

b a s i c c o l o r[®]



Devil 4

Reference Manual

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Chapter 1

About This Manual

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1. About This Manual

1.1. Installation and Licensing

Please refer to the separate manual for installation and licensing

„EN - basIColor Licensing.pdf“

2.2 Conventions:

For better understanding we try to adhere to a consistent style for the different GUI elements.

basIColor *products* are in italic type face.

The **Tools** are in bold.

«**Buttons**», «**Tabs**», «**Check Boxes**», «**Pulldown menus**» and «**Radio Buttons**»

are bold and in angle brackets.

„Names“ of windows or window areas and other elements are in quotes.

Hints, tips, warnings and ***links*** are in bold italic.

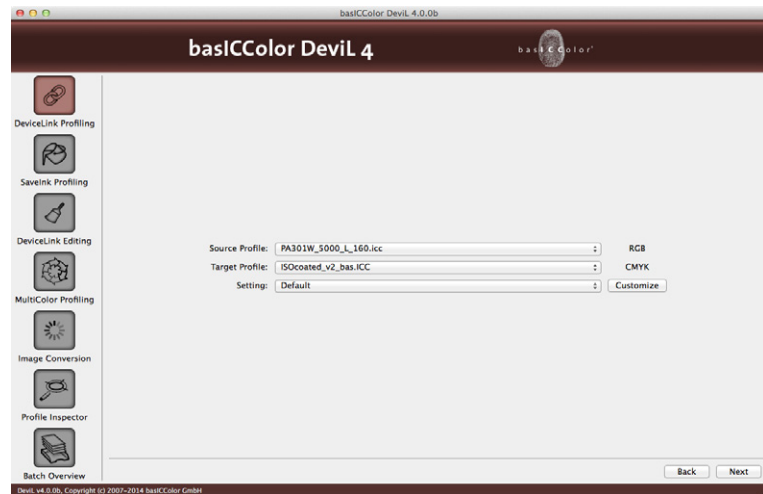
Chapter 2

Basic Functions

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2. Basic Functions

Start basICColor *DevIL* to get to the main window of the application. Each button on the left is for opening a separate module of basICColor *DevIL*.



The seven basic modules of basICColor *DevIL* are:

- **DeviceLink-Profiling**
- **SaveInk Profiling**
- **DeviceLink Editing**
- **MultiColor Profiling**

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- **Image Conversion**
- **Profil Inspector**
- **Batch Overview**

Enter each module by clicking on the respective icon. For detailed information on how to use each function please refer to the chapter of each module in this manual.

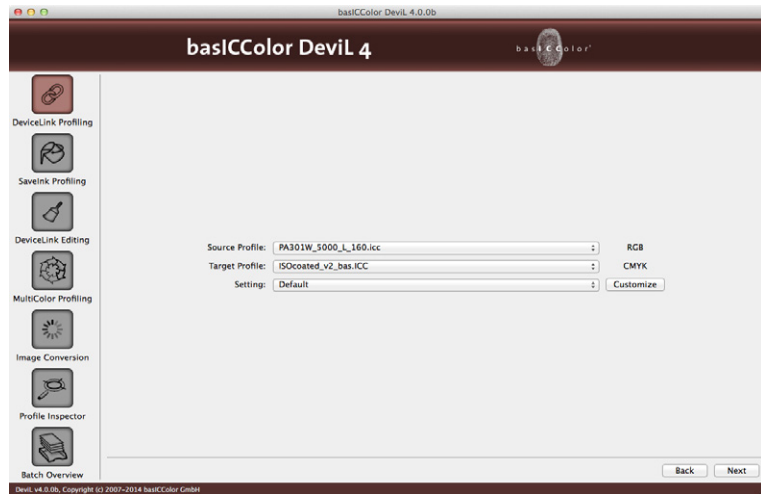
Chapter 3

DeviceLink Profiling

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3. DeviceLink Profiling

The basic task of a DeviceLink profile is to transform color data from one color space to another. The main difference to a “normal” ICC-based color transformation is that the profile connection space (PCS; usually this is XYZ or Lab) is “skipped” and the color values are translated directly from the source color space to the destination color space.



The advantage of this method is that certain parameters of the source color space can be transferred to the destination color space unchanged or optimized (eg. black body). Especially when already finished documents that have been prepared for a specific output color space shall then be used

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in a different printing method. The result will be significantly better than a normal ICC transformation.

The disadvantage of a DeviceLink profile is that it is a fixed combination of two color spaces that always work according to certain rules. If the source color space differs to the chosen destination color space the need for a new DeviceLink profile is absolutely necessary. The same applies if the separation is to be based on other criteria (eg. a different rendering intent)

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3.1. Button: DeviceLink Profiling

When you start basIColor *DevIL* the module „DeviceLink Profiling“ opens. In this window you can set the following:

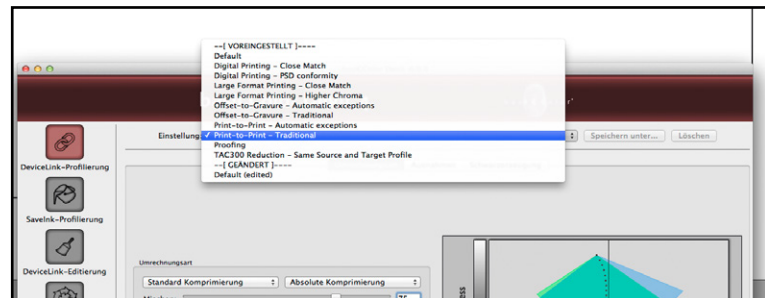
Source Profile:	PA301W_5000_L_160.icc	RGB
Target Profile:	ISOcoated_v2_bas.ICC	CMYK
Setting:	Default	<button>Customize</button>

Source Profile: Source profile for conversion

Target Profile: Target profile for conversion.

Setting: You can select one of the presets or stored configurations from the pull down menu. These configurations combine various options and settings related to profiling. To create and edit your own settings click the **<Customize>** button.

In the “Setting” pulldown menu up top you can see your preselected setting.



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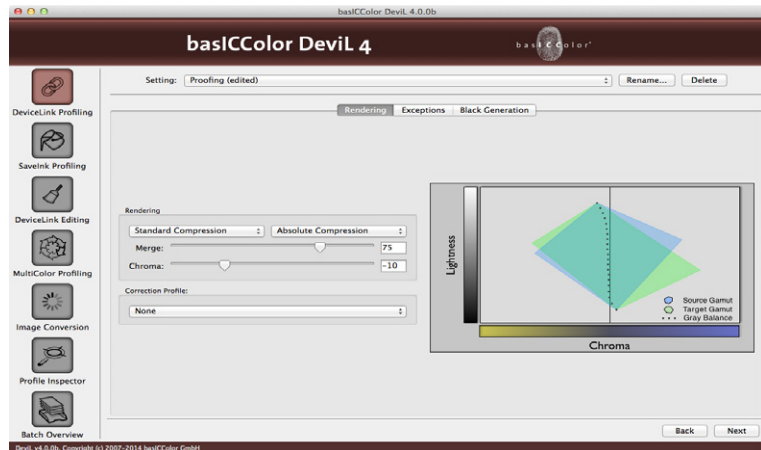
If you want to give the setting its own name change one of the parameters and then click the **<Rename>** button and enter a name. The **<Delete>** button will erase your setting without warning. Default presets in basIColor Devil cannot be deleted.

In the tabs **<Rendering>**, **<Exceptions>** and **<Black Generation>** you can modify your settings further.

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3.1.1. Tab Rendering

Every DeviceLink profile contains exactly one rendering intent. In addition to the choice of the standard rendering intents – „Perceptual“, „Relative Colorimetric“, „Saturation“ and „Absolute Colorimetric“ – basICColor *Devil* offers a further five methods. The methods can also be combined. As a result, you can individually tailor the rendering for your particular application.



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- **Standard Compression:** Our standard method, which is suitable for most applications. Neutral tones are converted by the relative colorimetric method. If the paper white of the printing medium used is significantly yellower than the reference, the gray axis also looks yellower in accordance with the paper white.
- **Black Compensation:** This method largely corresponds to the relative colorimetric with black point compensation method familiar from Adobe products. When converting CMYK data in printing systems, the image definition in the highlights and shadows is preserved, but losses of definition in areas of highly saturated color are avoided. Neutral tones are converted by the relative colorimetric method.
- **Dynamic Compression:** This method compares the source color space with the target color space and generates a compression that minimizes out-of-gamut ranges. In this context, the brightness, and thus the definition, of the original color space is retained to the greatest possible extent, at the expense of the saturation. As with „Standard Compression“ the gray axis of the conversion is relative to the paper white of the target profile.

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- **Absolute Compression:** In regards to color rendering, this method is geared to the absolute colorimetric intent, the contrast range in the highlights and shadows being adapted to avoid any loss of image definition. The rendering of neutral colors likewise corresponds to absolute colorimetric rendering, there being no paper color simulation in the highlights.
- **Minimal Compression:** This rendering intent describes the color space as absolute colorimetric as possible and only compensates near the black and the white point. This achieves a maximum depth, keeps image definition and the white is not simulated. Choose this rendering intent if you want to achieve a very accurate rendering of a printing standard like the ISO Coated V2 or GRACoL2006 Coated v2 on a digital printing press for example. Select the „Perceptual“ rendering intent if you use a printer-profile in your ICC-compatible software that was created with a special basICColor rendering intent.

Note: Please bear in mind that the target color space should preferably be larger or of similar size then the simulated color space to avoid loss of details and chromaticity. For conversions from large into small color spaces please use our rendering intent „Absolute Compression“ if you want to preserve the gay balance of the source color space.

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Further Options:

- Should you like two of the mentioned basICColor rendering methods, you can merge them to different degrees. For instance, if you have activated the combination of „Standard Compression“ (1st selection, left) and „Absolute Compression“ (4th selection, right), and if the **<Merge>** slider is set to 75, for example, corresponding proportions of the two rendering methods are used in your DeviceLink profile when converting files. In this example, that would mean that the gray axis is 75% adapted to the paper color, without paper color simulation in the highlights and with simultaneous adaptation of the contrast range in the highlights and shadows.
- The **<Chroma>** slider can be used to reduce or increase the chroma of highly saturated colors in the range between -20 and +20. Changing the chroma has no effect close to the gray axis.

