

Attribute Changer

User Guide

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A special thank goes to all the contributors working on Attribute Changer translations.

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1 License and Warranty

End-User license agreement for Attribute Changer

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2 Feedback and Support

As a freeware author, I would be pleased to receive feedback for the application by sending me bug reports, suggestions and messages.

Support site: www.petges.lu

All support issues will be answered as soon as possible.

If you like Attribute Changer or find it useful, I would be thankful if you could donate a small amount to cover my hosting and development costs. Thank you!



3 Launching Attribute Changer

3.1 Shell extension mode

Right-click on files and folders:

- **Change Attributes**

This is the standard way to run Attribute Changer. If a single file or/and folder is selected, Attribute Changer will retrieve the current values from the file and folder and display them in the application.

If multiple files or folders are selected, Attribute Changer displays the most commonly used attributes, date and time. For example, if all files have the Archive attribute set, then the Archive attribute will be checked in the user interface. If one of the files has a different Archive attribute, then the Archive attribute will be greyed in the user interface.

- **Change Attributes / Use Current**

At least two objects must be selected in Windows Explorer to be able to use this feature. The **Change Attributes / Use Current** menu item reads the attributes, date and time values of the item you right-clicked on to launch Attribute Changer. The selected values are then displayed in the **Properties** tab.

It's a simple way to duplicate attributes, date and time on multiple files and folders.

Please note that the item you right-clicked is not processed.

- **Change Attributes / Use Saved**

Sometimes, you need to apply the last used set of attributes, date and time again and again. Attribute Changer saves by default the last used configuration on exit, including attributes, date and time.

In the **Settings** tab, you can disable saving the last configuration change and do it manually when needed to create some kind of preset configuration.

When you run Attribute Changer against multiple selected items and choose **Change Attributes / Use Saved**, it ignores the current attributes, date and time and restores the configuration from last use.

3.2 Portable mode

Start Attribute Changer in the Start menu or directly by double-clicking the executable acmain.exe. You can even run Attribute Changer with elevated rights (Run as administrator).

Drop your file/folder selection onto the application window and Attribute Changer will act the same way as **Change Attributes** in shell extension mode.

Holding the CTRL key while dropping your selection will display a context menu to choose between the **Change Attributes / Use Current** and **Change Attributes / Use Saved**.

A complete description of the options is available in the shell extension mode section.

Once Attribute Changer has finished processing your selection, you can keep the application window open and drop a new set of files/folders.

4 Process files, folders or both

If you select a mix of files and folders, you can specify to apply the modifications on files, folders or all selected items. Attribute Changer changes the available options in the user interface to only display relevant features.

You can choose among **All**, **Files only** and **Folders only**. **Only common features are enabled if you choose All.**

Let's take a look at the following selection in Windows Explorer: Folder1, Folder2, File1, File2, Folder3, File4

All: Features are applied to files and folders, making no difference.

In the above selection with a mix of files and folders and working with the 'Date and time sequence' feature, then this means the offset will be applied to each item regardless the type.

Folder1	12 July 2021
Folder2	13 July 2021
File1	14 July 2021
File2	15 July 2021
Folder3	16 July 2021
File4	17 July 2021

Files only: Features are applied to files in selection

Folder1	-
Folder2	-
File1	12 July 2021
File2	13 July 2021
Folder3	-
File4	14 July 2021

Folders only: Features are applied to folders in selection

Folder1	12 July 2021
Folder2	13 July 2021
File1	-
File2	-
Folder3	14 July 2021
File4	-

5 Properties

Tip: Sometimes, it's a good idea to simulate changes before applying them to production files and folders. Instead of working on test items, you can activate the Simulation mode which runs the settings against your production files and folders without doing modifications.

Modifying attributes

Attributes (Read-only, Hidden, Archive, System, Compress and Index) can be toggled among three states:

- ☐ attribute is not set
- ☒ attribute is set
- ☐ attribute is ignored

Right-click on any attribute checkbox to invoke a context menu to toggle all attributes at once.

