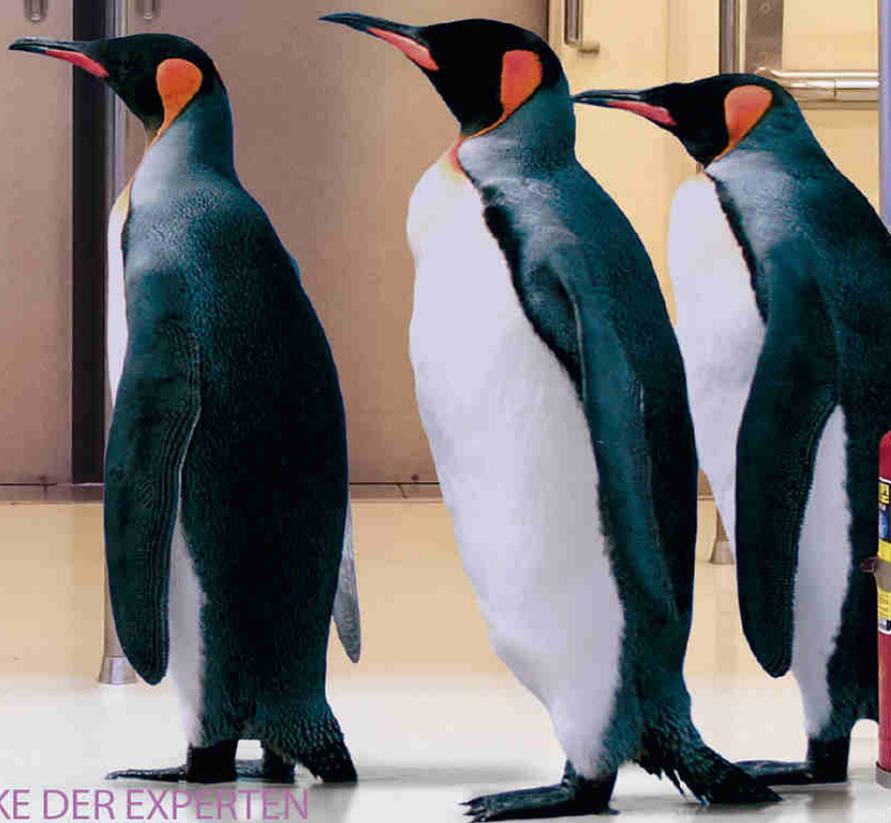


#5

CUTOUT PROFESSIONAL



FRANZIS® DIE MARKE DER EXPERTEN

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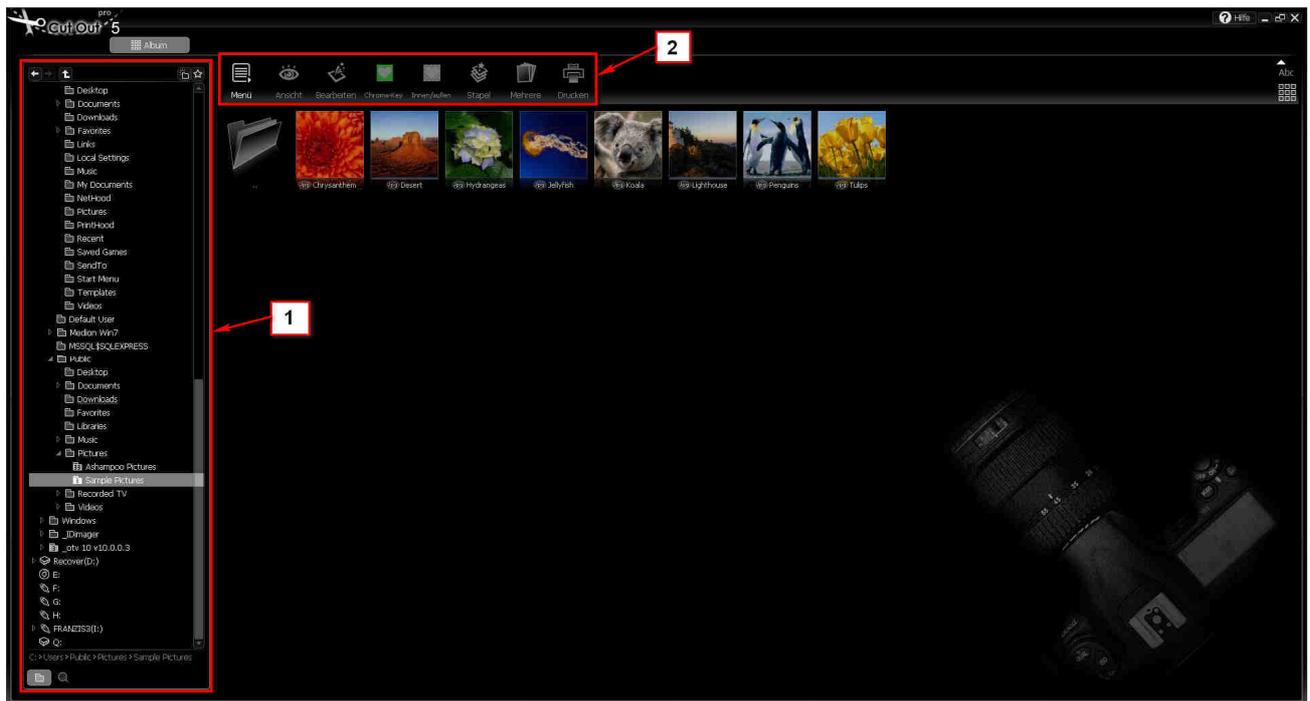
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I Introduction

CutOut 5 makes it possible to separate an image's foreground and background, and then edit them individually. This process includes various steps, such as dividing a photo's contents (digital matting) and additional photo editing. Some examples would be placing a cut out object in another photo or applying effects and photo enhancements.

I.1 Album Mode

When you open CutOut, the so-called Album mode appears. This is where you can manage your photos:



In Section 1, you can choose the folder of photos that contains the images that you would like to cut out or edit. You can search your computer for photo files with the search symbol at the bottom of this menu. With the Menu bar in Section 2, you have access to the

most important CutOut functions with one click, such as chromakey matting and inside/outside edge matting. A quick introduction will be explained in the next chapter.

The CutOut album view allows you to view, sort, rename, copy, paste and add EXIF information. These functions appear in a shortcut menu by right clicking on the photo.

II Quick Introduction to Cutting Out Objects

To cut out an object in a picture, select the desired photo in Album mode and click on *Chromakey* for chromakey matting or *Inside/Outside* for inside/outside matting in the Menu bar above. But which function serves which purpose?

