Bulk Rename Utility

A software utility to rename files and folders

TGRMN Software

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Version: 3.3.2

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Overview

Bulk Rename Utility is a software utility for Windows which allows you to rename multiple files and folders, based upon flexible criteria. For example, you can add a prefix or suffix to a file, or you can change three letters with four other letters in a filename. There are lots of ways to manipulate file and folder names.

Bulk Rename Utility supports many flexible renaming criteria, including:

- Rename files and/or folders
- Support for Regular Expressions
- Change the file name or use a fixed filename
- Convert the extension to lower case, upper case, title case - or replace it - or add a secondary extension - or remove it
- Replace text with other text
- Add a fixed prefix or suffix
- Add text to the middle of a name
- Move text to the start/end/middle of a name
- Remove the first *n* characters
- Remove the last *n* characters
- Remove from the *nth* character to the *nth* character
- Remove a list of characters
- Remove all digits, characters or symbols
- Remove double-spaces
- Crop text before or after a fixed character or text (or from anywhere in a name using a wildcard)
- Change to upper case, lower case, title case, sentence case - all with user-defined exceptions
- Auto-number files, with a prefix or suffix, and with a predefined minimum-length if required
- Prefix or suffix the filename with various dates (date-modified, accessed, created, or today's date), in many different formats with variable separators
- Append the folder name to the file (with multiple levels)
- Store your frequently-used renaming criteria as Favourites
- Copy or move the renamed files to a new location
- Set or clear the Windows attributes on the files (read-only, archived, system, hidden)
- Rename files according to a list
- Process files in folders and also sub-folders very quickly
- Change file or folder created, modified and accessed timestamps
- Convert Roman numerals to upper or lower case
- Log all activity to a text-file
- Create an UNDO batch file
- Preview all operations before actually renaming.
- Extract certain EXIF tags from JPEG, TIFF, .NEF, .CR2 and and .CRW files. Extract EXIF version 2 tags from JPEG files
- Extract certain ID3 tags (V1 and V1.1) from MP3 files
- Extract and use the Windows File Properties to rename
- Add file hashes to file names (crc32, MD5, SHA)
- Create and move files into folders based on file names or file dates ('folderize')
- Drag files directly from within Windows Explorer
- Support for renaming scripts using Javascript

The application supports Favourites, which allows quick access to frequently-used renaming configurations. Directory recursion is also fully supported, allowing you to process folders and sub-folders.

If you have suggestions for enhancements or improvements, please get in touch.

Manual Version: 3.3.2

Getting Started

Bulk Rename Utility is straightforward to use.

There are four simple rules to follows:

1. Only complete the boxes you are interested in. For example, don't assume you have to put something in the Regular Expressions box, or the New Location box, etc.
2. IMPORTANT: You have to select files to rename from the file list before the *Rename* button is enabled.
3. The "new name" column will always be shown in the list, so you can experiment until you get the desired result before actually committing the changes.
4. Almost all the boxes on the screen are ONLY for affecting the file name, NOT the extension. The only box which affects the extension is box 11. There is an option in the "Renaming Options' menu to 'Rename File Extensions as Being Part of the File Names' if needed.

So for example, if you just want to change the filename case to upper case, all you need to do is:

1. Change the drop-down in box 4 to "Upper".
2. Select the files you want to rename (click on the files, Shift+click to select a range, Ctrl+click, Ctrl-A etc.)
3. Press the Rename button (or Preview to review all changes before renaming).

And that's it! No worrying about regular expressions, new folders, auto-numbers, dates etc.
You only need to use the boxes you are interested in. Don't want to move the files to a new folder? Leave the New Location fields blank. Don't want to change the file name case? Leave the *Case* fields as their default values.

It is simple, only use the boxes you are interested in.

All Renaming Options

When you run the application for the first time you will be presented with the main window, located in the center of the screen. The main screen is laid out in a similar way to Windows Explorer. Below the menu bar are two panes, the left of which is a tree view providing access to your system drives and folders. The right-hand pane is a list view of the files and folders contained within the currently selected branch of the tree shown over on the left.

Below the navigation panes are a series of controls. The controls are grouped together according to function - for example, all the facilities to remove text from a filename. Only complete the boxes you are interested in. For example, don't assume you HAVE to put something in the Regular Expressions box, or the New Location box, etc.

The rules used by the Bulk Rename Utility to rename files processed in the order that the controls appear. i.e. from left to right. Names are not actually changed until the "Rename" button is clicked, but you can always see a preview of the proposed filename in the *New Name* column. Note that this column is only updated for the files which are selected.

RegEx (1)

Regular Expression. It allows you to enter a regular expression *Match* and *Replace*. More details can be found [here]. If you are not using Regular Expressions then both of these fields must be left blank. Do not confuse these fields with the Replacements fields found elsewhere on the screen (Repl., see below).

Include Ext.: select this option to apply the regular expression to the entire name and extension.

Note: It is also possible to use *<clip>* in the *Replace* field. <clip> will be substituted with the current text content of the Windows Clipboard.

Name (2)

Fine Name. It allows you to manage the file name.

Name drop-down:
- *Keep* - ensure that the original filename is not changed (default).
- *Remove* - completely erase the filename from the selected items.
- *Fixed* - specify a new filename in the box for all selected items. Only really useful if you're also using the Numbering section.
- *Reverse* - reverse the name, e.g. 12345.txt becomes 54321.txt.

Replace (3)

Replacement. It allows you to replace occurrences of one text string with another.

This section consists of two controls. You must specify the text you wish to *Replace* and the text you wish to replace it *With*. It is possible to find a text string and replace it with an empty string, or with a shorter string, or with a longer string. You may also specify whether or not you want the "find" to be case-sensitive using *Match Case*. Note that the text is always replaced with the text you specify, including any specific text case.

Note: It is also possible to use the tag *<clip>* in both the *Replace* and *With* fields. <clip> will be substituted with the current text content of the Windows Clipboard.

Case (4)

Changing of case. Allows the capitalization of file and/or folder names to be changed.

Case drop-down:

- *Same* - leave the original capitalization intact.
- *Lower* - convert all letters in the name(s) to lower-case.
- *Upper* - converts all letters in the name(s) into capitals.
- *Title* - converts all the words in the selected items to initial caps. A word is generally defined as a string of letters proceeded by a space or a bracket. So "joe public.txt" would become "Joe Public.txt" but "joe-public.txt" would become "Joe-public.txt".
- *Sentence* - converts all the words in the sentence to sentence format. This means capitalizing the first letter of the first word after every full stop (.). So "hello EVERYONE. MY name IS FreD.txt" would become "Hello everyone. My name is fred.txt"

Exceptions: You can also enter a list of "*exceptions*", separated by colons. So for example if you entered *PHP: ASP:doc* then any occurrence of *php* or *ASP* (or *pHP* or *aSp*) would be converted to upper-case, and every occurrence of *DOC* (or *DoC*) would become *doc*.

Remove (5)

Removing parts of a filename.

This section consists of several options for removing parts of a filename. Note that these do not apply to the file extension, just the name.

- *First n* - Remove the first *n* characters from the name. E.g. removing the first 2 characters from "Joe Public. txt" will result in "e Public.txt".
- *Last n* - Remove the last *n* characters from the name. E.g. removing the last 2 characters from "Joe Public. txt" will result in "Joe Publ.txt".
- *From/to* - Remove a string of text, e.g. from the 6th to the 9th characters.
- *Chars* - Remove occurrences of characters from the name. E.g. typing "QW:#" will result in all occurrences of Q, W, colon and hash being removed.
- *Words* - Remove occurrences of words (separated by spaces).
- *Crop* - Remove any text which occurs before (or after) a specific character or word. See note below.
- *Digits* - Remove all occurrences of the digits 0-9 from the filename.
- *High* - Remove high-ASCII characters (chars from 128 to 255).
- *Trim* - Remove leading and trailing spaces.
- *D/S* - Remove occurrences of double spaces, and replace them with single spaces.
- *Accent* - Remove accented characters and replace them with non-accented versions. File names may contain accented characters, e.g. File names might contain à and á. Bulk Rename Utility provides a facility to replace accented characters with non-accented if needed.
- *Chars* - Remove all characters.
- *Sym* - Remove all symbols.
- *Lead Dots* - Remove the . or .. from the front of filenames (useful if you've copied from a Linux/Unix system).

Note: When you use the "crop" option, you have the ability of specifying a "special" value using the wildcard (*). This will remove the specified string, and any characters occupied by the wildcard. So for example, specifying [*] would convert "Hello[ABC] Joe" to just "Hello Joe", as it has removed the two square brackets and everything between.

Move/Copy (6)

Move a section of text to a different place.

This section allows you to move or copy a fixed number of characters form one part of the string (start or end) to another (start, end or position). You could do this with Regular Expressions, but this gives you an alternative. So for example, if all your filenames end with a unique 6-digit sequence code, and you'd rather have this at the start of the filename, then this is the simplest way to achieve it. You can also specify a *separator* in the field *Sep*.

