

GMG ColorServer Conventional Printing—Quick Start Guide

Imprint

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Last update of this documentation: 25.03.2014

This documentation refers to the GMG software version No. 4.9.

1. Getting Started	5
1.1 About GMG ColorServer Quick Start Guide	5
1.2 Welcome to GMG ColorServer ..	5
1.2.1 Main General Features	5
1.2.2 Conventional Printing	6
1.2.3 GMG ColorServer Suite Work-flow	7
1.2.4 Software Components	7
1.2.5 Program Overview	8
1.3 Computer Configuration	9
1.3.1 System Requirements	9
1.3.2 Recommended Hardware Configuration	9
1.3.3 Graphics Card Configuration for Gamut Viewer	9
1.4 Program Installation	10
1.4.1 Installation Overview	10
1.4.2 Before You Install	11
1.4.3 Installing GMG ColorServer	11
1.5 Starting GMG ColorServer	12
2. First Program Start	14
2.1 License Information	14
2.2 Administrator Mode	14
3. About Hotfolders	16
3.1 Hotfolder Types	16
3.2 Creating a New PDF Hotfolder ..	16
3.2.1 Creating a Hotfolder with the Hotfolder Wizard	16
3.2.2 Creating a Hotfolder Manually ..	17
3.3 Hotfolder List View	22
3.4 Creating a Manual PDF Job	23
4. Profile Types	25
4.1 CMYK-to-CMYK Conversion	25
4.2 CMYK-to-CMYK Reseparation ...	26
4.3 RGB-to-CMYK Separation	26
4.4 RGB-to-RGB Conversion	26
4.5 CMYK-to-RGB Conversion	26
4.6 InkOptimizer Profiles	26
5. Where to Find Further Information	28

1. Getting Started

1.1 About GMG ColorServer Quick Start Guide

The **Quick Start Guide** is an easy-to-understand approach to getting started with GMG ColorServer, illustrating the hotfolder based processing of PDFs for conventional print methods.

In this tutorial, you will learn to do the following:

- Install the program
- Create a new PDF hotfolder for automated PDF processing
- Create a manual PDF job

Just follow the instructions step by step.

1.2 Welcome to GMG ColorServer

GMG ColorServer is a versatile program for a broad range of color management applications.

Customized software packages and flexible licensing options support different levels of complexity. Thus, GMG offers an ideal solution exactly for your specific requirements. The main GMG ColorServer application and all possible add-on programs available for GMG ColorServer are referred to as GMG ColorServer Suite in the documentation.

Note Some of the features described in the following are not included in the standard GMG ColorServer version and require an additional license (GMG InkOptimizer, GMG SmartProfiler, GMG FlawFinder or GMG ProfileEditor). Please contact your local dealer for details.

1.2.1 Main General Features

High-quality color management

- **Normalizing** multiple color spaces
- Automated **color space conversions** optimized for the target printing condition
- **RGB-to-CMYK** separation
- **CMYK-to-CMYK** conversion or reseparation
- **Spot colors** can be converted to **CMYK**. Databases with DeviceLink spot color profiles for several commercial providers such as PANTONE®, HKS, and DIC Color Guide® are included.
- Create your own custom spot color databases with the expert tool GMG SpotColor Editor.
- **High-quality** colors **matching** the original colors as intended by the creator of the document
- High degree of **reproducibility**
- Perfectly **smooth gradients**
- Print deep, dark color tones to bring out **detail in the shadows**
- Print **bright** and **colorful** images
- Avoid unintended tints or color drifts
- Browser-based **remote access** to all main functions (GMG WebConnect)

Supported print standards are:

- Offset (PSO)
- Newspaper
- PSR
- GRACoL
- SWOP
- 3DAP
- JMPA
- JPC
- PPA

PDF Optimization for print production

- Automated analysis of embedded ICC profiles and subsequent MX4 based color management
- Flatten transparencies, layers, and overprinting in PDFs
- Flattened and color managed output PDFs that can be directly sent to the printer or press
- User-defined warning system that keeps you informed and helps you keeping everything under control

Control and connectivity with GMG WebConnect

GMG ColorServer comes with GMG WebConnect, a web interface which enables multiple users to access the software and create jobs directly from any standard web browser and track them from anywhere in the world.

Automated workflows with GMG ColorProof

If you want to also automatically **proof** your output PDFs, GMG ColorServer can team up with GMG ColorProof by using cascaded hotfolders. Simply link hotfolders from GMG ColorServer to a specific GMG ColorProof workflow. This way, you can set up integrated and completely automated workflows for all kind of different applications and proofers.

1.2.2 Conventional Printing

This product variant was specifically designed with Offset and Gravure Printing in mind. In addition to the general benefits of GMG ColorServer, it offers the following advantages.

- Increase your production output
- Save valuable ink and print media
- Get to know the unique MX4 DeviceLink technology and by-pass the L*a*b* color space to prevent contamination by other colors: 50% black stays 50% black.
- Comes ready-to-use with profiles optimized for the target printing condition and tested by GMG ColorExperts.
- The **Hotfolder Creation Wizard** guarantees a simple and fail-proof setup.
- Create your own custom profiles with GMG ProfileEditor (optional).

Use effective ink saving strategies with GMG InkOptimizer

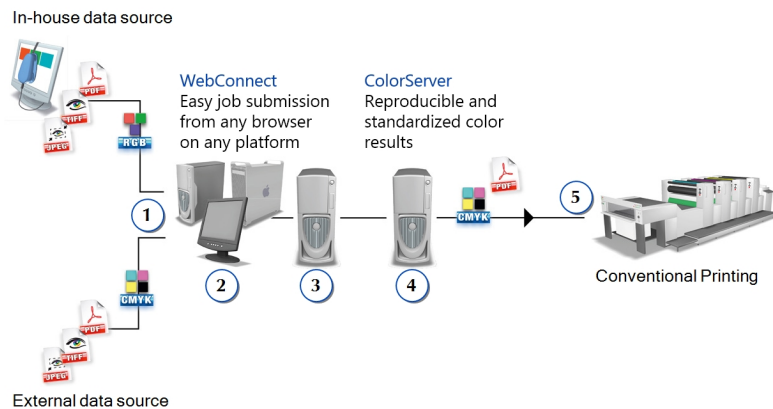
Use GMG InkOptimizer profiles for automated UCR/GCR conversions while at the same time increasing the print quality and production stability. Using GMG InkOptimizer can save you up to 20% ink (depending on the printing process and on the used medium). To clearly see the benefits of this technology, you can generate **Ink Saving Reports** which calculate your ink consumption and your potential savings.

- Cost reduction
- Excellent and stable gray balance
- Higher printing quality
- Avoid overinking for an improved image quality and fail-proof production, especially for **Newspaper printing**

1.2.3 GMG ColorServer Suite Workflow

GMG ColorServer Suite is a full-featured automated system ensuring an excellent **print quality** and **production stability** in a conventional production environment.

With GMG WebConnect, which is included in GMG ColorServer Suite, you can set up client users for submitting jobs from a browser. Client users do **not** need to install GMG WebConnect and just need a standard web browser to access the web server and create and track jobs from anywhere in the world.