If you invoke Attribute Changer on a folder object and want to process sub-folders, you need to select the **Include sub-folders and files** checkbox.


Note: Be careful in changing the System and Hidden attributes. They are used by the Windows operating system to flag special files and folders. The Compress and Index attributes can only be altered on NTFS partitions.

Case changes

Names and extensions can be changed to lowercase, uppercase or capitalized, depending on the selection in the drop-down list box. Select **No changes** to exclude the item from case modifications.

5.1 Date and time adjustments

The **Modify date and time stamps** option gives you access to date and time adjustments.

Use the  list icon to switch between basic and advanced adjustment options.

In basic mode, only date and time entry fields are displayed to apply precise date and time stamps to objects. If you right-click on any of the date and time fields, a pop-up menu appears, giving you more options on changing date and time.

Each date and time field has a checkbox to determine if the specified value should be applied or not. Partial updates, such as days and seconds only, can be configured in the **Mask** tab. If you wish to apply a complete date stamp for example, then check the **Day**, **Month** and **Year** checkboxes.

Let's take a look at an example:

After enabling the **Modify date and time stamps** checkbox, you change the time stamps for Created, Modified and Accessed in the **Properties** tab to 21 :15 :30, but only want to change the minute part on time stamps.

In the **Properties** tab, uncheck all date fields and enable the time fields for Created, Modified and Accessed. To change only the minute part, switch to the **Mask** tab, uncheck the Hours and Seconds checkboxes, check the Minutes option and click on OK.

If Attribute Changer processes an item with a

Creation time	22 :05 :14
Modification time	23 :58 :06
Access time	16 :01 :50

then this will result in an item with the following time stamps:

Creation time	22 : 15 :14
Modification time	23 : 15 :06
Access time	16 : 15 :50

5.2 Advanced Mode


In advanced mode, date and time entry fields are replaced by drop-down list boxes with multiple choices. The available entries depend on selections made in other list boxes.

The following features are available in advanced mode:

- **No changes:** No changes are applied to date and time stamps during processing.
- **Date and time Now:** Use current date and time when processing is started.
- **Created value from System tab:** Only available if basic mode is enabled for Created date and time. Attribute Changer uses the precise date and time information entered for Created during processing.
- **Modified value from System tab:** Only available if basic mode is enabled for Modified date and time. Attribute Changer uses the precise date and time information entered for Modified during processing.
- **Accessed value from System tab:** Only available if basic mode is enabled for Accessed date and time. Attribute Changer uses the precise date and time information entered for Accessed during processing.
- **Picture value from Photo tab:** Only available if basic mode is enabled for Photo date and time. Attribute Changer uses the precise date and time information entered for the photo during processing.
- **Created date and time from item:** Original Created date and time from the processed item before modifications. Used for synchronization.
- **Modified date and time from item:** Original Modified date and time from the processed item before modifications. Used for synchronization.
- **Accessed date and time from item:** Original Accessed date and time from the processed item before modifications. Used for synchronization.
- **Picture date and time from JPEG:** The original picture date and time stored inside the photo (EXIF value) is used during processing. Used for synchronization.
- **Add/Subtract offset values:** Apply offset values to date and time stamps during processing. The offset values are configured in the Offset tab. An additional feature can be activated using the Limit date and time stamp checkbox in the Offset tab. If enabled, it adds the Limit tab where you can control that the resulting date and time stamps should not exceed defined limits.

- **Randomize date and time:** Random date and time stamps are applied during processing. Randomization limits are configured in the Randomize tab.
- **Date and time sequence:** Apply a date and time interval to every selected item.
- **Redate with newest file:** Newest date and time stamp from files inside the processed folder is used for the folder's date and time.
- **Redate with oldest file:** Oldest date and time stamp from files inside the processed folder is used for the folder's date and time.
- **Redate with newest folder:** Newest date and time stamp from folders inside the processed folder is used for the folder's date and time.
- **Redate with oldest folder:** Oldest date and time stamp from folders inside the processed folder is used for the folder's date and time.

