

SERVER AUTOMATA



USER MANUAL

v.1.0

SoftColor Oy

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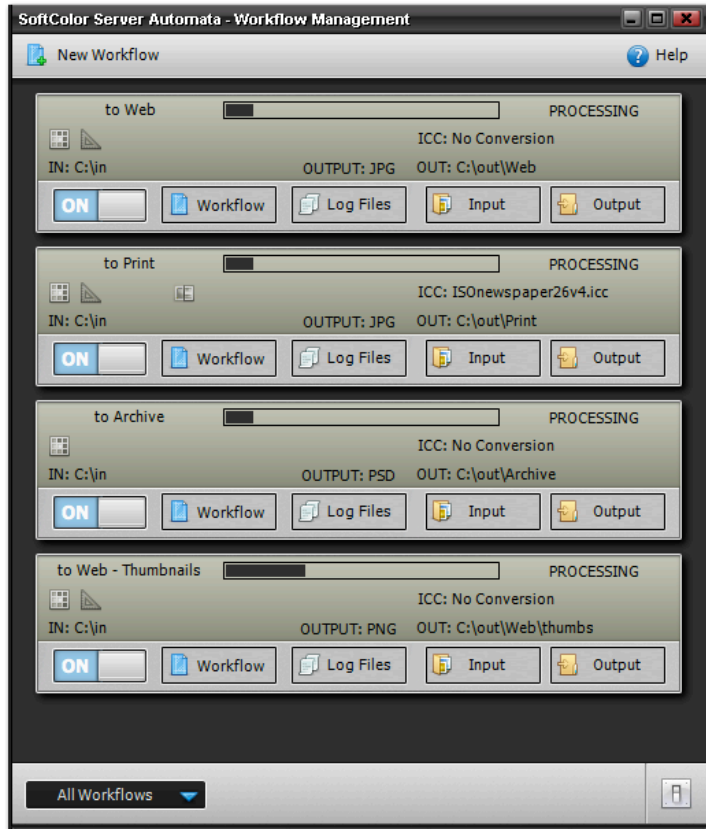
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SoftColor Server Automata Overview



SoftColor Server Automata is a tool for color correction, image editing and color management workflow automation on server side. Automata loads automatically new and changed files from input folder. After processing it saves images to output folder. You can create multiple workflows with different input / output folder combinations.

Automata uses non-destructive layer based processing for color and image adjustments. Automata's automatic color correction algorithm corrects white balance, exposure and contrast problems from original image in single step.

Automata reads multiple digital image and camera RAW-formats. Automata saves edited image to JPEG, TIFF, PNG, BMP and PSD formats. If PSD format is used Automata saves original and edited images into same file as separate layers.

Automata has full support for standard ICC-profile based color management and it supports embedded profiles. Automata manages embedded EXIF, IPTC and XMP meta-data.



Automatic

Automata process images automatically on the background. It loads new and changed files from input folder after that it process and saves to output folder. You can create multiple workflows with different input / output folder combinations. You can also chain Automata's workflows to work together.



Color Correction

Automata's automatic color correction algorithm corrects color balance, exposure and contrast problems from original image in single step. White balance, exposure and contrast adjustments are processed as separate layers. This gives full control to fine tune automatic correction intensity and other color correction adjustments.



Image Editing

Automata has tools and filters for resizing, cropping, rotating, straightening, sharpening and de-noising the original image. Image editing in Automata is non-destructive and layer based operation. Image editing tools and filters can be used together with color correction or separately.



Color Management

Automata has support for standard ICC profile based color management and loading and saving embedded ICC profiles. Automata can convert and render between different color spaces, for example conversion from RGB to CMYK. Automata's has support for v4 and v2 profiles.



Multiple formats

Automata can operate with multiple digital image and camera RAW formats. Automata handles conversions between image formats and color spaces. Embedded meta-data is transferred between input and output images if output image format has support for embedded metadata.



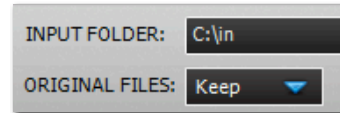
How to Process Images with Server Automata

How Make a Workflow and Process Images

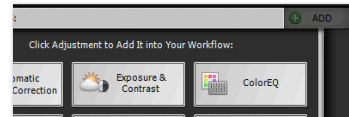
1. Create a new workflow.



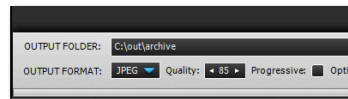
2. Select input folder in workflow editor.



3. Select adjustments for workflow.



4. Select output folder and format.



5. Save workflow and close workflow editor.



6. Enable workflow.

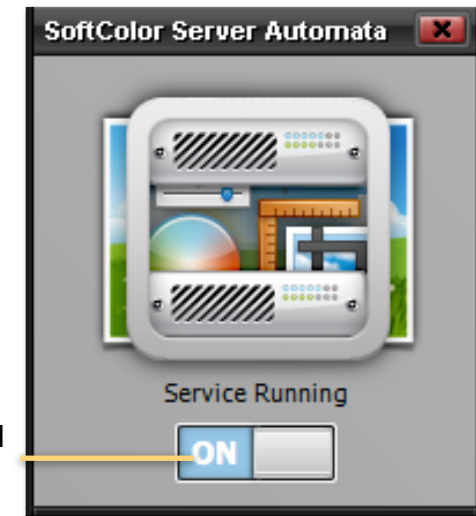


7. Copy or move files to input folder.

8. Get processed images from output folder.

Manage Background Processing

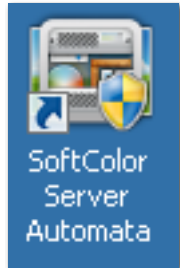
Manage Server Automata service [start / stop]