Note: *We deliberately kept the chroma effect moderate. However, when increasing the chroma, you still need to make sure that the setting neither causes a loss of image definition in highly saturated colors, nor excessively affects skin tones, for example.*

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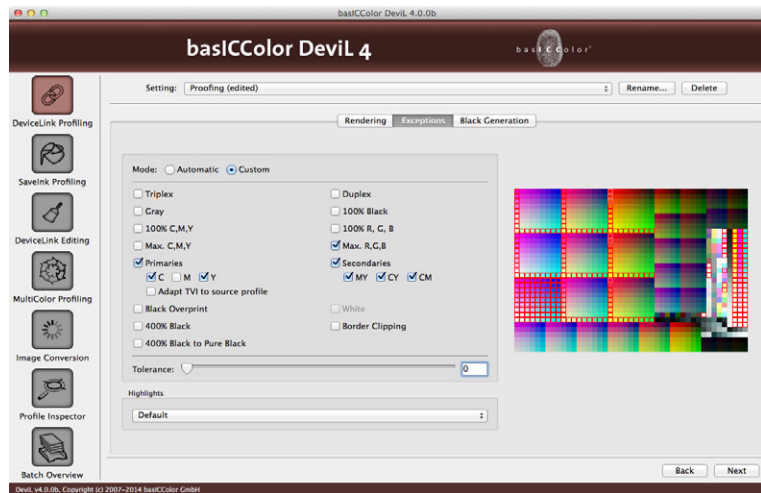
Correction Profile: A correction profile can be a DeviceLink profile or an abstract profile. It serves the targeted modification of a color space conversion. The use of a correction profile is a special case, so normally the “None” option should be selected.

Note: *As mentioned, the selection of a correction profile is a special case. The correction profile enables you to utilize corrections, that have been made with the DeviceLink Editing module, to create a DeviceLink profile. This could be a selective correction in a certain color space or the setting of the first printed tone for example. The correction profile, in the form of a DeviceLink profile or an abstract profile is included after the linking of the source with the target profile. Read more on creating correction DeviceLink profiles in the chapter “DeviceLink Editing”.*

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3.1.2. Tab „Exeptions“

Exceptions are used to allow targeted color conversion of special colors. If the source and target colors are the same, the colors are linearized. If the color spaces are different, they are optimized and adapted. Exceptions ensure that special properties of colors are preserved. The basICColor Optimize-technology obtains the property of the input colors (for example, using one color channel of primary colors or using two color channels for secondary colors), but calculates the optimal combination in order to minimize color errors.



Depending on the color space combination, varying exceptions are available for use when creating DeviceLink profiles.

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Exceptions are calculated in the background using the basICColor Optimize-technology, whereby the color value providing the best color match is calculated. If the **<Triplex>** option is activated as an exception, all other options influenced by it are also automatically activated. The purity of Gray, 100% Black, Duplex, Primary colors and Secondary colors is preserved in the DeviceLink profile as a result. If **<Duplex>** is selected, the purity of all Primary colors, Gray and 100% Black is preserved.

Mode: ☐ Automatic ☒ Custom

<input checked="" type="checkbox"/> Triplex	<input checked="" type="checkbox"/> Duplex
<input checked="" type="checkbox"/> Gray	<input checked="" type="checkbox"/> 100% Black
<input type="checkbox"/> 100% C,M,Y	<input type="checkbox"/> 100% R, G, B
<input type="checkbox"/> Max. C,M,Y	<input checked="" type="checkbox"/> Max. R,G,B
<input checked="" type="checkbox"/> Primaries	<input checked="" type="checkbox"/> Secondaries
<input checked="" type="checkbox"/> C <input checked="" type="checkbox"/> M <input checked="" type="checkbox"/> Y	<input checked="" type="checkbox"/> MY <input checked="" type="checkbox"/> CY <input checked="" type="checkbox"/> CM
<input type="checkbox"/> Adapt TVI to source profile	
<input type="checkbox"/> Black Overprint	<input checked="" type="checkbox"/> White
<input type="checkbox"/> 400% Black	<input type="checkbox"/> Border Clipping
<input type="checkbox"/> 400% Black to Pure Black	

Tolerance:

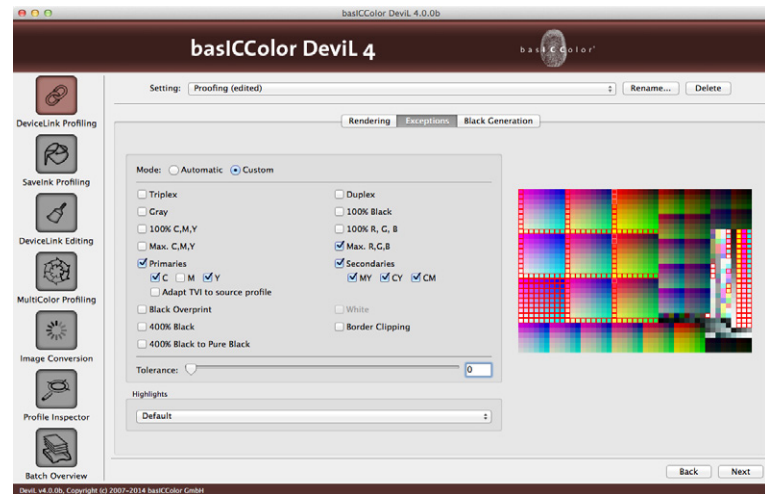
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A further setting option, **«Adapt TVI to source profile»**, has been added under **«Primaries»** for CMYK-to- CMYK Device-Link profiles. This option is important if you want to exactly preserve the tone value increases of the primary colors. One application would be a situation where you want to print in accordance with a particular printing standard, but on a different paper, and the profile used for the purpose has different tone value increases. A DeviceLink profile created by using the new option corrects the tone value increases in such a way that they correspond exactly to the required printing standard (from the source profile).

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Automatic calculation of exceptions

Selecting the right exceptions when creating DeviceLink profiles is an art in itself. If you make the right choices, you can rely on getting hue-accurate, pure and saturated colors, as well as color behavior optimized for printing, e.g. in overprinting situations. The **<Exceptions>** tab, when



creating DeviceLink profiles, has therefore been expanded to include an option for automatic calculation of the most suitable settings for the exceptions for your selected source and target profiles. This produces a combination of various calculations relating to color rendering, color difference and device color differences, as well as empirical values regarding the preservation of color purity. Select the **<Automatic>**

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mode to activate the new function. Following a short time for calculation, the automatically determined exceptions are grayed out. The exceptions that are not grayed out are not included in the calculation and can now be manually activated or deactivated. This new option makes it much easier to choose the right exceptions.

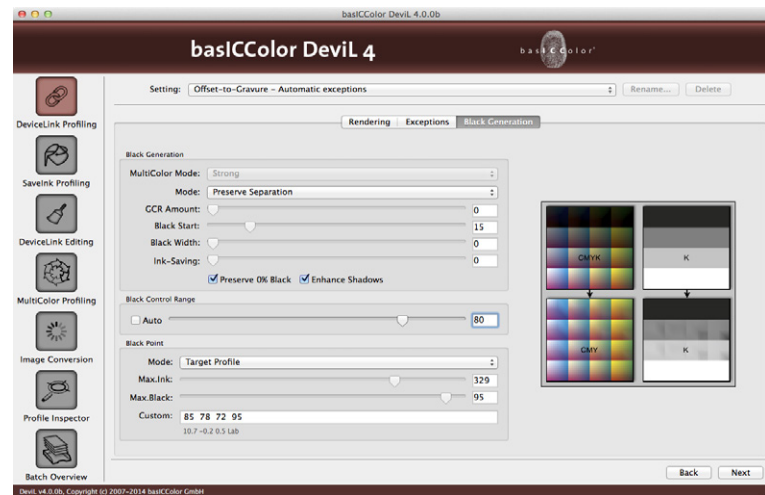
Note: *To make a good preselection, we recommend that you select **<Automatic>** calculation of the exceptions as your default setting when creating DeviceLink profiles. If you want to set exceptions yourself, or alter the automatically determined settings, switch the mode to **<Manual>**. If you have already selected exceptions manually, or chosen a DeviceLink preset at the top in the dialog, and then switch to **<Automatic>** mode, your settings will be overwritten with those of the **<Automatic>** function.*

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3.1.3. Tab „Black Generation“

Input field „Black Generation“

„Black Generation“ defines the method that generates black in the target color space.



Multicolor-Mode

As soon as Multicolor measurement data is loaded in the printer-profiling module or a Multicolor target profile is loaded in the **DeviceLink Profiling** module, four new Multicolor modes are available. In these modes you determine how the colors shall be structured in the individual separations.

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Note: *A Multicolor license is needed to use the Multicolor functions.*

- Default-setting is the mode **Strong**. A lot of spot color is put into the calculation and the spot color channels are pre-calculated utilizing the measurement data. This leads to a strong use of spot color channels and saturated colors in print. The disadvantage of the method is that the CMY separation can appear less smooth, depending on the data set.
- If you want to achieve a particularly smooth separation and harmonious color separation, so select the **Smooth** mode. Less spot color is generated depending on the measurement data set. The color results will be less saturated than with the **Strong** method.
- The method Sparse Inks is of particular interest for the packaging market, since in this case the color separations are keeping as much spot color as possible and make little if no use of the normal colors. Furthermore the black build up is done with few colors only, in the best case with three colors. Spot colors can be calculated in the grey balance also.

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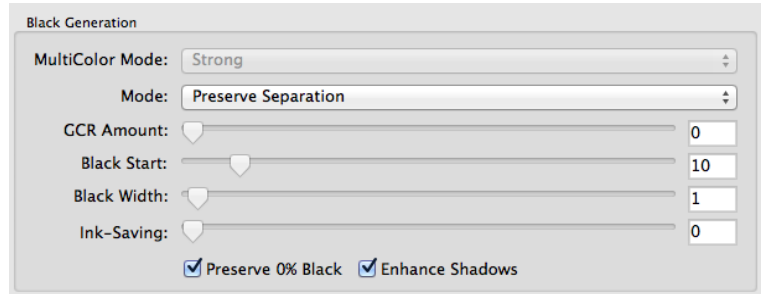
Note: Unlike in the methods **Strong** and **Smooth** you cannot alter the „Black Generation“ and the „Black Point“ in the method **Few Colors** as basIColor Devil calculates these values automatically. The adjustment options are therefore grayed-out.

- In the fourth method **Use CMYK only** a Multicolor printer profile or a DeviceLink profile is created that generates the required number of channels (ie.7 channels) but is made from CMY or CMYK only.

Note: Packaging printing sometimes requires that CMYK images and vectors, although converted into a multicolor color space, shall still be built up with minimal adjusted CMYK-values and without spot colors. Only the defined as DeviceN spot colors in the PDF shall be converted into the large multicolor color space in such a scenario. This workflow is possible by using a separation keeping CMYK to Multicolor DeviceLink profile created in basIColor Devil with the method „Use CMYK only“, followed by a spotcolor conversion of the PDF data with the basIColor colorserver gHOST.

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In the **<Mode>** pulldown menu you can define the method to generate black for the target color space.



- **Target Profile** uses the separation from the target profile
- **UCR, GCR, MinK, MaxK** generates a new separation independent from the profile separation
- **Preserve Separation** preserves the ratio of CMY- and black-composed gray during color conversion.
- **Preserve Black** linearizes the input black value and preserves it. Only CMY will be changed.
- **Save Ink** replaces CMY colorants with black to save ink. This option needs a separate licence.

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- The option **«Preserve 0% Black»** is available if the **Preserve Separation** mode is selected. It prevents creating a black channel for colors from the source color space that had no black. This is important for keeping overprints.