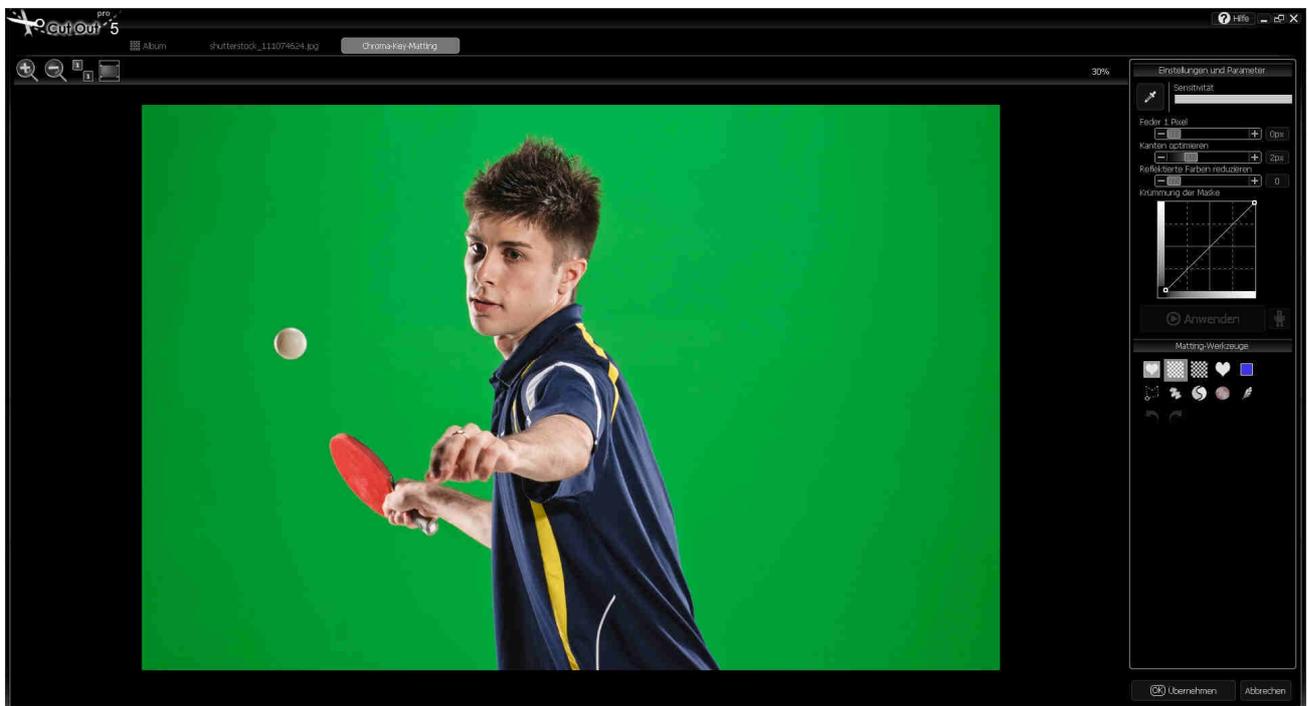
II.1 Chromakey Matting or Inside/Outside Edge Matting?

Do you want to cut out an object with a plain background (optimally blue or green) that clearly differentiates from the object that is to be cut out? Choose **Chromakey Matting**. For example, portraits with a monochrome background or landscape images with blue skies, from which an object could be cut out, would be appropriate.

Do you want to cut out an object that, as it often happens, has no obvious clearly defined background? Select **Inside/Outside Edge Matting**. The Polygon tool will help to trace the inside area (the object to be cut out) and the outside area (the background that the object will be cut out from), and thus cut out of the basis of the object.

II.2 Chromakey Matting - Quick Introduction

Chromakey matting works best with objects that have a mono-chrome background, preferably blue or green. To cut out an object with chromakey matting in CutOut, first select the photo that you would like to use and then click on *Chromakey* in the Menu bar. The chosen image should now appear in the Chromakey Matting Menu as follows:

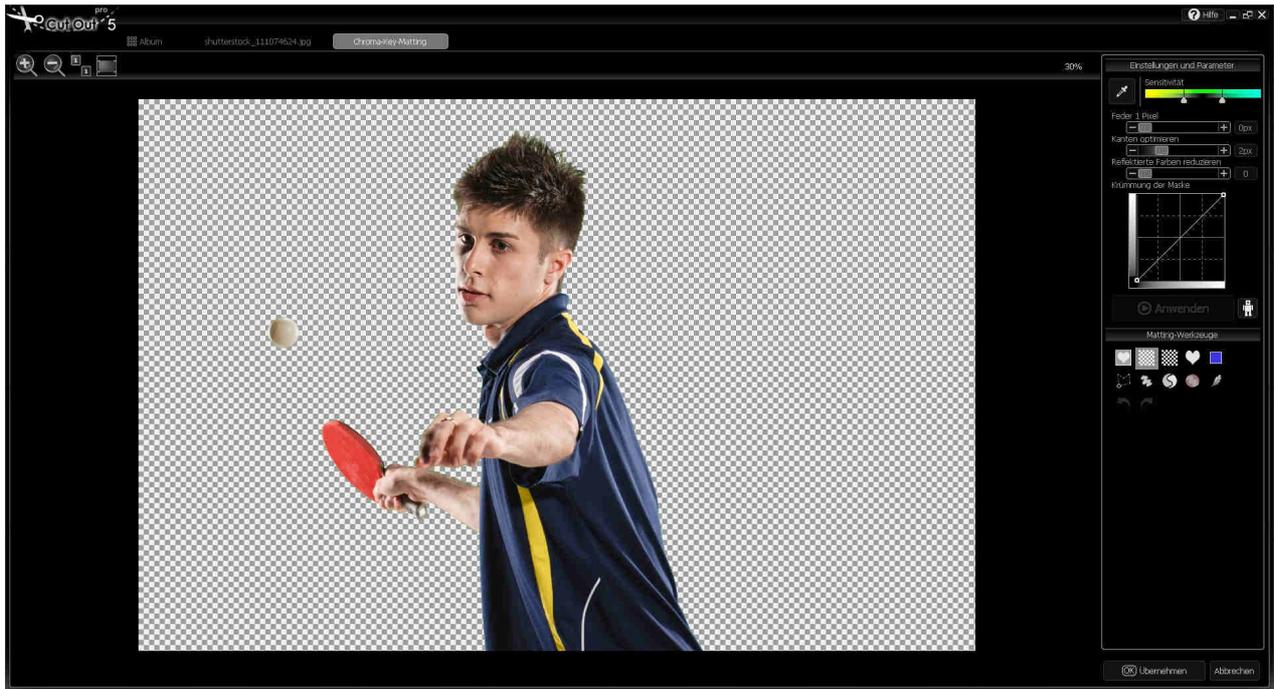


Various matting settings are now available on the right-hand side of the screen, which serve to optimize cut out results. To cut the table tennis player out of the shot and remove the green background, click on the Pipette symbol.

Then click on a spot that is the color of the background, in this case, the green area. With the help of the Pipette tool, CutOut will then tell you which color makes up the background. CutOut will automat-

ically recognize which area of the image should be extracted and which should be retained.

The result will be shown immediately with the removed background depicted as transparent (grey-white boxes):



Since the green background in this picture is very distinguishable from the object (the table tennis player), the matting result is already basically satisfactory and barely requires further editing. However, since you do not always have such a clearly defined background, the matting result should usually be edited afterwards. Here, the right side of the screen displays Matting tools.

Click on *Apply* in the Chromakey Matting menu to save or edit the matting result, or set it as its own layer.

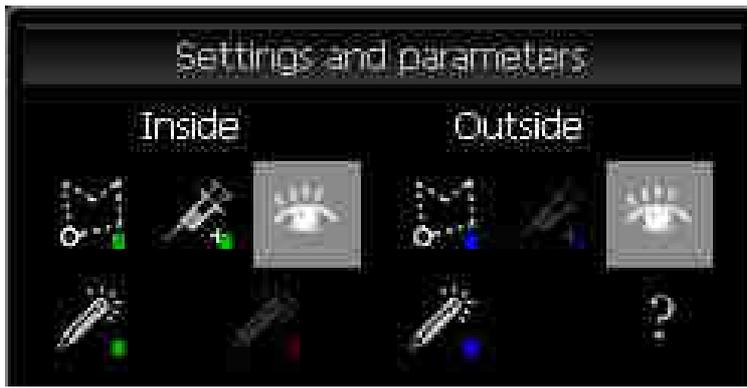
The Post-Matting menu will then open, where you can choose how you would like to proceed with the newly cut out object. Please turn to the *Post-Matting Menu* chapter.