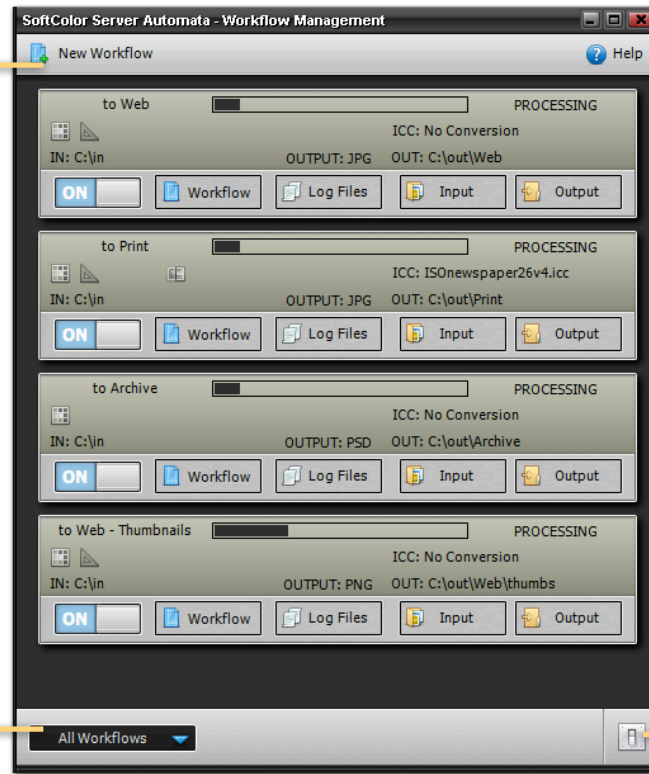
Stop all workflows and shutdown Automata service.



Workflow Management



Administrator rights [UAC] are required to manage workflows in Windows Vista and Windows 7.



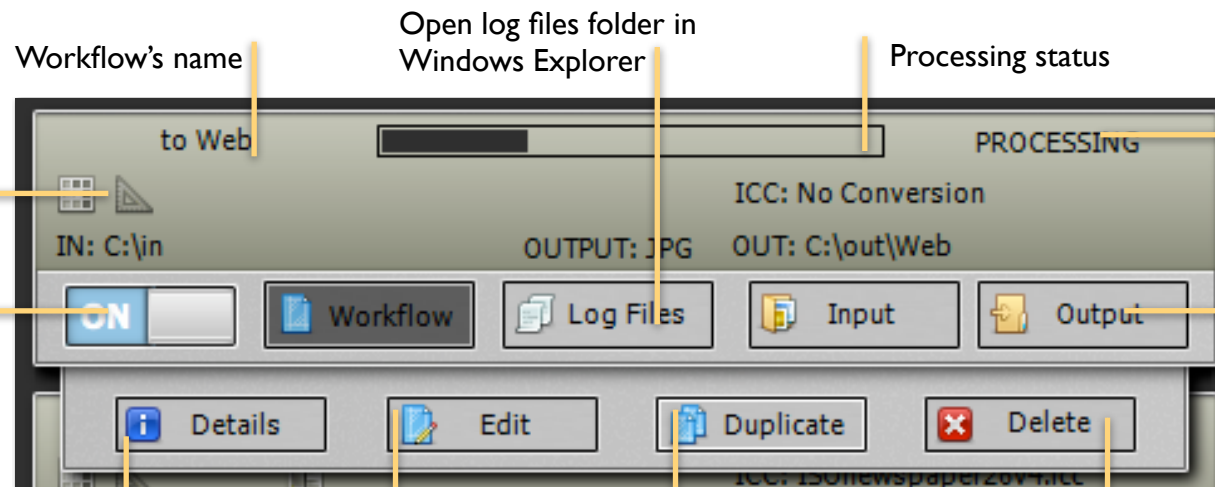
Create a new workflow

Select which workflows are shown

If you close Workflow Management application Automata will continue working on the background.

Server Automata runs image processing as Windows service. This means that you can log out from Windows and image processing continues on the background.

Manage Server Automata service [start / stop]



Workflow's name

Open log files folder in Windows Explorer

Processing status

Current status

Current adjustments

Enable or disable workflow.

Open input or output folder in Windows Explorer

Show workflows details without stopping.

Edit workflow's adjustments

Create new workflow from current adjustments

Delete workflow



Workflow Editor

Import settings from INI-file

Export current settings to INI-file

Set Workflow's name

Save workflow

Select input folder

Select what Automata will do with original files after processing.

Keep = Leave files to input folder

Copy = Copy files to the selected folder

Move = Move files to the selected folder

Delete = Delete files after processing.

Show or hide adjustments menu

Add adjustments to workflow

Select output folder

Select output format

SoftColor Automata - Workflow Editor

WORKFLOW: New Workflow

INPUT FOLDER: C:\in

ORIGINAL FILES: Keep

TOOLS & ADJUSTMENTS:

Click Adjustment to Add It into Your Workflow:

