

## Summary

TCMetadataViewer is an addon for the filemanager Total Commander for viewing (and editing) metadata, which can be embedded in many file types (e.g. EXIF information in pictures, which are taken with a digicam). TCMetadataViewer doesn't extract these metadata itself, but needs the external tool ExifTool for reading (and writing) them.

Additionally, TCMetadataViewer shows a preview on image files. TCMetadataViewer itself supports only BMP, JPG and (not-animated) GIF files. In order to provide previews on more file types, TCMetadataViewer optionally (configurable) uses one of the external tools IrfanView, NConvert or ImageMagick (`convert.exe`) for generating preview images.

<TCMetadataViewer.exe> is a compiled version of the AutoIt3 script <TCMetadataViewer.au3>. This script is written for AutoIt3 V3.3.4.0. <TCMetadataViewer.exe> is a standalone executable and doesn't need an installed AutoIt3. <TCMetadataViewer.exe> is an Unicode compiled script and will not run on Win9x/ME.

## Installation

### If you update from an earlier version of TCMetadataViewer

Unpack <TCMetadataViewer.exe> from <TCMetadataViewer\_2.0.zip> to your installation directory of TCMetadataViewer. Already existing files must be overwritten.

### If no older version of TCMetadataViewer is installed

Unpack <TCMetadataViewer.exe> and <TCMetadataViewer\_Sample.ini> from <TCMetadataViewer\_2.0.zip> to an empty directory. I recommend to install it in an empty directory, because TCMetadataViewer will create one directory and some files in the installation directory on first start or at the first time, you edit a tag, respectively. All icon files, which are used in TCMetadataViewer's GUI, will be unpacked from <TCMetadataViewer.exe> to subdirectory <TCMetadataViewer\_Icons%>, which TCMetadataViewer creates at the first start.

### If you like to use the "DaylightSavings" button ( / / / )

If you like to use the "DaylightSavings" button in order to write some information about daylight savings and timezone concerning DateTimeOriginal (a DaylightSavings flag, an offset (h) from GMT and a Timezone name) to the metadata, you need to create / update the ExifTool configuration file <.ExifTool\_config> manually:

Add the two user-defined XMP tags `XMP.DaylightSavings` and `XMP.TimezoneName` to your <.ExifTool\_config> (must be found / created in the path, where `ExifTool.exe` resides).

- If <.ExifTool\_config> doesn't exist, just unpack it from <TCMetadataViewer\_2.0.zip> to the path, where `ExifTool.exe` resides.
- If <.ExifTool\_config> already exists, you should edit it according to the <.ExifTool\_config>, which is delivered with <TCMetadataViewer\_2.0.zip>.

## Start

Preconditions:

- Total Commander must be running
- ExifTool must be installed. Path to `ExifTool.exe` must be configured in key `ExifToolPath` in section `[Configuration]` of INI file
- Optional:  
If you like quickview images to be generated by IrfanView, NConvert or ImageMagick (`convert.exe`), it must be installed. Desired image converter (IrfanView, NConvert or ImageMagick) must be configured in

key **ImageConverter** in in section **[Configuration]** of INI file and the path to `i_view32.exe`, `nconvert.exe` or `convert.exe` must be configured in key **IrfanViewPath**, **NConvertPath** or **ImageMagickPath**

Just launch `TCMetadataViewer.exe` in order to start `TCMetadataViewer`. It has no parameters.

I recommend creating a button on Total Commander's buttonbar or a menu item for TC's Start Menu:

|             |  |
|-------------|--|
| Command:    | {Path}\TCMetadataViewer\TCMetadataViewer.exe |
| Parameters: | {Empty}                                      |
| Start path: | {Empty}                                      |
| Icon file:  | {Path}\TCMetadataViewer\TCMetadataViewer.exe |
| Icon:       | 0  |
| Tooltip:    | TCMetadataViewer                             |

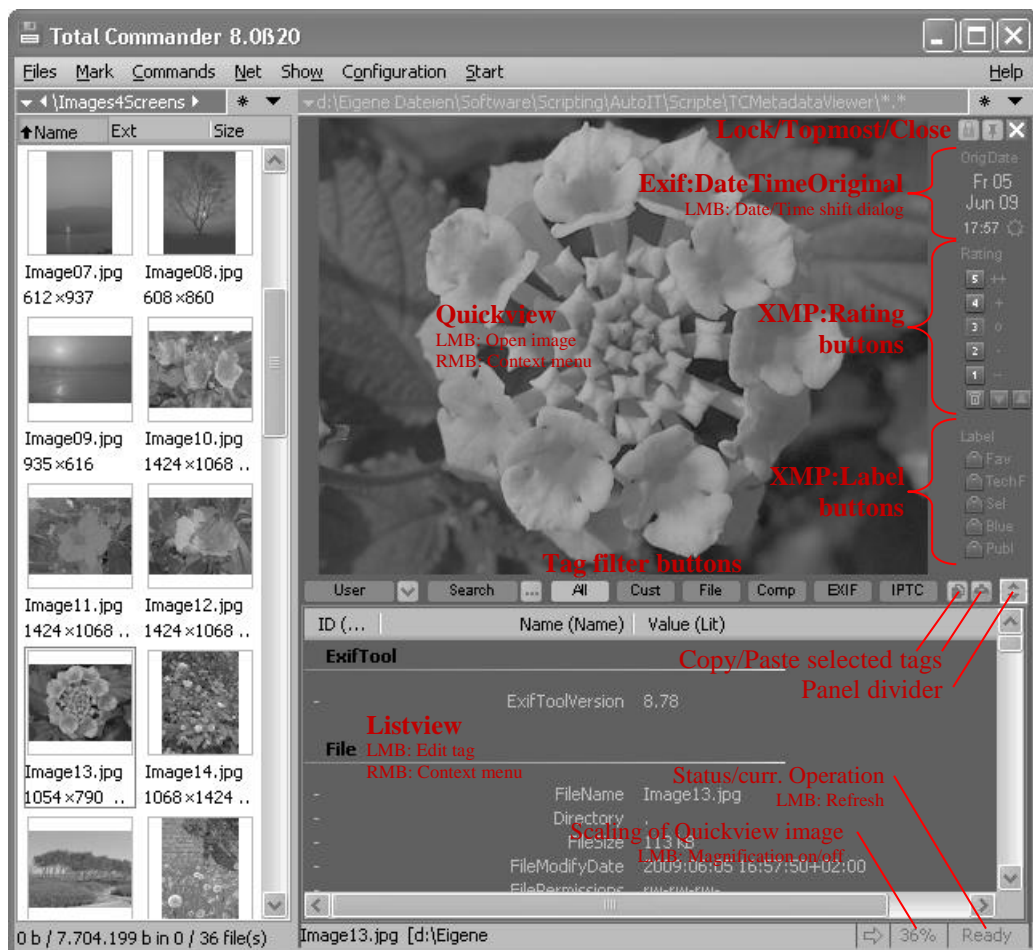
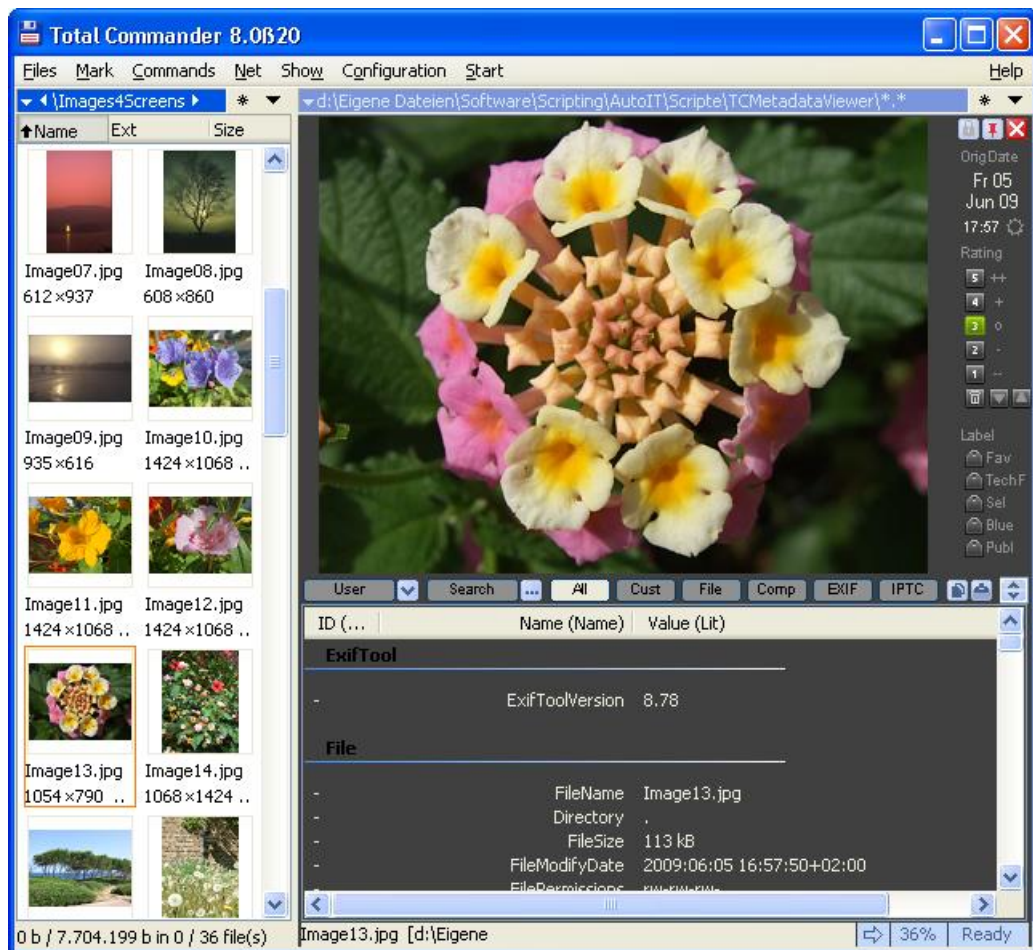
## Interaction with Total Commander and other running applications

`TCMetadataViewer` tries to simulate / to act like a lister plugin's quickview. It opens a borderless window, which fits into and overlays one of both file panels. When TC's main window is moved or the file panel with the pseudo quickview is resized, `TCMetadataViewer`'s window will readjusted automatically. Unlike the quickview of a real lister plugin, the `TCMetadataViewer` GUI will not automatically overlays ("opens in") the inactive panel. You must configure in INI file, whether `TCMetadataViewer` shall be opened over the left or over the right panel.

`TCMetadataViewer` shows the metadata and a preview image for the file, which is focussed in TC in the opposite file panel. When the name or the path of the focussed file changes (e.g. by navigating the filelist with <Down>/<Up> or by changing the directory), then `TCMetadataViewer`'s view will be refreshed. Other changes on a focussed file will be not recognized (if an image has been edited or metadata have been changed outside `TCMetadataViewer`, for instance). You can force a manual refresh by clicking on the rightmost part of the status bar (where status is shown, e.g. "Ready").

In order to be able to operate Total Commander (navigating through files etc.) while `TCMetadataViewer` is shown in front of the opposite file panel, the main window of `TCMetadataViewer` has set the top most flag by default. When the main window of TC loses focus (e.g. TC's copy dialog is shown, window of another application becomes active), then `TCMetadataViewer` will be minimized automatically. When the main window of TC gets focussed, `TCMetadataViewer`'s window will be restored automatically. You can remove (and set again) the top most flag using the Topmost button (see chapter "GUI").

## GUI



## Lock / Topmost / Close buttons

### / **Lock**

TCMetadataViewer shows the metadata and a quickview image for the file, which is focussed in TC in the opposite file panel. When the name or the path of the focussed file changes (e.g. by navigating the filelist with <Down>/<Up> or by changing the directory), then TCMetadataViewer's view will be refreshed.

Click the lock button to disable / enable automatic refresh

### / **Topmost**

Click the pin button to set / remove on top flag for the TCMetadataViewer window

### **Close**

Click this button to exit TCMetadataViewer

## Quickview

In this area TCMetadataViewer shows a quickview on image files. TCMetadataViewer supports internally only BMP, JPG and (not-animated) GIF files. In order to provide quickviews on more file types and to get better results, TCMetadataViewer optionally (configurable) uses one of the the external tools IrfanView, NConvert or ImageMagick (convert.exe) for generating preview images.

If Quickview is disabled (option Show Quickview of image: None is set) or if a Quickview image can't be generated (file isn't an image file or image file type isn't supported), then this symbol is shown:



### **Auto-rotation**

Auto-rotation based on EXIF-information is only done for JPEGs AND if ImageMagick is choosen as ImageConverter OR if IrfanView is choosen as ImageConverter AND if auto-rotation option is set in IrfanView settings.

Auto-rotation is not yet implemented

- for preview on RAW files (TCMetadataViewer generate the quickview image from embedded preview image. The quickview image will be auto-rotated, if the from the RAW file extracted preview image has the Orientation tag set.)
- if NConvert is choosen as ImageConverter
- if IrfanView is choosen as ImageConverter, but auto-rotation option isn't set in IrfanView settings

## Quickview: LMB - Action on left mouse button click

A left click on the quickview image will open the file with the application, wich is configured in key **ImageViewerPath** in section **[Configuration]** of <TCMetadataViewer.ini>. If key **ImageViewerPath** is missed or value is empty or given path+filename doesn't exist, then images are opened using Windows' default application (ShellExecute on current file, verb "open")

## Quickview: RMB - Context menu

Items in the right click menu of the image quickview are:

|  |
|--|
| Show QuickView of image: None<br>Show QuickView of image: Thumbnail<br>Show QuickView of image: Standard (low quality, faster)<br>● Show QuickView of image: IrfanView (high quality, slower)<br>Bildvorschau: Vorschaubild aufhellen<br>View image with FSViewer.exe<br>Play audio note on image<br>Show GPS position in GoogleMaps |
| Lossless operation: Optimize JPG<br>Lossless operation: Rotate JPG by 90°<br>Lossless operation: Rotate JPG by 180°<br>Lossless operation: Rotate JPG by -90°<br>Lossless operation: Auto-Rotate JPG according to EXIF info  |
| Thumbnail-Image<br>- view with FSViewer.exe<br>- save to file...<br>- delete from file   |
| Preview-Image<br>- view with FSViewer.exe<br>- save to file...<br>- delete from file   |

### Show Quickview of image: None

If this option is set, no quickview image will be shown at all. Might be useful, if you like to see only the metadata (in the listview below the quickview area)

### Show Quickview of image: Thumbnail

If this option is set, TCMetadataViewer extracts and shows an embedded thumbnail image from the file, if one is present. This is even slower than Show Quickview of image: {ImageConverter} (high quality, slower), but is the only way to show embedded cover art in MP3 files (tag [ID3. Picture](#)) or OGG files (tag [Vorbis. CoverArt](#)).