5.3 Advanced Mode – Add/Subtract offset values

Use the  list icon to enable the advanced mode for a chosen date and time and select **Add/Subtract offset values** from the drop-down list.

Use the **Offset** tab to configure offsets for date and time. You can use positive and negative values and even combine the different parts. For example, it's possible to configure a day offset of -5 days while using a -30 minutes offset.

A useful feature is the **Limit date and time stamp** option as it allows you to configure date and time limits that should not be exceeded. This feature adds an additional tab named **Limit** right to the **Offset** tab. The resulting date and time stamp is not applied to the item if it does not fit into the range defined by the lower and upper bounds. If the resulting date exceeds the upper bound or falls below the lower bound, the **Force** option may be used to set the resulting date and time stamp to the bound value.

Let's take a look at an example:

Date and time stamp	27 October 2002,	17 :00 :00
Month offset	3	
Resulting date and time	27 January 2003,	17 :00 :00

- No date and time limitation (Limit checkbox not checked)

Attribute Changer sets the selected date and time to 27 January 2003, 17 :00 :00

- Limit date to 19 June 2002, 00 :00 :00 and 14 January 2003, 23 :59 :59

Attribute Changer rejects the resulting date and time and no changes will be applied to the item.

- Limit date to 19 June 2002, 00 :00 :00 and 14 January 2003, 23 :59 :59 / Use Force option

Attribute Changer rejects the resulting date and time and applies the nearest bound (14 January 2003, 23 :59 :59) to the item.

Please note that offsets may produce overflows. For example, adding a 5 day offset to 27/03/2002 produces 01/04/2002 as the resulting date stamp.

5.4 Advanced Mode – Synchronizing date and time

Synchronizing date and time stamps can be useful to make the Modified date and time of a picture the same as the one stored in the photo. Use the ▢ list icon to enable advanced mode for a chosen date and time and select **Created date and time from item**, **Modified date and time from item**, **Accessed date and time from item** or **Picture date and time from JPEG** from the drop-down list.

Let's take a look at an example:

Created date and time	8 June 2007,	12 :07 :08
Modified date and time	21 September 2010,	08 :30 :00
Accessed date and time	3 November 2011,	09 :15 :20

We want that the Created date and time became the same as Modified and all others should be left untouched.

- Click the ▢ list icon at the right side of the Created date and time fields until the drop-down list box appears. From the list choices, select the **Modified date and time from item** entry.
- Click the ▢ list icon for all others until the drop-down list box appears and choose **No changes**. You can also use basic mode and then deactivate the individual checkboxes for date and time.
- Select the following date and time parts to update in the **Mask** tab:

<input checked="" type="checkbox"/> Day	<input checked="" type="checkbox"/> Month	<input checked="" type="checkbox"/> Year
<input checked="" type="checkbox"/> Hours	<input checked="" type="checkbox"/> Minutes	<input checked="" type="checkbox"/> Seconds
- Click **Apply** or **OK** to perform the update

This feature is extremely useful to do batch processing with Attribute Changer.

Tip: The synchronization feature is also pretty useful if you want to update all folders' Created date and time for example, but do not like to update other date and time stamps.

5.5 Advanced Mode – Randomize date and time

Use the ▢ list icon to enable the advanced mode for a chosen date and time and select **Randomize date and time** from the drop-down list.

The **Randomize** tab is used to configure the range being used to generate the random date and time stamps. Enable **Use strict mode** to produce resulting date and time stamps in the order:

Created <= Modified <= Accessed

Let's take a look at an example:

Original item date and time stamps:

Created date and time	5 March 2002,	16 :16 :00
Modified date and time	28 August 2003,	22 :15 :10
Accessed date and time	9 September 2008,	10 :10 :00

We want to create random date and time stamps for Created, Modified and Accessed.