Automatic Color Correction

Exposure & Contrast

ColorEQ

Color Management

Resize

Resolution

Crop

Rotate

Flip & Mirror

Automatic Sharpening

Unsharp Masking

De-Noise

XMP-Metadata

Pre Process Files

Post Process Files

OUTPUT FOLDER: C:\out\archive

OUTPUT FORMAT: JPEG

Quality: 85

Progressive: ☐

Optimized: ☐



Automatic Color Correction

Automatic Color Correction

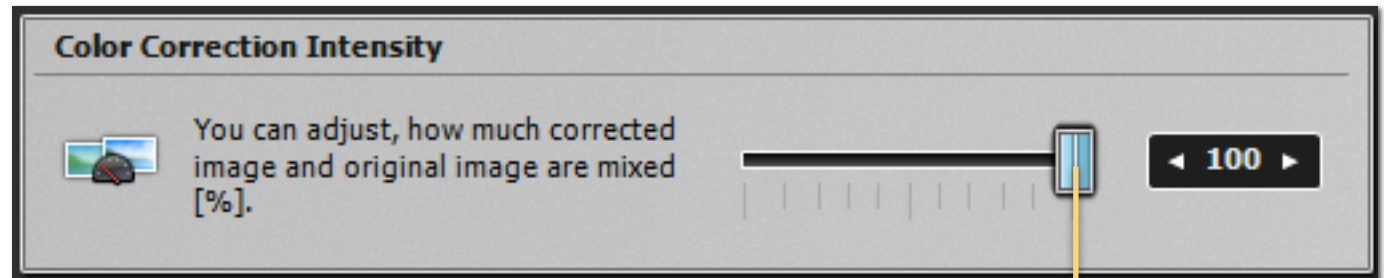
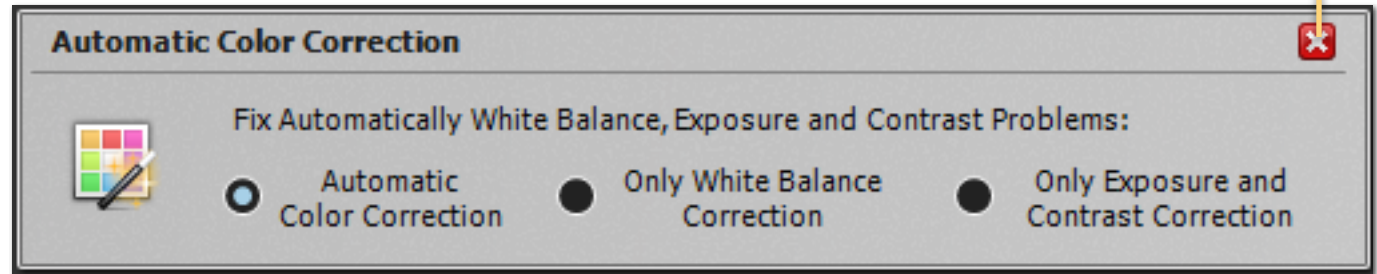
Automatic color correction fixes color balance, exposure and contrast problems automatically in single step. Automatic color correction uses separate layers for white balance, exposure and contrast adjustments. Layer based solution gives you a freedom to tune all color correction adjustments as you want.

If you don't use automatic correction you can still adjust white balance, exposure, contrast and correction intensity settings manually.

How to Tune Automatic Color Correction

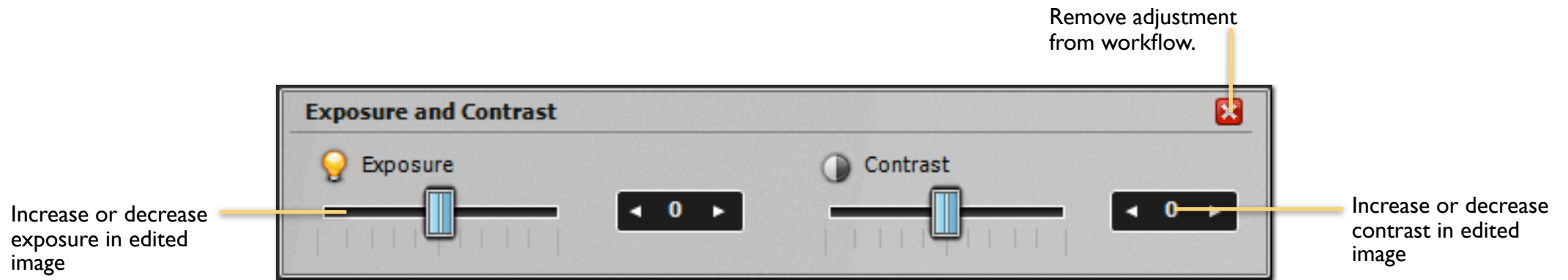
If you are not satisfied with Automata's automatic color correction results you can easily tune results by adjusting "Color Correction Intensity" value 0-100%. This value adjusts how much pixel color values of color corrected image are mixed with original image. You can also increase or decrease exposure and contrast values for automatic correction. If you want to change white balance you can use ColorEQ tool.

Remove adjustment from workflow.



Adjust color correction intensity. This intensity value adjusts how much pixel color values of color corrected image are mixed with original image. Color correction intensity is the easiest way to tune automatic color correction results. Color Correction Intensity value is available if you have selected any of color correction adjustment.

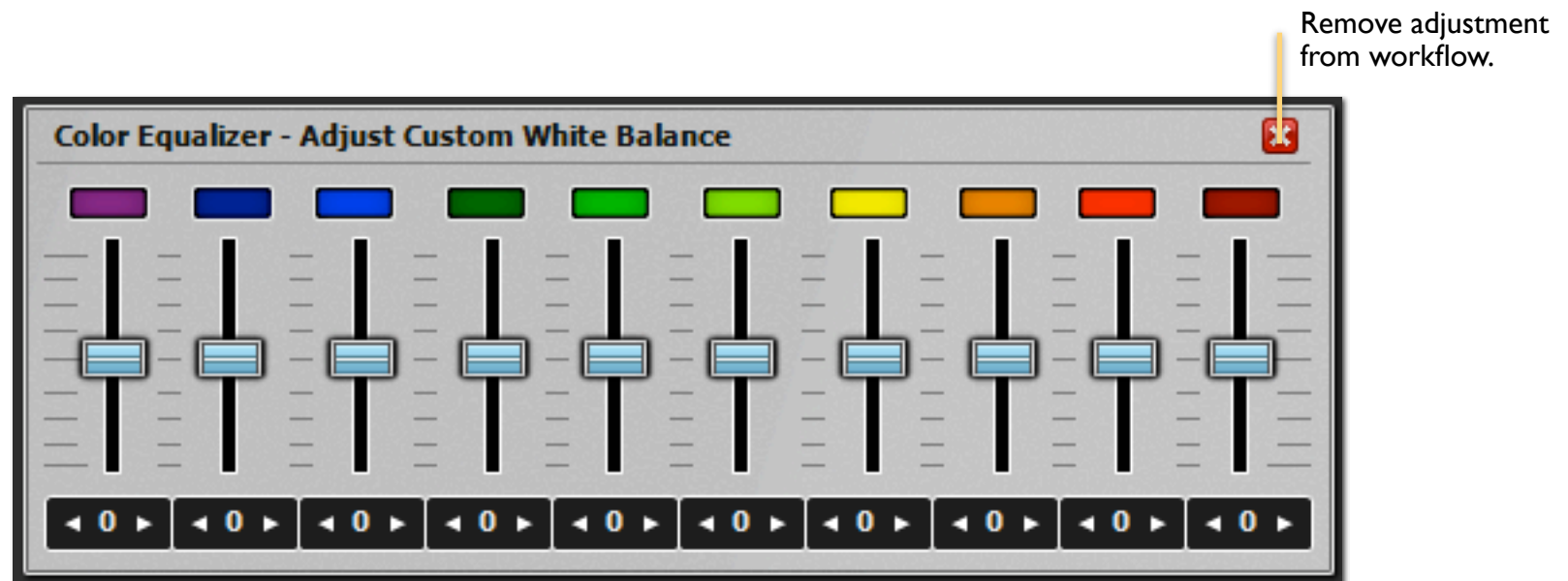
Non-linear adjustments for exposure and contrast.





