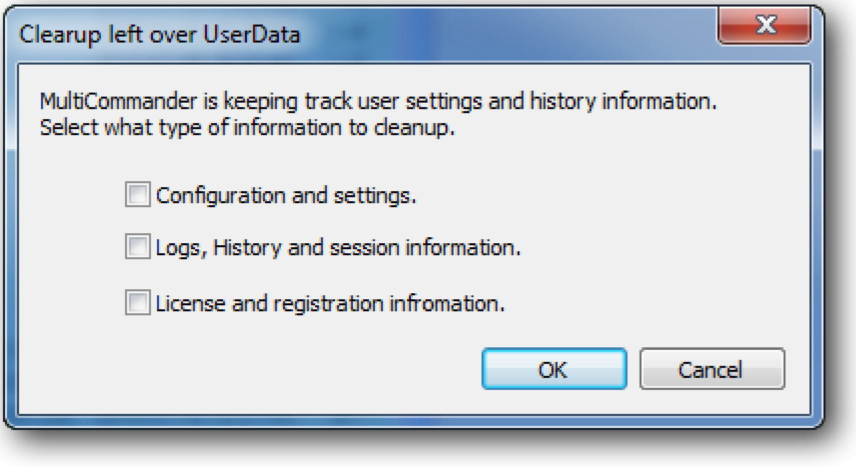
## Restore

Enter a file path to a .zip file or click the "..." button to browse for the file that contains a backup of the configuration.
Press the **Restore** button to replace the current configuration with the configuration that was backed up in that file.

*You need to restart Multi Commander after this for the restored configuration to fully take effect.*

# Cleanup User Data

Multi Commander stores user-specific data in different places. To remove all this data you can run **Cleanup User Data**. Select "**Cleanup userdata...**" from the Help menu to start it.



Clearup left over UserData

MultiCommander is keeping track user settings and history information.
Select what type of information to cleanup.

□ Configuration and settings.

□ Logs, History and session information.

□ License and registration infromation.

Select the type of user data you want to remove then click *OK*. After the user data is removed it is recommended to exit Multi Commander so any new information can be stored.

## Configuration and settings

Multi Commander stores configuration and settings files in an application data folder for the user account. Checking this option will remove all these files.

## Logs, History and Session Information

Multi Commander stores logs of file operations and failures in the user's application data folder. These logs are used to identify why problems happen if Multi Commander fails. History and session information is stored in the Windows Registry. This information is used to create dropdown lists with selections you have made earlier. for example, previously-run commands from the Command Line bar are listed when you use its dropdown list.

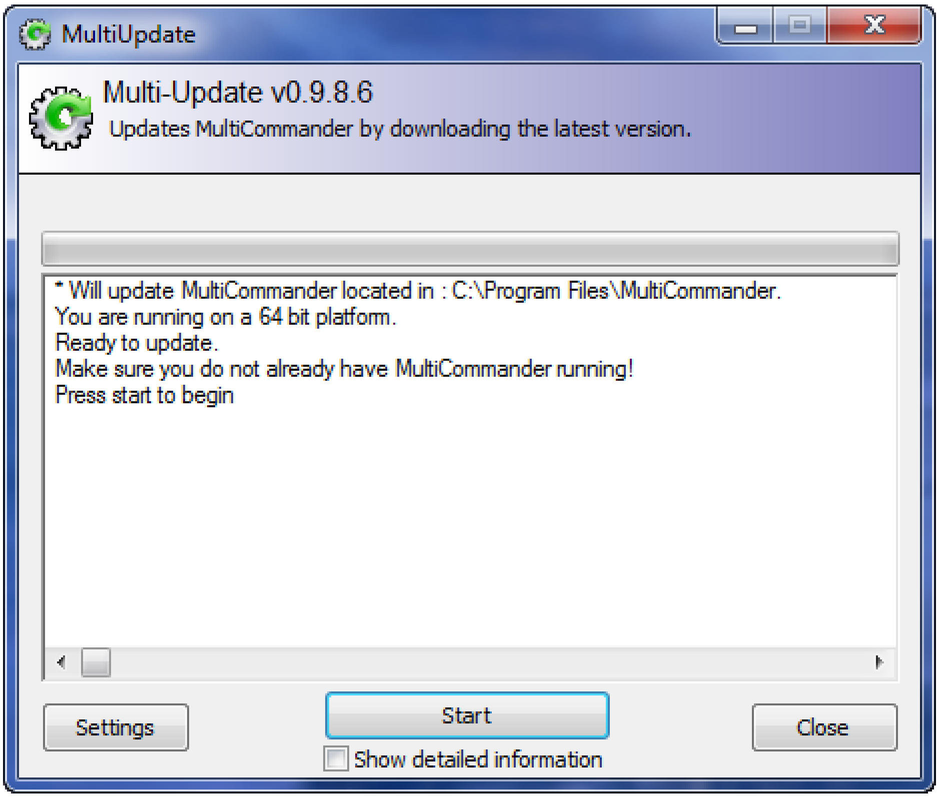
## License and Registration information

Checking this option will remove the license and registration information for Multi Commander.

# MultiUpdate

**MultiUpdate** is a separate tool that will check whether an updated version of Multi Commander is available. If one exists, it will be downloaded and Multi Commander will be updated.

MultiUpdate can be launched separately from the Start Menu or from the folder where it is located (by default, this is the Multi Commander install folder) or by selecting "**Launch MultiUpdate...**" from the *Help* menu in Multi Commander.



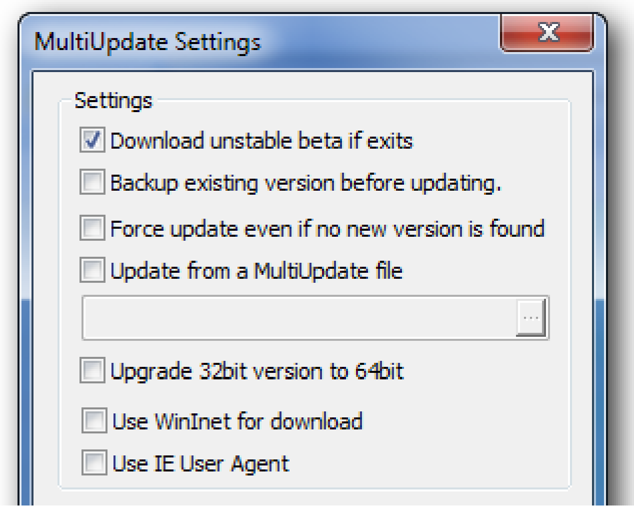
```
* Will update MultiCommander located in : C:\Program Files\MultiCommander.
You are running on a 64 bit platform.
Ready to update.
Make sure you do not already have MultiCommander running!
Press start to begin
```

□ Show detailed information

By default Multi Commander will check if an update exists each time it starts. If an update exists it will launch MultiUpdate.

