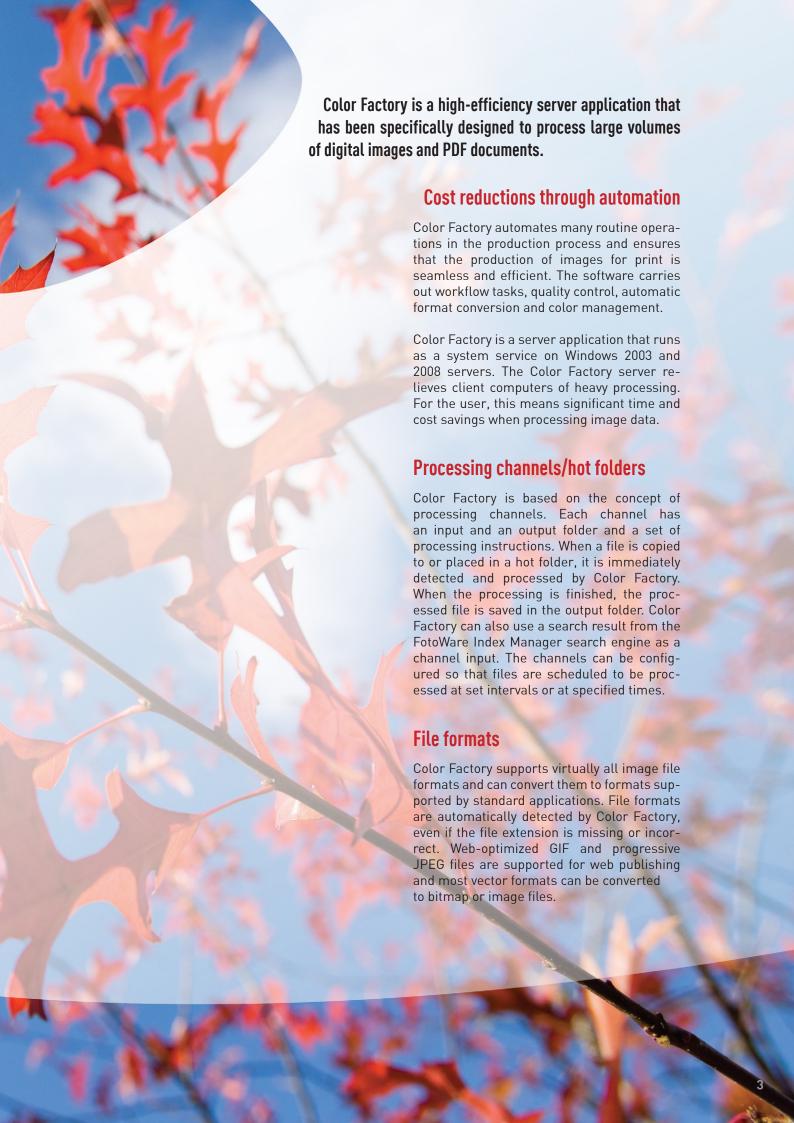


# Photo enhancement and workflow automation

- Automatic repro and image enhancement
- Quality assurance
- Format conversion, sorting and duplication
- Comprehensive PDF processing
- 16-bit image engine
- ODBC database interface
- Automatic metadata processing
- Advanced file routing
- Excellent scalability thanks to multi processor use
- Robust architecture.
- Simple channel management via the management console

"...significant time and cost savings when processing image data..."





SAAR

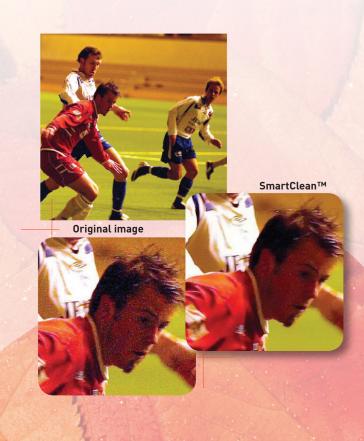
# SmartClean™

# - Perfect images - automatically

This automated noise reduction filter improves the quality of your digital pictures.

