






















# PAPERSCAN V4



## User Guide



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Thank you for your interest in our software!

All our products and solutions are available at [www.orpalis.com](http://www.orpalis.com).

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**PaperScan** is a TWAIN and WIA-compatible scanning tool that supports all scanners on the market. It makes it easy for you to scan documents and photos quickly, modify them (remove borders, rotate, apply filter and effects), compress, and save them in various formats like PDF, JPEG, PNG, Tiff, or JBIG2.

Our user guide will give you a complete overview of the different functionalities available in **PaperScan Scanner Software**. Reading it will help you to make the best use of this software and fully benefit from its many features.

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Note: We have blog articles, announcements, and a knowledge base on our website at <https://paperscan.orpalis.com/>

You can get support at <https://orpalis.zendesk.com/hc/en-us/requests/new> or contact us at <https://paperscan.orpalis.com/contact/>

To keep up to date on new PaperScan features check out our version history:

<http://paperscan.orpalis.com/history/>



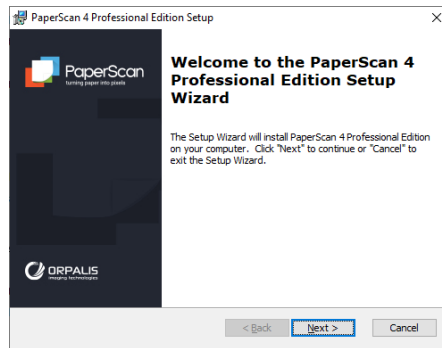
# 1 Introduction

## 1.1 Installation

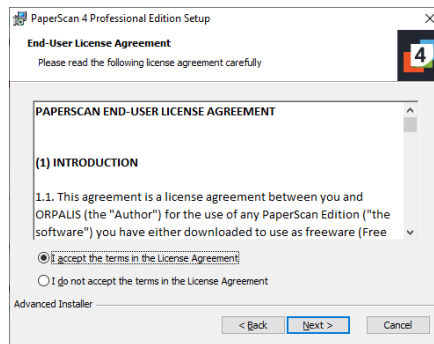
PaperScan 4 can be downloaded from <https://paperscan.orpalis.com/support/>.

Once the installer file has been downloaded, check if it needs to be unblocked by right clicking on the file and viewing the properties.

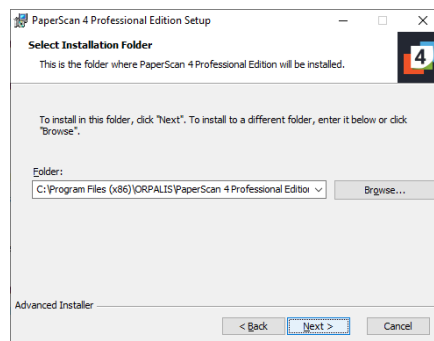
1. Run the executable



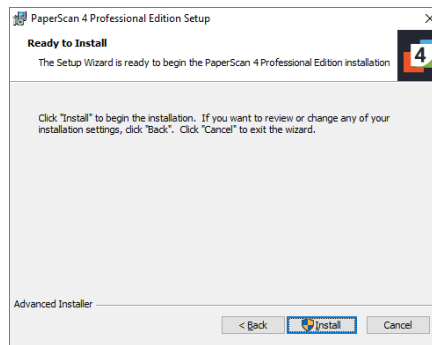
2. Click Next



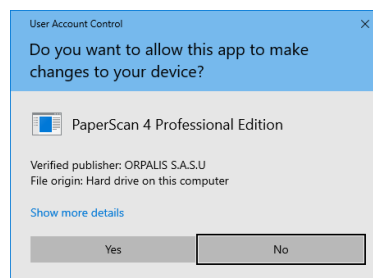
3. Accept the License Agreement and click Next



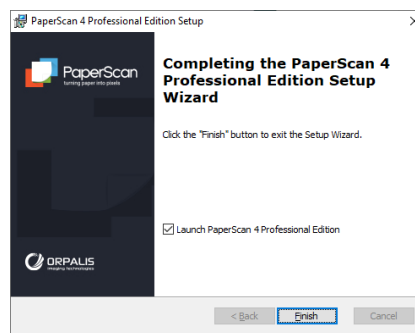
4. Change the installation location if required, then click Next.



5. Click on Install to begin the installation.

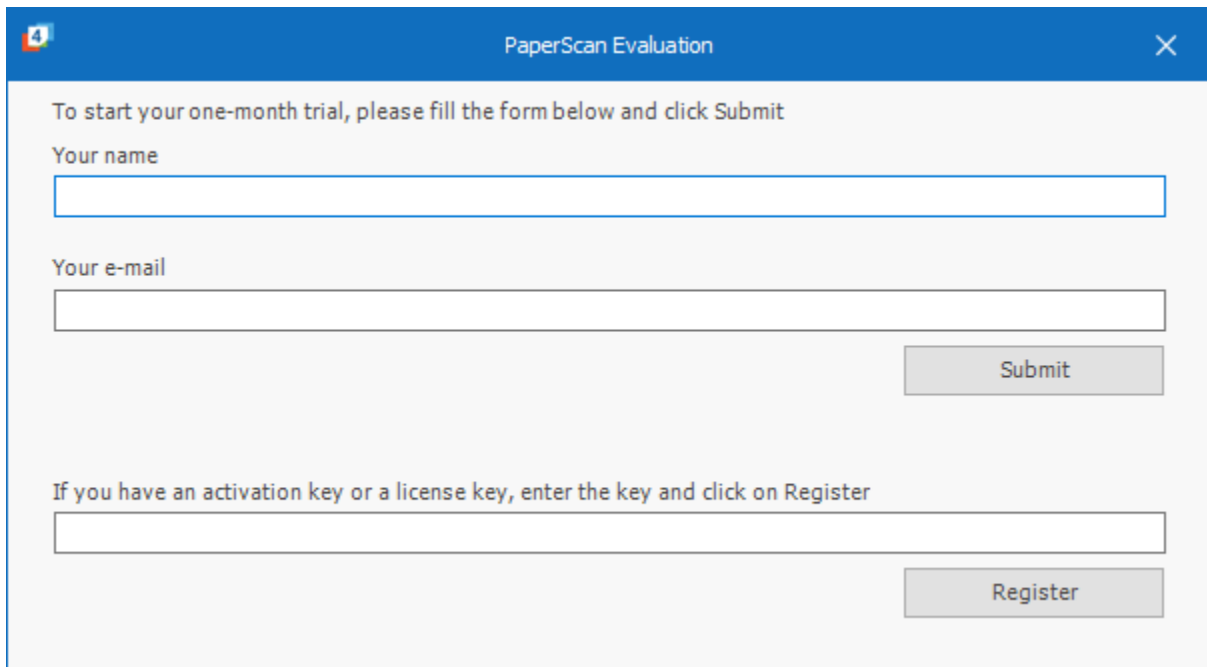


6. Depending on your User Account Control settings, you may be asked if you want PaperScan to make changes to your device. Click yes to continue installation.



You can now finish the installation with an option to start PaperScan.

If this is the first installation of PaperScan 4, you will need a key. The application will bring up the Evaluation request page.



The image shows a 'PaperScan Evaluation' dialog box with a blue title bar. Inside, there is a text instruction: 'To start your one-month trial, please fill the form below and click Submit'. Below this, there are two input fields: 'Your name' and 'Your e-mail'. To the right of the 'Your e-mail' field is a 'Submit' button. Further down, there is another text instruction: 'If you have an activation key or a license key, enter the key and click on Register'. Below this is a single-line text input field, and to its right is a 'Register' button.

Enter your name and a valid email address, then click on Submit. A Machine Bound evaluation key will be obtained and registered. This evaluation key is valid for one month. If you need to extend this evaluation period, please contact [contact@orpalis.com](mailto:contact@orpalis.com).

If you have purchased a licensed copy of PaperScan, you will either receive a specific machine bound license key or an activation key. Enter it in the box and click on Register.

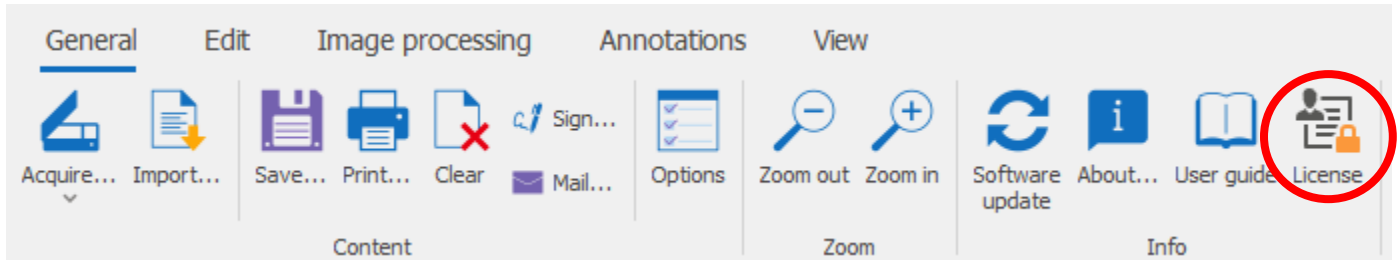


## 1.2 License Keys


Evaluation keys have an expiry date, the number of days remaining is shown in the application's title bar:

PaperScan Scanner Software Professional Edition 4.0.0 - 32-bit (Evaluation: 38 days left)

To view the application's current license status or to enter a new license, click on the License button.



This brings up the License Information page.


License Information

License Information

License key

Bound to

License status

Valid

License type

Permanent

Expiration

Never expires

[Refresh activation info](#)

Activation key

Activations

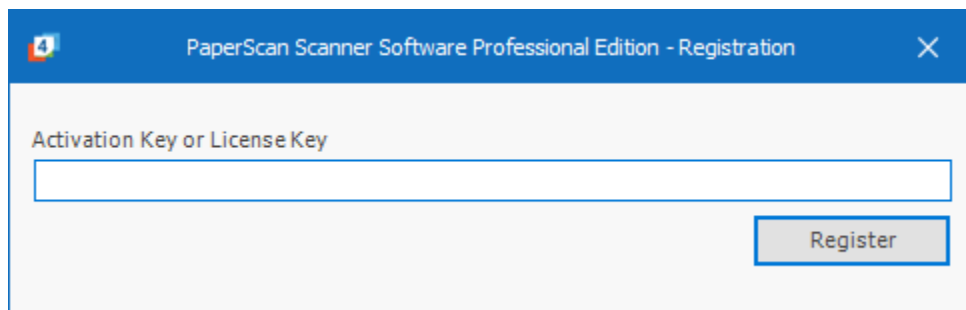
Deregister

Update License

Option	Description
License key	Value of the current license key
Bound to	Machine name (NETBIOS) the key is bound to
License status	Valid, Expired, Invalid
License type	Permanent, Evaluation
Expiration	Expiration date or Never Expires
Activation key	Activation key used (not applicable for a supplied license key)
Activations	Activation count (number of activations against the activation key) and the total available

### 1.2.1 Update license

When you click on the Update License button, you can enter either an Activation Key or a License Key.



Depending on the method of purchase, an activation key may have been sent by email after purchasing PaperScan.

Enter the activation key and click on Activate key.

This will generate a Machine Bound (tied to the machine's NETBIOS name) license key.

Depending upon the purchase option, the activation key may be used more than once to generate individual machine keys. The Activations section of the License Information will show how many times the activation key has been used.

Alternatively, if you have received an offline license key, it can be entered here. These are also Machine Bound.

#### [De-register license key](#)

De-registering a license key releases one of the activations on an activation key, allowing it to be used to activate PaperScan on a different machine.

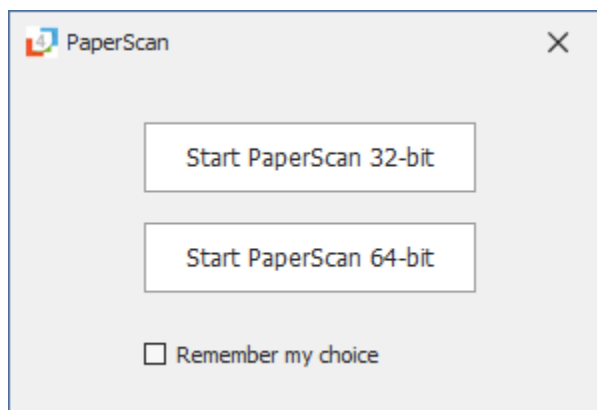
To de-register a license key, just click on the De-register license key button.

This will only work where the license key was generated from an activation key, not a specific license key. It also does not work for evaluation licenses.

### 1.3 Starting PaperScan

PaperScan is supplied in both 32- and 64-bit versions. Some scanners (especially older ones) do not currently have 64-bit drivers, in which case use the 32-bit version of the application with the 32-bit drivers.

If both 32- and 64-bit drivers are available, when starting PaperScan from the Start Menu you will be offered a choice of the 32-bit or 64-bit application. If there are only 32-bit (or 64-bit) drivers installed, that version will be launched directly without the option being offered. If no drivers are available, it will default to 64-bit for 64-bit operating systems.

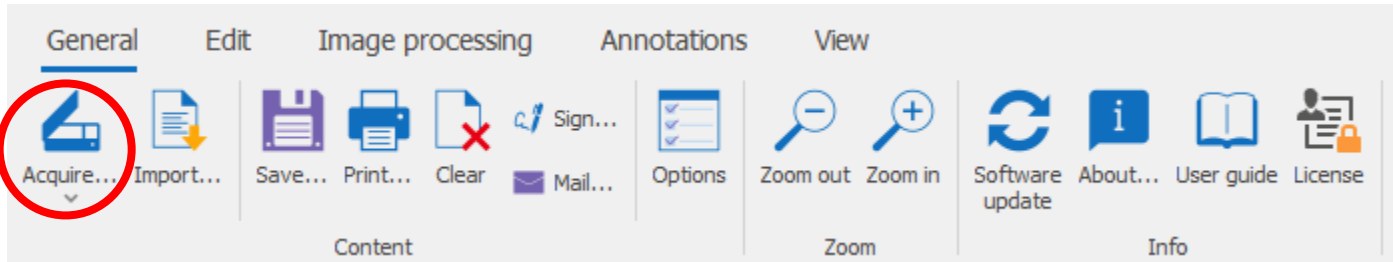


You can set Remember my choice so subsequently it will start the same version without offering the choice.

## 2 Scan / Import an image

Before you start scanning files, you must check you have the latest drivers for your scanner installed. See [Download TWAIN drivers](#).

### 2.1 Acquisition

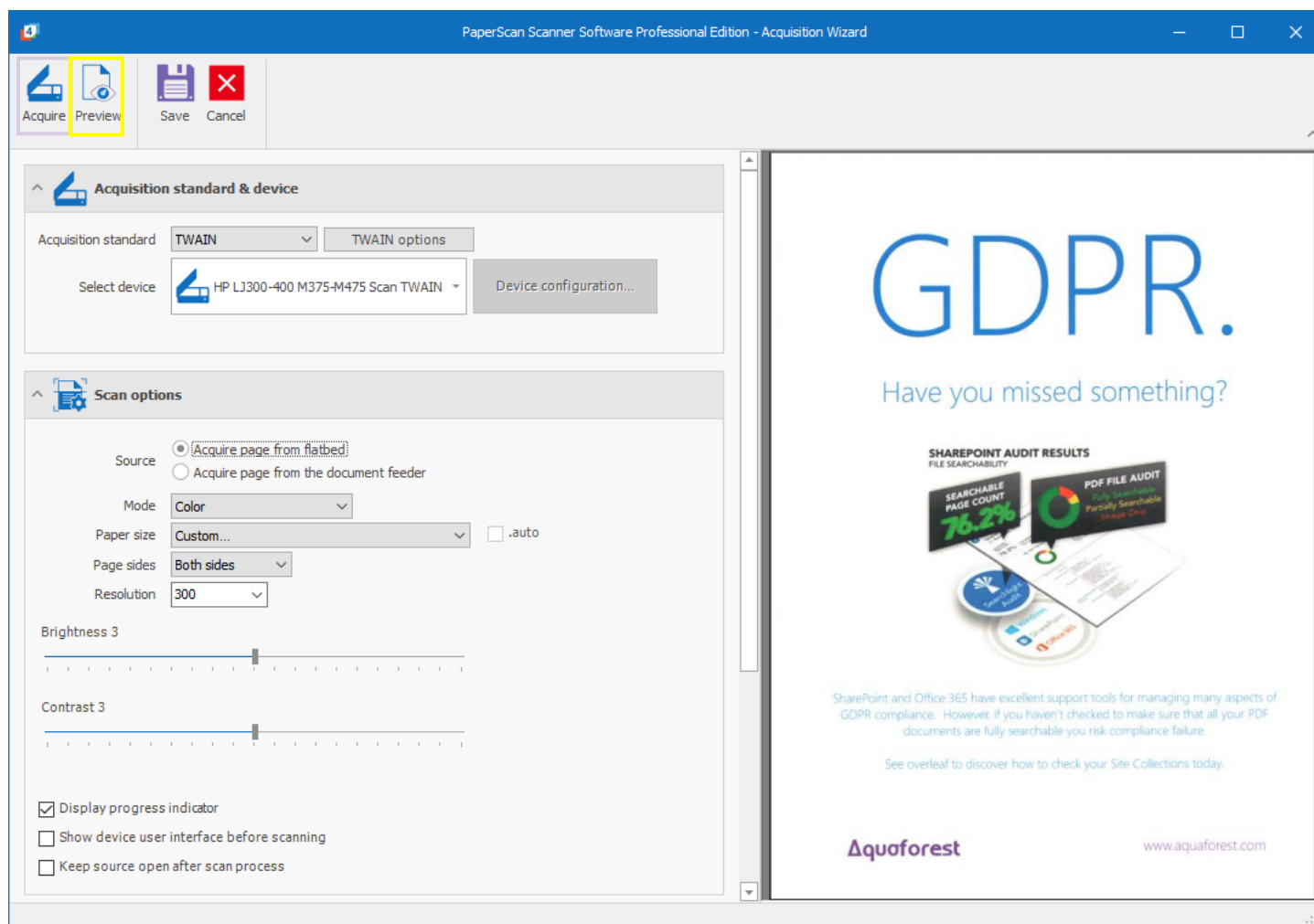


In the *General* tab, click on *Acquire...*

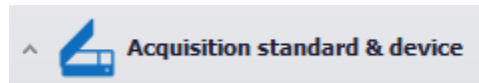
We would suggest using the [Scan Wizard](#) for your first acquisition

### 2.1.1 Scan Wizard

The Scan Wizard provides access to the settings required to scan one or more images.



#### Acquisition standard & device



PaperScan works with two acquisition technologies:

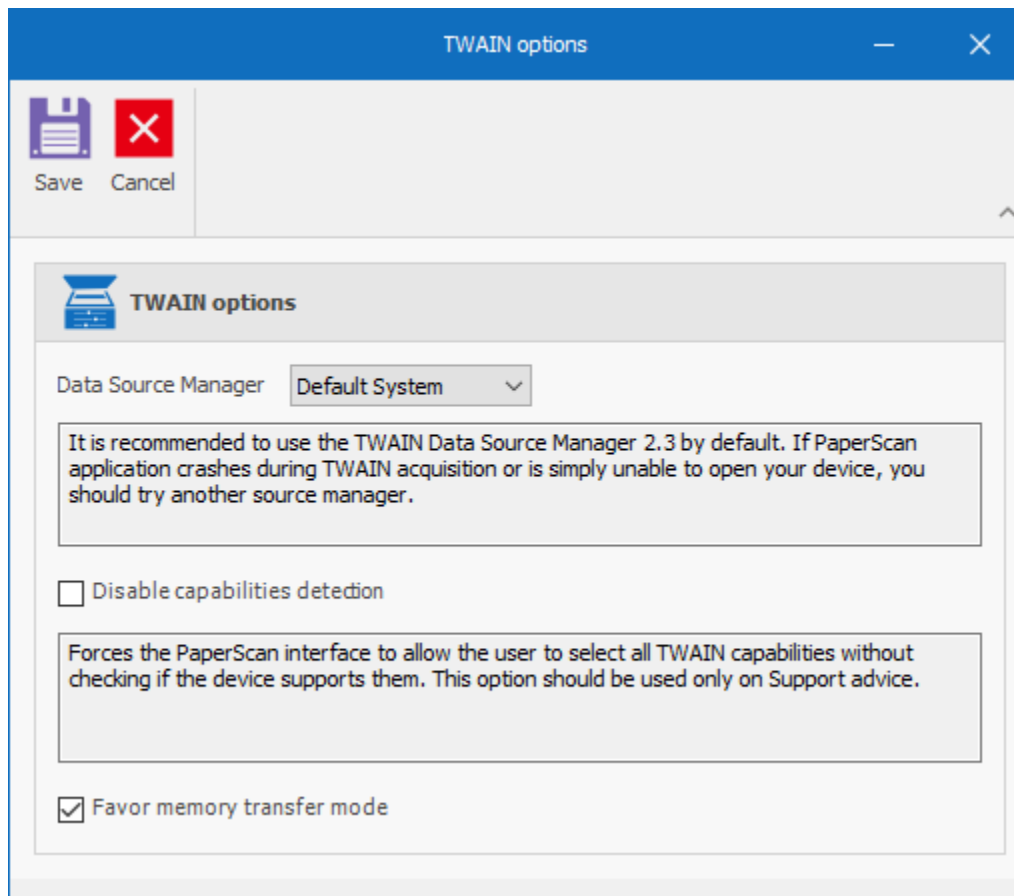
- TWAIN is an industry standard API for image acquisition, strongly oriented toward scanners.
- WIA (Microsoft Windows Image Acquisition) API is standardized for acquiring digital images from devices primarily used to capture still images, and for managing these devices. WIA is a COM interface, very different from, but overlapping with TWAIN. Compared to TWAIN it offers much better support for digital cameras and much less sophisticated support for scanners.

If your device can be controlled by both WIA bridge from Microsoft and the TWAIN driver of the supplier, you must use the TWAIN driver. Otherwise, you will have problems in controlling the document feeder.

#### Select your device:

We recommend checking that you are using the latest TWAIN drivers for your scanner (see Additional Information: [Download TWAIN drivers](#)).

## TWAIN Options:



### *Data Source Manager:*

It is recommended to use the TWAIN Data Source Manager 2.3 by default. If the PaperScan application crashes during the TWAIN acquisition or fails to open your device, you should try another source manager.

### *Disable capabilities detection:*

This function forces the PaperScan interface to allow the user to select all TWAIN capabilities without checking whether the device supports them or not. Use this option only when recommended by our technical support team.

### *Favor memory transfer mode:*

Three different modes can be used to transfer data from the source to the application: native, disk file, and buffered memory.

**Native:** Every Source must support this transfer mode. It is the default mode and is the easiest for an application to implement. However, it is restrictive. The Source allocates a single block of memory and writes the image data into the block. It passes a pointer to the application indicating the memory location. The application is responsible for freeing the memory after the transfer.

**Disk File:** A Source is not required to support this transfer mode, but it is recommended. The application creates the file to be used in the transfer and ensures that it is accessible by the Source for reading and writing. A capability exists that allows the application to determine which file formats the Source supports. The application can then specify the file format and file name to be used in the transfer. The Disk File mode is ideal when transferring large images that might encounter memory limitations with Native mode. Disk File mode is simpler to implement than the buffered mode discussed next. However, Disk File mode is a bit slower than Buffered Memory mode, and the application must be able to manage the file after creation.

**Buffered Memory:** Every Source must support this transfer mode. The transfer occurs through memory using one or more buffers. Memory for the buffers is allocated and deallocated by the application. The data is transferred as an unformatted bitmap. The application must use information available to learn about each buffer and be able to interpret the bitmap correctly. If using the Native or Disk File transfer modes, the transfer is completed in one action. With the Buffered Memory mode, the application may need to loop repeatedly to obtain more than one buffer of data. Buffered Memory transfer offers the greatest flexibility, both in data capture and control. However, it is the least simple to implement.

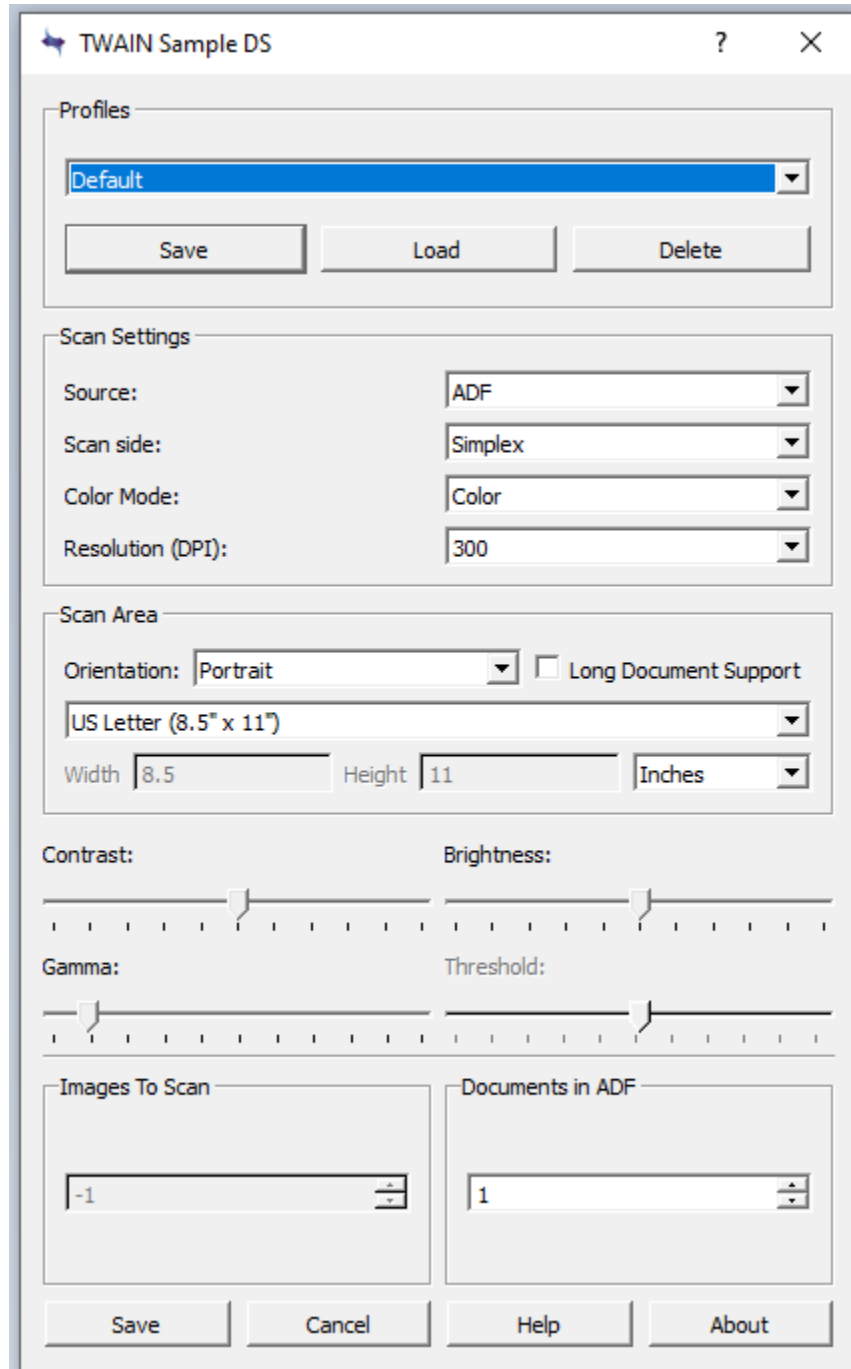
Checking the [Favor memory transfer mode](#) box causes the application to use the Buffered Memory mode.