The values should be generated between 5 May 2009, 15 :00 :00 and 30 December 2010, 19 :00 :00

- Click the ▢ list icon at the right side of the Created, Modified and Accessed time fields until the drop-down list box appears. From the list choices, select the **Randomize date and time** entry.
- Switch to the **Randomize** tab and enter
- Lower date and time 5 May 2009, 15 :00 :00
- Upper date and time 30 December 2010, 19 :00 :00
- Enable **Use strict mode**

Apply the settings and Attribute Changer will generate random Created, Modified and Accessed date and time stamps:

Created date and time	9 July 2009,	21 :05 :17
Modified date and time	25 February 2010,	15 :09 :20
Accessed date and time	8 September 2010,	03 :17 :00

5.6 Advanced Mode – Date and time sequence


Enable the **Date and time sequence** option to set a different date and time value for every selected item, using a constant additional interval. Sequence mode is not available for recursive operations. Use the  list icon to enable the advanced mode for a chosen date and time and select **Date and time sequence** from the drop-down list.

In the **Sequence** tab, enter a date and time value as the starting point for the generated sequences. The date and time interval can then be configured with the **Day, Month, Year, Hours, Minutes** and **Seconds** input fields.

Let's take a look at an example:

We want to create a sequence of date and time stamps for Created.

The values should be generated beginning from 20 October 2020, 16 :10 :00 and incremented by 1 minute

- Click the  list icon at the right side of the Created time fields until the drop-down list box appears. From the list choices, select the **Date and time sequence** entry.
- Switch to the **Sequence** tab and enter
 - Date and time 20 October 2020, 16 :10 :00
 - Minutes offset 1

Apply the settings and Attribute Changer will generate a sequence of Created date and time stamps:

First selected item	20 October 2020,	16 :10 :00
Second selected item	20 October 2020,	16 :11 :00
Third selected item	20 October 2020,	16 :12 :00


Please note that offsets may produce overflows. For example, reaching a cumulative offset of 24 hours will increment the resulting date stamp by one day.

Note: The order of the items is determined by your selection in Explorer and the right-click action. If you select 4 items in Explorer and then right-click on the third one to launch Attribute Changer, Explorer will send the following circular list to Attribute Changer: Item 3, Item 4, Item 1, Item 2.

Explorer uses the item you used to right-click as the first one and then continues until the end of the selection and wraps to the beginning of the list. If you would like to have a sequence order

beginning from the top of your selected list, you must right-click on the first item of your selection to launch Attribute Changer.

5.7 Advanced Mode – Redate date and time

Redating folder date and time stamps is useful if you want to get a quick overview on the newest or oldest file inside a folder. Use the  list icon to enable advanced mode for a chosen date and time and select **Redate with newest file** or **Redate with oldest file** from the drop-down list.

It's not limited to files inside folders, but sub-folders can also be used for redating. From the drop-down list, select **Redate with newest folder** or **Redate with oldest folder**.


Let's take a look at an example:

Original folder date and time stamps:

Created date and time	6 May 2010,	18 :00 :00
Modified date and time	17 October 2011,	22 :15 :00
Accessed date and time	9 December 2011,	10 :10 :00

We want to redate the Created folder property to reflect the newest Created date and time stamp of all files inside this folder:

File1.txt	Created date and time	24 June 2014, 14 :15 :00
File2.txt	Created date and time	11 April 2009, 16 :42 :40

Click the  list icon at the right side of the Created field until the drop-down list box appears. From the list choices, select the **Redate with newest file** entry.

Apply the settings and Attribute Changer will change the folder's date and time to:

Created date and time	24 June 2014,	14 :15 :00
Modified date and time	17 October 2011,	22 :15 :00
Accessed date and time	9 December 2011,	10 :10 :00

5.8 Photo date and time

JPEG photos may contain an embedded structure that holds lot of camera information, such as the date and time when the photo was shot. Attribute Changer is able to modify the embedded date and time information.