- SmartClean™ filters out both high and low frequency noise
- Achieve better color saturation and contrast with SmartClean™
- SmartClean<sup>™</sup> differentiates between shadows, highlights and mid-tones in an image
- Available as an optional module for Color Factory

SmartClean™ is a highly efficient and flexible tool to reduce noise in digital images. It is based on state-of-theart technology and was developed in collaboration with professional photographers. By using SmartClean™ to reduce image noise, especially in high-ISO images, it is possible to significantly increase image color saturation and contrast. SmartClean™ also optimizes images which have more noise in the shadow areas than in the highlights areas.



SmartClean™ is available as an optional module for Color Factory Professional and Color Factory Enterprise.

# SmartColor<sup>TM</sup>- Perfect colors – automatically

Reduce costs through automation. Save time and increase productivity with SmartColor™, the new, automatic repro module for Color Factory. SmartColor™ provides the following optimization functions:

- Contrast enhancement
- Color enhancement
- Shadow and highlights enhancement
- Natural color enhancement
- Automatic red-eye reduction



#### Contrast enhancement

The contrast enhancement feature determines the optimum settings for white- and black-point level and gamma correction. The advantage of this technology is that difficult scenes such as snow, night, portrait, flash, and other images are detected, enabling optimal correction.

#### Color enhancement

Color enhancement differentiates between normal color casts and special cast situations such as artificial light, portraits with skin tone, highlights or colored shadow areas, e.g. in the various shades of green in nature photos.

# Shadows and highlights enhancement.

This is one of the most important image enhancement steps. The enhancement results are obvious, especially in the shadow areas where much more detail will be visible. The shadows and highlights enhancement also acts on the highlights which are near saturation. A good example is flash portrait images shot at night. Here shadows and highlights enhancement can bring back some skin details in an overexposed face.

SmartColor™ is available as an optional module for Color Factory Professional and Color Factory Enterprise.

#### Natural color enhancement

This enhancement affects key natural colors that are aesthetically pleasing to the human eye. These colors are mainly skin, sky and vegetation. For these colors we define color points so that unpleasant colors become closer to more pleasant colors.

# **Automatic red-eye reduction**

SmartColor $^{\text{TM}}$  will detect which pictures have been taken using flash and will apply red-eye reduction selectively using face recognition technology.

Portions of FotoWare's product is created through use of Colour-Science i2e Image Enhancement Technology.



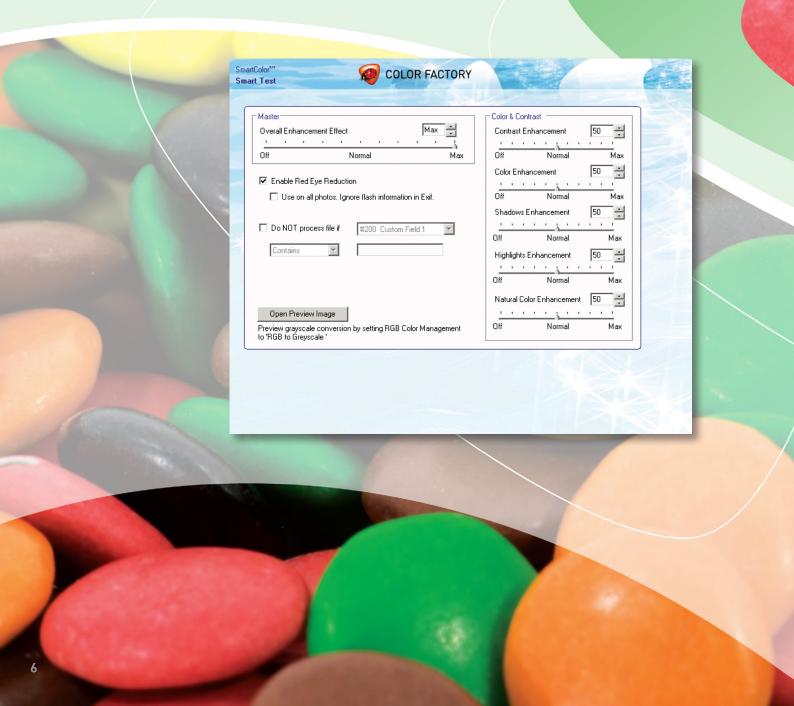
# Intelligent image enhancement using Smart™ technology