II.3 Inside/Outside Edge Matting - Quick Introduction

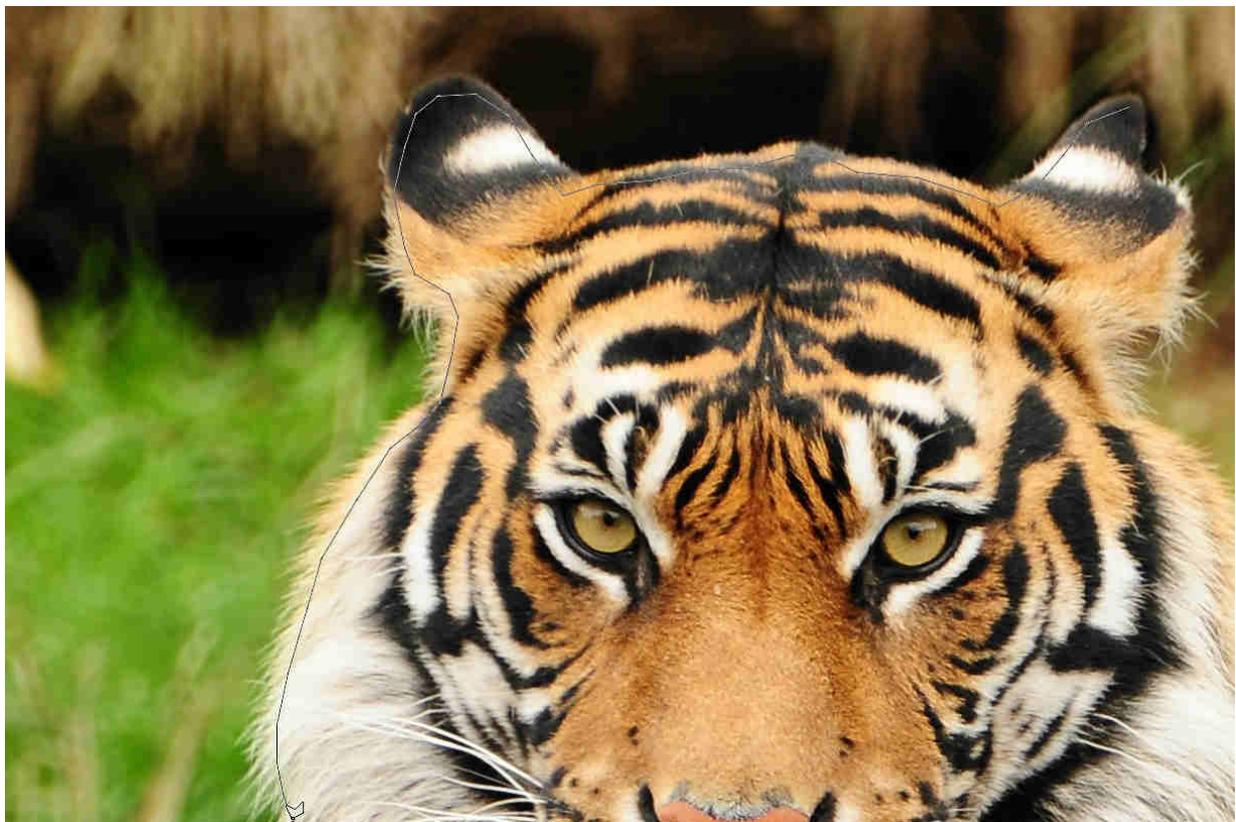
Inside/outside edge matting is the right choice, when you want to cut out an object that does not occupy a distinct, that is monochrome, background - which is often the case. Select your desired image in Album mode and click on *Inner/Outer* in the Menu. The chosen photo should open as follows in the Inner/Outer Edge menu:



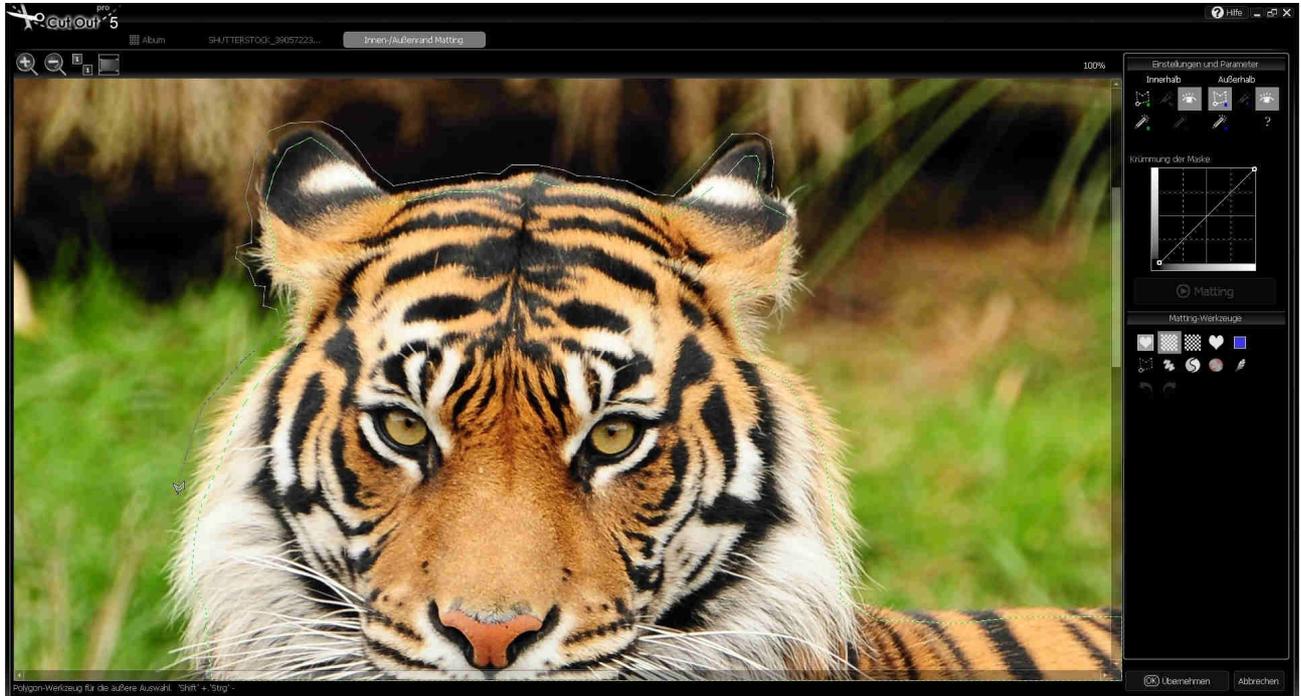
In this case, since the background is very multicolored, chromakey matting would deliver a dissatisfactory result. You must therefore apply the margins by hand to set the borders of the object in the foreground and distinguish it from the background area. In the right hand menu, click on the Polygon tool for inside selection, to outline the object to be cut out.