Multi Commander **must not** be running when MultiUpdate tries to update it or the update process will fail: it will be unable to replace files that are in use.

## Settings



☑ Download unstable beta if exits

□ Backup existing version before updating.

□ Force update even if no new version is found

□ Update from a MultiUpdate file

□ Upgrade 32bit version to 64bit

□ Use WinInet for download

□ Use IE User Agent

### Download beta if exists

This option checks for an unstable beta version and, if one is available, will update Multi Commander with it.

*Unstable beta versions are often not fully tested and can contain experimental or unfinished features.*
**Checking this is normally NOT recommended.**

## Backup existing version before updating.

This option creates a backup of the current installation before updating, so that you can revert to a previous version if there are problems with the update.

## Force Update even if no new version is found

This will force the download of the latest version found and update Multi Commander with it. This can be useful if the current version has been corrupted or if you are running an unstable beta version and want to revert back to the latest stable version.

## Update from a MultiUpdate file

If you already have a file containing Multi Commander updates, you can update from this file instead of downloading another.

## Upgrade 32-bit version to 64-bit

If you are running a 32-bit version of Multi Commander, you can check this option to force MultiUpdate to upgrade you to the latest stable 64-bit version. This option requires you to be running a 64-bit version of Windows.

## Use WinInet for Download

If you have problems downloading an update, try activating this option.

## Use IE User Agent

Some corporate networks have restrictions in firewalls that do not allow browsers other than Internet Explorer to communicate with the Internet. Checking this option will force MultiUpdate to download updates by impersonating Internet Explorer.

# Command Line Parameters

Multi Commander can be started with some command line parameters.

```
-L=<path> - Path to show in the left panel
-R=<path> - Path to show in the right panel
-F=<startup.ini> - file that contains startup properties for the path to show
-T=<Any Text> - A Text that will be shown in the caption bar of the Multi Commander
window
-AutoRun=<User Defined Command to auto run when started>
-NOUPDATECHECK - Disable the check for a new version
-TABSESSION=<Name or ID> - Name of ID of a saved TabSession that will be loaded at
startup
-INSTANCE=<Name> - Name of instance, Use separate configuration for the same
execution of MultiCommander.exe
-MINIMIZED=Start Minimized (there is also an option for that in settings)
```

*Both - or / are supported for parameters. eg. /L=C:\Bin or -L=C:\Bin*

If you want an already-running instance of Multi Commander to go to a path you can use the /OPEN parameter.
This is useful when you have an external program that should tell Multi Commander to go to a specific path or when Multi Commander is running in **Single Instance** mode

```
/OPEN "<path>" - Open new tab for this path
/OPEN "<path>" /NONEWTAB - Open path in currently active tab
/OPEN "<path>" /PANEL=Left|Right|Active|Source|Target - On path in panel Left,
Right, Active, Source or Target panel.. only use ONE of them
/QUIT - Exit current instance
```

## Startup definition file ( -F=<filename.ini> )

The startup file specifies multiple folders to be shown when Multi Commander opens. Each path will be shown in a separate tab.

```
[PANEL_1]
Path=D:\
Side=L

[PANEL_2]
Path=D:\Bin
Side=L

[PANEL_3]
Path=D:\Projects
Side=L

[PANEL_4]
Path=C:\Projects\Jupiter
Side=R

[PANEL_5]
Path=E:\Projects\Pluto
```

```
Side=R
```

**Path** and **Side** parameters **must** be specified in the file.

The following parameters are optional:

```
Locked=1|0
AllowSubPathChange=1|0
ShowTree=1|0
SortAsc=1|0
SortCol=[column number]
TabColorText=#000000
TabColorBk=#000000
TabColorHotWhenActive=1|0
TabColorGradient=1|0
ViewMode=1|2|3|4
ViewModeListWidth=000
ViewModeDetailWidth=000
Side=L|R
Path=[Full Path]
```

1|0 means 1 or 0, 1|2|3 means 1 or 2 or 3, and so on.

## Examples

```
MultiCommander.exe "C:\Bin" "D:\"
```

If no "-L" or "-R" parameter is specified, the first parameter is assumed to be a path to show in the left panel, and the second to be a path to show in the right panel.

```
MultiCommander.exe -L="C:\Bin" -R="D:\"
```

```
MultiCommander.exe -F="AutoStart.ini"
```

```
MultiCommander.exe -TABSESSION="WorkWithPictures"
```

```
MultiCommander.exe -AutoRun=CmdRunStartup
```

```
MultiCommander.exe /OPEN "D:\My Folder\SubFolder"
```

```
MultiCommander.exe -INSTANCE=WorkWithPictures
```

# Multi Commander Windows Message API

Multi Commander supports the **WM_COPYDATA** Windows message for setting and getting information.
Other programs can use this message to tell Multi Commander to go to a path, change focus to a file item, or to query what the current path is or which file is currently in focus.

Actions for getting information from Multi Commander will have the response to the calling program returned using WM_COPYDATA message.

WM_COPYDATA is a special Windows message. One of the parameters to send is a pointer to a COPYDATASTRUCT stucture. This struct is used to store all the data that should be send to Multi Commander.

```
typedef struct tagCOPYDATASTRUCT {
  ULONG_PTR dwData;
  DWORD     cbData;
  PVOID     lpData;
} COPYDATASTRUCT, *PCOPYDATASTRUCT;
```

dwData is used to set some action flags for Multi Commander
lpData is a pointer to the data that should be sent to Multi Commander
cbData is the size in bytes of the data that should be sent

The **WM_COPYDATA** message must be sent to the main Multi Commander Window.
This can be found by first finding the process ID of the Multi Commander.exe instance and then finding the top level window of that instance.
An example of how to do that is the **MCCopyData.h** file in the samples.

When the HWND for the window has been found, use the Windows API SendMessage to send the **WM_COPYDATA** message to the HWND of the windows of Multi Commander.
If requesting information that requires Multi Commander to answer back, the HWND of the windows that will recieve the answer is also needed.

**Exmple**

```
  COPYDATASTRUCT cds;
  cds.dwData = CPF_GOTOPATH | CPF_SOURCE | CPF_NEWTAB;
  cds.cbData = wcslen(szPath) * sizeof(wchar_t);
  cds.lpData = (void*)szPath;
  SendMessage(hMCHWND, WM_COPYDATA, (WPARAM)hMyHwnd, (LPARAM)(LPVOID)&cds);
```

**CPF_GOTOPATH** tells Multi Commander that the data provided is a path and this it should go to this path
**CPF_SOURCE** tells Multi Commander that the new path should be shown in the source panel
**CPF_NEWTAB** tells Multi Commander that the new path should be opened in a new tab.