☐ Preserve 0% Black ☒ Enhance Shadows

- The option **«Enhance Shadows»** is available if the **Preserve Separation** mode is selected. This intelligent „Black Generation“ option prevents detail losses and low densities in dark color regions.

Note: *Specifically when converting between two CMYK color spaces, the **Preserve Separation** mode for **Black Generation** is of decisive importance, because it preserves the ratio of CMY- and black-composed gray during color conversion. The **Enhance Shadows** option should always be activated when you select the **Preserve Separation** mode.*

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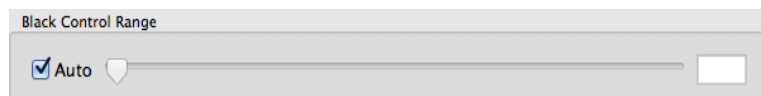
- If you choose the mode **Preserve Separation**, the option **<Enhance Shadows>** should always be clicked.

The **GCR options** include settings for **GCR Amount**, **Black Start** and the **Black Width**:

- **GCR Amount** defines how much CMY parts are replaced with black. With **0** a very light GCR is used that many affects shadow areas. **100** however uses a strong GCR which uses black from light to dark color areas
- **Black Start** defines the starting point to generate black. If the minimum of C,M,Y exceed the limit, black will be generated
- **Black Width** defines the range outside the neutral area to generate black. The lower the value the less black will be generated outside the neutral area.

Black Control Range

The Black Control Range defines a limit for the calculation of the intersection to black. If black exceeds the limit, the CMY colorants will not be modified and only black will be added linear. Black is calculated up to the given limit.



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A value of 0% indicates that only the CMY colorants will be converted and black will be linearized only. The use case proofing requires an exact absolute colorimetric match which means that the limit should be set to 100%. In most other cases a limit of 80% is a good value to reach a smooth transition in the dark colors region. The Black Control Range can now be determined automatically using the Automatic checkbox.

Black Point

Black Point

Mode: Target Profile

Max.Ink: 329

Max.Black: 95

Custom: 85 78 72 95

10.7 -0.2 0.5 Lab

The black point is the darkest color value in a profile – it is usually also the point with the maximum amount of color. You have a choice of different modes for defining the Black Point, and the mode can also be changed at a later stage:

- **Auto** calculates the optimal black point. The Max. Ink and Max. Black values you have entered are taken as maximum borders which are not allowed to be exceeded but that may well be changed to lower values if possible.

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- **Balance CMY** keeps your black point neutral. If necessary, you can reduce the Max. Ink in accordance with the printing conditions. The Max. Black should be set to the ideal value for your substrate. These values are exactly reached in the profile.
- The effect of **Custom** is that you can predefine the black point in the Custom field as CMYK values, whereupon the Max. Ink is automatically recalculated.
- If you select **Target Profile**, basICColor *DevIL* automatically adopts the Max. Ink and Max. Black values from the selected target profile. The black point used in the profile is displayed as a CMYK value in the Custom field, the Lab value achieved being indicated beneath it. The Lab value helps you check the impact of the black point you enter. If, for example, you reduce the Max. Ink too much, shadows will become lighter on the press. This is indicated by a higher L* value, and will be undesirable in many cases.

Note: First select **<Target Profile>** as the „Black Point“ mode, in order to extract the Max. Ink and the Max. Black from the target profile, and then switch to **<Balance CMY>** so that basICColor *DevIL* calculates the best possible, neutral black point.

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The „Black Point“ **<Auto>** mode now works differently than before. Between 400% and 300%, the **<Automatic>** mode calculates the best total ink coverage and maximum black automatically. Below 300%, the total ink coverage is no longer changed to prevent gamut limitations in colorful tertiary colors. To calculate the total ink coverage over the automatic mode, simply drag the slider to maximum. After a short calculation time, the desired value is displayed.

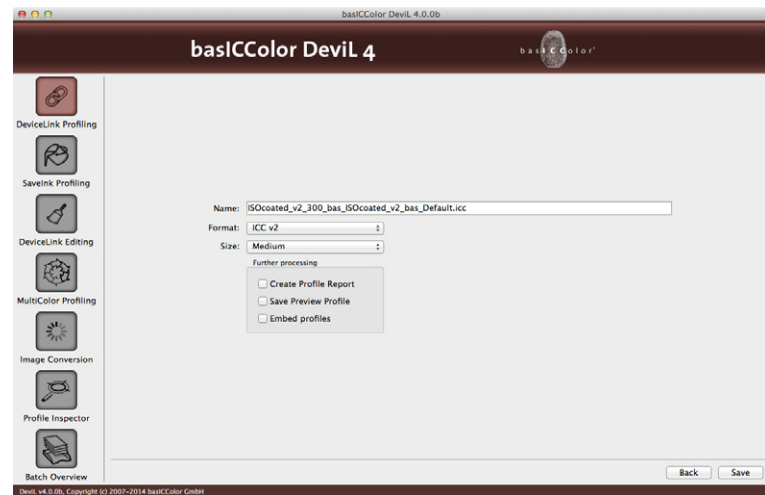
Note: *The **<Automatic>** mode operates below 300%, just like the Neutral CMY mode. If you require smaller values for the total ink coverage than 300%, enter it manually.*

- Use input field or slider **<Max.Ink>** to type in the max. tone sum that shall not be exceeded, value range: 0-400%. Using multicolor profiles, the total ink coverage cannot exceed 400% also.
- Use field or slider **<Max.Black>** to input the separation defined maximum of black ink. (value range: 0-100%)

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3.2.Profile Calculation Options

The profile creation page for DeviceLink Editing, SaveInk and Printer Profiling basically operate the same. Sometimes, depending on the modules, different options are available.



- Specify a **Name** for the ICC DeviceLink profile.
- Specify the profile **Format**. An ICC format in accordance with specification v2 is recommended as the basic setting. However, you can also choose the newer ICC v4 format. In this case, you must also make sure that your programs support this format correctly.

Note: Profiles in ICC V4 format are used consistently and correctly in basICColor products.

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- The **<Large>** setting is a good choice for the profile **Size**. With the **Size**, you are specifying the number of grid points in the profile. With this option, you can determine the amount of disk space required for the profile generated. Small profiles should only be used for test purposes. Very large profiles are not always advantageous and should be treated with caution.
- We recommend to activate the option **<Create Profile Report>** to get a detailed PDF-Report with your profile. This way you get a good overview about the quality of your profile.
- If you activate **<Save Preview Profile>**, your selected DeviceLink combination is used to generate not only the DeviceLink profile itself, but also an ICC profile that you can use as a soft proof profile in Photoshop. This option is only available in the modules **DeviceLink Profiling** and **Multicolor Profiling**.

STORAGE PATH - DEVICELINK PROFILES

Under Mac the DeviceLink Profiles are automatically stored in the `/Library/ColorSync/Profiles/` folder if you are logged in as administrator and otherwise in the corresponding `User/.../Profiles` folder (`Users/<user>/Library/ColorSync/Profiles/`). On Windows operating systems, the profile is installed in the `Colors` folder.

Note: *The preview profile is only suitable for soft proofing.*

- Click **<Save>** and basICColor *DevIL* automatically creates the DeviceLink profile.

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3.3 Creating Multicolor to Multicolor DeviceLinks

It is possible to create multicolor to multicolor DeviceLink profiles in the DeviceLink Profiling module. You can use all options for Rendering Intent, Exceptions and the Black Generation like with all other DeviceLinks. Multicolor source profiles with up to 7 channels are supported. Please note that the source profile and the target profile have to be CMYK + additional channels. None CMYK color combinations for the first four channels are not supported.

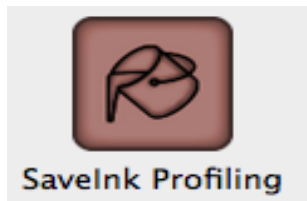
Note: *A Multicolor- and DeviceLink license is needed to be able to use this new function.*

The exceptions you might want to use for profile generation apply only to the CMYK components of the Multicolor profiles. However if the purity of CMY primary colors or of red, green and blue secondary colors cannot be preserved, because the additional multicolor channels add to the colorfulness of the separations, the exceptions will not be applied.

Chapter 4

SaveInk- Profiling

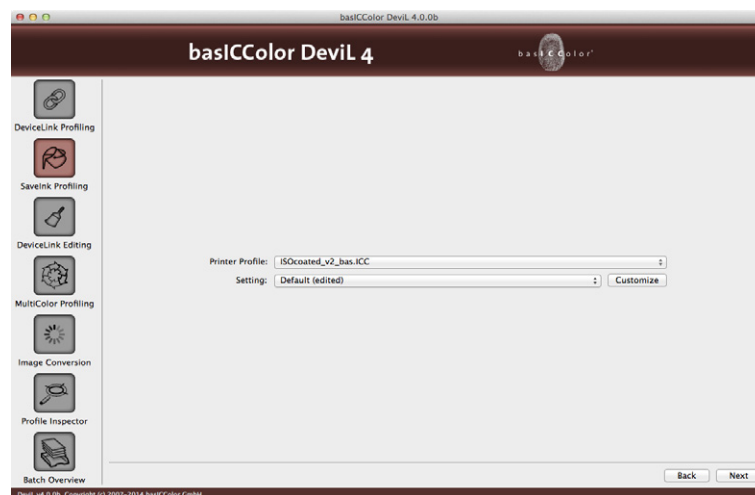
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4. SaveInk Profiling

One important application of DeviceLink profiles is saving ink while retaining the visual color impression. Today, **SaveInk Profiling** (or sometimes referred to as ink optimization) is a popular application for saving ink and enhancing quality in standardized offset, gravure and newspaper printing. Its application in large-format printing is relatively new, but should be evaluated for cutting the cost of ink consumption.

Note: *The SaveInk Module must be licensed to create a SaveInk profile.*



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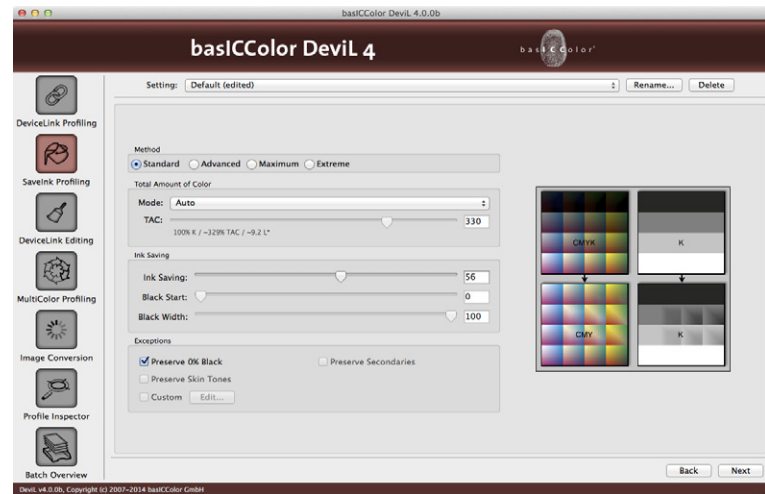
Open **SaveInk Profiling** by clicking the **<SaveInk>** button in the left task menu of baslCColor *Devil*:

- In the **SaveInk** module, select the **<Printer Profile>** to apply ink saving..
- Under **Setting**, choose a predefined setting for the SaveInk calculation.
- If necessary, click **<Customize>** and change the settings for the profile.. (see chapter „4.1 Advanced settings,,)
- Click on the **<Next>** button to go to the Save dialog.
- Create the DeviceLink-profile.