*If you encounter a TWAIN acquisition problem with a device (scanner, digital camera, or capture card), see the [Troubleshooting section](#).*

## Device Configuration

The Device Configuration is scanner dependent. Some scanners do not have this option and may display a configuration form when the scan is started.

This is an example configuration from the TWAIN test scanner.



The image shows a Windows-style dialog box titled "TWAIN Sample DS". It contains several sections for configuring a scanner. The "Profiles" section has a dropdown menu set to "Default" and buttons for "Save", "Load", and "Delete". The "Scan Settings" section includes dropdowns for "Source" (ADF), "Scan side" (Simplex), "Color Mode" (Color), and "Resolution (DPI)" (300). The "Scan Area" section has a dropdown for "Orientation" (Portrait), a checkbox for "Long Document Support", a dropdown for paper size (US Letter (8.5" x 11")), and input fields for "Width" (8.5), "Height" (11), and a unit dropdown (Inches). Below these are four sliders for "Contrast", "Brightness", "Gamma", and "Threshold". The bottom section has two input fields: "Images To Scan" (set to -1) and "Documents in ADF" (set to 1). At the very bottom are buttons for "Save", "Cancel", "Help", and "About".

**TWAIN Sample DS**

**Profiles**

Default

Save Load Delete

**Scan Settings**

Source: ADF

Scan side: Simplex

Color Mode: Color

Resolution (DPI): 300

**Scan Area**

Orientation: Portrait ☐ Long Document Support

US Letter (8.5" x 11")

Width 8.5 Height 11 Inches

Contrast: Brightness:

Gamma: Threshold:

**Images To Scan**

-1

**Documents in ADF**

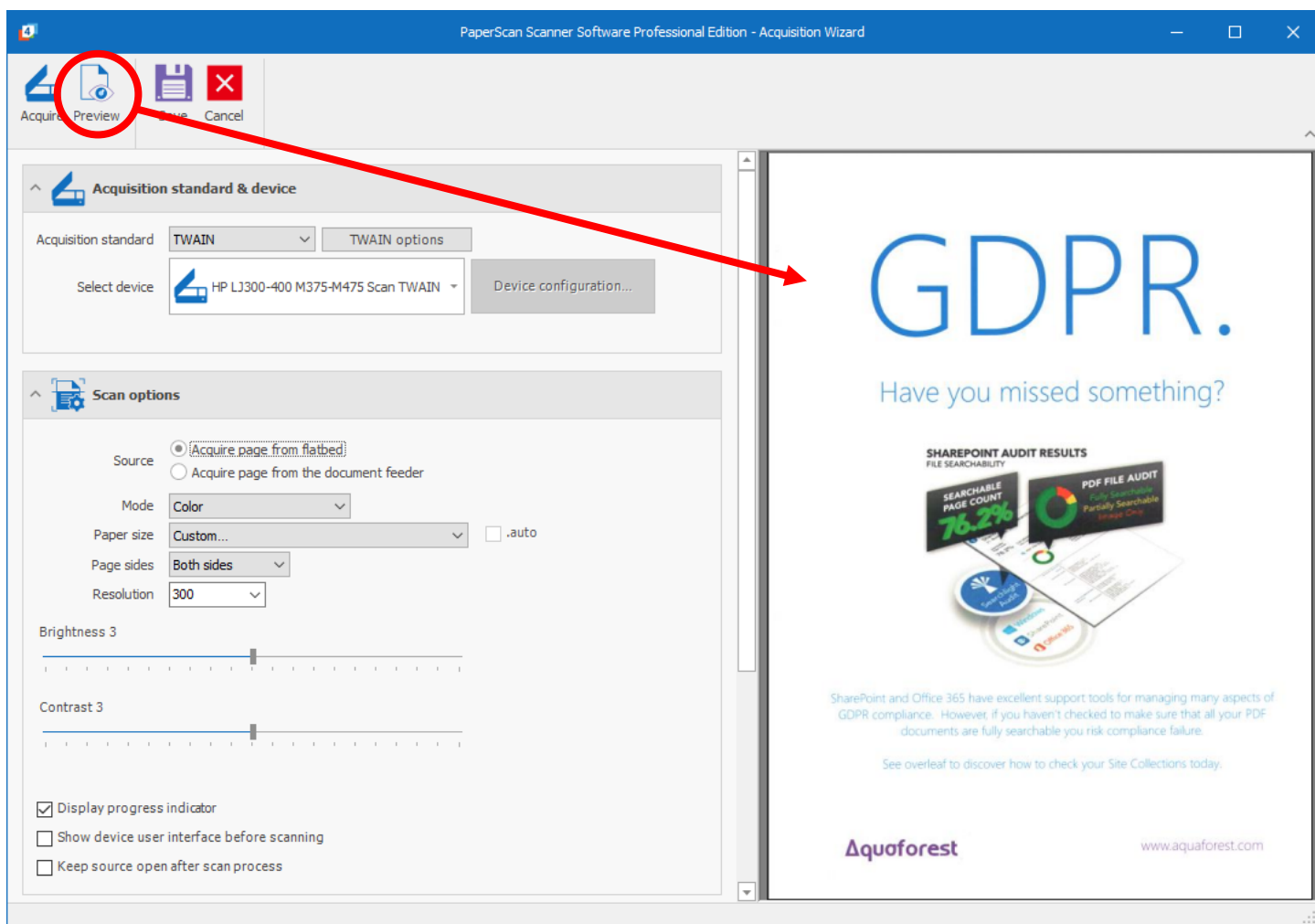
1

Save Cancel Help About



## Preview

Click on the preview button to scan the current page on the scanner flat bed and display it in the window.



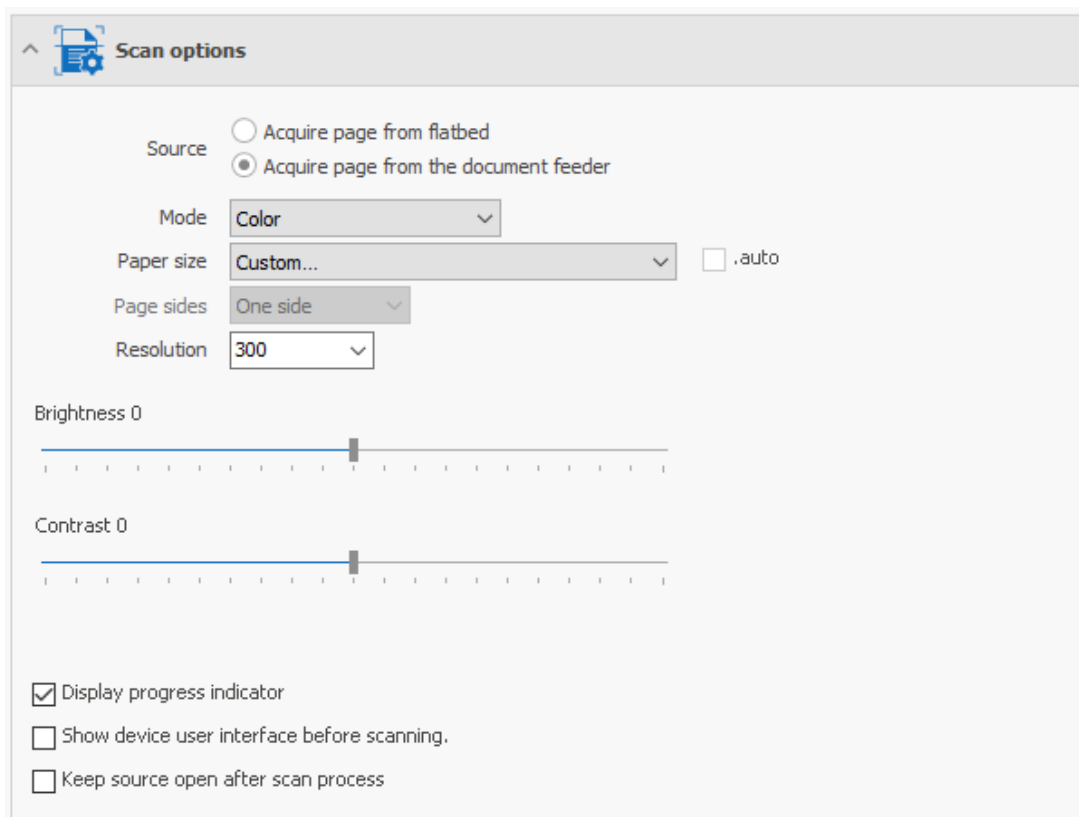
This will allow you to determine if the page is the correct way, centered and if any settings need to be changed.

## Acquire

Click on the Acquire button to begin the scan.

## Scan options

Scanners provide a range of options, the options available on your particular scanner may differ.



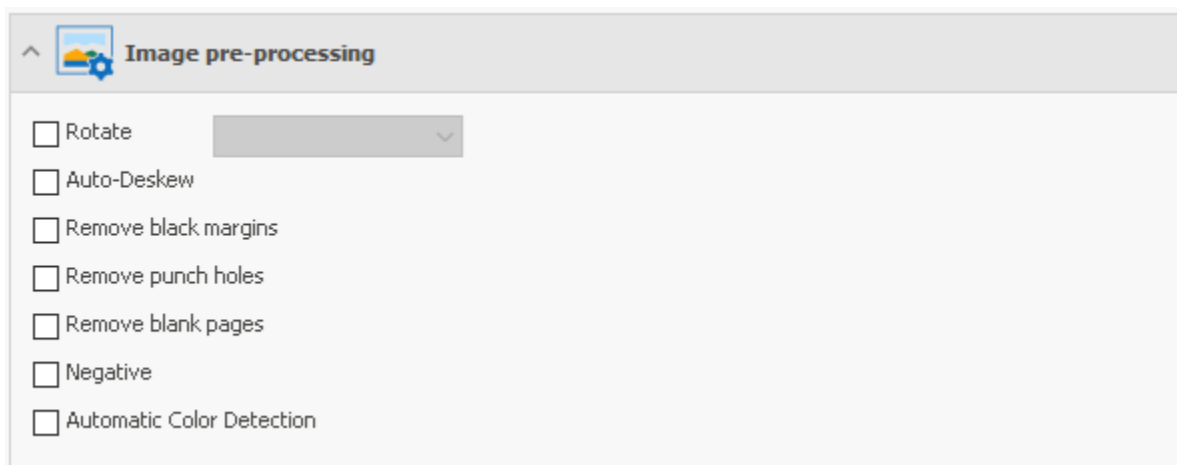
The screenshot shows a 'Scan options' dialog box with the following settings:

- Source:** ☐ Acquire page from flatbed, ☒ Acquire page from the document feeder
- Mode:** Color (dropdown menu)
- Paper size:** Custom... (dropdown menu), with a checkbox for .auto
- Page sides:** One side (dropdown menu)
- Resolution:** 300 (dropdown menu)
- Brightness:** A slider bar with a value of 0.
- Contrast:** A slider bar with a value of 0.
- Checkboxes:**
  - ☒ Display progress indicator
  - ☐ Show device user interface before scanning.
  - ☐ Keep source open after scan process

Scanners may offer a flatbed and/or an automatic document feeder (ADF).

Option	Description
Source	Scanners may offer a flatbed and/or an automatic document feeder (ADF).
Mode	Select color, black and white or grayscale
Paper size	Select from standard paper sizes, the entire scan area, or a custom size. The options shown in this window will depend on the selected scanner's capabilities.
Page sides	Duplex scanners can offer scanning of both sides of a page, this can be chosen here.
Resolution	Choose the scanning resolution.
Brightness	Use the slider to change the relative brightness for scanning
Contrast	Use the slider to choose the relative contrast for scanning.
Display progress indicator	Select whether to display the scanning progress indicator
Show device user interface before scanning	Select whether to display the device's user interface before scanning
Keep source open after scan process	When set it prevents the scanner from performing a close-then-reopen operation on the completion of a scan. This operation can take lot of time on some scanners, especially high-speed scanners.

## Image pre-processing



Rotate	PaperScan can be set to rotate the image by 90, 180 and 270 degrees, or Auto which detects text in the document and rotates the image, so the text is the correct way up
Auto-Deskew	Images might be scanned at an angle due to incorrect paper feed, or because the paper was not placed completely flat when scanned. Auto Deskew straightens the content of the images.
Remove black margins	Automatically removes unnecessary margin from current image/page. This function detects the black borders of the scanned image and replaces the black pixels with white pixels.
Remove punch holes	Will automatically detect the location of the punch holes on the image, and will remove them. Note: certain 2d bar codes may be adversely affected by this operation
Remove blank pages	Remove blank pages automatically in a scanned document.
Negative	Inverts colors of the current image/page or within a selected area to switch it to a negative/positive version.
Automatic Color Detection	Automatic color detection is delivered in PaperScan Pro through a patent pending, proprietary to ORPALIS technology. It allows users to scan any document (black/white, grayscale or colored) using color scan mode. It automatically detects the original color-type of the document (black/white, grayscale or colored). It allows users to save the document in best-fitted bits-per-pixel (bpp) encoding, thus providing the best reading quality for the smallest possible file size.

Once you have selected your scanning options, just click on *Acquire*.

### 2.1.2 Quick Scan

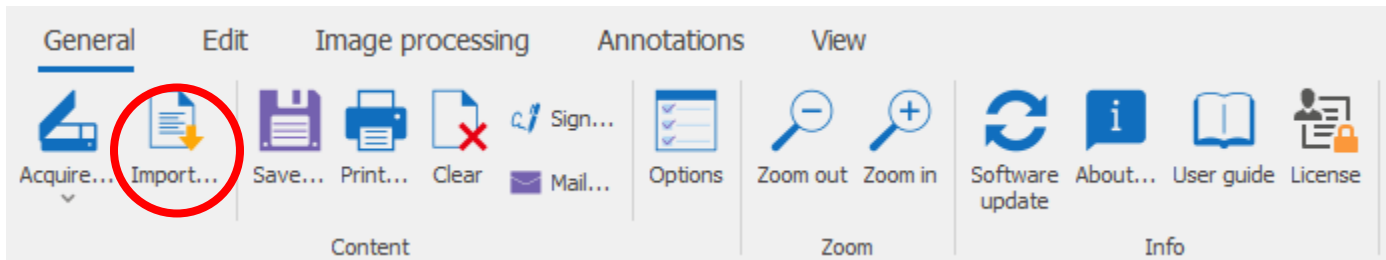
Scan your document with the current settings.

We would suggest using the [Scan Wizard](#) for your first acquisition, otherwise you must set the scan options (described in the [Devices section](#)).

## 2.2 Import document

As an alternative to scanning files, PaperScan can import existing files in a range of formats.

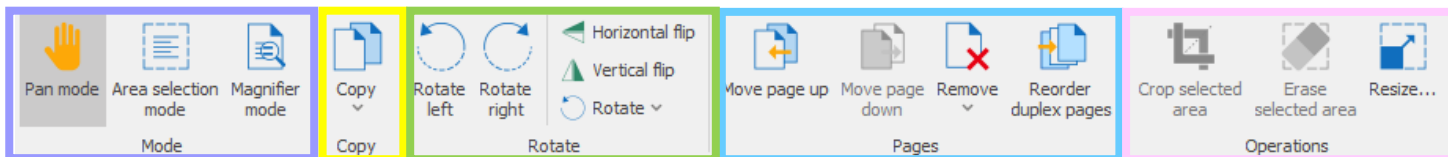
Click on the Import button and from the file selector choose the file or files you wish to import.



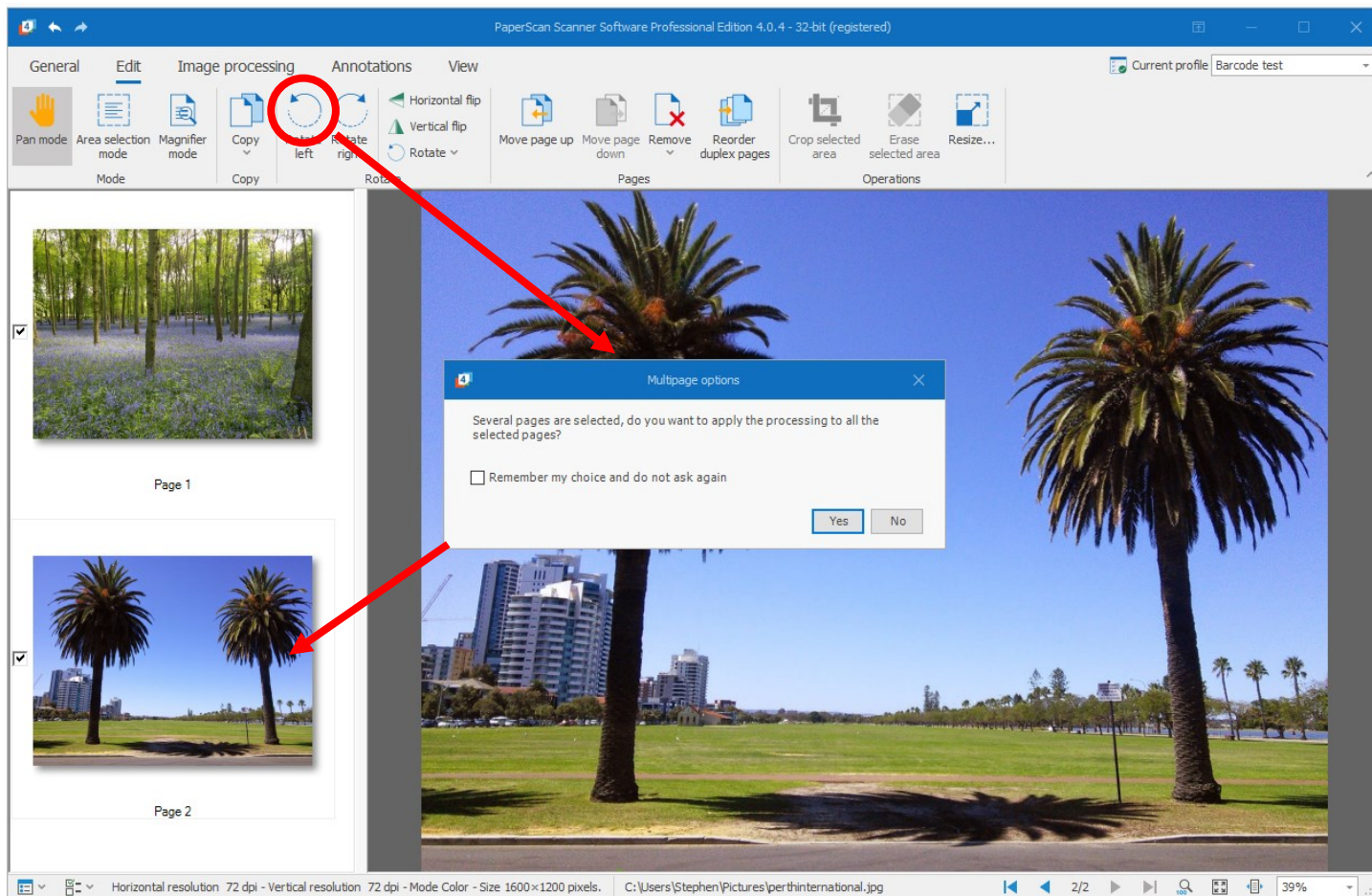
Import settings are chosen from the [Import section](#) of the Settings.

### 3 Edit an image

In the *Edit* tab, you will find several features to edit an image:

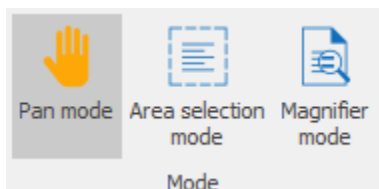


In this tab most of the options can either be applied to the current page or all selected pages. If this is the case it will prompt you before application.

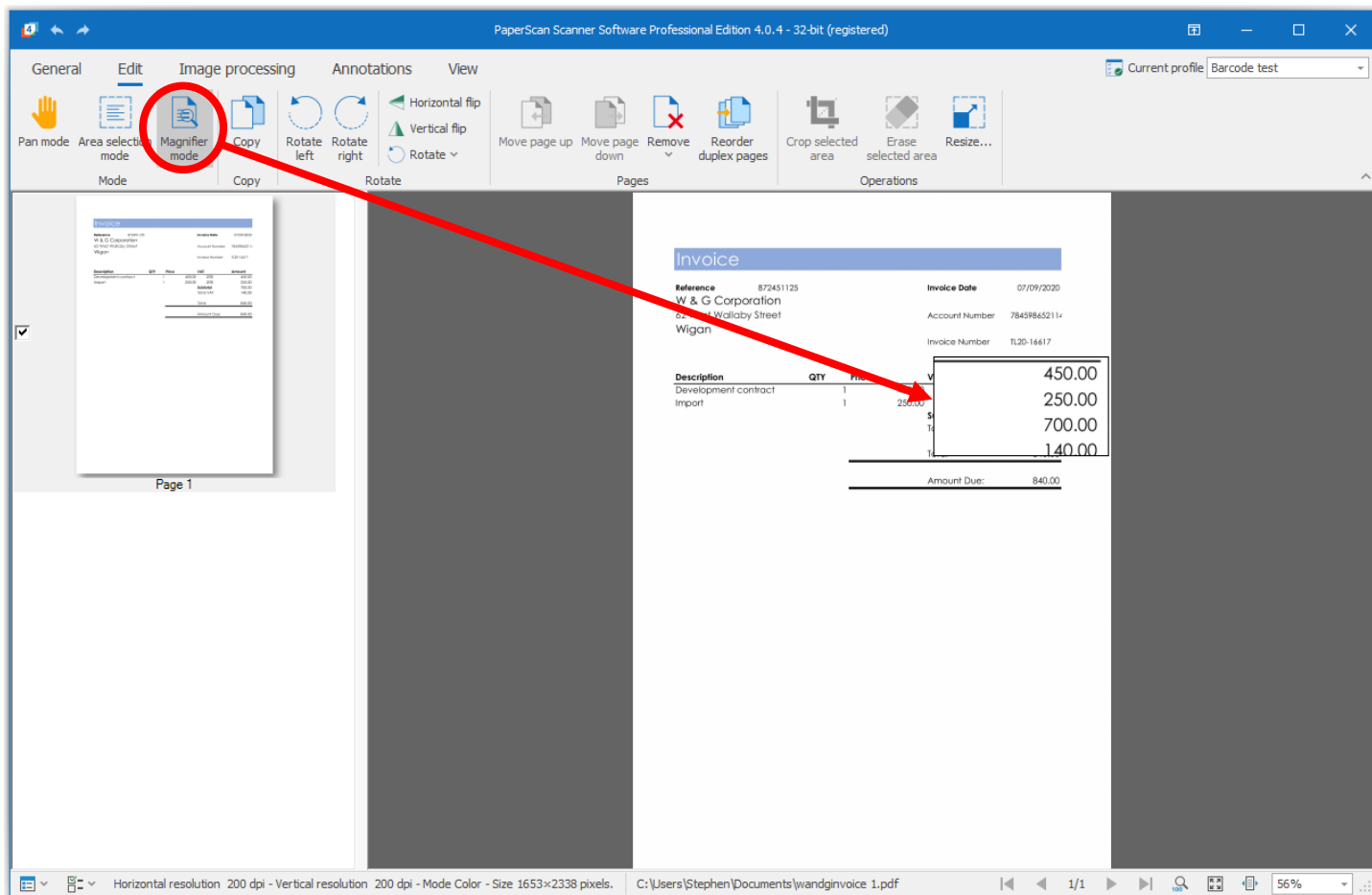


Clicking “Yes” will apply the changes to all pages you have selected in the thumbnail panel on the left, while clicking “No” will apply the option selected only to the current page.

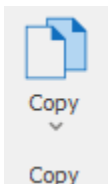
#### 3.1 Mode



Option	Description
Pan mode	Set pan mode for current image/page handling in Viewer area. The Pan tool lets you choose a location on the zoomed area and move it to your convenience.
Area selection mode	Set area selection tool in Viewer to define a rectangular region-of-interest. Selection can be reshaped, resized, or moved. Use selection area to erase image content, crop it from the rest of the image/page, apply image filters and effects, perform color adjustments and conversions, or copy the selected area to a new page. Click outside the selected area in the Viewer to disable the area selection mode.
Magnifier mode	Set magnifying glass tool in Viewer area to enhance details viewing.



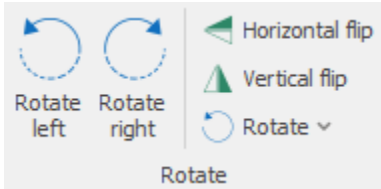
## 3.2 Copy



There are two options here:

- Copy current page to clipboard
- Copy selected area to a new page (select an area using the Area selection mode).