The following CopyData Flags can be combined.
Some flags can't be combined: do *not combine* multiple action flags and multiple target panel/side flags.

```
#define CPF_GOTOPATH       0x00000002L // Go to path
#define CPF_GETCURPATH     0x00000004L // Go to current path - Result returned in
WM_COPYDATA message from MC
#define CPF_GETCURITEM     0x00000008L // Get name of current item (file or folder)
in focus
#define CPF_GETCURITEMFULL 0x00000010L // Get full path of current item (file or
folder) in focus
```

```
#define CPF_LEFT           0x00000100L // Go to the new path on the left side
#define CPF_RIGHT          0x00000200L // Go to the new path on the right side
#define CPF_SOURCE         0x00000400L // Go to the new path in the source panel
side
#define CPF_TARGET         0x00000800L // Go to the new path in the target panel
side
#define CPF_ANSI           0x00010000L // If not specified, all string are assumed
to be Unicode
#define CPF_NEWTAB         0x00020000L // Open a new side on the specified side
#define CPF_FOCUSITEM      0x00040000L // Change focus to the file item provided in
the path
```

Set CPF_ANSI if the path sent is ASCII/ANSI. If this is not set, Unicode (wchar_t) is assumed.

## C++ Helper

Included in the Sample project there is a MCCopyData.h file. This file contains a helper class that will do most of the work for you.

```
  // Get Current path of the source panel
  MultiCommander::MCCopyDataHelper MCCopyData;

  MCCopyData.Subclass(hDlg);
  std::wstring path = MCCopyData.GetCurrentPathW(hDlg, CPF_SOURCE);
  MCCopyData.ReleaseSubClass(hDlg);
```

hDlg is the HWND of the calling program. This HWND is used when Multi Commander returns the answer to the request.

*MCCopyData.Subclass(hDlg);*
This will hook the helper class into the message loop of the calling program and it will handle all of the WM_COPYDATA responses sent from Multi Commander.

If your program is not a pure Win32 program or you cannot do this, you need to handle the answer of the WM_COPYDATA yourself.
You will find an example of how to do this in the helper class.

In this example we tell Multi Commander to go to D:\MyFolder\SubFolder and that this path should be opened in a new tab

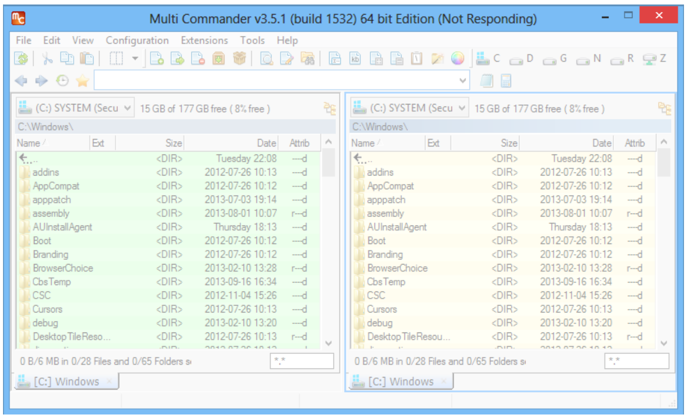
```
  MultiCommander::MCCopyDataHelper MCCopyData;
  MCCopyData.GoToPath(L"D:\\MyFolder\\SubFolder\\", CPF_SOURCE | CPF_NEWTAB, hDlg);
```

Download the sample project and test executable

# Multi Commander Hangs and is Not Responding

## Symptom

When Multi Commander hangs it is often because it is waiting for some external operation to finished, but it can also be because of a problem within Multi Commander itself.
A 'hang' is when Multi Commander becomes unresponsive. The main user interface no longer accepts any input and you see the Windows message "Not Responding" in the title bar.



Multi Commander v3.5.1 (build 1532) 64 bit Edition (Not Responding)

| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| ... | | <DIR> | Tuesday 22:08 | ---d |
| addins | | <DIR> | 2012-07-26 10:13 | ---d |
| AppCompat | | <DIR> | 2012-07-26 10:12 | ---d |
| apppatch | | <DIR> | 2013-07-03 19:14 | ---d |
| assembly | | <DIR> | 2013-08-01 10:07 | r--d |
| AUInstallAgent | | <DIR> | Thursday 18:13 | ---d |
| Boot | | <DIR> | 2012-07-26 10:12 | ---d |
| Branding | | <DIR> | 2012-07-26 10:12 | ---d |
| BrowserChoice | | <DIR> | 2013-02-10 13:28 | r--d |
| CbsTemp | | <DIR> | 2013-09-16 16:34 | ---d |
| CSC | | <DIR> | 2012-11-04 15:26 | ---d |
| Cursors | | <DIR> | 2012-07-26 10:13 | ---d |
| debug | | <DIR> | 2013-02-10 13:20 | ---d |
| DesktopTileReso... | | <DIR> | 2012-07-26 10:13 | r--d |

0 B/6 MB in 0/28 Files and 0/65 Folders s

| Name | Ext | Size | Date | Attrib |
|---|---|---|---|---|
| ... | | <DIR> | Tuesday 22:08 | ---d |
| addins | | <DIR> | 2012-07-26 10:13 | ---d |
| AppCompat | | <DIR> | 2012-07-26 10:12 | ---d |
| apppatch | | <DIR> | 2013-07-03 19:14 | ---d |
| assembly | | <DIR> | 2013-08-01 10:07 | r--d |
| AUInstallAgent | | <DIR> | Thursday 18:13 | ---d |
| Boot | | <DIR> | 2012-07-26 10:12 | ---d |
| Branding | | <DIR> | 2012-07-26 10:12 | ---d |
| BrowserChoice | | <DIR> | 2013-02-10 13:28 | r--d |
| CbsTemp | | <DIR> | 2013-09-16 16:34 | ---d |
| CSC | | <DIR> | 2012-11-04 15:26 | ---d |
| Cursors | | <DIR> | 2012-07-26 10:13 | ---d |
| debug | | <DIR> | 2013-02-10 13:20 | ---d |
| DesktopTileResou... | | <DIR> | 2012-07-26 10:13 | r--d |