Color Equalizer

Use Color Equalizer's sliders to adjust current white balance of edited image. You can increase or decrease certain color tones by adjusting Color Equalizer's sliders.

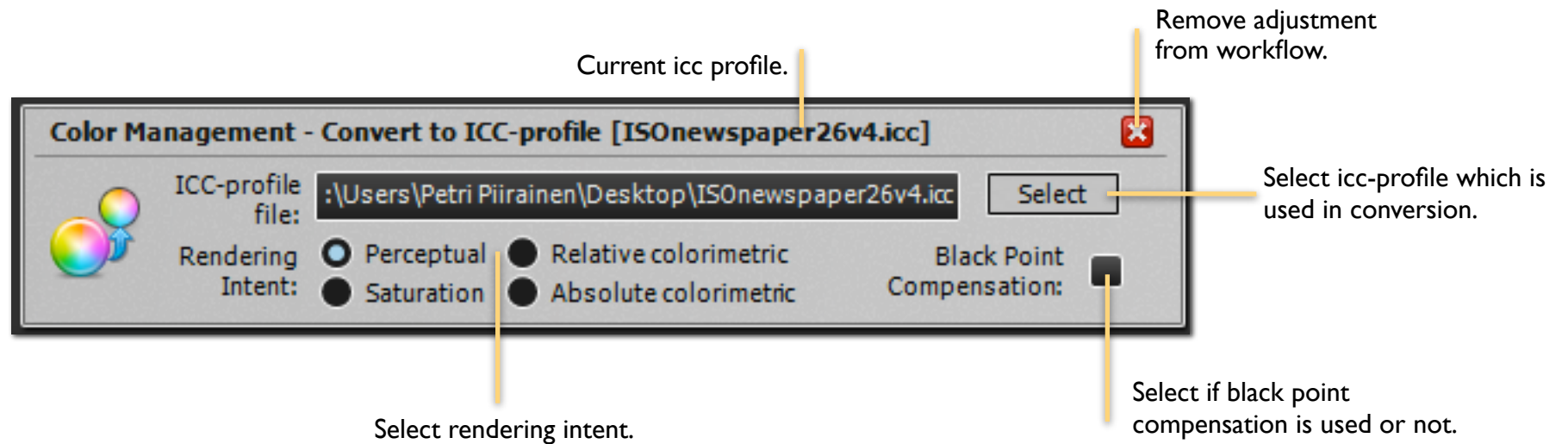




Color Management

With “Convert to ICC Profile” tool you can select icc-profile which defines target color space for saved images. You can also set rendering intent method which is used during conversion and usage of black point compensation. Selected icc-profile is embedded to the saved image. If you are not using icc-profile conversion original image’s icc-profile is embedded to the saved image.

Automata reads automatically original image’s embedded profile and uses it while images are presented on the display.





Resize

Select resizing type.

Remove adjustment from workflow.

Width to edited image. If Height not defined then new height will be calculated automatically (aspect ratio saved)

The 'Resize' dialog box has a title bar with a close button. Below the title bar is a small icon of a corner handle. The main area contains three radio buttons: 'Set Pixel Width / Height' (selected), 'Set Maxium Pixel Width / Height', and 'Scale'. Below these are two input fields: 'Width: 1024' (with a checkmark icon to its left) and 'Height: 768'.

Height to edited image. If width not defined then new width will be calculated automatically (aspect ratio saved)

Scales down improved image width if it is more than Max Width value. (aspect ratio saved)

The 'Resize' dialog box has a title bar with a close button. Below the title bar is a small icon of a corner handle. The main area contains three radio buttons: 'Set Pixel Width / Height', 'Set Maxium Pixel Width / Height' (selected), and 'Scale'. Below these are four input fields: 'Max Width: 1024', 'Max Landscape Width: 1024' (with a checkmark icon to its left), 'Max Height: 768', and 'Max Portrait Height: 768'.

Maximum width for landscape image [width > height]. Doesn't affect to portrait images. (aspect ratio saved)

Maximum height for portrait image [height > width]. Doesn't affect to landscape images. (aspect ratio saved)

Scales down improved image height if it is more than Max Height value. (aspect ratio saved)

The 'Resize' dialog box has a title bar with a close button. Below the title bar is a small icon of a corner handle. The main area contains three radio buttons: 'Set Pixel Width / Height', 'Set Maxium Pixel Width / Height', and 'Scale' (selected). Below these is a single input field: 'Scale: 50 %'. At the bottom, there is a text label: 'Scales down or up image size (aspect ratio saved)'.

Scales improved image width and height. (aspect ratio saved)