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4.1 Advanced settings

Click the button **<Customize>** in the main window of **SaveInk Profiling** to get to the advanced settings.



4.1.1 Selection field „Method“

There are four different methods specifying the basic settings and the algorithms for the ink saving of the SaveInk DeviceLink profiles. Depending on the selected method, different rules for exceptions are also available.

1.) Standard-Method

When using the **<Standard>** method, the only option available is the slider for Ink Saving, ranging from slight to strong.

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2.) Advanced-Method

If you choose the manual method under **<Advanced>**, you can additionally specify the **<Black Start>** and the **<Black Width>**.

3.) Maximum-Method

<Maximum> selects the degree of ink saving that achieves maximum savings while retaining the visual color impression and maximum colorimetric accuracy. However, it is possible to alter the exceptions.

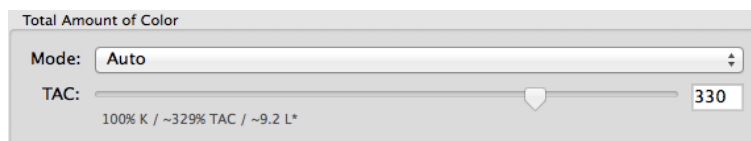
4.) Extreme-Method

The **<Extreme>** method achieves the greatest possible degree of ink saving, but can lead to changes in color rendering. In addition, there are only limitations for controlling exceptions.

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4.1.2 Selection field: „Total amount of color“

Use „Total Amount of Color“ to set the desired tone value limit for your SaveInk profile. Print data to be converted using your SaveInk profile will be limited to this total amount of color. The maximum black value is controlled and set automatically.



You can use **<Mode>** to specify whether the total amount of color and maximum black value is to be adopted from the profile, manually defined by you as a **<Custom>** setting or calculated automatically (**<Auto>** setting). Depending on the method selected, the maximum black value, the **Total amount of color (TAC)** and the darkest L* value are calculated and displayed after a short time for your information. From this information, you can deduce whether reducing the total amount of color, for example, will result in brightening in the shadows. Brightening is indicated by an increase in the L* value.

Note: In most cases, **<Auto>** Mode produces the best results. If the printer profile allows it, this mode calculates a slight reduction in the **Total amount of color** without significantly increasing the L* value.

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*With a <Maximum> or <Extreme> ink saving method and a substantial reduction of the **Total amount of color (TAC)** at the same time, identical Lab measurement mapping is possible to a limited extent*

4.1.3 Selection field: „Ink Saving“

The slider <Ink Saving> adjusts the degree of ink saving. The slider is active in the in the methods <Standard> and <Advanced>.



The screenshot shows a dialog box titled "Ink Saving". It contains three horizontal sliders, each with a shield icon in the center. The first slider is labeled "Ink Saving:" and has a value of 30. The second slider is labeled "Black Start:" and has a value of 0. The third slider is labeled "Black Width:" and has a value of 100.

The <Black Start> and the <Black Width> can only be adjusted in the method <Standard>. <Black Start> defines at which point black ink shall be added to the colorants C,M and Y. Adding black often looks grainy and pixelated especially in pastel shades and skin tones and in the light grey tones.

Therefore black should be added at a later point relative to the colorants. On the other hand adding black earlier stabilizes the color reproduction of the grey axis and the ink consumption is reduced. A low value means an earlier black start than a high value..

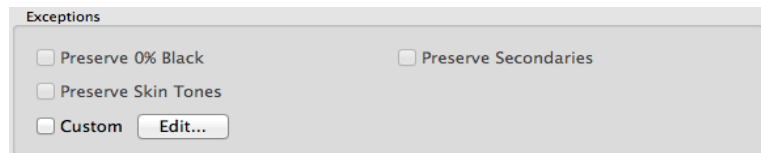
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The slider **<Black Width>** determines to what degree black is added to the colorants. A low value has an impact around the grey axis mainly (slim black). A high value creates a wide black and impacts the colored color areas.

With a wide black you can reduce the total ink consumption and stabilize the print. There is a possibility, however, that colors (skin tones for example) tend to get a grey shade and /or show black raster dots.

4.1.4 Selection field „Exceptions“

„Exceptions“ ensure that special properties of the SaveInk profile are preserved.



The **<Preserve 0% black>** option ensures that areas consisting of CMY without black in the original do not change after applying the **SaveInk** function. This is particularly important when overprinting with CMY inks.

One of the new features of Devil 4 is the **<Preserve Secondaries>** option. When clicked on highly saturated secondary colors without reduction are obtained, despite reduction of the TAC in dark colors to below 200%. Typically, secondaries are always preserved if the TAC is higher than 200%.

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However, in the event of a TAC below 200%, secondary colors like reds, greens or blues would also undergo unwanted reduction if this option were not used. In a production environment such as newsprint, there is frequently a need to reduce the TAC to 180%, or even 140%, but without affecting highly saturated Red, Green and Blue colors.

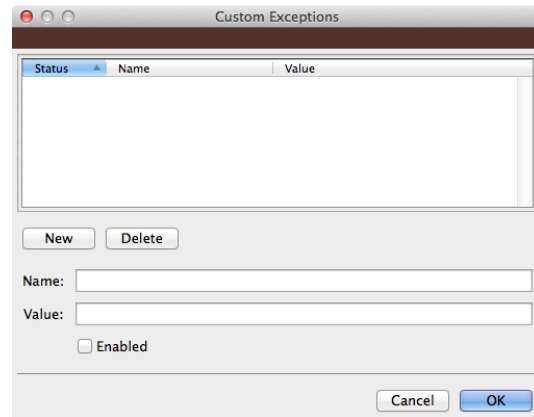
By selecting **<Preserve skin tones>**, you specify that skin tones are to be excluded from ink saving. Especially on printing methods with a coarse screen (e.g. large-format inkjet systems with low print resolutions, newspaper printing and printing processes susceptible to missing dot problems such as flexographic and gravure printing), this is one way of counteracting the peppering effect, visual graying and coarse skin tones.

Under **<Custom>**, specify individual CMYK color values that are not to be optimized. These could include specific color builds, for example, or corporate identity that must remain unchanged. Click on **<Edit>** to open a window where you can enter your colors.

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Custom Exceptions

Enter individual CMYK color values that are not to be affected by the SaveInk optimization. These could include custom builds, for example, or corporate identity colors that must remain unchanged.

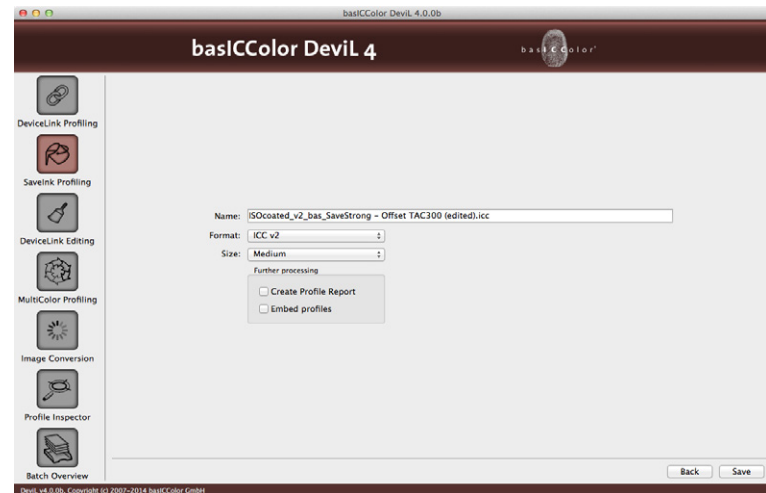


1. Select **<New>** to make a new entry..
2. Under **Value**, enter the CMYK value to be excluded from the SaveInk optimization. As an option, apply a **Name** to the color.
3. Enter as many colors as required.
4. Use the **<Enabled>** checkbox to indicate which colors should be taken into account and which should not.
5. Click **<OK>** to confirm the customized values.
6. Make sure that the checkbox next to **<Custom>** is also activated

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4.2 Create profile

Once all the adjustments in the settings are done, the SaveInk profile can be created. Click the button <Next> to get to the window where you can name the profile.



Note: Please refer to chapter 3.2. on detailed information on Profile calculation options.

Chapter 5

DeviceLink- Editing

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5. DeviceLink-Editing

The **DeviceLink-Editing** module is a very powerful and versatile tool.



- Create your own gamut mapping by editing, RGB to CMYK conversion for example
- Fine tune your calculated DeviceLinks
- Create gradations corrections or selective color corrections that you can use as correction profile in basICColor *DevIL*
- Create abstract ICC-profiles, that produce a certain shade or look.
- Define the first printed tone, then transfer this gradation correction into a DeviceLink for use in flexographic printing, for example
- Record the color conversion of any tool and save it as a standard ICC DeviceLink profile with high accuracy to be able to reproduce it in ICC-compatible workflows.

Supplied with basICColor *DevIL* in the **EditTargets** folder are four different TIFF files for CMYK, RGB, Lab and Gray color spaces. In conjunction with the **DeviceLink-Editing** module in basICColor *DevIL* the **CMYK, RGB and Gray EditTargets** can be used to represent any kind of color transformation in a DeviceLink profile.

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The **Lab EditTarget**, however, makes it possible to create an abstract profile. The top, left-hand corner of every basIColor Devil edit chart contains a patch of representative colors that include the gray axis, all pure colors and mixed colors.

Note: Since version 3 basIColor Devil supports the Photoshop PSD format and so it is also possible to edit Duplex (two color channels) and Triplex (three color channels) via **Device-Link Editing**.

As basIColor Devil identifies the original edit chart via the identification color patches, the color space of the converted edit chart is irrelevant. basIColor Devil can also transform color conversions into DeviceLink profiles that include a change of color space, e.g. from RGB to Gray, Gray to RGB or RGB to CMYK. Needless to say, DeviceLink profiles can also be created that merely involve a color correction without a change of color space (e.g. CMYK to CMYK or Lab to Lab for creating abstract profiles).