Basic and advanced options can be used to change the embedded information. If the embedded structure is missing, Attribute Changer is able to add a new structure containing the Date Taken tag.

By default, Attribute Changer looks at the following tags and order to find photo date and time information:


DateTimeOriginal	(TagID 0x9003)
DateTimeDigitized	(TagID 0x9004)
DateTime	(TagID 0x0132)

If none of these tags are found, then the current date and time is displayed in Attribute Changer for the photo information.

Use the **Add missing date and time** option in the **Photo** tab to add a new EXIF structure into a JPEG file if none exists. Attribute Changer adds a Date Taken (DateTimeOriginal - TagID 0x9003) tag into the newly created header in your photo.

5.9 Working with filters

Click the **Advanced** button in the **Properties** tab to display the **Configure Filter** dialog box. This dialog is used to include/exclude files and folders from modifications if they match a pattern or criteria of date/time and attribute settings.

Note: A small Information icon  is shown near the **Advanced** button if at least one filter option is applied.

Use the **Attributes** tab to configure a matching criteria based on date, time, attributes and size.

Additionally, file and folder exceptions can be configured using wildcard expressions in the **Names** tab. Adding files to the exception list can be simplified by using drag and drop. To exclude all files from a particular folder, you simply drag the folder onto the exception list and Attribute Changer adds a new entry to the list.

Enabling the **Group file extensions (Drag and Drop)** option let you drag and drop files onto the list and Attribute Changer automatically converts each dropped filename into a wildcard enabled filename.

Only files and folders that match all enabled criteria are processed by Attribute Changer.

Basic example:

You want to exclude all HTML files from all folders. Furthermore, the files matching the pattern 'letter' should be excluded from the folder C:\My Documents and all subfolders.

Simply add the following two entries to the Exception list:

- *.HTML → filter all HTML files
- C:\My Documents**letter* → filter items matching pattern 'letter' in folder "My Documents" and its subfolders

Group drag and drop example:

If you want to add all DLL and EXE files from a folder with a multitude of filenames to the exception list, then simply check the **Group file extensions (Drag and Drop)** option and select only one DLL and one EXE file. Drop them onto the exception list and Attribute Changer will convert them to a ***.DLL** and ***.EXE** exception rule.

Additional configuration options can be used by preceding a line with:

Create a comment

- D Tag only folders
- F Tag only files
- T Exclude a complete folder tree (folders and files)

Example of an exception list:

```
# Custom exclusion list
# -----

*.jpg

# Tag only folders
-D D:\My Documents\Year 200*

# Tag only files
-F D:\My Documents\Meetings*

# Tag folder tree
-T C:\Windows\system
```

What exactly does this mean?

***.jpg:** Attribute Changer will match every item ending with the jpg extension, regardless the location.

-D D:\My Documents\Year 200*: Using the -D option, only folders matching the pattern will be retained.

If the -D option is omitted, Attribute Changer would match the following items as an example:

D:\My Documents\Year 2001 (as a folder)
D:\My Documents\Year 2009 (as a folder)
D:\My Documents\Year 2001 Budget.xlsx (as a file)
D:\My Documents\Year 2008 Budget Proposal.odt (as a file)

Using the -D option, only the listed folders would match.

-F D:\My Documents\Meetings*: Using the -F option, only files matching the pattern will be retained.

-T C:\Windows\system: Using the -T option, the specified folder and all files and folders below the root will match the pattern.

6 Reporting

The **Reporting** tab is used to monitor the progress of Attribute Changer and to verify that all objects were updated. All locked files and folders are immediately logged in the upper part of the logging area. The number of already processed objects and the active processing is displayed in the lower part of the window.

Enabling **Detailed logging** instructs Attribute Changer to keep track of original and modified attributes, date and time stamps, EXIF information, file and folder names. This information is accessible in the **Detailed Reporting** window when you click on the **Details** button.

Detailed logging can be enabled and disabled at any time during processing.