Add (7)

Add a fixed prefix or suffix to the filename, and certain Exif and ID3 tags.

This section allows you to add a fixed text string to the start of the filename (*Prefix*) and/or a fixed text string to the end of a filename (*Suffix*). Useful for renaming MP3 files, where you can prefix all the filenames with the artist or album name. You can also insert a text string at any point in the filename.
You may also choose to add a "*Word Space*". This will insert a space before any capital letter (except the first character), unless there's a space already there. So, the name "MyHoliday Photographs" would become "My Holiday Photographs".

EXIF Tags: If you are processing JPEG files or other image files that support EXIF, you can also extract and add certain EXIF tags.
These are specified using substitution tags, which you key into the *Prefix*, *Insert* or *Suffix* boxes. The tags supported are:

    %a - Aperture
    %c - Comments
    %e - Exposure
    %f - Focal Length
    %xb - Exposure Bias
    %ma - Camera Make
    %mo - Camera Model

Extended EXIF Tags (version 2): Additional extended version 2 EXIF Tags are also supported in *Add (7)*. They can be added as text, number or as a formatted date to a file name. Read More.

ID3 Tags: If you are processing MP3 files, you can also extract certain ID3 tags (n.b. only V1 and V1.1 ID3 tags are supported). These are specified using substitution tags, which you key into the *Prefix*, *Insert* or *Suffix* boxes. The tags supported are:

    %r - Artist
    %l - Album
    %t - Title
    %k - Track Number

Other Tags Supported:

- *%z* : You can also specify %z to include the file size (using the format currently specified on the Options menu)
- *<clip>* : It is also possible to use the tag *<clip>*. <clip> will be substituted with the current text content of the *Windows Clipboard*.
- *<removed>* : Use the <removed> tag to add back what was removed in section Remove(5). For example, if in Remove(5) text was removed from position 3 to 6 or First n or Last n or by the crop function, then you can re-add that removed text in a different position, as a suffix, prefix or insertion, using the <removed> tag in Add(7). You can use the <removed> tag multiple times in Add(7).

HASH Value Tags

The following hash value tags are also supported: <(hash:crc32)>, <(hash:md5)>,<(hash:sha1)>,<(hash:sha256)>,<(hash:sha3)>,<(hash:keccak)>. These tags will be replaced by the corresponding hash value of the file and can be used to add a hash value to the file name.

Windows File Properties:

All Windows File Properties tags are also supported in *Add (7)*. They can be added as text, number or as a formatted date to a file name. Read More.
To enable Windows File Properties tags support, activate the option *'Extract Windows File Properties'* from the

[Renaming menu](.).

Auto Date (8)

Add various dates to the filename, in various formats.

This section allows you to prefix or suffix the filename with a variety of dates - the date that the file was created, modified, or accessed, and also with the current date. The date can be added in 9 different formats, some of which also include the modification time. You can also specify the characters you would like placed between the date/time and the existing filename (the *Sep.* field) and the character to place between the different date/time segments (the *Seg.* field). e.g. a format of DMY, with a *Seg* field of "-" would give a date of (for example) "25-01-03". The "*Cent.*" flag is used to indicate whether or not you would the year to be represented with two digits or 4 digits.

You also have the option to specify your own custom date formats, and these are detailed [here](.).

If you are also updating the file's [Creation-date or Modified-date](.), then you can also choose the "Create (New)" and "Modified (New)" values, and these will equate to your new timestamps.

Several of the dates you can use relate to "date taken". These are EXIF flags which are often embedded in digital camera images (images created using a digital camera). Bulk Rename Utility will only get the flags from JPEG images (.JPG or .JPEG extension), TIFFs (.TIF, .TIFF), Nikon (.NEF) and Canon (.CR2) files. If no date is available then no date will be used. So for example, choosing to append a Date Taken field for a .EXE file will simply append nothing. The dates are:

- *Taken (Original)* - The original timestamp, which should never change.
- *Taken (Digitized)* - The original timestamp, but if the file has been edited (Canon Digital Photo Professional etc.) then this date is updated.
- *Taken (Modified)* - The standard "DateTime" EXIF field, which is usually updated if you edit the picture.
- *Taken (Recent)* - the most "recent" of all three. By recent, this means the last timestamp in the file, not necessarily the most recent in time. This is purely to retain the same behaviour as previous versions of Bulk Rename Utility.

Append Folder Name (9)

Add the name of the containing folder(s).

This section allows you to append (or prepend) the name of the containing folder to the filename. So for example, if you had a file called "Dancers.jpg" in a folder called "Highland Show August 2003" then you could automatically rename the file to "Highland Show August 2003 - Dancers.jpg". Useful if you have lots of folders, each containing the same group of files, and you want to merge all the files into a single folder.

You can specify a separator character(s) to use between the folder name and the file name.

You can also specify how many folders to append. So for example, if you had a picture called "Cat.jpg" in "C:\Documents and Settings\Administrator\Pictures", and you chose 4 levels, the result will be "C-Documents and Settings-Administrator-Pictures-Cat.jpg" The software will automatically remove the ":\" from the root (e.g C:\) as these two characters are illegal in file names.

Numbering (10)

Add sequential numbers.

This section allows you to sequentially number a group of files. Several criteria exist:

- *Mode* - Specify whether you want the number to be appended to the start of the filename, or at the end of the filename, both or insert at a certain position.
- *Start* - Specify a starting number for the numbering.

- *Incr.* - The number by which you want each file name number to be incremented.
- *Pad* - The minimum number of digits occupied by the numeric element. Bases 1-36 will be padded with leading zeros; the a-z and A-Z options will be padded with "a" or "A" as appropriate.
- *Sep.* - A character or characters that you wish to be inserted between the filename and the number. If you enter the special character ":" (colon) in the Sep. box then this will be replaced with the auto-number. So a separator value of ABC:DEF: would result in ABC1DEF1, ABC2ABC2 etc.

  A common scenario would be:
  - Mode = Suffix
  - Start = 1
  - Increment = 1
  - Pad = 4
  - Separator = -

  This would result in filenames with suffixes of -0001, -0002, -0003, -0004 etc.

- *Break* - Reset the auto-number when the *nnn* character changes. e.g. enter 4 to cause the number to reset when the 4th character of the <u>NEW</u> name changes.
- *Folder* - Reset the auto-number upon a change of subfolder.
- *Type* - You can choose to append the auto-number in any numeric base, from base 2 to base 36. e.g. a value of 26 in base 16 would be appended as 1A. Or even use letters, e.g. A-Z or a-z.
- *Roman Numerals* - Convert Roman Numerals to upper of lower case. For example, if you had a file called "Beethoven's niNTH syMPHONY part iii", you might want to use Title Case to format the filename, but this would impact the "iii". Use this control to handle the Roman Numeral element.

Extension (11)

Change case of the file name extension.
- *Same* - Leave the original capitalization intact.
- *Lower* - Convert all letters in the extension to lower-case.
- *Upper* - Convert all letters in the extension into capitals.
- *Title* - Convert all the words in the selected items to initial caps, e.g. Jpeg.
- *Fixed* - Replace the extension with a fixed extension. For example, use this option to set all your files to ".doc" types.
- *Extra* - Add a secondary extension. For example, change my.holiday to my.holiday.gif
- *Remove* - Remove any file extension. e.g. *My.Holiday* becomes *My*

Filters (12) (a.k.a Selections)

Select which files and/or folders are shown in the file list. By default this will be all the files and folders in the current folder. Note that this section is only used to govern which files/folders are *displayed*. You still need to *select* a file or folder in order to rename it.
- *Filter* - Specify a file mask to use. Normally this would be *.*, or *.mp3, or *.doc etc. Note that this section is only used to govern which files/folders are *displayed*. You still need to *select* a file or folder in order to rename it. So for example, entering a filter of "*.mp3" means that only your MP3 music files will be shown. You can enter multiple file masks by separating them with a space, e.g. "*.mp3 *.doc *.xls". Note: changes to this field only take effect when you move the cursor to a different field or click a different control. This is to prevent the list from rebuilding with each keystroke as you type. You can also prefix a criteria with the exclamation mark (!) to perform a "not" expression. So "* !*.doc !*.mp3" will select everything except Word documents and MP3 files.
- *Match Case* - Match case when applying the filter.
- *RegEx* - The *Filter* is a regular expression.
- *Folders* - Include folders in the listing.
- *Files* - Include files in the listing.