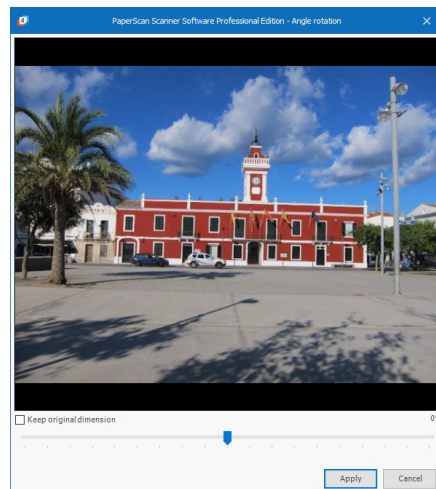
### 3.3 Rotate



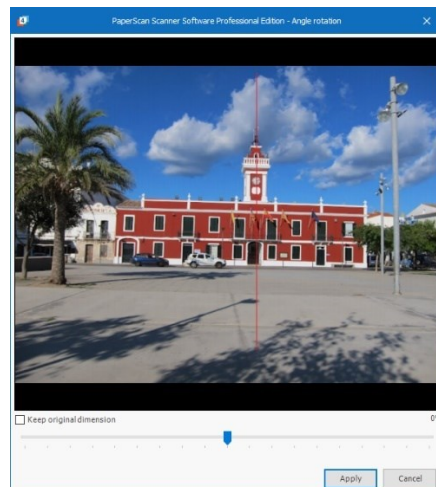
Option	Description
Rotate left	Perform a 90° counterclockwise rotation.
Rotate right	Perform a 90° clockwise rotation.
Horizontal flip	Generate a mirror-like image (identical but left and right reversed).
Vertical flip	Generate a mirror-like image (identical but up and down reversed).
Rotate	Rotate by 90, 180 or 270 degrees or bring up an interactive form to select a specific <a href="#">angle of rotation</a> .

### 3.3.1 Angle of Rotation

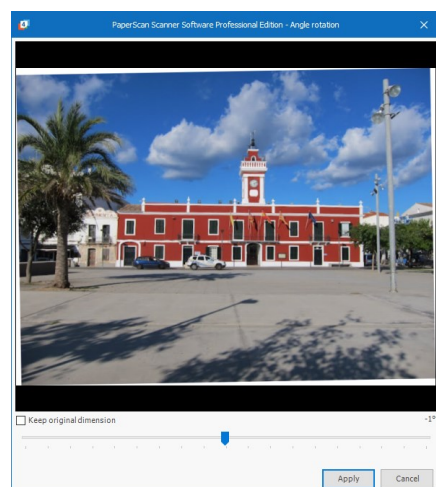
This allows the image to be rotated interactively.



As you can see the image is slightly skewed.



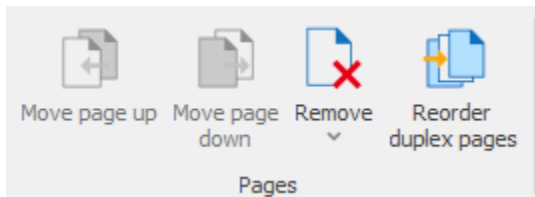
Use the slider to straighten the image.



Click on Apply to complete rotation.



### 3.4 Pages



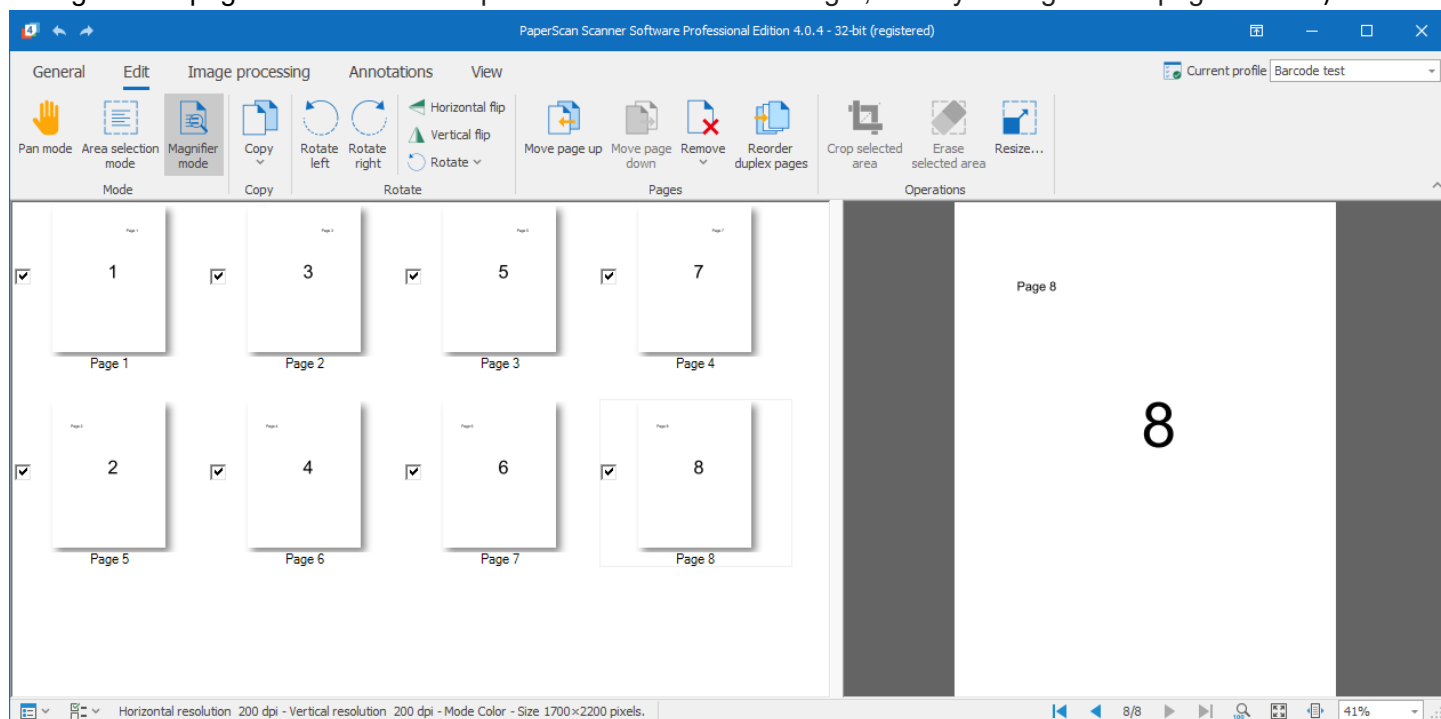
Option	Description
Move page up	Move the current image/page up one position in the thumbnails panel.
Move page down	Move the current image/page down one position in the thumbnails panel.
Remove	Remove the current page, all pages before/after current page, all pages, or the selected pages from the thumbnails panel.
Reorder duplex pages Interleave	Reorder scanned/imported pages where all the odd pages are scanned first followed by the even ones. For double sided originals where the scanner can only scan one side at a time. See the <a href="#">Reorder duplex pages</a> section for more details.

Pages can also be moved around directly on the Thumbnails tab.

### 3.4.1 Reorder duplex pages

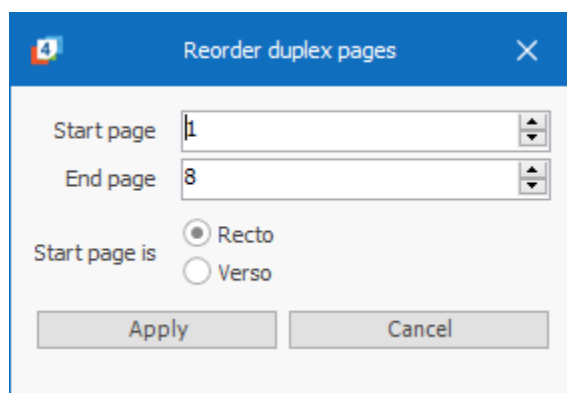
Though source documents may contain double sided pages, some scanners with document feeders can only scan one side at a time. One way to scan these documents is first to scan the odd number pages, then reload the document feeder with the document the other way round to scan the even number pages.

Here is an example eight page document (the large number on each page is the original page number of the physical document) where the first page has an odd page number. Select the Recto option (from the printing term referring to the right-hand page of a book of a script which reads from left to right, usually having an odd page number)



The scanned pages are pages 1 - 7 odd and 2 – 8 even.

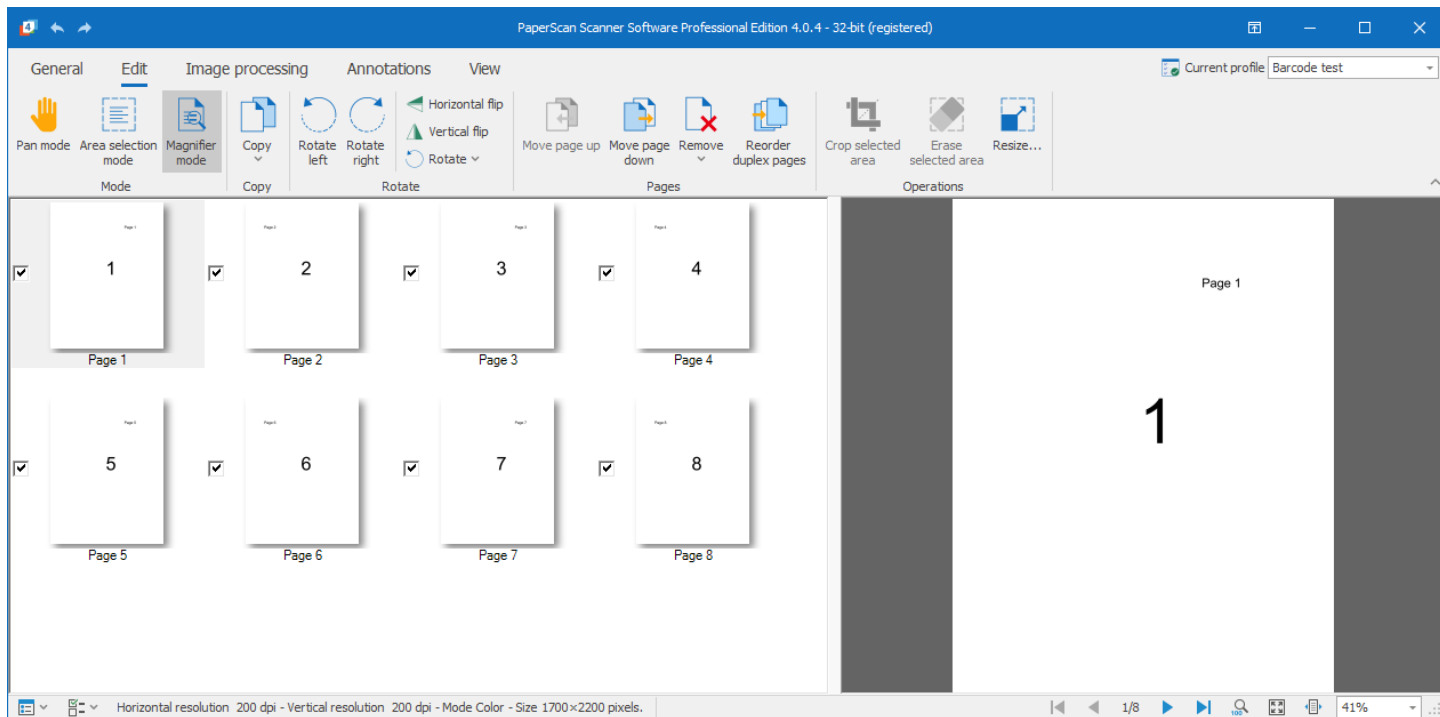
Click on the reorder duplex pages button.



For most situations, the automatically generated values will interleave the pages correctly.

Click on Apply to interleave the pages.

The pages are now in the correct order.

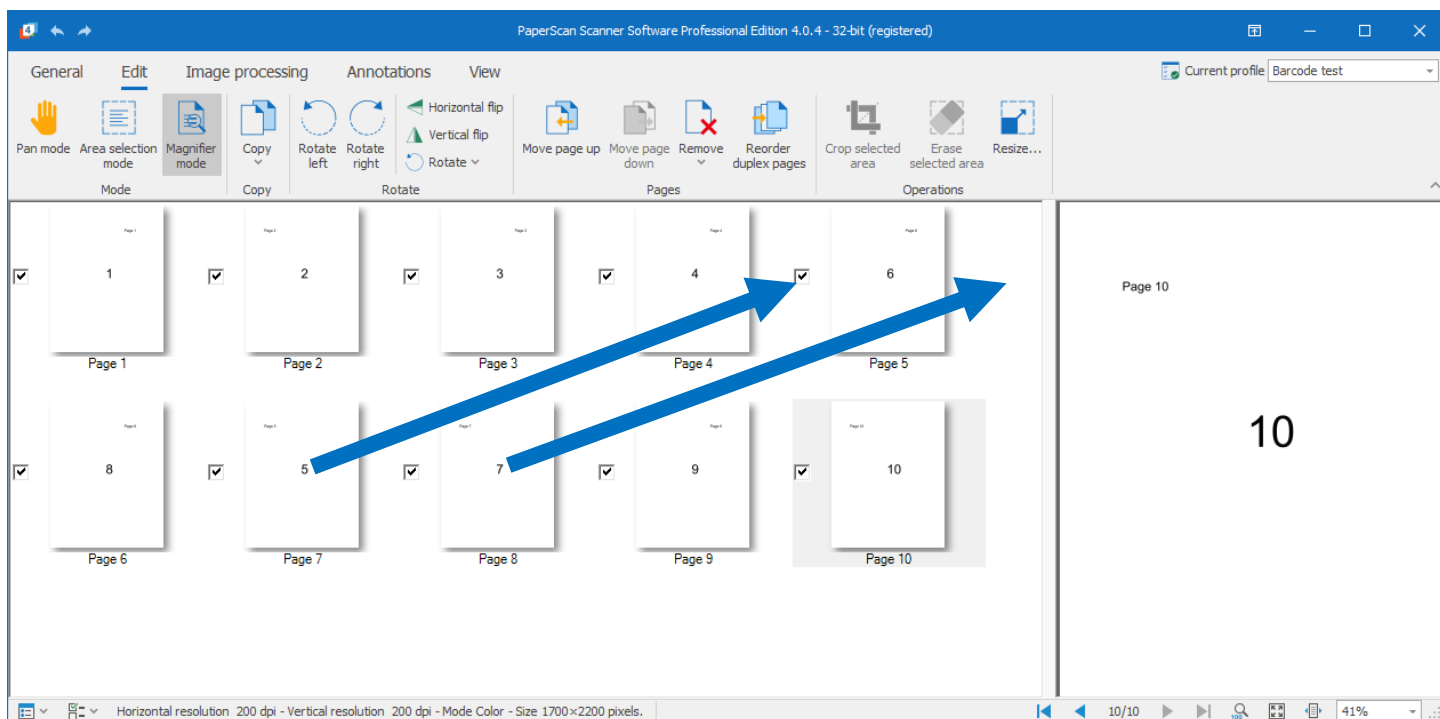


If the Current first page is even, select the Verso option (from the printing term referring to the left-hand page of a book of a script which reads from left to right, usually having an even page number).

### Partially reordering a file

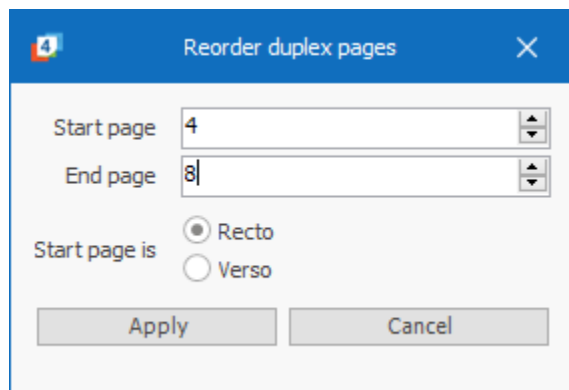
There may be situations where only part of the document needs to be reordered.

In this example pages 5 and 7 need to be interleaved with pages 4, 6 and 8.

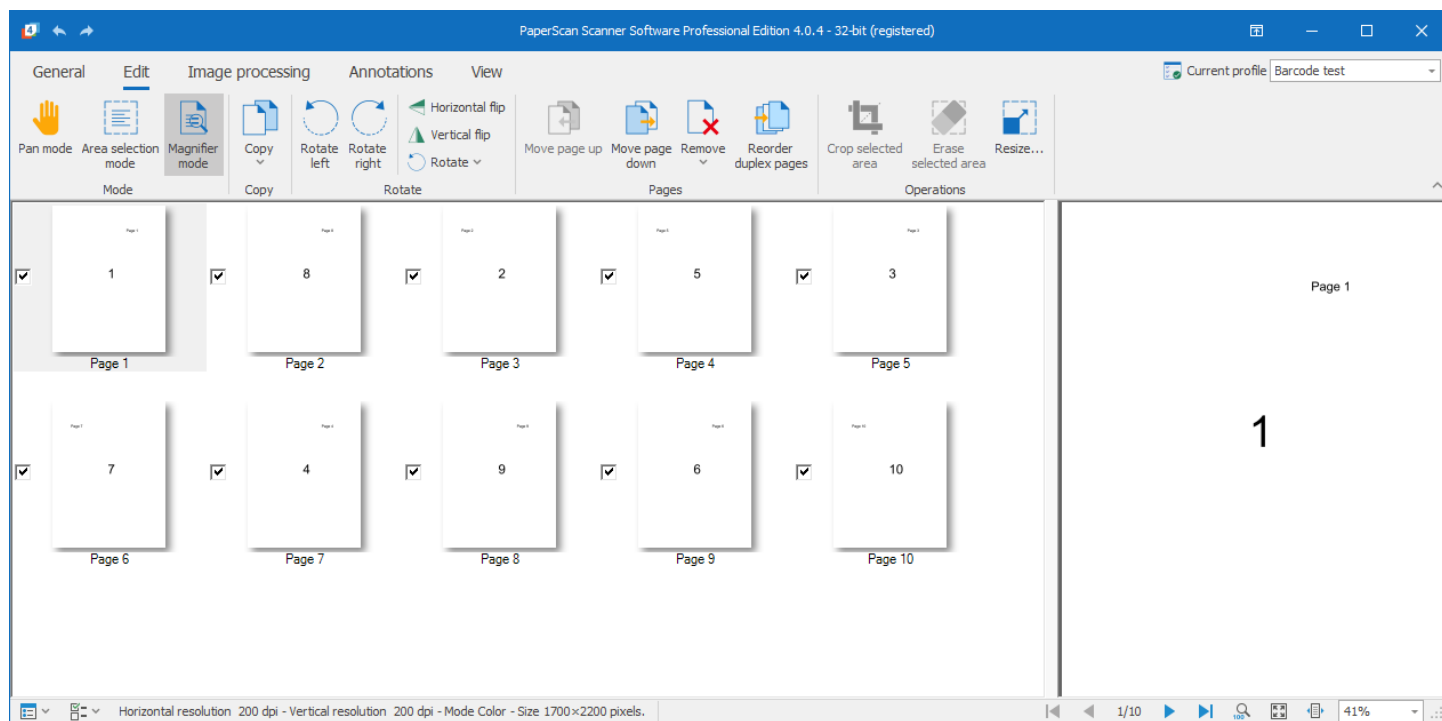


In these cases, we suggest that you save the documents as scanned to a temporary file (TIFF or PDF) before attempting to interleave a section. This will allow quick recovery (by clearing PaperScan and importing the temporary file) in the event that your selected Start and End values do not produce your expected result.

For this example, the start page is 4 and the End page is 8:

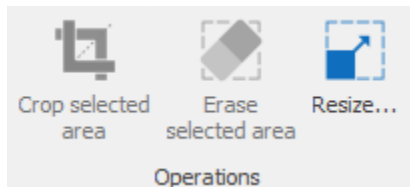


Clicking on Apply interleaves the pages.



Please note that there are built in constraints on the Start and End values. These are checked when the cursor leaves the text box. If an out of bounds value is typed in, it will be replaced with a valid value (Start with 1, End with the page count).

### 3.5 Operations

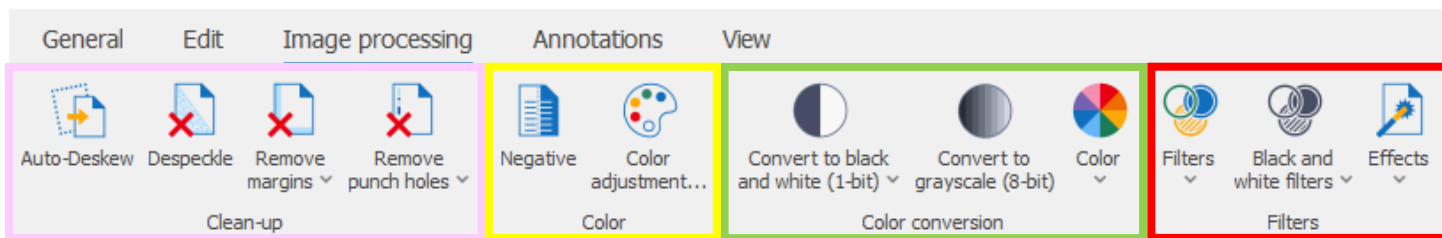


Use the Area selection mode to select the area for cropping or erasing.

Option	Description
Crop selected area	Crop the selected area from the image/page to work only on this area.
Erase selected area	Erase the selected area in the current image/page.
Resize	Resize current image/page by setting new width and height (in pixels) with/without keeping the original proportions.

## 4 Image processing

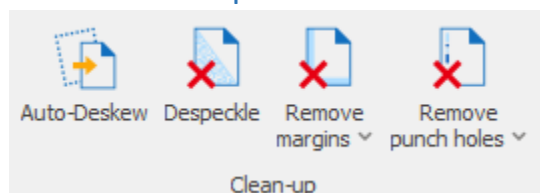
The image-processing menu offers tools to improve scanned images.



In this tab most of the options can either be applied to the current page or all selected pages. If this is the case it will prompt you before application. See [Edit an Image](#) for more details.

There are many features available for image processing, let's take a look at some of them:

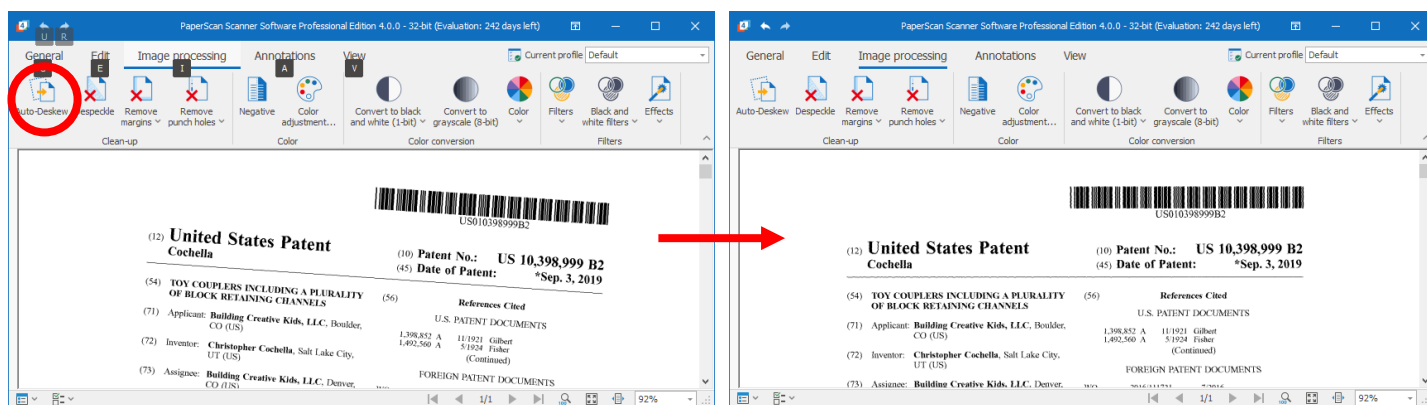
### 4.1 Clean up



Document cleanup improves the accuracy of processes like Optical Character Recognition (OCR).

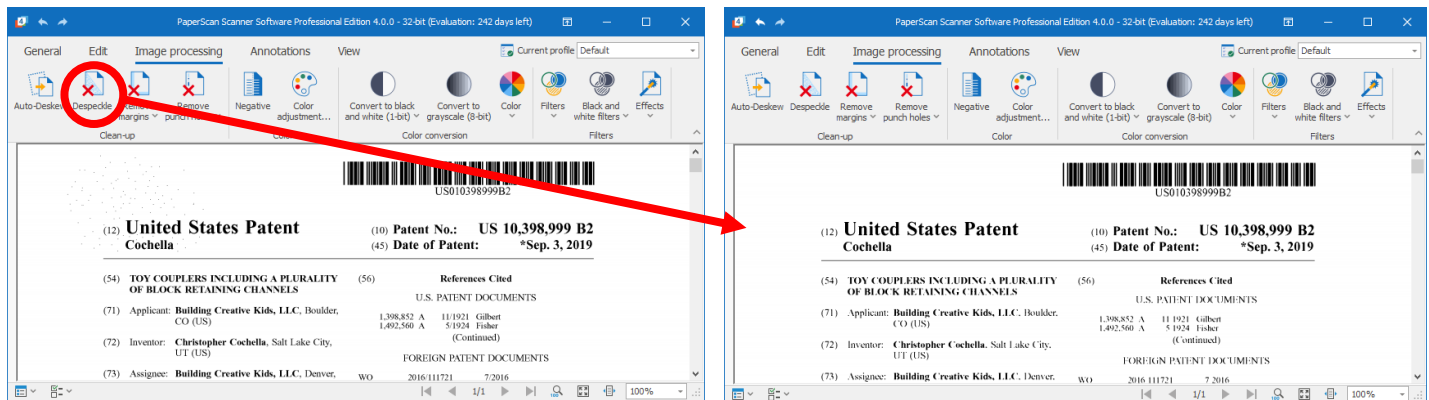
#### 4.1.1 Auto-Deskew

Automatically straightens the current image/page content. This may be caused by a misfeed or misalignment of the paper entering the scanner.



### 4.1.2 Despeckle

Remove the speckles, dust (noise), and isolated small imperfections on a scanned image.