### Show Quickview of image: Standard (low quality, faster)

If this option is set, TCMetadataViewer will show an image using its internal capability. TCMetadataViewer supports internally only BMP, JPG and (not-animated) GIF files.

### Show Quickview of image: {ImageConverter} (high quality, slower)

TCMetadataViewer will show an image using its internal capability at first. If the option "Show Quickview of image: {ImageConverter} (high quality, slower)" is set, then TCMetadataViewer checks the extension of the current file against the values of INI keys [ImageConvertFileExtsSTD](#) and [ImageConvertFileExtsRAW](#). If the file type is listed in either of them, then the image is processed by the configured ImageConverter:

```
If ImageConverter = IrfanView then
{IrfanViewPath} "{OriFilename}" /resize=({PreviewW},{PreviewH}) /resample /sharpen=15 /bpp=24
/convert="%TEMP%\TCMetadataViewer.bmp" /silent
```

```
If ImageConverter = NConvert then
```



```
{NConvertPath} -o "%TEMP%\TCMetadataViewer.bmp" -quiet -out bmp -truecolors -rtype lanczos -resize {PreviewW}  
{PreviewH} -sharpen 30 "{OriFilename}"
```

If **ImageConverter** = ImageMagick then

```
{ImageMagickPath} "{OriFilename}[0]" -auto-orient -type TrueColor -filter Lanczos -resize  
{PreviewW}x{PreviewH}! -sharpen 2 "%TEMP%\TCMetadataViewer.bmp"
```

*Note:* [0] is appended to {OriFilename} in order to convert only the first image of a multi frame / multi page image. For "single frame / page" images this affix doesn't matter.

The higher quality preview image <%TEMP%\TCMetadataViewer.bmp> will be shown on the quickview area.

If the original image is smaller than the quickview area, then the quickview image will be generated too, but will be not resized, resampled or sharpened.

*Note:* Color depth will be converted to 24 bpp in order to avoid problems with 1 bpp images (TCMetadataViewer can't show them)

*Note:* Image proportions (aspect ratio) are *not* kept in order to avoid blurring. Why?  
TCMetadataViewer gets the dimensions of the original image from ExifTool's results and calculate a scaling factor, which is used to calculate the expected dimensions ( $\{PreviewW\} \times \{PreviewH\}$ ) of the quickview image.  
{PreviewW} and {PreviewH} are passed with `resize` parameter to the ImageConverter.  
The actual dimensions of the resulting quickview image may differ from the expected dimensions (around 1-2 pixel).  
The quickview image is shown in the quickview image area, which is sized according the expected dimensions.  
TCMetadataViewer (AutoIt, to be precise) scales the quickview image to fit it into the quickview image area, which will result in blurring.

If the extension of the current file is listed in INI key **ImageConvertFileExtsRAW**, then {ImageConverter} isn't called for {OriFilename}, but for the preview image, which might be embedded in the RAW image. This embedded preview image will be extracted from RAW image using ExifTool and saved to  
<%TEMP%\TCMetadataViewer\_PreviewImage.jpg>

### **Bildvorschau: Vorschaubild aufhellen**

If this option is set, then the quickview image will be brightend up by increasing the gamma value (and the contrast). May be useful, if you like to define areas (**XMP.RegionPersonDisplayName** + **XMP.Rectangle**) in underexposed photos.

If **ImageConverter** = IrfanView , then IrfanView will be called with additionally params:  
/gamma={Gamma} /contrast={Contrast}

If **ImageConverter** = NConvert , then NConvert will be called with additionally params:  
-gamma {Gamma} -contrast {Contrast}

For **ImageConverter** = ImageMagick this feature is not yet implemented.

{Gamma} should be defined in key **Gamma** in section **[Configuration]** of the INI-file.

{Contrast} should be defined in key **Contrast** in section **[Configuration]** of the INI-file.

### **View image with {ImageViewer}**

Analogous to "Quickview: LMB - Action on left mouse button click"

### **Play audio note on image**

This menu item will be enabled, if the current viewed file has an audio sibling (a WAV file with the same base name as current viewed file). The sound file will be played using TCMetadataViewer's internal capability.

### **Show GPS position in {GeoService}**

If the metadata contains GPS information, then the GeoService will be called to show the GPS position in your internet browser:

For **GeoService** = GoogleMaps : <http://maps.google.de/maps>

For **GeoService** = BingMaps : <http://www.bing.com/maps>

GeoService should be defined in key **GeoService** in section **[Configuration]** of the INI-file (valid values: GoogleMaps or BingMaps).

### **Lossless operation: Optimize JPG**

This menu item is only available for files with extension jpg or jpeg *and* if IrfanView is configured as ImageConverter (NConvert and ImageMagick doesn't support lossless optimization on JPEGs).

IrfanView is called with /jpg\_rotate parameter with "Optimize" option set (/jpg\_rotate=(0, 1, 0, 1, 0, 0, 0, 0)).

Calling IrfanView with /jpg\_rotate parameter opens the IrfanView GUI, but doesn't close it automatically after finishing the operation. Hence, the additional parameter /killmesoftly is passed to IrfanView. Unfortunately, /killmesoftly will close *all* already running instances of IrfanView too. If IrfanView is already running, TCMetadataViewer prompts you for confirmation of the operation.

### **Lossless operation: Rotate JPG 90°**

This menu item is only available for files with extension jpg or jpeg *and* if IrfanView or NConvert is configured as ImageConverter (ImageMagick doesn't support lossless operations on JPEGs).

IrfanView is called with /jpg\_rotate parameter with "Rotate 90°" option set (/jpg\_rotate=(3, 0, 0, 1, 0, 0, 0, 0)).

NConvert is called with -jpegtrans rot90 parameter.

### **Lossless operation: Rotate JPG 180°**

This menu item is only available for files with extension jpg or jpeg *and* if IrfanView or NConvert is configured as ImageConverter (ImageMagick doesn't support lossless operations on JPEGs).

IrfanView is called with /jpg\_rotate parameter with "Rotate 180°" option set (/jpg\_rotate=(4, 0, 0, 1, 0, 0, 0, 0)).

NConvert is called with -jpegtrans rot180 parameter.

### **Lossless operation: Rotate JPG -90°**

This menu item is only available for files with extension jpg or jpeg *and* if IrfanView or NConvert is configured as ImageConverter (ImageMagick doesn't support lossless operations on JPEGs).

IrfanView is called with /jpg\_rotate parameter with "Rotate 270°" option set (/jpg\_rotate=(5, 0, 0, 1, 0, 0, 0, 0)).

NConvert is called with -jpegtrans rot270 parameter.

### **Lossless operation: Auto-Rotate JPG according to EXIF info**

This menu item is only available for files with extension jpg or jpeg *and* if IrfanView or NConvert is configured as ImageConverter (ImageMagick doesn't support lossless operations on JPEGs).  
IrfanView is called with /jpg\_rotate parameter with "Auto-Rotation" option set (/jpg\_rotate=(6, 0, 0, 1, 0, 0, 0, 0)).  
NConvert is called with -jpegtrans exif parameter.

#### **Thumbnail image - view with {ImageViewer}**

This menu item will be enabled, if the current viewed file has a thumbnail image embedded.  
This thumbnail image will be extracted from current viewed file using ExifTool, saved to  
<%TEMP%\%TCMetadataViewer\_ThumbnailImage.jpg> and opened with your configured {ImageViewer}.

#### **Thumbnail image - save to file...**

This menu item will be enabled, if the current viewed file has a thumbnail image embedded.  
When choosen, then the thumbnail image will be saved to a file of your choice.

#### **Thumbnail image - delete from file**

This menu item will be enabled, if the current viewed file has a thumbnail image embedded.  
When choosen, then the thumbnail image will be deleted from the current viewed image. If option "Backup file when writing" is unchecked, then you will be asked to confirm the delete request.

#### **Preview image - view with {ImageViewer}**

This menu item will be enabled, if the current viewed file has a preview image embedded.  
This preview image will be extracted from current viewed file using ExifTool, saved to  
<%TEMP%\%TCMetadataViewer\_PreviewImage.jpg> and opened with your configured {ImageViewer}.

#### **Preview image - save to file...**

This menu item will be enabled, if the current viewed file has a preview image embedded.  
When choosen, then the preview image will be saved to a file of your choice.

#### **Preview image - delete from file**

This menu item will be enabled, if the current viewed file has a preview image embedded.  
When choosen, then the preview image will be deleted from the current viewed image. If option "Backup file when writing" is unchecked, then you will be asked to confirm the delete request.

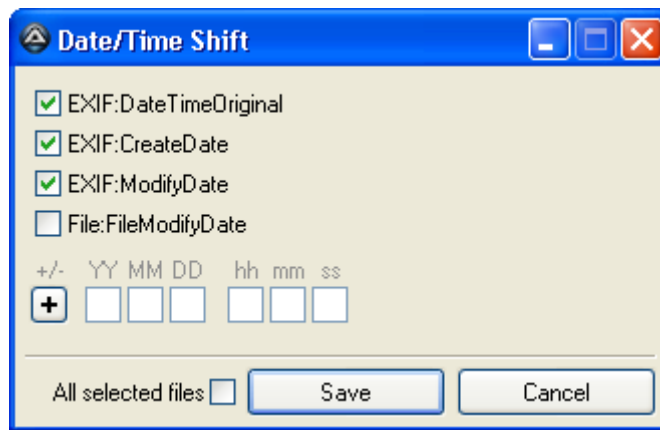
### **EXIF:DateTimeOriginal**

If EXIF tag **DateTimeOriginal** is found in the currently viewed file, then this date / time is shown here.  
Unfortunately, you can't define the date / time format, "DDD DD %n MMM YY %n hh:mm" is hard coded in V2.0 of TCMetadataViewer.  
Localization for abbreviated names of days of week (Mo, Tu, ..., Su) is found in string 85 in language sections of INI file.

### **Date/Time Shift**

A left mouse button click on date or time will show the Date/Time shift dialog:





You can shift date / time for [EXIF.DateTimeOriginal](#), [EXIF.CreateDate](#), [EXIF.ModifyDate](#) and/or [File.FileModifyDate](#). Tick the appropriate checkboxes. Enter the shift amount in years (YY), months (MM), days (DD), hours (hh), minutes (mm) and/or seconds (ss) into the appropriate edit fields, e.g. "1" to the "hh" field in order to shift time by 1 hour. Click on the "+/-" button in order to toggle between increasing date/time ("+") and decreasing date/time ("-"). Check the "All selected files" checkbox, if you like to shift date/time not only for the currently viewed file, but for all files, which are selected (marked) in the opposite panel in TC.

## Daylight saving time

Symbol for standard time (snowflake: ❄️) / daylight saving time (sun: ☀️) is shown next to time of EXIF.DateTimeOriginal. Can be disabled (0) / enabled (1 or 2) via INI key [ShowXMPDaylightSavings](#) in section [\[Configuration\]](#) of INI file.

With a click on DaylightSavings symbol, [XMP.DaylightSavings](#), [XMP.TimezoneName](#) and [EXIF.TimeZoneOffset](#) will be written to the metadata.

Set INI key [MoveCursorToNextFileAfterSetXMPTimezone](#) to "1", if you like to view the next file automatically (cursor in Total Commander's opposite panel is moved one entry down/right) after changing the daylight saving information.

See chapter "INI file <TCMetadataViewer.ini>", section [\[Configuration\]](#), keys [ShowXMPDaylightSavings](#) and [DefaultXMPTimezone](#) for further details.

## XMP:Rating

If [XMP](#) tag [Rating](#) is found in the currently viewed file, then the rating is shown here. You can choose between two layouts:

Boxes...













...or Stars





Set your choice in key [LayoutXMPRating](#) of INI section [\[Configuration\]](#).

You can clear / set / change the rating by clicking on the appropriate box / star. Changed file will be stored immediately (without confirmation) on changing [XMP.Rating](#).

-  ⇒  With a click on the garbage can icon you set a rating of -1, which indicates “rejected” (image may be deleted at a later date).
-  ⇒  A click on the upside down triangle will decrease the rating by 0.3  
A rating of “3” (or “3.3”) will be decreased to “2.7”, for instance
-  ⇒  A second click will undo this and increases the rating by 0.3  
A rating of “2.7” will be increased to “3”, for instance
-  ⇒  A click on the other triangle will increase the rating by 0.3  
A rating of “3” (or “2.7”) will be increased to “3.3”, for instance
-  ⇒  A second click will undo this and decreases the rating by 0.3  
A rating of “3.3” will be decreased to “3”, for instance

Set INI key `MoveCursorToNextFileAfterSetXMPRating` to "1", if you like to view the next file automatically. If Thumbnail view is activated in TC, then the cursor in Total Commander's opposite panel will be moved one entry right, otherwise it will be moved one entry down. The current cursor move direction is indicated in the status bar of TCMetadataViewer:

 Cursor will be moved one entry down (TC long view, short view, custom view, ...)

 Cursor will be moved one entry right (TC thumbnail view)

TCMetadataViewer switches the cursor move direction automatically, when you change TC's view mode. TCMetadataViewer starts by default with “move cursor down”, even if thumbnail view is active in TC. In this case you can switch the cursor move direction manually by clicking on the arrow.

