

GMG OpenColor Single PACKZ Connector Quick Start Guide (EN)

Imprint

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This documentation refers to the GMG software version No. 2.0.6.

1. First Use

1.1 Software Requirements

PACKZ:

- ▶ PACKZ 4.0.0.37 or newer
- ▶ GMG OpenColor extension license

GMG OpenColor:

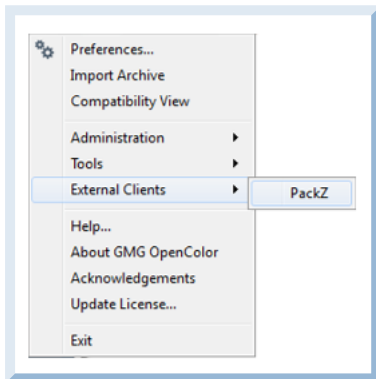
- ▶ Version 2.0.6.12 or newer
- ▶ GMG OpenColor Basic or GMG OpenColor Plus
- ▶ GMG OpenColor Profiler Standard 2.0 or GMG OpenColor Profiler Plus Edition 2.0
- ▶ GMG OpenColor Separation
- ▶ GMG OpenColor Single PACKZ Connector

Note Please refer to the documentation of GMG OpenColor and PACKZ to learn more about the system requirements.

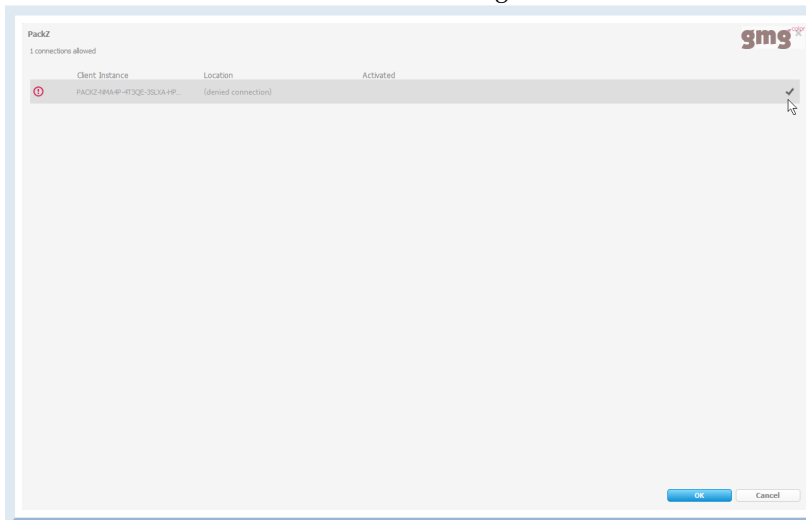
1.2 Connecting OpenColor and PACKZ

How to enable the PACKZ client in GMG OpenColor

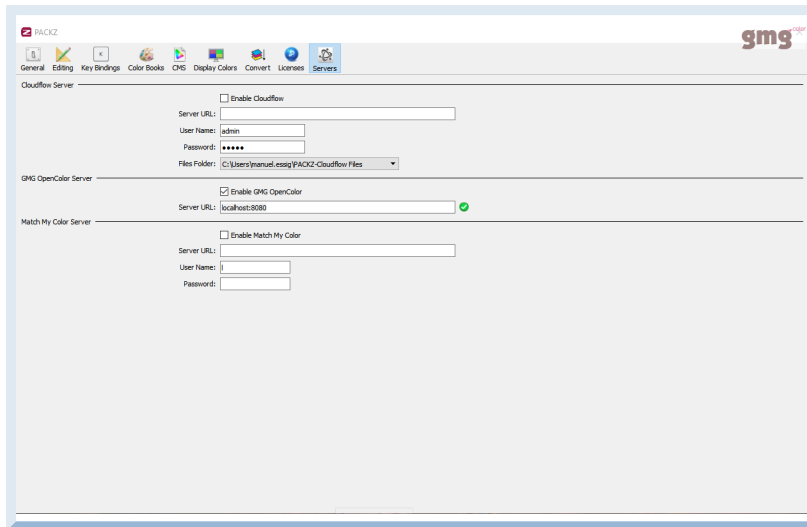
1. Start PACKZ and open **Paint** menu > **Convert Colors**.
2. Click the Download button (see "Color Conversion with GMG OpenColor" on page 9).
You will get an error message that there is no license (this is currently technically necessary to enable the PACKZ connection from GMG OpenColor side).
3. Switch to GMG OpenColor.
4. Click the **Options** button (cogwheel icon).
5. Choose **External Clients** and click **PACKZ**.