- *Subfolders* - If the subfolders option is checked, Bulk Rename Utility will process the contents of all sub-folders in the selected branch of the file hierarchy. Care should be taken when using this feature as the utility can potentially list every file on your system.
- *Hidden* - Checking this option will mean that hidden files will be displayed and selectable. Important: you should be careful using this option as many Windows system files are hidden and renaming them could have a detrimental effect on the functionality of your system.
- *Min. Len.* - Only files/folders whose names are greater than (or equal to) this length will be displayed and selectable. Useful if you want to rename files greater than 64 characters for putting onto a CD, for example. N.B. This will exclude files and folders, if the file/folder name is shorter than the nominated length. However, in a recursive scan, sub-folders will still be scanned regardless of the length of the subfolder's name.
- *Max. Len.* - Only files/folders whose names are lesser than (or equal to) this length will be processed. However, in a recursive scan, sub-folders will still be scanned regardless of the length of the subfolder's name
- *Condition* - Here you can enter a *Javascript condition* to filter files/folders. If the condition evaluates to 'true' for an object, then that object is included in the file list, otherwise it is not. Using a condition you can include/filter files based on name, date, exif, size, attributes, length, etc.

New Location (13)

This section allows you to leave the original files intact, but create copies of the files (with the new names) in a separate folder. This option will honor the "*Overwrite Target Files*" menu option.

Special (14)

On top of the above renaming options, there are 4 additional special actions that can be performed on files. These actions are also accessible via the "***Special***" menu and they are:

- Change File Attributes
- Change File Timestamps
- Character Translations
- Javascript Renaming (Javascript renaming gives you total flexibility and control on file renaming by using Javascript code)

Renaming From a Text File

Accessible from the '***Actions***' menu, '*Import Rename-Pairs*' allows renaming files from a text file.

Using the Application

Launching the Application

When you run the application for the very first time you will be presented with the main window, located in the center of the screen. The main screen is laid out in a similar way to Windows Explorer. Below the menu bar are two panes, the left of which is a tree view providing easy access to your system drives and folders. The right-hand pane is a list view of the files and folders contained within the currently selected branch of the tree shown over on the left.

Below the navigation panes are a series of controls. The controls are grouped together according to function - for example, all the facilities to remove text from a filename.

Whenever you re-launch the application most of the settings from your previous session will be retained, such as the directory and file-filter you were using. For this to work you must save your renaming criteria to a Favourites file, using "Save as..."

Only one instance of the application may be launched. If you try to run the application, and there is already a version running, then the original instance will be displayed.

If you chose the *Complete* installation option then the easiest way to access the Bulk Rename Utility dialog is from Windows Explorer itself. Simply highlight the folder or files which you wish to rename, and then either right-click or press shift Function Key 10 and select "Bulk Rename Here" from the context menu. Also, if you've previously saved the renaming criteria to a Favourite file then you can double-click that Favourite file to launch the application.

Renaming Files and Folders

It is easy to rename files and folders:

1. Select the folder which contains the objects you wish to rename. If required, you may also specify a file filter to restrict your list.
2. Enter the renaming criteria. The column beside the file name ('New Name') will show you what the new file name will become.
3. Select the files you wish to process (use CTRL or SHIFT to select multiple files).
4. Hit the *Rename* button. (IMPORTANT: This button is not enabled unless you have selected one or more files/folders to rename)

Note: You can sort the file list using the column headers, as you would do in Windows Explorer.
The files will always be processed in the displayed sequence - useful when you're using the Numbering facility.

The renaming criteria are processed from left to right, according to the number listed against each section

So for example, a text replace will be performed before a change of case. The specific operations are as follows:

1) Apply any fixed name changes from an imported text file

2) Apply any Regular Expression reformatting [RegEx (1)]

3) Remove any file name, or use a fixed name [File (2)]

4) Perform any text substitutions [Repl. (3)]

5) Perform Character Translations [Special (14)]

6) Perform any changes of case [Case (4)]

7) Remove *n* digits from the start, middle or end of the filename, and optionally remove certain characters, and/or all characters, and/or all digits and/or all symbols and/or all high-ascii characters [Remove (5)]

8) Move any text from the start, middle or end of the filename to the start, middle or end of the filename [Move/Copy (6)]

9) Add any prefixes or suffixes, or apply text to the middle of the filename. Suffixes are added at the end of the filename, i.e. before any file extension [Add (7)]

10) Apply any "auto-date" text as a prefix or suffix. "Sep" is the text to insert between the filename and the date; "Seg" is the separator between the day, month, year, hour, minute and second segments. Or you can use a custom date format. [Auto Date (8)]

11) Add the containing folder name as a prefix or a suffix, with a user-defined separator [Append Folder Name (9)]

12) Perform any auto-numbering [Numbering (10)]

13) Make any changes to the case of the file extension, or change the extension [Extension (11)]

14) Process Javascript code [Special (14)]. This is the last step.

The *selected* files will be renamed according to your selection criteria. You can select multiple files by holding down the SHIFT or CTRL keys. If there are any problems with the rename operation then you will be given the option to roll back (undo) the operation.

Remember - you can always preview the new name in the file list. This allows you to refine your criteria before actually renaming the files.

To preserve your renaming criteria for the next time you use the utility, save the renaming criteria to a

Favourite file.

You can use the Reset button to reset all your renaming criteria back to the default values (or the smaller *R* buttons to just reset one group).

Changes to File Timestamps and/or to File Attributes are also applied if specified in Special (14).

Actions Menu

The actions menu provides you with a variety of shortcuts to speed up common tasks, and these are described below.

Select All (Ctrl+A)
This will select all the files and folders in the file-list window.

Deselect All (Ctrl+D)
This will de-select all the files and folders in the file-list window.

Invert Selection (Ctrl+I)
Any entry which is currently selected will be de-selected, and vice-versa. Handy for two-pass renames, where you want to rename a whole batch of files in one go, then rename "everything else" in another go.

Select from Clipboard
If you have a list of file names on the clipboard (such as the output from *DIR /B*) then the software will try to select files which match the names from the clipboard.

Jump to Path (Ctrl+J)
This option will display a window, allowing you to type or select a full pathname to navigate to. The path must exist (it will be validated) and it must map to a drive letter. UNC paths are not supported.

Rename Object Manually (F2)
Enable manual name editing of the selected object in the file list.

Refresh Files (F5)
This will refresh the contents of the right-hand file-list window.

Refresh Tree (Ctrl+F5)
This will refresh the contents of the left-hand tree window. Note that you can refresh the contents of the selected branch by collapsing and re-expanding the branch.

Show/Hide Tree (F11)
This will hide or show the folder "tree". This is useful if you have located your folder and you are now doing lots of work in the one folder. The "tree" can be removed to give you more space. Note: The tree will always be visible at program startup, even if it was hidden when you closed the program.

Zoom (F8)
This allows you to launch a new window to edit the current text field. Space on the screen is limited, and some fields are small, so this option allows you to enter long text with ease. You can type text into the new window, in a larger font, and the text will then appear in the field on the main screen.

List

List > Reposition > Move Up, Down, Top, Bottom, Swap, Remove from List
Allows you to reposition/reorganize items in the file list, useful for renumbering.

List -> Apply Random Sort to Current List

This allows you to sort the file list in a random sequence. Useful if you want to create a slideshow in a random display-sequence. Once you've sorted in random order, apply a numeric auto-number prefix to keep the list in that order.

List -> Show Only Items Affected by Renaming Criteria

This allows you to only show the files which will be renamed by renaming criteria, select files first and then this action.

List -> Clear All Items from Current List

This allows you to clear all items from list (items are not deleted from disk, only cleared from Bulk Rename Utility file list)

List -> Auto-Select All Items After Listing a Folder

Let all files and folders be selected automatically when the list of files/folders is built.

Import Rename-Pairs

Import rename pairs to be used for renaming (renaming from a text file).

View Imported Rename-Pairs

If you have imported rename pairs then this option will show the list of pairs imported.

Clear Imported Rename-Pairs

If you have imported rename pairs then this option will clear the list of pairs.
Normally the list would only be removed by loading a different list or by exiting the application.

Debug New Name

If you have a one (and only one) file or folder selected in the right-hand pane then this menu item becomes available. What this will do is display a simple dialog box which shows how the file's "new name" has been derived. This can help when you are using lots of the controls and boxes, and you aren't getting the end result that you are expecting.

Reset All Renaming Criteria (Ctrl+T)

This allows you to quickly reset all the renaming-criteria which are currently selected. Handy if you want to start from scratch. (This won't reset your file-selection and new-location items, groups 12 and 13).

Reset All Criteria to Last Saved (Ctrl+E)

Reverts all renaming criteria to the last saved status.

Preview (Ctrl+P)

Preview all the renaming actions, before actually renaming (name change, timestamp change, attribute change, etc). This is an alternative to pressing the PREVIEW button on the screen.

Rename (Ctrl+R)

Actually perform the rename. This is an alternative to pressing the RENAME button on the screen.

Undo Rename (Ctrl+Z)

If you have just performed a rename activity, and then said "oops..." then this is the option you need. This

function will try to "undo" your last rename activity (including any timestamp and attribute changes you made). The files are processed in reverse order, so even if you renamed folders, and files within the folders, the full operation should be reversed successfully.

Create Undo Batch File (Ctrl+B)

Similar to *Undo Rename* above, this will allow you to create a DOS batch file which can be run from the command line, and which will reverse out your last renaming operation.