## XMP:Label

If XMP tag `Label` is found in the currently viewed file, then the (decoded) label is shown here. There are 3 facets concerning TCMetadataViewer's processing of XMP label:

- Which data are actually read from the tag and should be written to it respectively?  
Value(s) to be written to `XMP.Label` must be configured in section `[LabelsMapDispColor2Tag]` of INI file
- Which label color should be shown, when a specific content is read from tag `XMP.Label`?  
Configure this mapping in section `[LabelsMapTag2DispColor]` of INI file, syntax:  
{LabelTagContent}={LabelColor} (with {LabelColor}=Red|Yellow|Green|Blue|Purple)
- Which descriptive text should be shown to the right of the colored GUI boxes?  
Configure this mapping in section `[LabelsMapDispColor2DispText]` of INI file, syntax:  
{LabelColor}={LabelDisplayedText} (with {LabelColor}=Red|Yellow|Green|Blue|Purple)

The space for label descriptions is unfortunately extremely limited (and not expandable).

Set key `ShowXMPLabel` in section `[Configuration]` of INI file to "0" in order not to show XMP Labels at all.

Optionally, *multiple* labels can be stored to tag `XMP.Label`. Set key `AllowMultLabel` in section `[Configuration]` of INI file to "1", if you like to allow multiple labels. Multiple labels are not in accordance with some proprietary standards, but as far as I know, there doesn't exist any generally accepted standard for `XMP.Label`. Set `AllowMultLabel`=0 in order to keep tag `XMP.Label` compatible with other third party tools / applications.

You can clear / set / change the label by clicking on the appropriate box. Changed file will be stored immediately (without confirmation) on changing `XMP.Label`.

Set INI key `MoveCursorToNextFileAfterSetXMPLabel` to "1", if you like to view the next file automatically. See chapter “XMP:Rating” above for further details.

## Button bar

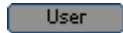
With these buttons you can filter the listview items.

 **User**

These buttons are always shown



Lists all tag groups and the number of tags in the respective tag group in the listview.  
Select a tag group to filter on by clicking the accordant listview item. The caption of the button [User] is set accordingly.



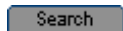
Filters the tag list on the currently set tag group

 **Search**

These buttons are always shown



Opens a little dialog, where you can enter your search string(s).  
Separate multiple search strings by a pipe symbol ("|"), it will be interpreted as logical "OR"



Filters the full tag list using the search criteria. All listview columns are searched.

 **All**

This buttons is always shown

Shows all tags (unfiltered), grouped by tag grouping criteria

 **Custom**

This buttons is always shown

Shows the user defined collection of tags. The custom view

- must be listed in section [CustomViews],
- must have file extensions assigned and
- must be configured in section [{NameOfCustomView}] of the INI file.

Syntax for section [CustomViews] and sections [{NameOfCustomView}] see chapter "INI file  
<TCMetadataViewer.ini>"

      **TagGroup 1-6**

With these buttons you can filter the listview by tag group. These buttons (the tag groups, you like to filter on) can be configured in INI section [FilterButtons]. A tag group filter button is only shown, if matching tags are present in the currently viewed file.

Syntax for each line in section [FilterButtons]:

FilterButtons={GroupName} : {ButtonCaption}

{GroupName} is the name of a tag group as used from ExifTool. I recommend using group names from tag grouping family "Type"

{ButtonCaption} is the user-defined caption of the filter button

Example:

FilterButtons=MakerNotes:Maker

When switching to another tag grouping family, then some filter buttons may disappear:

Example:

Have FilterButtons=EXIF:EXIF defined in INI section [FilterButtons] and have Tag grouping set to "Type".

View an image with EXIF metadata.

⇒ Filter button "EXIF" is visible, because tags from group EXIF are found in the metadata

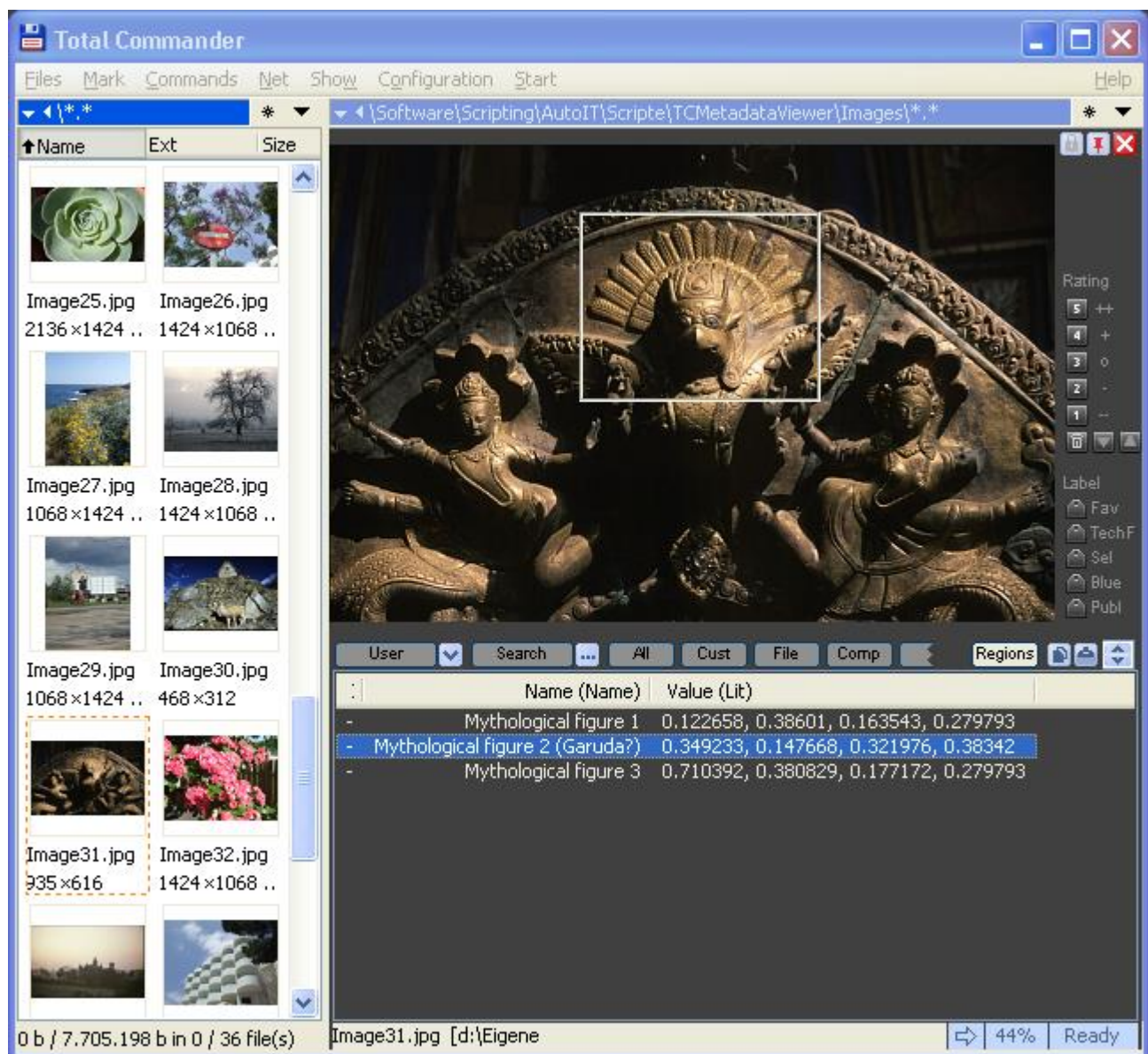
Now switch to tag grouping "Specific location"

⇒ Filter button "EXIF" will be no longer available, because EXIF tags now are grouped into IFD0, ExifIFD etc., but the group name EXIF cannot be found anymore in ExifTool's taglist.

## Regions


This button is shown, if region info in structure XMP.RegionInfoMP can be found in the currently viewed file.

Example:



Click on the “Regions” button in order to list all available regions from the structure `XMP.RegionInfoMP` in the listview. Information from `XMP.PersonDisplayName` will be listed in the “Name” column of the listview, related information from `XMP.Rectangle` in the column “Value”.

With a click on a listview row a frame as per coordinates from `XMP.Rectangle` will be drawn on the quickview image.

You can magnify the framed region by clicking on the scale information  44% Ready in the status bar.

#### **Desc**

This button is only shown, if a file comment from `<description>` can be found for the currently viewed file. Will show – surprise! – the comment for the currently viewed file.

#### **Preview**

This button is only shown, if a preview image can be found in the currently viewed file. This preview image will be extracted from current viewed file using ExifTool, saved to `<%TEMP%\TCMetadataViewer_PreviewImage.jpg>` and opened with your configured `{ImageViewer}`

#### **Thumb**

This button is only shown, if a thumbnail image can be found in the currently viewed file. This thumbnail image will be extracted from current viewed file using ExifTool, saved to `<%TEMP%\TCMetadataViewer_ThumbnailImage.jpg>` and opened with your configured `{ImageViewer}`.

#### **PanelDivider**

Control to increase / decrease the height of the listview (and to decrease / increase the height of the quickview area) by 5% on each click.

You can set the start partitioning with key `PanelDivider` in INI section `[Configuration]`

## 4.2 Listview

In the listview the metadata of the selected file will be shown in 3 (visible) columns (actually, the listview has 4 cols, but 1st column "Group" is hidden).

- **Group**  
This column actually exists, but is not visible (column width = 0; can be resized in order to make the column content visible).  
ExifTool classifies tags into groups in five different families (Information Type, Specific Location, Category, Document Number, Instance Number). You can switch between the first three families (Information Type, Specific Location, Category) using the context menu of the listview (section "Tag grouping:"). You can set the initial state in key `TagGrouping` in section `[Configuration]` of INI file.
- **ID**  
Shows the tag ID numbers in hexadecimal, if available (otherwise "-" is shown)
- **Name (Name)/(Desc)**  
Tag names. Localized descriptions (Desc) can be shown optionally instead of standard names (Name). Option can be chosen from the context menu of the listview (section "Tag names:"). You can set the initial state in key `TagNames` in section `[Configuration]` of INI file.

When "Name" column is set to "(Desc)", then localized strings are used for "Value (Lit)" too. Translation is done by ExifTool. Set the desired language in `<TCMetadataViewer.ini>`, section `[Configuration]`, key

**ExifToolLang.** Use "ExifTool -lang" to get a list of available languages (available with ExifTool 8.16: cs, de, en, en\_ca, en\_gb, es, fr, it, ja, ko, nl, pl, ru, sv, tr, zh\_cn, zh\_tw).

- **Value (Lit)/(Num)**

Tag values. Tags of numeric type are decoded by default to descriptive strings. You can choose to show the not decoded numeric values from the context menu of the listview (section "Tag values:"). You can set the initial state in key **TagValues** in section **[Configuration]** of INI file.

Example: EXIF.Flash: 16 (Num) = Off, did not fire (Lit)

TCMetadataViewer has limited edit capabilities. Click on a listview item (a line in the listview) in order to edit the shown tag. In order to know, whether a tag can be written by ExifTool or not, TCMetadataViewer needs lists of writable tags and file types.

If these lists doesn't exists, then they will be created (<TCMetadataViewer\_ExifTool\_XMLTagDB.xml> and <TCMetadataViewer\_ExifTool\_WritableExts.txt> in TCMetadataViewer installation directory) when clicking on a listview item. A splash screen is shown for each list until creation process has been finished.

These lists will be automatically renewed, if

- TCMetadataViewer has been updated (version info in 1st line differs from installed version)
- ExifTool config file (<.ExifTool\_config>) has been updated (file modify date and/or file size in 2nd line differs from file modify date and/or file size of current ExifTool config file)
- ExifTool has been updated (version info in 3rd line differs from installed version)

When both lists are available, then a generic tag edit dialog will open.

## Listview: Context menu

Items in the right click menu of the listview are:



|   |
|---|
| <ul style="list-style-type: none"> <li>● Tag grouping: "Type"<br/>Tag grouping: "Specific Location"<br/>Tag grouping: "Category"<br/>.....</li> <li>● Tag names: Names<br/>Tag names: Localized descriptions<br/>.....</li> <li>● Tag values: Literal<br/>Tag values: Numeric<br/>.....</li> </ul> <p>Reset display options: Group (Typ) - ID (Hex) - Name (Name) - Value (Lit)</p> |
| <p>Export tags: Create textfile...</p> <p>Export tags: Create XMP sidecar file...</p> <p>Export tags: Create ExifTool XML file...</p> <p>Export tags: Create MIE file...</p>  |
| <p>Compare tags with...</p> <p>Selected Tags: Copy =&gt; Clipboard</p> <p>Selected Tags: Paste &lt;= Clipboard...</p> <p>Selected Tags: Copy from file...</p> <p>Selected Tags: Synchronize...</p> <p>Execute ExifTool with arguments from an *.args file...</p>  |
| <p>Delete Tags: Remove all metadata from file</p> <p>Delete tags: All IPTC tags</p> <p>Delete tags: All XMP tags</p> <p>Selected Tags: Delete...</p>  |
| <p>Write UTF-8-coded values only, if tag contains non-ANSI chars</p> <ul style="list-style-type: none"> <li>● Always write UTF-8-coded values</li> </ul>  |
| <p>Use "sidecar" file (*.mie)</p> <p>✓ Allow duplicate tag names</p> <p>Backup file when writing</p>  |
| <p>Edit configuration file</p> <p>About...</p>  |

**Tag Grouping: Type | Specific Location | Category**  
Explained in chapter 4.2, "Group"

**Tag names: Names | Localized descriptions**  
Explained in chapter 4.2, "Name"

**Tag values: Literal | Numeric**  
Explained in chapter 4.2, "Value"

### Reset display options

Resets the tag view options grouping, names, values to the values, which are defined in INI file, section [Configuration], keys TagGrouping, TagNames, TagValues

**Export tags: Create textfile ...**

**Export tags: Create XMP sidecar file...**

**Export tags: Create ExifTool XML file...**

**Export tags: Create MIE file...**

Exports all tags to the specified type of file (TXT, XMP, XML, MIE). A "Save as.." dialog asks for the path and filename of the file to create.