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5.1 Button: DeviceLink-Editing

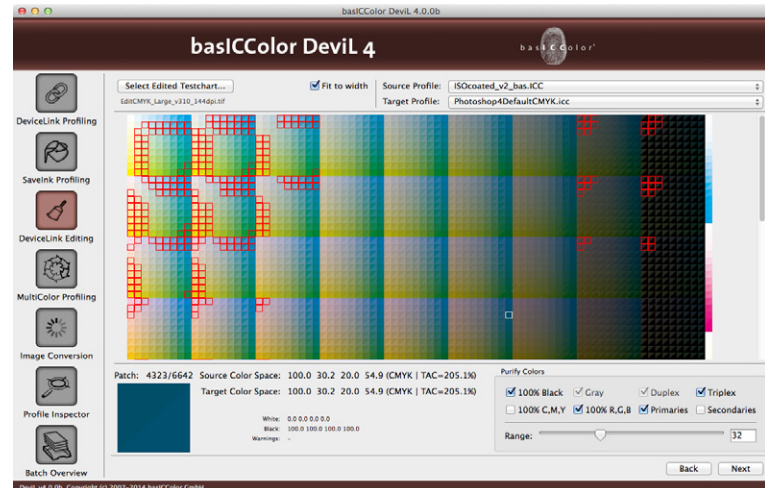
In your image editing program (e.g. Adobe Photoshop), open one of the basICColor *Devil* **Edit Charts** in the color space you want to use either for editing or as the source for color conversion.

In order to represent any desired color conversions in a DeviceLink profile, e.g. global corrections and selective color corrections, the basICColor *Devil* **Edit Chart** first has to go through this color conversion in an application program. The modified **Edit Chart**, now saved under a new name, is then opened in the basICColor *Devil* **DeviceLink Editing** module by Drag&Drop or via the **<Select Edited Testchart...>** button.

„PSID“-TAG IN THE DEVICELINK PROFILE

A DeviceLink profile represents a tailor-made color conversion from a defined source (e. g. Gray, RGB or CMYK color space) to a target profile. Within the ICC standard, there is the possibility of using the “Profile Sequence Identifier” – PSID Tag for short – in the DeviceLink profile to store information regarding the source and target color spaces for which a DeviceLink profile was calculated. basICColor gHOST is capable of reading the PSID Tag and thus of automatically setting the profiles under Document Color Space and Target.

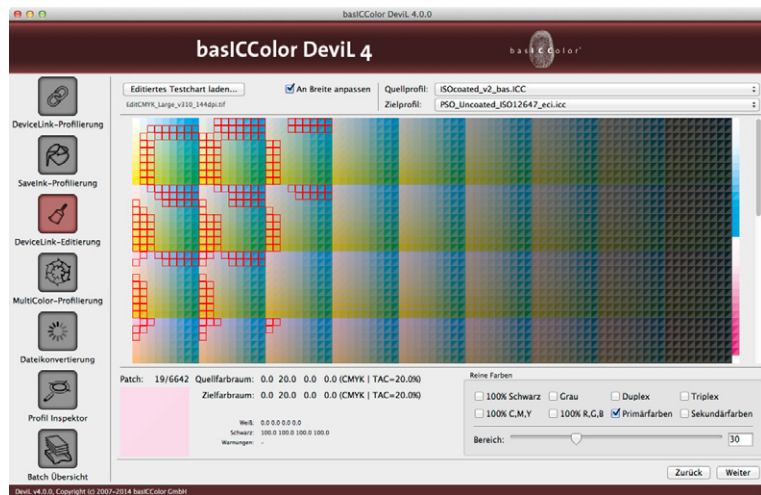
When creating an ICC DeviceLink profile from an Edit Chart this information is often “missing” and so you can choose the corresponding ICC profiles for the source and destination color space in 2 pull-down menus.



The menu handling and the possibility to fit the loaded (edited) target to size help you to easier analyze the data

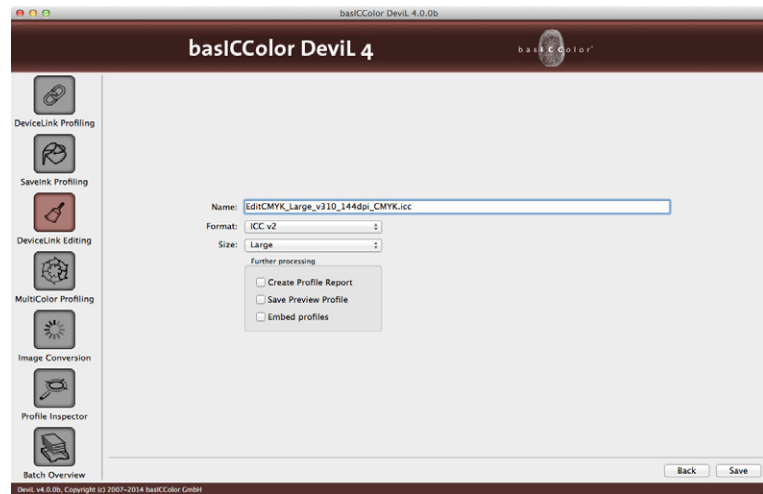
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in basICColor *Devil*. All setting options are clearly arranged in one window for easier handling. The original chart and the edited chart are shown in a shared field. Additionally the selected patch is highlighted in a separate field, so you can visually check your editing easier. All patches that will be affected by the options selected in Purify colors have a red frame, so you can evaluate the effects by these settings immediately.



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You also get the option to create a profile report in the **DeviceLink Editing** module when calculating the DeviceLink - another advantage of the integrated profile manager of basICColor *DevIL*.



Note: Please refer to chapter 3.2. on detailed information about **Profile calculation options**.

Chapter 6

MultiColor- Profiling

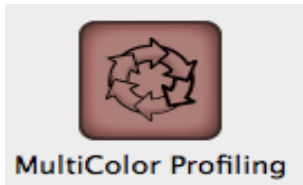
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6. MultiColor Profiling

The module **MultiColor Profiling** is a powerful tool to create target profiles meeting the ICC standard.

Next to generating RGB and CMYK target profiles, another main task of this module is to build MultiColor profiles.

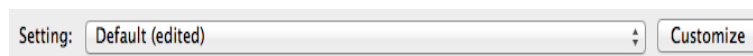
MultiColor means that a printing system works with more than 4 colors. The maximum number of color channels supported by basICColor *DevIL* is 7 primary colors.



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6.1 Settings

Once a target has been selected, choose in the pulldown menu **Settings** what criteria shall be applied to the profile. There is a default setting for all primary color systems which already delivers excellent results without further adjustment.

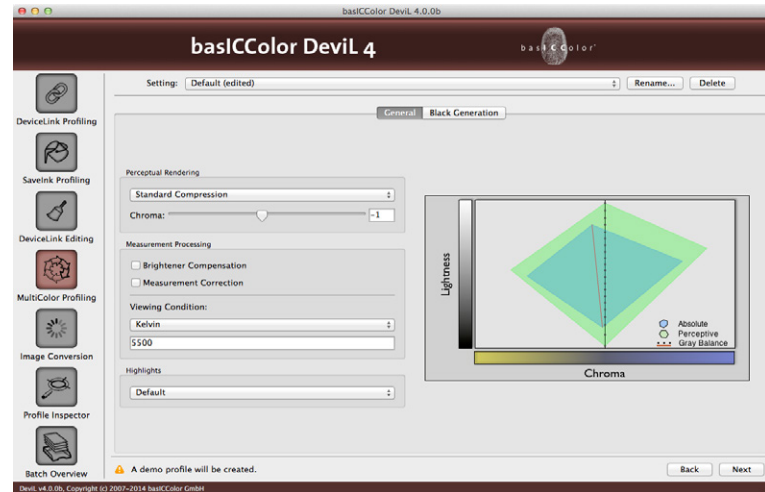


If you wish to define your own settings, a click on **Customize** opens an advanced menu where you can make relevant adjustments to the final result in your profile creation.

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6.1.1 General

Select your general settings for the profile generation in the tab <General>.



Perceptual Rendering

Depending on the task at hand, it can make sense to use different versions of gamut mapping. For printer profiling, we therefore offer four different methods in relation to the perception-oriented rendering method under „Perceptual Rendering“:

- **Standard Compression: Standard** method, which is suitable for most applications. Neutral tones are converted by the relative colorimetric method. If the

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paper white of the printing medium used is significantly more yellow than the reference, the gray axis also looks more yellow in accordance with the paper white.

- **Blackpoint Compensation:** This method largely corresponds to the Relative colorimetric with black point compensation method familiar from Adobe products. When converting CMYK data in printing systems, the image definition in the highlights and shadows is preserved, but losses of definition in areas of highly saturated color are avoided. Neutral tones are converted by the relative colorimetric method.
- **Absolute Compression:** This method is geared to the absolute colorimetric intent, the contrast range in the highlights and shadows being adapted to avoid any loss of image definition. The rendering of neutral colors likewise corresponds to absolute colorimetric rendering, there being no paper color simulation in the highlights.
- **Minimal Compression.** This rendering intent allows an absolute colorimetric reproduction and compensates only close to the black and white point. This means

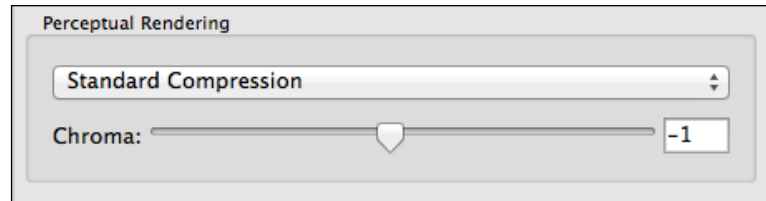
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you will reach the maximum black point and will not simulate white. You may use this rendering intent if you like to achieve a very close reproduction of a print standard, e.g. ISO Coated V2 or GRACoL2006 Coated1v2 on a digital printer. If you like to use a printer profile generated with a special basICColor rendering intent in another ICC-compliant software, simply chose perceptive rendering intent..

Note: *Similar to the absolute colorimetric rendering intent, you should ensure that the target color space is larger or at least the same size to avoid any loss of structure and details. For color conversions from large to small color spaces, please use <Absolute Compression> instead if you want to maintain the gray balance of the source color space.*

With these methods you influence the whole color space rendering and you can individually adjust the rendering intent to your needs.

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Chroma

The **<Chroma>** slider is used to reduce or increase the chroma within the specified color space. In this way, highly saturated in-gamut colors, and also skin tones, for example, can become stronger, while the gray axis remains stable

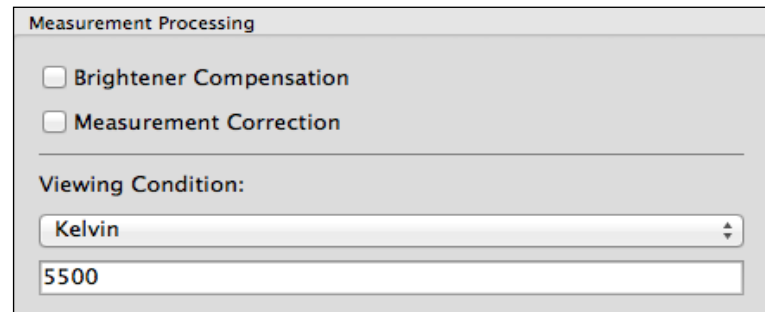
The **<Chroma>** slider can be used to reduce or increase the chroma of highly saturated colors in the range between -20 and +20.