Workflow diagram illustrating the process chain.

No.	Description
1	RGB and CMYK input data from multiple sources are collected for processing with GMG ColorServer.
2	You can easily submit jobs from any standard browser on any platform such as Windows or Mac OS.
3	Submitted jobs will be automatically uploaded to a web server running GMG WebConnect. The web server can be installed on the same computer as GMG ColorServer or on a different computer, as shown in the above illustration. The web server will distribute incoming jobs to hotfolders on the GMG ColorServer system.
4	Input documents are converted to PDF and optimized for the target printer by GMG ColorServer.
5	Normalized CMYK data is then sent to a printer from the printer pool via the output folder.

GMG ColorServer

The central core module of GMG ColorServer processes input documents and performs high-quality color management. The technology is hotfolder based: You only need to copy the document into a hotfolder—the processing is started fully automatically. Output PDFs can be directly sent to the printer. GMG ColorServer will be installed on a **central server** so that hotfolders can be accessed from multiple workstations.

- Files from different or unknown sources are **normalized** to a common color space according to the **target printing condition** ISO Coated v2 (39L) or GRACoL.
- PDFs are **flattened** and **optimized** for achieving premium print results.
- Colors are optimized **specifically** for the used **printer–medium combination**, that is, for a specific printer and print medium, a specific ink type and print mode.

1.2.4 Software Components

The product GMG ColorServer comprises multiple components as described in the following.

Note Some of the features described in the following are not included in the standard GMG ColorServer version and require an additional license (GMG InkOptimizer, GMG SmartProfiler, GMG FlawFinder or GMG ProfileEditor). Please contact your local dealer for details.

GMG ColorServer

Main program, for automated color space transformations of image data and PDFs with hotfolder technology.

GMG ProfileEditor

Expert tool for creating and editing MX4 profiles. Requires an additional license.

GMG GamutViewer

Analyzer tool for a visualization of gamut files (*.csc or *.txt) in a 2D or 3D view, integrated into GMG ProfileEditor.

GMG SpotColor Editor

Expert tool for creating and editing spot color databases and gradation correction files.

1.2.5 Program Overview

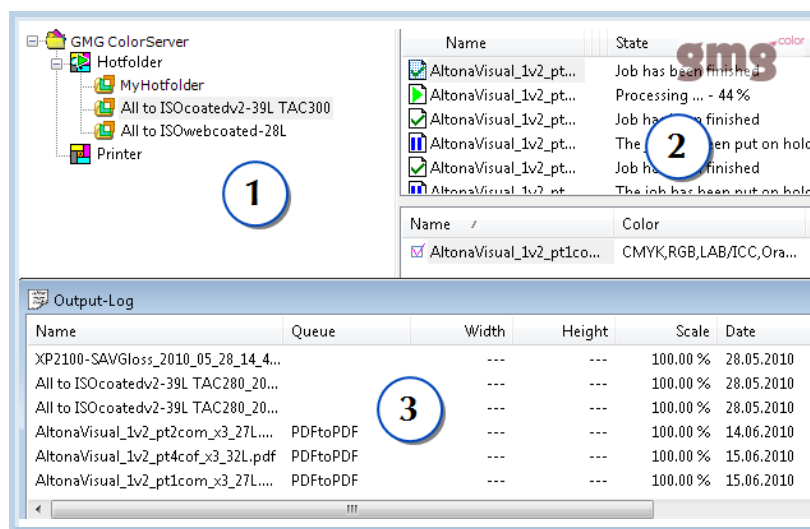


Fig. 1 Main program window of GMG ColorServer.

The **Overview** window provides an overview on your hotfolder configuration (1). You can **double-click** a **hotfolder** to show the processing settings. You can use a hotfolder command from the **context menu**. You can **select** a hotfolder with the mouse to create a **manual job**. (The **Printer** configuration is important only if you are using **Image Hotfolders**. **Image Hotfolders** require a **ColorServer** printer.)

On the right pane, you can see all **jobs** generated by the selected hotfolder (2). You can select a job and use a job command from the context menu, for example, to manually start printing.

The **Output Log** window (3) shows a list with all **processed** jobs. (You can activate the **Output Log** window from the **Options** menu.)

See also:

- "Hotfolder List View" on page 22

1.3 Computer Configuration

1.3.1 System Requirements

Our recommendations and minimum system requirements are meant to provide general guidelines for running GMG ColorServer. We recommend systems that meet or exceed the following requirements.

Processor: Intel dual core CPU

Memory: 4 GB RAM, 250 GB hard disk drive

Hardware components: Video card (supporting DirectX 10), enabled Direct 3D acceleration, updated driver (**not** Windows default driver), minimum resolution 1024 x 786 dpi, USB 2.0 port

Operating system:

- ▶ Windows 8 (32-bit/64-bit version)
- ▶ Windows 7 (32-bit/64-bit version)
- ▶ Windows Server 2008 R2 SP1 (32-bit/64-bit version)

Software components:

- ▶ Microsoft Internet Explorer 8.0 or higher
- ▶ DirectX 10 or higher (required for the GMG GamutViewer feature in GMG ProfileEditor)

Maximum processing performance

For maximum processing performance, we recommend the following computer configuration.

Processing power: 4–8 CPU cores (2 GHz or higher)

Memory: fast HDD RAID with 6–8 GB RAM, SSD for temporary data

When using a RAID system, that is, combining **separate** hard disk drives into a system, we recommend to divide the data transfer according to the following schemes.

- ▶ Disk drive for GMG ColorServer + RAID 0 for hotfolders and temporary folder
- ▶ Disk drive for GMG ColorServer and hotfolders + SSD for temporary folder
- ▶ Disk drive for GMG ColorServer + RAID 0 for hotfolders + SSD for temporary folder

See also:

- "PDF Processing Performance"
- "Creating a Hotfolder Manually" on page 17

1.3.2 Recommended Hardware Configuration

For maximum processing performance, we recommend the following hardware configuration with three **separate** disk drives on the same computer, as described in the following.

Note A noticeable performance increase can be achieved only with separate physical disk drives, **not** with separate partitions on the **same** disk drive.

- ▶ Disk drive with the GMG ColorServer installation
- ▶ Disk drive for input data (**Input Folders**)
- ▶ Disk drive for output data (**Output Folders**)

See also:

- "Creating a Hotfolder Manually" on page 17

1.3.3 Graphics Card Configuration for Gamut Viewer

For using the gamut viewer included in GMG ProfileEditor, you need to use a graphics card that supports the required drivers and software components.

Hardware recommendations: Graphics card supporting DirectX 10, with activated Direct3D acceleration, with up-to-date driver (not Windows default driver)

How to check the DirectX settings

- Open the **Windows Control Panel** and check that the video card driver provided by the manufacturer of the video card is used. Check also that the driver is up to date.
- Install **DirectX 10** or higher.
- In the **Start/Run** box of the Windows operating system, type in "**dxdiag**" and press Enter. The **DirectX Diagnostic Tool** dialog box is displayed.
- Click the **Display 1** tabbed page.
- Check that the following DirectX features are enabled: **DirectDraw Acceleration**, **Direct3D Acceleration**, and **AGP Texture Acceleration**. Enable them if this is not the case. If it is not possible to activate these features, the graphics card might not support them and you might need to use a different card.