Resolution

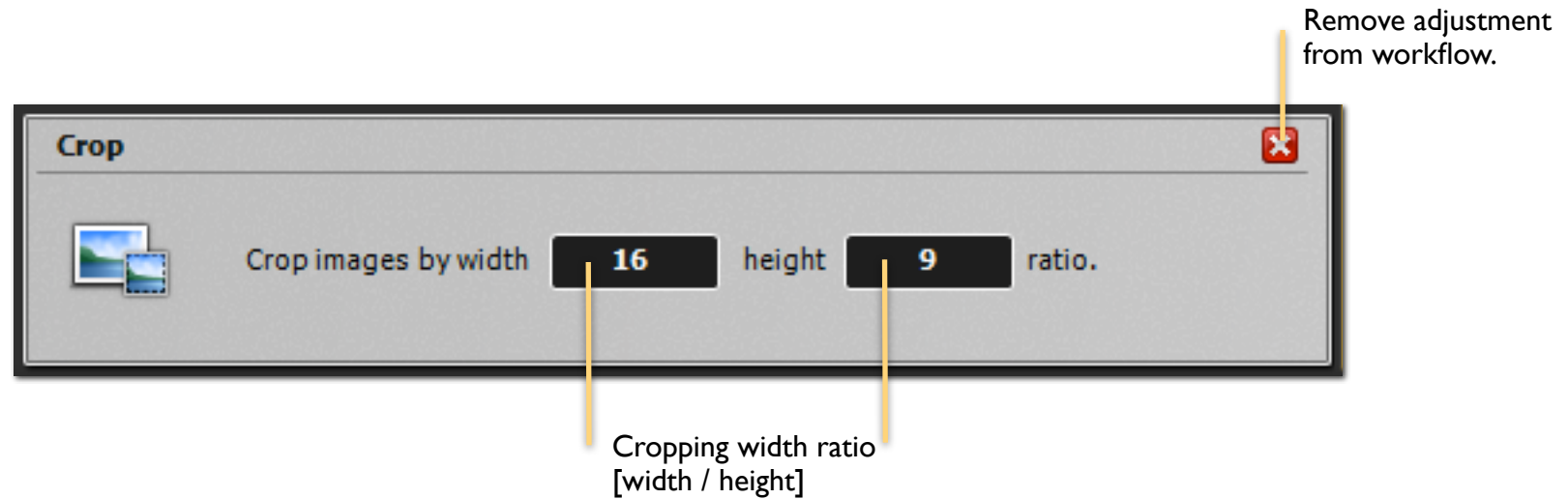
With Automata's resolution tool you adjust dots per inch (DPI) resolution. If you changes images resolution new resolution is updated to output image metadata.





Crop

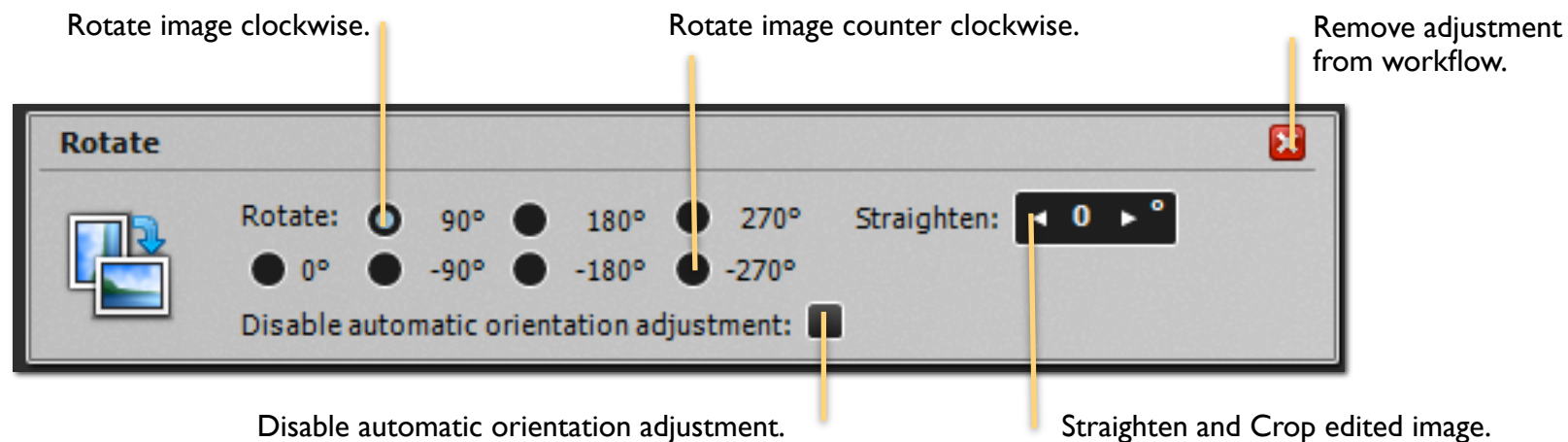
When cropping is done the cropped area outside selection will be removed from image.





Rotate


With Automata's Rotate tools you can rotate and fix image's horizontal orientation by using "Straighten" adjustment.







Flip and Mirror

Flip image vertically.

Flip and Mirror 

 Flip:

☒ Enabled ☐ Disabled

 Mirror:

☐ Enabled ☒ Disabled

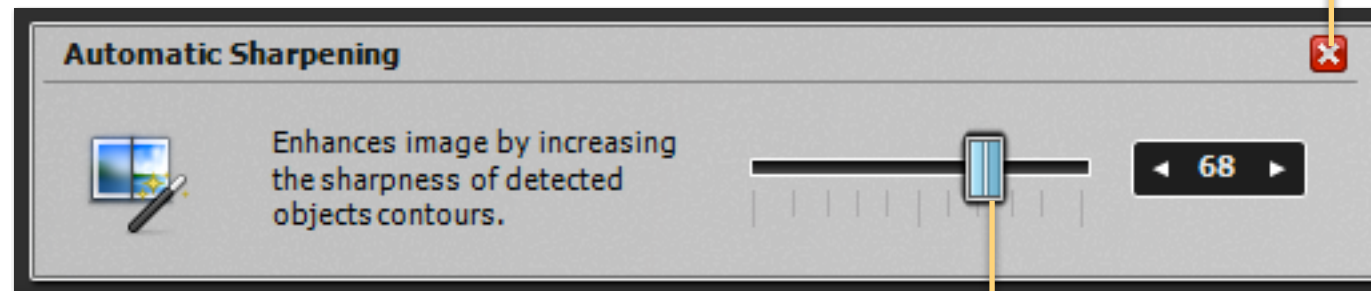
Remove adjustment from workflow.

Flip image horizontally.



Automatic Sharpening

Automatic sharpening filter which enhances image by increasing the sharpness of detected objects contours.