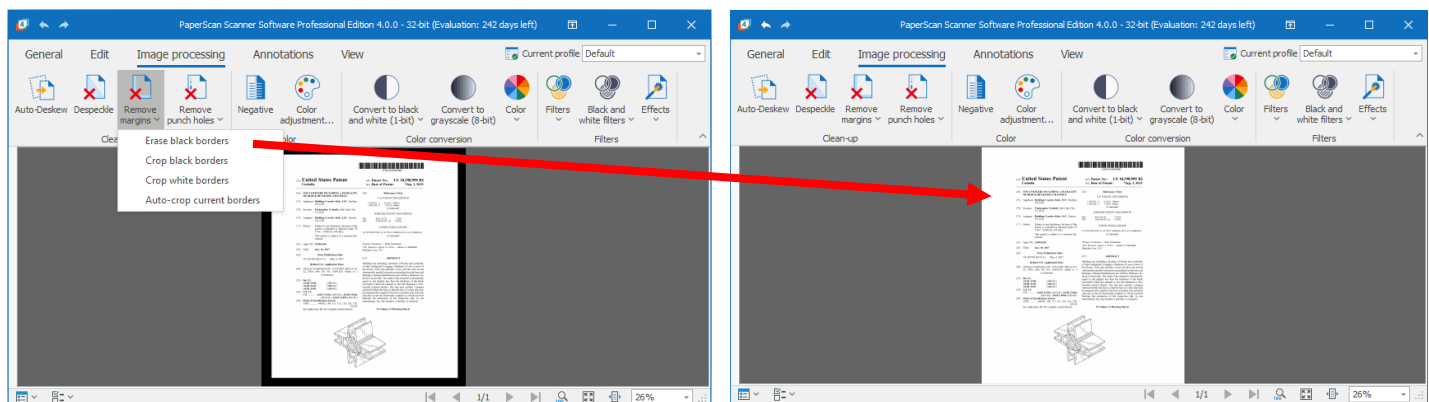


### 4.1.3 Remove margins

Scanned images may have scanning artefacts creating dark margins to the image. This tool can be used to remove these margins.

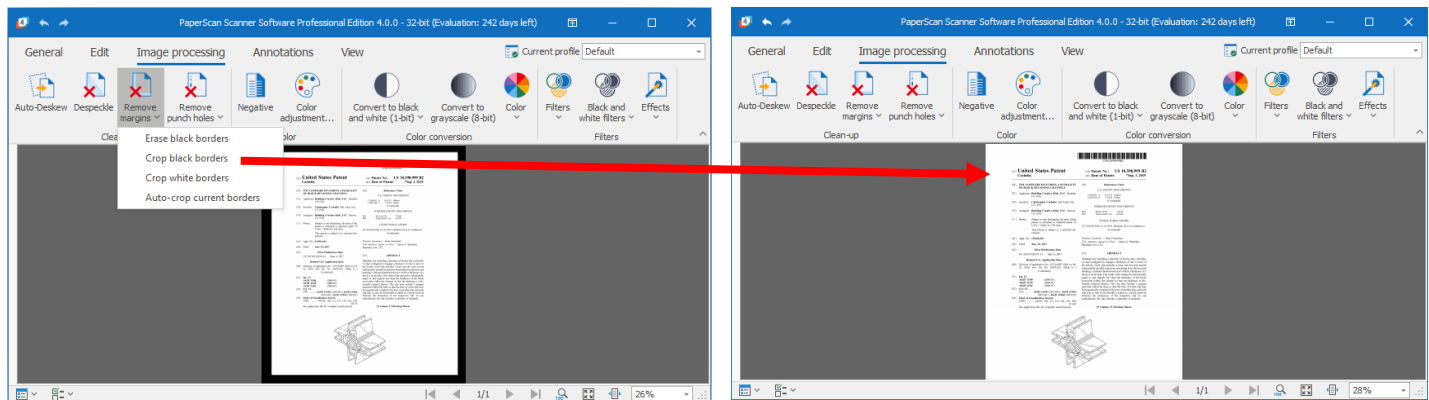
#### Erase black borders

This tool erases the black borders from the image, but leaves the image the same size.



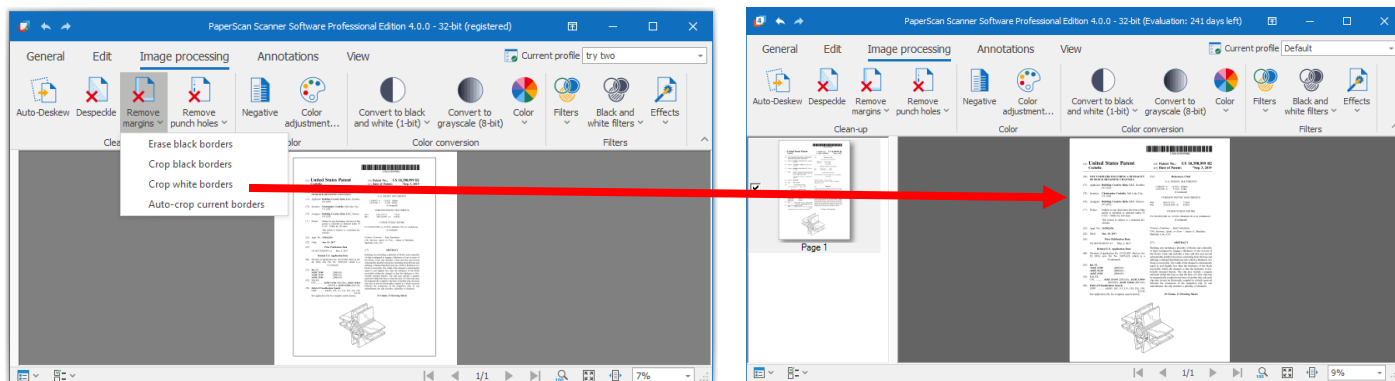
#### Crop black border

This tool removes the black border by cropping the image to those borders.



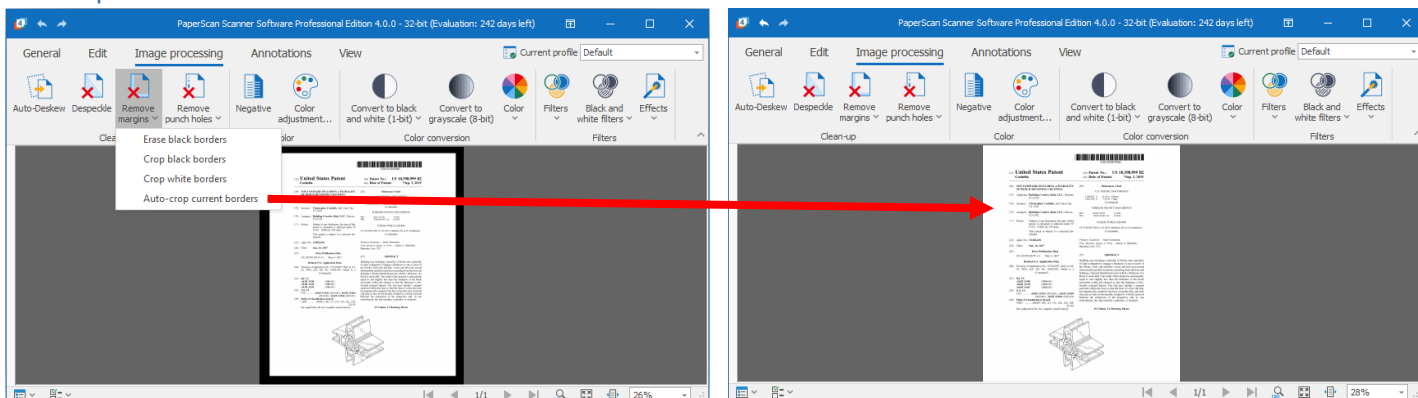
## Crop white borders

This tool crops the image to a rectangle that will contain all non-white areas of the image



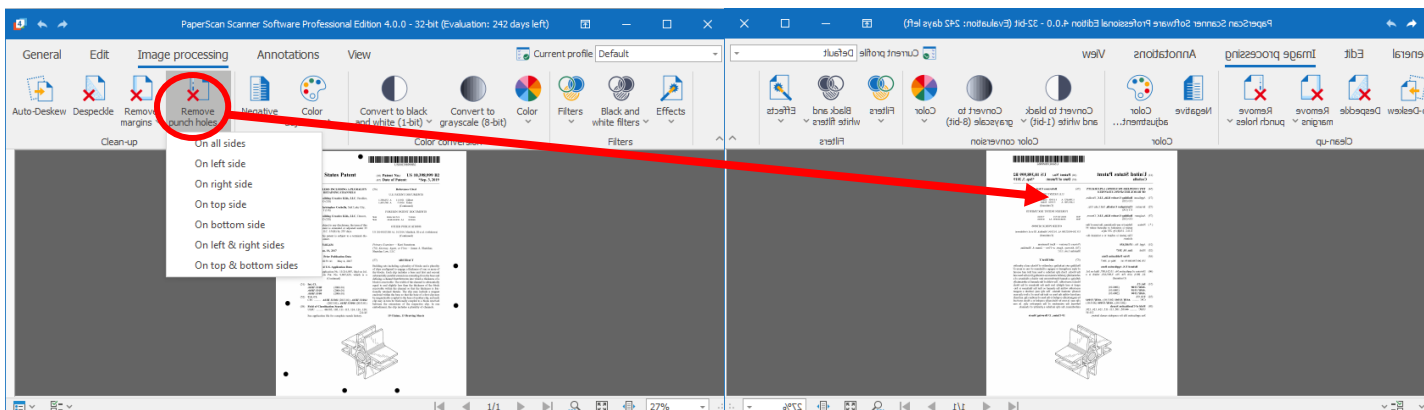
Note that an image without a border will crop to the edges of the text.

## Auto-crop current borders



### 4.1.4 Punch-hole removal

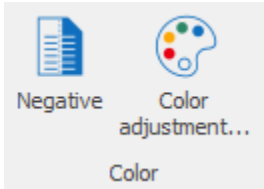
Automatically removes hole punch marks from a scanned image/page, either on a specified side, pairs of sides or on all sides of the image/page.



Note: certain 2d bar codes may be adversely affected by this operation

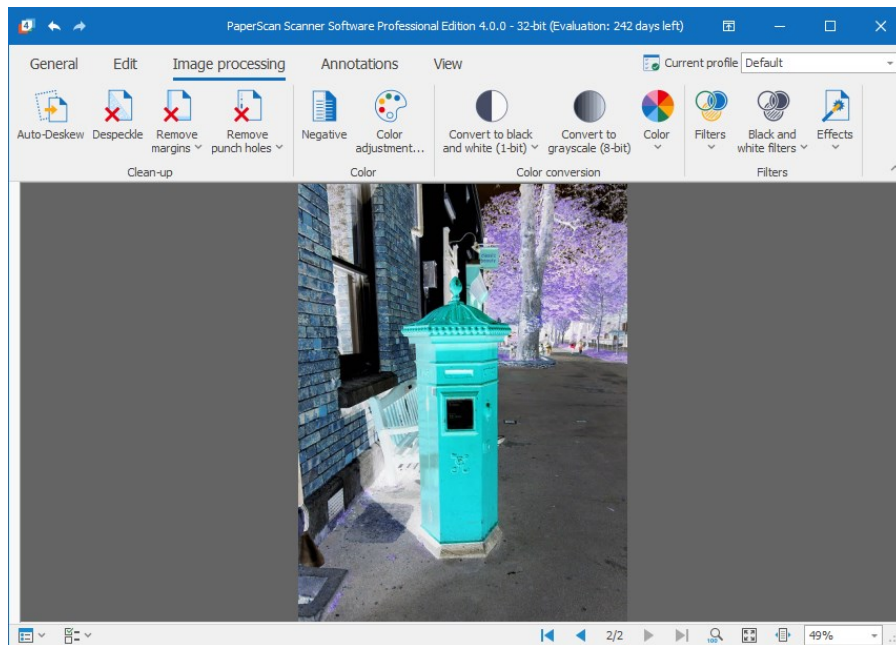


## 4.2 Color



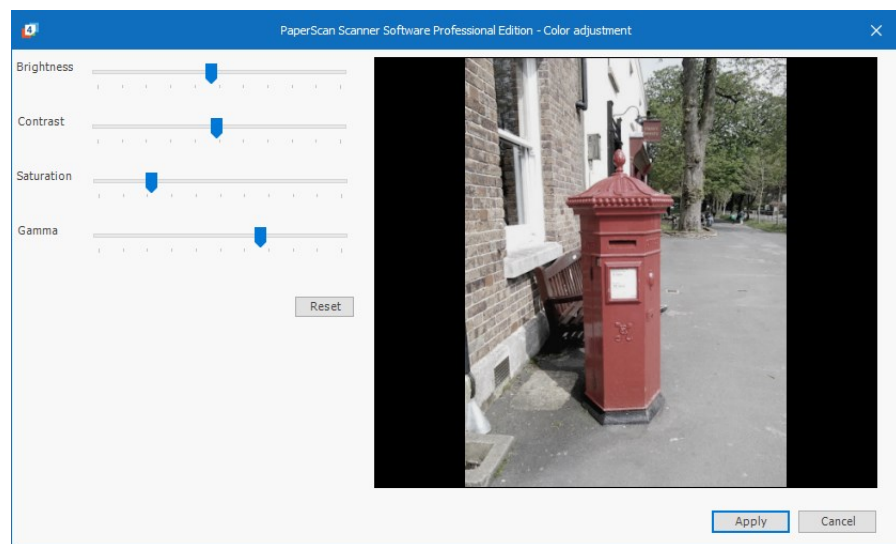
### 4.2.1 Negative

Inverts colors of the current image/page, or within a selected area, to switch it to a negative/positive version.

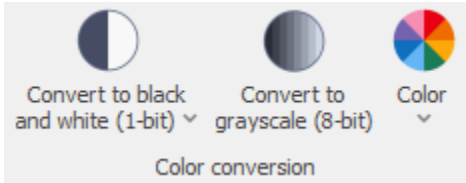


### 4.2.2 Color adjustments

Adjusts color brightness, contrast, saturation, and gamma of current image/page. Values can be changed visually on an example image.

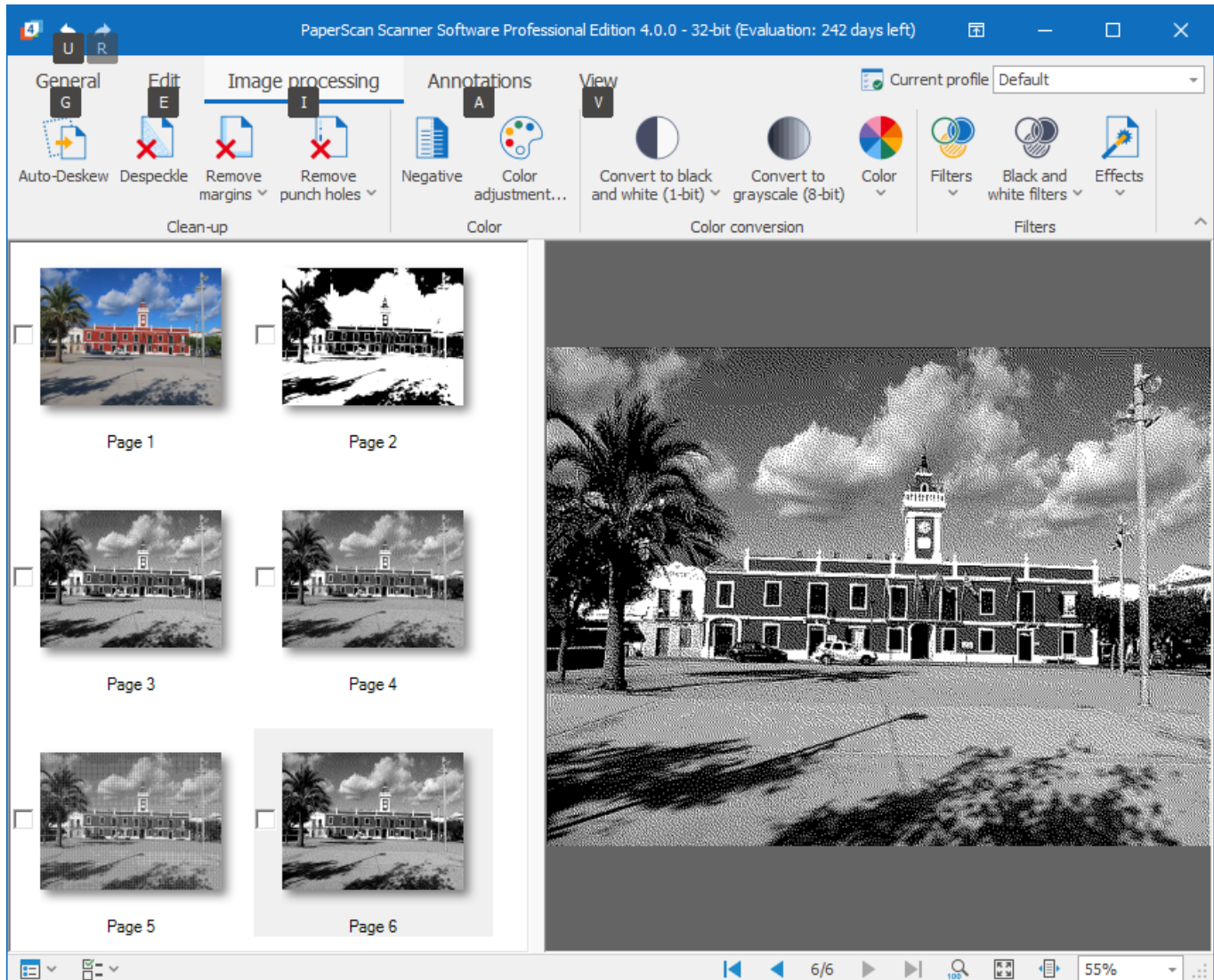


## 4.3 Color conversion



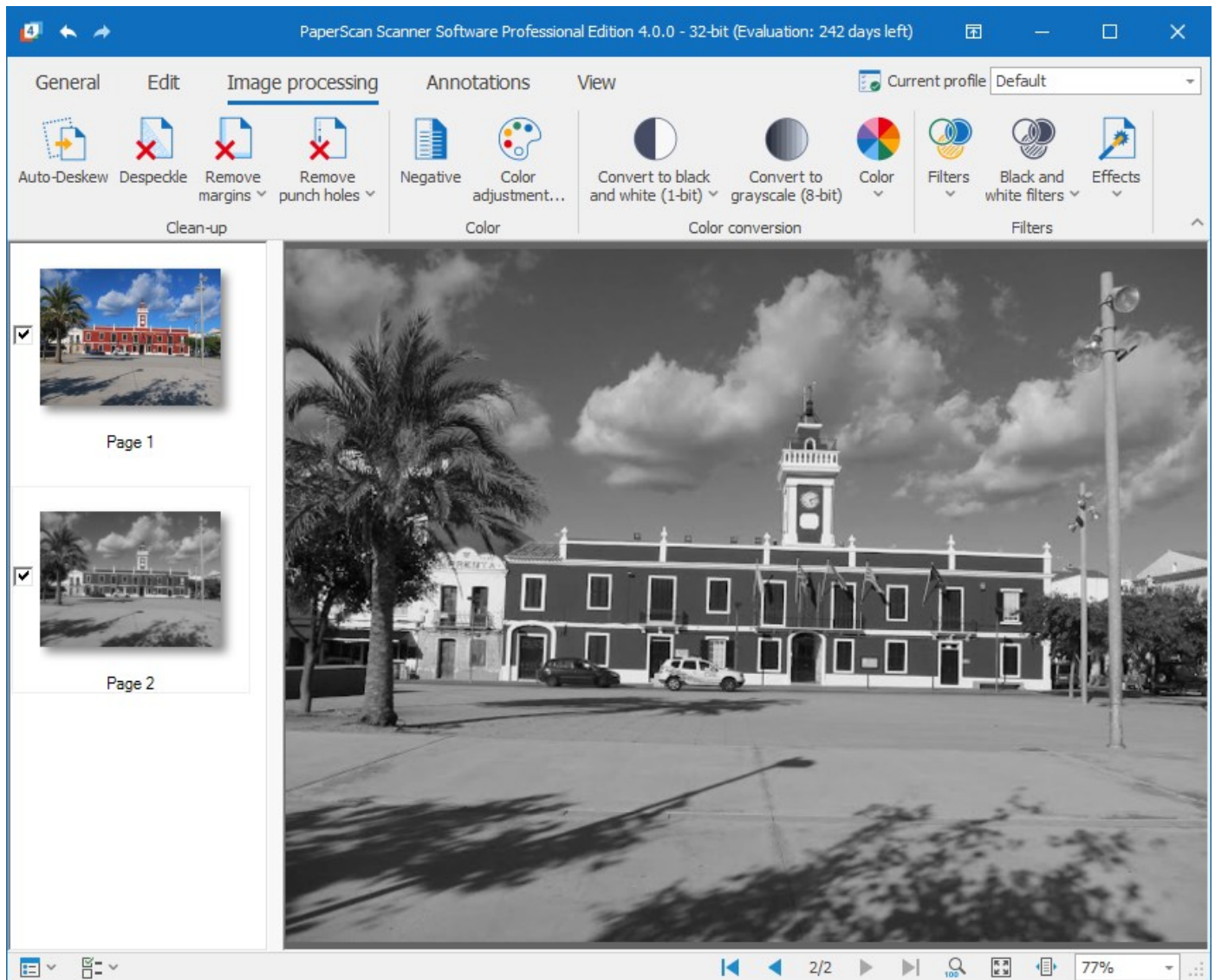
### 4.3.1 Convert to black and white (1-bit)

Convert to black and white (monochrome), by using various black and white conversion algorithms.



#### 4.3.2 Convert to grayscale (8-bit)

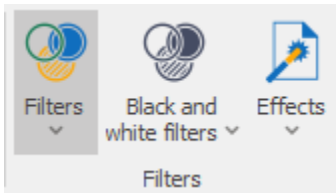
Convert to 8-bit grayscale (256 different shades of gray from black to white).



#### 4.3.3 Convert to color (8-bit, 24-bit):

Converts current image/page to color.

## 4.4 Filters



The Filters can improve the images and can prepare the image for optimal compression and OCR. All these options can be used with the Area selection mode tool featured in the “Edit” options.

### 4.4.1 Filters

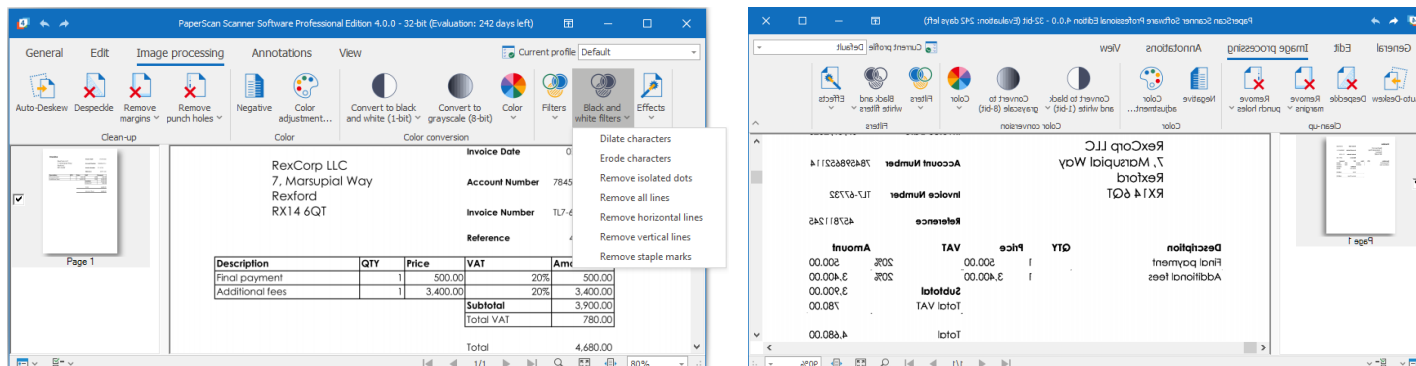
Apply filters to current page/image or just in selected area to smooth jagged edges, stretch contrast, or reduce/remove image noise with the median filter.

### 4.4.2 Black and white filters

Apply filters for black and white pages/images or selected areas, to delete/erode text characters, despeckle (reduce/remove noise while preserving details), or remove isolated dots. Generally these only work when the image is black and white (use the Convert to black and white option before applying these filters).

#### Example: Line removal

If images are going to be OCR'd to make them searchable then the accuracy can be improved by removing horizontal and vertical lines. Due to the layout of the image it may be that removing vertical then horizontal (or horizontal then vertical) produces a better result than remove all lines.



#### 4.4.3 Effects

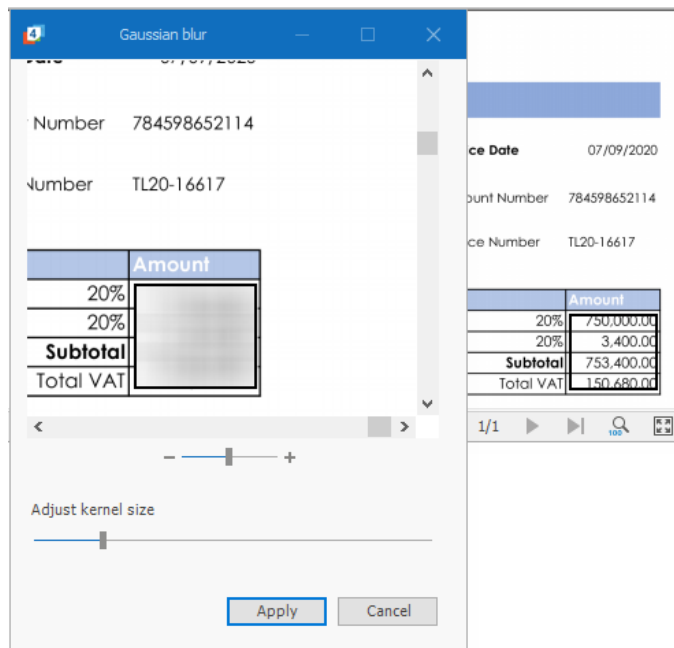
Apply various effects on current page/image or selected areas, such as contour (outlines shapes), sepia (converts to sepia tone), or scanlines (adds a grid of horizontal lines).

##### Example effect: Gaussian blur

On the Edit tab, use the Areas selection mode to select an area to be blurred.