Display Options Menu

This menu contains a variety of options to customize the application appearance.

Always On Top
This will keep the Bulk Rename Utility window on top of all other windows.

List > ...
Several options to customize the appearance of the file list.
>   *Select Columns*: Select which columns to display in the file list.
>   *Autofit All Columns*: Automatically set the best width for all columns based on content.
>   *Expand File List (Ctrl+F9)*: Make the file list bigger by collapsing some renaming controls.
>   *Maximize File List (F9)*: Make the file list as big as possible by collapsing most renaming controls.

Colours > ...
Several options to customize application highlight colours.

Font > ...
The font size used by Bulk Rename Utility can be selected to be bigger (zoom in) or smaller (zoom out). Select '*Reset*' to reset the font size to its original size.

Sorting > Logical Sorting
This option allows you to sort file names according to the default Windows sort-sequence. This allows files containing numbers to be sorted logically, e.g. 1.txt, 2.txt, 10.txt, 11.txt, 21.txt. The default sort-sequence for all operating systems earlier than XP is to use absolute sorting, e.g. 1.txt, 10.txt, 11.txt, 2.txt, 21.txt.

Sorting > Group Affected Files
This option allows you to sort your file listing in the normal way, but with all "affected" files together (files with new name). Therefore, all files with "new names" will be sorted together, and all files which are not affected by your renaming criteria will be sorted together. When you click a column-heading to sort the files, all the files which are affected (normally shown in green) will be grouped together. Note that this does not apply to the Size, Date or Attributes columns. If this option is activated, after having selected some files/folders click on a column-heading to group the files with "new name" together.

Sorting > Sort Files and Folders Together
With this option selected, files and folders will be sorted together, intermingled according to their name. This differs from the normal Windows Explorer view, where folders are sorted together and then files are sorted together.

Renaming Options Menu

This menu contains a variety of options to customize the renaming behavior.

Retain Autonumber

If you are using an Autonumber in your renaming then this option will allow the last-used number to be retained. So for example if you start at 1 and rename 5 files, after the rename is compete the "start at" value will show 6. This is useful for renaming in lots of batches but keeping the numbers contiguous.

Rename in Reverse Order (Advanced Option)

Normally files are renamed from top to bottom, e.g. the first item in the list followed the second item etc. But this can cause you problems if files already exist. Let's say you want to rename 1.txt to 2.txt, 2.txt to 3.txt, and 3.txt to 4.txt. Normally the first rename (1.txt to 2.txt) would fail because 2.txt already exists. This option will overcome this, as the files will be processed in reverse order. This option is only required on rare occasions.

Prevent Duplicates

This option allows to you to overcome the situation whereby a rename would fail because a file with the same name already exists. If you try to rename a file, and there's already a file with the same name, the software will make up subsequent attempt to rename the file but with a "_1" suffix. If this fails it will try with "_2" as the suffix, and will continue up to "_99". The limit of 99, and the separator character (underscore, _) are currently fixed and cannot be changed.

Advanced Options > Allow Using '\' in Renaming Criteria for Creation of New Folders (Advanced Option)

Use this option with caution. This option can create new folders during renaming and can not be undone. With this option selected, if the new resulting file name contains a \, then a new folder is created, instead of just considering the file name invalid. So for example, if you had a file called a.txt and your renaming-criteria caused the file name a.txt to become 20190801\a.txt, then a new folder 20190801\ is created and the file a.txt is moved in there. This is called '*folderize*'. Using this option, you can reorganize files into folders based on their timestamps, for instance.
Before using this option it is recommended to backup your files

Advanced Options > Overwrite / Delete Existing Files (Advanced Option)

Use this option with caution. This option can delete files and can not be undone. With this option selected, if the destination file name for a rename operation already exists, that file will be overwritten / deleted. So for example, if you had files called a.txt, b.txt and c.txt, and your renaming-criteria caused file a.txt to become c.txt, file c.txt will be overwritten. As such, you need to use this option with extreme caution - if you enter incorrect renaming criteria then you could overwrite valuable existing files. This option is also applicable if you choose to copy files to a New Location (box 13 on the screen).
Before using this option it is recommended to backup your files or copy the files to a new empty location (box 13 on the screen).

ID3 / Exif Data / File Properties > Extract Exif Data

Use this option to control whether or not EXIF tags will be extracted from photographs. At present only *Date Taken, Aperture, Exposure, Focal Length, Exposure Compensation, Comments, Camera Model* and *Camera Make* are extracted, but even this can slow down the processing. If you don't need these fields then leave this option unchecked to speed up the processing. Only files with the following extensions are processed: .JPG, .JPEG, .TIF, .TIFF, .CRW, .CR2, .NEF.

ID3 / Exif Data / File Properties > Extract ID3 Data

Use this option to control whether or not ID3 (Version 1) tags will be extracted from MP3 files. At present only *Artist, Album* and *Title* are extracted, but even this can slow down the processing. If you don't need

these fields then leave this option unchecked to speed up the processing.

ID3 / Exif Data / File Properties > Extract Windows File Properties

Use this option to enable the use of Windows File Properties tags during renaming.

File/Folder Extensions > Rename File Extensions as Being Part of the File Name

With this option selected, the file name extensions will be ignored and your renaming operations will always affect the entire file name. Use this option with great care, as Windows relies on the file name extension to decide what to do with a file.

File/Folder Extensions > Rename Folder Extensions as Being Part of the Folder Name

With this option selected, any "extensions" within folder names will be ignored - this is because folder extensions have no real meaning, unlike file name extensions which identify the file type. So for example, if you have a folder called "Holidays.2004" and you choose to remove the last 2 characters, the resulting folder name will be "Holidays.20" or "Holida.2004", depending upon the status of this option.

Log Renaming Activity to a File (Ctrl+L)

Use this option to record a log of all your renaming activity (including undo requests). The log file will be created in the *Documents* folder with a *.log* suffix. Please note that only renaming activity is logged, not changes to attributes or timestamps.

Show Warning Message Before Renaming

This allows you to control whether or not you are warned prior to renaming files.

Show Confirmation Message After Renaming

This allows you to control whether or not a confirmation message is shown after renaming is complete.

Special Menu

Change File Attributes

Open the Change File Attributes settings.

Change File Timestamps

Open the Change File Timestamps settings.

Change Character Translations

Open the Character Translations settings.

Change Javascript Renaming

Open the Javascript Renaming settings.

Javascript Libraries ...

Include sugar.js : make the library sugar.js available to Bulk Rename Utility Javascript code.

Include date.js : make the library date.js available to Bulk Rename Utility Javascript code.

Context Menu

If you ***right-click*** an item in the right-hand window (e.g. a file or a folder) you will be presented with a Context menu (or "Shell" menu). You will see the standard Windows context menu (with options to Edit, Delete, Copy etc.), with many additional menu options in a new "*Clipboard Copy*" menu. The "Clipboard Copy" menu items allow you to copy various pieces of information, such as the file name or folder path, to the Windows clipboard.

Additional menu items:
- *Open Containing Folder* (for the selected file).
- *Show List of File Properties* (for the selected file).
- *Show EXIF info (.JPG files)* (for the selected file).

Note:
1. If you perform an operation on a file/folder using the Shell menu which changes the name of that file, or deletes the file, then this is not automatically reflected in Bulk Rename Utility. This avoids unnecessary rebuilding of the file listing.
2. If you are using the "sub-folders" option, and you select multiple files which span two or more folders, then the right-click context menu might give unpredictable results.

Saving Your Settings

When you quit the application, your current settings (menu choices etc.) will be stored in a .INI file in the same folder as the executable program. As Bulk Rename Utility doesn't require an Installer this makes it quite useful as a utility on a "memory stick" or a "Tools CD".

If you need two sets of preferences with different values then create two copies of the executable with different names, and you'll get two INI files.

Using Favourites

A Favourite is a collection of configuration values which can be used to provide quick access to commonly-used criteria. For example, if you frequently want to rename a bunch of pictures in one folder, and you frequently want to rename a bunch of sound files in another folder, then you could create two Favourites called Pictures and Sound Files. Each Favourite holds with it the selection criteria, rename criteria, and current folder.

When you launch the application for the first time you will not have any Favourites defined, but you can create favourites in the same was as you would create text files or pictures. Store them anywhere on your hard drive and use them as you wish.

Each individual Favourites file contains all the criteria you used to rename files. So for example, you could create a Favourite for renaming your pictures; a Favourite for stripping dodgy characters out of filenames etc. You can then recall these Favourites whenever you need them.

To use favourites, just use the **Open** and **Save/Save As** menu options in the same way as you would do in Word or Excel and other programs. When you choose to save a favourite, all the settings currently in place will be saved into that favourite. You can then recall these quickly, either from the *Open* command or by double-clicking a Favourite file in Windows Explorer. Favourites files have the file extension .bru.

If you have loaded a Favourite and made changes to it, but wish to revert back to the original version, then choose *Revert all criteria to last saved* in the *Actions* menu.