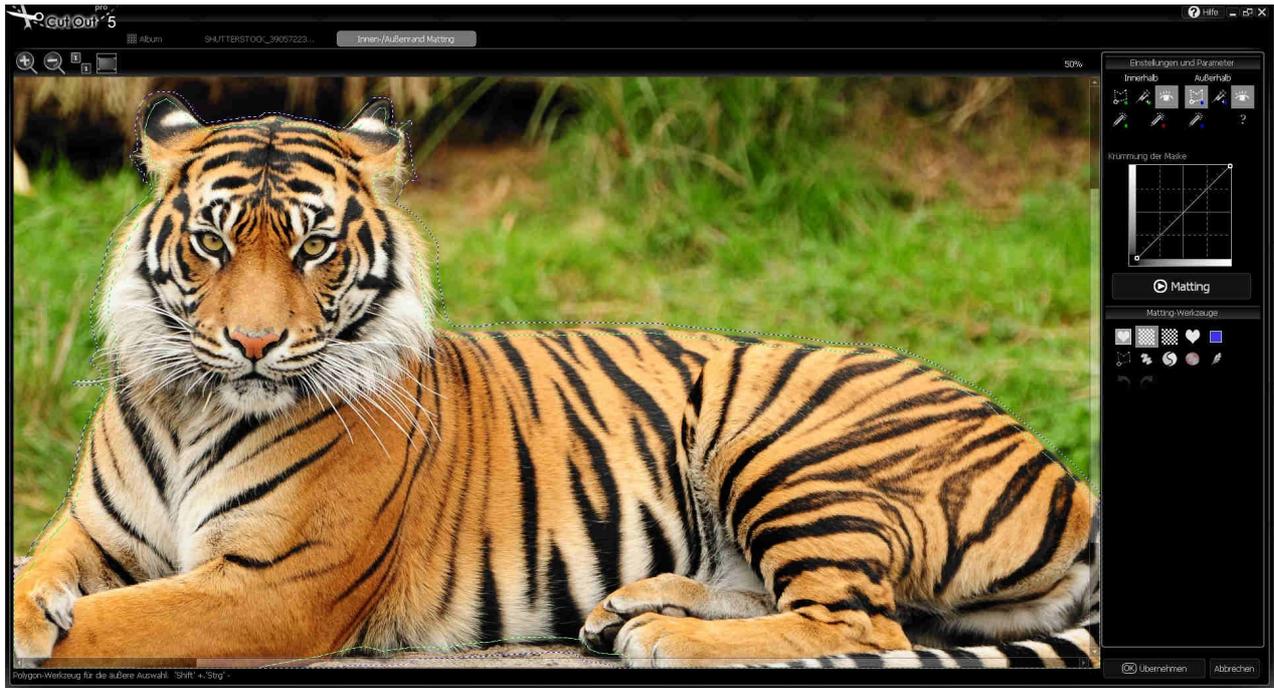
Next, gradually trace along the inner edge of the object that is to be cut out, in this case the tiger. If you need to, zoom in on the image to work more precisely. You do not have to be completely exact. Trace around the inner area, until you have surrounded the object. Double click to finalize the selection.



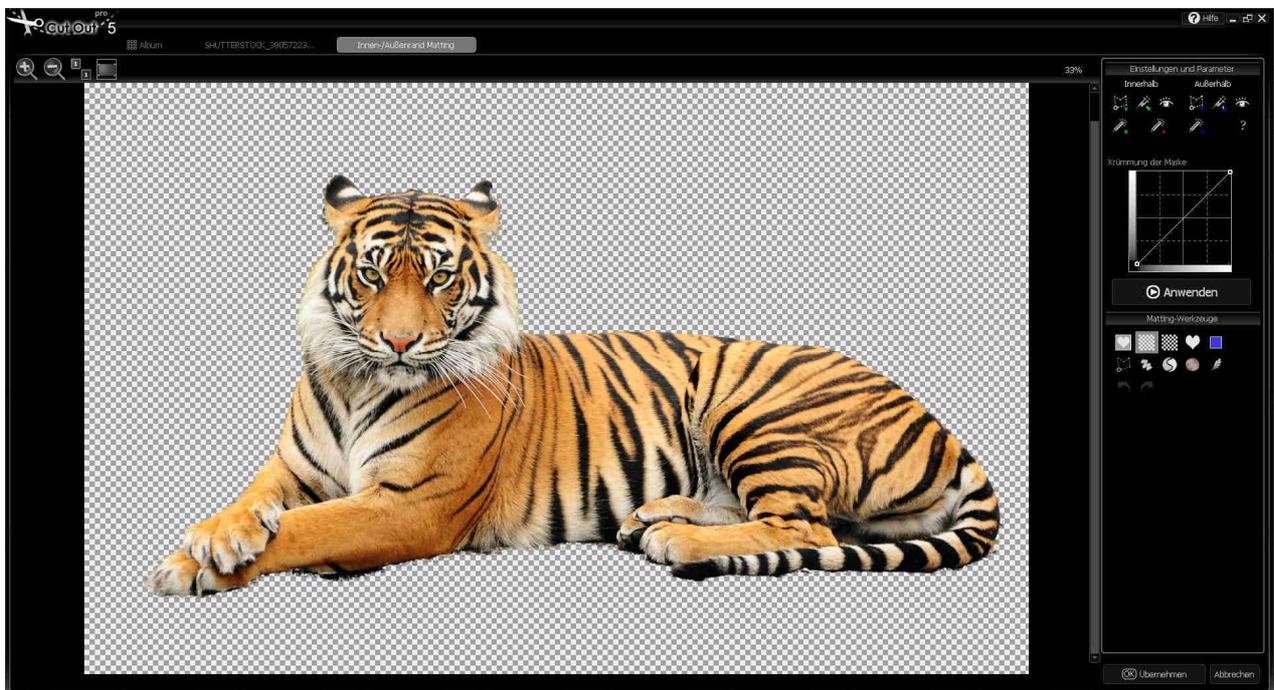
Now the outer edge needs to be set. Use the outside selection Polygon tool and go along the object relative to the inside edge.



With one click on the Matting button in the right hand menu, the object will be cut out according to the inside and outside selections that you have set.