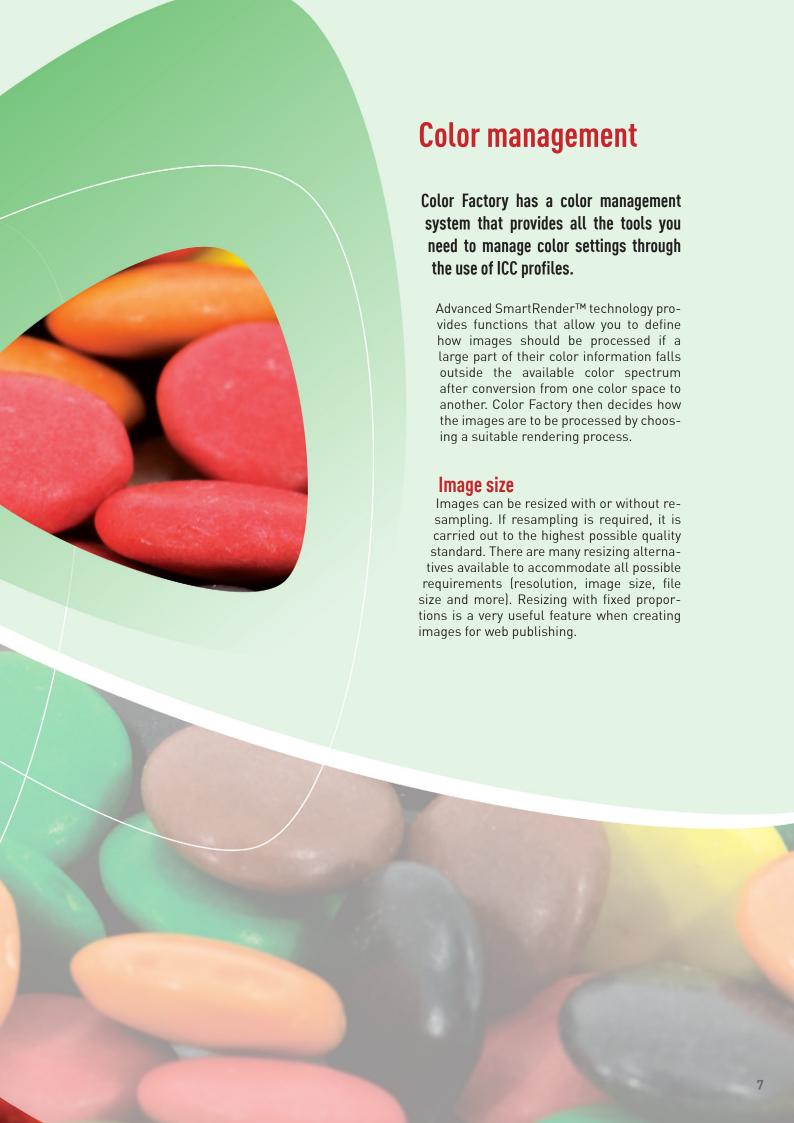
SmartContrast™ enhances the contrast and brilliance of images. This feature is especially useful for images from digital cameras whose sensors react differently to conventional film. SmartContrast™ corrects images that are too light or too dark so that the contrast is adjusted automatically.

Unlike other programs, it is not necessary to assign set categories to the images. SmartSharp™ detects details within the images and improves the sharpness by increasing the contrast at the edges. When

setting up the function, you are able to fine-tune the sharpening preferences.

SmartSharp™ automatically works out the correct values for the strength and radius of the sharpness, taking the output type and size of the image file into consideration.





### **Automatic text tools**

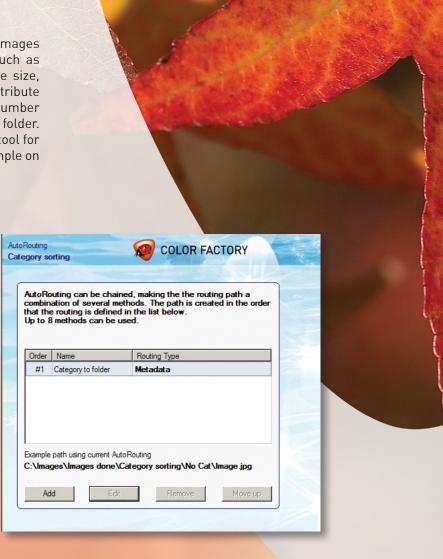
When processing metadata, Color Factory can import data from various sources. Using an ODBC interface, specific metadata fields can be filled with content from SQL databases or Microsoft® Excel tables for example. Predefined text templates can be applied automatically, either adding to existing metadata or replacing it. The ability to extract metadata from images and transfer it to other applications (e.g. editorial systems) further enhances Color Factory's functionality. Character set conversion is available for most languages and platforms.