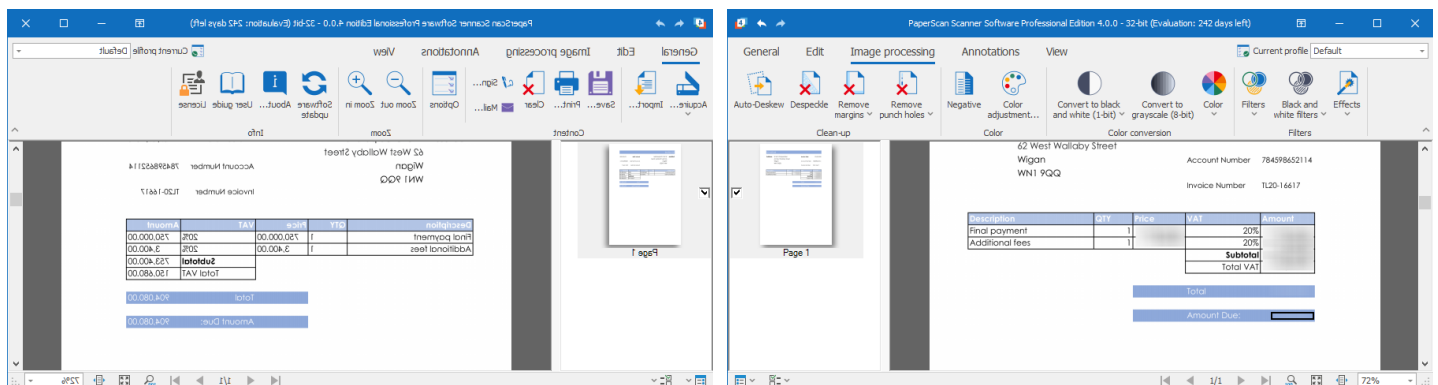
On the Image processing tab select the Effects drop down and select Gaussian blur.

This will bring up the Gaussian blur window.



Adjust the Kernel size to alter the amount of blur (the blur is applied to example window when the button is released).

Click Apply to apply the change to the page. Repeat for all areas.

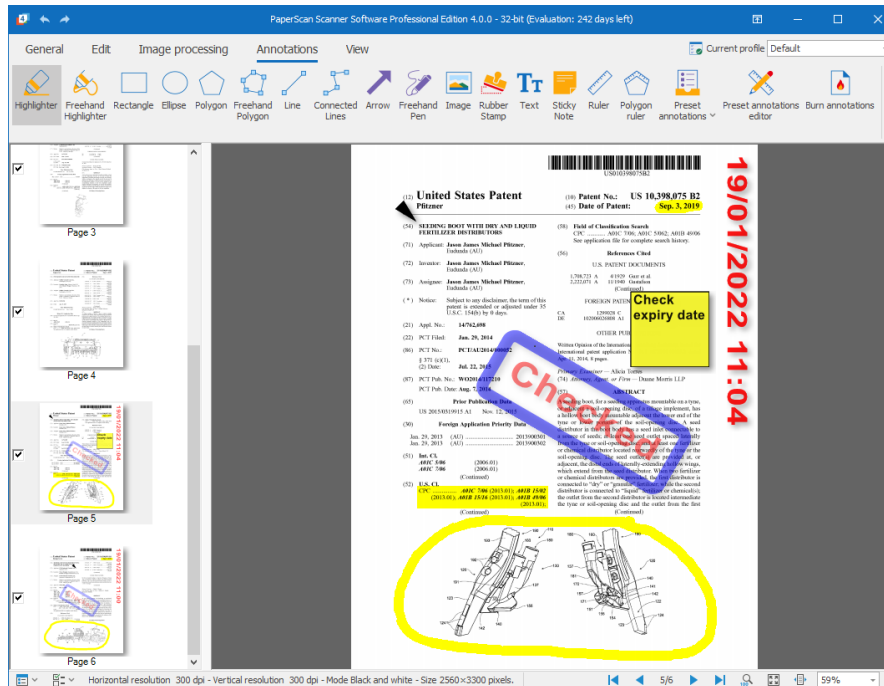




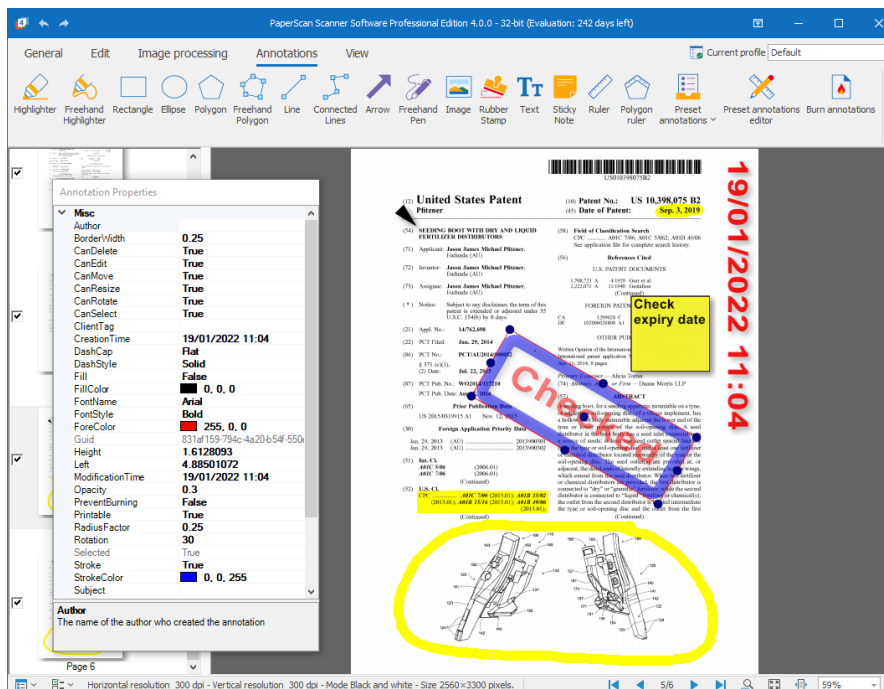
## 5 Annotations

With PaperScan, you can improve your document by adding annotations.

These can include highlighting important pieces of information, adding notes, notifications of status, dynamic data such as page numbers or dates, rulers etc.



When you click on an annotation, an *Annotation Properties* window opens. You can fully customize the color, the font and size of the characters, etc. of each type of annotation. They remain editable until the Burn annotations button is clicked and they become a permanent part of the image.



## 5.1 The main tools



Tool	Description
Highlighter	Add a transparent yellow box to highlight an area
Freehand highlighter	Freehand draw on the page in transparent yellow.
Rectangle	Add a rectangle
Ellipse	Add an ellipse
Polygon	Add a polygon
Freehand Polygon	Draw a freehand polygon
Line	Draw a line
Connected Lines	Draw a series of connected lines
Arrow	Add an arrow
Freehand Pen	Free hand draw
Image	Select an image file and then draw an area on the page to take the image.
Rubber Stamp	Draw the area on the page to take the stamp. Edit the properties to change the text, color and line thickness
Text	Set an area on the page to add the text. Edit the text directly or via the properties. The text area is shown with a drop shadow until <a href="#">the annotations are burned</a> .
Sticky Note	Add a yellow box for text. Draw its dimensions and edit the text as required.
Ruler	Display a ruler and its length on the page. Use to show the length of objects scaled to the page size.
Polygon ruler	Draw a multi-piece ruler showing the cumulative length scaled to the page size.
Preset annotations	Apply <a href="#">preset annotations</a> .
Preset annotations editor	See the <a href="#">Preset annotations editor</a>
Burn annotations	See <a href="#">Burn annotations</a>

To exit one of these tools, either click on the tool icon again or another tool icon.

To move annotations, select (ensure that Pan mode is selected on the Edit tab) and move.

To view and change properties of an annotation, right click and select Properties.

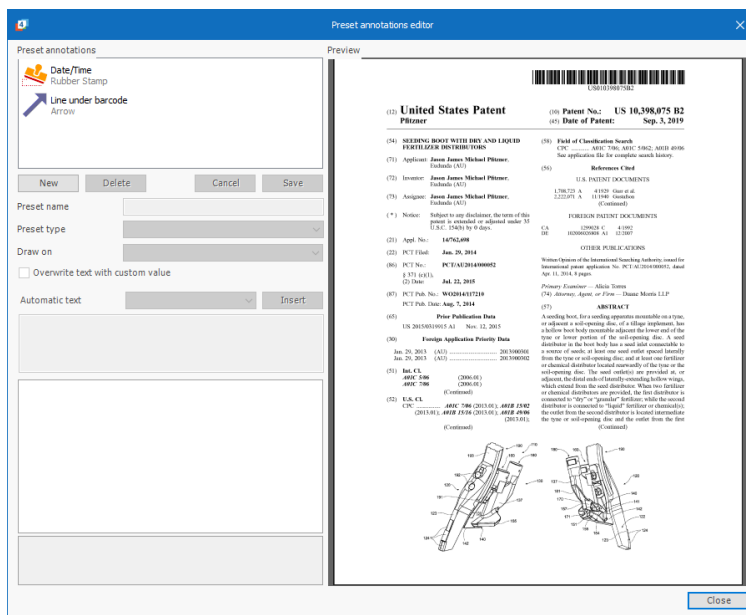
To delete an annotation right click and select Delete.

## 5.2 Preset annotations editor

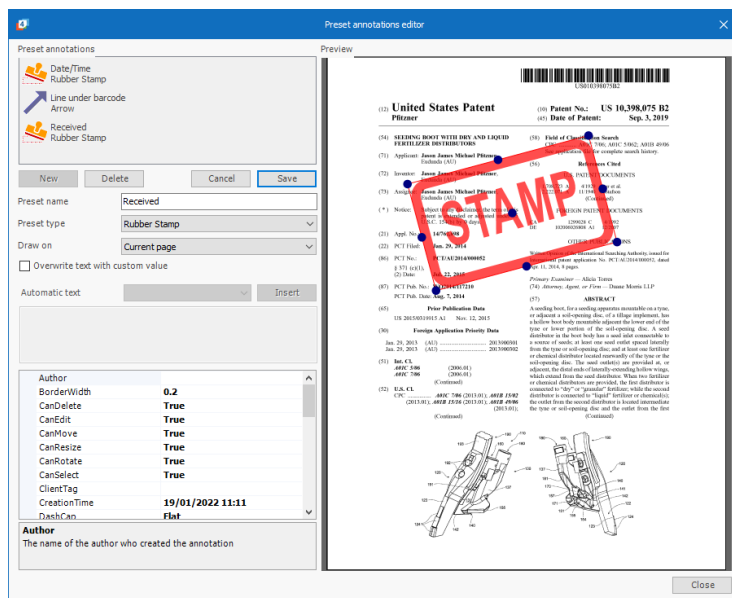
The Preset annotation editor allows you to build dynamic annotations you can add to your documents. These annotations can include the current date and/or time, page number and user name. The values are added when the file is processed.

### 5.2.1 Creating the annotation

Click on the Preset annotation editor button, then click on “new” to create a new preset annotation.



After selecting your annotation type you will need to draw the annotation on your page displayed to the right of all the options. For this example it is a Rubber stamp called Received.



You can adjust and edit your annotation by changing its properties displayed in the bottom left of the window. The size, position and rotation can be changed by dragging it on the page.



You can change the text of the annotation by checking the Overwrite text with custom value box.

☒ Overwrite text with custom value

Automatic text None Insert

None  
Current user  
Page number  
Date  
Time  
Date and time

Select the automatic text items from the drop-down list and click Insert to add them to the box. Add any additional text to meet your requirements.

☒ Overwrite text with custom value




Automatic text Date and time Insert

Received: {{datetime}}

Adjust the properties and location until you are happy with the content and position.

Preset annotations editor
✕

Preset annotations

 Date/Time Rubber Stamp  
 Line under barcode Arrow  
 Received Rubber Stamp

New Delete Cancel Save

Preset name: Received

Preset type: Rubber Stamp

Draw on: Current page

☒ Overwrite text with custom value

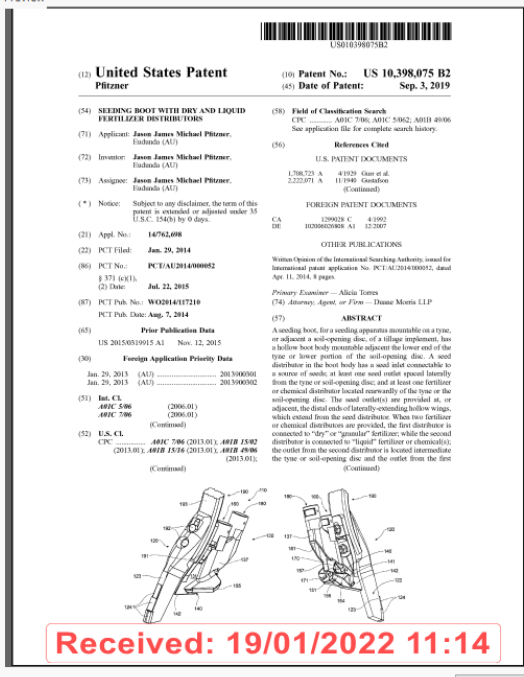
Automatic text: Date and time Insert

Received: {{datetime}}

Author	
BorderWidth	0.01
CanDelete	True
CanEdit	True
CanMove	True
CanResize	True
CanRotate	True
CanSelect	True
ClientTag	
CreationTime	19/01/2022 11:11
DashCan	Flat

**BorderWidth**  
The width, in inches, of each lines in stroking operations

Preview



You can apply the annotation to multiple pages by selecting which option you prefer in the “Draw on” box.

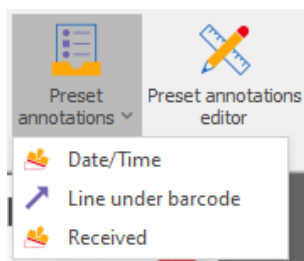
Preset name	Date received
Preset type	Rubber Stamp
Draw on	Current page
<input checked="" type="checkbox"/> Overwrite text with cu	Current page
Automatic text	Even pages
	Odd pages
	All pages

Once you are happy with the annotation, click on Save.

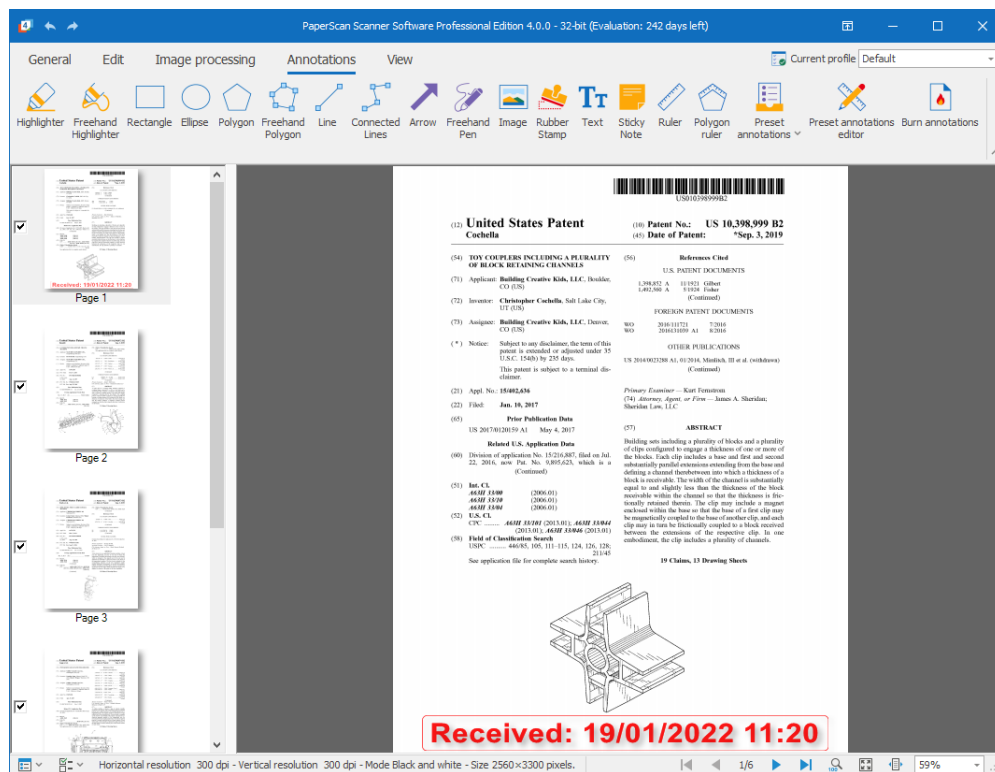
Click on Close to return to Annotations.

### 5.2.2 Applying the annotation

To apply the annotation click on the “Preset annotations” button:



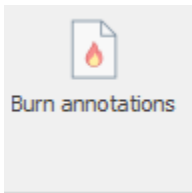
Select the required annotation.



If the Draw on setting for the annotation is “Current page” it will (as shown) add it to the current page. If the other options (odd, even, all) it will add them to the associated pages.

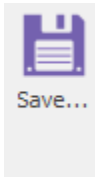
### 5.2.3 Burn annotations

Once you have added and edited the annotations, you must click on the Burn annotations button to permanently save your changes.



Once burned, your annotations will no longer be editable. This option is necessary so that when you save your pages to a file the edited annotations on them are saved with it. You only need to do this once before saving your scanned pages to a file or when you want to crop a page containing annotations.

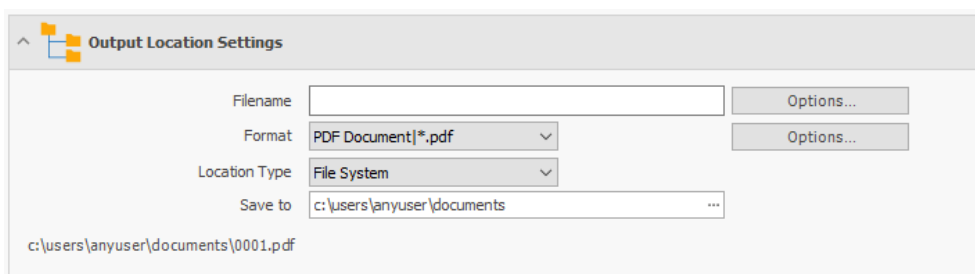
## 6 Save Wizard



When you are finished editing or creating your image, you can compress and save it to another format.

The format to choose depends on the content of your image and the use you want to make of it. For example, if you are saving an image for use on the Web, you should use PNG, JPEG, or GIF.

### 6.1 Output Location Settings



#### 6.1.1 Filename

This is the base text used for naming output files.

The expected output filename is shown at the bottom of this section.

There are two file naming systems: Simple and Advanced. These can be set using the Filename Options button.

For Simple File Naming, an empty Filename will use the name of the last file imported. Certain multipage options will force the use of the index suffix to create unique filenames: see the [Simple File Naming section](#) of File Naming Settings for more details.

For Advanced File Naming, the filename can include template variables (such as %DATETIME%) which are replaced with specific values when the file or files are saved. See the [Advanced File Naming section](#) of File Naming Settings.

Certain [Multipage options](#) have mandatory template variables which cannot be removed:

- [Separator pages](#) – This will have %INDEX% in Advanced File Names (or the Add Index box ticked for Simple File Names)
- [Save as n pages per file](#) – This will have %INDEX% in Advanced File Names (or the Add Index box ticked for Simple File Names)
- [Barcodes](#) – This will have %BARCODE% in the filename.

The %BARCODE% template variable will be removed for non bar code multipage options.

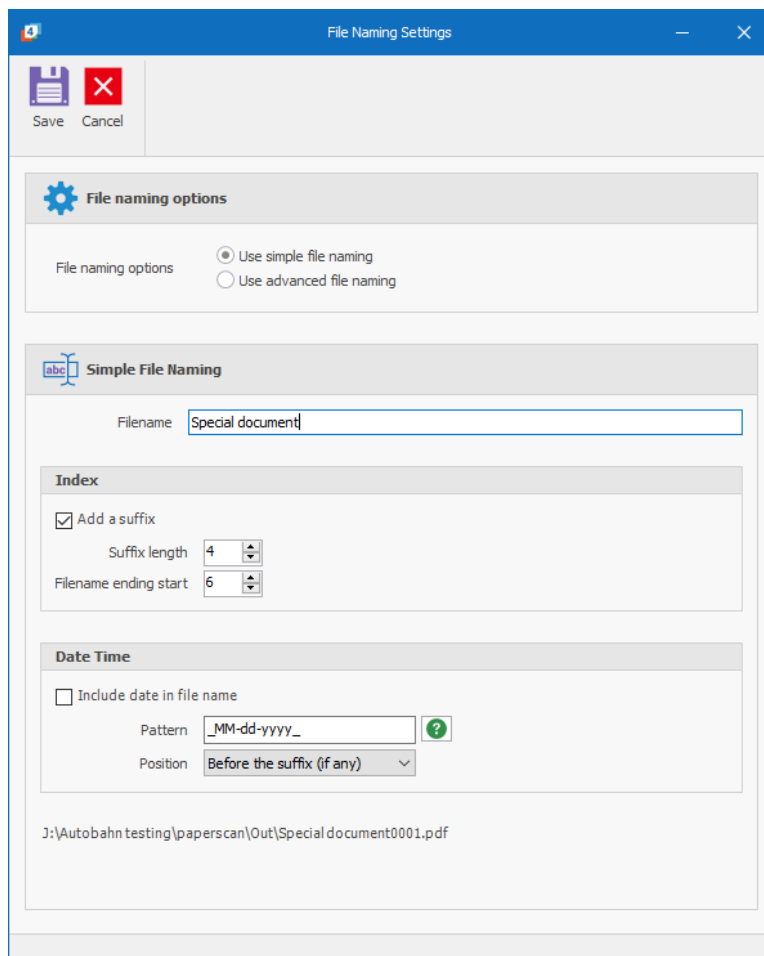
Though these mandatory template variables cannot be removed, they can be moved within the filename to meet your requirements.

## File Naming Settings

The file naming Settings allows the choice between Simple File Naming and Advanced File Naming.

### Simple File Naming

The output filename is based on the text in the Filename field.



There are two additional settings for file naming:

Add a numeric index as a suffix that is incremented as each file is saved. The value can be padded to a set number of digits and a start value set. Each “Save To” location (folder) maintains its own index value. If the Date-Time option is also selected, a separate index value is used that is reset when the date changes – each day the index starting at 1.

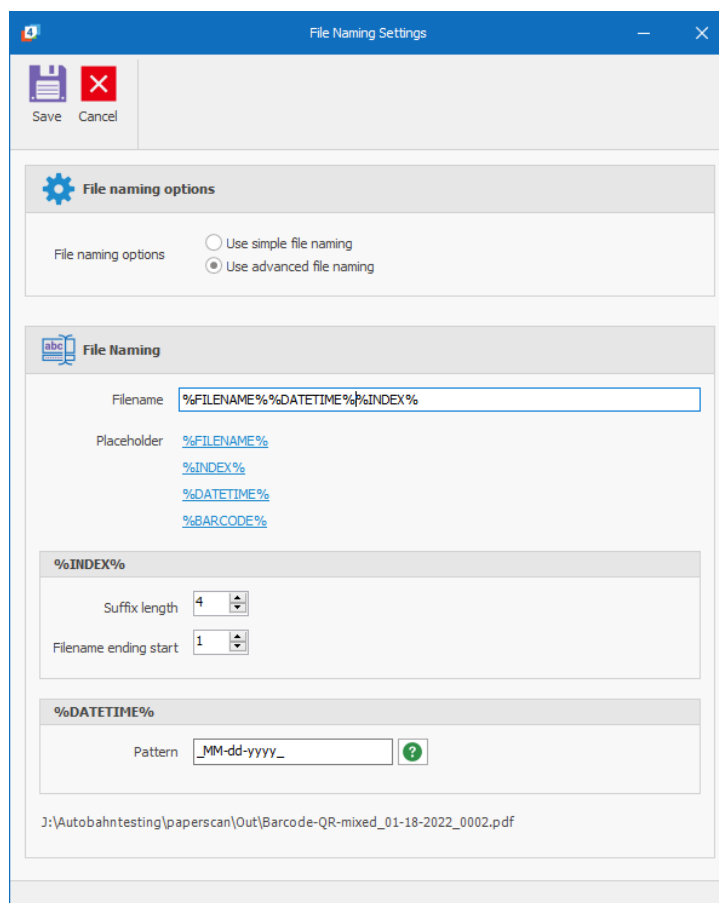
The numeric index is added automatically when the multipage options “Use separators” and “Save n pages per file” are selected and can not be turned off for Simple File Naming.

Add a Date-Time value. This can be located at the start of the filename, between the filename text and the suffix or after the suffix. It also affects the index value – the index value is reset each day when selected.

**Note:** If the filename value is blank and one or more files have been imported, the last filename is used as the base text.

## Advanced File Naming

PaperScan 4 offers an Advanced File naming system using dynamic file naming template variables.



In this example, the last filename imported, the current date and the index are used to define the filename. The value is displayed at the bottom of the section. Barcode values are not substituted until the files are saved.

### Filename

Template variable	Notes
%FILENAME%	The file name of the last file imported. If images are scanned this variable is replaced by "Scanned"
%INDEX%	Index value – The index number is incremented each time a file is saved. If the file path template contains a %DATETIME% variable the index is reset each day.
%DATETIME%	This is replaced by the current date and time using the format pattern described in the <a href="#">%DATETIME% section</a> .
%BARCODE%	This template variable is replaced by the first bar code found on the page (see barcode section for methods of choosing the barcode to use). Note that the barcode value is only substituted when saving files, it remains as %BARCODE% in the example filename.

### %INDEX%

The index number is incremented each time a file is saved. If the file path template contains a %DATETIME% variable the index is reset each day.

### %DATETIME%

The pattern defines the format of the date/time that replaces the %DATETIME% variable in the file naming template.

### 6.1.2 Format

**PaperScan** can save an image or images to a range of different formats:

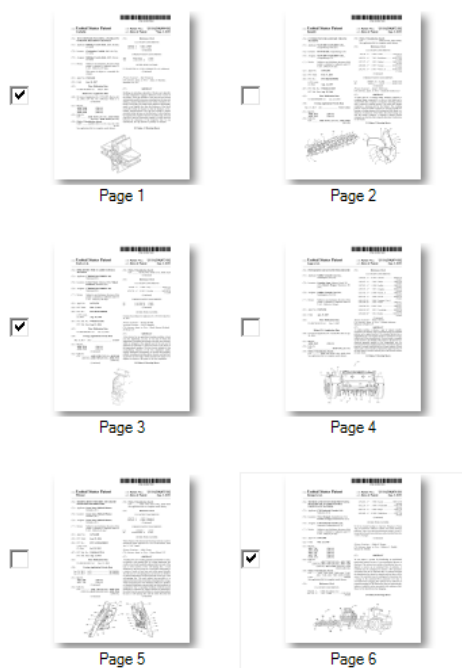
- PDF Document (image or OCR text)
- TIFF image
- JBIG2 image
- Word document (image or OCR text)
- Text (OCR)
- HTML (OCR)

Single page documents can also be saved as:

- JPEG image
- JPEG2000 image
- PNG image
- WEBP image

If the format has additional options, they can be viewed and set by clicking on the associated “Options...” button.