How to check the hardware acceleration settings

1. Open the **Display Settings** of the Windows operating system.
2. Open the **Advanced Settings**.
3. Click the **Troubleshoot** tab.
4. Click the **Change Settings** button.
(If your current display driver does not allow you to change the settings, you will see the Change Settings button grayed out, and you will not be able to change the settings.)
5. Set **Hardware Acceleration** to **Full**.

1.4 Program Installation

1.4.1 Installation Overview

GMG ColorServer Suite comes with several components you can select in the feature list of the installation wizard. The following table will provide you with information on the different components followed by a description of the possible client/server structures.

<i>Feature/Component</i>	<i>Description</i>	<i>See also</i>
ColorServer	Main color management application.	
ConnectManager	GMG ConnectManager is a utility program that monitors all GMG Connect components.	
ConnectServer	Part of the GMG Connect system that links GMG applications such as GMG ColorServer and GMG SmartProfiler or GMG WebConnect across different computers. Central data management of the Connect system, needs to be run in the background.	
Ink Saving Report Tool	Tool that analyzes your output and calculates the ink savings you could realize with GMG InkOptimizer.	"Creating an Ink Saving Report"
SmartProfiler	Calibration and profiling wizard. GMG SmartProfiler can also be installed as a client component on a different computer for information exchange with GMG ColorServer via your local network.	See GMG-Smart-Profiler_Manual_en.pdf
WebConnect Server	Web server for remote data management that allows to set up users for remote use of GMG ColorServer hotfolders.	"Installing and Configuring the Web Server" "WebConnect"

<i>Feature/Component</i>	<i>Description</i>	<i>See also</i>
ProfileEditor / Spot-ColorEditor	Profiling and spot color editing tool.	GMG-Pro-fileEditor_CS_Readme_en.pdf

Client/Server configuration possibilities

All components of GMG ColorServer Suite can either be installed on one system and used just locally or distributed across several computers, allowing for a networked, but centrally controllable cross-platform color management. For example, you can install GMG SmartProfiler on several computers within your network and create hotfolders with color management files in GMG ColorServer via remote access. WebConnect also follows the client/server model, but as the client only needs a web browser to access GMG ColorServer hotfolders, there is no installation required from the client side.

- ▼ Client-server configuration: Installation on **two** separate computers (**server**, **client**), as shown in the table below.

<i>Workstation</i>	<i>Installation</i>
Server	GMG ColorServer, GMG ConnectServer, GMG WebConnect
Client	GMG SmartProfiler

Note The number of client programs you can install on different computers depends on the purchased license. All client computers must have access to the server with **Full Control** permissions.

Note GMG SmartProfiler licenses are managed by GMG ConnectServer. You need to install GMG ConnectServer on the **same** computer as GMG ColorServer. Otherwise, it will not be possible to run the client software.

1.4.2 Before You Install

To ensure a safe installation, please check the following list before starting the process.

- Check the **system requirements** for the software you want to install.
- Make sure a valid **license** required for the software version you want to install is available on the target computer.
- Unplug all **measuring devices** connected to the computer (if any). Otherwise, device drivers will not be properly installed.
- Make sure you are logged on as a user with **full administrator rights**.
- Make sure **no** Microsoft system updates are running in the background. This could lead to an installation failure.

1.4.3 Installing GMG ColorServer

Note The GMG ColorServer Suite installer offers an **update** functionality. If you have already installed GMG ColorServer **4.7 or later**, you do **not** need to uninstall an existing version before installing the new version. If you have installed an **earlier** version, you will need to **uninstall** an existing version before installing the new version.

GMG ColorProof o4, DotProof o4, FlexoProof o4

If you have a dongle with a combined license for GMG ColorServer and GMG ColorProof o4, DotProof o4, or FlexoProof o4, you will **not** be able to use proof printers anymore after installing the GMG ColorServer 4.7 setup. This functionality is only supported up to version 4.6.

How to uninstall the previous version

Existing hotfolder configurations or application data from the user are **not** changed by the installer. Still, it is recommended to make an **environment backup** to save all workflows and settings before uninstalling the software to avoid any potential data loss.

1. Start your currently installed version of GMG ColorServer.
2. On the **Options** menu, point to **Environment Backup**, and click **Create**.
3. After the **Environment Backup** has been successfully created, close all GMG applications.
4. Uninstall GMG ColorServer from the Windows Control Panel (**Start > Control Panel > Programs and Features**). Do **not** delete the main program folder (default folder for version 4.6 or lower: `c:\C-colorproof\`) manually before the new installation as the folder contains all printer calibrations, profiles, and other system files and application data related to the software.
5. After the uninstall operation is complete, restart the computer.

How to install the new version

Note Even if the installer appears to be **unresponsive**, it is still working in the background. Do **not** cancel the installation, end the process, or restart the computer until the installation is **finished**.

1. For a successful installation of device drivers, unplug all spectrophotometers connected to the computer.
2. You can install the program directly from the purchased DVD.
3. If you downloaded the program from the GMG website, copy the **ZIP** file to a local directory on the computer you want to install the program on.
4. Extract all compressed files and double-click the **setup.exe** file to start the installation.
(**x86** to run the software on a 32-bit system and **x64** for compatibility with a 64-bit system. Please note that this only concerns the ability of the application to run on a 64-bit system, GMG ColorServer as such remains unchanged.)
5. Follow the instructions of the installation assistant. (If upgrading from an earlier version than 4.7, please install the program to a different folder than the one you installed the previous version to.)
6. Under **Setup Type**, you can select the **Custom** option if you want to install only the main components required for a specific program.
7. Deselect the features you do not want to install on the computer.
8. If you want to run GMG SmartProfiler on a remote client and not on the same computer as GMG ColorServer, select only the **Server** features (i. e. GMG ColorServer, GMG ColorServer Connector, and GMG ConnectServer) for the installation on the server computer and select only the **Client** features (i. e. GMG SmartProfiler) for the installation on the client computer.
9. Please wait while the installer is running.
The installer needs to extract the installation package, install the program, and copy all application data to the hard disk. These actions may take a while.
10. Restart the computer if you are prompted to do so.
The installation procedure will be automatically resumed after the restart.
11. The installation assistant will inform you when the installation is complete. Click the **Finish** button to exit the wizard.

1.5 Starting GMG ColorServer

Note Make sure the license dongle is connected to a USB port.

How to start GMG ColorServer

1. Double-click the GMG ColorServer program icon on the Windows desktop or click GMG ColorServer on the Windows **Start** menu.
The program verifies the license information on the dongle and then starts the application automatically.
2. Optional: If you had a previous version of GMG ColorServer installed and have an environment backup, you can restore it now. On the **Options** menu, point to **Environment Backup**, and click **Restore**.

