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# BarcodeOCR Dokumentation 4.16.3.1

## BarcodeOCR is a tool for automatic file processing and barcode recognition.

With this software, scanned documents can be monitored for a barcode and then renamed as appropriate, separated for further processing and saved in another application.

BarcodeOCR monitors folders on the local PC or in the network. If new files go into these input folders they are automatically processed. How documents are to be processed is defined only once in one or more configurations. Processing includes differentiating them by barcode type and content, input folder and output folder, separating document stacks and naming output files.

Once the configuration has been created, the software runs automatically in the background as a Windows service, without any further intervention.



## Einführung

### BarcodeOCR is a tool for automatic file processing and barcode recognition.

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## Supported Barcodes

### 1D-Barcodes

- Code 11
- Code 39
- Code 93
- Code 128
- Inter 2 of 5
- Codabar
- Patchcode
- Code 39 Extended
- EAN 8
- EAN 13
- UPC-A
- UPC-E
- Add 2
- Add 5
- Pharmacode

### Postal Barcodes

- PostNet
- RM4SCC
- Planet
- Australia Post
- Intelligent Mail

### 2D-Barcodes

- PDF 417
- Data Matrix
- QR Code
- Micro QR

## Supported operating systems

BarcodeOCR runs on all Windows versions from Windows 7 upwards or respectively Windows Server 2008, in each case on 32 Bit and 64 Bit systems.

## Supported file formats

PDF (automatic page separation possible), BMP, TIF, JPG und PNG

Note: Only single-page TIF-Images can be processed

## Installation und Einrichtung

The current version of BarcodeOCR is available at the [download area](#). Here you will find older versions as well as the current version.

### Installation

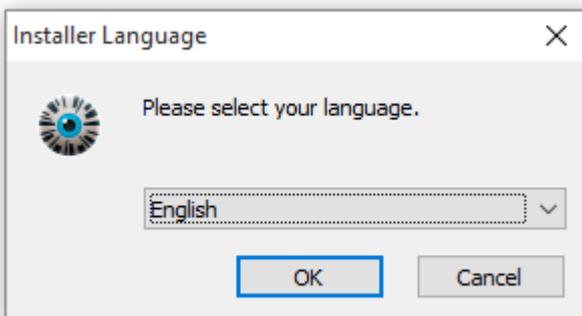
The current version of BarcodeOCR is available at the [download area](#). Here you will find older versions as well as the current version.

Insert your serial number into the field on the download area, to download the latest version available for your license.

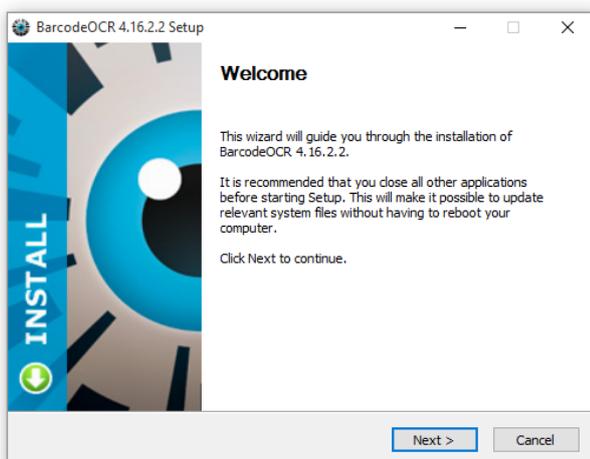
### Installation

The installation requires elevated rights to create a windows service.

- Start the installation by double-clicking the setup
- Select the desired language



- Follow the instructions provided by the setup wizard to complete the installation.



## BarcodeOCR testen

You can operate BarcodeOCR for a 30 day trial period for free. During this period the registration wizard will appear each time the application is launched.

The entire range of functions of BarcodeOCR is available in this period. Once the test period has expired the application can no longer be started. It can then only be activated by entering a valid serial number.

The remaining days of your test period can be seen within the application in the bottom-left corner.