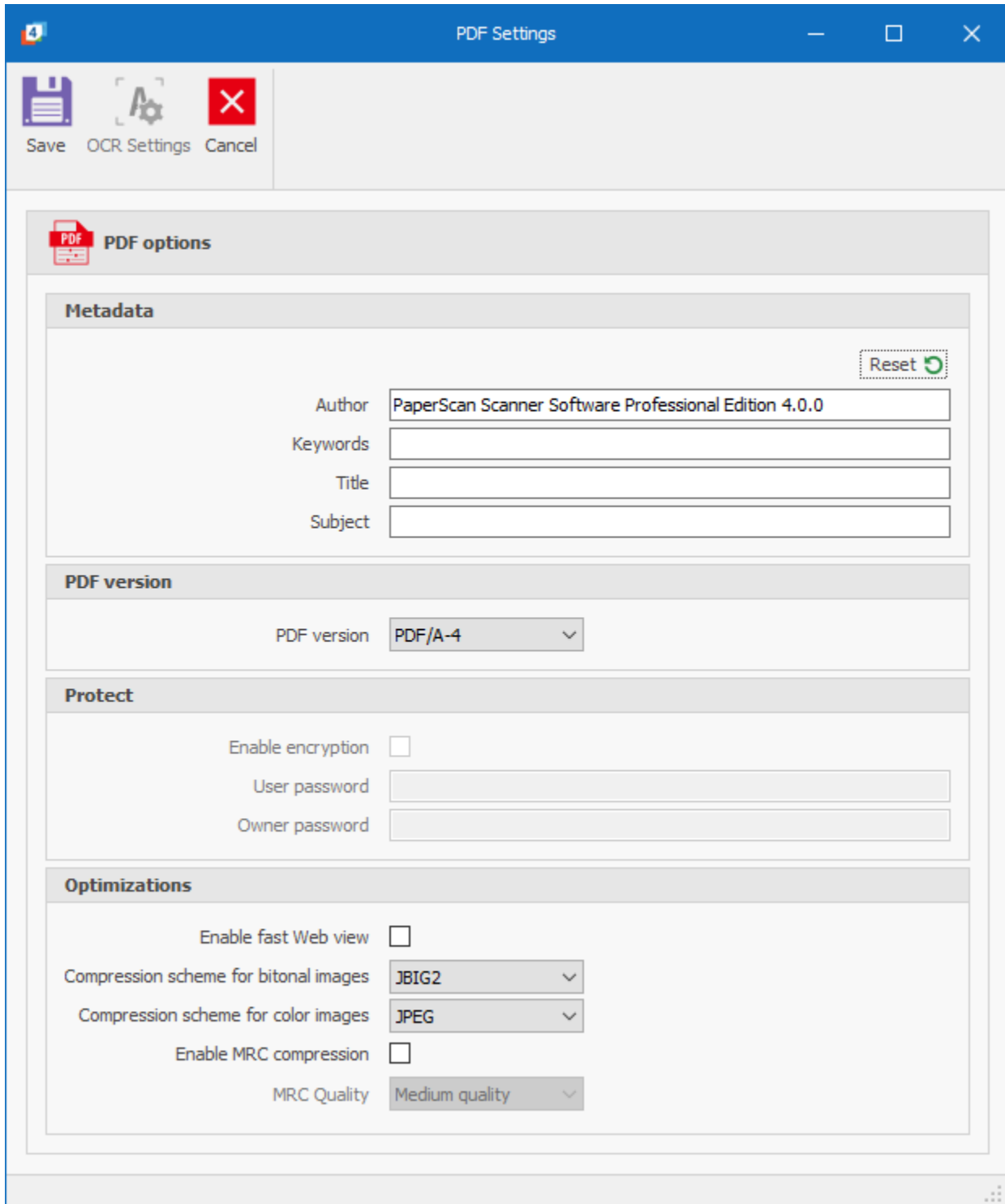
Only the pages that are “ticked” in the thumbnails will be saved.



In this example, only pages 1, 3 and 6 will be printed.

## PDF Options

The PDF Settings offer the following options



The screenshot shows the 'PDF Settings' dialog box with a blue title bar. At the top, there are three buttons: 'Save' (floppy disk icon), 'OCR Settings' (gear icon), and 'Cancel' (red X icon). Below these is a section titled 'PDF options' with a PDF icon. The settings are organized into four panels: 'Metadata', 'PDF version', 'Protect', and 'Optimizations'. The 'Metadata' panel includes fields for Author, Keywords, Title, and Subject, with a 'Reset' button. The 'PDF version' panel has a dropdown for 'PDF version' set to 'PDF/A-4'. The 'Protect' panel has checkboxes for 'Enable encryption', 'User password', and 'Owner password'. The 'Optimizations' panel has checkboxes for 'Enable fast Web view' and 'Enable MRC compression', and dropdowns for 'Compression scheme for bitonal images' (JBIG2), 'Compression scheme for color images' (JPEG), and 'MRC Quality' (Medium quality).

**PDF Settings**

Save OCR Settings Cancel

**PDF options**

**Metadata**

Reset

Author PaperScan Scanner Software Professional Edition 4.0.0

Keywords

Title

Subject

**PDF version**

PDF version PDF/A-4

**Protect**

Enable encryption ☐

User password

Owner password

**Optimizations**

Enable fast Web view ☐

Compression scheme for bitonal images JBIG2

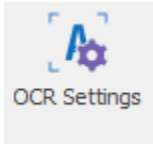
Compression scheme for color images JPEG

Enable MRC compression ☐

MRC Quality Medium quality



## OCR Settings




The OCR settings button is only enabled when the selected format is PDF Document + OCR. See the [OCR option below](#) for details.

## Metadata

For PDF output, PaperScan can set the PDF metadata.

**Metadata**

Reset 

Author

Keywords

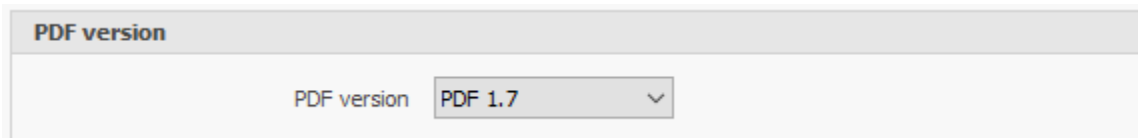
Title

Subject

Option	Description
Author	Provide a new value for the Author
Title	Provide a new value for the Title
Creator	Provide a new value for the Creator
Subject	Provide a new value for the Subject

These values are static for each profile.

## PDF Version



The interface shows a tab labeled "PDF version". Below the tab, there is a label "PDF version" followed by a dropdown menu currently displaying "PDF 1.7".

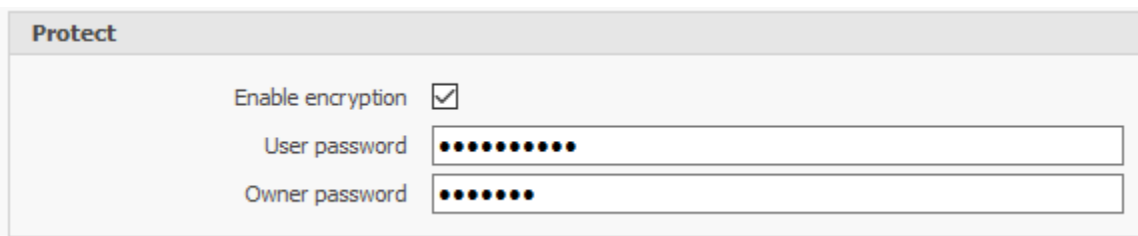
PaperScan can produce PDFs in the following conformance levels and versions:

- PDF 1.5
- PDF 1.6
- PDF 1.7
- PDF 2.0
- PDF/A -1a
- PDF/A-1b
- PDF/A-2a
- PDF/A-2b
- PDF/A-2u
- PDF/A-3a
- PDF/A-3b
- PDF/A-3u
- PDF/A-4
- PDF/A-4e
- PDF/A-4f

PDF/A is an ISO-standardized version of PDF that is suitable for the archival preservation of electronic documents.

A PDF/A document contains all the information required to display the document without the need for external sources.

## Protect



The interface has a tab labeled "Protect". Below the tab, there is a checkbox labeled "Enable encryption" which is checked. Below this, there are two password input fields: "User password" and "Owner password". Both fields contain masked characters (dots).

PaperScan can encrypt output PDFs.

User password: A password that will be required to open the target document.

Owner password: A password is used to set certain document restrictions on the target PDF.

## Optimizations

**Optimizations**

Enable fast Web view ☐

Compression scheme for bitonal images JBIG2 ▼

Compression scheme for color images JPEG ▼

Enable MRC compression ☐

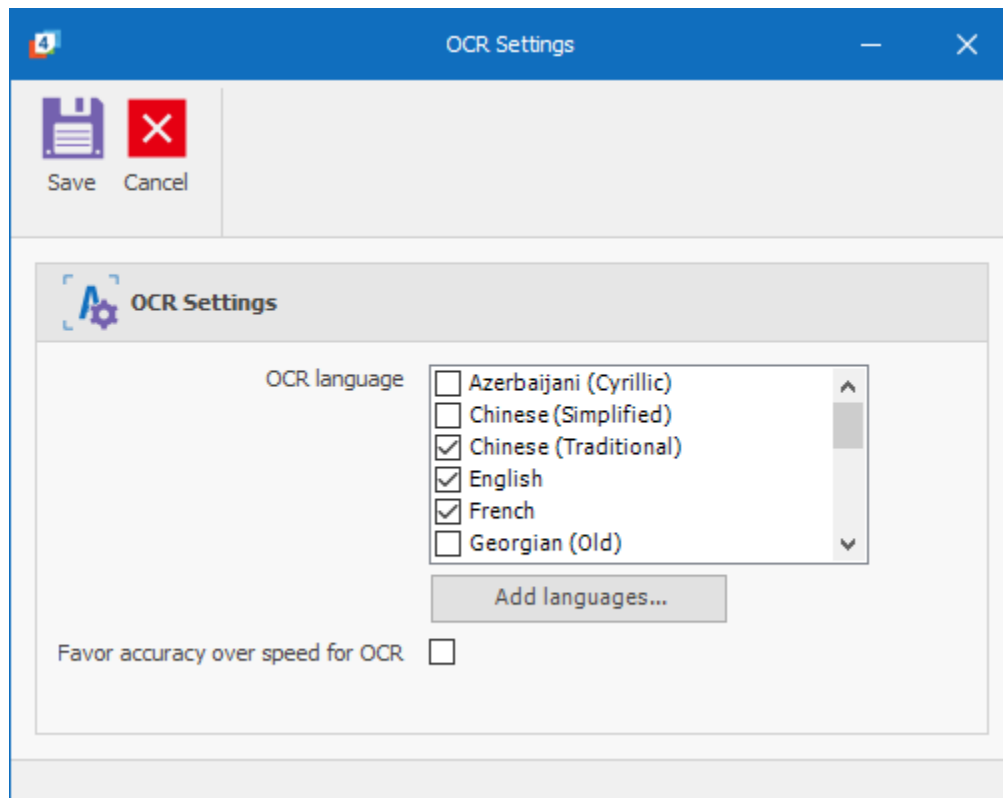
MRC Quality Medium quality ▼

Setting	Description
Enable fast web view	This setting restructures the PDF document to enable the individual downloading of pages from web servers, not the entire PDF document. This option is especially useful for large documents that can require a considerable amount of time to download from a web server.
Compression scheme for bitonal images	<ul style="list-style-type: none"> <li>• JBIG2 encoding generally compresses images smaller than CCITT Group but at the cost of more processing time.</li> <li>• JPEG is a lossy compression scheme</li> <li>• CCITT Group 4: CCITT, only available for monochrome bitmap images, is suitable for black-and-white images or scanned images with a depth of 1 bit. Group 4 is a general method that produces good compression for most monochrome images. CCIT Group 4 is a lossless compression mode.</li> <li>• Deflate is a lossless data compression algorithm.</li> <li>• None: No compression takes place</li> </ul>
Compression scheme for color images	<ul style="list-style-type: none"> <li>• Deflate: is a lossless data compression algorithm.</li> <li>• JPEG is a lossy compression scheme</li> <li>• JPEG 2000</li> <li>• None: No compression takes place</li> </ul>
Enable MRC compression	Mixed Raster Content Compression: Each image is broken down into segments which reduce the bitmap size while preserving the required quality (see below). These segments are then compressed using the most appropriate compression algorithms.
MRC Quality	Low; Medium; High; Very High quality

## OCR Options

PaperScan 4 offers the capability to simultaneously OCR images in multiple languages.

For some output formats this is a sub option (such as “PDF Document + OCR”), for others this is the only option.



Select the OCR languages you wish to use.

The default set of languages are:

English

French

German

Portuguese

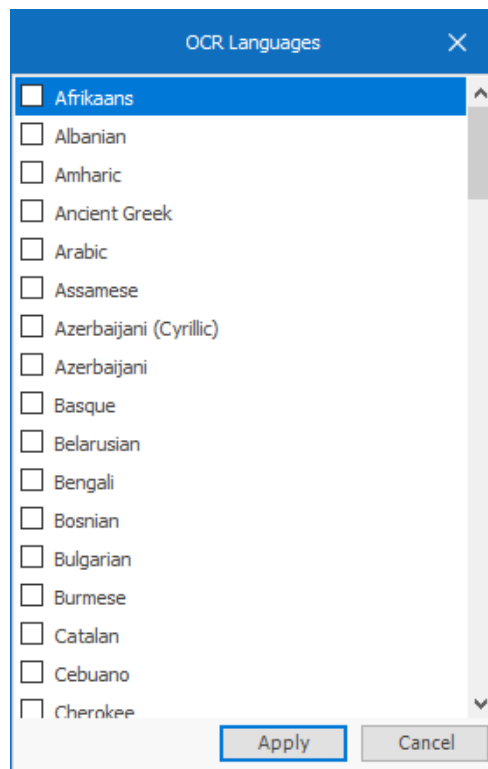
Spanish

Additional languages can be added by clicking on Add languages.

OCR is a delicate balancing act between speed and accuracy. There is an option here to favor accuracy over speed.

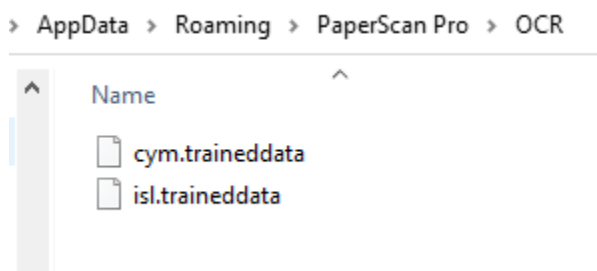
## Additional Languages

Click on Add languages.

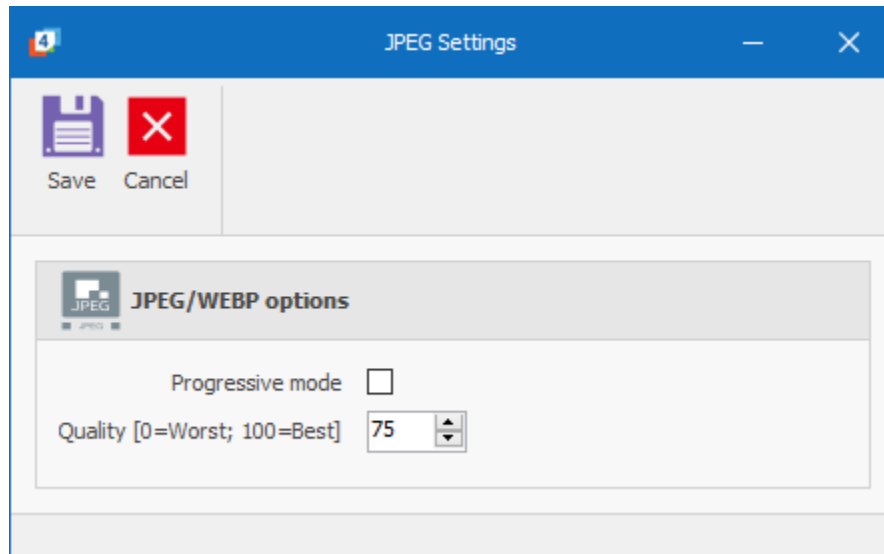


Select the languages from the list that you wish to add. Click on Apply, and the language information will be downloaded to your machine.

The OCR languages are stored in the user's AppData folder:



## JPEG/WEBP options

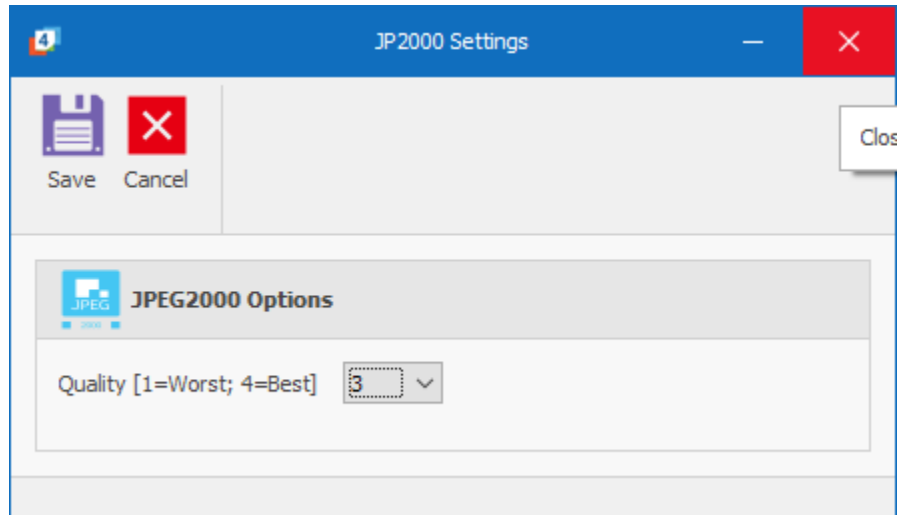


Progressive mode creates an image file that can be displayed as it is downloaded to a browser. The details appear over the whole image as it is downloaded.

The Quality sets the compression ratio. A low-quality setting means a high compression and small file size. A high-quality setting has a lower compression and a larger file size.

JPEG images are always lossy, even at a quality setting of 100.

## JPEG 2000 options



JPEG 2000 image compression system can have its quality set between 1 (worst) and 4 (best). The higher the quality, the larger the subsequent file.

## Location Type

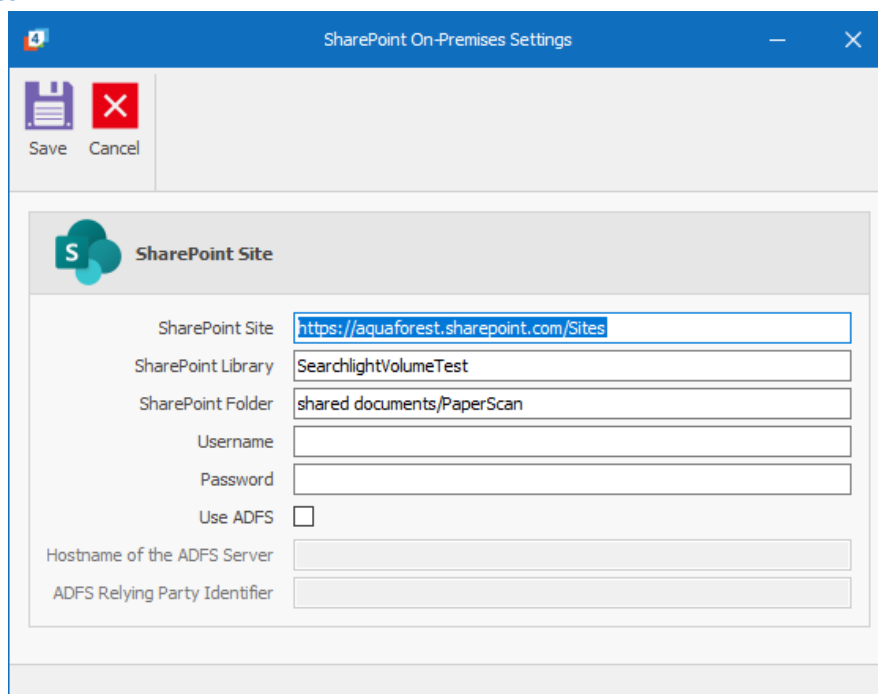
PaperScan can save to the Windows filesystem, SharePoint On-Premises or SharePoint Online (Office365).

## File System

The Save To location can be entered into the input box, or selected via the Folder Selector.

The %DATETIME% template variable (qv) can be used as part of the folder path for date-based output distribution.

## SharePoint On-Premises

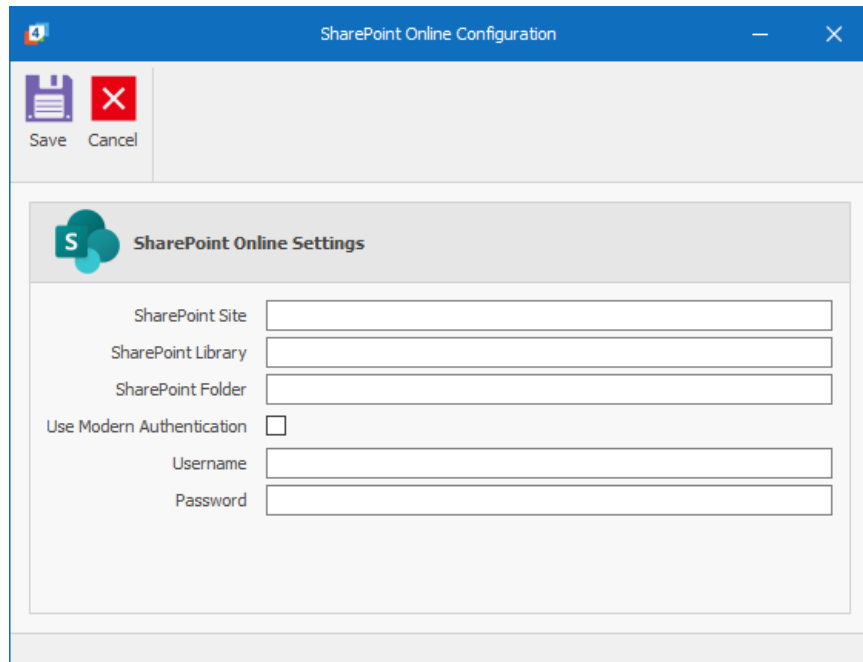


PaperScan can use conventional username and password to authenticate to the SharePoint On-Premises server or use Active Directory Federation Services (ADFS) to provide single sign-on access.

Setting	Notes
SharePoint Site	The URL of the SharePoint On-Premises site
SharePoint Library	SharePoint library
SharePoint Folder	SharePoint folder
Username	Username to connect to SharePoint
Password	Password to authenticate to SharePoint
Use ADFS	Set to use ADFS to access the SharePoint On-Premises
Hostname of the ADFS Server	The hostname of the Active Directory Federated Services server
ADFS Relying Party Identifier	The identifier

## SharePoint OnLine

PaperScan can use username and password or OAuth2 (Modern Authentication) to authenticate to SharePoint OnLine servers.



SharePoint Online Configuration

Save Cancel

**SharePoint Online Settings**

SharePoint Site

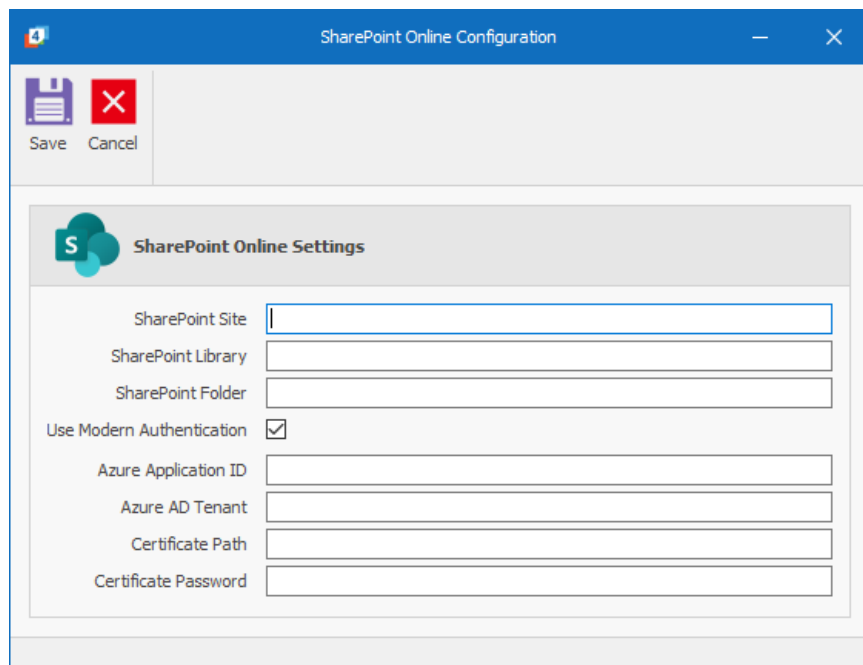
SharePoint Library

SharePoint Folder

Use Modern Authentication ☐

Username

Password



SharePoint Online Configuration

Save Cancel

**SharePoint Online Settings**

SharePoint Site

SharePoint Library

SharePoint Folder

Use Modern Authentication ☒

Azure Application ID

Azure AD Tenant

Certificate Path

Certificate Password

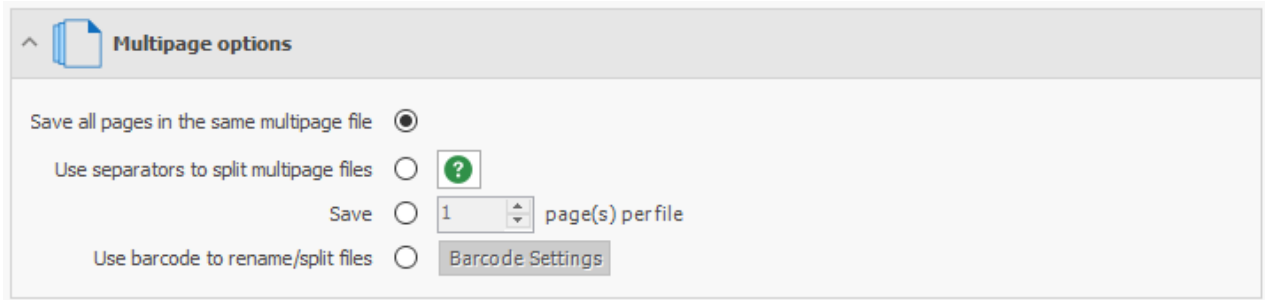


Setting	Notes
SharePoint Site	The URL of the SharePoint Online site
SharePoint Library	SharePoint library
SharePoint Folder	SharePoint folder
Username	Username to connect to SharePoint
Password	Password to authenticate to SharePoint
Use Modern Authentication	Set to use Modern Authentication to access the SharePoint
Azure Application ID	Azure Application (Client)
Azure AD Tenant	Azure Tenant ID
Certificate path	File path to the certificate related to this Azure Application ID
Certificate password	Password for the certificate

## 6.2 Multipage option

PaperScan can save all the pages as a single file or split the pages based on the following :

- Pages per file
- Separator pages
- Barcodes



The screenshot shows the 'Multipage options' dialog box. It has a title bar with a folder icon and the text 'Multipage options'. Inside, there are three radio button options: 'Save all pages in the same multipage file' (selected), 'Use separators to split multipage files' (with a green question mark icon), and 'Use barcode to rename/split files'. Below the first option is a 'Save' radio button. To the right of the second option is a numeric input field with '1' and a 'page(s) per file' label. Below the third option is a 'Barcode Settings' button.