2. First Program Start

If you start GMG ColorServer for the first time, the main window (named **Overview**) is empty. This is because no printers and hotfolders have been configured yet. If you had a previous version installed, your existing hotfolders and installed printers will show up automatically.

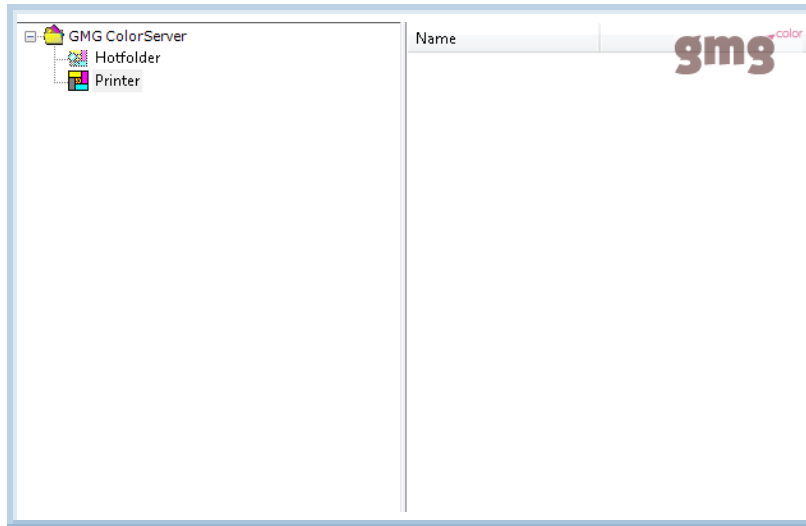


Fig. 2 Main program window with empty hotfolder list after first start.

You can create a **new** hotfolder now. Even if you want to create a manual job, you will first need to create at least one **hotfolder** as a kind of template for the manual job.

2.1 License Information

All available features are controlled by the license information on the connected USB dongle. Please make sure that you have all licenses required for the actions you want to perform with the software.

For example, trial or temporary program versions can be limited either by the **number of actions** the user can perform or by an **expiration time**.

Licenses can be updated via the software. For more information on available license packages, please contact your local dealer.

Please keep the license information and serial number at hand when contacting the support.

How to check the currently available licenses

1. Start the main GMG ColorServer application.
2. On the **Help** menu, click **Update License**.
A list with all licenses installed on the connected USB dongle is displayed.

2.2 Administrator Mode

In GMG ColorServer, users can set up hotfolders or change hotfolder settings only in **Administrator Mode**. This way, unintended changes can be easily avoided. This is especially useful if different teams have access to the same computer. You can secure the administrator mode by using a password.

Note We recommend setting up a password directly after program installation. If no password is set up at the beginning, any user can enter the **Administrator Mode** and set up a password, thus locking the program settings for all other users.

Note If you **uninstall** GMG ColorServer, the password information is **not** deleted from the registry. The password protection (using the old password) will still apply when reinstalling the program later.

How to set up or change the password

1. On the **Options** menu, click **Administrator Password**.
The **Change Password** dialog box is displayed.
2. Type the appropriate password (if required) into the **Old Password** box. Type the new password into the **New Password** and **Confirm Password** boxes.

How to switch operating modes

1. On the **Options** menu, click **Administrator Mode**.
If a password has been set up, a dialog box is displayed asking you for the password. If no password has been set up, the operating mode is switched to **Administrator Mode** at once.
2. Enter the appropriate password (if required).
You can now set up or change workflows.

3. About Hotfolders

Hotfolders are generally used whenever a larger number of files need to be converted according to the same rules and output settings. Setting up hotfolders also leads to a higher degree of consistency and reproducibility. You can assign any number of input folders to a single hotfolder.

All **processing** parameters such as color management and output parameters are defined in the **hotfolder**.

It is possible to set up various hotfolders according to different input data or to different print standards.

Information on all files currently present in a hotfolder is shown in the info pane on the right side of the main window. The info pane also shows which hotfolder is currently processing which input files.

3.1 Hotfolder Types

GMG ColorServer offers two different types of hotfolders: **Image Hotfolders** and **PDF Hotfolders**. As the name indicates, **Image Hotfolders** are basically used to color-convert images or to convert the image file format (e.g. from TIFF to JPEG). **PDF Hotfolders**, on the other hand, allow for far more functionalities and can be used to process both images and PDFs, automatically converting images to PDF format.

Image-to-PDF and PDF-to-PDF Conversion

Processing PDF documents demands extended functionalities due to the fact that PDFs can contain a mix of images and vector-based objects in **multiple** color spaces. Usually, each PDF object is tagged with an ICC profile that describes the color space of the object. GMG ColorServer automatically identifies these profiles and uses them as a starting point for the subsequent color management.

- ▼ **Image-to-PDF Conversion:** All supported document formats (TIFF, JPEG) are converted to PDF.
- ▼ **PDF-to-PDF Conversion:** For native PDF documents. You can choose to apply CMYK-to-CMYK conversion profiles or ink optimization profiles (GMG InkOptimizer).

3.2 Creating a New PDF Hotfolder

Note Some of the features described in the following are not included in the standard GMG ColorServer version and require an additional license (GMG InkOptimizer, GMG SmartProfiler, GMG FlawFinder or GMG ProfileEditor). Please contact your local dealer for details.

Reflecting the different needs of our customers, **PDF Hotfolders** can be created in different ways in GMG ColorServer.

The quick and very easy way to create hotfolders is to use our **Hotfolder Creation Wizard**. As hotfolders created by the wizard already contain presets for all major printing conditions, you only need to select very basic parameters such as the target color space.

If you need custom settings or want to define all settings yourself, you can also create a new hotfolder from scratch, ranging from the very simple to the highly complex.

See also:

- "Creating a Hotfolder Manually" on page 17
- "Creating a Hotfolder with the Hotfolder Wizard" on page 16

3.2.1 Creating a Hotfolder with the Hotfolder Wizard

The quickest and easiest way to create a PDF hotfolder for conventional printing processes is to use the Hotfolder Creation Wizard, which can be started from the **Hotfolder** menu.



Every step you are going through is explained in detail and will not require any extra knowledge. As soon as you created a new hotfolder, it will show up in the **Hotfolder List View** on the left side of the main window.

3.2.2 Creating a Hotfolder Manually

Note Hotfolders can be added, modified, or deleted only in **Administrator Mode** (**Options** menu > **Administrator Mode**).

When setting up a hotfolder from scratch, you first need to define input folder(s) for the input files and an output folder for the processed files.

How to manually set up a hotfolder

1. On the **Hotfolder** menu, click **New PDF Hotfolder**.
The **PDF Hotfolder** dialog box opens.
2. Click the **Files & Folders** button on the navigation panel on the left side of the dialog box.
3. Click the **Input Folders** tab.
4. Type any name into the **Hotfolder Name** box.
5. On top of the **Input Folders** list, click the **Add Input Folder** button .
6. Browse to the desired folder, or create a new folder, and confirm by **clicking OK**.
The selected folder is added to the **Input Folders** list.
7. Optional: If you want to assign multiple input folders to the same hotfolder, repeat steps 5 and 6.
8. Optional: You can delete hotfolders by clicking the **Remove Input Folder** button .
9. Optional: If you want to convert image file formats to PDF, select the option **Convert TIFF and JPEG to PDF**.