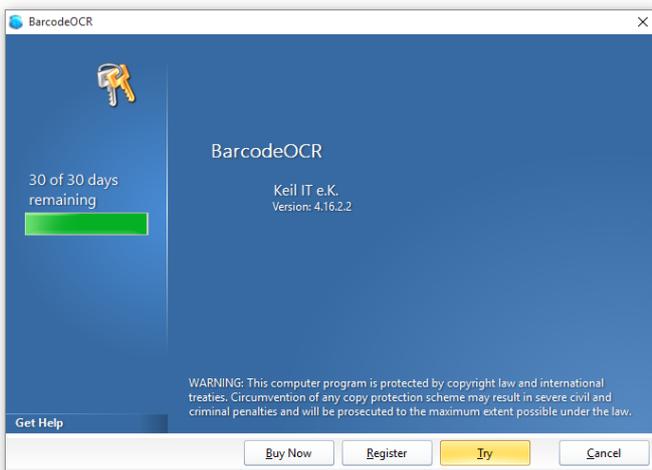
BarcodeOCR will not leave a watermark while in test mode so the processed documents can be used productively.

## Aktivierung der Lizenz

### Registration and activation with an internet connection

Registration with an internet connection is the quickest and easiest way to get your copy of BarcodeOCR up and running.

- Start the application to show the registration wizard.



- Click on "Register" and enter your name, an organisation (optional) as well as your serial number. Your serial number generally starts with "BAR" or "STD"



- By clicking "Register" the software will be activated on the PC. After successful activation you can use the software with the range of functions that you have purchased.

#### Note

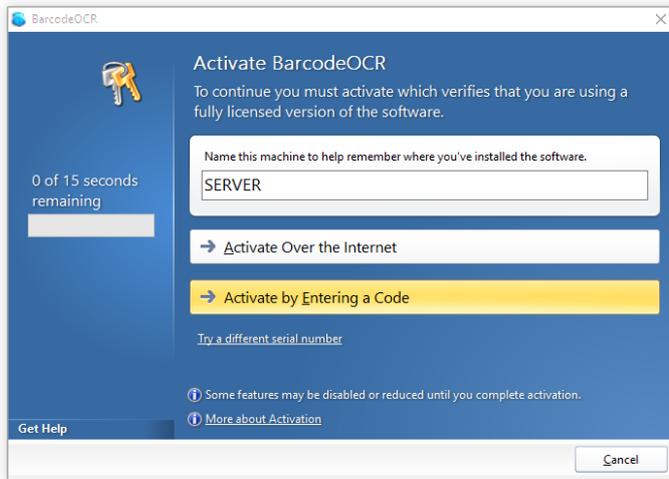
During activation a connection to the license server is established, so the serial number can be validated. For activation, the data entered in the registration wizard and a unique key calculated from the PC's hardware are transmitted. Apart from this, no data or other information is collected or transferred from your PC.

Make sure that the PC is connected to the internet and the connection of BarcodeOCR isn't being blocked by a firewall or proxy server.

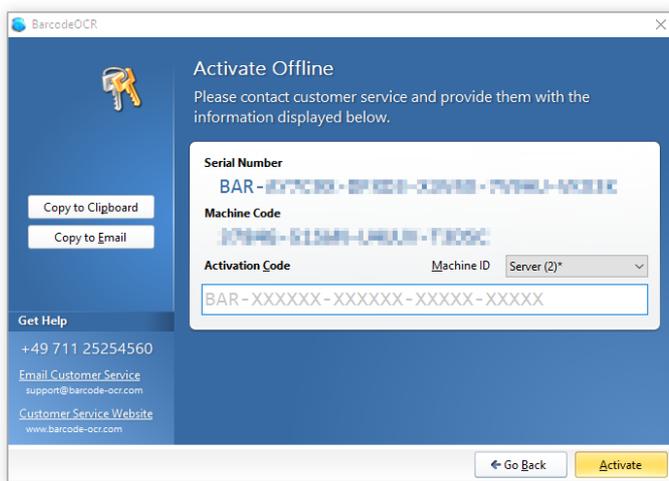
## Registration and activation without an internet connection

If the PC that you want to run BarcodeOCR on does not have an internet connection, you must activate the software manually. This must be done in addition to the registration steps described above.