## File sorting and archiving

Color Factory can automatically sort images based on several different criteria such as prefixes, meta-data categories, image size, quality, color space etc. It can even distribute files automatically according to the number of files or megabytes in the destination folder. This makes Color Factory the perfect tool for preparing data to be archived, for example on removable media such as CD or DVD.

## **Quality control**

Color Factory can automatically detect the quality of the images through histogram analysis. If the images are high quality, they are stored in *one* folder, while low-quality images are placed in *another* folder so that they can be processed manually.





# **Convenient system administration**

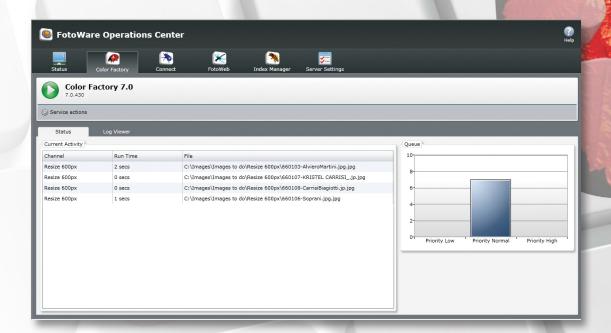
FotoWare applications are configurable through a web-interface which makes it easy for an administrator to connect to the server from anywhere in the network and make the necessary adjustments.

## **FotoWare Operations Center**

FotoWare Operations Center is a common entry point for an overview of all installed server applications that allow system operators to monitor the FotoWare servers and start, stop or restart services as required. One click away from the Operations Center, and only accessible by the system administrator, are the server configuration sites where each FotoWare server is configured.

This approach to server maintenance and configuration gives only server administrators access to change the workflow setup, while users in the operators group have access to perform maintenance tasks.

Access to a FotoWare system can be controlled with Active Directory services. Hence, your existing network users and groups can likely be used as the basis for controlling access to archives, workflow destinations and not least, server configuration.











# **Feature Comparison**

		Color Factory Small Office	Color Factory Professional	Color Factory Enterprise
Architecture:	Multi Processing Channels	NO	NO	YES
	16 Bits processing	NO	YES	YES
	Channel Priority	NO	NO	YES
File support:	Image support	YES	YES	YES
	Adobe PSD layer support	NO	NO	YES
	Adobe PDF support	NO	NO	YES
	Vector graphics and special format supp.	NO	NO	YES*
	Movie suport	NO	NO	YES
	16 Bits output file formats	NO	YES	YES
	Text and Autorouting for Unknown file types	YES	YES	YES
	JPEG Virus scan	YES	YES	YES
Color Processing:	SmartColor	NO	OPTIONAL	OPTIONAL
	CMYK Support	NO	YES	YES
	Lino CMS Engine (Windows 2000, XP)	YES	YES	YES
	Color Management (Non-CMYK level) ICC process	ing YES	YES	YES
	Digital camera ICC support	YES	YES	YES
Image Processing:	SmartClean	NO	OPTIONAL	OPTIONAL
	Advanced Unsharp Mask	YES	YES	YES
	Standard Unsharp Mask	YES	YES	YES
	Advanced Contrast enhancement	YES	YES	YES
	Standard Contrast enhancement	YES	YES	YES
Text Processing:	ODBC Text merge	NO	YES	YES
Workflow:	Job Request file support	NO	YES	YES
	Search Criteria support	NO	YES	YES
	Search Image ID (low res layout support)	NO	YES	YES
Pixel Edit:	Stroke clipping path	NO	YES	YES
Offline:	Creating Offline thumbnails	NO	NO	YES

<sup>\*</sup> Requires 3rd party software installed (MS Office for Office document support etc)