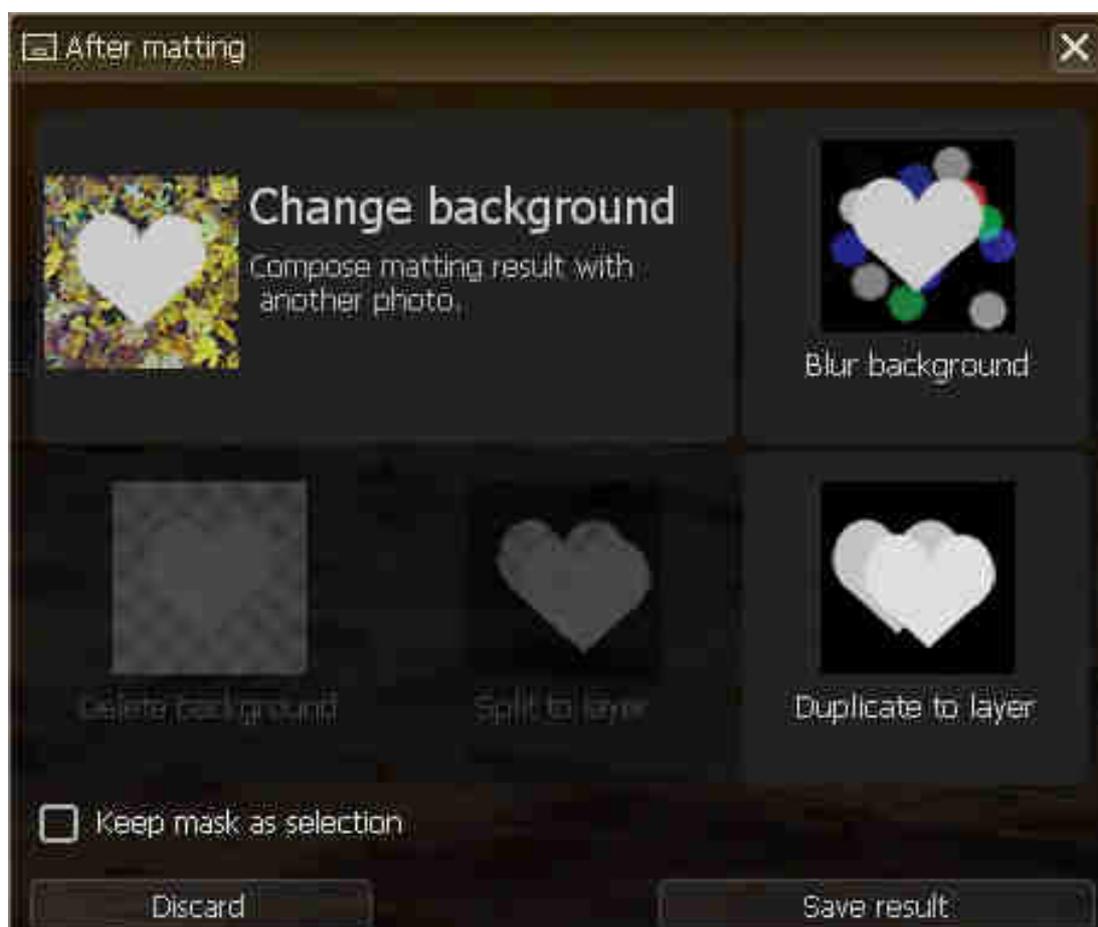
The result looks promising right away. The background will be removed and displayed as transparent (grey-white boxes):



If you are not satisfied with the result, you can improve it by using further Matting tools in the Inside/Outside Matting menu.

Now click on the *Apply* in the Inside/Outside Matting menu to set the matting result as its own layer in CutOut and subsequently edit and save it.

The Post-Matting menu will then open, where you can choose how you want to continue with the object that was just cut out. Please turn to the chapter on *Post-Matting Menu*.



III New in CutOut 5

CutOut 5 offers innovations in the field of digital matting, that significantly reduce the time consuming process of cutting out images.

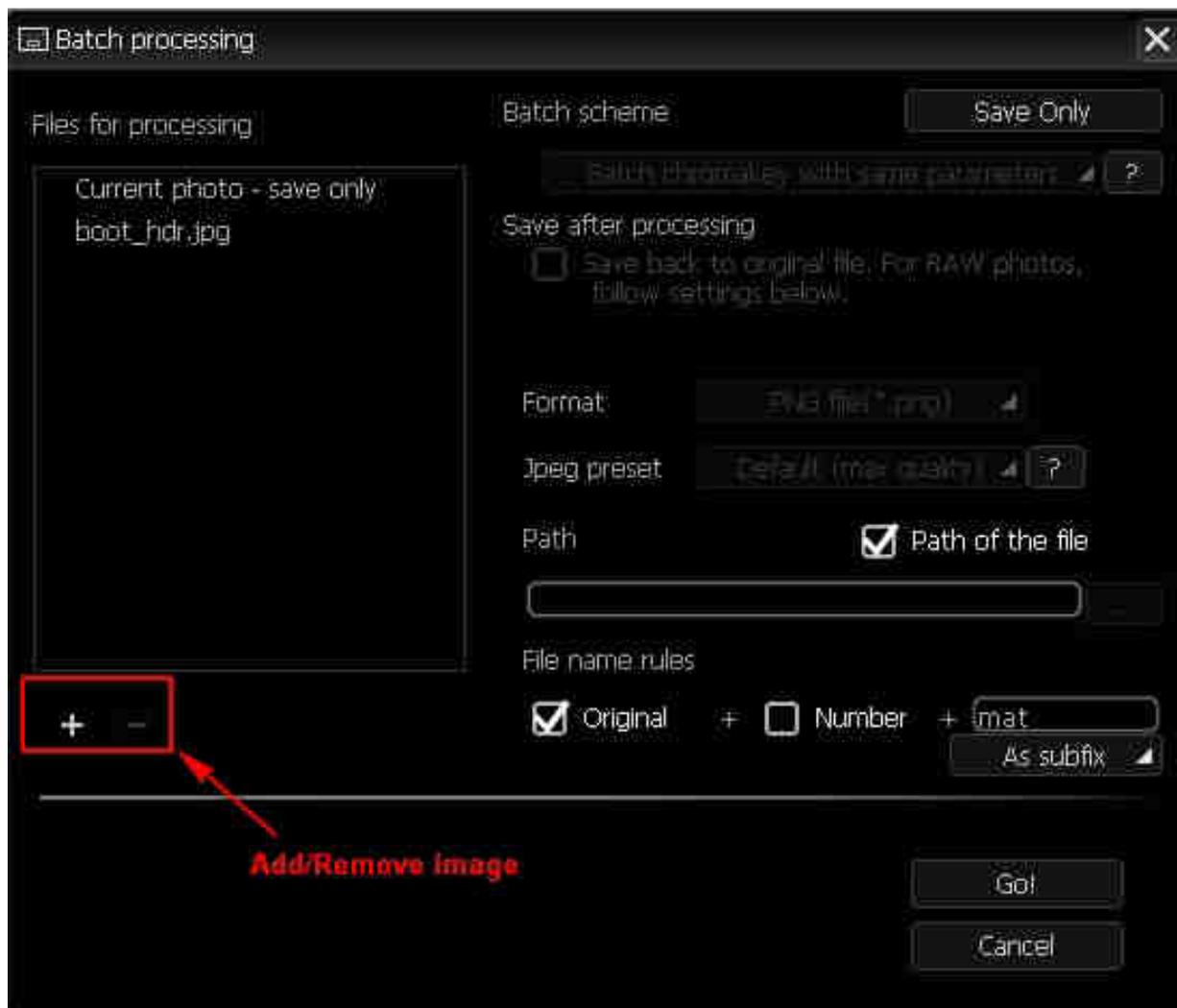
III.1 Improved Chromakey Matting

Apart from drastically improved algorithms and the considerably enhanced chromakey processing, CutOut is now capable of batch processing. This is particularly valuable when you want to cut out objects from a series of photos with similar surroundings or the same background. Conceivable examples would be multiple scenic shots with blue sky as a background, or portraits that were all taken on the same background. In this case, the matting settings only need to be established once, and then they will be automatically applied to all of the subsequent images.