0 B/6 MB in 0/28 Files and 0/65 Folders s

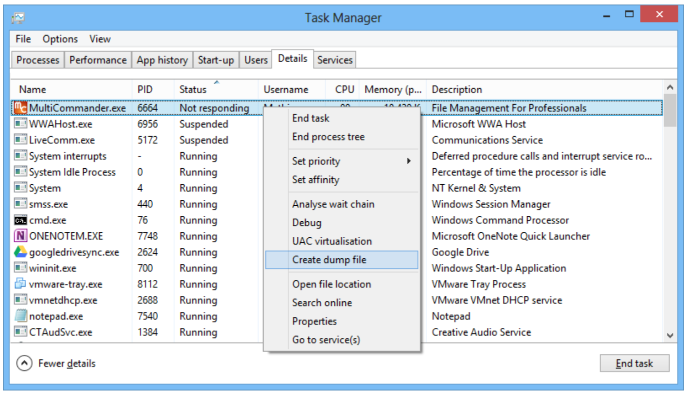
## What To Do

If Multi Commander actually *crashes* a mini dump file is created and sent to our crash report system where we can investigate why it crashed.
For a hang this is not done automatically; to be able to find out why it hung, and to be able to fix it, we need to know what Multi Commander was doing when it hung. To do that, we need a dump of the hung 'MultiCommander.exe. process, but you, the user, will need to create that dump and send it to us.

## Creating a Dump File

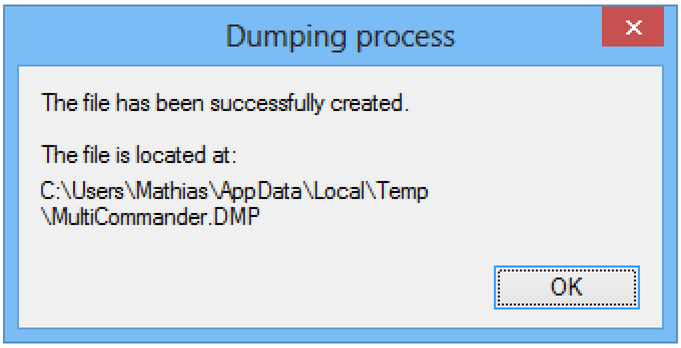
To create a dump file you can use the Windows Task Manager (For Windows XP or Windows Server2003 you have to use a tool like procdump).

Start Task Manager by pressing Ctrl+Shift+Esc (or right-click on the status bar and select "Start Task Manager"), select the Processes tab.
Find the "not responding" MultiCommander.exe process in the list, right-click it and select "Create Dump File".



| Name | PID | Status | Username | CPU | Memory (p... | Description |
|---|---|---|---|---|---|---|
| MultiCommander.exe | 6664 | Not responding | [illegible] | [illegible] | [illegible] | File Management For Professionals |
| WWAHost.exe | 6956 | Suspended | | | | Microsoft WWA Host |
| LiveComm.exe | 5172 | Suspended | | | | Communications Service |
| System interrupts | - | Running | | | | Deferred procedure calls and interrupt service ro... |
| System Idle Process | 0 | Running | | | | Percentage of time the processor is idle |
| System | 4 | Running | | | | NT Kernel & System |
| smss.exe | 440 | Running | | | | Windows Session Manager |
| cmd.exe | 76 | Running | | | | Windows Command Processor |
| ONENOTEM.EXE | 7748 | Running | | | | Microsoft OneNote Quick Launcher |
| googledrivesync.exe | 2624 | Running | | | | Google Drive |
| wininit.exe | 700 | Running | | | | Windows Start-Up Application |
| vmware-tray.exe | 8112 | Running | | | | VMware Tray Process |
| vmnetdhcp.exe | 2688 | Running | | | | VMware VMnet DHCP service |
| notepad.exe | 7540 | Running | | | | Notepad |
| CTAudSvc.exe | 1384 | Running | | | | Creative Audio Service |

When the dump file is saved you will be presented with a dialog telling you where the dump file was written.

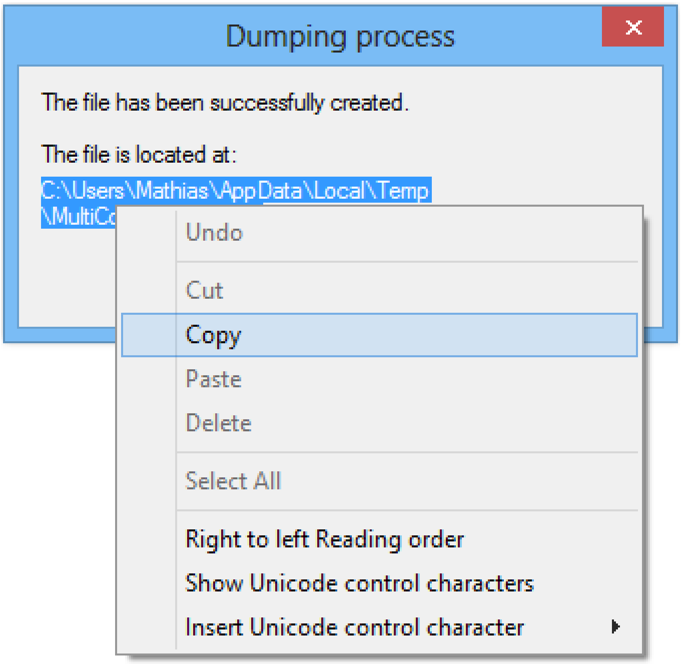


Dumping process

The file has been successfully created.

The file is located at:
C:\Users\Mathias\AppData\Local\Temp
\MultiCommander.DMP

The path in the dialog must be selected so that you can copy and paste that path into Multi Commander or Windows Explorer to go to that location.



Dumping process

The file has been successfully created.

The file is located at:
C:\Users\Mathias\AppData\Local\Temp
\MultiCo

Undo
Cut
Copy
Paste
Delete
Select All
Right to left Reading order
Show Unicode control characters
Insert Unicode control character

Compress the dump file with Zip/7-zip/Rar. The fastest way is to just right-click the file and select "Send To > Compressed Folder".

Then upload that file to http://multicommander.com/upload and we can take a look and see what Multi Commander was waiting for and why it hung.

If you need feedback on your submitted file, then also post a message in the forum or send us an email.

# Multi Commander Crashes

## If Multi Commander Crashes

A crash can happen for many different reasons. Perhaps because of a bug in Multi Commander, but also because of external factors, like bad memory or bad hardware or conflicts with other software.

When Multi Commander crashes it will, by default, try to create a mini crash dump and send it to our crash report system. The crash report system will then do an automatic analysis of the crash and send the result for review. If the issue needs more investigation it will be analyzed manually.