6. Check the desired client instance on the right and click **OK**.



How to enable GMG OpenColor in PACKZ



1. Click **Edit > Preferences > Server**.
2. Check **Enable GMG OpenColor**.
3. Enter the URL of your GMG OpenColor host. In case you run both programs on the same computer, enter "localhost:8080".

2. Getting Started

2.1 Welcome

You can use OpenColor separation profiles directly in PACKZ to convert entire files or selected objects or layers into the target color space of your choice. If you change your conversion mapping, GMG OpenColor's dynamic profiling will update your profile calculations automatically. You are also able to reduce the use of inks by creating **Separation Rules**.

GMG OpenColor in PACKZ allows you to solve the following tasks, getting the best spot color match based on your specific printing condition:

- ▶ Convert spot colors to CMYK.
- ▶ Convert spot colors to extended gamut.
- ▶ Replace spot colors by other spot colors.

See also:

- "Color Conversion with GMG OpenColor" on page 9
- "Separation Rules" on page 6

2.2 Separation Rules

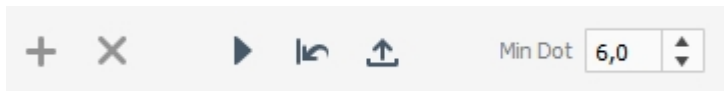
Separation Rules determine how the input inks of your document are converted, with maximal three output inks per color. You can edit a **Separation Rule** flexibly to adapt the input-output relation to your specific case.

GMG OpenColor Separation Rules

After selecting a project as input color space, the **Separation Rules** matrix will represent the relation between the input inks on the left and the target inks on the right.

Input Ink	Lab	Current Lab	ΔE2000	Status		
Cyan	54.5 -35.6 -51.0	61.3 -56.9 6.1	31.15	Ready		
Magenta	48.1 17.4 4.1	91.1 -4.2 98.2	1.78	Ready		
Yellow	89.2 -5.5 92.7	16.0 0.0 0.0	18.4 0.2 -1.1	1.97	Ready	
Black	100.00 98.85 95.11	79.5 31.3 6.0	76.3 26.1 6.5	3.38	Ready	
PANTONE Red 0331 C	40.13	4.54	78.3 -24.0 -22.6	74.3 -18.2 -18.8	4.23	Ready
PANTONE Blue 0821 C	49.00	37.64	86.1 -27.1 -1.2	81.9 -23.9 1.3	3.62	Ready
PANTONE Green 0921 C	4.76	37.64	91.2 -0.3 38.5	89.3 2.3 37.1	2.34	Ready
PANTONE 2001 C	40.86 2.43	90.3 -0.1 51.3	88.4 2.0 49.7	1.93	Ready	
PANTONE 2002 C	58.79 2.88	90.2 -1.6 61.5	92.2 -4.1 62.5	2.01	Ready	
PANTONE 2003 C	70.00	89.3 2.7 51.8	88.2 2.2 51.3	0.82	Ready	
PANTONE 2004 C	61.05 4.63	88.3 6.5 48.0	86.6 4.7 47.0	1.68	Ready	
PANTONE 2005 C	57.50 11.88	79.3 9.6 60.4	77.8 9.1 59.2	1.11	Ready	
PANTONE 2006 C	80.74 24.81	72.3 15.7 68.4	72.3 15.7 68.4	0.01	Ready	
PANTONE 2007 C	93.62 37.55	80.8 12.8 47.0	80.8 12.7 47.0	0.05	Ready	
PANTONE 2008 C	63.47 28.18	78.5 16.6 50.8	78.1 16.1 50.3	0.41	Ready	
PANTONE 2009 C	71.28 34.66	79.0 27.3 99.9	76.5 16.8 80.7	5.45	Ready	
PANTONE 2010 C	100.00 36.32					

Toolbar commands



<i>Icon</i>	<i>Command</i>	<i>Meaning</i>
	Add	Creates alternative Separation Rules for any input ink.
	Delete	Deletes alternative Separation Rules .
	Calculate	Starts profile calculation.
	Reset calculation	Resets profile calculation.
	Export	Exports a Separation Rule as a .txt file to analyze it in Microsoft Excel, e.g. to detect "out of gamut" colors.