(MIE type seems to be most suitable to make a full backup of the metadata, because binary data (like embedded thumbnail images) will be included too)

### **Compare tags with...**

This menu item is only enabled, when Total Commander V7.50 (or newer) is running.

When choosing "Compare tags with..." from context menu, TCMetadataViewer will export the metadata from current file to a temporary text file (<%TEMP%\TCMetadataViewer\_Taglist1.txt>) and asks for the path and the name of a second file to compare with. The metadata from second file will be exported to <%TEMP%\TCMetadataViewer\_Taglist2.txt>. Tags will be always reported with their "Specific location"; duplicate tag names are always allowed.

Comparison is done by Total Commander: TCMetadataViewer calls TC using

```
"%COMMANDER_PATH%\TotalCmd.exe /S=C %TEMP%\TCMetadataViewer_Taglist1.txt %TEMP%\TCMetadataViewer_Taglist1.txt"
```

### **Selected tags: Copy => Clipboard**



### **Selected tags: Paste <= Clipboard...**



### **Selected tags: Copy from file...**



### **Selected tags: Synchronize...**



### **Execute ExifTool with arguments from an \*.args file...**



### **Delete tags: Remove all metadata from file**

Deletes all meta information from the selected file. If option "Backup file when writing" is unchecked, then you will be asked to confirm the delete request.

### **Delete tags: All IPTC tags**



### **Delete tags: All XMP tags**



### **Selected tags: Delete...**



### **Write UTF-8-coded values only, if tag contains non-ANSI chars**

If "Write UTF-8-coded values only, if tag contains non-ANSI chars" is checked, then values will be written ANSI-coded by default. If the tag value contains characters, which are not available with the active codepage, then tag content will be written UTF-8 coded.

### **Always write UTF-8-coded values**

If "Always write UTF-8-coded values" is checked, then values will be written always UTF-8-coded

Values for the following tags will be written always UTF-8-coded (regardless of charset conversion setting):

EXIF:UserComment

EXIF:GPSProcessingMethod

EXIF:GPSAreaInformation

EXIF:XPTitle

EXIF:XPCComment

EXIF:XPAuthor

EXIF:XPKeywords

EXIF:XPSubject  
IPTC:\*  
XMP:\*

On saving a tag, the characters &|'>< will be replaced by their HTML representation at first.  
If UTF-8-coding is set (user's choice or forced in case of above mentioned tags), then each character with a Unicode code above 127 will be replaced by its HTML representation and ExifTool will be called with parameters "-E". Otherwise ExifTool will be called with parameters "-ex".

If tag value contains line breaks (at least one LineFeed character) and "CRLF" is set for tag name in INI section [LineBreaks], then the "raw" tag value from the edit box will be written to a temporary file. The write mode (charset conversion) for this file will be chosen depending on the "UTF-8 relevance" (user's choice or forced in case of above mentioned tags). ExifTool will import the temporary file as binary input for the tag's new value.

#### Use "sidecar" file (\*.mie)

[...]

#### Allow duplicate tag names

Tag names and tag IDs can occur multiple times in the metadata of a file (e.g. "Date last saved" / "Last saved by" in MS Office documents)

In a custom view only the first occurrence of the particular tag will be shown. Which "instance" of the tag will be shown depends on the order, ExifTool prints the tags "instances". This order varies depending on the option set.

Example:

Assume, that tag "LastSavedBy" exists two times in a Word doc: let first occurrence be "Alice" and second occurrence "Bob"

If TagName="Name", then ExifTool may firstly report "Alice" and "Bob" afterward. If TagName="Desc", then ExifTool may firstly report "Bob" and "Alice" afterward.

If TagName="Name", then TCMetadataViewer will show "Alice" in a custom view. On "drill-down" ExifTool will be called with option "a" (no duplicates allowed) and reports "Bob".

In order to avoid such confusing results, you may prevent duplicate tag names from being printed by ExifTool.

#### Backup file when writing

When option "Backup file when writing" is checked, then ExifTool will preserve the original file by adding "\_original" to the file name when writing information to an image.

When the backup option is unchecked, then ExifTool is called with additional parameter "overwrite\_original". This will overwrite the original file when writing information to an image. The overwrite is implemented by renaming a temporary file.

Please note: If a backup file already exists, it will be not overwritten.

#### Edit configuration file

This will open the <TCMetadataViewer.ini> file with the configured text editor (key "TexteditorPath" in section [Configuration]). Most INI keys are read once on program startup, thus most changes on INI file takes effect at next start of TCMetadataViewer. If key "TexteditorPath" is missed or value is empty or given path+filename doesn't exists, then the INI file is opened using Windows' default application (ShellExecute on current file, verb "open")

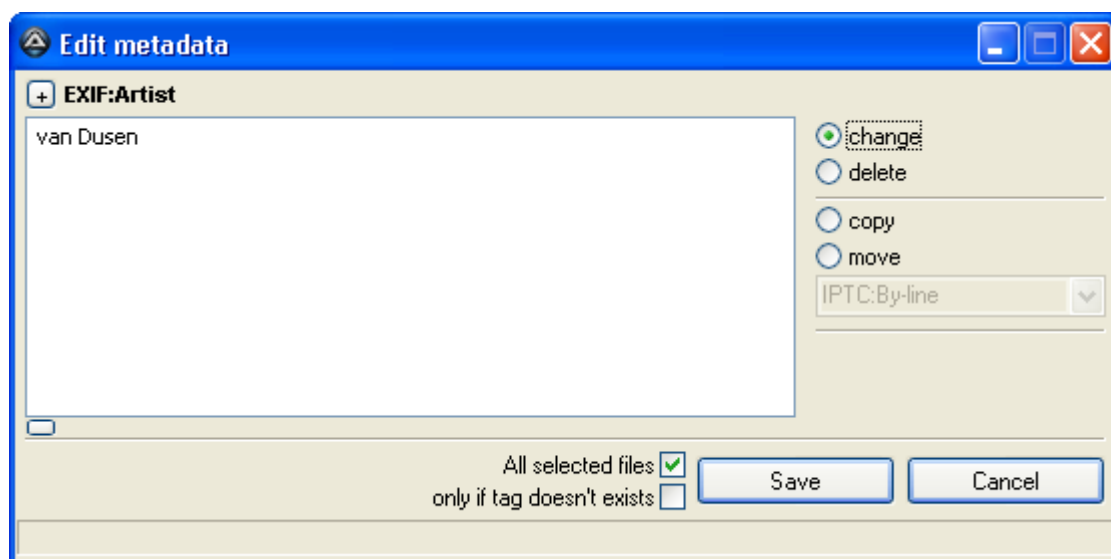
#### About

"About..." shows the version number of TCMetadataViewer and the version numbers (if available) of TC, ExifTool, the configured ImageConverter and the configured ImageViewer.

#### Listview: Standard edit dialog

This dialog will be shown, when editing any tag other than categories, keywords or person tags.

Tag values, which may contain line breaks (like EXIF ImageDescription), must be listed in section **[LineBreaks]** of INI file###



```
+4. 2. 2. 1-----+
! [+ ] {TagGroup} : {TagName} 4. 2. 2. 2          4. 2. 2. 3      !
! +-----+ (o) change      ! [{Lng}], 73
! !         ! ( ) delete    ! [{Lng}], 74
! !         ! -----      !
! !         !             !
! !         !             !
! !         !             !
! !         !             !
! !         !             !
! +-----+
! -----4. 2. 2. 5-----4. 2. 2. 6-----
! All selected files [ ] [ Save ] [Add to BAT] [ Cancel ] ! [{Lng}], 90, 75, 96, 76
! only if tag doesn't exists [ ] ! [{Lng}], 91, 92
+-----+
!         4. 2. 2. 7      !
+-----+
```

#### [+] / [-] button

If {TagGroup} : {TagName} isn't already applied to the current custom view, this button is enabled with caption "+". A click on this button adds the currently edited tag to the custom view: a line

**{TagGroup} : {TagName}=[={TagGroup}. {TagName}]**

will be appended to the end of the custom view related section of the INI file.

If {TagGroup} : {TagName} is already applied to the current custom view *and* a key

**{TagGroup} : {TagName}**

exists in the the custom view related section of the INI file, then this button is enabled with caption "-". A click on this button will delete the key (and the applied value) from the INI file. Afterwards the button will be disabled (and its caption will be set to "±").

Otherwise this button is disabled.

#### Label {TagGroup}:{TagName}

Tag group and tag name of the currently edited tag

#### Radio button "change"

Original tag value will be changed to the value, which has been entered in the edit box, when clicking the [Save] button.

Option (checkbox) “only if tag doesn’t exist” will be enabled, if option (checkbox) “All selected files” is ticked. If the checkbox “only if tag doesn’t exist” is ticked and the tag already exists in the currently processed file, then the tag keeps unchanged. Check is done by ExifTool using conditional execution:

```
[...] -if[not ${TagGroup}:{TagName}]-{TagGroup}:{TagName}={TagValue from Editbox} [...]
```

### Radio button “delete”

Original tag value will be deleted (and tag will be removed where necessary) when clicking the [Save] button.

Option (checkbox) “only if tag content is equal” will be enabled, if option (checkbox) “All selected files” is ticked.

If the checkbox “only if tag content is equal” is ticked and when button [Save] is clicked, then the tag value from the focused file will be checked against the tag value for each selected file:

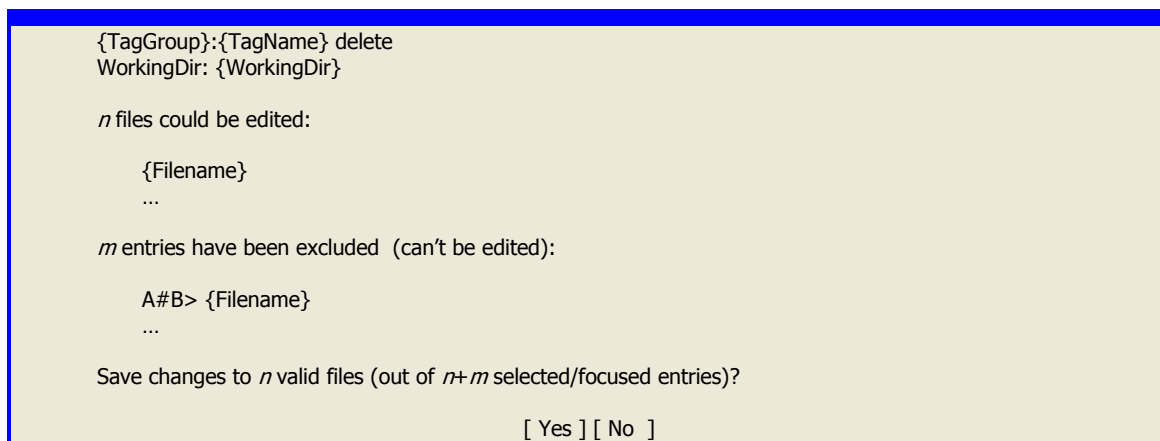
1. Tag value from focused file will be extracted as binary data to the file <TCMetadataViewer\_BinaryDataRef.bin> as reference data

For each selected file:

2. Tag value will be extracted as binary data to the file <TCMetadataViewer\_BinaryData.bin>

3. Reference data will be compared to current data

After this validation has been done, a confirmation dialog will be shown:



“A#B>” is printed as reason, if tag value of the mentioned file differs from the reference data.

### Edit box

A simple text box. Enter the new value for the tag here.

Please note, that TCMetadataViewer doesn't make any validation on your new value. Validation is made by ExifTool on save. In case of any error on save this error will be caught from ExifTool and reported by TCMetadataViewer.

### Checkboxes “All selected files”, “only if...”

All selected files

If checkbox “All selected files” is unchecked, then the tag value will be saved only to the focussed file.

If checkbox “All selected files” is checked, then the tag value will be saved to the focussed file and all selected files. On “Save” or “Add to BAT” these files will be validated at first (see 4.2.2.6).

only if tag doesn't exists / only if tag content is equal

With this checkbox you can add a condition for changing or deleting a tag in multiple files. This checkbox will be enabled if checkbox “All selected files” is checked. The condition depends on the selected operation; the caption is set accordingly:

- Radio button “change” is checked

Caption of checkbox is set to “only if tag doesn't exists”

With this condition set you can restrict change of tag to those selected files, which doesn't have the tag set so far. If the tag already exists in the processed file, it will not be changed.

This condition will be checked by ExifTool using the command line paramter

```
-if "not ${TagGroup}:{TagName}"
```

Please note: If you choose “Add to BAT”, the condition will be not validated until the batch file will be executed.

- Radio button “delete” is checked  
Caption of checkbox is set to “only if tag content is equal”

With this condition set you can restrict deletion of tag to those selected files with a tag value identical to that of the focussed file. If the tag values diverges, the tag will not be deleted from the processed file.

This condition will be instantly validated by TCMetadataViewer on “Save” or “Add to BAT”. If the values diverges, the processed file will be excluded from saving (see result “A#B” in 4.2.2.6).

**Button [Save]**

Saves the new value given in the edit box to the tag. Old tag value will be overwritten. In case of any error it will be caught from ExifTool and reported by TCMetadataViewer.

If “All selected files” is checked, then each selected file will be validated. After validation has been finished, a summary of validation results will be shown with a confirmation request:

```
{TagGroup}:{TagName} {Operation}
WorkingDir: {WorkingDirectory}

n files could be edited:

    {Filename}
    ...

m entries have been excluded (can't be edited):

    {Reason}> {Path}\{Filename}
    ...

Save changes to n valid files (out of n+m selected/focused entries)?

[ Yes ] [ No ]
```

|             |   |
|-------------|---|
| {Operation} | change delete   |
| {Reason}    | Uni Ext Dir A#B Bat   |
|             | Uni .....Filename contains non-ANSI characters  |
|             | Ext.....Filename extension is not equal to that of focussed (and currently in TCMetadataViewer shown) file  |
|             | Dir.....Selected entry is not a file, but a directory   |
|             | A#B.....Operation “delete” with option “only if tag content is equal” should be performed, but tag value of focussed (and currently in TCMetadataViewer shown) file is not equal to that of stated file |

Based on the information found in the files <TCMetadataViewer\_ExifTool\_XMLTagDB.xml> and <TCMetadataViewer\_ExifTool\_WritableExts.txt> TCMetadataViewer enables/disables the "Save" button. These two files will be generated automatically by TCMetadataViewer. If TCMetadataViewer notice, that ExifTool has been updated, they will be refreshed automatically by TCMetadataViewer.