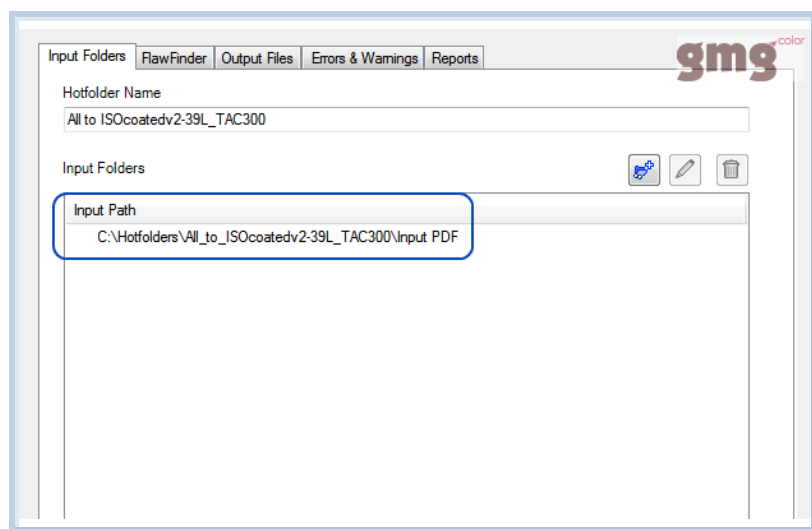


Fig. 3 Hotfolder Input settings.

Defining an Output Method

You can send the processed PDF files to an output folder or to a Windows printer connected to a real printer. If you decide for the print option, the PDFs are saved temporarily and then directly send to the printer, using the defined printer properties.

How to set up a Windows printer

Note The output PDF files are stored to a temporary folder (**File** menu > **General Settings: Temporary Folder**) until the associated jobs are removed from the job list.

1. On the navigation panel of the **PDF Hotfolder** dialog box, click **Files & Folders**.
2. Click the **Output Files** tabbed page.
3. Under **Output Method**, select **Send to Windows Printer**.
4. Under **Name**, select the printer you want to output your files to.
5. Optional: Click the **Properties** button to open and edit the printer properties.

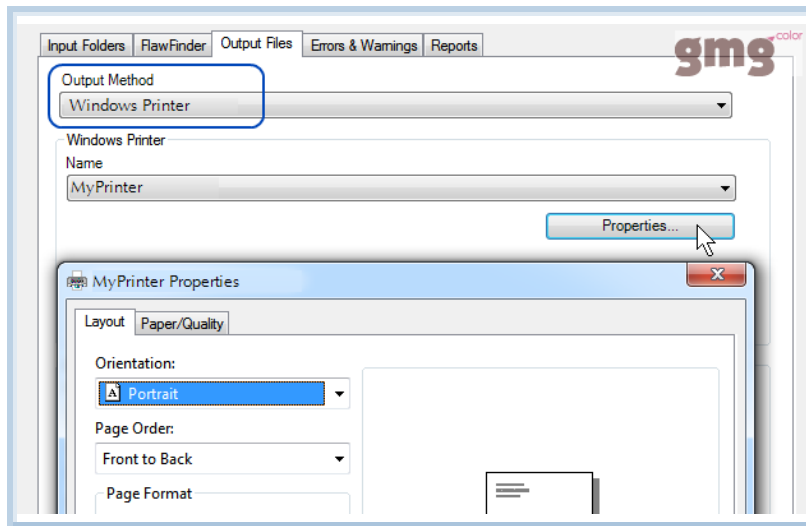


Fig. 4 Output to a Windows printer.

How to set up an output folder

Tip If you want to use PDF **and** Image Hotfolders, you can set up two separate **input** folders, but a common **output** folder. This makes it very easy to use GMG ColorServer output folders as input folders for your workflow system, printer, or press.

1. On the navigation panel of the **PDF Hotfolder** dialog box, click **Files & Folders**.
2. Click the **Output Files** tabbed page.
3. Under **Output Method**, select **Hotfolder**.
4. Under **Output Folder**, click the browse button (...) on the right side of the edit box.
5. Browse to the desired folder, or create a new folder, and confirm by clicking **OK**.
6. Select the option **Keep File Name of Input File** and enter a **Suffix** or **Prefix** so that you can easily distinguish between the input and processed output files.

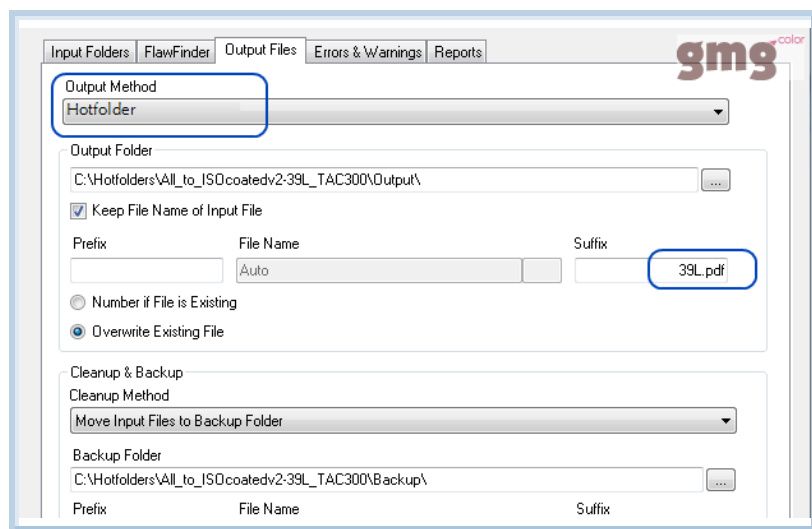


Fig. 5 Output to an output folder.

PDF Hotfolder Basics

This chapter will give you a quick overview on main hotfolder settings, without going into much detail. Please see the GMG ColorServer Help for further information.

Folder Structure

1. Double-click a hotfolder to open the **PDF Hotfolder** dialog box.
2. On the navigation panel of the **PDF Hotfolder** dialog box, click **Files & Folders**.

The **Input Folders** page shows the **Input Folders**, into which you will copy all files that you want to process with the hotfolder.

Processed PDFs that do not generate a warning will be saved to the **Output Folder** defined on the **Output Files** page.

PDFs that generate a warning or unprocessed PDFs are sent to the **Warning** and **Error** folders defined on the **Errors & Warnings** page.

Reports are saved to the **Reports** folder defined on the **Reports** page.

Flattening settings

1. On the navigation panel of the **PDF Hotfolder** dialog box, click **Flattening & Normalizing**.
2. Click **Flattening**.