- If automatic activation via the internet is not possible this window will appear:



- Please enter a name for the PC. If you were only temporarily without an internet connection you can now try to activate the software online again. Otherwise start the manual activation by clicking on "Activate manually". The following window will display your unique machine key



- Press the "Copy to Clipboard" button to copy all relevant data and send the copied data to the BarcodeOCR support via Mail. You will generally receive your activation code within 24 hours. Please enter this code in the appropriate field to activate your licence.

### Note

You can abort the process and continue at another time. The unique machine key is bound to your PC and will not change after repeated invocation of the activation wizard.

## Einrichtung im Netzwerk

To access and process files on network folders, it is necessary to grant the BarcodeOCR service the necessary rights for the affected folder. Read and write access is required.

The service requires the credentials of an account with read and write access to the network folder listed within the configuration.

To grant access to the service.:

1. Open the *Control Panel*
2. Press *Administrative Tools*

3. Press *Services*
4. Look for the BarcodeOCR service
5. Right-Click the entry and open *go to details*
6. Open the *Log On* tab
7. Set the option *This Account* and click *Browse*
8. Enter the account credentials of a user with sufficient rights and confirm the password by reentering it
9. Press *OK*
10. Confirm the hint by pressing *OK* and restart the BarcodeOCR service

## Updates

If you have an active maintenance subscription, you are warranted for the latest updates and can download the latest updates from the BarcodeOCR website.

## Preparation

- Backup your current configuration by exporting them (see [Configurations](#) for more information)
- Download the latest release of BarcodeOCR for your license (for a list of changes see the [Release Notes](#))

## Updating

1. Start the Installer and follow the steps
2. Start BarcodeOCR
3. Start the BarcodeOCR service, if not already started (the BarcodeOCR logo will color to green)
4. Check the error log for any entries
  - a. If you receive an error regarding missing permissions, please configure BarcodeOCR for network usage: [Configuration within a network](#)

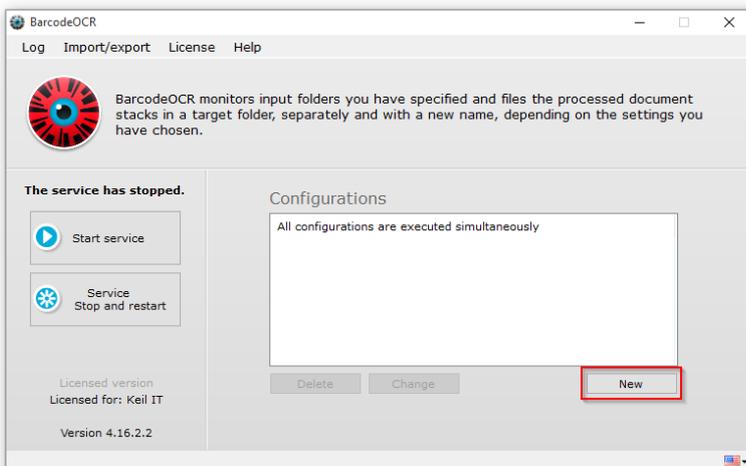
If an error occurs or if the documents won't be processed the usual way, please check if there is already a solution for your problem. If not, please contact the support.

## Die erste Arbeitsanweisung

BarcodeOCR is a Windows service which works in the background and constantly monitors predefined folders. For configuration purposes the application needs to be launched from the Desktop or through the shortcut from within the start menu. The user interface displays the current state of the service - through the text on the left as well as through the colour of the Logo:

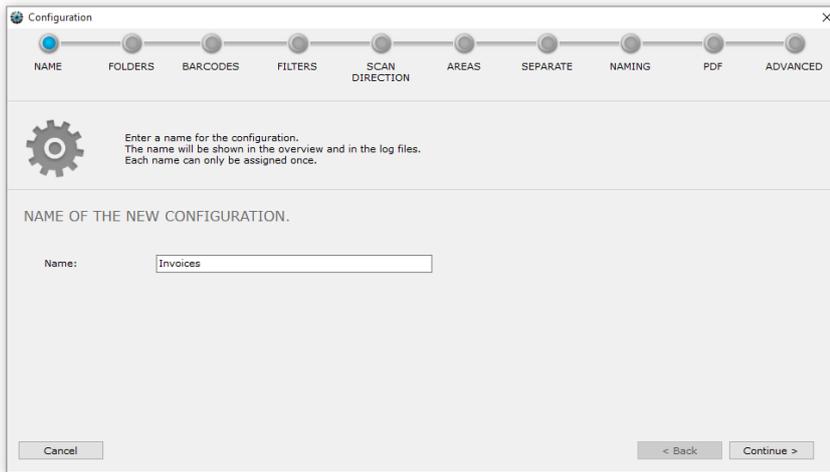
Colour	Description
red	The service stopped. Files are not being processed
yellow	The service is launching or stopping
green	The service is running and responds to new files, that are being put into the input folder