Picture Viewer

Bulk Rename Utility allows you to display a preview window, which will show the picture for the currently selected file. Only certain file-types are supported, these being jpeg (JPG), bitmap (BMP) WIndows Metafiles (WMF) and Compuserve Graphical Interchange Format (GIF).

In addition, you can only display the picture for a single file; if you select multiple files then no preview will be displayed.

Bulk Rename Here

When you install Bulk Rename Utility you have the option of installing "Context" menus. If you choose this option (recommended), you will find a new *Bulk Rename Here* facility when you right-click a file or folder within Windows Explorer. Selecting this option will launch Bulk Rename Utility, and will automatically select the folder you right-clicked (or the parent folder, if you right-clicked a file). This provides quick access to the utility.

If you are using the Favourites facility, and you have selected the option to automatically save Favourites upon exit, then please be aware that the folder name stored against the favourite will become the folder you right-clicked.

For reasons of performance, if you use the *Bulk Rename Here* right-click function then the *Sub-folders* flag will be unticked, regardless of its stored setting. This is to prevent situations where you choose a high-level folder (e.g. C:\) without realising that a recursive directory search is about to be performed. The note regarding Favourites above also applies here.

Drag and Drop from Explorer

You can now drag files and folders directly from within Windows Explorer. This means you can select files from anywhere on your computer and aggregate them all together, allowing you to rename them in a single operation.

To perform this task, launch Bulk Rename Utility in the normal way. Then launch Windows Explorer (or My Computer), and find the files or folders that you wish to process. Select all the files/folders and drag them over the Bulk Rename Utility "file list" window (you should see the icon change). Then let go of the mouse, and the files will be listed.

As this function is available for ANY Explorer window, you can even use the inbuilt Windows "Find" facility to find files on your computer (for example, all your Word documents) and then drag the files directly from the Search Results window.

It's important to note that when you drag the files/folders across, you are NOT performing any operations on those files. You have not moved those files! You are simple displaying them in the Bulk Rename Utility window for subsequent processing.

Note that any files/folders you drag on the window will be added to the list of files/folders already there. If you instead wish to show ONLY the files you are dragging then simple hold down the CTRL key when you let go of the mouse button.

Single File Quick Rename

If you want to quickly rename a file/folder manually, without applying any criteria, then you can press **F2** while the filename is selected and edit it manually. Simply press the ENTER key without making any changes, to cancel the operation or press ESC. If you rename a folder, and you are in *recursive* mode, then the file list will be rebuilt.

Additional Features

Custom Date Formats

You can append a variety of dates to the file names, either at the beginning or the end. For example, you could prefix the file names with their *Modified* date, or you could suffix them with the *Creation Date*. See section 'Auto Date (8)'.
A new feature, introduced in version 2, is the ability to add date and time information in a very flexible manner, using standard formatting codes. The full list of codes is defined below. So for example, if you wanted to suffix the file name with the day name and the month you could enter a custom code of "%a%M".

The full list of codes is:

Code	Meaning
%a	Abbreviated weekday name
%A	Full Weekday name
%b	Abbreviated month name
%B	Full month name
%d	Day of Month (01-31)
%H	Hour in 24-hour format (00-23)
%I	Hour in 12-hour format (01-12)
%j	Day of Year (01-366)
%m	Month number (01-12)
%M	Minute (00-59)
%p	AM/PM Indicator
%S	Seconds (00-59)
%U	Week number of year (00-53), with Sunday as the first day of the week.
%w	Weekday (0-6), with Sunday=0.
%W	Week number of year (00-53), with Monday as the first day of the week.
%y	Year, with no century indicator (00-99)
%Y	Year, with century indicator (e.g. 2004)
%z	Time zone name
%%	Percentage sign

You can enter other text in the file name, and the symbols above will be substituted with the values. So, you could enter a custom value of "Created on %a, %d %B, %Y" to get "Created on Tuesday, 25th March, 2004"

Recursive Scans

It is possible to perform a recursive scan and rename from the current folder. This allows you to rename folders and files contained within any subdirectories from the current folder. Subdirectories of subdirectories are also scanned, right down to the lowest level. To do this, enable the Subfolders option of Selection (12).

This option needs to be treated with great care - if you scan a high-level folder such as C:\ or C:\Program Files then the program could have tens of thousands of files to scan. Whilst the system should cope with in excess of 250,000 files, it will take a long time for the file list to be displayed.

As such, it is recommended that you only use the Subfolders Option of Selection (12) only if you really need it.

Please note that, if you rename a folder whilst using the recursive option, after the rename is complete the file list will be refreshed automatically. This is to prevent problems whereby the file-list becomes out of synchronization with the files on your hard drive. If you don't rename a folder (just files), or if you rename anything whilst not using the recursive option, then no refresh is necessary.

Renaming From A Text File

With Bulk Rename Utility it is possible to rename files according to a text file. The text file should contain a list of "old name" and "new name" pairs, separated by a pipe symbol (|) or a comma (,)

To use this facility, create a text file in for the correct format, for example:

Track001.mp3|Headlong.mp3
Track002.mp3|Rushes.mp3
TRACK003.mp3|AnywhereIs.mp3

or use comma separated (CSV)

Track001.mp3,Headlong.mp3
Track002.mp3,Rushes.mp3
TRACK003.mp3,AnywhereIs.mp3

One entry per line.

Next, click the *Import Rename-Pairs* on the *Actions* menu and select your file. If the file is valid, then select files to rename and you will see the "new name" column reflecting the contents of the text file.

When comparing the current filename with the text file, the application ignores the *case* of the filename, e.g. it will match Track001.mp3 and TRACK001.mp3. This makes it easy to rename the files.

Bulk Rename Utility will read ANSI and Unicode (UTF-16) text files.

Note: You can **view** all the imported rename-pairs by selecting '*View Imported Rename-Pairs*' from the Bulk Rename Utility menu.

Regular Expressions

Bulk Rename Utility supports powerful Regular Expression processing. This allows you to enter a flexible Match expression, and a flexible Replacement expression, and the program will generate the appropriate name using these expressions. For example, you can use match and replace strings to swap two words in a filename, or remove numbers, or apply fixed formatting.

A full description of Regular Expressions is beyond the scope of this help file, but a wide range of resources is available on the internet. However, the syntax supported by Bulk Rename Utility is the same as that offered by PERL 5. The precise implementation is via the PCRE Library, and full notes on the Perl Regular Expression syntax can be found here.

We also have a section on our forum dedicated to Renaming Files using Regular Expressions.

A quick summary of the syntax is:

Character	Usage
*	Matches the previous character zero or more times
+	Matches the previous character one or more times
?	Matches the previous character zero or one times
.	Matches any single character except the newline
^	Matches the start of the input
$	Matches the end of the input
x|y	Matches either first or second character listed
(pattern)	Matches pattern
{number}	Matches exactly number times
{number,}	Matches number, or more, times (note comma)
{num1, num2}	Matches at least num1 and at most num2 times
[abc]	Matches any character listed between the [ ]
[^abc]	Matches all characters except those listed between the [ ]
[a-e]	Matches any characters in the specified range (a,b,c,d,e)
[^K-Q]	Matches all characters except in the specified range
\	Signifies that the next character is special or a literal.
\b	Matches only on a word boundary
\B	Matches only inside a word
\f	Matches only on a form feed character
\n	Matches only on a new line
\r	Matches only on a carriage return
\s	Matches only on a blank space
\S	Matches only on nonblank spaces
\t	Matches only on a tab
\d	Matches any digit

Replacements are usually performed on the basis of "components, and these are defined using \ notation, e.

g. \1 matches the first element, \2 matches the second

Example Regular Expression:
Match: (Louis Armstrong)(.\[0-9].)([A-Za-z]*)
Replace: \1 \3

EXAMPLE:

Assume you have a file called Program Files, and you wish to swap the names around (e.g. Files Program). A Regular Expression which performs this task is :

^([A-Z][a-z]*) ([A-Z][a-z]*)

Let us break this down into components:

^ This means start at the beginning of the string

([A-Z][a-z]*) This is a single "group", which we will use later. What this says is that we want any capital letter, followed by any number of lower-case letters. The single capital letter is denoted by the **[A-Z]**, i.e. allow a letter in the range A to Z. The lower-case letters are denoted by **[a-z]** in the same way, followed by an asterisk. This means we can allow any number of letters.

We then allow a single space. If I had wanted multiple spaces I would probably have typed "space asterisk", or possible (*) to group.

We then have exactly the same again, i.e. we are denoting two words.

Notice we had two sets of brackets. Everything within each set of brackets is treated as a "grouping", and we refer to these groupings as **\1**, **\2**, **\3** etc.

So, lets say we wanted to swap around the two words in the filename. We would put:

^([A-Z][a-z]*) ([A-Z][a-z]*)

For the match string, and

\2 \1

As the replacement string. Of course, we're free to manipulate the replacements string as we like. For example, it would be quite valid to have:

The \2 which are used to run the \1

For the replacement string. This would result in:

The Files which are used to run the Program.