With the crash dump we can see where in Multi Commander the crash happened and sometimes the reason why. However, the crash dump file that is created by default has very limited information and sometimes does not have enough for us to find out what has happened.

## Shell Extensions

The most common reason for crashes is third party programs that get executed inside the Multi Commander process. This happens often when Multi Commander is using Windows Explorer Shell Extensions for building the Context Menu ("Right-Click" menu).

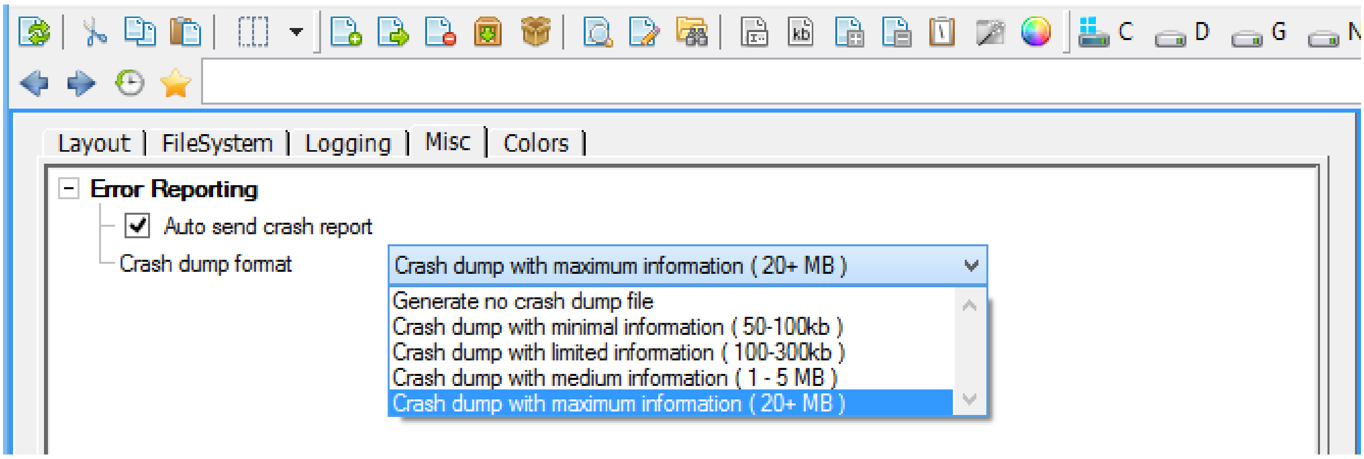
A lot of shell extensions are only tested on Windows Explorer, so when programs like Multi Commander call them, they can crash Multi Commander because the Extension has a coding error. There is nothing Multi Commander can do about this.

One thing you as a user can do is to disable Shell Extensions one by one to find out which one is at fault. A tool to disable/enable Shell Extensions is the free ShellExView by NirSoft

## Provide Better Crash Information

Since the default crash report is limited in information, what it does provide is not always useful. If you have regular crashes, please consider changing the Crash Dump Format to a higher level. This will provide us with more and better information to determine why it crashed.

You find the settings under Core Settings



⊟ Error Reporting

☑ Auto send crash report

Crash dump format: Crash dump with maximum information ( 20+ MB )

- Generate no crash dump file
- Crash dump with minimal information ( 50-100kb )
- Crash dump with limited information ( 100-300kb )
- Crash dump with medium information ( 1 - 5 MB )
- Crash dump with maximum information ( 20+ MB )

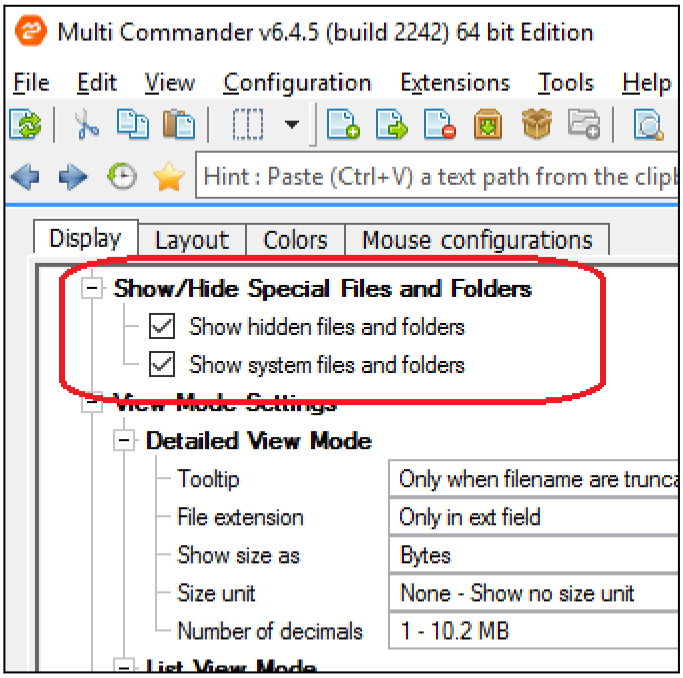
If you did something specific which triggered the crash, please send an email or leave a post in the forum letting us know what exactly you did to trigger the crash. The more information we get the better the chance that we can fix the problem.

The crash dumps with maximum information contain all the memory addresses that the Multi Commander.exe process used, so they can be large. But they also give us a good view on what is going on inside Multi Commander and information about the internal state of its various components.

# FAQ - Show Hidden Files

Just as in Windows Explorer, files and folders with the hidden and system attributes set are not visible by default.

There is a settings in Explorer Panel settings for changing this:


Multi Commander v6.4.5 (build 2242) 64 bit Edition
File
Edit
View
Configuration
Extensions
Tools
Help
Hint : Paste (Ctrl+V) a text path from the clipb
Display
Layout
Colors
Mouse configurations

Show/Hide Special Files and Folders
☑ Show hidden files and folders
☑ Show system files and folders

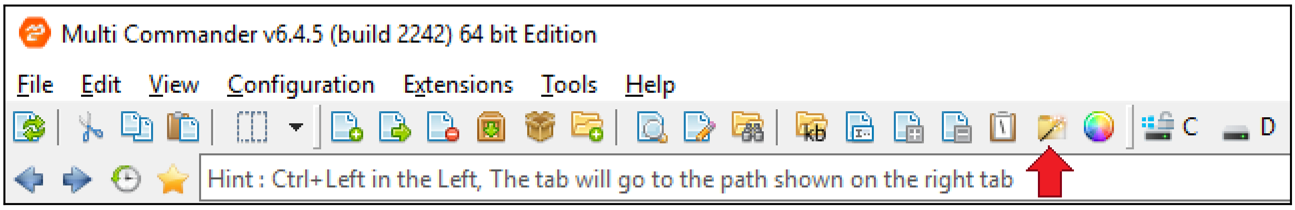
View Mode Settings

Detailed View Mode

| | |
|---|---|
| Tooltip | Only when filename are trunca |
| File extension | Only in ext field |
| Show size as | Bytes |
| Size unit | None - Show no size unit |
| Number of decimals | 1 - 10.2 MB |