[Add to BAT]

Doesn't save your changes immediately, but appends several lines to the batch file

<TCMetadataViewer\_BatchEdit.bat> (located in TCMetadataViewer installation directory):

```
@Rem Added {SysDate} {SysTime}
```

```
@Rem {TagGroup}:{TagName} {Path}\{Filename}
```

```
@CD { Path }
```

{ExifTool command with parameters}

If batch file doesn't exist, it will be created.

If “All selected files” is checked and if batch file already exists and {TagGroup}:{TagName} is found for {Path}{Filename} in the batch file, then you will be asked for confirmation at first: (see description of button [Save] for further information).



If “All selected files” is checked, then each selected file will be validated (including the batch file check). After validation has been finished, a summary of validation results will be shown with a confirmation request: (see description of button [Save] for further information).

Conversion to DOS charset is done where necessary. Non-ANSI characters in new tag value are allowed, because they will be replaced by their HTML equivalents before writing the ExifTool command line to the batch file.

For tag values, which need to be imported from a data file (tag value contains line breaks and “CRLF” is set for tag name in INI section [LineBreaks]), the tag value will be written to a file <TCMV\_YYYYMMDD\_HHMMSS\_TagGroup\_TagName.bin> in %TEMP% directory; this data file will be referenced in the generated ExifTool command.

Click on the rightmost part of the status bar (where process step is shown) in order to execute the batch file. See 4.4.1.4 for further details.

### Button [Cancel]

Edit tag dialog will be closed without any changes on the original metadata.

## INI file <TCMetadataViewer.ini>

### [Configuration]

|                           |  |   |
|---------------------------|--|---|
| Language                  | <b>ENG</b>   | A section with the same name as defined in value for key <b>Language</b> must be set up   |
| ExifToolLang              | cs   de   <b>en</b>   en_ca   en_gb   es   fr   it   ja   ko   nl   pl   ru   sv   tr   zh_cn   zh_tw  | Set current language for tag descriptions and converted values<br>Use "ExifTool -lang" to get a list of available languages   |
| ExifToolCharacterEncoding | UTF8   <b>Latin</b>   Latin2   Cyrillic   Greek   Turkish   Hebrew   Arabic   Baltic   Vietnam   Thai<br>or use aliases: cp65001   cp1252   cp1250   cp1251   cp1253   cp1254   cp1255   cp1256   cp1257   cp1258   cp874                    | Sets the ExifTool character encoding for input values when writing  |
| ExifToolPath              | Example:<br>%ProgramFiles%\Misc\ExifTool.exe   | Path+Filename to ExifTool.exe   |
| ImageConverterPath        | Examples:<br>For ImageConverter = IrfanView:<br>%ProgramFiles%\IrfanView\i_view32.exe<br>For ImageConverter = NConvert:<br>%ProgramFiles%\XnView\nconvert.exe<br>For ImageConverter = ImageMagick:<br>%ProgramFiles%\ImageMagick\convert.exe | Optional. Path+Filename to IrfanView or NConvert or ImageMagick (convert.exe)<br>IrfanView or NConvert or ImageMagick is used to generate the QuickView image (if key <b>ImageConverter</b> isn't missed and isn't empty)   |
| ImageViewerPath           | Example:<br>%ProgramFiles%\FastStone Image Viewer\FSViewer.exe   | Optional. Path+Filename to the image viewer, which is used when left clicking the QuickView image or using the context menu. If key <b>ImageViewerPath</b> is missed or value is empty, then images are opened using Windows' default application (ShellExecute on current file, verb "open") |
| PackJPGPath               | Example:<br>%ProgramFiles%\Misc\packJPG.exe  | Optional. Path+Filename to packJPG.exe (for unpacking/repacking PJG files)<br>If key <b>PackJPGPath</b> is missed or value is empty or given path+filename doesn't exist, then you will get a warning, when viewing a PJG file  |
| TexteditorPath            | Example:<br>%ProgramFiles%\Notepad2\notepad2.exe   | Optional. Path+Filename to the text editor, which is used for editing <TCMetadataViewer.ini><br>If key <b>TexteditorPath</b> is missed or value is empty or given path+filename doesn't exist, then <TCMetadataViewer.ini> is   |

|                         |  |  |
|-------------------------|--|--|
|                         |  | opened using Windows' default application (ShellExecute on current file, verb "open")  |
| ImageConverter          | IrfanView   NConvert   ImageMagick   | ImageConverter is used to generate the QuickView image and to perform lossless operations on JPEG images   |
| ImageConvertFileExtsSTD | Example:<br>bmp   dng   gif   hdp   ico   j2k   jp2   jpc   jpeg   jpg   jpg_original   png   psd   tga   tif   tiff   wdp   wmf | List of file extensions, separated by pipe symbol (" ") (see <a href="#">chapter 3.2.1 for details</a> )   |
| ImageConvertFileExtsRAW | Example:<br>arw   cr2   crw   dcr   dng   eff   mrw   nef   orf   pef   raf   srf   x3f  | List of file extensions, separated by pipe symbol (" ") (see <a href="#">chapter 3.2.1 for details</a> )   |
| Gamma                   | Example:<br>2.0<br>Default: <b>1.0</b>   | Modifys gamma for quickview image:<br>IrfanView: 0.01...6.99<br>NConvert: 0.01...5.0<br>ImageMagick: 0.8...2.3   |
| Contrast                | Example:<br>48<br>Default: <b>1</b>  | Modifys contrast for quickview image:<br>IrfanView: -127...127<br>NConvert: -100...100<br>ImageMagick: -100...100  |
| BGColor                 | Example and Default:<br><b>0x404040</b>  | Background color for the GUI and its controls (format: 0xRRGGBB)   |
| BGColorActiveControls   | Example and Default:<br><b>0xEBCADB</b>  | Text color and "highlight" color for active controls (format: 0xRRGGBB)  |
| BGColorInactiveControls | Example and Default:<br><b>0x909090</b>  | Background color and "dimmed" color for inactive controls (format: 0xRRGGBB)   |
| ColorSyncDefault        | Example and Default:<br><b>0x5D7080</b>  | Default text color in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)   |
| ColorSyncHeader         | Example and Default:<br><b>0x5080FF</b>  | Text color for headers in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)   |
| ColorSyncSkip           | Example and Default:<br><b>0x808080</b>  | Text color for skipped entries in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)   |
| ColorSyncNoMatch        | Example and Default:<br><b>0x808080</b>  | Text color for tags/files with no match in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)  |
| ColorSyncMixed          | Example and Default:<br><b>0x5080FF</b>  | Text color for headers in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)   |
| ColorSyncNew            | Example and Default:<br><b>0x99CC00</b>  | Text color for new tags/files with new tags (but no not-equal or obsolete tags) in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)          |
| ColorSyncEqual          | Example and Default:<br><b>0xD0D0D0</b>  | Text color for equal tags/files with equal tags (but no new, not-equal or obsolete tags) in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB) |
| ColorSyncNotEqual       | Example and Default:<br><b>0xFFCC00</b>  | Text color for not equal tags/files with not equal tags (but no new or obsolete tags) in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)    |
| ColorSyncObs            | Example and Default:<br><b>0xFF6600</b>  | Text color for obsolete tags/files with obsolete tags (but no new or not-equal tags) in SyncSelectedTags and SyncSelectedFiles dialog (format: 0xRRGGBB)     |
| TCQuickviewPanel        | Left   <b>Right</b>  | TC's file panel, where TCMetadataViewer is shown   |
| PanelDivider            | Example and Default:<br><b>50</b>  | Relative position of the imaginary horizontal divider measured from the top border of TCMetadataViewer's window in 5% steps                                  |
| ColumnWidthTagGrp       | <b>-1</b>   0   1...n  | Width of tag group column in the listview<br>-1 = AutoSizeColumn<br>0 = HideColumn<br>1...n = ColumnWidth in Pixel   |
| ColumnWidthTagID        | <b>-1</b>   0   1...n  | Width of tag ID column in the listview   |

|   |   |  |
|---|---|--|
|   |   |  |
| ColumnWidthTagNam                       | -1   0   1...n  | Width of tag name column in the listview   |
| ColumnWidthTagVal                       | -1   0   1...n  | Width of tag value column in the listview  |
| ColumnAlignTagNam                       | 0   1   2   | 0 = Left aligned<br>1 = Right aligned<br>2 = Centered  |
| ShowXMPDaylightSavings                  | 0   1   2   | <p>0 = Don't show DST symbol at all<br/> 1 = Show DST symbol (sun/snowflake) according to value of <b>XMP.DaylightSavings</b> or "undefined" symbol (clock symbol) if XMP.DaylightSavings is not set<br/> 2 = Show DST symbol (colored sun/snowflake) according to value of <b>XMP.DaylightSavings</b> or DST symbol (pale sun/snowflake) according to <b>EXIF.DateTimeOriginal</b>, if <b>XMP.DaylightSavings</b> is not set</p> <p>Only set ShowXMPDaylightSavings to "2", if you are living/your pics has been taken mainly in a country, where DST begins on last sunday in march and ends on last sunday in october! This is true for most EU nations (since 1996), Switzerland and some more countries</p> <p>DST-flag (0=standard time; 1=DST) will be stored in user-defined tag <b>XMP.DaylightSavings</b></p> <p>If <b>ShowXMPDaylightSavings</b> is set to "1" or "2" and if you like to save the DaylightSavings and TimeZone information, then the user-defined XMP tags <b>XMP.DaylightSavings</b> and <b>XMP.TimezoneName</b> needs to defined in ExifTool configuration file &lt;.ExifTool_config&gt;. A sample of &lt;.ExifTool_config&gt; is delivered with &lt;TCMetadataViewer_2.0.zip&gt;</p> |
| DefaultXMPTimezone                      | <p>Examples:<br/> +1 MEZ +2 MESZ<br/> +0 WET +1 WEST<br/> -1 AZOST +0 AZODT<br/> -3 ART -2 ARDT</p> | <p>Value for this key consists of 4 parts, divided by a pipe symbol:<br/> UTC-offset (h) (standard time)   TimezoneName (standard time)   UTC-offset (h) (daylight saving time)   TimezoneName (daylight saving time)</p> <p>Abbreviation for name of Timezone will be stored in user-defined tag <b>XMP.TimezoneName</b></p> <p>Time offset from GMT (in h) for EXIF.DateTimeOriginal will be stored in tag <b>EXIF.TimeZoneOffset</b></p> <p>Unfortunately, fractional parts of an hour can't be stored (e.g. Australian Central Standard Time=GMT+9:30), because data type of <b>EXIF.TimeZoneOffset</b> is INTEGER.</p> <p>When you click on DaylightSavings symbol (sun/snowflake), <b>XMP.DaylightSavings</b>, <b>XMP.TimezoneName</b> and <b>EXIF.TimeZoneOffset</b> will be written to the metadata</p> <p>Delete INI key <b>DefaultXMPTimezone</b> (or comment it) in order to avoid writing of <b>XMP.TimezoneName</b> and <b>EXIF.TimeZoneOffset</b>; only <b>XMP.DaylightSavings</b> will be written then.</p>   |
| ShiftAllDatesOnChangeXMPDaylightSavings | 0   1   2   | <p>0 = No<br/> 1 = Yes<br/> 2 = Ask</p> <p>When you click on DaylightSavings symbol (sun/snowflake), TCMetadataViewer can increase/decrease the <b>EXIF</b> dates <b>DateTimeOriginal</b>, <b>CreateDate</b> ("DateDigitized") and <b>ModifyDate</b> ("DateTime") accordingly</p>  |
| MoveCursorToNextFileAfterSetXMPTimezone | 0   1   |  |
| LayoutXMPPRating                        | Stars   <b>Boxes</b>  |  |
| MoveCursorToNextFileAft                 | 0   1   |  |

|                                       |                                 |  |
|---------------------------------------|---------------------------------|--|
| erSetXMPRating                        |                                 |  |
| ShowXMPLLabel                         | 0   1                           |  |
| MoveCursorToNextFileAfterSetXMPLLabel | 0   1                           |  |
| AllowMultLabel                        | 0   1                           | 0 = Tag <b>XMP.Label</b> may contain none or exact <i>one</i> value<br>1 = A list of label values, separated by " ", may be read from / written to tag <b>XMP.Label</b>  |
| ListviewFontSize                      | <i>n</i><br>Default: <b>8.5</b> |  |
| ListviewFontWeight                    | <b>400</b>   700                | 400 = Normal<br>700 = Bold   |
| ListviewFontName                      | Default:<br><b>Tahoma</b>       |  |
| UpdateMetadataDate                    | 0   1                           | 0 = <b>XMP.MetadataDate</b> isn't updated on changing metadata<br>1 = <b>XMP.MetadataDate</b> is updated to current date on changing metadata  |
| TagGrouping                           | <b>Typ</b>   Loc   Cat          | Organize output by tag group family:<br>Typ = "general location"<br>Loc = "specific Location"<br>Cat = "category"  |
| TagNames                              | <b>Name</b>   Desc              | Tag descriptions and converted values are output...:<br>Name = in default language [en]<br>Desc = as localized descriptions according language set in key ExifToolLang   |
| TagValues                             | <b>Lit</b>   Num                | Lit = Extracted values are converted to a more human-readable format<br>Num = Read and write values as numbers instead of words  |
| UseSidecarFile                        | 0   1                           | 0 = Process original file for reading/writing metadata<br>1 = Process "Sidecar"-file (*. xmp; *. mie) for reading/writing metadata)  |
| SidecarFileType                       | <b>mie</b>   xmp                |  |
| MagnifyResample                       | 0   1                           | 0 = Don't use resample for zooming >100%<br>(NConvert: -r type quick)<br>1 = Use resample for zooming >100%<br>(IrfanView: /resample; NConvert: -r type lanczos)   |
| GeoService                            | <b>GoogleMaps</b>   BingMaps    | If metadata contains GPS information, then the GeoService (http://maps.google.de/maps; http://www.bing.com/maps) can be called to show the GPS position in your internet browser   |
| AllowDuplicateTagNames                | 0   1                           |  |
| Backup                                | 0   1                           | 0 = Don't backup files before writing<br>1 = Backup files before writing   |
| WriteLog                              | 0   1   2                       | 0 = Don't log actions to logfile<br>1 = Log write actions (and a few additional) to TCMetadataViewer.log (created in directory, where TCMetadataViewer.exe resides):<br>AddCommandToBatch   ChangeDir  <br>ConvertIPTCTagsToUTF8   DeleteMetadata  <br>FeedExifTool   FileCopy   FileMove  <br>LosslessJPGOperation   PackJPG   ProgramExit  <br>ProgramStart   RestartExifTool   RunExifTool  <br>SaveMetadata   SetXMPDaylightSavings   SetXMPLLabel  <br>SetXMPRating   ShiftDateTime   ShutdownExifTool  <br>StartUpExifTool   UnPackJPG<br>2 = Log all (read and write) actions to TCMetadataViewer.log |
| DelayOnExit                           | 0   <i>n</i>                    | 0 = No delay on program exit<br>>0 = Delay of <i>n</i> seconds on program exit   |