The above example is very precise. If we wanted to swap the first two words of a name, but keep the

remaining text the same, we could put

^([A-Z][a-z]*) ([A-Z][a-z]*)(.*)

\2\1\3

This says to create three groups: the first group is the first word, the second group is the second word, and the third group is everything that's left.

Changing File Attributes

Bulk Rename Utility allows you to change the attributes of files and folders once they have been renamed. This can be useful if you wish to flag all renamed files/folders as requiring archiving, or if you want to hide all the renamed files/folders. As well as making a file read-only, hidden etc., you can also clear the same flags.

For each of the file attributes you can choose to **set** the attribute, **clear** the attribute, or **leave** it unchanged.

If you are updating the file's attributes information, this will be reflected in the application main window, as the attribute field will be colored in the file list.

Note
If you set the *Hidden* or *System* attribute for a file, it will disappear from the main window upon renaming if you do not have *Hidden* or *System* options ticked in the Filters group (group 12)

Changing File Timestamps

Bulk Rename Utility allows you to change the timestamp information for files and folders once you have renamed them. This is useful if you have certain applications which use a file's timestamp in order to identify if a file has been modified, of if you want to sort photographs in a particular sequence. Some older applications even use the timestamp to identify a product version.

You can choose a new date and timestamp for the *Created Date, Modified Date* and *Accessed Date*, and they are independent of each other. You can also choose a value of "Current" which will use the current date and time <u>at the time of renaming</u>.

You can also apply a delta. This is a value in days, followed by HH:MM:SS, and this value will be added (or subtracted) from the timestamp. So for example, if you rely upon timestamps and you realize your computer's clock is wrong, you can use this facility to batch-correct the timestamps. n.b. This will NOT update the "date taken" information held within a picture file.

If you are updating the file's timestamp information, this will be reflected in the application main window, as the appropriate date field will be colored in the file list.

If you would like to set the Modified and Accessed timestamps to be the same as the Created timestamp then choose the *Created* option.

Note that the Date Taken option is always the *Date Time Original* EXIF flag.

Character Translations

Character Translations allows you to enter a specific character or sequence of characters, and have that translated into a different character or sequence of characters. So for example, you could specify that you always want a $ sign to be converted into the word DOLLAR.

There are three ways to enter the replacement data:

1.As a character, e.g. A
2.As a hex value, e.g. 0F
3.As a decimal value, e.g. 065

Separate the FROM and the TO conversions with an equals sign (=). If you wish to actually convert an equals sign to/from something else then you can specify the hex or decimal value for the equals sign in your rules.

Bulk Rename Utility identifies the type of value entered by its length. So if your value is one character long then it's a direct character; two characters long and its a hex value; three characters long and its a decimal value.

In the following examples, every example is converting a capital "A" to a capital "B"

- A=B (direct expression of the characters to convert)
- 41=42 (two character long, therefore hex values)
- 065=066 (three characters long, therefore decimal values)
- A=066 (using a mixture of the above)
- 41=066 (using a mixture of the above)

If you wish to to convert several characters then you can separate the values by commas. So the following example will convert ABC to DEF:

- 41,066,C=D,E,070

If you wish to actually convert a comma sign to/from something else then you can specify the hex or decimal value for the comma sign in your rules.

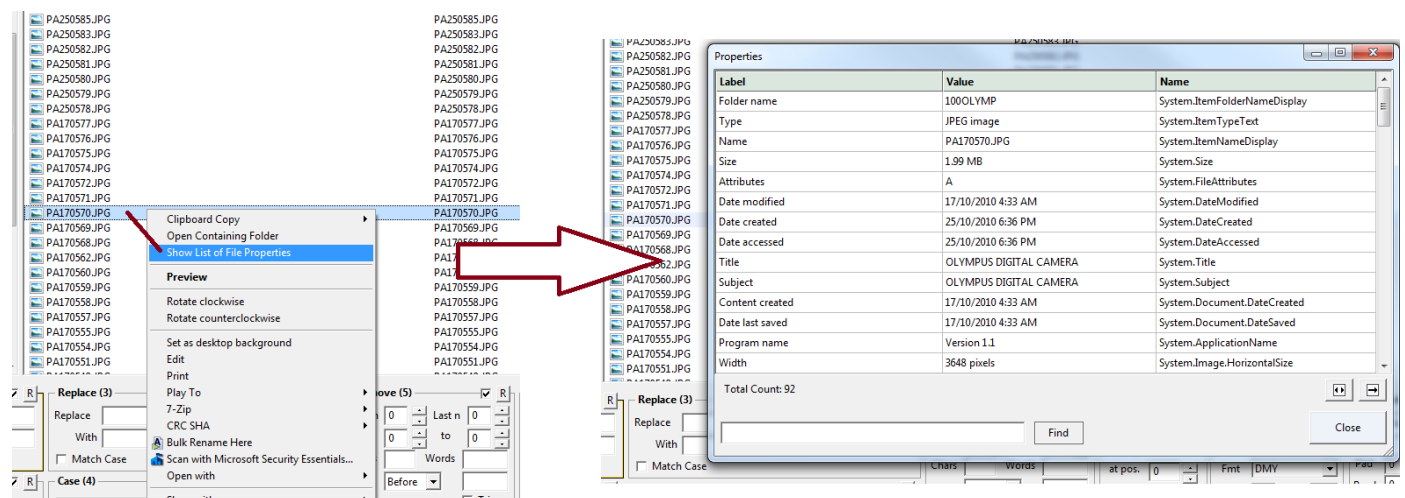Learn more on our website : **Character Translations HowTo**

Using Windows File Properties to Rename Files

With Bulk Rename Utility you can read and use the Windows File Properties to rename your files. More information on the Windows Property System that can be set on Windows files can be found here: https://docs.microsoft.com/en-us/windows/win32/properties/props

Windows File Properties are only available on *Windows Vista or newer*.

*** To enable Windows File Properties tags support in Bulk Rename Utility, activate the option *'Extract Windows File Properties'* from the Renaming menu.

To show a list of all available file properties, for a file or a file type, in Bulk Rename Utility, right-click on a file in the main file list and select '*Show List of File Properties*' from the popup context menu. See image below.

Alternatively, you can also see the file properties of a file in Windows Explorer: right-click on a file and select "Properties" and then "Details".

Each file property has three entries: a LABEL, a VALUE and a NAME. You can select a file property by LABEL or by NAME and then use its VALUE to rename a file.

Using File Properties in Add (7)

You can use the file properties in **Add(7)** as tags. To enable Windows File Properties tags support in Bulk Rename Utility, activate the option *'Extract Windows File Properties'* from the Renaming menu.
To use a file property, specify the file property like this: *<(propertylabel)>* or *<(propertyname)>.* The tag will be replaced by the property value for that property.

For instance :
Prefix : <(System.Photo.CameraManufacturer)> might add "OLYMPUS" as a prefix.
Suffix : <(System.Image.HorizontalSize)> might add "3648 pixels" as a suffix.
Prefix : <(Title)> might add the file title as a prefix.

The file properties can be referred to by Label or Name. They can be used in Add(7) -> Prefix, Suffix, Insert.

IMPORTANT: You can also specify some extra characters in the property < > tag. For instance, "<(*Subject)* ->" will add the *Subject* and the - , but only if the *subject* is not empty. If (*Subject*) is empty, the whole tag < > will be empty. This is different from using "<(subject)> -". In this case - will always be added even if the file does not have a subject.

File Properties as Dates and Numbers

If you want to add a file property to a file name as a date or as a number, use the property formatting markers.

# will format a property as a number. If a file property value has numbers and letters, the letters will be ignored.
$ will format a property as a date, according to the date and time formatting options as specified in Auto-Date (8).

For instance :
Prefix : <($System.Photo.DateTaken) - > will add the date taken as prefix followed by - , formatted according to values in Auto-Date (8).

Suffix : < - (#ISO speed)> might add " - 100" as suffix. The file property is added as number only.

Suffix : < - (ISO speed)> might add " - ISO100" as suffix. The file property is added as a text string.

Clipboard

A special tag is <clip> which is replaced by the current text content of the Windows Clipboard.

Using File Properties in Javascript

For more complex uses, besides just adding certain file properties to file names with Add (7), also Javascript and Javascript Conditions support Windows file properties, via the functions **fileProperty**, **filePropertyDate**, **filePropertyNum**. See Javascript Renaming for more information.

Using EXIF Properties to Rename Files

With Bulk Rename Utility you can read and use the EXIF file properties to rename your image files.

Exchangeable image file format (officially EXIF, according to JEIDA/JEITA/CIPA specifications) is a standard that specifies the formats for images, sound, and ancillary tags used by digital cameras (including smartphones), scanners and other systems handling images.
Bulk Rename Utility supports the latest EXIF metadata and attributes **version 2.2.**

*** To enable EXIF Properties tags support in Bulk Rename Utility, activate the option *'Extract EXIF data'* from the Renaming menu.