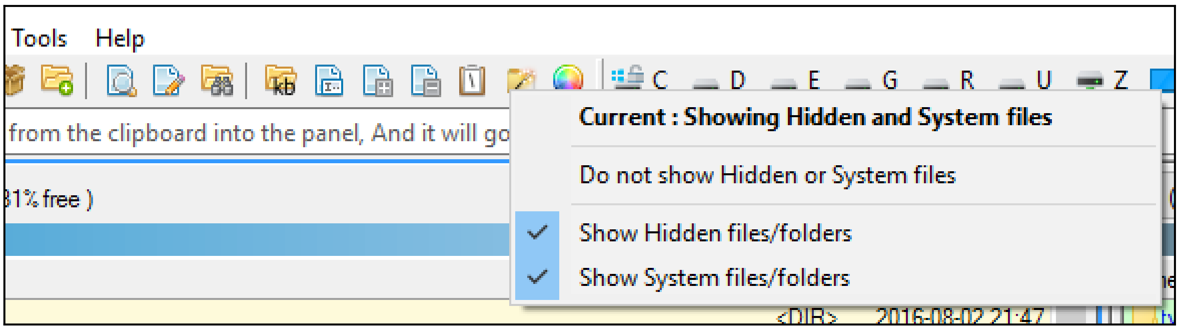
List View Mode

There is also a quicker way to toggle this setting on or off, and that is to use the toolbar button.


Multi Commander v6.4.5 (build 2242) 64 bit Edition
File
Edit
View
Configuration
Extensions
Tools
Help
C
D
Hint : Ctrl+Left in the Left, The tab will go to the path shown on the right tab

This will toggle the visibility of files and folders with the hidden and system attribute set.

Right-clicking on the button will open a pop-up.


Tools
Help
C
D
E
G
R
U
Z
from the clipboard into the panel, And it will go
31% free )
Current : Showing Hidden and System files
Do not show Hidden or System files
✓ Show Hidden files/folders
✓ Show System files/folders
<DIR>
2016-08-02 21:47

The popup will display the current settings and allows for changing the settings, with separate options for hidden and system attributes.

# FAQ - Enter Folder on Single Click

Because there are so many configuration options in Multi Commander there is no single option you can check to enable this behaviour.

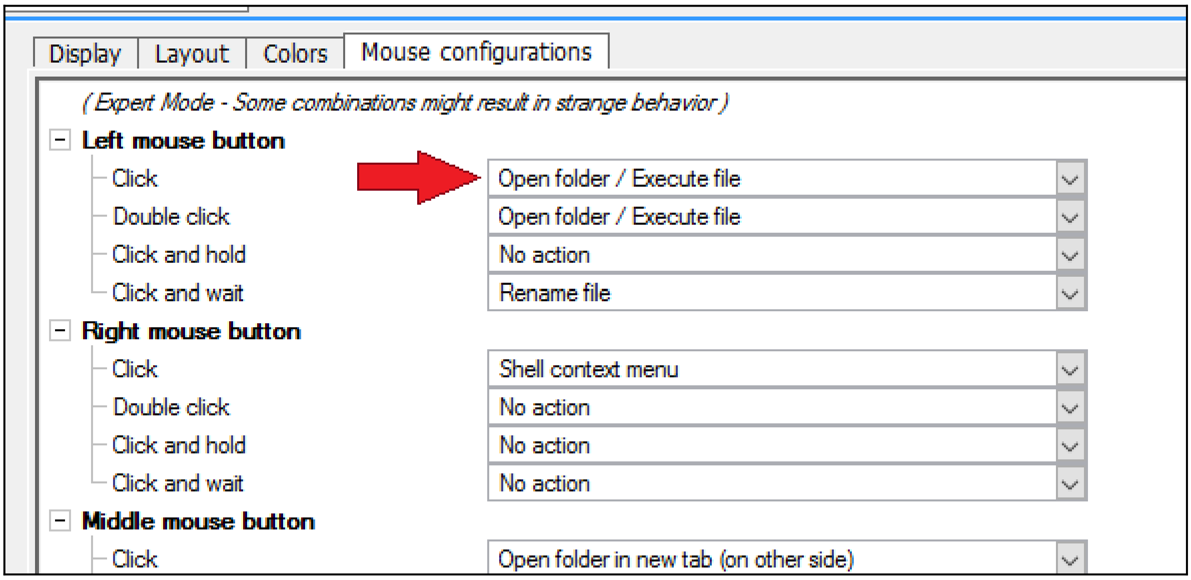
But because the mouse and keyboard are both very customizable, it is possible to configure it.

You can configure what should happen when you click with a mouse button and how things should work.

To enable single-clicking, the settings in Explorer Panel need to be modified.

The first thing to change is what should happen when left mouse button is clicked.

Changing this to "Open Folder / Execute file" will allow a folder to be opened with single click, and a file will be run on single click.



( Expert Mode - Some combinations might result in strange behavior )

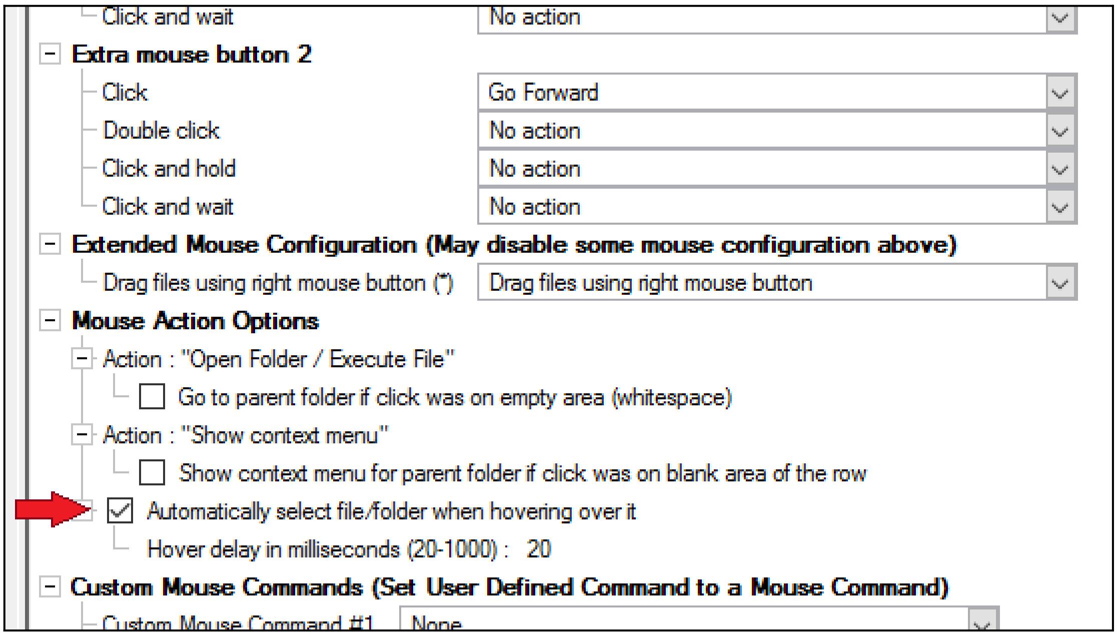
**Left mouse button**
- Click: Open folder / Execute file
- Double click: Open folder / Execute file
- Click and hold: No action
- Click and wait: Rename file