Note: *We intentionally keep the chroma effect moderate. However, when increasing the chroma, ensure that the setting neither causes a loss of image definition in highly saturated colors, nor excessively affects skin tones, for example.*

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6.1.2 Measurement Processing

„Measurement Processing“ is one of the major new features that have been added. It includes significantly improved **<Optical Brightener Compensation>**, the **<Measurement Correction>** function and the specification of a „Viewing Condition“.



Measurement Processing

☐ Brightener Compensation

☐ Measurement Correction

Viewing Condition:

Kelvin

5500

Brightener Compensation

When working with spectral measurements, the **<Brightener Compensation>** function can perform optimum correction for papers containing optical brighteners. In contrast to the case when using colorimetric data (LAB measurements only), this compensation is only performed if *DevIL* actually recognizes the paper color as an optical brightener, and not in the case of a blue-colored paper, for example. In other words, *DevIL* only performs a correction if it really is necessary. However, unlike other solutions, the compensation also works with pure LAB measurements, although it is always applied in this case, even when using a blue paper mentioned above.

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Recommendation: *Work with spectral measurements whenever possible.*

Particularly as a result of the new viewing condition changes according to ISO 3664:2009, optical brighteners in paper are excited more intensively, meaning that only slight correction is needed when using measuring instruments based on measuring method Mo.

Note: *If you want to make targeted corrections of the effects of the optical brightener in the paper, use the basICColor IMProve measurement optimization software before profile creation in basICColor Devil. Once you have used basICColor IMProve to compensate for the brightener, deactivate the corresponding checkbox in basICColor Devil, so as to avoid double compensation.*

Measurement Correction

The aim of the <Measurement Correction> function is to detect and eliminate measuring errors but without changing the printing properties in the process. Redundant measurements, as they occur in typical test charts, e.g. the ECI2002 or IT8.7/4 test charts, are moreover taken into consideration for detecting uniform printing properties, and intelligently included in the correction. Further optimization

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of measurement data such as removal of redundant patches or smoothing can be used in the separate tool basICColor *IMProve*.

Recommendation: *Measurement Processing is recommendable as the default setting for your own measurements, ultimately making for printer profiles that are better in that they are smoother. However, the option should be deactivated when working with measurements that have already been smoothed (e.g. FOGRA39L measurements).*

Viewing Condition

Printer profiles are typically created for the D50 „Viewing Condition“. However, if the task at hand is, for example, to set up photos in a gallery illuminated by the light of incandescent lamps (corresponding roughly to viewing condition **A**), or displays at an exhibition where the lighting conditions are anything but optimum (e.g. fluorescent light), you can take the lighting conditions into account when creating the profile.

You can either select one of the three predefined viewing conditions, or enter the measured viewing condition manually in the form of a **Kelvin** value or, better still, an XYZ value.

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To simplify matters, you can moreover drag a measurement file with the measured light onto the value field, whereupon basIColor *Devil* extracts the white point from the file and displays the value. *Devil* then uses this information to calculate a printer profile that makes your prints appear the same way under the selected viewing condition as they would under the standard **D50** viewing condition. The chromatic adaptation familiar from CIECAM02 is applied in this context. In contrast to other solutions, no spectral measurements are necessary.

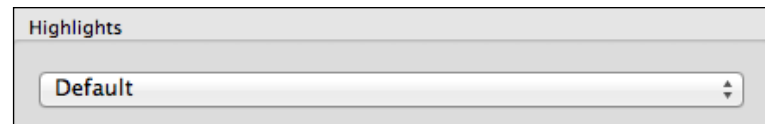
If you work with spectral measurements of your test chart, and with a spectral light measurement of your viewing condition, basIColor *Devil* uses a spectral color model instead of the otherwise customary chromatic adaptation according to CIECAM02. Chromatic adaptation according to CIECAM02 is only used now if you do not provide a spectral light measurement as the viewing condition and/or if the test chart is also not available with spectral measurements. To select a spectral light measurement, use the new **Emission** entry in the chooser and select your measurement file in the subsequent dialog, or simply drag your measurement file onto the chooser.

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Note: basIColor Devil remembers the last settings including your selected viewing condition. If you are creating new profiles please verify that the selected „Viewing Condition“ entry is in accordance with your application goals of the ICC profile. If no specific viewing condition is required always select the **Default D50** entry.

6.1.3 Highlights Option to Simulate First Printed Tone

In flexo printing it is common that the first printed tone has a high tone value increase. In addition, it happens often that in the very light areas – until it reaches a certain percentage – there is no tone value at all. For proof applications, it is essential to simulate all characteristics of the final printing process. In Devil 4 we added a new option „Highlights“ for **Multicolor Profiling** (in tab <General>) and also in **Device-Link Profiling** (in tab <Exceptions>)



In these options you may define when the **First Printed Tone** shall be visible when applying the profile for proofing (hardcopy proof or softproof). In that way you can guarantee that your proof will reflect the final printing. It also ensures if you define the **First Printed Tone** with 3% for example that

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for the separation direction of the profile (BtoA LUTs) all tone values lower than that, will be increased to the defined value and can be printed correctly. The paper white will not be touched but very low values will be set to start with the value you entered for the first printed tone.

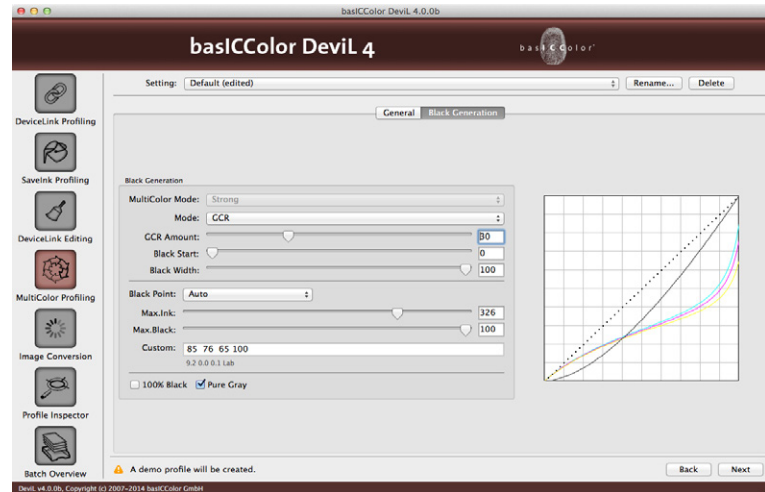
Note: *The Default setting leads to the “normal” profiling behavior in the highlight regions of a profile. Use it for any printing process you are profiling that does not demand for special treatment of the first printed tone.*

*In the **DeviceLink Profiling** module you will find the „Highlights“ options in the <Exceptions> tab. Define in the pulldown menu if the DeviceLink is for proof or production and choose accordingly.*

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6.1.4 Black Generation

The tab <**Black Generation**> defines the method to generate black for the target color space.



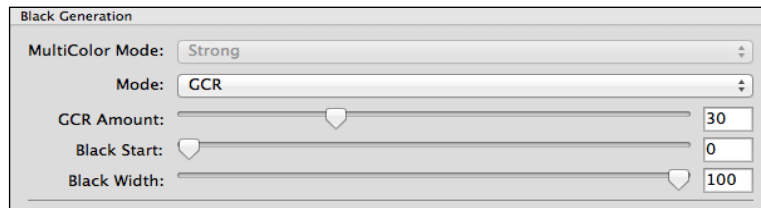
You can select the following in the mode pulldown menu:

- **Auto** selects a medium strong GCR method depending on the measurement data.
- **UCR**: define the **Black Start** and the **Black Width**
- **GCR**: additionally allows to define the **GCR Amount**
- **MinK**: uses black only a little and leads to a separation using the maximum amount of CMY

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- **MaxK:** uses the maximum amount of black possible leading to a separation with very little CMY amounts..

The GCR options include settings for **GCR Amount**, **Black Start** and the **Black Width**:

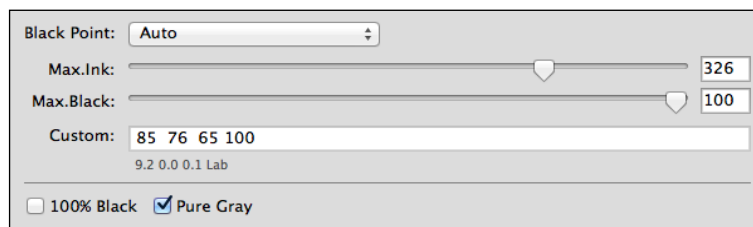


- **GCR Amount** defines how much CMY parts are replaced with black. With 0 a very light GCR is used that many affects shadow areas. 100 however uses a strong GCR which uses black from light to dark color areas.
- **Black Start** defines the starting point to generate black. If the minimum of C,M,Y exceed the limit, black will be generated..
- **Black Width** defines the range outside the neutral area to generate black. The lower the value the less black will be generated outside the neutral area.

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Black Point

The **Black Point** is the darkest color value in a profile – it is usually also the point with the maximum amount of color. You have a choice of different modes for defining the **Black Point**, and the mode can also be changed at a later stage:



The screenshot shows the 'Black Point' settings dialog. It features a dropdown menu set to 'Auto'. Below it are two sliders: 'Max.Ink' with a value of 326 and 'Max.Black' with a value of 100. A 'Custom' section contains a text field with the values '85 76 65 100' and the text '9.2 0.0 0.1 Lab' below it. At the bottom, there are two checkboxes: '100% Black' (unchecked) and 'Pure Gray' (checked).

Auto will find the best (dark and neutral) **Black Point**-based on the measurement data. The **Max. Ink** and **Max. Black** values that you are providing are regarded as maximum values that can be underrun if possible.

Balance CMY keeps your black point neutral. Define the **Max.Ink** in accordance with the printing conditions. The **Max.Black** should be set to the ideal value for your substrate. Both values will be reached exactly in the printer profile.

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The effect of **Custom** is that you can predefine the CMYK values for the **Black Point** in the **Custom** field, whereupon the **Max.Ink** is automatically recalculated.

Note: *The Lab value displayed is particularly helpful for assessing the effect on the black point (darkest value in a profile) if you change the maximum ink value, for example. The smaller the L* value, the deeper the black.*

- Use input field or slider **<Max.Ink>** to type in the max. tone sum that shall not be exceeded, value range: 0-400%. Using multicolor profiles, the total ink coverage cannot exceed 400% also.
- Use field or slider **<Max.Black>** to input the separation defined maximum of black ink. (value range: 0-100%)
- If **Black Point** calculation is set to **Custom**, you can control the **Black Point** independently of the maximum ink value. Some toner-based digital printers achieve maximum depth with pure black, i.e. CMYK= 0/0/0/100. For these printing systems, you should enter this value in the **Custom** text field to obtain optimum black rendering. However, to also be able to print maximum secondaries and colored shadows with this setting, you need a higher **Max.Ink** level, which you can now enter manually at this point.

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Checkbox „100% Black“

If you select the **<100% Black>** option, for example, you avoid a pure black RGB text being printed in four colors following conversion via a CMYK profile, and the text looking blurred as a result. This is often the case with Office documents. The **<100% Black>** option converts an RGB value of 0-0-0 to 0-0-0-100 (i.e. 100% black).