After you have selected a photo that fits your preferred matting settings, click on the small Robot symbol beside the Apply button in the Chromakey Matting menu:



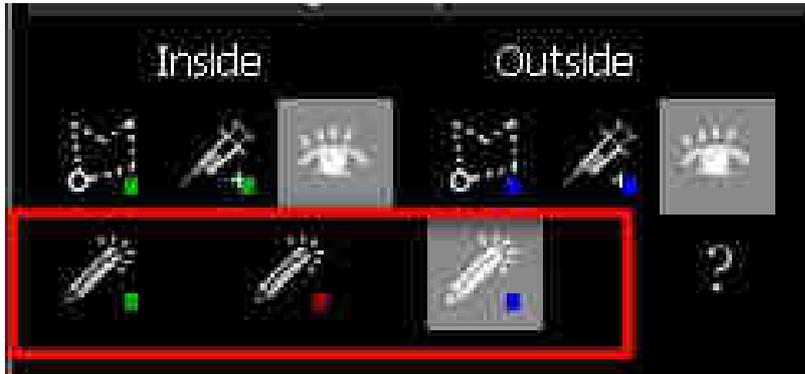
The following Batch Processing window will open and you can add further images with one click on the “+” symbol. You can remove previously added images with the “-” symbol. Start the matting process with one click on *Go!*. The photos will be saved as PNG format to preserve the transparent background data.



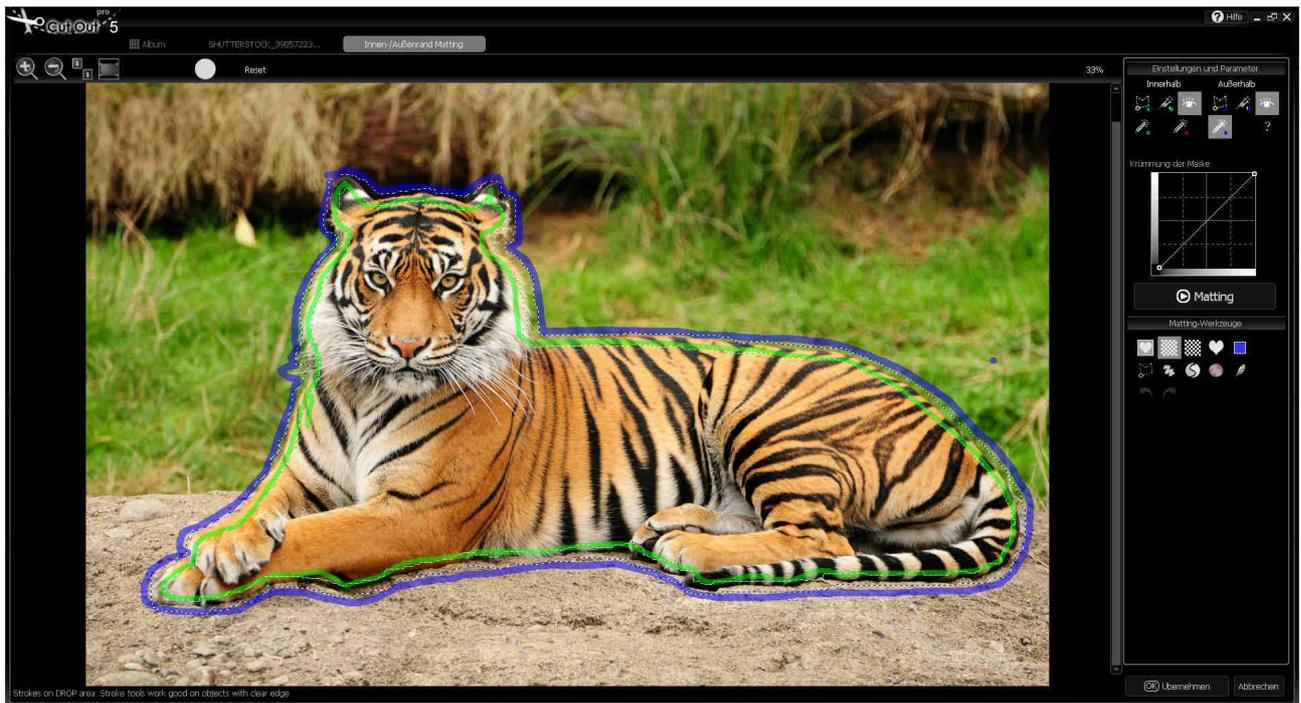
III.2 Improved Inside/Outside Edge Matting

Now cut out even faster with CutOut 5 using inside/outside edge matting. With help from the Contour tool, simply trace the edges of the inner and outer borders roughly and CutOut will automatically recognize the area in which the separation should occur. You can then fine tune the dividing line. This new function is particularly well suited to objects with clear borders and will save you a great deal of time.

This new Contour tool is located directly under the previously introduced Polygon tools for inside/outside selection.

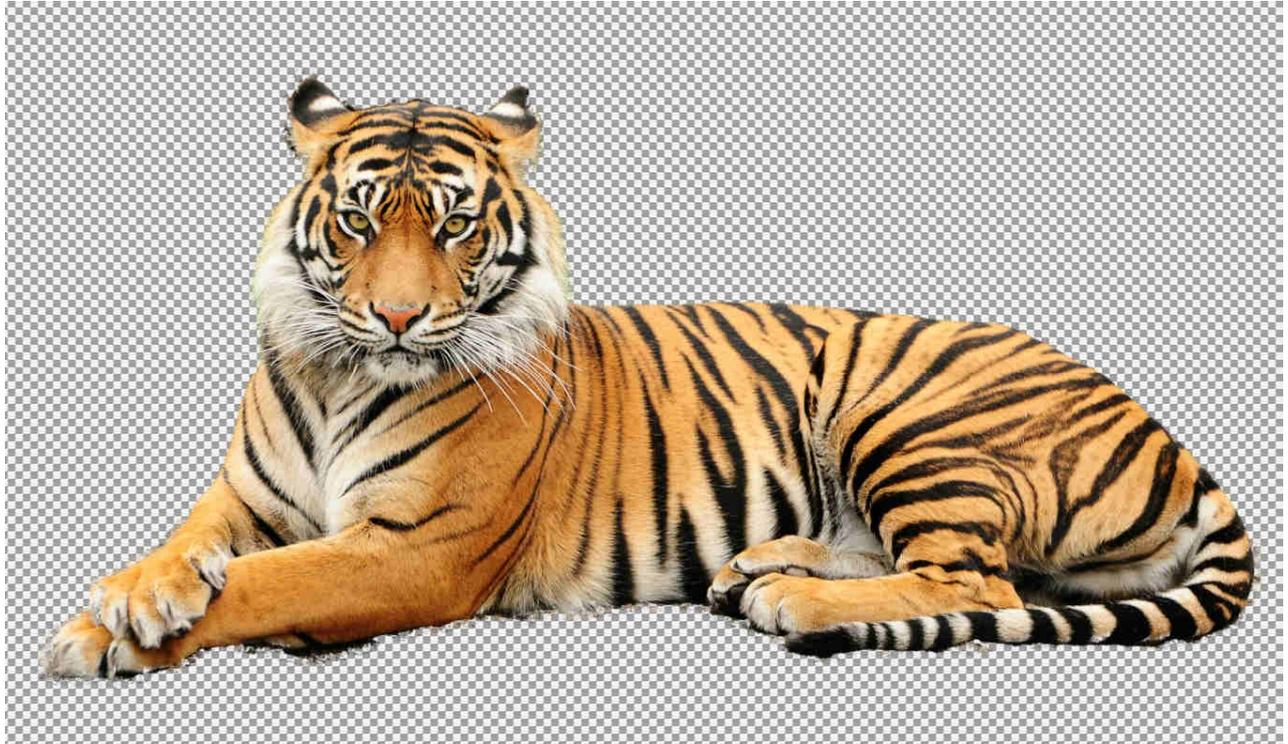


Retrace the inside and outside edges of the object with the Contour tool. The process is similar to the quick introduction chapter, where the application of the Polygon tool is explained.