### 6.2.1 Multipage

All the pages are saved as a single file.

### 6.2.2 Separator pages

A separator sheet is used to split a set of images. The first page of the document needs to be the separator sheet. Each subsequent occurrence of the separator sheet indicates the start of the next document. The separator sheet is not included in the output documents.

A separator sheet can be any image (except a full blank page), as long as it is the same image used multiple times in the batch.

This is an example separator sheet.



You can use a large barcode, but be aware that the barcode value cannot be used in the file naming of a files generated using separator sheets. See the [Split options](#) for the use of barcodes to split and name batches.

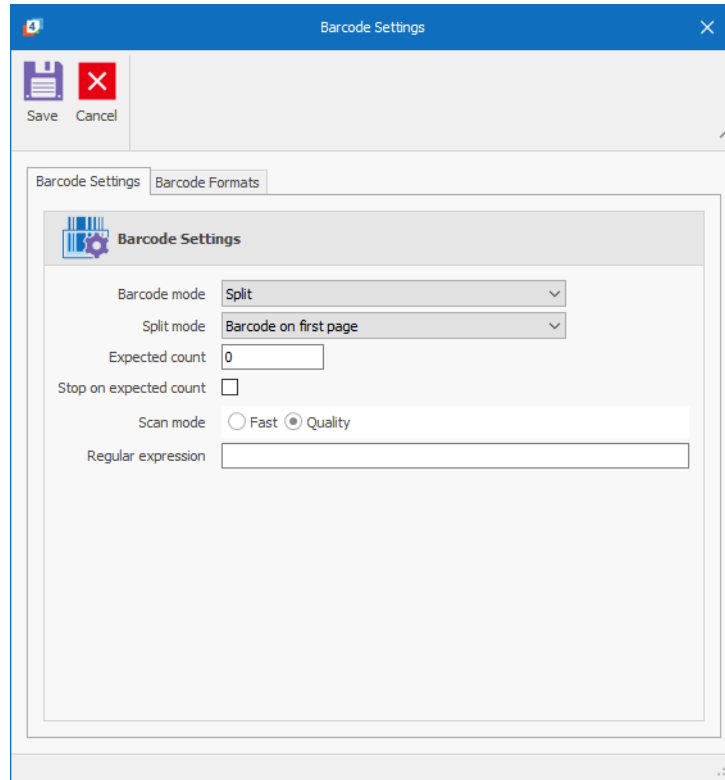
### 6.2.3 Save as n pages per file

Each n pages of images are grouped into files.

## 6.2.4 Barcodes

Barcodes can be read to provide a part of the name for the output file, or to split the set of images into groups of files - using the barcode to provide part of the file name. In the latter case the image with the barcode can be removed in a similar manner to the [separator pages](#).

Click on the Barcode Settings button to select the Barcode Options.



Barcode mode	When set to Rename, the first barcode identified replaces the filename template variable %BARCODE% in the output filename. When set to Split, each barcode identified is used to split the output into files and each barcode value again replaces the filename template variable %BARCODE% for that output file.
Split mode	This is only available when Split is selected as the barcode mode. The following modes are available : <ul style="list-style-type: none"> <li>Barcode on first page</li> <li>Barcode on last page</li> <li>Barcode on First page and Remove Barcode page</li> </ul>
Expected count	Expected number of barcodes (checked before filtering by regular expressions)
Stop on expected count	If the number of barcodes found equals the expected count, stop looking for further barcodes. This can speed up processing where there are a large number of barcodes. Note: The regular expression filtering takes place after the expected number of bar codes are read. Take care when using regular expressions and stop on expected results to prevent missing required barcodes.
Scan mode	Options are Fast (Highest Speed) and Quality (Highest Quality)
Regular expression	A regular expression can be used to identify specific barcodes. This is useful where there are multiple barcodes of the same type, but only those that follow a particular format are required for renaming or splitting the output.

## Regular Expression Example

Here is an example document with three barcodes :

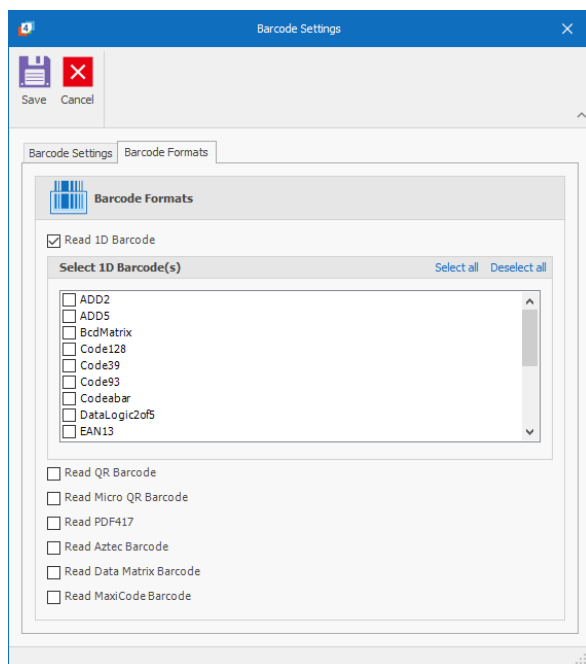
This document demonstrates the use of regular expressions to select a type of barcode value in a document.



In this case the barcode format of interest has the form XX-0000-0032-AD where X represents an alphabetic character and 0 represents a number.

To select this value from the three barcodes, the regular expression “\w\w\-\d{4}\-\d{2}32\-\AD” (without quotes) is entered in the Regular expression field.

## Barcode Formats



PaperScan can read the following one dimensional bar codes :

- ADD2
- ADD5
- BcdMatrix
- Code128
- Code39
- CODE93
- Codeabar
- DataLogic2of5
- EAN13
- EAN8
- Iata2of5
- Industrial2of5
- Interleaved2of5
- Inverted2of5
- Matrix2of5
- None
- UPCA
- UPCE

PaperScan can also read the following two dimensional codes:

- QR
- PDF417
- Aztec
- Data Matrix
- MaxiCode

### Efficiency

Reading a one dimensional barcode (irrespective of the number of selected barcodes) is a single action, each two dimensional barcode type scanned also counts as a single (additional) action. If you are only expecting one dimensional barcodes or a specific two dimensional barcode, it is more efficient to only select that type of barcode.

### Problems reading barcodes

Barcode recognition does depend upon the quality of the scanned or imported image. If PaperScan appears to have difficulty reading a bar code, try importing/scanning the image at [a higher resolution](#).

## 6.3 Output files attributes



Output files attributes

Read-only ☐


Archive ☐

Hidden ☐

This option is made available in the Save Wizard by clicking on the Show advanced settings link.

The file attributes Read-only, Archive and Hidden can be set using this section. All output files will have the selected attributes set.

## 6.4 Miscellaneous



Miscellaneous

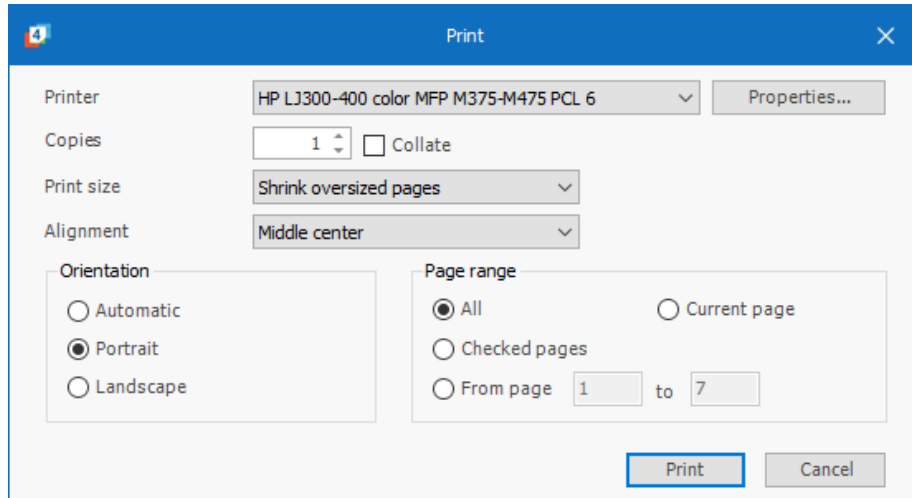
Open file after saving ☐

This option is made available in the Save Wizard by clicking on the Show advanced settings link.

This option when set will display each output file after it has been saved. It does not operate when saving to SharePoint.

## 7 Print

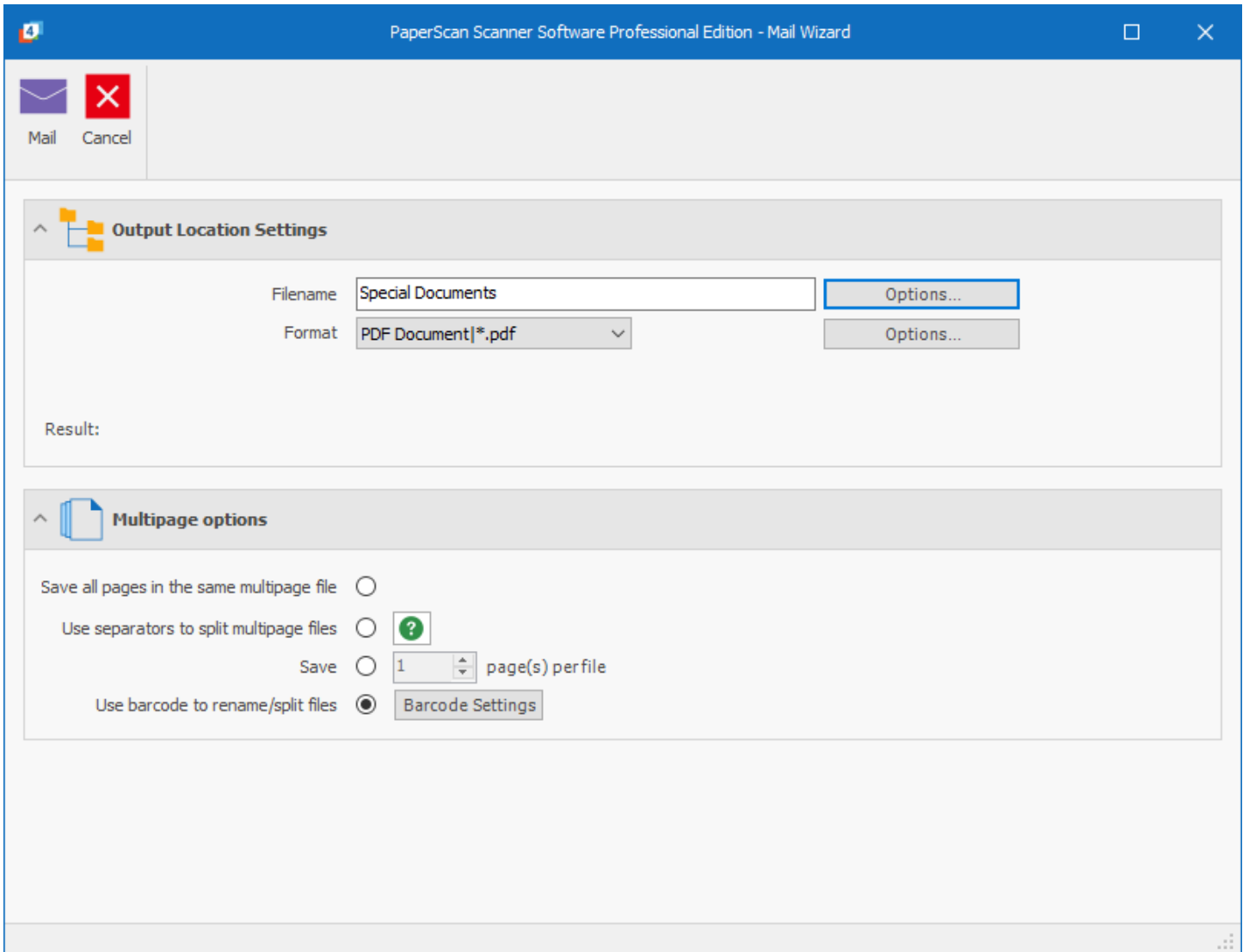
The selected page range can be printed by clicking on the Print button.



Setting	Description
Printer	Select the output printer. Use the Properties button to access the printer's settings.
Copies	Set number of copies to be printed and whether they are to be collated.
Print size	<ul style="list-style-type: none"> <li>Actual size</li> <li>Fit to page</li> <li>Shrink oversized pages</li> </ul>
Alignment	The image alignment on the page: <ul style="list-style-type: none"> <li>Middel left</li> <li>Middle right</li> <li>Middel center</li> <li>Default</li> <li>Top left</li> <li>Top right</li> <li>Top center</li> <li>Bottom let</li> <li>Bottom right</li> <li>Bottom center</li> </ul>
Orientation	Paper orientationn: <ul style="list-style-type: none"> <li>Automatic – identify each image orientation</li> <li>Portrait</li> <li>Landscape</li> </ul>
Page Range	The page range to be printed: <ul style="list-style-type: none"> <li>All</li> <li>Checked pages</li> <li>From page n to m – print all pages within the defined page range</li> <li>Current page</li> </ul>

## 8 Mail

Click on the Mail option to save the selected pages into one or more files and attach these files to a Microsoft Outlook email.



The screenshot shows the 'PaperScan Scanner Software Professional Edition - Mail Wizard' dialog box. At the top left, there are two buttons: 'Mail' (with an envelope icon) and 'Cancel' (with a red 'X' icon). Below these is a section titled 'Output Location Settings' with a folder icon. It contains a 'Filename' text box with 'Special Documents' and an 'Options...' button. Below that is a 'Format' dropdown menu set to 'PDF Document|\*.pdf' with another 'Options...' button. A 'Result:' label is below the format settings. The next section is 'Multipage options' with a document icon. It contains three radio button options: 'Save all pages in the same multipage file' (unselected), 'Use separators to split multipage files' (unselected, with a green question mark icon), and 'Save' (unselected, with a numeric spinner set to '1' and the text 'page(s) per file'). Below these is a radio button for 'Use barcode to rename/split files' (selected), with a 'Barcode Settings' button next to it.

The options are similar to those on the [Save action](#).

Click on the Mail button to create the files and add them to an Outlook email.

Note: If you run PaperScan using the “Run as Administrator” option, Outlook will refuse to allow a connection as it thinks there are two users (the normal user and the user as administrator) trying to access the Outlook mailbox at the same time. It is better to give the user the required permissions rather than elevate privileges for PaperScan in general.

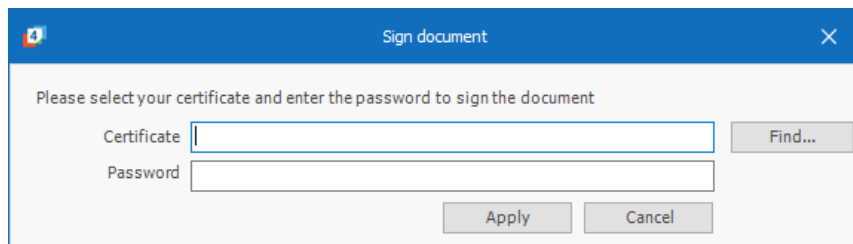


## 9 Sign

The Sign option allows the location of a digital signature place holder to be defined.

Click on Sign and draw the location of for the signature on the page. If a previous signature has been used for this profile, the previous text will be used to show a representation of the signature on the page.

The application will then ask for the file location of the certificate (\*.pfx file) and the certificate password.



Sign document

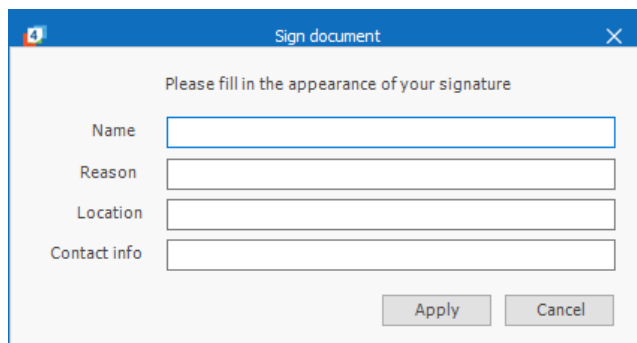
Please select your certificate and enter the password to sign the document

Certificate  Find...

Password

Apply Cancel

Once the certificate has been authenticated, the text content of the signature can be added:



Sign document

Please fill in the appearance of your signature

Name

Reason

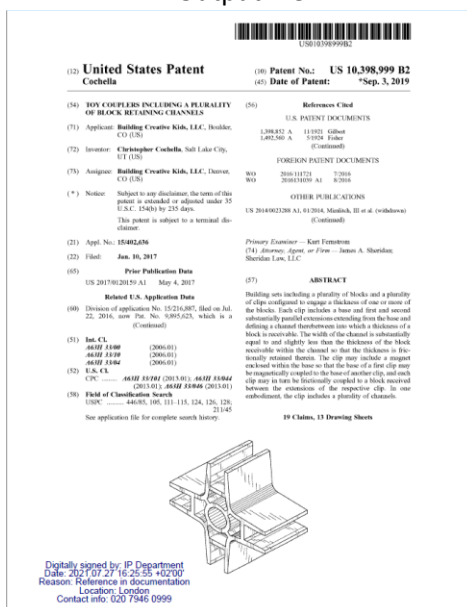
Location

Contact info

Apply Cancel

The signature will be applied with the current date when the document is Saved.

### Output file



United States Patent  
Cochella

(10) Patent No.: US 10,398,999 B2  
(45) Date of Patent: Sep. 3, 2019

(34) FOREIGN REFERENCES INCLUDING A DUALITY OF BLOCK RETAINING CHANNELS

(71) Applicant: Building Creative Kids, LLC, Boulder, CO (US)

(72) Inventor: Christopher Cochella, Salt Lake City, UT (US)

(73) Assignee: Building Creative Kids, LLC, Denver, CO (US)

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 225 days. This patent is subject to a terminal disclaimer.

(21) Appl. No.: 15/002,056

(22) Filed: Jan. 10, 2017

(51) Int. Cl. B65D 1/00 (2006.01); B65D 1/30 (2006.01); B65D 1/32 (2006.01); B65D 1/34 (2006.01); B65D 1/36 (2006.01); B65D 1/38 (2006.01); B65D 1/40 (2006.01); B65D 1/42 (2006.01); B65D 1/44 (2006.01); B65D 1/46 (2006.01); B65D 1/48 (2006.01); B65D 1/50 (2006.01); B65D 1/52 (2006.01); B65D 1/54 (2006.01); B65D 1/56 (2006.01); B65D 1/58 (2006.01); B65D 1/60 (2006.01); B65D 1/62 (2006.01); B65D 1/64 (2006.01); B65D 1/66 (2006.01); B65D 1/68 (2006.01); B65D 1/70 (2006.01); B65D 1/72 (2006.01); B65D 1/74 (2006.01); B65D 1/76 (2006.01); B65D 1/78 (2006.01); B65D 1/80 (2006.01); B65D 1/82 (2006.01); B65D 1/84 (2006.01); B65D 1/86 (2006.01); B65D 1/88 (2006.01); B65D 1/90 (2006.01); B65D 1/92 (2006.01); B65D 1/94 (2006.01); B65D 1/96 (2006.01); B65D 1/98 (2006.01); B65D 2/00 (2006.01); B65D 2/02 (2006.01); B65D 2/04 (2006.01); B65D 2/06 (2006.01); B65D 2/08 (2006.01); B65D 2/10 (2006.01); B65D 2/12 (2006.01); B65D 2/14 (2006.01); B65D 2/16 (2006.01); B65D 2/18 (2006.01); B65D 2/20 (2006.01); B65D 2/22 (2006.01); B65D 2/24 (2006.01); B65D 2/26 (2006.01); B65D 2/28 (2006.01); B65D 2/30 (2006.01); B65D 2/32 (2006.01); B65D 2/34 (2006.01); B65D 2/36 (2006.01); B65D 2/38 (2006.01); B65D 2/40 (2006.01); B65D 2/42 (2006.01); B65D 2/44 (2006.01); B65D 2/46 (2006.01); B65D 2/48 (2006.01); B65D 2/50 (2006.01); B65D 2/52 (2006.01); B65D 2/54 (2006.01); B65D 2/56 (2006.01); B65D 2/58 (2006.01); B65D 2/60 (2006.01); B65D 2/62 (2006.01); B65D 2/64 (2006.01); B65D 2/66 (2006.01); B65D 2/68 (2006.01); B65D 2/70 (2006.01); B65D 2/72 (2006.01); B65D 2/74 (2006.01); B65D 2/76 (2006.01); B65D 2/78 (2006.01); B65D 2/80 (2006.01); B65D 2/82 (2006.01); B65D 2/84 (2006.01); B65D 2/86 (2006.01); B65D 2/88 (2006.01); B65D 2/90 (2006.01); B65D 2/92 (2006.01); B65D 2/94 (2006.01); B65D 2/96 (2006.01); B65D 2/98 (2006.01); B65D 3/00 (2006.01); B65D 3/02 (2006.01); B65D 3/04 (2006.01); B65D 3/06 (2006.01); B65D 3/08 (2006.01); B65D 3/10 (2006.01); B65D 3/12 (2006.01); B65D 3/14 (2006.01); B65D 3/16 (2006.01); B65D 3/18 (2006.01); B65D 3/20 (2006.01); B65D 3/22 (2006.01); B65D 3/24 (2006.01); B65D 3/26 (2006.01); B65D 3/28 (2006.01); B65D 3/30 (2006.01); B65D 3/32 (2006.01); B65D 3/34 (2006.01); B65D 3/36 (2006.01); B65D 3/38 (2006.01); B65D 3/40 (2006.01); B65D 3/42 (2006.01); B65D 3/44 (2006.01); B65D 3/46 (2006.01); B65D 3/48 (2006.01); B65D 3/50 (2006.01); B65D 3/52 (2006.01); B65D 3/54 (2006.01); B65D 3/56 (2006.01); B65D 3/58 (2006.01); B65D 3/60 (2006.01); B65D 3/62 (2006.01); B65D 3/64 (2006.01); B65D 3/66 (2006.01); B65D 3/68 (2006.01); B65D 3/70 (2006.01); B65D 3/72 (2006.01); B65D 3/74 (2006.01); B65D 3/76 (2006.01); B65D 3/78 (2006.01); B65D 3/80 (2006.01); B65D 3/82 (2006.01); B65D 3/84 (2006.01); B65D 3/86 (2006.01); B65D 3/88 (2006.01); B65D 3/90 (2006.01); B65D 3/92 (2006.01); B65D 3/94 (2006.01); B65D 3/96 (2006.01); B65D 3/98 (2006.01); B65D 4/00 (2006.01); B65D 4/02 (2006.01); B65D 4/04 (2006.01); B65D 4/06 (2006.01); B65D 4/08 (2006.01); B65D 4/10 (2006.01); B65D 4/12 (2006.01); B65D 4/14 (2006.01); B65D 4/16 (2006.01); B65D 4/18 (2006.01); B65D 4/20 (2006.01); B65D 4/22 (2006.01); B65D 4/24 (2006.01); B65D 4/26 (2006.01); B65D 4/28 (2006.01); B65D 4/30 (2006.01); B65D 4/32 (2006.01); B65D 4/34 (2006.01); B65D 4/36 (2006.01); B65D 4/38 (2006.01); B65D 4/40 (2006.01); B65D 4/42 (2006.01); B65D 4/44 (2006.01); B65D 4/46 (2006.01); B65D 4/48 (2006.01); B65D 4/50 (2006.01); B65D 4/52 (2006.01); B65D 4/54 (2006.01); B65D 4/56 (2006.01); B65D 4/58 (2006.01); B65D 4/60 (2006.01); B65D 4/62 (2006.01); B65D 4/64 (2006.01); B65D 4/66 (2006.01); B65D 4/68 (2006.01); B65D 4/70 (2006.01); B65D 4/72 (2006.01); B65D 4/74 (2006.01); B65D 4/76 (2006.01); B65D 4/78 (2006.01); B65D 4/80 (2006.01); B65D 4/82 (2006.01); B65D 4/84 (2006.01); B65D 4/86 (2006.01); B65D 4/88 (2006.01); B65D 4/90 (2006.01); B65D 4/92 (2006.01); B65D 4/94 (2006.01); B65D 4/96 (2006.01); B65D 4/98 (2006.01); B65D 5/00 (2006.01); B65D 5/02 (2006.01); B65D 5/04 (2006.01); B65D 5/06 (2006.01); B65D 5/08 (2006.01); B65D 5/10 (2006.01); 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B65D 13/60 (2006.01); B65D 13/62 (2006.01); B65D 13/64 (2006.01); B65D 13/66 (2006.01); B65D 13/68 (2006.01); B65D 13/70 (2006.01); B65D 13/7

## 10 Profile Settings

PaperScan 4 extends the concepts and boosts the power of the profiles found in PaperScan 3.