Matrix commands/status

<i>Icon</i>	<i>Command/ Ink Status</i>	<i>Meaning</i>
	Change ink status	Sets an output ink to 100% if clicked twice. Click the Calculate button and the calculation will be compensated by the remaining output inks. Removes an output ink from the calculation if clicked it once. Click the Calculate button and the calculation will be compensated by the remaining output inks.
	Removed	Ink is removed from the calculation.
	100%	Ink is set to 100%.

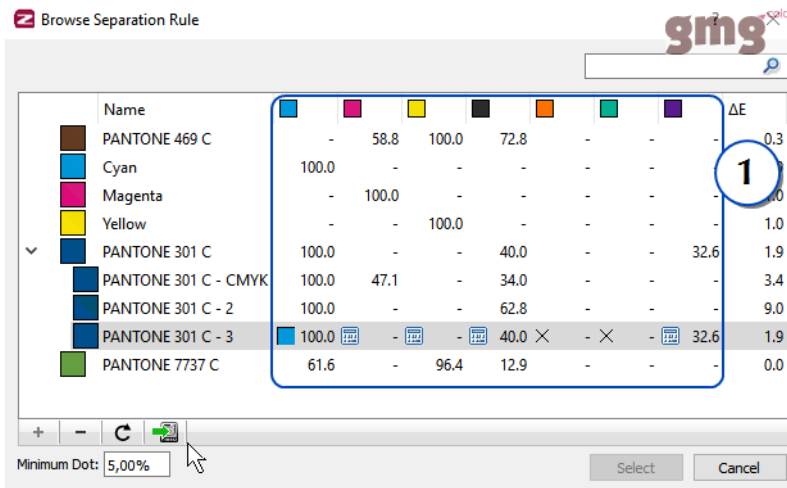
- First press **Calculate** on the toolbar to calculate input to output colors.
- If there are several possibilities of separating your target color, define the ink priorities by dragging them horizontally, e.g. in case you prefer to compose Gray with primarily Black.
- You can define a minimum dot value for a color to be included in the conversion.

The matrix will display the following values:

- ▼ Original Lab values (1)
- ▼ Current Lab values (2).
- ▼ Delta E values (3) which are the difference between the original values and the Current Lab value.





PACKZ Separation Rules

Separation Rules can be edited in a matrix in a similar way as in GMG OpenColor.






Toolbar commands



Icon	Command	Meaning
	Add Alternative	Creates alternative Separation Rules for any input ink.
	Delete Alternative	Deletes alternative Separation Rules .
	Calculate Alternative	Calculates alternative Separation Rules .
	Save Alternative	Saves alternative Separation Rules .

Matrix commands/status

Icon	Command/Ink Status	Meaning
	Change ink status	Sets an output ink to 100% if clicked twice. Click the Calculate Alternative button and the calculation will be compensated by the remaining output inks. Removes an output ink from the calculation if clicked it once. Click the Calculate Alternative button and the calculation will be compensated by the remaining output inks.
	Removed	Ink is removed from the calculation.
	100%	Ink is set to 100%.

- If there are several possibilities of separating your target color, define the ink priorities by dragging them horizontally, e.g. in case you prefer to compose Gray with primarily Black.
- You can define a minimum dot value for a color to be included in the conversion.
- To define the ink priorities, drag the target inks horizontally.
- Define a minimum dot value for a color to be included in the conversion.

The matrix will display the following values:

- ▶ Current Lab values will be shown as a tooltip by hovering over the separation colors.
- ▶ Delta E values (1) which are the difference between the original values and the Current Lab value.