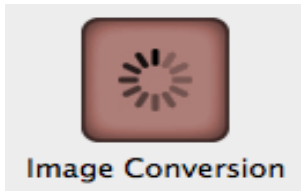
Checkbox „Pure Gray“

With the help of the **<Pure Gray>** option, the gray balance in a CMYK printer profile is composed exclusively of black ink. However, this only makes sense if your printing system has a very neutral black, from the highlights to the shadows. In RGB printer profiles, the effect of **<Pure Gray>** is that the gray balance is composed of equal amounts of color. This proves to be a very useful option in the case of RGB-controlled ink systems, for example.

Chapter 7

Image conversion

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NOTE: DEMO-DEVICELINK-PROFILE

The image conversion supports coded and with the *basICColor DevIL* demo version created demo profiles. This way, you can evaluate the profile quality from either coded or demo profiles when converting images. In order for other applications to correctly display the converted files, *basICColor DevIL* will decode a coded or demo profile and embed it with a smaller grid size into the converted image.

Note, however, that you can not use this profile for production purpose, because the profile quality is reduced. For this reason, such profiles are marked as **LOW QUALITY VERSION FOR DEMO ONLY** in the file name

7. Image conversion

basICColor DevIL converts PSD, TIFF and JPEG files with the help of ICC device profiles and DeviceLink profiles. This function is very useful for checking the profile quality on images, since typical application programs do often not support all types of DeviceLink (i.e. RGB to CMYK) or multi-color profiles.

If you are using a *DevIL* trial license (demo license), the application will allow the conversion of images with the demo profiles for further evaluation in other programs (i.e. Photoshop).



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After selecting an image (TIFF, JPEG or PSD), which is to be color converted, both a preview of the image as well as a possibly embedded profile is displayed.

You may choose to apply either a normal ICC conversion with source and target profile or a DeviceLink conversion. By the information of the embedded profile, you know that you should select this profile as your **<Source Profile>**. If you would like a DeviceLink conversion, you know which source profile your DeviceLink should have.

In a normal ICC conversion from the source to the target profile, you will be able to specify the rendering intent for the conversion. Besides the typical four ICC rendering intents, a fifth option **Blackpoint Compensation** is available.

Note: *It is the relative colorimetric intent with additional black compensation, as it is also known from Adobe Photoshop.*

STORAGE PATH - DEMO-DEVICELINK PROFILES

Under Mac the Demo DeviceLink profiles are automatically stored in the /Uses/ Shared/ basIColor/Demo-Profiles/. On Windows operating systems, the profile is installed in the C:\Documents and Settings\All Users\ Documents\basIColor\ Demo-Profiles\ folder.

Want a DeviceLink conversion to perform? Just select the desired DeviceLink profile from the drop-down menu of the **<Source Profile>**. Other options, such as the choice of the target profile or a rendering intent, are no longer necessary. These options are disabled accordingly.

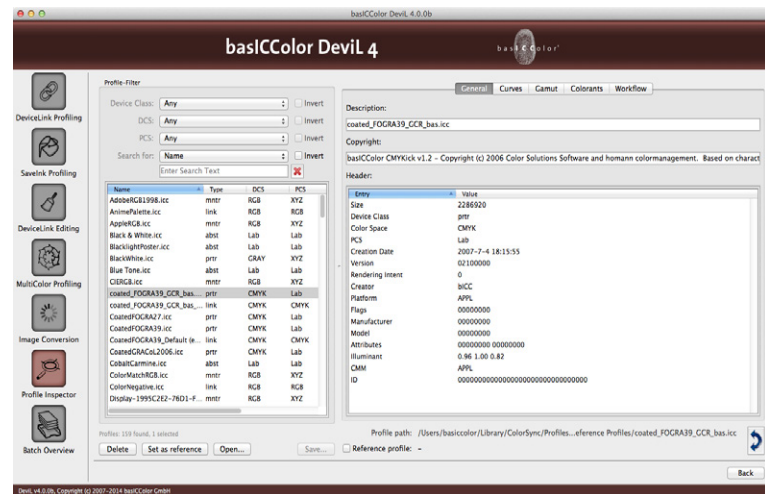
Chapter 8

Profile Inspector

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8. Profile Inspector

The **Profile Inspector** is a new feature in basICColor *Devil* 4. You can now manage, sort, analyze, compare and adapt your profiles without having to leave the basICColor *Devil* working environment. The main window of the **Profile Inspector** shows you all on your computer available profiles. All sorts of profiles can be handled (including DeviceLink- and MultiColor profiles) and therefore make the **Profile Inspector** the ultimative tool for all colormangement requirements.



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In the tabs <General>, <Curves>, <Gamut>, <Colorants> and <Workflow> you can access various functions. Furthermore you can check the profile quality with the help of the profile report.

8.1 Profile Selection

The left side of the **Profile Inspector** window is divided into three areas:

8.1.1 Filter

Here you can filter the profiles from the „Profile List“ with the help of various parameters. You can filter the <Device Class> to “Any”, “Input”, “Output”, “Monitor”, “Device Link”, “Color Space”, “Abstract” or “Named”. <DCS> and <PCS> are filterable to “Any”, “CMYK”, “RGB”, “Gray”, “N-Color”, “2,3,4,5,6,7,8,9 ..15 -Color“, “XYZ or Lab“, “Lab “or” XYZ“. This is for example useful if you want to see only profiles of a given color space.

Profile-Filter

Device Class: Any ☐ Invert

DCS: Any ☐ Invert

PCS: Any ☐ Invert

Search for: Name ☐ Invert

Enter Search Text

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Furthermore, you can search specifically for a text in the profile through the **<Search for>** function. You can customize your search by selecting “None” or you can search for “Name”, “Creator”, “Manufacturer” or “Date”. This is useful if you want to display all the profiles that were created on a certain day, for example.

All filters and search terms can also be inverted by a click on the corresponding checkbox **<Invert>**.

8.1.2 Profile List

The list is updated automatically (not just at startup, but each time the program is brought to the foreground).

Name	Type	DCS	PCS
AdobeRGB1998.icc	mntr	RGB	XYZ
AnimePalette.icc	link	RGB	RGB
AppleRGB.icc	mntr	RGB	XYZ
Black & White.icc	abst	Lab	Lab
BlacklightPoster.icc	abst	Lab	Lab
BlackWhite.icc	prtr	GRAY	XYZ
Blue Tone.icc	abst	Lab	Lab
CIERGB.icc	mntr	RGB	XYZ
coated_FOGRA39_GCR_bas....	prtr	CMYK	Lab
coated_FOGRA39_GCR_bas....	link	CMYK	CMYK
CoatedFOGRA27.icc	prtr	CMYK	Lab
CoatedFOGRA39.icc	prtr	CMYK	Lab
CoatedFOGRA39_Default (e...	link	CMYK	CMYK
CoatedGRACoL2006.icc	prtr	CMYK	Lab
CobaltCarmine.icc	abst	Lab	Lab
ColorMatchRGB.icc	mntr	RGB	XYZ
ColorNegative.icc	link	RGB	RGB
Display-1995C2E2-76D1-F...	mntr	RGB	XYZ

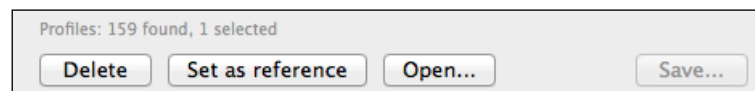
...because it simply works!

Open...	CMYK	CMYK
Show File...	CMYK	LAB
Delete...	CMYK	LAB
Duplicate...	CMYK	CMYK
Show similar	LAB	LAB
Show All	RGB	RGB
Set as reference		
Generate Profile Report (PDF)		
Save Gray-Profile		
Smooth Profile LUTs		

Right-click a profile and the context menu shows, depending on the profile, a list with the following possible options to choose from:

The three entries **Generate Profile Report**, **Save Preview-Profile** and **Save Gray-Profile** are only available if you have activated the program with a valid license.

8.1.3 Action buttons



- **«Delete»:** The selected profile is deleted.
- **«Set as reference»** The selected profil will be set as the reference for comparison with another profile
- **«Open»:** Opens the ICC profile in the default system-assigned program. On the Mac, the ColorSync Utility will launch, which displays the individual flags and tables of the selected profile

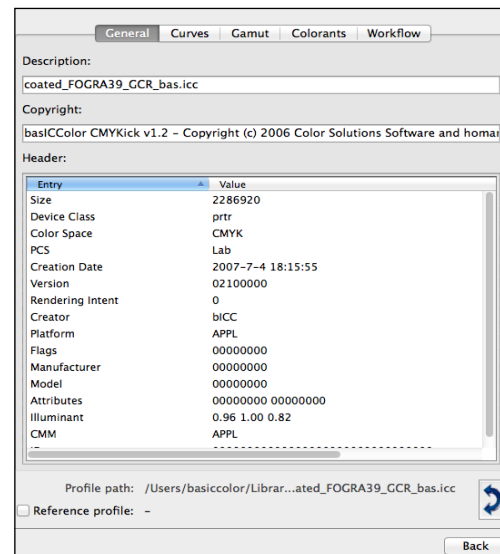
...because it simply works!

8.2 Functions of the main area

At the very top of the main window of the **Profile Inspector** are five tabs that give you the following options:

8.2.1 General

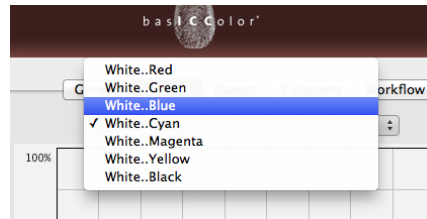
The **General** tab is divided into three sections: **Description** (here, a new internal name for the profile can be defined, which will automatically be saved when you go back to select another profile), **Copyright** (the corresponding “non-editable” Copyright of the profile) and **Header** (shows all the relevant entries from the profile header).



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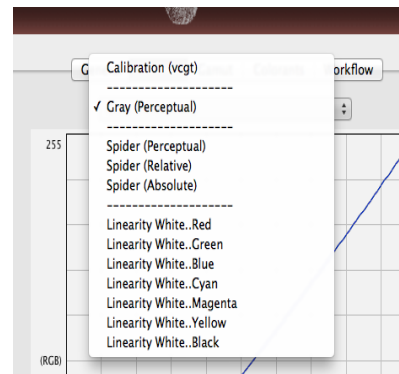
8.2.2 Curves

The <Curves> tab displays according to the selection from the drop-down menu matching the appropriate Device Link...



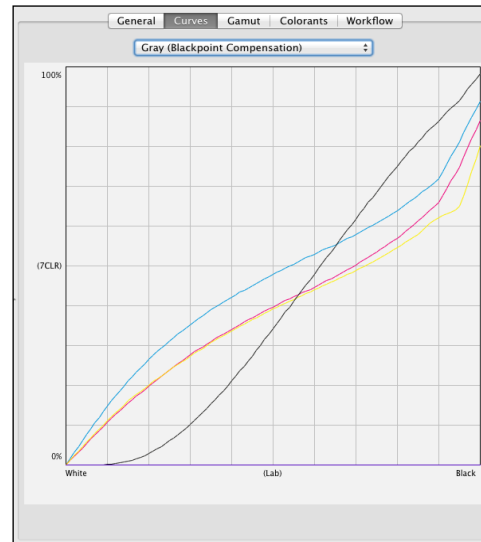
...or device profile...