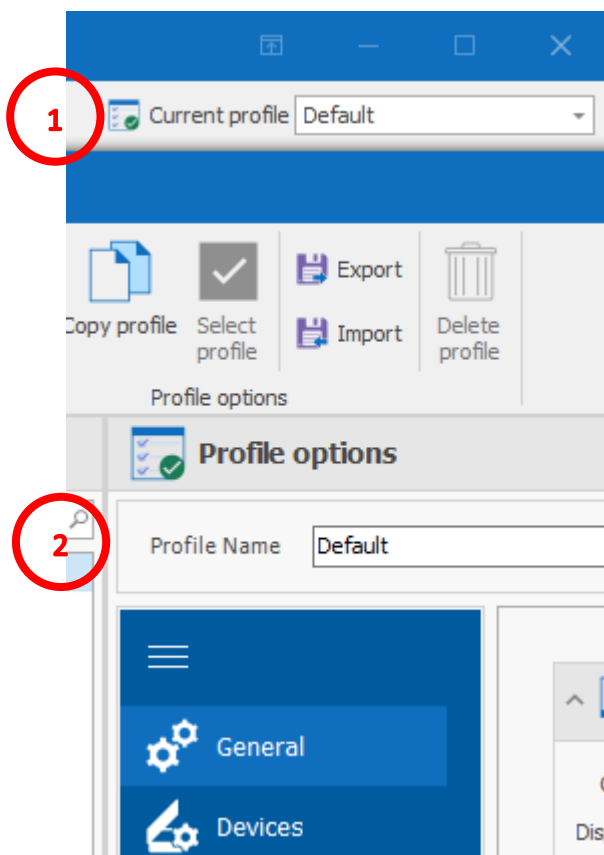
Each profile stores all the PaperScan settings for that profile, allowing a complete change in the settings for each profile.

Profiles can be:

- created from defaults
- copied (to allow the creation of profiles based on common settings)
- Exported for use on other machines (or by other users on the same machine)
- Imported (from other machines or other users on the same machine).

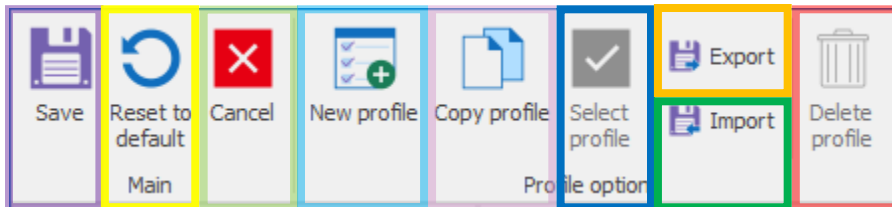
Each profile is user specific (so users who share the same machine but with different logins do not change the other user's settings).

Please note there is the “selected” profile, which is the profile currently selected in the application (labelled 1 below) and the “current” profile (labelled 2 below), which is the profile currently being edited.



Be aware that if you create a new profile or change the “current” profile and save the changes, if you click on the Options button again it will be the “selected” profile that will be displayed.

## 10.1 Actions



### 10.1.1 Save

Save current profile and close form.

### 10.1.2 Reset to default

Reset to default values.

### 10.1.3 Cancel

Abandon unsaved changes and close form.

### 10.1.4 New

Create a new blank profile with defaults. Choose a name for the profile and then edit as required.

### 10.1.5 Copy

Copy the current profile. Choose a name for the profile and then edit as required.

### 10.1.6 Select

Set current profile as the selected profile. All operations will make use of the selected profile.

### 10.1.7 Export

Export a profile to a file. This allows a profile and its settings to be backed up or shared (see Import below).

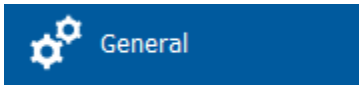
### 10.1.8 Import

Import a previously exported profile (see Export above).

### 10.1.9 Delete

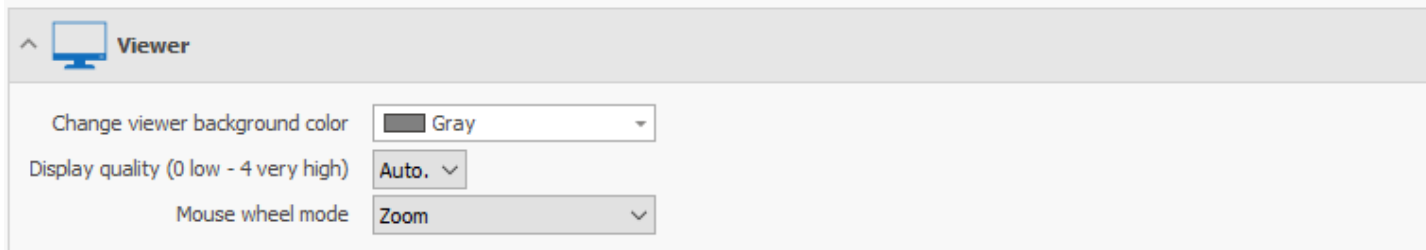
Delete a profile.

## 10.2 General



In the General tab of the Settings menu, you can control the viewer, measurement units, display language, notifications, annotations and AutoSave options

### 10.2.1 Viewer



Setting	Description
Change viewer background color	Choose from a range of background colors
Display quality	Change the display quality 0: low to 4: high or automatic
Mouse wheel mode	Set the action performed by the mouse wheel: <ul style="list-style-type: none"> <li>• Disabled</li> <li>• Zoom</li> <li>• Vertical scroll</li> <li>• Page change</li> </ul>

### 10.2.2 Unit




Set the measurement units displayed by the application.

### 10.2.3 Language



Choose the language used on the display. PaperScan is translated into 30+ languages

## 10.2.4 Notifications


**Notifications**

☒ Automatically check for available updates  
☐ Disable warning and notification dialogs  
☐ Hide processing on all pages confirmation message

Setting	Description
Automatically check for updates	Check for updated version of PaperScan
Disable warning and notification dialogs	Do not display warning and notification dialogs
Hide processing on all pages confirmation message	Image processing actions can work on all pages or just selected pages. This option will hide (not display) the <a href="#">confirmation message</a> .

## 10.2.5 Annotations



**Annotations**

☒ Enable automatic display of the annotation properties window.

When displaying the Annotations, this setting controls whether the selected annotation's Properties window is displayed automatically, or has to be selected.

## 10.2.6 Session Autosave

The Session Autosave allows the automated saving of the last import or scanned session while you are working on the images. This session will be automatically loaded into PaperScan upon reopening the application.


**Session Autosave**

Enable autosave ☒

Autosave location

Setting	Description
Enable autosave	Enable the autosave feature (requires a valid autosave location)
Autosave location	Full filepath (excluding filename) to the folder to contain the saved images


### 10.3 Devices




See the [Scan Wizard](#) above, the options are the same.

### 10.4 Import



 Colors

☐ Enable ICM

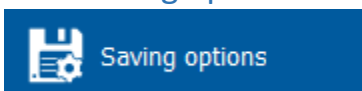
 Import Resolution

Import resolution (DPI)

**Enable ICM:** (Image Color Management) the integration of the imported images into the color space of a document is different if the image has an embedded profile.

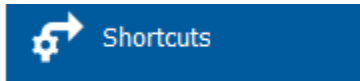
**Import resolution (DPI):** defines the resolution to use to convert file data to raster format. The suggested value is 200.

### 10.5 Saving options

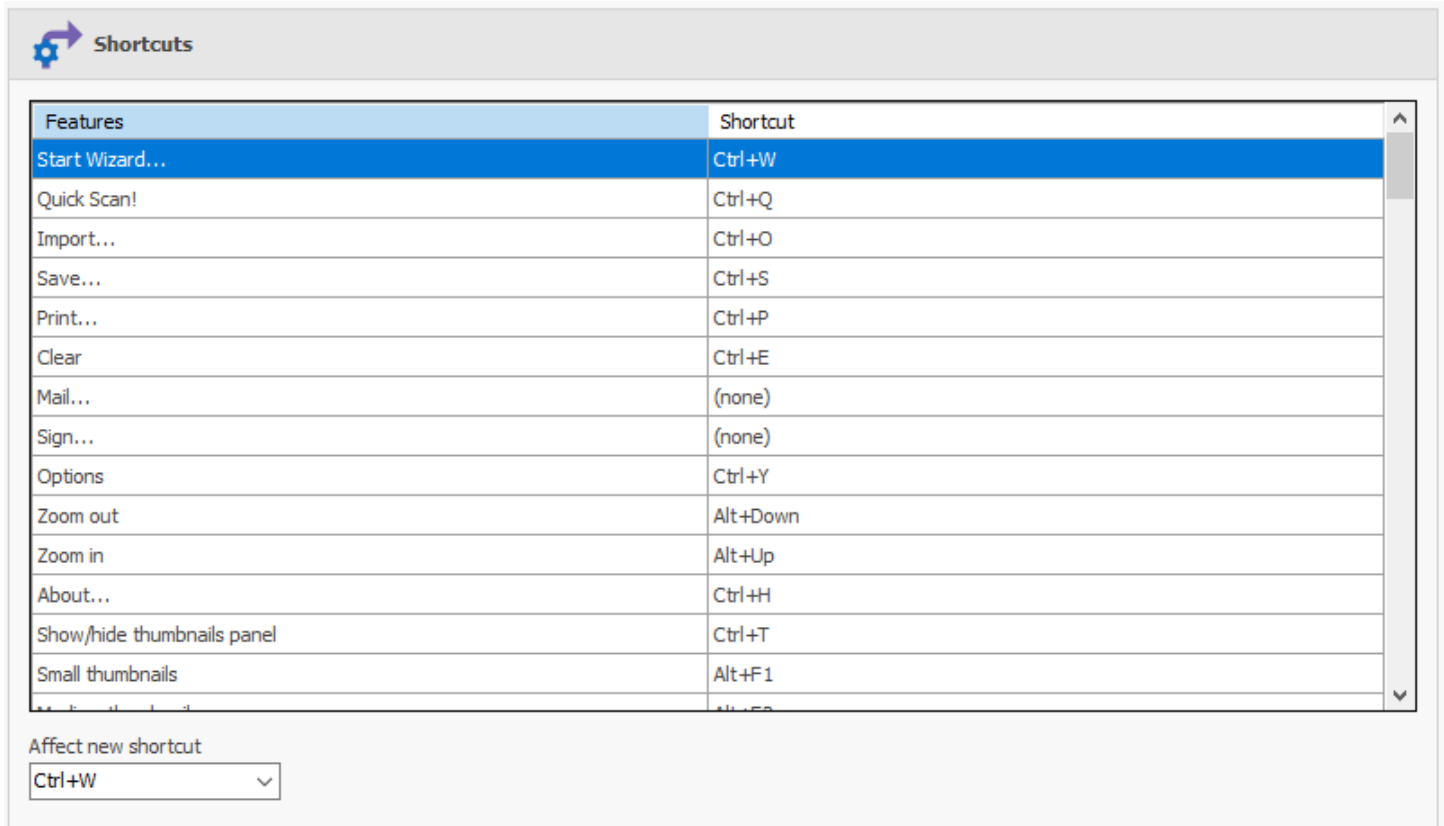


See the [Save Wizard](#), the options are the same.

## 10.6 Shortcuts



The Shortcut tab allows the assigning of key combinations to most of the actions in PaperScan.



The screenshot shows the 'Shortcuts' dialog box in PaperScan. It features a table with two columns: 'Features' and 'Shortcut'. The 'Start Wizard...' feature is highlighted in blue and assigned the shortcut 'Ctrl+W'. Other features include 'Quick Scan!' (Ctrl+Q), 'Import...' (Ctrl+O), 'Save...' (Ctrl+S), 'Print...' (Ctrl+P), 'Clear' (Ctrl+E), 'Mail...' (none), 'Sign...' (none), 'Options' (Ctrl+Y), 'Zoom out' (Alt+Down), 'Zoom in' (Alt+Up), 'About...' (Ctrl+H), 'Show/hide thumbnails panel' (Ctrl+T), and 'Small thumbnails' (Alt+F1). At the bottom, there is a section labeled 'Affect new shortcut' with a dropdown menu currently showing 'Ctrl+W'.

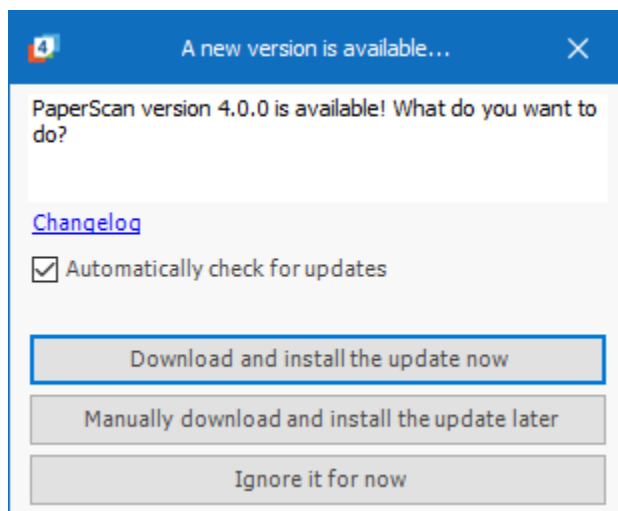
Features	Shortcut
Start Wizard...	Ctrl+W
Quick Scan!	Ctrl+Q
Import...	Ctrl+O
Save...	Ctrl+S
Print...	Ctrl+P
Clear	Ctrl+E
Mail...	(none)
Sign...	(none)
Options	Ctrl+Y
Zoom out	Alt+Down
Zoom in	Alt+Up
About...	Ctrl+H
Show/hide thumbnails panel	Ctrl+T
Small thumbnails	Alt+F1

Affect new shortcut  
Ctrl+W

Select the shortcut in the box at the bottom, then select the feature you want assign to the short cut.

## 11 Software Update

You can download the update from either the Download page or by clicking on the *Software Update* in the *General* tab. **PaperScan** will remember your commercial key, so you won't have to re-enter it again for registration, even if your current version needs to be uninstalled before installing the new one.



This pop-up window means that our technical team has just released a minor update. All our minor updates are free (see our EULA at <https://paperscan.orpalis.com/eula/>).

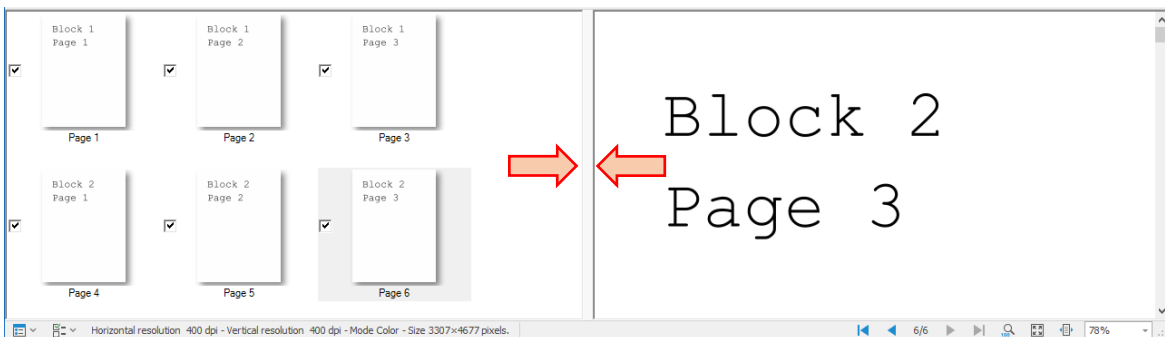


## 12 Thumbnails

The thumbnail bar displays a selection of the images scanned/loaded.

Each page has a tick box and page number. Only ticked files are saved .

The size of the Thumbnail bar can be altered by moving the grip bar, or the bar can be [hidden](#) via the toolbar at the bottom of the form. The layout of the thumbnails changes dependent on the selected thumbnail size and the width of the Thumbnail bar.

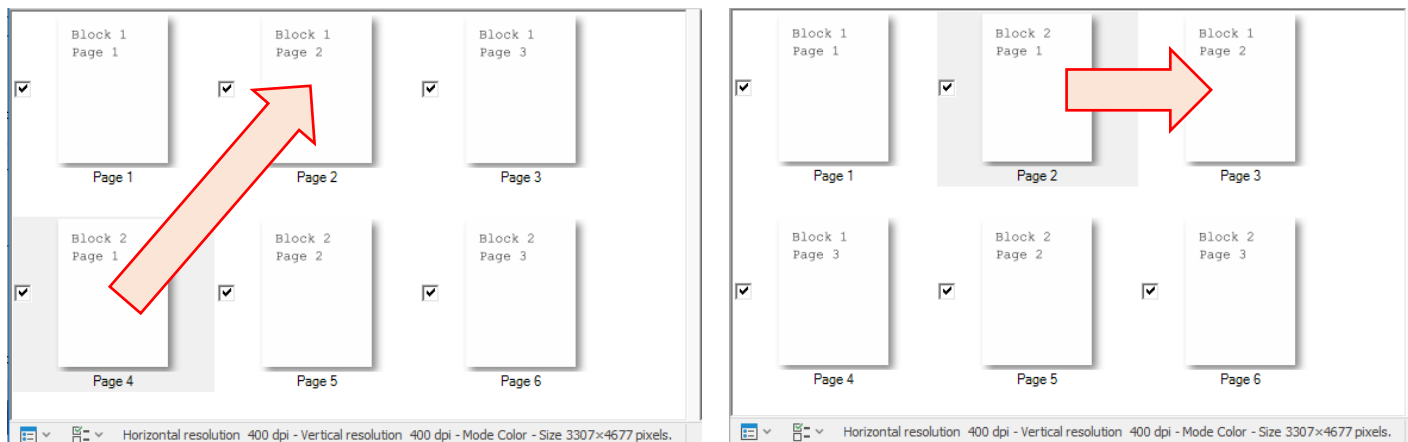


### 12.1 Reordering pages

The thumbnails can also be used to re-order the the pages (in addition to the [Edit operations](#) mentioned earlier).

Ensure the source and target location are visible on the Thumbnail bar. It is possible to change the size of the thumbnails and the size of the thumbnail bar.

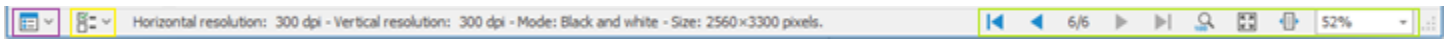
Click on the file thumbnail or thumbnails to move, then drag and drop it over the location.



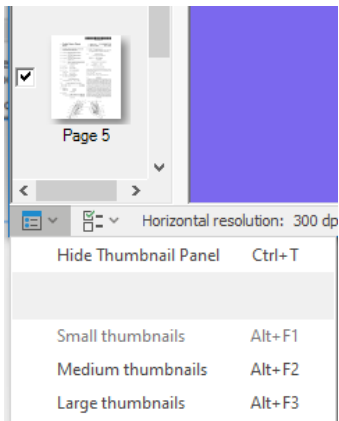
The new file is moved, and the file previously in the location is moved down.

## 13 Useful Toolbar

At the bottom of the application there is a toolbar. This displays information about the current displayed page including resolution, color mode and size. There are also controls for [thumbnail size](#), [page selection](#), [page navigation](#) and [zoom](#).



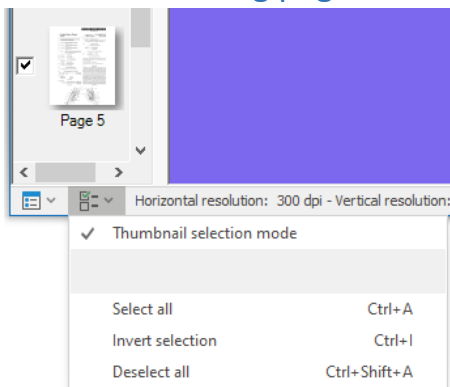
### a. Thumbnail size



You can change the size the thumbnails of your pages display on the left and you can even remove it to have more workspace when editing.

You can also change the thumbnail panel size by dragging it across the screen.

### b. Selecting pages



This allows you to select or deselect all pages or invert your current selection.

### c. Automatic and manual zooming plus page navigation



The page navigation allows you to go to the first, previous, next and last page.

There are also options to make your page automatically fit the window display size or width, set the zoom to a specific percentage, and return it to 100%.

## 14 Additional information

### 14.1 Download TWAIN drivers

Please note that modern operating systems automatically source and install drivers when new hardware devices like scanners are plugged into a system. In many cases these drivers work fine for most uses of these devices. When checked in the Device Manager, Windows often considers these drivers as sufficient and would display no need to change or update.

For optimal performance with PaperScan, we strongly recommend that you download the complete driver software directly from the scanner manufacturer. This will ensure the latest version of the TWAIN drivers, which PaperScan relies upon, are installed on your PC.

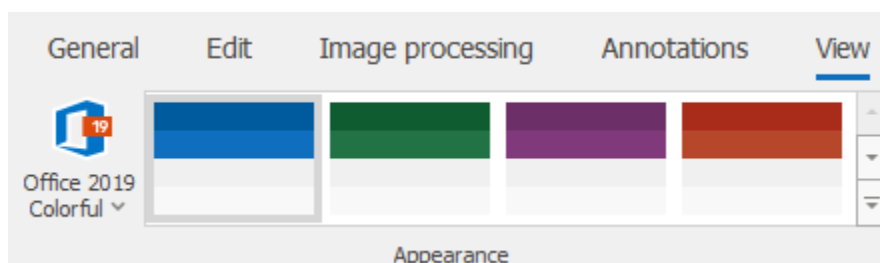
You will need to restart your computer to apply the new drivers you've just installed.

Ensure that your device is connected to your PC to proceed.

You may need to also check your antivirus and/or firewall and add some exception rules if the acquisition does not work.

### 14.2 View and Themes

The View tab allows the user to choose the general theme for the display.



There are a large number of themes, and for most of them there are additional color options.

### 14.3 Comparison Matrix

The Professional edition has additional features beyond those offered by the Home edition.

Features	Home	Professional
Batch TWAIN & WIA scanning/import limitation.	Unlimited	Unlimited
Import 100+ document formats.	Yes	Yes
Save as single page DOCX, PDF, PDF/A, TIFF, JPEG, JPEG 2000, PNG, JBIG2.	Yes	Yes
Save as multipage TIFF, JBIG2, DOCX, PDF and PDF/A.	Yes	Yes
Auto-deskew, rotation, border removal, hole punch removal, negative: post processing mode.	Yes	Yes
Color adjustment, color space conversion, effects, filters, crop and more...	Yes	Yes
Automatic color detection.	Yes	Yes
PDF Encryption & Fast Web View mode support (read & write).	Yes	Yes
Flatbed & document feeder support.	Yes	Yes
Duplex scanning support.	Yes	Yes
Profile manager to create, remove and switch configuration settings.	Yes	Yes
Custom keyboard shortcuts management.	Yes	Yes
Auto-Save imported/scanned images	Yes	Yes
Technical support.	Yes	Yes
Separator sheets support for separating scanned documents.	No	Yes
Bar Code processing	No	Yes
Send as email in Outlook.	No	Yes
Save as PDF-OCR (more than 60 languages supported).	No	Yes
Digital signature.	No	Yes
Batch processing (auto-deskew, rotation, border removal, hole punch removal, negative).	No	Yes
Automatic blank page removal.	No	Yes
SharePoint upload	No	Yes
Optimizing PDF documents by enabling MRC compression techniques (Hyper Compression).	No	Yes
Annotations support with a featured custom annotation pre-set designer.	No	Yes

## 14.4 Troubleshooting

### 14.4.1 Scanning

If you encounter a TWAIN acquisition problem with a device (scanner, digital camera or capture card), please follow these steps.

1. Check you are using the latest version of the PaperScan Edition by visiting:  
<https://paperscan.orpalis.com/history/>
2. Check you are using the latest TWAIN driver's version of your device.
3. If your device can be controlled by both WIA bridge from Microsoft & the TWAIN driver of the supplier, you have to use the TWAIN driver (else you will have problems to control the document feeder).
4. Try another TWAIN Data Source Manager. Go to Profile Settings/Devices/TWAIN options and select a data Source Manager from the drop down. Save your changes.

If the problem persists log a ticket here: <https://orpalis.zendesk.com/hc/en-us/requests/new>

Please provide details of your scanner (with an exact device reference) and the TWAIN driver (including version).

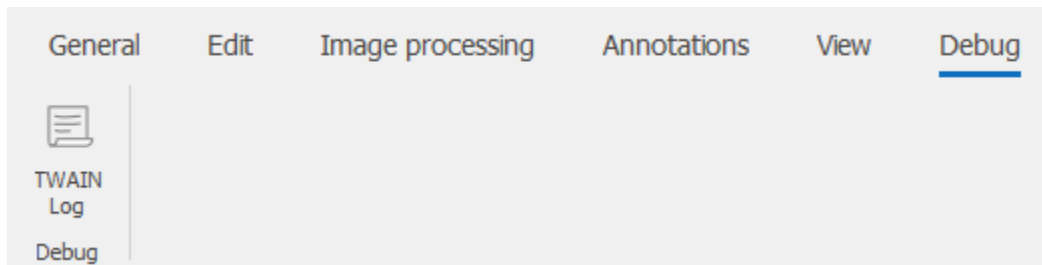
Please also state the version of Windows you are using.

It will assist us if you can provide us with the PaperScan log and the Twain Data Source Manager log. See below for details on how to obtain them.

#### Debug Mode

PaperScan has a Debug mode which writes information about the processing to a log.

To activate Debug mode, go to the General tab and press CTRL-D. This will display the Debug tab.



Click on the TWAIN log button and select a location and a name for the log file.

#### Data Source Manager log

The Twain Data Source Manager log is activated by setting a user variable TWAINDSM\_LOG to the value of the file path to the log file.

Search for Environment Variable in the Task Bar search box. In the form select the Advanced Tab and click on the Environment Variable button.

Add a new user variable called TWAINDSM\_LOG with a value of %temp%\twain2.log.

This will log the DSM's actions to a file called twain2.log in the user's AppData/Local/Temp folder.



For details of the history of PaperScan including changes see:  
<https://paperscan.orpalis.com/history/>

We thank you for trusting our software.



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