**Right mouse button**
- Click: Shell context menu
- Double click: No action
- Click and hold: No action
- Click and wait: No action

**Middle mouse button**
- Click: Open folder in new tab (on other side)

A potential problem is that it will be harder to select files and/or folders: normally a file or folder is selected when clicked on.

By enabling "Automatically select file/folder when hovering over it", the item under the mouse cursor is automatically selected.
It is thus easier to select items.


- Click and wait: No action

**Extra mouse button 2**
- Click: Go Forward
- Double click: No action
- Click and hold: No action
- Click and wait: No action

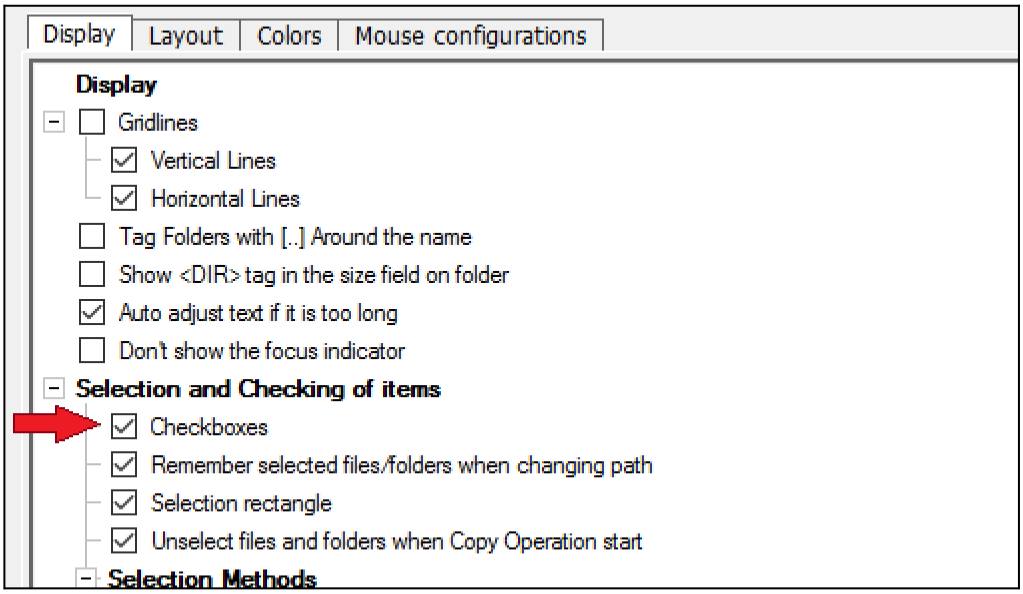
**Extended Mouse Configuration (May disable some mouse configuration above)**
- Drag files using right mouse button (*): Drag files using right mouse button

**Mouse Action Options**
- Action : "Open Folder / Execute File"
  - □ Go to parent folder if click was on empty area (whitespace)
- Action : "Show context menu"
  - □ Show context menu for parent folder if click was on blank area of the row
- ☑ Automatically select file/folder when hovering over it
  - Hover delay in milliseconds (20-1000) : 20

**Custom Mouse Commands (Set User Defined Command to a Mouse Command)**
- Custom Mouse Command #1: None

Multi selection, however, is more difficult.

But enabling "Checkbox" under "**Selection and Checking of Items**", it will be easier to select multiple files and folders.



**Display**

- ☐ Gridlines
  - ☑ Vertical Lines
  - ☑ Horizontal Lines
- ☐ Tag Folders with [..] Around the name
- ☐ Show <DIR> tag in the size field on folder
- ☑ Auto adjust text if it is too long
- ☐ Don't show the focus indicator

**Selection and Checking of items**

- ☑ Checkboxes
- ☑ Remember selected files/folders when changing path
- ☑ Selection rectangle
- ☑ Unselect files and folders when Copy Operation start

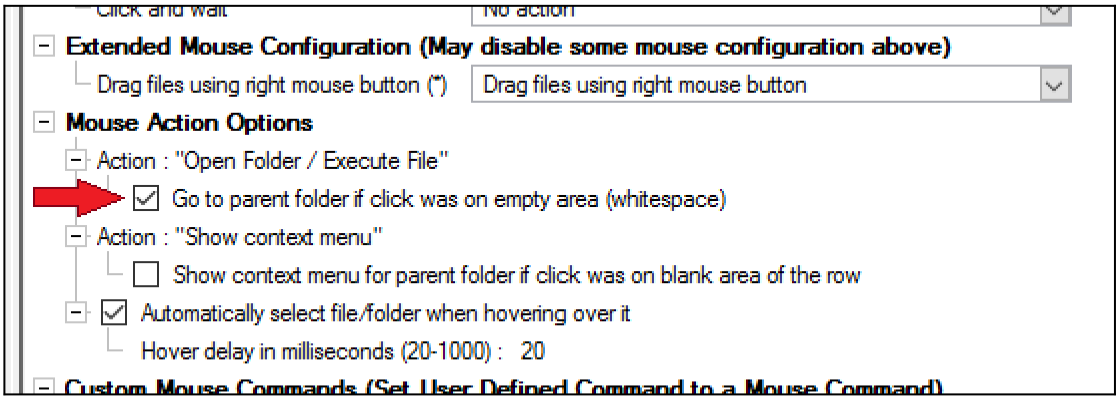
**Selection Methods**

# Optional

Many users like to use the single-click setup and prefer that clicking on empty space will go back to the parent item.