...the corresponding curve. The purity of the channels for DeviceLink profiles can be shown. With printer profiles you have, in addition to the curves for gray balance, many other curves and color space views. Play around with it to get an overview of the characteristics of your profiles. With monitor profiles in turn, other curves to view will be offered in the drop-down menu.



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A special feature of the **Profile Inspector** is the ability to display the gray balance of a printer profile for the different rendering intents in the profile. You could, for example, view the gray balance in a conversion with the relative colorimetric RI with black point compensation.

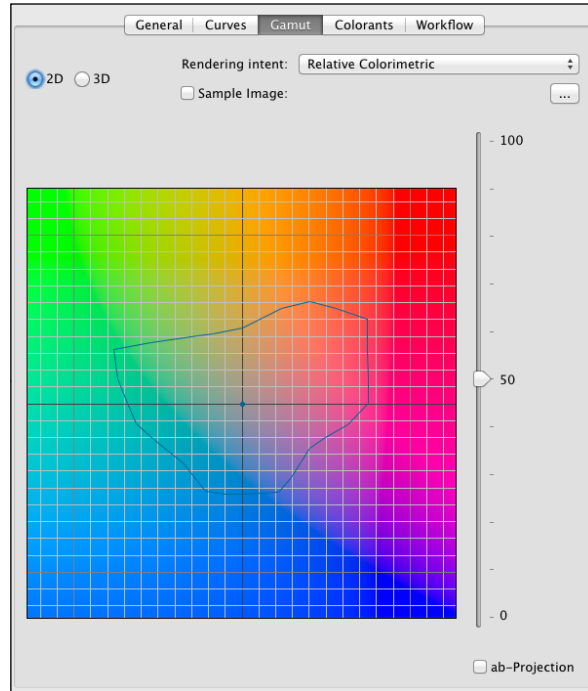


(Shown here: gray balance of a CMYK printer profile when using the relative colorimetric rendering intent with Black Point Compensation).)

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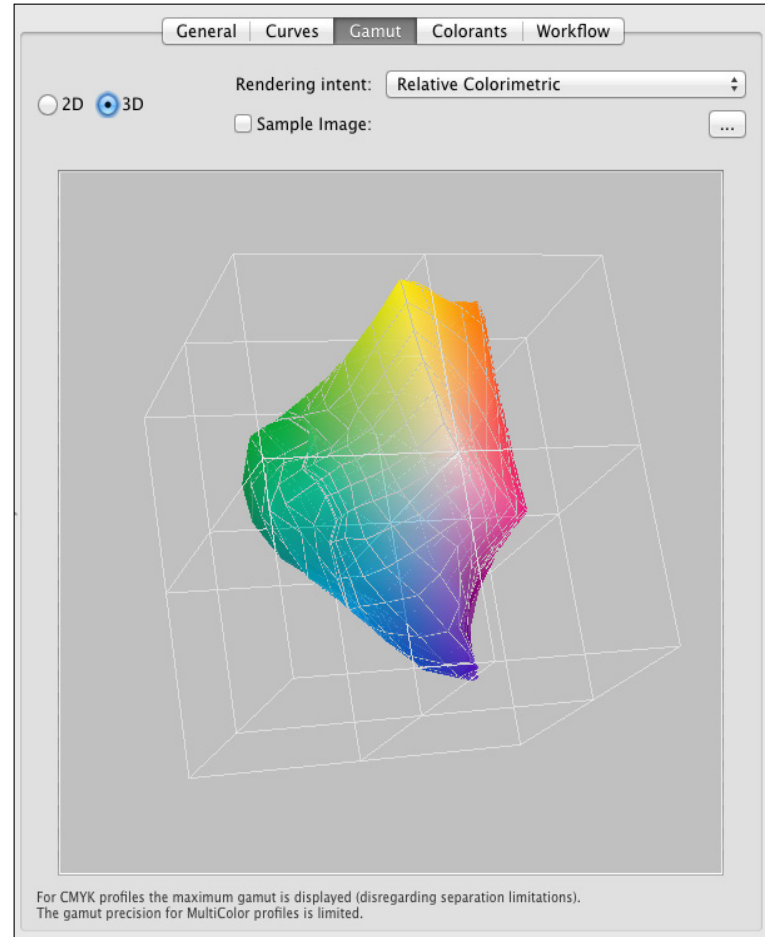
8.2.4 Gamut

The GamutTab shows either a 2D...



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...or 3D...

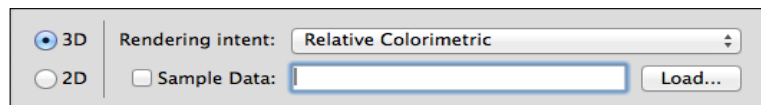


...representation of the selected profile.

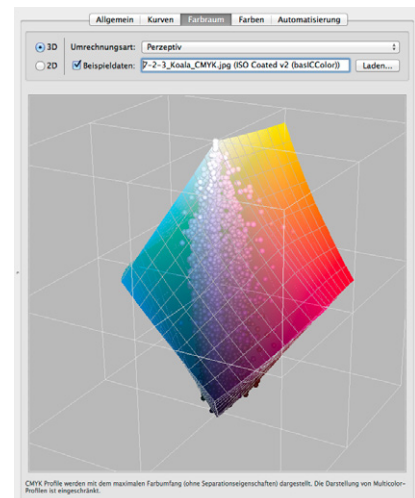
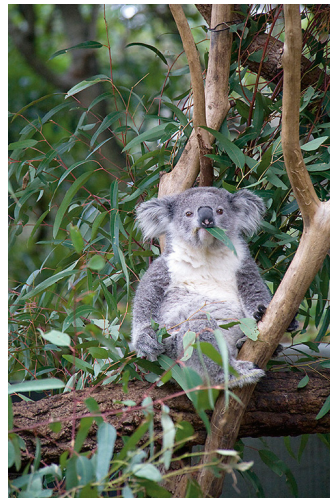
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The representation varies according to the selected conversion type.

The Sample Image function not only allows an image (TIFF, JPEG, PSD files are supported), but also data as text files to be loaded. With the position of the dots you can quickly detect



if images or color values measured are in the desired printer gamut and if the used rendering intent can be displayed.



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8.2.4 Colorants

The <Colorants> tab shows (if available for Multicolor profiles and MC DeviceLinks) the color tables (Colorants) of the profile.

	Name	Lab-Values	
1.	Cyan	58.45 -37.91 -48.39	
2.	Magenta	52.56 79.79 0.64	
3.	Yellow	94.31 -6.34 98.26	
4.	Black	14.82 -0.24 0.93	
5.	Orange	71.74 55.27 99.21	
6.	Green	67.14 -76.99 1.80	
7.	Violet	30.36 57.15 -77.25	

Both the name and the Lab values can be edited and saved. A small color box at the end of each line always shows the current Lab-value.

In addition, you can create a new table or load a previously created table.

Note: For printer profiles, there is only one color table and for the DLs there may be up to two color tables (in case of an MC to MC DLs).

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8.2.5 Workflow

As a user of our colorserver basICColor *gHOST* you surely appreciate the **<Workflow>** tab in the **Profile Inspector**. The **<Workflow>** tab automatically sets the source and destination profile for a configuration of a DeviceLink profile and enters the PDF/X information into the profile. basICColor *gHOST* reads information about the source and destination profile as well as PDF-X information automatically from the

The screenshot shows the 'Workflow' tab of the 'Profile Inspector' dialog. It features two main sections. The first, 'Source and Destination Profile', contains two dropdown menus labeled 'Source Profile' and 'Destination Profile', each with a 'Select...' button to its right. The second section, 'PDF/X Information', contains four text input fields labeled 'Output Condition Identifier', 'Output Condition', 'Info', and 'Registry Name'. An 'Import...' button is located at the bottom right of this section. The tabs at the top are 'General', 'Curves', 'Gamut', 'Colorants', and 'Workflow', with 'Workflow' being the active tab.

loaded DeviceLink and applies it in the configuration. This only works if there is a default profile or if this information is stored in the device link profile. In the basICColor DeviceLinkpacks this is already done. In the **<Workflow>** tab, you have the option of entering the information in your generated profiles. Therefore, profiles of other manufacturers can be optimized for the basICColor *gHOST* workflow.

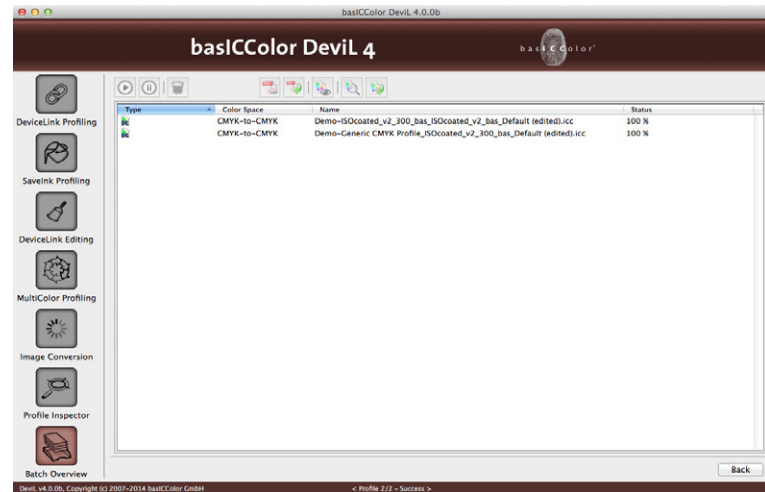
Chapter 9

Batch Overview

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9. Batch Overview

Batch Overview enables all users to track created profiles, calculate profiles parallel and prepare further profiles in the meantime.

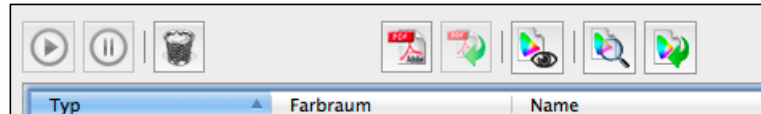


Advantages of using the batch processing

While the first profile is in calculation, you may set up additional profiles, which will be calculated afterwards. All profiles will be listed in the **Batch Overview** and will be calculated one after the other. This eliminates the need to wait until one profile is calculated before working on the next one..

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In the upper part of the **Batch Overview** window you can see a number of tools for quick handling the profiles. Start or stop the calculation of a profile, or delete a profile.



Furthermore you can create a PDF- or XML Report, create preview profiles, or have the profiles revealed in the **Profile Inspector** or in the file manager.

Chapter 10

Product Information basIColor DeviL

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10. Product Information basIColor Devil

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