## [LineBreaks]

- List tags here, which may contain line breaks  
Format: {TagGroup} : {TagName} =CRLF
- Tags, which contains lists of values (like **IPTC.Keywords** or **IPTC.SupplementalCategories**) needs not to be listed, provided that they have the "list" flag set in <TCMetadataViewer\_ExifTool\_XMLTagDB.xml>. TCMetadataViewer searches the XMLTagDB for the tag name each time before it opens the tag edit dialog.

TCMetadataViewer reads amongst other tag attributes the flags of the tag and will automatically open the appropriate type of the tag edit dialog.

- Tags, which contains lists of values, but have not the “list” flag set (like `FlashPix.TitleOfParts`), should be listed here.

Syntax: `{TagGroup} : {TagName} =LF`

Examples:

```
*** Comments
EXIF:XPCOMMENT=CRLF
File:Comment=CRLF
EXIF:UserComment=CRLF
ID3v2_3:Comment=CRLF

*** Descriptions
EXIF:ImageDescription=CRLF
IPTC:Caption-Abstract=CRLF
XMP:Description=CRLF

*** Other
FlashPix:TitleOfParts=LF
```

## [CustomViews]

List the names of all your custom views here and assign file extensions to each custom view.

`CustomView_Default` doesn't need to be listed here.

Syntax: `{NameOfCustView} = {Ext_1} | ... | {Ext_n}`

Examples:

```
CustomView_Images=bmp|cr2|gif|jpg|mie|png|tif|xmp
CustomView_Audio=mp3|ogg
CustomView_Office=doc|pdf|ppt|xls
```

## [CustomView\_Default]

Custom view `CustomView_Default` is used, if section `[CustomViews]` doesn't exist or none of the custom views listed in section `[CustomViews]` matches the currently viewed file.

If custom view `[CustomView_Default]` doesn't exist, then tag filter is set to “All” automatically

Syntax is similar to that of Total Commander's custom view configuration:

`{Desc} = {UcPre} [= {CPre} " {TGrp} . {TNam} . {U} : {SStrInst} " {CPost} "]" {UcPost}`

|                         |                          |
|-------------------------|--------------------------|
| <code>{Desc}</code>     | : {Description}          |
| <code>{UcPre}</code>    | : {UnconditionalPrefix}  |
| <code>{CPre}</code>     | : {ConditionalPrefix}    |
| <code>{TGrp}</code>     | : {TagGroup}             |
| <code>{TNam}</code>     | : {TagName}              |
| <code>{U}</code>        | : {Unit}                 |
| <code>{SStrInst}</code> | : {SubStrInstruction}    |
| <code>{CPost}</code>    | : {ConditionalPostfix}   |
| <code>{UcPost}</code>   | : {UnconditionalPostfix} |

`{TagGroup} . {TagName}` must be given (minimum syntax: `[={TagGroup} . {TagName}]`), all other parts are optional.

You may define multiple tags on one line. Each line corresponds to one line in the Listview.

In order to insert an empty line in the listview output, define a `{Desc}` key without a value assigned:  
`{Desc}=`

Strings set for `{ConditionalPrefix}` and `{ConditionalPostfix}` (between a pair of square brackets and surrounded by double quotes) will be only shown, if tag `{TagGroup}. {TagName}` exists.

Strings set for `{UnconditionalPrefix}` (left to the opening square bracket) and `{UnconditionalPostfix}` (right to the closing square bracket) will be always displayed.

In order to add grouping headers to the listview, add to your `[CustomView_...]` definition:  
`$Group={Group header text}`

Example:

```
$Group=Dateinformationen
Dateityp, MIME-Typ=[File.FileType] [= " " · "File.MIMETyp]
Dateiname=[File.FileName]
Leerzeile=
Änderungsdatum=[File.FileModifyDate]
Dateigröße=[File.FileSize]
Kommentar=[File.Comment]
$Group=Executable
ProductName=[EXE.ProductName]
OriginalFilename=[EXE.OriginalFilename]
Product-/FileVersion=[EXE.ProductVersion] · [=EXE.FileVersion]
FileDescription=[EXE.FileDescription]
Comments=[EXE.Comments]
LegalCopyright=[EXE.LegalCopyright]
```

## **[{NameOfCustomView}]**

Custom view `{NameOfCustomView}` is used, if the extension of the currently viewed file is found in one of the file extension lists in section `[CustomViews]`

If section `[{NameOfCustomView}]` doesn't exist, then custom view `[CustomView_Default]` is used

Syntax: see description for INI section `[CustomView_Default]`

Examples:

```
[CustomView_Office]
Anwendungsname=[FlashPix.Software]
Dateityp=[File.FileType]
Dateiname=[File.FileName]
Änderungsdatum=[File.FileModifyDate]
Leerzeile=
Thema=[FlashPix.Subject]
Titel=[FlashPix.Title] [=PDF.Title]
Firma=[FlashPix.Company]
Autor=[FlashPix.Author] [=PDF.Author]
Erstellt am=[FlashPix.CreateDate] [=PDF.CreateDate]
Zuletzt gespeichert am, von=[FlashPix.ModifyDate] [=PDF.ModifyDate]
[=" " · "FlashPix.LastSavedBy]
Version=[FlashPix.RevisionNumber]
Leerzeile=
Seiten/Folien=[FlashPix.PageCount" Seite(n)"]
[=" " · "FlashPix.Slides" Folie(n)"] [=FlashPix.Slides" Folie(n)"]
[=" (+ "FlashPix.HiddenSlides" verborgene)"]
Teile=[FlashPix.HeadingPairs]
Titel der Teile=[FlashPix.TitleOfParts]
Leerzeile=
```



Stichwörter=[FlashPix. Keywords]

Kommentare=[FlashPix. Comments]

#### [CustomView\_Images]

\$Group=Beschreibung

Personen (Regionen)=[XMP. RegionPersonDisplayName]

Personen=[XMP. PersonInImage]

Leerzeile=

Fotograf, Copyright=[EXIF. Artist" [E]" [= " · "IPTC. By-line" [I]"  
[=" · "XMP. Creator" [X]" [= " · "EXIF. XPAuthor" [W]"  
[=" · "EXIF. Copyright" [E]"  
[=" · "IPTC:CopyrightNotice" [I]" [= " · "XMP:Rights" [X]"  
Titel=[IPTC. Headline" [I]" [= " · "XMP. Headline" [X]"  
[=" · "EXIF. XPTitle" [W]" [= " · "EXIF. XPSubject" [W]"

Ereignis=[XMP. Event]

Beschreibung=[EXIF. ImageDescription" [E]" [= " · "IPTC. Caption-Abstract" [I]"  
[=" · "XMP. Description" [X]"

Kommentar=[File. Comment" [J]" [= " · "EXIF. UserComment" [E]"  
[=" · "EXIF. XPComment" [W]"

Bewertung, Label=[XMP. Rating] [= " · "EXIF. Rating" [E]"  
[=" · "EXIF. RatingPercent" [E]" · [=XMP. Label]

Leerzeile=

Kategorien=[IPTC. SupplementalCategories" [I]"  
[=" · "XMP. SupplementalCategories" [X]"

Schlüsselwörter=[IPTC. Keywords" [I]" [= " · "XMP. Subject" [X]"  
[=" · "EXIF. XPKeywords" [W]"

\$Group=Technische Aufnahmedetails

Zeit, Blende, ISO, Korrektur=[EXIF. ExposureTime" s"] · [= "f"EXIF. FNumber] ·  
[="ISO "EXIF. ISO" [= " · ISO "MakerNotes. ISO" [M]" ·  
[EXIF. ExposureCompensation]

Kamera, SW, Objektiv=[EXIF. Make] · [=EXIF. Model] · [=EXIF. Software] · [=Composite. LensID]

Crop, Brennweite=[Composite. ScaleFactor35efl] · [=Composite. FocalLength35efl]

Blitz, Macro=[EXIF. Flash] · [=MakerNotes. Macro]

MotivPrg, Belicht. Prg, Weißabgl.= [MakerNotes. PictureMode] ·  
[EXIF. ExposureProgram] · [=MakerNotes. WhiteBalance]

Verwackeln, Fokus, Belicht.= [MakerNotes. BlurWarning] · [=MakerNotes. FocusWarning] ·  
[MakerNotes. ExposureWarning]

\$Group=Basisinformation

B×H, Ausrichtung, DPI=[Composite. ImageSize] · [=EXIF. Orientation" [E]"  
[=" · "MakerNotes. CameraOrientation" [M]" · [=EXIF. XResolution" dpi"]

OriNam, DatNr, Größe=[EXIF. DocumentName" [E] · "  
[IPTC. ObjectName" [I] · "] [=Composite. FileNumber] · [=File. FileSize]

EXIF: B×H=[EXIF. ExifImageWidth" ×"] [=EXIF. ExifImageHeight]

\$Group=Datums-/Zeitangaben

Datei ÄndDat=[File. FileModifyDate]

AufnahmeDat=[EXIF. DateTimeOriginal] [= "EXIF. SubSecTimeOriginal]  
[="+ "EXIF. TimeZoneOffset":00"] · [=XMP. TimezoneName]  
[=" · "XMP. TimezoneNameAbbreviation] · [= "Sommerzeit"XMP. DaylightSavings]  
[=" · DST"XMP. DaylightSavingTime]

SeqNr=[#"MakerNotes. SequenceNumber]

Metadaten ÄndDat=[XMP. MetadataDate]

\$Group=Verortung

Land, Region=[IPTC. Country-PrimaryLocationName" [I]" [= " · "XMP. Country" [X]" · [=IPTC. Province-  
State" [I]" [= " · "XMP. State" [X]"

Stadt, Ort=[IPTC. City" [I]" [= " · "XMP. City" [X]" · [=IPTC. Sub-location" [I]"  
[=" · "XMP. Location" [X]"

GPS-Position=[EXIF. GPSLatitude] [= "EXIF. GPSLatitudeRef" [= "EXIF. GPSLongitude]  
[=" · "EXIF. GPSLongitudeRef]

GPS-Richtung=[EXIF. GPSTimeDirection" [E]" [= " · "XMP. GPSTimeDirection" [X]"

#### [CustomView\_Audio]

Künstler, Komponist=[ID3. Artist] [=Vorbis. Artist] [= " · "ID3. Composer]

Album, Jahr, Genre=[ID3. Album] [=Vorbis. Album] [= " · "ID3. Year]  
[=" · "Vorbis. Date" [= " · "ID3. Genre" [= " · "Vorbis. Genre]

Leerzeile=

```

Title=[="[ID3. Track"] "[ID3. Title]" "[Vorbis. TrackNumber]" "[
[Vorbis. Title]" "Composite. Duration]
Leerzeile=
Kommentar=[ID3. Comment][Vorbis. Comment]
Leerzeile=
Bitrate=[MPEG. AudioBitrate][Vorbis. NominalBitrate] [= "MPEG. LameMethod]
Kanäle=[MPEG. ChannelMode][Vorbis. AudioChannels]
Encoder=[MPEG. Encoder]

```

## [FilterButtons]

Filter buttons above listview are:

```

User Search All Cust ...
{ TagGroup1 } { TagGroup2 } { TagGroup3 } { TagGroup4 } { TagGroup5 } { TagGroup6 } ...
Regions Desc Thumb Preview

```

List group names and button caption here for those tag groups, you like to have a filter button `{ TagGroupn }` for (however, a button is only shown, if matching tags are present in the file)

Syntax: `{Key} = {GroupName:ButtonCaption}`  
`{Key}` and `{ButtonCaption}` are arbitrary strings  
`{Groupname}` should be a valid tag group name (otherwise it will never match any tag)

Examples:

```

TagGroupTyp=File:File
TagGroupTyp=Composite:Comp
TagGroupTyp=EXIF:EXIF
TagGroupTyp=IPTC:IPTC
TagGroupTyp=XMP:XMP
TagGroupTyp=MakerNotes:Maker
TagGroupTyp=PNG:PNG
TagGroupTyp=BMP:BMP
TagGroupTyp=FlashPix:Doc
TagGroupTyp=PDF:PDF
TagGroupTyp=HTML:HTML
TagGroupTyp=MPEG:MPEG
TagGroupTyp=QuickTime:QuickT
TagGroupTyp=H264:H264
TagGroupTyp=M2TS:M2TS
TagGroupTyp=ID3:ID3
TagGroupTyp=ID3v1:ID3v1
TagGroupTyp=ID3v2_3:ID3v2
TagGroupTyp=Vorbis:Vorbis
TagGroupTyp=RIFF:RIFF
TagGroupTyp=ASF:ASF
TagGroupTyp=EXE:EXE
TagGroupCat=Image:Image
TagGroupCat=Camera:Camera
TagGroupCat=Time:Time
TagGroupCat=Location:Location
TagGroupCat=Author:Author
TagGroupCat=Other:Other
TagGroupCat=Unknown:Unknown