You can show a **list of all available EXIF attributes** for a file by **right-clicking on the file** in the main file list and select '*Show EXIF info (.JPG files)*' from the context menu.

Using EXIF Properties in Add (7)

You can use the EXIF properties in **Add(7)** as tags to add to file names.
To enable EXIF tags support in Bulk Rename Utility, activate the option *'Extract EXIF data'* from the Renaming menu.

To use a property, specify the property like this: *<(exifproperty)>.* The tag will be replaced by the property value for that file.

For instance :
Prefix : <(exif:ImageWidth)> might add "800" as a prefix.

Suffix : <(exif:ImageResolution)> might add "640x480 pixels" as a suffix.

Prefix : <(exif:Software)> might add the software used to create the image as a prefix.

The EXIF properties can be used in Add(7) -> Prefix, Suffix, Insert.

IMPORTANT: You can also specify some extra characters in the property < > tag. For instance, "<(*exif:Make) -* >" will add the *exif:Make* and the - , but only if the *exif:Make* is not empty. If (*exif:Make*) is empty, the whole tag < > will be empty. This is different from using "<(*exif:Make*)> -". In this case - will always be added even if the file does not have a camera make attribute. You can also specify multiple properties: <(*exif:Make) - (exif: ImageResolution)>

EXIF Properties as Dates and Numbers

If you want to add a property to a file name as a date or as a number, use the property formatting markers.

# will format a property as a number. If a file property value has numbers and letters, the letters will be ignored.
$ will format a property as a date, according to the date and time formatting options as specified in Auto-Date (8).

For instance :
Prefix : <($exif:DateTimeOriginal) - > will add the date taken as prefix followed by - , formatted according to values in Auto-Date (8).
Suffix : < - (#exif:Flash)> might add " - 16" as suffix. The file property is added as number only.

Using EXIF Properties in Javascript

For more complex uses, besides just adding certain file properties to file names with Add (7), also Javascript and Javascript Conditions support Windows file properties, via the functions **fileProperty**, **filePropertyDate**, **filePropertyNum**. See Javascript Renaming for more information.

Example of EXIF Properties for an Image File JPG

exif:ImageResolution	640x480
exif:ImageWidth	640
exif:ImageHeight	480
exif:Make	NIKON
exif:Model	COOLPIX P6000
exif:Orientation	1
exif:XResolution	300
exif:YResolution	300
exif:ResolutionUnit	2
exif:Software	Nikon Transfer 1.1 W
exif:DateTime	2008:11:01 21:15:09
exif:DateTimeOriginal	2008:10:22 16:46:53
exif:DateTimeDigitized	2008:10:22 16:46:53
exif:ExposureTime	0.015432
exif:FNumber	5.6
exif:ExposureProgram	2
exif:ISOSpeedRatings	64
exif:FocalLength	22.1
exif:Flash	16
exif:MeteringMode	5
exif:LensInfo.FocalLengthIn35mm	103
exif:GeoLocation.Latitude	43.468243
exif:GeoLocation.Longitude	11.880172
exif:GeoLocation.GPSMapDatum	WGS-84
exif:GeoLocation.GPSTimeStamp	14 45 20.91
exif:GeoLocation.GPSDateStamp	2008:10:23

JavaScript Renaming

Javascript renaming gives you total flexibility and full control of your file renaming needs by using Javascript code.

Bulk Rename Utility uses the V8 Javascript, Google's high performance Javascript engine also used in Google Chrome. V8 implements ECMAScript as specified in ECMA-262, 5th edition.

All standard Javascript syntax and functions are supported. Additional javascript libraries can be included, see below.

Javascript code is processed as the last step after all other renaming options have been applied. The javascript code is applied to each object as the last step, before it is renamed.

A commercial license for Bulk Rename Utility is required to use Javascript Renaming.

Here is an example of a Javascript script which changes a file name in Bulk Rename Utility. The script is applied to each selected file. This scripts adds a counter, padded with up to 5 zeros, after each file name:

Javascript Renaming

Javascript Code:

```
1 function padLeft(nr, n, str){
2     return Array(n-String(nr).length+1).join(str||'0')+nr;
3 }
4
5 newName = name + '_' + padLeft(counter, '5', '0') ;|
```

Explanation:

- The function padLeft is defined.
- **newName** represents the new name of the file.
- **name** represents the current name of the file.
- **counter** is a counter that starts from 1 and it's incremented for each file.

More examples can be found on our website: Javascript Renaming Examples

Javascript Bulk Rename Utility Constants and Variables

The following special constants and variables are available in Bulk Rename Utility javascript.

Variables can be modified, while constants have a fixed value and can not be changed.

Constant / Variable	Type	Explanation
name	Constant	This constant contains the name of the object (i.e. file or folder name) being processed, after all Bulk Rename Utility renaming options 1 to 13 and all specials have been applied. If the Bulk Rename Utility renaming options 1 to 13 and specials did not modify the name, then *name* will be the same as *origName* (see below).

Constant / Variable	Type	Explanation
newName	Variable	This variable contains the new name to be applied to the object. Modify this variable to modify the object name. If you do not modify the variable newName, then the javascript code has no effect on the name of an object.
origName	Constant	This constant contains the original name of the object before all Bulk Rename Utility renaming options 1 to 13 and all specials.
ext	Constant	This constant contains the extension of the object (i.e. file or folder name) being processed, after all Bulk Rename Utility renaming options 1 to 13 and all specials have been applied. If the Bulk Rename Utility renaming options 1 to 13 and specials did not modify the extension, then *ext* will be the same as *origExt* (see below).
newExt	Variable	This variable contains the new extension to be applied to the object. Modify this variable to modify the object extension. If you do not modify the variable newExt, then the javascript code has no effect on the extension of an object.
origExt	Constant	This constant contains the original extension of the object before all Bulk Rename Utility renaming options 1 to 13 and all specials.
location	Constant	This constant contains the location of the object as specified in *Location (13)*
newLocation	Variable	This variable contains a modified *location (13)* for the object. If you do not modify the variable newLocation, then the javascript code has no effect on the location (13) of an object.
subDir	Constant	This constant contains the object sub directory (it matches the subdir column in the file list). It is only applicable if subfolders have been included in Selection (12).
counter	Constant	A counter that is incremented during the renaming operation, starting from 1. To retrieve the Bulk Rename Utility 'auto number' as used in section Numbering (10), use the *object* function below.

Javascript Bulk Rename Utility Functions

The following special functions are available in Bulk Rename Utility javascript.

Function	Explanation	Details / Examples
object("value")	This function returns specific values for the object being processed.	The following *values* are supported. **object**("*folder*") : returns the folder for the current object being processed. **object**("*autonumber*") : returns the autonumber for the current object being processed, taken from Numbering (10). **object**("*autodate*") : returns the autodate for the current object being processed, taken from Auto Date (8) **object**("*isdir*") : returns true if the current object being processed is a directory. **object**("*size*") : returns the file size for the current object being processed in bytes. **object**("*modified*") : returns the modified timestamp for the current object being processed. (Javascript Date) **object**("*created*") : returns the created timestamp for the current

Function	Explanation	Details / Examples
		object being processed. (Javascript Date) **object**("*accessed*") : returns the accessed timestamp for the current object being processed. (Javascript Date)
exif("value")	This function returns EXIF values for the object being processed. See details.	The following values are supported. **exif**("%d") : Date/Time Taken (Javascript date) **exif**("taken") : Date/Time Taken, same as %d (Javascript date) **exif**("%a") : Aperture **exif**("%c") : Comments **exif**("%e") : Exposure **exif**("%f") : Focal Length **exif**("%xb") : Exposure Bias **exif**("%ma") : Camera Make **exif**("%mo") : Camera Model
fileProperty ("name") **fileProperty ("label")**	This function returns the Windows File Property value for the object being processed, as a *text string*, by name or by label. See details. This function also returns the EXIF Properties of an image. If the property is not found, the function will return *null*.	**fileProperty**("Height") **fileProperty**("Dimensions") **fileProperty**("Total bitrate") **fileProperty**("System.Media.Duration") **fileProperty**("Channels") **fileProperty**("exif:XResolution") **fileProperty**("exif:ISOSpeedRatings") **fileProperty**("hash:sha256") **fileProperty**("hash:md5") etc. You can list all file property labels or names that can be used in Bulk Rename Utility from the context menu of a file in the main file list (right-click) or in Windows Explorer, right-click on a file and select "Properties". Each file type might have different properties available.
filePropertyDate ("name") **filePropertyDate ("label")**	This function returns the Windows File Property value for the object being processed, as a *date object*, by name or by label. See details. This function also returns the EXIF Properties of an image. If the property is not found, the function will return *null*.	**filePropertyDate**("System.Document.DateCreated") **filePropertyDate**("exif:DateTimeOriginal") You can list all file property labels or names that can be used in Bulk Rename Utility from the context menu of a file in the main file list (right-click) or in Windows Explorer, right-click on a file and select "Properties". Each file type might have different properties available.
filePropertyNum ("name") **filePropertyNum ("label")**	This function returns the Windows File Property value for the object being processed, as a *number*, by name or by label. See details. This function also returns the EXIF Properties of an image.	**newName = filePropertyNum**("Width") + **name**; **newName = filePropertyNum**("exif:Orientation") + "-" + **name**; You can list all file property labels or names that can be used in Bulk Rename Utility from the context menu of a file in the main file list (right-click) or in Windows Explorer, right-click on a file and select "Properties". Each file type might have different properties available.