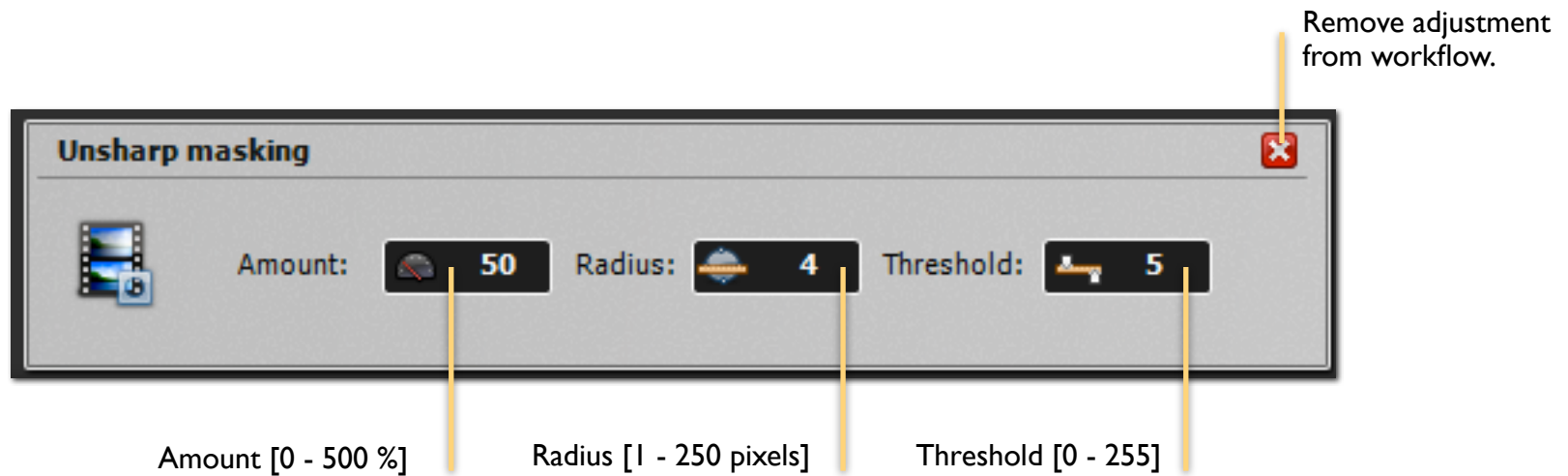
Remove adjustment from workflow.

Do sharpening to the edited image.



Unsharp Masking

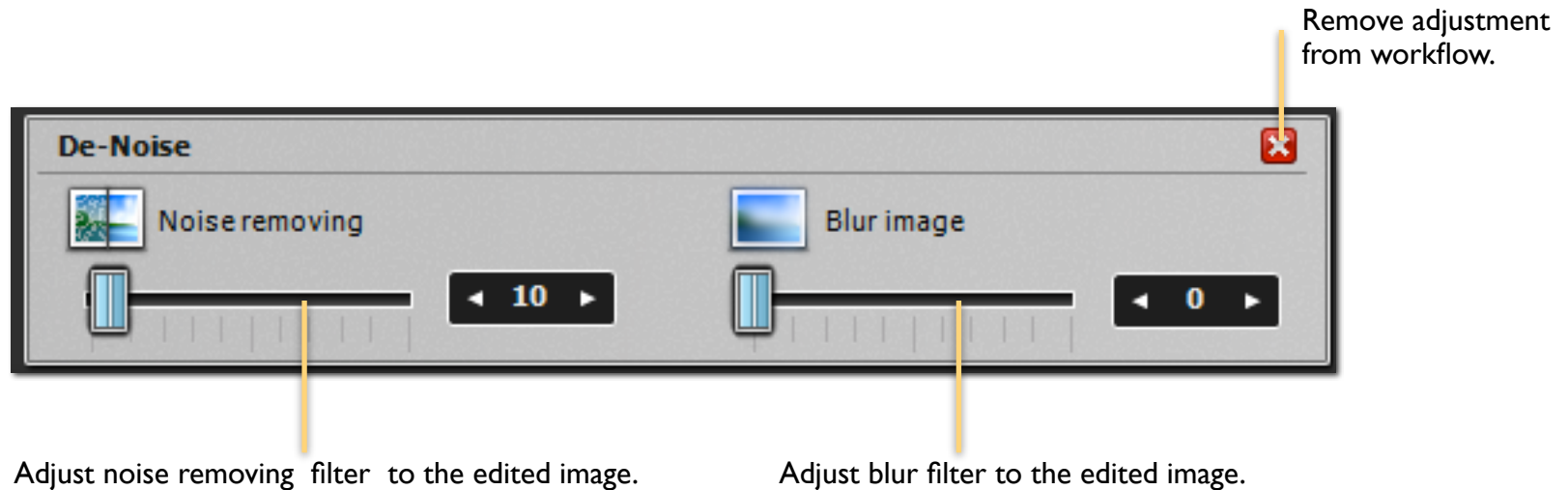
Unsharp masking filter which increases the contrast of the edges between pixels of different colors in an image.