And there is an option for that:

(Where whitespace is the area on a row after any text).



Click and wait: No action

**Extended Mouse Configuration (May disable some mouse configuration above)**

- Drag files using right mouse button (*): Drag files using right mouse button

**Mouse Action Options**

- Action : "Open Folder / Execute File"
  - ☑ Go to parent folder if click was on empty area (whitespace)
- Action : "Show context menu"
  - ☐ Show context menu for parent folder if click was on blank area of the row
- ☑ Automatically select file/folder when hovering over it
  - Hover delay in milliseconds (20-1000) : 20

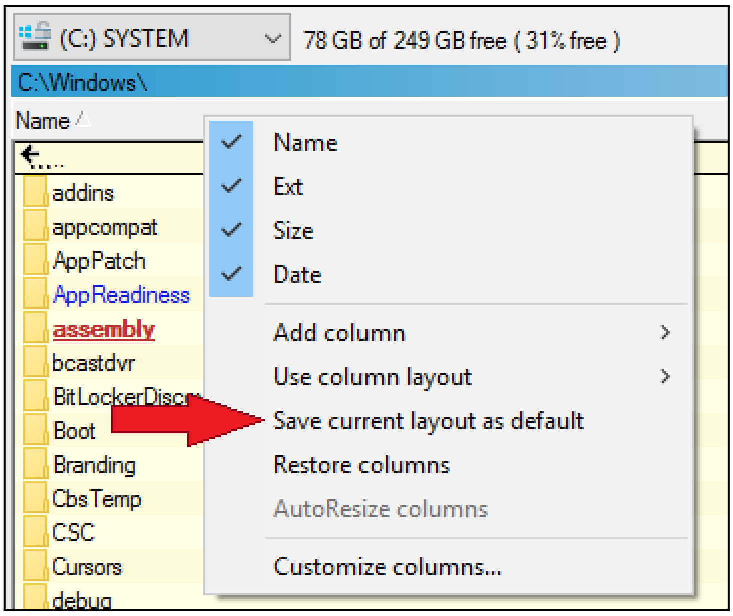
**Custom Mouse Commands (Set User Defined Command to a Mouse Command)**

# FAQ - Save and Resize Columns

## Save column layout

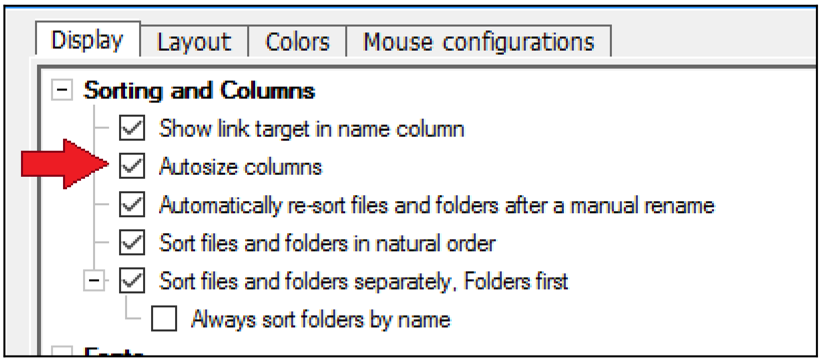
If you resize, add or remove columns, and want to save the new layout as your default for all Explorer Panels:

Right-click the column header and select "**Save current layout as default**".



## Resizing Columns and AutoResize

If the option "AutoResize columns" in Explorer Panel settings is enabled, columns will automatically resize when you next resize them.



Sorting and Columns

☑ Show link target in name column

☑ Autosize columns

☑ Automatically re-sort files and folders after a manual rename

☑ Sort files and folders in natural order

☑ Sort files and folders separately, Folders first

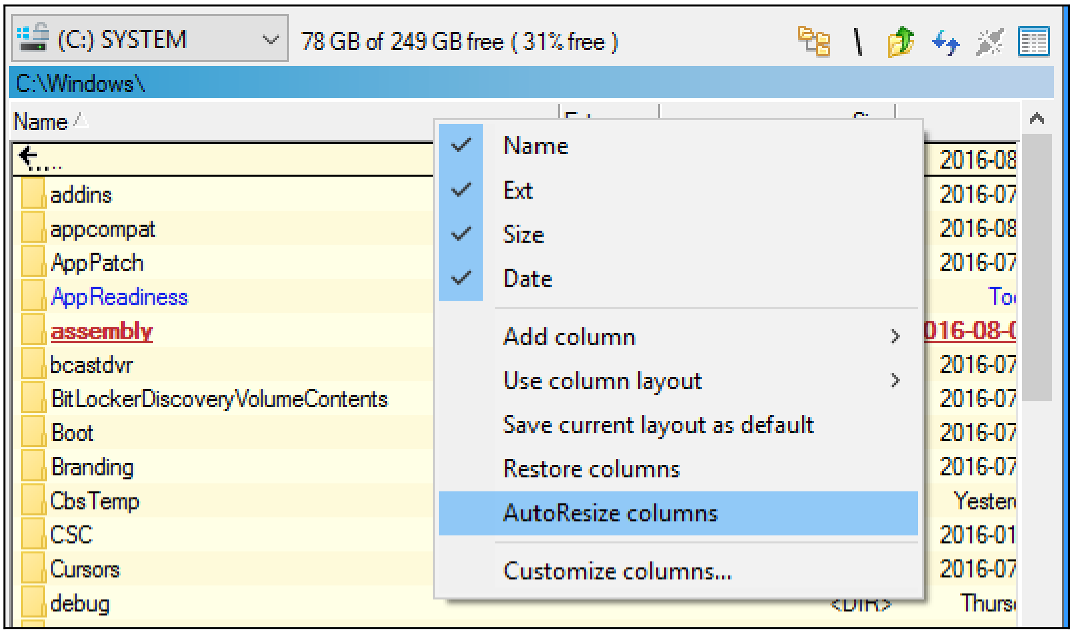
☐ Always sort folders by name

The size of all columns will change immediately after you resize any of them. All columns will then fit into the width of the view.
When you resize the last column, the Filename column is automatically resized to accommodate the new size of the last column.

So when resizing all columns to fit your needs, do so from left to right but skip the filename column. This will resize to fill whatever room is left after resizing all other columns.

If the AutoResize Column option is *not* enabled, columns are not automatically resized and you can create column layouts that are wider than the width of the view.
In the latter case you will see a horizontal scrollbar.

You can manually force columns to be resized by right-clicking on column header and selecting "AutoResize columns"



When selected, a one-time AutoResize of the columns in the view will occur.

More...

Read more about how to customize columns and how to create new column layouts
Customize columns
Customize columns layouts