Function	Explanation	Details / Examples
	If the property is not found, the function will return *null*.	
clipboard()	This function returns the text that is currently in the Windows Clipboard.	**newName** = **clipboard()** + " - video";
alert("text")	This function shows a popup message.	**alert**("object new name is: " + newName);
regEx("text", "match", "replace")	This function processes a regular expression in the same way as it is done in section RegEx (1). Using this function is possible to process multiple regular expressions.	This code will switch a file name around "-". <u>Please note that the character \ must be doubled \\ in Javascript strings</u>. **newName** = **regEx**(**name**, "(.*)-(.*)", "\\2\\1");
setEnv ("varname", "value")	Sets the value of an environment variable	**setenv**('BRUNAME', **name**);
getEnv ("varname")	Gets the value of an environment variable	var value = **getenv**('USERNAME');
include ("filename")	Includes and runs an extra javascript file. The file location is relative to the current working directory, usually the Bulk Rename Utility installation folder, unless Bulk Rename Utility is running from a different directory.	**include**('js/sugar.js'); **include**('file.js'); **include**('../afile.js');
require ("filename")	Same as include but if the file is not found, javascript execution is stopped and an error is reported.	**require**('js/date.js'); **require**('myfile.js');

About Conditional Renaming

Setting the variable **newName** back to the **origName** is like canceling the renaming of an object, as the new name is set back to the object's original name. This feature allows you to perform conditional renaming: for example, you could set **newName** back to **origName** only for objects with a certain modified timestamp. The modified timestamp is accessed via **object("modified")**.

The same is valid for **newExt** and **newLocation**.

Javascript renaming examples can be found on our website: Javascript Renaming Examples

Javascript Extension Libraries

Extension javascript libraries and files can be included with the functions **include** and **require**, see above.

There are two Javascript libraries that are already included in Bulk Rename Utility. They are saved in the *js* folder in the installation directory. File names are *sugar.js* and *date.js*.

These two libraries can be made easily available to javascript code in Bulk Rename Utility using the options '*Javascript Libraries...*" in the '*Special*' menu: activating the option 'Include sugar.js' is equivalent to adding **require('js/sugar.js')** at the start of your javascript code and activating the option 'Include date.js' is equivalent to adding **require('js/date.js')** at the start of your javascript code. Using the menu options is much easier.

About Sugar.js library

Information on the **sugar.js** javascript library and its supported functions/API can be found on the Sugar library website: http://sugarjs.com/

Sugar is a very powerful library. It adds many useful functions to work with dates, text and more in Javascript, see: http://sugarjs.com/api

The Sugar library is Copyright (c) 2014 Andrew Plummer. It is licensed under the MIT license.

Include Sugar.js library support in Bulk Rename Utility using the menu option '*Include sugar.js*' in the '*Special->Javascript Libraries...*'

About Date.js library

More information on the **date.js** javascript library and its supported functions/API can be found on the Date library website: http://datejs.com/

Date.js is a very powerful library. It adds many useful functions to work with dates in Javascript.

The Date.js library is copyright (c) 2006-2007, Coolite Inc. all rights reserved, licensed under the MIT license.

Include Date.js library support in Bulk Rename Utility by using the menu option '*Include date.js*' in the '*Special->Javascript Libraries...*'

JavaScript Filter Condition

The Javascript filter condition is part of the <u>Filter (12) box</u>.
In the Javascript filter condition you can use Javascript syntax. If the condition evaluates to true for an object in the file list, then that object is included, otherwise it is not. The Javascript condition supports all the functions, variables and constants that are available for <u>Javascript Renaming</u>.

The Javascript condition allows selection/inclusion of files/folders based on objects's name and also date, size, time, exif, attributes, etc.

Here is are some examples of Javascript conditions that can be used:

<u>Javascript Filter Condition Examples</u>

Javascript Filter Condition	Requires sugar. js (*)	Requires date. js (**)	Result
name.endsWith(/[q-z]/)	Y	N	Include all objects that end with 'q' to 'z'.
name.startsWith(/[a-d]/, null, false)	Y	N	Include all objects that start with 'a' to 'd', case insensitive.
ext.isBlank()	Y	N	Include all objects that have no extension.
object('modified').getTime() == **exif**('%d'). getTime()	N	N	Include all files that have the Windows modified timestamp matching the EXIF date taken.
object('modified').getTime() != **exif**('%d'). getTime() && **exif**('%d').getTime() != 0	N	N	Include all files that have the Windows modified timestamp not matching the EXIF date taken and the EXIF date taken is not empty.
object('size') == 0	N	N	Include all objects with zero size. Disable option to include folders in Filters (12) to include only files.
object('size') > 10000	N	N	Include all files larger than 10000 bytes.
object('modified').daysAgo() < 31	Y	N	Include all objects with the Windows modified timestamp more recent than 31 days ago. daysAgo() requires sugar.js, see note below.
object('modified').weeksAgo() < 4	Y	N	Include all objects with the Windows modified timestamp more recent than 4 weeks ago. weeksAgo() requires sugar.js, see note below.
object('modified').isBetween('yesterday', 'tomorrow');	Y	N	Include all objects with the Windows modified timestamp between yesterday and tomorrow. isBetween() requires sugar.js, see note below.
object('modified').isBetween('the beginning of last month', 'today');	Y	N	Include all objects with the Windows modified timestamp between the beginning of last month and today. isBetween() requires sugar.js, see note below.
exif('taken').isBetween('the beginning of last month', 'today');	Y	N	Include all objects with the EXIF taken date between the beginning of last month and today. isBetween() requires sugar.js, see

Javascript Filter Condition	Requires sugar. js (*)	Requires date. js (**)	Result
			note below.
var objsize = object('size'); objsize !=0;	N	N	Include all non-empty objects. This examples shows that multiple statements separated by ';' can be included in the condition.
include("myfile.js"); myFunction(**name**) == true;	N	N	Includes myfile.js which defines myFunction then include object if myFunction is true.
if (**filePropertyDate**('System.Document. DateCreated')) { **filePropertyDate**('System. Document.DateCreated').yearsAgo() < 2 }	Y	N	Include all objects with the Windows File Property date 'System.Document. DateCreated' more recent than 2 years ago. yearsAgo() requires sugar.js, see note below.
filePropertyNum('Width') == 3840;	N	N	Include all images with Width (pixels) equal to 3840.
name.startsWith(**clipboard**());	Y	N	Include all files (or folders) with name starting with the text content of the Windows Clipboard.

More examples can be found on our website: Javascript Examples

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(*) *sugar.js* support can be activated in Bulk Rename Utility, menu 'Special' -> 'Javascript Libraries'. See sugar.js

(**) *date.js* support can be activated in Bulk Rename Utility, menu 'Special' -> 'Javascript Libraries'. See date.js

Command Line Parameters

On the command line you can specify the name of a [favourite file](#) to open at start-up or a directory path to scan, i.e.:

"Bulk Rename Utility.exe" *filename.bru*

or

"Bulk Rename Utility.exe" *directorypath*

Other command line options

Command Line Parameters for automatic license code registration:

"Bulk Rename Utility.exe" /writeregkey:"AAAA|BBBB" [/elevated]

/writeregkey:"AAAA|BBBB" : Enter a license code via the command line, where AAAA is the registration text and BBBB the registration key, separated only by the character |. The whole text must be surrounded by quotes ".
Program will return 0 if the operation was successful.

[/elevated] : Optionally instructs to prompt for elevation to administrator if needed (to register for all users on computer).

Examples:
"C:\Program Files\Bulk Rename Utility\Bulk Rename Utility.exe" /writeregkey:"Paul|1234"
"C:\Program Files\Bulk Rename Utility\Bulk Rename Utility.exe" /writeregkey:"Paul|1234" /elevated

Support

If you have any comments or suggestions, please get in touch. The latest version of the application can always be downloaded from the website.

Remember, the easiest way to find your way around the application is to experiment. You won't do any harm unless you hit the Rename button, so you can play around with as many settings as you like!

The application's homepage is at www.bulkrenameutility.co.uk

Contact information is at www.bulkrenameutility.co.uk/Contact.php

The **Support Forums** are available at the same website.

If you get in touch with a problem then please email the following details:

- Your version of Windows (e.g. Windows 7, Windows 10, Windows Server, etc.)
- The version of the utility (found at Help -> About)
- How to recreate the problem

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Bulk Rename Utility

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Email local part: ph10
Email domain: cam.ac.uk
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