De-Noise

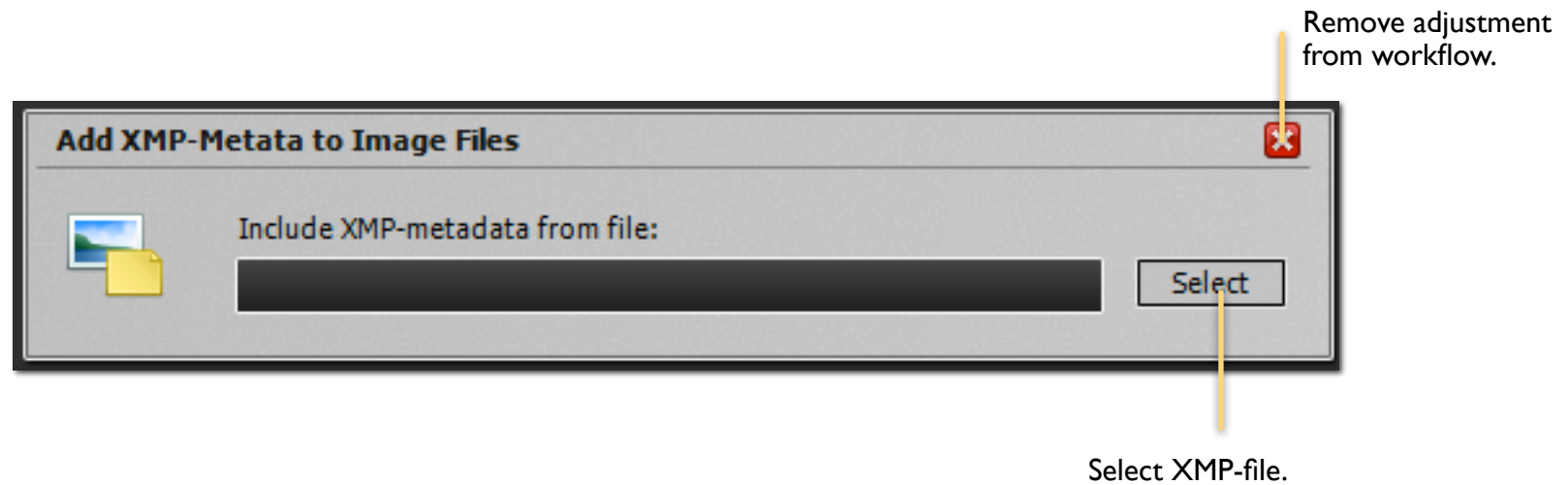
With Automta you can use automatic noise removing filter or blur filter to remove unwanted noise from edited image. Blur filter performs gaussian blur filtering.





Add XMP-Metadata

With XMP configuration you can include XMP data to processed image [JPEG, TIFF, PSD]. XMP-data is read from .xmp file and store to image.

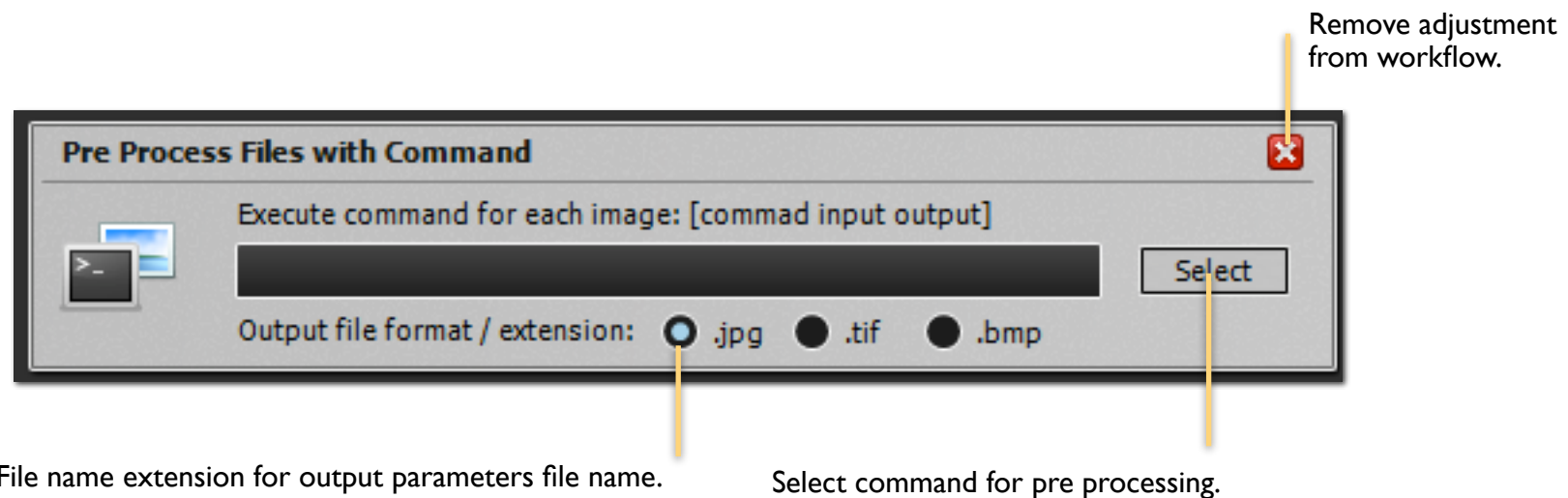




Pre Process Images with Command

With Pre Process tool you can execute selected application or batch / script file for every file which are located inside input folder before Automata will process file. Automata loads output file which selected command has processed. Pre Process command will get all files as input parameter, also them which are not supported by Automata.

Pre Processing command can be Windows executable (.exe), Windows batch file (.bat) or PowerShell script (.ps1).



Automata will execute command with following parameters:

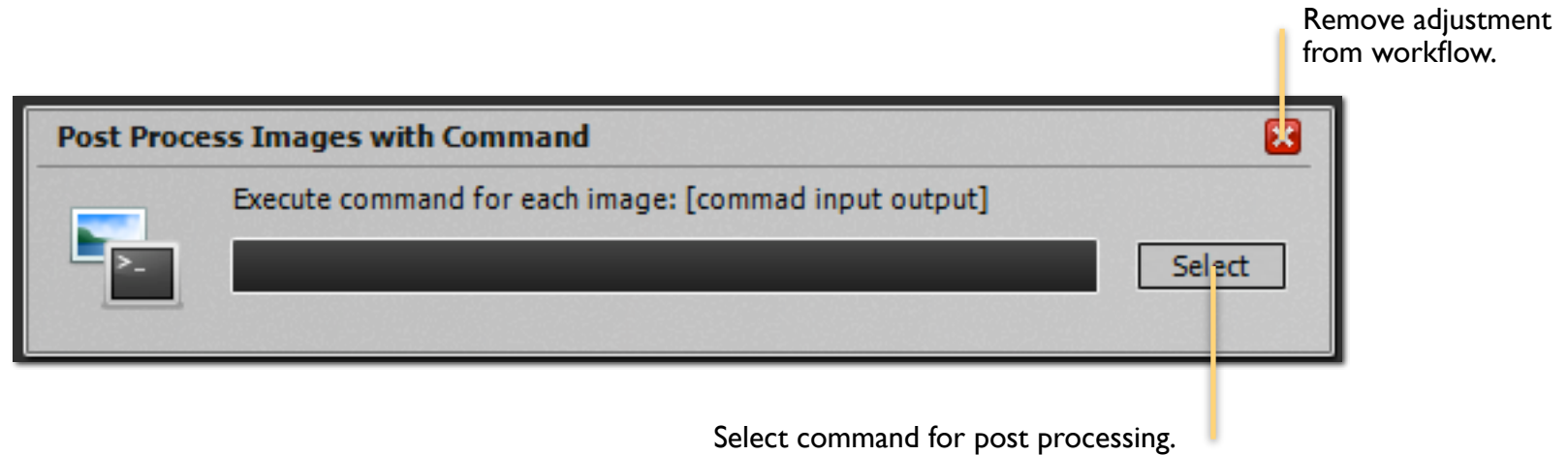
command [input path + filename] [output path + filename].[selected extension]



Post Process Images with Command

With Post Process tool you can execute selected application or batch / script file for every file after they are processed by Automata.