Tip: If you process a very large number of files and folders, **Detailed logging** slows down processing. Disabling it speeds up the process.

When processing is done, Attribute Changer creates a summary report in the upper area in the **Reporting** tab.

Reports can be generated and saved for further processing in a spreadsheet application. The exported files are in a TAB separated format. Click on the **Export** button to save the files to disk. Select a folder to save the generated report files.

The generated report file has the following format:

<date> <time> - AC Summary.txt: Contents from the Reporting tab

<date> <time> - AC Failure.txt: TAB separated report of failed items

<date> <time> - AC Success.txt: TAB separated report of processed items

The **Reporting** tab is always shown at the end of processing if **Always display Processing Report** is enabled in the **Settings** tab. Otherwise, it will only be displayed if failures occurred during processing.

7 Settings

Here are defined the user dependent settings that are written to the HKEY_CURRENT_USER part of the Windows registry. This ensures that several users can share Attribute Changer on the same workstation (see the Information & System Changes section for more information).

Show context menu icon displays the Attribute Changer application icon left to the menu entries in the Explorer context menu (if supported by operating system and theme).

Enable Change Attributes menu shows or hides the **Change Attributes** Explorer context menu.

Enable Change Attributes / Use Current menu shows or hides the **Change Attributes / Use Current** context menu in Explorer and for drop operations in portable mode using CTRL key.

Enable Change Attributes / Use Saved menu shows or hides the **Change Attributes / Use Saved** context menu in Explorer and for drop operations in portable mode using CTRL key.

Always display Processing Report switches the view to the **Reporting** tab after a processing event. Unchecking the option shows the **Processing Summary Report** only when errors occurred during processing.

Enable Confirmation dialog shows or hides an additional confirmation dialog box before changes get applied. Previewing the changes (Simulation mode) can be enabled or disabled as well.

Always on top will make Attribute Changer the top most window on your desktop.

Save settings on exit instructs Attribute Changer to save the state of the application when a user quits the application. This is the default behaviour.

Unchecking the **Save settings on exit** option is useful when you would like to use the **Save** button. At any time, you can save the current state of Attribute Changer with the **Save** button. This state can be reused on subsequent launches.

You can reset Attribute Changer's configuration to default values at any time with the **Reset** button.

8 Information & System Changes

The **About** tab informs you about the currently used version and build of Attribute Changer. Please include the Version and Build in your e-Mail if you need technical assistance.

All configuration data is stored in the HKEY_CURRENT_USER part in the Windows registry.

The following changes are made by the installation program and the COM object registration:

- Create the folder Attribute Changer in <Program Files> and copies the following files into it: acmain.exe, acshell.dll, acshell32.dll (on x64), messages.ini, template.ini, ac.pdf and unins000.exe.
- Create a program group in the start menu and adds the shortcuts: Attribute Changer Help and Attribute Changer Homepage.
- Add a key {D3F9A525-8824-497A-BE36-B23E22F141FC} for the COM object GUID to HKEY_CLASSES_ROOT\CLSID
- (For x64) Add a key {D3F9A525-8824-497A-BE36-B23E22F141FC} for the COM object GUID to HKEY_CLASSES_ROOT\Wow6432Node\CLSID
- HKEY_CLASSES_ROOT\AllFilesystemObjects\shellex\ContextMenuHandlers: add key '{D3F9A525-8824-497A-BE36-B23E22F141FC}' and 'ACShell' as default value.

The user information is stored in the HKEY_CURRENT_USER\Software\Attribute Changer part of the registry and is created at the first run. Here's a brief description of the keys used by Attribute Changer:

Properties: All configuration data available in the **Properties** tab including the relative date and time adjustments, filter and exception settings. The registry values under the List key represent the entries in the filter list.

Settings: All configuration data available in the **Settings** tab.

Important: The above registry entries are created automatically by Attribute Changer if they don't exist and should be removed manually from the registry if the application is removed from the system.