CutOut 5 will recognize which section of the approximately outlined range belongs to the inner area and which to the outer.

The Contour tool delivers results equally as satisfactory to the Polygon tool, yet with far less expended time:



The simple outlining with the Contour tool always serves best when the object to be cut out has clear edges. If this is not the case, the Polygon tool maybe better suited to the task.

III.3 Using the Contour Tool to Cut Out an Object's In-Between Areas

It often happens that you want to cut out an object that contains areas not belonging to the object in the foreground.

Typical examples include people with hands on their hips or on their head, or holding their hat, like our example below:

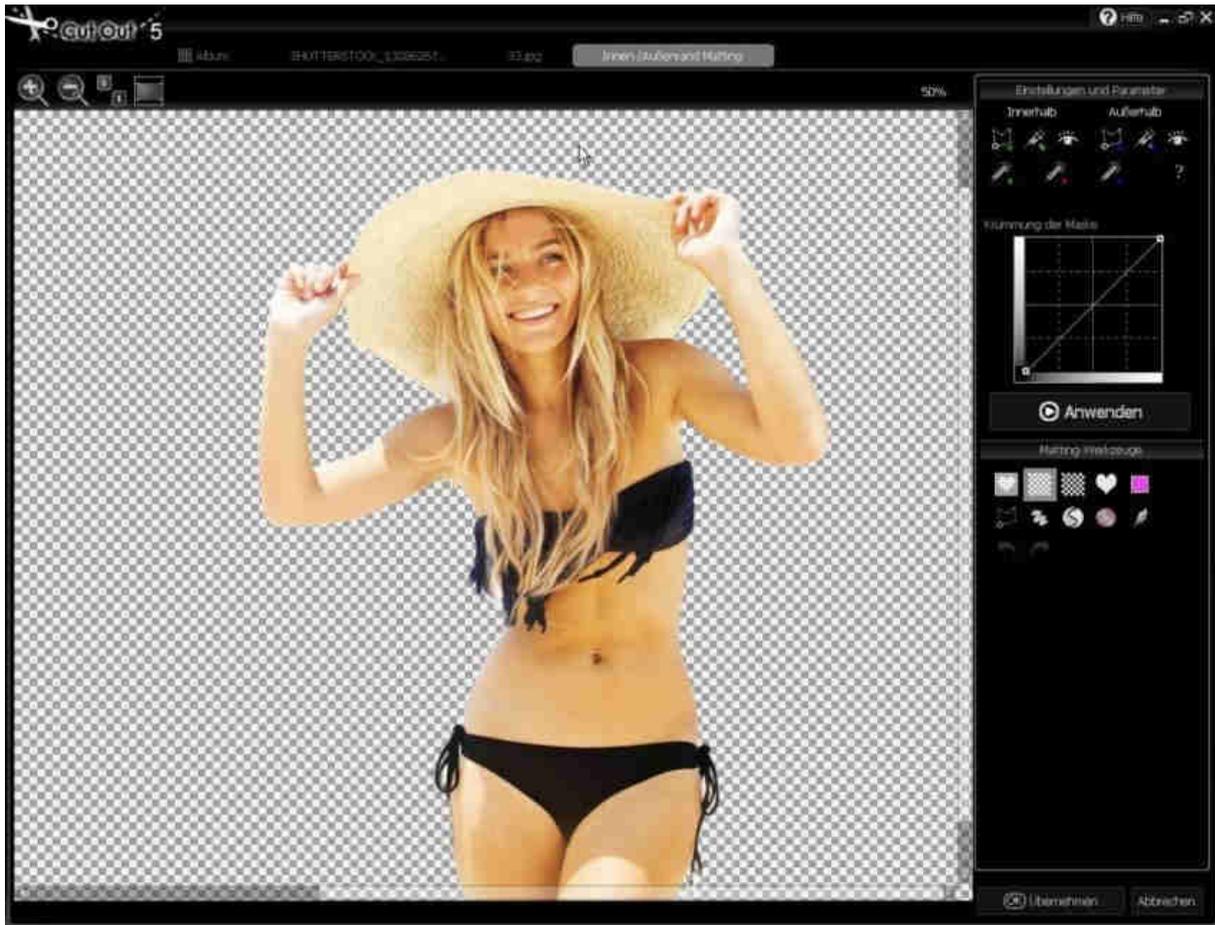


The problem with using Inside/Outside Matting to cut out the person is that the area between the arms, head and hat will mistakenly not be removed, but be rather maintained with the result.

In CutOut 5, you can easily remove this area with the Contour tool by going around the unwanted inner area after tracing the entire person:



The result of the rough tracing above appears promising:



The problematic area between the arms, head and hat is quickly and effectively removed.

IV Post-Matting Menu

After you have finished matting and optimizing the cut out result with the Matting tool, only editing of your image remains. If you are satisfied with the matting result, click on *Apply* in the Matting menu.

The Post-Matting menu will then open with the following available options:

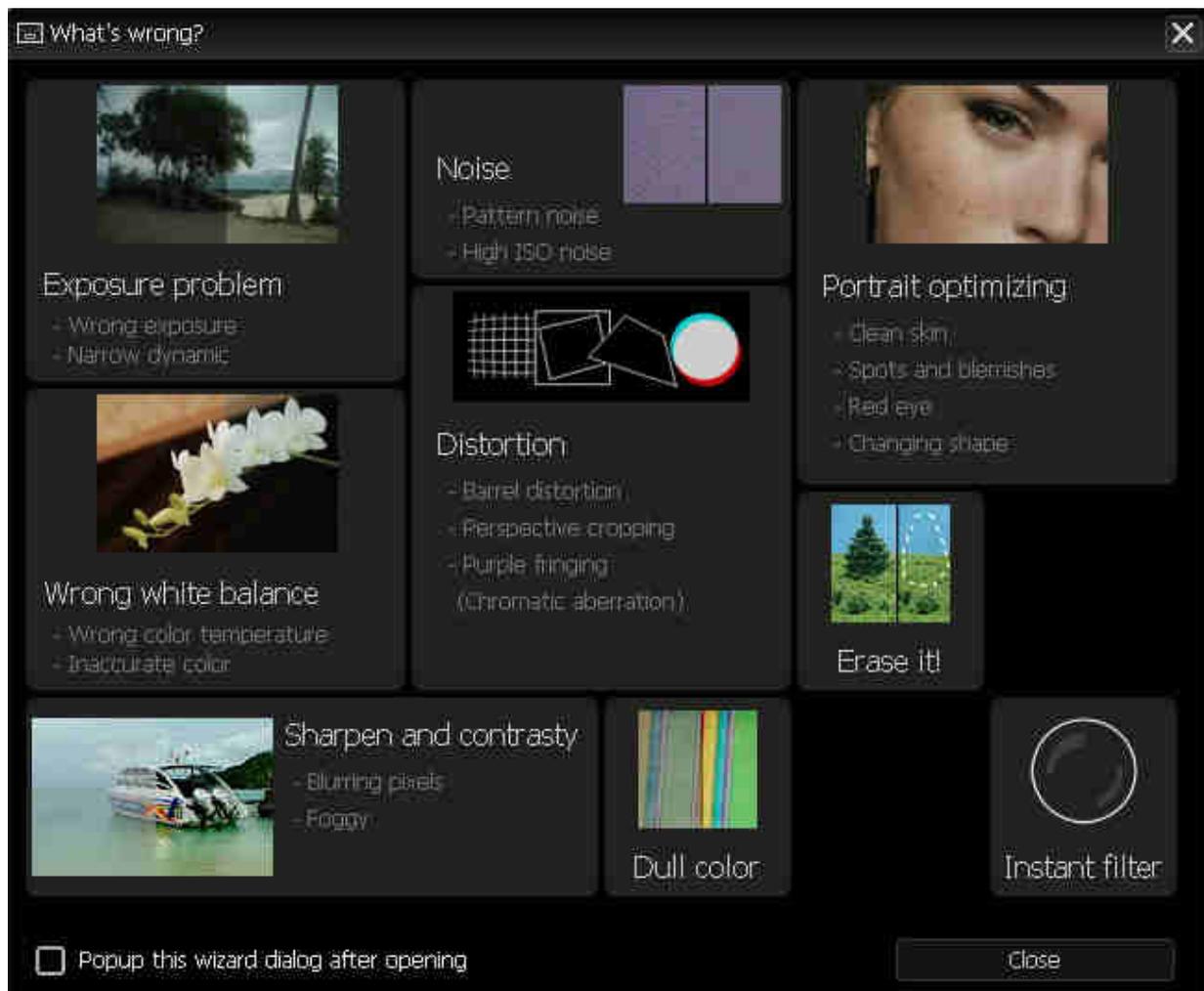
- **Change Background:** This function allows you to combine the newly cut out object with another image of your choice. For example, you can put cut out objects in “other places”.
- **Blur Background:** When you select this function, the program switches to Blur mode. You can blur the image’s background to vastly varying degrees. Also, the background will be retained and the only component subject to the blur effect. This ability allows you to obtain a striking depth of focus.
- **Duplicate to Layer:** This function adds the matting result to the user interface as its own layer. You can now proceed as you wish; either save the matting result or edit it further with the numerous editing options and effects in available in CutOut 5 Pro.
- **Split to Layer:** This action is only applicable for layers other than the basis level. It keeps the foreground and background as their own layers.
- **Delete Background:** This action is only applicable for layers other than the basis level. The background will be deleted and only the cut out object will be kept as a layer.