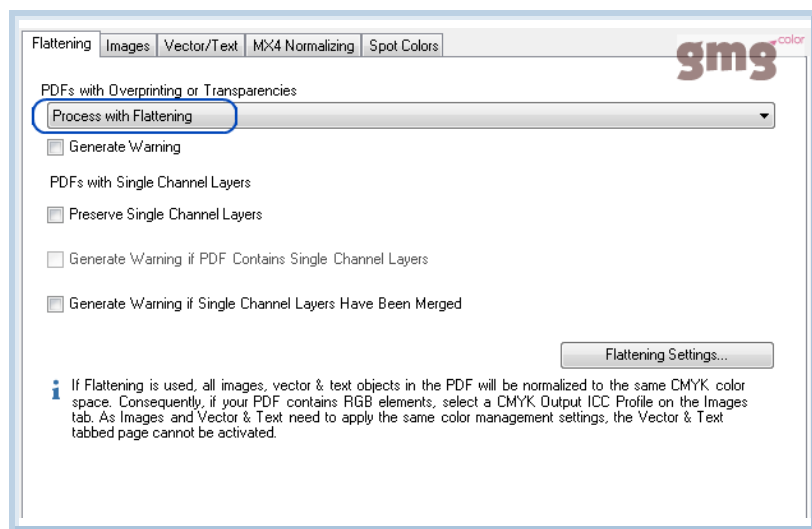


Fig. 6 Hotfolder using flattening.

The hotfolder shown in the screenshot uses flattening. You can select **Process without Flattening** from the drop-down list to switch off flattening.

Normalizing output color space

1. On the navigation panel of the **PDF Hotfolder** dialog box, click **Flattening & Normalizing**.
2. Click **Images**.
The most important parameter on this page is the **Output ICC Profile**, which defines the Normalizing color space.

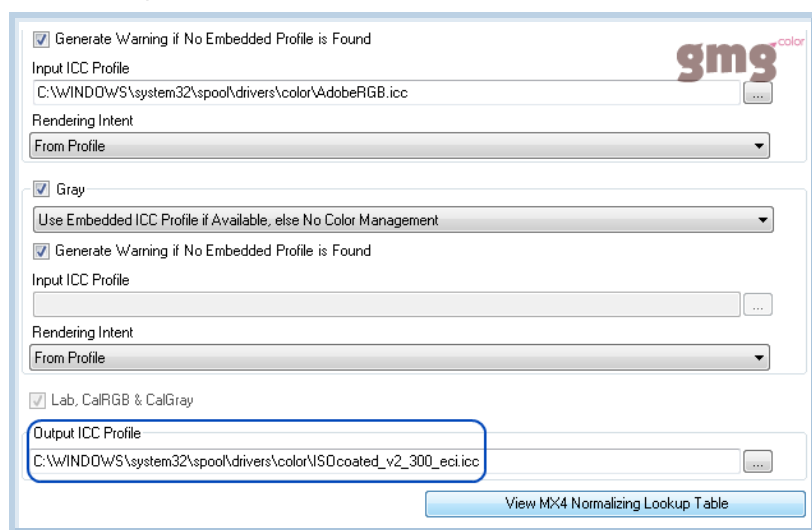


Fig. 7 Output color space of the Normalizing step.

All PDF objects in the input color spaces selected on the **Images** and **Vector & Text** tabbed pages will be normalized to the color space defined by the **Output ICC Profile**.

MX4 based normalizing

1. On the navigation panel of the **PDF Hotfolder** dialog box, click **Flattening & Normalizing**.
2. Click **MX4 Normalizing**.

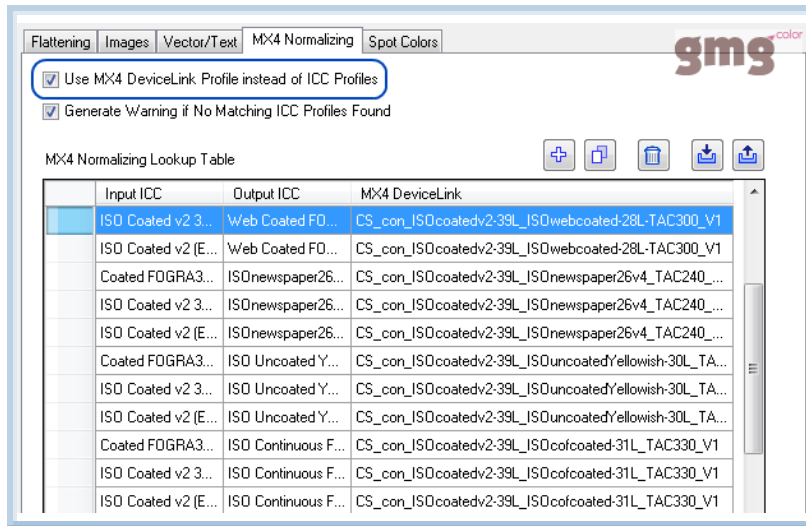


Fig. 8 Hotfolder using MX4 Normalizing.

The hotfolder uses **MX4 Normalizing**. This means that instead of ICC profiles, MX4 DeviceLink profiles are used for normalizing. The program automatically selects the correct conversion profile with respect to the **embedded ICC profile** of the PDF object and the **Output ICC Profile** defined on the **Images** and **Vector & Text** tabbed pages.

You can deselect the option **Use MX4 DeviceLink Profile instead of ICC Profiles** if you want to use only ICC profiles for flattening (not recommended).

MX Color Processing (main color management step)

→ On the navigation panel of the **PDF Hotfolder** dialog box, click **MX Color Processing**.

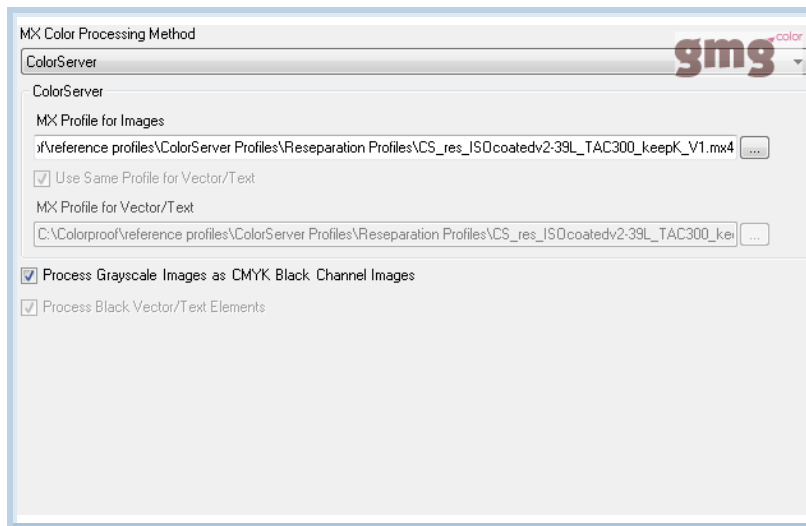


Fig. 9 CMYK-to-CMYK conversion.

The color space conversion and the TAC limitation is defined by the **ColorServer** conversion profile selected in the **MX Profile for Images** (and **Vector/Text**) box.

The hotfolder applies a **CMYK-to-CMYK conversion** from the **ISO Coated v2 (39L)** print standard to **ISO Web-Coated (28L)**, including a limitation of the **TAC to 300%**.