```

## [Categories]

List of predefined categories, which can be assigned, when editing `IPTC:SupplementalCategories` or `XMP:SupplementalCategories` tags

Syntax: `{Key} = {Category}`  
`{Key}` is an arbitrary string

Example:

```
Category=—— Representative categories ——  
Category=Landscape  
Category=Architecture  
Category=People  
Category=Fauna & Flora  
Category=Objects  
Category=Transport  
Category=Food & Drink  
Category=Sport & Leisure  
Category=Background & Texture  
Category=Abstract  
Category=Other  
Category=—— Conceptual categories ——  
Category=Business  
Category=Technology  
Category=Emotions & Feelings  
Category=Concept  
Category=Human Features  
Category=Lifestyle  
Category=Leisure  
Category=Welfare  
Category=Science & Nature  
Category=Social Issues  
Category=Travel
```

## [Keywords]

List of predefined keywords, which can be assigned, when editing `IPTC:Keywords` or `XMP:Subject` tags

Syntax: `{Key} = {Keyword}`  
`{Key}` is an arbitrary string

Example:

```
Keyword=—— Group 1 ——  
Keyword=Keyword 1  
Keyword=Keyword 2  
Keyword=—— Group 2 ——  
Keyword=Keyword 3  
Keyword=Keyword 4  
Keyword=—— Other ——  
Keyword=Keyword 5  
Keyword=Keyword 6
```

## [Persons]

List of predefined names of persons, which can be assigned, when editing `XMP:PersonInImage` or `XMP:PersonDisplayName` tags

Syntax: `{Key} = {Person}`  
`{Key}` is an arbitrary string

Example:

```
Person=Alice  
Person=Bob  
Person=Carol  
Person=Dave  
Person=Eve
```

```
Person=Marvin
Person=Oscar
Person=Peggy
Person=Trudy
Person=Victor
```

## [LabelsMapTag2DispColor]

Which label color should be shown, when the specified content is found in tag **XMP.Label**?

Syntax: **{Label|TagContent}**={Label|Color}  
**{Label|Color}**: Red|Yellow|Green|Blue|Purple

Example 1:

```
Fav=Red
TechF=Yellow
Sel=Green
Blue=Blue
Publ=Purple
```

Example 2 (Lightroom/IDimager):

```
Red=Red
Yellow=Yellow
Green=Green
Blue=Blue
Purple=Purple
```

Example 3 (Bridge):

```
Select=Red
Second=Yellow
Approved=Green
Review=Blue
To Do=Purple
```

## [LabelsMapDispColor2DispText]

Which label text and tooltip should be shown for the specified label colors?

Syntax: **{Label|Color}**={Label|DisplayedText} | {Label|Tooltip}  
**{Label|Color}**: Red|Yellow|Green|Blue|Purple

Example:

```
Red=Fav|Red: Favorite
Yellow=TechF|Yellow: Deficient (blurred/exposure/other)
Green=Sel|Green: Selected
Blue=Undef|Blue: Undefined
Purple=Publ|Purple: Published
```

## [LabelsMapDispColor2Tag]

Which Text should be stored in tag **XMP.Label**, when the specified label is clicked?

Syntax: **{Label|Color}**={Label|TagContent}  
**{Label|Color}**: Red|Yellow|Green|Blue|Purple

Example 1:

```
Red=Fav
Yellow=TechF
Green=Sel
Blue=Blue
Purple=Publ
```

Example 2:

```
Red=Red
Yellow=Yellow
Green=Green
Blue=Blue
Purple=Purple
```

## [TagMapping]

The “Edit metadata” dialog allows to copy or move the tag value from the currently edited tag to another tag within the file. Some tags may be stored in alternative places (example: Keywords are usually stored in [IPTC:Keywords](#) or [XMP:Subject](#) or [EXIF:XPKeywords](#)). In INI section TagMapping you can group tags, which are normally used for storing a certain information. Grouped tags will be available then through the TagMapping dropdown (below the “copy” and “move” radio buttons) in the “Edit metadata” dialog.

Syntax: [\[Description\]](#)={TagGroup} : {TagName} | ... | {TagGroup} : {TagName}  
{Description} is an arbitrary string

Example:

```
Documentname=File:FileName|EXIF:DocumentName|IPTC:ObjectName
Date/Time=EXIF:DateTimeOriginal|EXIF:ModifyDate|
EXIF:CreateDate|File:FileModifyDate
Categories=IPTC:SupplementalCategories|XMP:SupplementalCategories
Keywords=IPTC:Keywords|XMP:Subject|EXIF:XPKeywords
Persons=XMP:PersonInImage|XMP:RegionPersonDisplayName
Artist=EXIF:Artist|IPTC:By-line|XMP:Creator|EXIF:XPAuthor
Comment=File:Comment|EXIF:UserComment|EXIF:XPComment
Title=EXIF:XPTitle|IPTC:Headline|XMP:Headline|EXIF:XPSubject
Description=EXIF:ImageDescription|IPTC:Caption-Abstract|XMP:Description
Location=IPTC:Sub-location|XMP:Location|
XMP:LocationCreatedSublocation|XMP:LocationShownSublocation
City=IPTC:City|XMP:City|XMP:LocationCreatedCity|XMP:LocationShownCity
Region=IPTC:Province-State|XMP:State|
XMP:LocationCreatedProvinceState|XMP:LocationShownProvinceState
State=IPTC:Country-PrimaryLocationName|XMP:Country|
XMP:LocationCreatedCountryName|XMP:LocationShownCountryName
State (ISO-Code)=XMP:LocationCreatedCountryCode|XMP:LocationShownCountryCode
World Region=XMP:LocationCreatedWorldRegion|XMP:LocationShownWorldRegion
OriFilename=EXIF:DocumentName|IPTC:ObjectName|XMP:Title
Rating=EXIF:Rating|XMP:Rating
TagMapping01=IPTC:Writer-Editor|XMP:CaptionWriter
TagMapping02=IPTC:Category|XMP:Category
TagMapping03=IPTC:Urgency|XMP:Urgency
TagMapping04=IPTC:SpecialInstructions|XMP:Instructions
TagMapping05=IPTC:DateCreated|XMP:DateCreated
TagMapping06=IPTC:By-lineTitle|XMP:AuthorsPosition
TagMapping07=IPTC:OriginalTransmissionReference|XMP:TransmissionReference
TagMapping08=IPTC:Credit|XMP:Credit
TagMapping09=IPTC:Source|XMP:Source
TagMapping10=IPTC:CopyrightNotice|XMP:Rights
Orientation=MakerNotes:CameraOrientation|EXIF:Orientation
```

## [SelectedTags]

Only tags, which are listed in this section, will be considered in the SyncSelectedFiles and SyncSelectedTags functions.

Syntax: **Header**= {Header}  
      {Header} is an arbitrary string

**Tag**= {TagGroup} : {TagName}

You may define any number of headers and any number of tags per header here  
Example:

```
*** Metadata modify date
```

```
Header=Metadata ModDate
```

```
Tag=XMP:MetadataDate
```

```
*** Rating, Label
```

```
Header=Rating, Label
```

```
Tag=XMP:Rating
```

```
Tag=EXIF:Rating
```

```
Tag=EXIF:RatingPercent
```

```
Tag=XMP:Label
```

```
*** Persons
```

```
Header=Persons
```

```
Tag=XMP:PersonInImage
```

```
Tag=XMP:RegionPersonDisplayName
```

```
*** Event
```

```
Header=Event
```

```
Tag=XMP:Event
```

```
*** Categories
```

```
Header=Categories
```

```
Tag=IPTC:SupplementalCategories
```

```
Tag=XMP:SupplementalCategories
```

```
*** Keywords
```

```
Header=Keywords
```

```
Tag=IPTC:Keywords
```

```
Tag=XMP:Subject
```

```
Tag=EXIF:XPKeywords
```

```
*** Artist
```

```
Header=Artist
```

```
Tag=EXIF:Artist
```

```
Tag=IPTC:By-line
```

```
Tag=XMP:Creator
```

```
Tag=EXIF:XPAuthor
```

```
Tag=EXIF:Copyright
```

```
*** Country, Region
```

```
Header=Country, Region
```

```
Tag=IPTC:Country-PrimaryLocationName
```

```
Tag=XMP:Country
```

```
Tag=IPTC:Province-State
```

```
Tag=XMP:State
```

```
*** City, Location
```

```
Header=City, Location
```

```
Tag=IPTC:City
```

```
Tag=XMP:City
```

```
Tag=IPTC:Sub-location
```

```
Tag=XMP:Location
```

```
*** GPS position
```



```

Header=GPS position
Tag=EXIF:GPSVersionID
Tag=EXIF:GPSLatitudeRef
Tag=EXIF:GPSLongitude
Tag=EXIF:GPSLongitudeRef
Tag=EXIF:GPSDateStamp
Tag=EXIF:GPSTimeStamp
Tag=XMP:GPSLatitude
Tag=XMP:GPSLongitude
Tag=XMP:GPSDateTime

;*** Title
Header=Title
Tag=IPTC:Headline
Tag=XMP:Headline
Tag=EXIF:XPTitle
Tag=EXIF:XPSubject

;*** Description
Header=Description
Tag=EXIF:ImageDescription
Tag=IPTC:Caption-Abstract
Tag=XMP:Description

;*** Comment
Header=Comment
Tag=File:Comment
Tag=EXIF:UserComment
Tag=EXIF:XPCComment

;*** Camera, Software, Lens
Header=Camera, Software, Lens
Tag=EXIF:Make
Tag=EXIF:Model

;*** OriNam
Header=Original filename
Tag=EXIF:DocumentName
Tag=IPTC:ObjectName

;*** OriWxH
Header=Dimensions of original image
Tag=EXIF:ExifImageWidth
Tag=EXIF:ExifImageHeight

;*** Date/Time taken
Header=DateTime taken
Tag=EXIF:DateTimeOriginal
Tag=EXIF:SubSecTimeOriginal
Tag=EXIF:TimeZoneOffset
Tag=XMP:TimezoneName
Tag=XMP:DaylightSavings

```

## [FileExtensionsUnsupported]

ExifTool analyzes files regardless of their filename extension. List filename extensions of files here, which should not be processed by TCMetadataViewer at all. For files with extensions listed here the message

*Filetype not supported (File extension found in TCMetadataViewer.ini/[FileExtensionsUnsupported])*

will be displayed in the listview.

Syntax: {FilenameExtension}=0

Example:

```
7z=0
```

AU3=0  
BAT=0  
BIN=0  
CAB=0  
CHM=0  
CSV=0  
INI=0  
ION=0  
LNK=0  
LOG=0  
LST=0  
MDB=0  
MHT=0  
PAB=0  
PFI=0  
PL=0  
PM=0  
PST=0  
RAR=0  
REP=0  
RTF=0  
SITX=0  
SQL=0  
SQX=0  
TAB=0  
TXT=0  
UHA=0  
URL=0  
VBS=0

## [FileExtensionsXMPTags]

Rating buttons 1..5 should be only shown for file types, which may have XMP metadata. List filename extensions of these file types here.

See <<http://www.sno.phy.queensu.ca/~phil/exiftool/TagNames/XMP.html>>

Syntax: [FilenameExtension]=1

Example:

*;\*\*\* Image file types*

CRW=1  
DJVU=1  
DNG=1  
EPS=1  
GIF=1  
IND=1  
INX=1  
JP2=1  
JPEG=1  
JPG\_ORIGINAL=1  
JPG=1  
MIFF=1  
PDF=1  
PGF=1  
PNG=1  
PSD=1  
SVG=1  
TIF=1  
TIFF=1  
XCF=1

*;\*\*\* Video file types*

ASF=1  
AVI=1  
FLV=1

```

MOV=1
MP4=1
SWF=1
WMV=1

;*** Audio file types
WMA=1
;*** Audio formats supporting ID3v2 information
;*** (see <http://www.sno.phy.queensu.ca/~phil/exiftool/TagNames/ID3.html>)
AIFF=1
APE=1
FLAC=1
MP3=1
MPEG=1
OGG=1

;*** Other
MIE=1
XMP=1

```

## [[Language]]

Localized strings for TCMetadatViewer's GUI

## Limitations and known bugs

- You can't compare tags, if target file is a PJG archive. Reason: Target PJG archive will not be unpacked, tags of the PJG file will be compared with tags of the source file
- If MoveCursorToNextFileAfterSetXMPRating is set to "1" and current file is last file in the TC file panel, then listview of TCMetadataViewer isn't refreshed.
- You can't edit tags ("Save" button will be disabled in tag edit dialog), if name of currently viewed file contains unicode characters, which are not present in the current codepage.
- Sometimes the Up-/Down control for panel divider will be misplaced on resizing/restoring TCMetadataViewers window
- You can't view (and edit) tags of files within an archive (e.g. image files in a ZIP) except to PackJPG archived files (\*.jpg)
- If rejection of duplicate tag names is enabled, then ExifTool will prevent a tag from being printed even, if the homonymous tag belongs to an other tag group.
- Example: Metadata of a file contains IPTC.SupplementalCategories and XMP.SupplementalCategories tags  
⇒ Only XMP.SupplementalCategories will be printed
- This is desired for filters, which show tags from only one tag group (e.g. filter button „EXIF“), but (possibly) undesired for filters, which may show tags from several tag groups (e.g. filter button “Cust”)
- (to be continued...)
- Wenn ein TC-Dateifilter aktiv ist und die Änderung eines Tags bewirkt, dass die Datei aus der Ansicht entfernt wird (Bsp.: Anzeige aller JPGs mit XMP.Rating=4, dann ändern des Ratings auf 3), dann werden in TCMetadataViewer zwar die Metadaten derjenigen Datei angezeigt, die im TC neu den Fokus erhält, es wird aber kein Vorschaubild angezeigt.
- Bei einem Wechsel der TC-Ansicht von „Miniaturbild“ auf eine benutzerdefinierte Spaltenansicht wird die Richtung der automatischen Cursor-Bewegung nicht geändert (Problem noch nicht korrekt beschrieben; so jedenfalls nicht reproduzierbar)
- Wenn ein \*.JPG aus einem PJG-Archiv angezeigt wird, dann gibt es bei Größenänderung des TC-Fensters bei CreatePrevImg mit IrfanView einen load/save error (exitcode = 1) (Grund: Resize des PrevImg wird für das \*.PJG-File versucht; Aufruf ist i\_view32.exe xxx.pjg /resize=...)