You can also select *Save Results* to save the matting result as a .png or .psd file to your preferred folder.

V Editing Images

Besides the options for cutting out objects described so far, CutOut provides a plethora of editing options for your photos and cut out images. Various effects and filters are at your disposal for optimizing your pictures.

The Photo Assistant will appear when you open an image to edit:



In this menu, you can quickly find the appropriate editing functions for specific problems in your photos. The Assistant displays a rapid solution without requiring lengthy searching. All of the editing functions in this menu can also be found in Editing mode.

V.1 Editing Mode Overview



(1) *Editing Functions:* Matting, transform, exposure, color and enhancement are editing functions that you can use to refine your images. Each category is made up of multiple tools.

(2) *Further Functions:* With these displayed symbols, you can either adjust the zoom, save the image (Disk symbol), call up the Image Assistant (First Aid Kit symbol), show the image property (Information symbol), add an image (Photo symbol) or print the image (Printer symbol).

(3) *Histogram:* Here the histogram of the current image is displayed. The percentage on its right hand side represents the zoom level.

(4) *Help:* Call up this handbook.

(5) *Tools:* Use this selection of tools to edit only a particular section of the photo as well as employ other useful editing tools.

(6) *Layers*: All of the current available layers are displayed in the layers window. Here you can add, delete, merge, rename, save and move layers, as well as adjust their opacity.

(7) *Areas*: Using the Select tool, you can store a selection as a mask and apply it later to a chosen layer at any time.

(8) *History*: The history archive displays all of the actions taken so far. You can undo or redo individual steps here.

VI Creating HDR and Stereo Images

CutOut offers the possibility to merge photos from an exposure series and thus generate HDR images. Broadening the dynamic range produces more impressive images. At least two, preferably more, shots from an exposure series are required, that is a subject that was photographed with different exposures. Select the applicable photos with varying exposure levels in Album mode (at least two) and click on *Multi* in the upper Menu bar:



Then select *HDR merge for bracket exposure*.

You can adjust depth, middle tones and brightness as well as potential enhancement with the slide controls.

Besides merging photos, the **Multi** function also has the option to reduce noise and create stereo (3D) images, that can appear three dimensional with appropriate 3D glasses and when saved in MPO format.

VII Opening and Saving

CutOut 5 supports:

- Opening regular image formats, including: JPG, GIF, TIF, TGA, PCX, PNG, BMP as well as the majority of RAW camera formats
- Camera raw formats: *.raw, *.nef (Nikon), *.cr2 (Canon), *.crw (Canon), *.orf (Olympus), *.mrw (Minolta), *.raf (Fujifilm), *.pef (Pentax), *.dcr (Kodak), *.srf (Sony), *.erf, *.dng (Adobe), *.arw (Sony), *.rw2 (Lumix)...

The program exports JPG, PNG, TIF, BMP and many more formats.

Numerous options are available upon saving:

- **Quality**
The JPEG compression quality.
- **Adjust file size**
Enter the desired file size and the program will attempt to generate a result corresponding to the settings and quality.
- **High quality**

Use YUV 1:1:1 for JPG decoding.

- **Adaptive**

Use the adjustable quantum table for JPG decoding. It is possible that this will reduce the file size.

- **EXIF Data**

Choose if you would like all, some or no EXIF Data to be kept in the file. EXIF Data requires approximately 1-64 KB of space.

- **Compression optimization**

The program will attempt to reduce the file size through optimization.

- **Maximum photo size**

Set the limit for the size of the photo. If it exceeds the file size, the photo will be automatically reduced.

- **Maximum file size**

Set the limit for the file size.

- **Methods**

If the final file size exceeds the maximum file size, the program will select a way to reduce the file size. The process involves either downscaling the image size or reducing the quality. This reduction procedure happens automatically.

VIII Plug-ins

Besides the stand-alone software, CutOut 5 also offers Photoshop plug-ins.

The “8bf” files can be found in the CutOut installation folder. Copy these files into the Plug-In File in Photoshop, or another compatible program, to use CutOut 5 as a plug-in. The plug-ins use 8bit or 16bit per channel, RGB color space as input.

To apply the plug-in, open an image in photoshop and select the desired plug-in through **Filter -> Cut Out** in the menu to begin the CutOut Work mode. After you have finished editing, click on *Apply* or *Cancel* to return to Photoshop with the result.

Hotline/Support

If you have questions regarding the installation, problems or errors of the software, please contact the **FRANZIS customer support team**.

E-Mail: support@franzis.de

**Phone (Monday to Friday 12am to 6pm): +49 (0)180 30 02 644
(0,09 EUR/minute from German landlines, prices from mobile phones might vary)**

Fax: 0180 300 26 45 (0,09 EUR/minute from German landlines, prices from mobile phones might vary)

Please understand that your questions can only be answered directly by FRANZIS customer support. This is to give us the opportunity to constantly enhance our customer service for you and to make sure that you receive only the most qualified answers to all of your questions as fast as possible.

This is how our customer support works best:

Please have the most important details about your computer and about our product at hand when you call our customer support. These include:

- Name of the product
- Product **ISBN (which you can find on the back of the packaging, above the easy to spot barcode)**.
- Operating system of your computer
- Technical details of your PC including all your peripheral devices

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