Pre Processing command can be Windows executable (.exe), Windows batch file (.bat) or PowerShell script (.ps1).



Automata will execute command with following parameters:

command [input path + filename] [output path + filename]

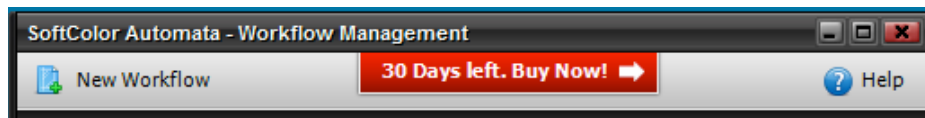


Registering Automata Trial Version

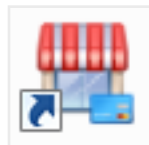
After installing Automata starts in 30 days fully working trial mode. After 30 days trial Automata software will be locked and “Register SoftColor Automata” window is shown when you start the application. To continue working with Automata software you need to buy a license key.

You can activate Automata trial version by buying license and registering your copy. License can be purchased from our online store and it will be delivered immediately via email as soon as your payment is completed.

You can register you Automata by clicking “Buy Now” badge

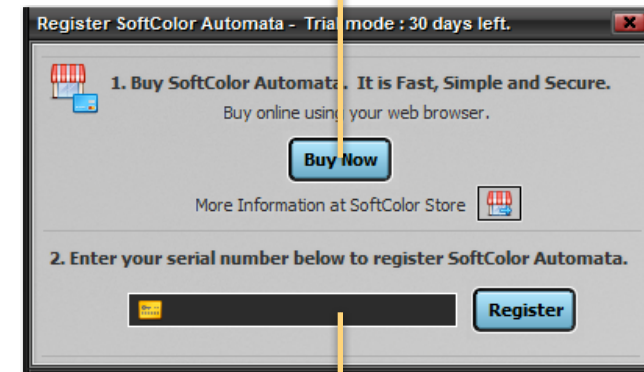


or you can start “Automata Registration” application from Start menu.



How to Buy a License and Register Automata

You can easily buy license code online by clicking “Buy Now” button. Our secure store page will open to your default web browser.



The best way to add your serial number is to simply copy it from your e-mail and paste it into the serial number section. After adding serial number just click “Register” button to register your copy.

After registering with valid serial number this message is shown.



This window is also shown when if you have already registered your copy and you have started “Automata Registration” from Start menu.

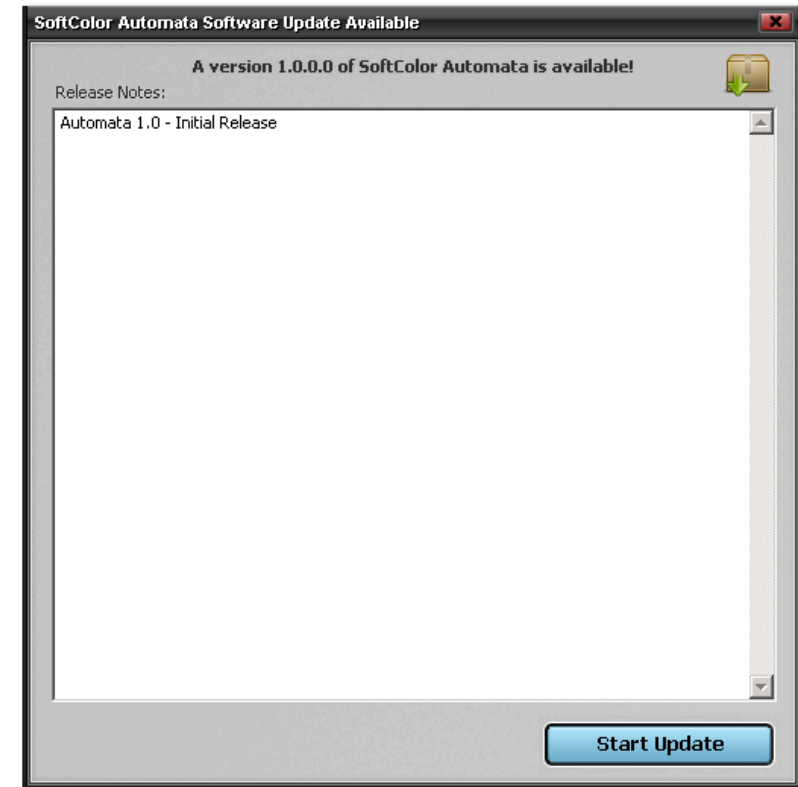
SoftColor Automata includes a tool for automatic software updates. You can download and install latest version of software automatically with “Automata Software Updates” tool.

You can start it from Start Menu -
“Automata Software Updates” icon



In Windows Vista and Windows 7 software update activates UAC-controls. You will need to have administrator rights to update Automata software with automatic software update tool.

If there is new version available, release notes are shown. You can start update process by clicking “Start Update “ button. You have to shut down Automata software before updating.



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<http://cybercom.net/~dcoffin/dcrw/>

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JPEG2000
<http://www.ece.uvic.ca/~mdadams/jasper/>
This software is based in part on JasPer library
Copyright (c) 1999-2000, Image Power, Inc. and the University of British - Columbia, Canada.
Copyright (c) 2001-2002 Michael David Adams.

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