If you want to use another conversion or reseparation type, you can simply select another profile.

3.3 Hotfolder List View

Selecting a hotfolder

A hotfolder can be selected in the list with the mouse or by pressing the ARROW UP or DOWN key. A selected hotfolder or workflow is highlighted by a different border and background color.

When a hotfolder from the left window frame is marked by using the mouse, the window on the right will show the dedicated images or PDF jobs. Selecting such an image, the lower window will display the associated job. Selecting the PDF job, the lower window displays the associated PDF document properties.

Hotfolder commands

Hotfolder commands such as editing or creating a manual job can be selected from the **Hotfolder** menu or from the context menu (which appears when you right-click on a hotfolder) and are applied to the selected item.

The command **Hold Images**, which may be selected from the context menu by right-clicking on a hotfolder, puts the automatic processing of jobs by the hotfolder on hold. New files will still be recognized in the hotfolder and will be added to the file list in the hotfolder. These new documents will remain in status **Hold Images** until the command **Hold Images** is switched off again by the user.

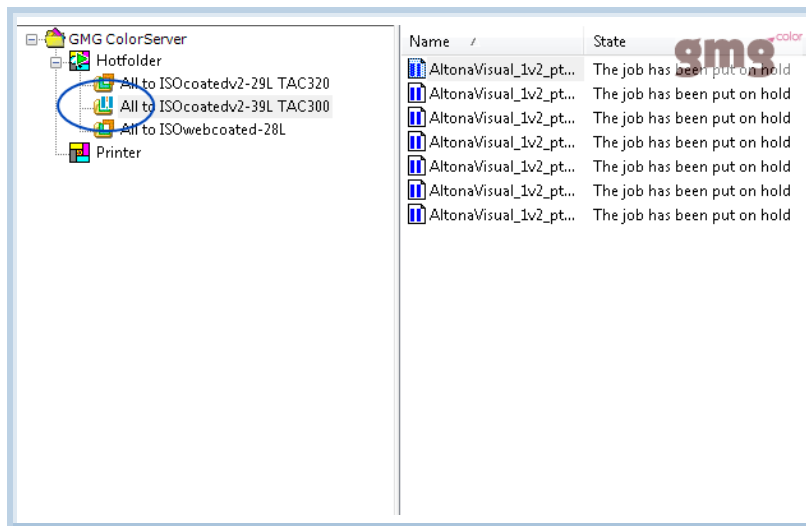


Fig. 10 Hotfolder put on hold.

As you can see in the screen shot, jobs have been created from all PDFs recognized by the hotfolder. Jobs are in status on hold as long as the hotfolder is on hold (indicated by the blue **Hold** icon). After activating the hotfolder, you need to **manually** start the processing of each job by using the **Print** command.

Job commands

Right-clicking on an image or PDF job opens the context menu. There you are able to **Print** or **Delete** an image or PDF job, or to show a **Preview**.

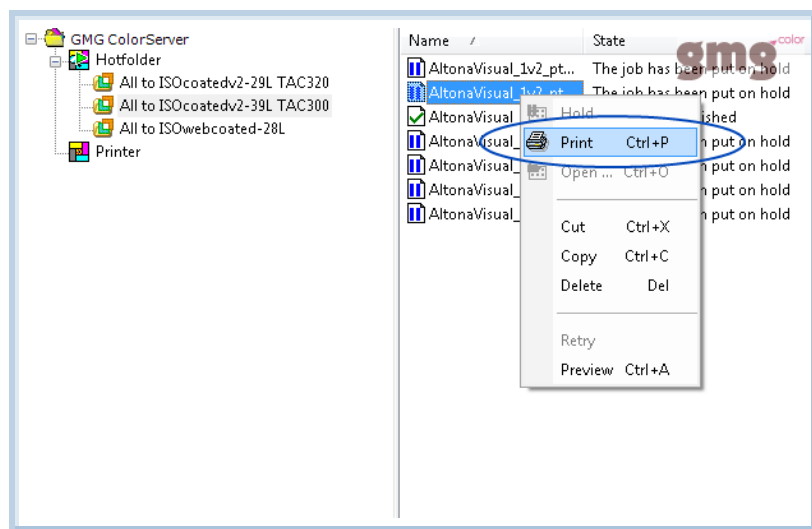




Fig. 11 Start processing a job on hold.

→ On the job context menu, click **Print** to start the processing of jobs on hold.

3.4 Creating a Manual PDF Job

After you have set up a PDF hotfolder, you can now also create **manual** jobs. This is convenient if you want to process only a few documents with slightly different settings than defined in the hotfolder. Still, as the hotfolder settings are used as a kind of template for manual jobs, you will only need to fill in a few parameters.

How to create a manual job

1. From the **Overview**, select a hotfolder as a template for the manual job.
2. Right-click the hotfolder to open the context menu.
3. Click **New PDF Job**.
The **PDF Manual Job** dialog box opens.
4. Click the **Files & Folders** button on the navigation panel on the left side of the dialog box.
5. Click the **Input Files** tab.
6. Type any name into the **Job Name** box.
7. On top of the **Files** list, click the **Add File** button .
8. Browse your folders, select the desired input files, and confirm by **clicking OK**.
The selected PDFs are added to the **Files** list.
9. You can remove files from the list by clicking the **Remove File** button .

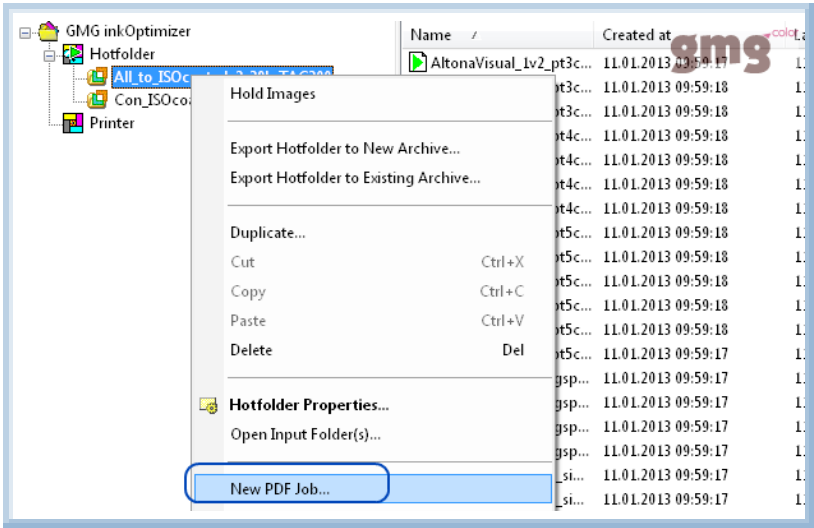


Fig. 12 Creating a manual PDF job as described in the preceding instructions.

4. Profile Types

Note Some of the features described in the following are not included in the standard GMG ColorServer version and require an additional license (GMG InkOptimizer, GMG SmartProfiler, GMG FlawFinder or GMG ProfileEditor). Please contact your local dealer for details.