## History

### V1.3 (2010-MM-DD)

- Changed ExifTool parameter “-L” isn’t used anymore for charset conversion. ListView context menu entries concerning charset conversion changed to “Write UTF-8-coded values only, if tag contains non-ANSI chars” (INI key 56 in section [{Language}]) and “Always write UTF-8-coded values” (INI key 57 in section [{Language}]).
- Added Value “1” for key “WriteLog” in INI section [configuration] now only logs write operations (and a few additional) to <TCMetadataViewer.log>. Value “2” logs all operations to the logfile.
- Added Optionally save changes to all selected files. Can be done conditionally (change only, if tag not exist; delete only, if tag value is equal to that of currently viewed file)
- Added Option: Elements of categories / keywords tags can be added / deleted selective
- Changed Encoding of <TCMetadataViewer.ini> changed from ANSI to UTF-8 in order to allow Unicode characters in custom view definitions, categories, keywords etc.
- Added TCMetadataViewer’s working directory follows the path of the currently viewed file. Now it is possible to edit files, even if the path contains unicode characters, which are not present in the current codepage. Please note: editing isn’t still possible, if filename contains Unicode characters.
- Added Comprehensive changes in order to be able to process tag values with non-ANSI characters
- Added Editing of tags now is independent from current view in TCMetadataViewer. Editing wasn’t possible so far, if TagNames was set to “Desc” and tag filter (active filter button) was not “Cust”. In order to get a tag’s standard name (and its attributes like write flag) based on the tag description, TCMetadataViewer now accesses ExifTool’s XML tag database using XPath queries (drawback: worse performance of TCMetadataViewer).
- Added File comments from <descript.ion> will be read and can be accessed (read only) through the new filter button “Desc”
- Added Direction of automated cursor movement (<Right> for TC’s thumbnail view, <Down> for TC’s other view modes) on changing XMP rating, XMP label or XMP TimeZone can be set manually via the GUI; direction will be toggled automatically on changing the view mode.
- Added Made TCMetadataViewer compatible with packJPG version v2.4 and v2.5a and keep compatibility with v2.3c (background info: packJPG v2.4/v2.5a needs to be called with new introduced parameter “-np” (no pause after processing files). Result of calling older packJPG v2.3c with parameter „-np“ would be an error “file “-np” doesn't exist”)
- Changed Reworked icons for XMP label section of GUI
- Added Additional icons for XMP rating and XMP label section of GUI with a “clock” overlay symbol (<\*\_Pend.ico>) will be shown on changing XMP.Rating / XMP.Label until changes are persistent.
- Changed Validation and update (if necessary) of reference data <TCMetadataViewer\_ExifTool\_XMLTagDB.xml> and <TCMetadataViewer\_ExifTool\_WritableExts.txt> is done at program start now
- Changed “Drill-down” for “Cust” view entries will be done even if only a single tag is defined on the appropriate line of the “Cust” view definition. This is necessary since tag attributes will be read from <TCMetadataViewer\_ExifTool\_XMLTagDB.xml>.

Several small additions / fixes (list isn’t complete):

- Added Consider font configuration for tag editing text box and categories / keywords list in edit dialog
- Fixed Path handling for files from branch view (<Ctrl><b>) improved (entries in branch view provides a relative path, which needs to be completed to an absolute path by concatenating it with the path from the path bar)
- Added Added a tooltip to the status bar with full (not truncated) filename + path name
- Fixed Path+filename of ImageConverter will be surrounded by “” now on call from command line in order to avoid problems with path-/filenames with spaces
- Fixed Running command interpreter (%comspec%) now with additional “/S” switch.
- Fixed Selected (marked) files in TC’s thumbnail view now processed correct (TC flags these file panel entries internally with a leading “\*”, which needs to be cut)
- Fixed State (enabled/disabled) of “Add to CustView” button in edit dialog will be set correct now if view mode settings are “TagGrouping” < “Typ” and/or “TagNames” < “Name”
- Fixed **[Belegung der benutzerdefinierbaren Filter-Buttons geändert (Schleife „While \$intTagListIdx > -1“)]**
- Fixed XMP Label wasn’t initialized before reading metadata: XMP Label from previous file was mixed with XMP Label of current file on changing the XMP Label.

## V1.2 (2010-04-06)

- Added Multiple custom views can be defined: You can define separate custom views per file type (per filename extension).  
New section [CustomViews] in INI file may contain a list of custom views and their associated filename extensions.  
In "Cust" view, TCMetadataViewer automatically chooses the matching custom view definition according to the extension of the viewed file.
- Added If multiple tags are defined on a line of a custom view, then a click on the appropriate listview row will "drill-down" the tags to a new temporary view (tags will be separated, one tag per listview row). "Roll-up" to the custom view with a click on the "Cust" button.
- Added Workaround (limited to read operations) for pathnames/filenames with unicode characters, which are not present in current codepage:  
ExifTool and NConvert will use short names for all read operations, if path or filename contains unicode characters. IrfanView can't process files with unicode path / filename at all, even if short name is passed as parameter. Write operations (changing metadata, rotating image etc.) are generally disabled, if path or filename contains unicode characters.
- Added Abbreviated name of day of week (Mo, Tu, ..., Su) is shown for EXIF.DateTimeOriginal in date/time area right to the preview image.  
Added: New string 85 (names of days) in language sections
- Added Symbol for standard time (snow flake) / daylight saving time (sun) is shown next to time of EXIF.DateTimeOriginal in date/time area right to the preview image.  
Can be disabled (0) / enabled (1 or 2) via new INI key "ShowXMPDaylightSavings" in section [Configuration] of INI file  
Added: New key "ShowXMPDaylightSavings" in section [Configuration] of INI file  
Added: New key "MoveCursorToNextFileAfterSetXMPTimezone" in section [Configuration] of INI file
- Added Font for listview can be configured via new keys "ListviewFontSize", "ListviewFontWeight", "ListviewFontName" in section [Configuration] of INI file
- Added Preferred (start-up) options for listview can be set in INI file, section [Configuration] (new keys "TagGrouping", "TagNames", "TagValues")  
These settings will be taken as default for activity "Reset display options" from listview context menu.
- Added New key "AllowDuplicateTagNames" in section [Configuration] of INI file
- Changed Option 'Tag edit: Always edit first tag of a line in "Cust" view (skip choice dialog)' removed (new "drill-down" function has made it dispensable)  
String 58 in language sections (changed from 'Tag edit: Always edit first tag of a line in "Cust" view (skip choice dialog)' to 'Allow duplicate tag names')
- Changed INI file, section [Configuration], keys "IrfanViewPath", "NConvertPath", "ImageMagickPath" replaced by one new key "ImageConverterPath"
- Changed String 49 in language sections (changed from 'Reset display options (Typ - Name - Lit)' to 'Reset display options')
- Fixed If "Backup file when writing" is checked, then already existing backup files now will be not overwritten any longer. The fix concerns only functions, where TCMetadataViewer needs to create the backup file (ExifTool creates backups itself, but IrfanView/NConvert (lossless JPG operations) does not)
- Fixed If extension of currently viewed file is listed in section [FileExtensionsUnsupported] or if currently focussed entry is a directory, then a manual refresh (click on right part ("Ready" etc.) of status bar) causes reading metadata for these "forbidden" files
- Changed If tag filter (active filter button) is "Comp", then edit dialog can be opened now (however, composite tags can't be stored)
- Changed Tags will be prevented from being changed/deleted ("Save" button will be disabled in tag edit dialog), if
- tag filter (active filter button) is "Comp" or
  - option TagNames is set to "Desc" and tag filter (active filter button) is not "Cust" or

- path+name of currently viewed file contains unicode characters, which are not present in the current codepage
- Changed Reference files "TCMetadataViewer\_ExifTool\_WritableExts.txt" and "TCMetadataViewer\_ExifTool\_WritableTags.txt" will be renewed, if
- TCMetadataViewer has been updated (version of installed TCMetadataViewer differs from version, which is stored in 1st line of "TCMetadataViewer\_ExifTool\_WritableExts.txt")
  - ExifTool config file (<.ExifTool\_config>) has been updated (file modify date or file size of installed <.ExifTool\_config> differs from info, which are stored in 2nd line of "TCMetadataViewer\_ExifTool\_WritableExts.txt")
  - ExifTool has been updated (version of installed ExifTool differs from version, which is stored in 3rd line of "TCMetadataViewer\_ExifTool\_WritableExts.txt")
- Added Show path to currently viewed file in left section of status bar (format: {filename} [{path}])
- Added Utility <TCMetadataViewer\_UpdateINI.exe> for creating or updating <TCMetadataViewer.ini>

## V1.1 (2010-03-12)

- Added Support for ImageMagick (convert.exe) as ImageConverter. New key "ImageMagickPath" in section [Configuration] of INI file. Value "ImageMagick" allowed for key "ImageConverter"
- Changed Key "MoveCursorToNextFileAfterSetXMPPRating": Default changed from 1 to 0
- Changed Key "MoveCursorToNextFileAfterSetXMPLLabel": Default changed from 1 to 0
- Changed Key "Backup": Default changed from 0 to 1
- Fixed Wrong key numbers 76, 77 and 78 corrected to 77, 78 and 79 in section [DEU] of included <TCMetadataViewer.ini>
- Changed Icons for TCMetadataViewer's GUI will be installed into a separate subdirectory <TCMetadataViewer\_Icons> (created by TCMetadataViewer) of the installation directory.
- Added Made initial state of listview options Tag grouping, Tag names and Tag values configurable: 3 new keys "TagGrouping", "TagNames" and "TagValues" in section [Configuration] of INI file
- Fixed Processing fails (with error message "File does not exist"), when size display in TC (on sheet "Tabstops" in Configuration) isn't set to "bytes" and show mode is "Full".
- Notes:
- Option "Tabstops" in TC Configuration is only evaluated at program start. If you change "Tabstops" setting while TCMetadataViewer is running, then processing will fail until you restart TCMetadataViewer
  - Fix will not help, if keys 1450="b", 1451="k", 1452="M", 1453="G" in <WCMD\_{lng}.LNG> are changed to user-defined units, which contain space(s)
  - Fix will not help, if date/time parts in "Date" column are separated by space(s) or space is used as separator for digit grouping in "Size" column
- Changed If ImageViewerPath isn't found, empty or invalid, then accordant info message isn't shown on start, but on first time an external ImageViewer is needed.
- Changed If PackJPGPath isn't found, empty or invalid, then accordant warning isn't shown on start, but on first time a PJG file gets focus in TC.
- Changed If TexteditorPath isn't found, empty or invalid, then accordant info isn't shown on start, but on first time you call "Edit configuration file" from context menu.
- Changed Not used icon file <cycle.ico> removed from <TCMetadataViewer.exe> (will not be any longer installed on first start of TCMetadataViewer)
- Added Some more operations will be logged to <TCMetadataViewer.log>:
- Packing a JPEG to a PJG archive
  - Moving PJG from temp directory back to origin
  - Copying a PJG to temp directory (preparation for unpacking, which is done in temp directory)
  - Unacking a JPEG from a PJG archive
  - Deletion of temporary preview image before next image is converted
  - Deletion of temporary files on exit
- Changed ImageConverter generates BMPs as preview images for quickview instead of JPGs
- Fixed If NConvert is set as ImageConverter and version of NConvert is >= 5.60, then TCMetadataViewer shows only the first image.
- Reason:

Since v5.60 NConvert doesn't overwrite target image by default; new parameter "-overwrite" as been introduced.

Solution:

Quickview image <TCMetadataViewer.bmp> will be deleted before image conversion (new option "-overwrite" not used in order to keep compatible with older NConvert versions)

Fixed If ImageConverter is set to NConvert, then images, which are smaller than the quickview area, are anyhow resized and sharpened.

Changed Special handling of IrfanView window when viewing a thumbnail image (automatic sizing in order to fit it into the listview area) removed.

## V1.0 (2010-03-05)

First release

## Links

### AutoIt3

V3.3.6.1

Copyright © 1999-2010 by Jonathan Bennett & AutoIt Team

Homepage: <http://www.autoitscript.com/autoit3/>

### Total Commander

V7.55a

Copyright © 1993-2010 by Christian Ghisler

Homepage: <http://www.ghisler.com/>

Forum (Plugins and addons: devel.+support (English)): <http://www.ghisler.ch/board/viewforum.php?f=6>

### ExifTool

V8.34

Copyright © 2003-2010 by Phil Harvey

Homepage: <http://www.sno.phy.queensu.ca/~phil/exiftool/>

### IrfanView

V4.27

Copyright © 1996-2010 by Irfan Skiljan

Homepage: <http://www.irfanview.com/>

### NConvert

V5.75

Copyright © 1991-2010 by Pierre-Emmanuel Gougelet

Homepage: <http://www.xnview.com/>

### ImageMagick

V...

Copyright © 1999-2010 ImageMagick Studio LLC

Homepage: <http://www.imagemagick.org/>

### ExifToolGUI

V3.38

By Bogdan Hrastnik

Homepage: <http://freeweb.siol.net/hrastni3/>