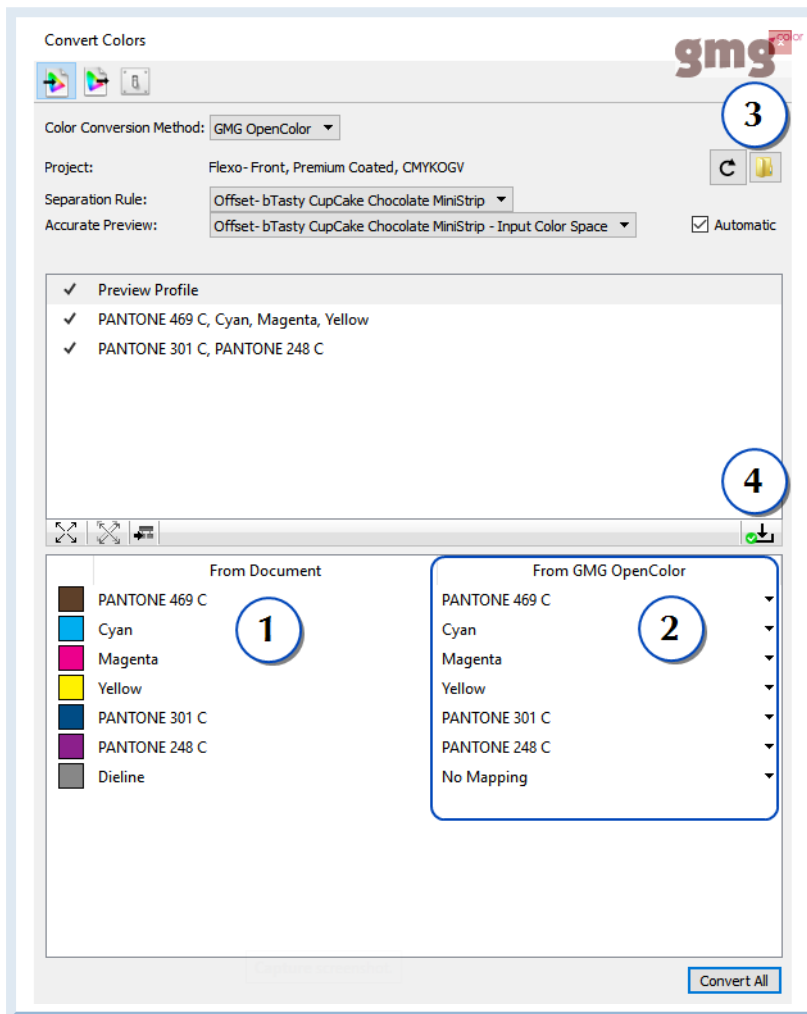
See also:

- ▶ "Color Conversion with GMG OpenColor" on page 9

2.3 Color Conversion with GMG OpenColor

Note GMG OpenColor has to be running and separations have to be published to show up in PACKZ.

How to convert colors with GMG OpenColor



1. Open your Pdf in PACKZ.
2. On the **Paint** menu, click **Convert Colors**.
3. The table (1) lets you assign the colors of your document to the colors of your GMG OpenColor project. To edit a **Separation Rule** in PACKZ, click on a color (2).
A menu will open.
4. Choose **Browse** (see "Separation Rules" on page 6).
5. Select the object you want to convert. Otherwise all objects will be converted.
6. Choose GMG OpenColor as **Color Conversion Method**.
7. Click the folder icon (3) and choose an GMG OpenColor Project which will define your target color space.
8. Select a **Separation Rule** which will determine, how the colors of your GMG OpenColor Project are converted.
9. Click the Download button (4).
GMG OpenColor will calculate the required overprint profiles and load them.
10. Select the desired color space for the **Accurate Preview** (real-time soft proof). You can select a **Separation Rule** (Input Color Space), which will show the original data, and a GMG OpenColor Project (Output Color Space), which will show the converted data.
Check **Automatic** and the preview color space will change automatically to before or after, if you undo or redo the conversion.
11. Click **Convert All**.
The colors of your document will be converted according the **Separation Rules** and you are ready to print.

See also:

- "Separation Rules" on page 6