Type	Usage	Where to find	See also
CMYK-to-CMYK Conversion	Used in the MX Processing step, for conventional printing. Used for normalizing colors in the Normalizing step. For color conversions of CMYK objects from one standard to another, including a gamut mapping, for example, from ISO coated to ISO uncoated.	<i>reference profiles\ColorServer Profiles\CMYK Conversion Profiles\</i>	"CMYK-to-CMYK Conversion" on page 25
CMYK-to-CMYK Reseparation	Used in the MX Processing step, for conventional printing. For harmonizing GCR/UCR for different output processes under the respective printing conditions (without using an InkOptimizer profile).	<i>reference profiles\ColorServer Profiles\Reseparation Profiles\</i>	"CMYK-to-CMYK Reseparation" on page 26
RGB-to-CMYK Separation	Used in the MX Processing step, for conventional printing. Used for normalizing colors in the Normalizing step. For transformations of RGB objects into CMYK.	<i>reference profiles\ColorServer Profiles\Separation Profiles\</i>	"RGB-to-CMYK Separation" on page 26
RGB-to-RGB Conversion	Used in the MX Processing step, for conventional printing. For transformations of RGB objects from one standard RGB color space to another, for example, from Adobe RGB (1998) to eciRGB v2.	<i>reference profiles\ColorServer Profiles\RGB Conversion Profiles\</i>	"RGB-to-RGB Conversion" on page 26
InkOptimizer	Used in the MX Processing step. Optimized GCR/UCR settings, available in three different levels (G3, G2, G1).	<i>reference profiles\InkOptimizer Profiles\</i>	"InkOptimizer Profiles" on page 26
CMYK-to-RGB Conversion	Used in Image Hotfolders , as Additional Profile , for transformations of CMYK objects into RGB.	<i>reference profiles\ColorServer Profiles\CMYK-RGB Conversion Profiles\</i>	"CMYK-to-RGB Conversion" on page 26

GMG Color GmbH & Co. KG provides MX4 profiles and spot color databases (db3) for all major print standards world-wide. All GMG color profiles were created and tested by GMG ColorExperts.

To suit different use cases, GMG ColorServer provides you with different types of color profiles (MX4 DeviceLink profiles). MX4 profiles installed with the setup can be found in the **reference profiles** subfolder of the main program folder (default path: *<installation path>\reference profiles*). The folder names correspond to the basic color conversions as described in the preceding table.

Not all GMG ColorServer profiles are installed with the setup. The PDF document **ColorServer Profiles.pdf** located in the software directory in the */reference profiles/ColorServer Profiles/* folder gives an overview of the installed profiles.

You can always find the latest profiles on the GMG website, in the **Support** section.

www.gmgcolor.com

4.1 CMYK-to-CMYK Conversion

A CMYK-to-CMYK conversion means an automated color conversion from a print standard such as PSR, ISO, GRACoL, and 3DAP to another print or in-house standard. Outgoing data will be optimized for different output processes (for example, for offset or gravure printing) with the respective printing conditions.

As GMG ColorServer uses four-dimensional MX4 DeviceLink profiles, the source and target values are computed directly in CMYK—without using CIE Lab as an intermediate color space. The black channel separation from the original data is preserved when transforming into the target CMYK color space, maintaining the visual impression of the document.

4.2 CMYK-to-CMYK Reseparation

A CMYK-to-CMYK reseparation means an automated reseparation of CMYK data prepared for one print standard. This is suitable for a harmonization of files having different UCR/GCR settings to achieve a consistent color channel separation. Standardized separations help to establish a stable print result.

4.3 RGB-to-CMYK Separation

The increasing use of digital cameras and RGB-based workflows is driving more and more RGB data use. However, the RGB data supplied is often in a not finalized status, meaning the resolution of image data has still to be scaled to the final size and to be sharpened in accordance with the changed resolution. The data is then subsequently separated into the **CMYK** color space required for printing.

The hotfolder technology used in GMG ColorServer automates all required steps. Image data placed into a hotfolder can be scaled, sharpened, and separated in accordance with the parameters assigned to the hotfolder. This automatic process makes a manual editing in an image editor obsolete.

Separation profiles delivered together with the program use special UCR settings and algorithms for a more effective **gamut mapping**. An effective gamut mapping is required for minimizing visual changes when reducing the larger RGB color space to the **smaller CMYK** color space.

4.4 RGB-to-RGB Conversion

A RGB-to-RGB conversion means an automated color conversion of RGB data from one standard RGB color space into another standard RGB color space such as Adobe RGB (1998), sRGB, and eciRGB.

This conversion is particularly useful for standardizing RGB data in the prepress business. A conversion with MX4 RGB-to-RGB conversion profiles leads to a **smooth** gamut boundary.

4.5 CMYK-to-RGB Conversion

Note CMYK-to-RGB conversions are applied in **Image Hotfolders** because they are primarily (if not exclusively) applied to images. They are **not** supported for **PDF-Hotfolders**.

A CMYK-to-RGB conversion means an automated color conversion from a print standard such as ISO or GRACoL to a print process neutral AdobeRGB color space. This conversion is particularly useful for normalizing CMYK images in different color spaces to a common color space.

Supported input and output color spaces

Profile type	Input color space	Output color space
CMYK-to-RGB	ISO coated v2 (39L)	AdobeRGB
	GRACoL2006 Coated Commercial Sheet (#1)	
	SWOP Publication Sheet (#3)	
	SWOP Groundwood (#5)	

Tip Further profiles for other input and output color spaces are available on the GMG website and integrated in the GMG ColorMaster workflow package.

4.6 InkOptimizer Profiles

InkOptimizer profiles (*.mx4) are four-dimensional device-link profiles for CMYK-to-CMYK reseparation and UCR/GCR optimization.

They reparate the incoming data, applying GMG's specialized GCR settings as defined within each profile. Using InkOptimizer profiles will reduce the application of the CMY inks and increase the K ink in their place. Intelligent algorithms allow this change without visible effects on the four color printed results.

GMG InkOptimizer profiles are tamper-proof with an embedded CRC control code and write protection.

Generally, the GMG InkOptimizer product includes, next to the installation CD, GMG InkOptimizer profiles G1, G2, and G3, which employ different optimization levels.

Profiles of the **G1** type use the **highest** possible GCR level. The **G2** level uses **medium** optimization, and **G3** profiles use the **lowest** optimization level, thus leading to the lowest ink reduction.

5. Where to Find Further Information

For further information on how to use the software and adapt it to your needs, please consult the Help (F1) from within GMG ColorServer.

You will always find the latest versions of user manuals on the GMG website.

www.gmgcolor.com > SupportArea

Further information:

- GMG ColorServer **User Manual:**
GMG-ColorServer_PDF-to-PDF_Manual_en.pdf
GMG-ColorServer_PDF-to-PDF_Manual_de.pdf
- Creating new MX4 ColorServer profiles in GMG ProfileEditor:
GMG-ColorServer_Tutorial_MX4_en.pdf
GMG-ColorServer_Tutorial_MX4_de.pdf