Inside the right side of the user interface, the configurations are listed with which the BarcodeOCR service monitors folders and processes files. Create your first configuration by pressing "New".



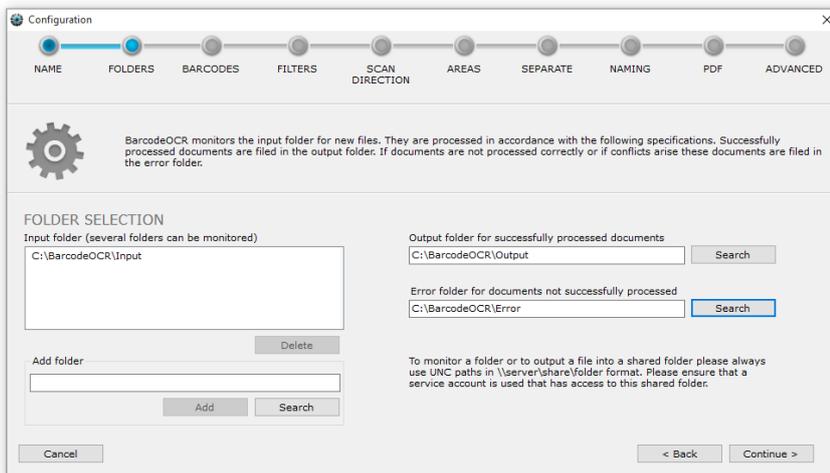
## Name der Arbeitsanweisung

The first step of the wizard will be the assignment of a name for the configuration. The name of the configuration only serves description purposes, to be able to differentiate between multiple configurations.



## Order

BarcodeOCR monitors a single or multiple folders per configuration for incoming files. Those folders are so called "input folders". It is usually the output folder of a scanner or other folders, where documents are being regularly stored at.



Specify an input folder and then click on "Add", or click on "Search" and navigate to a local folder. Selected input folders will be added to the list and can be removed again by pressing "Delete".

Similarly to the input folder, enter an output folder for successfully processed files and an error folder for unsuccessfully processed files.

### Networkfolder

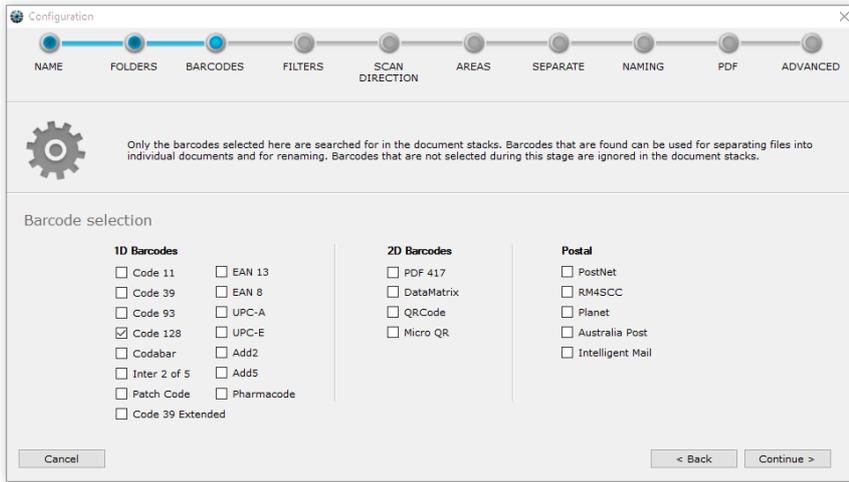
Please remember that shared folders must be specified via a UNC path. System inherent, mapped drives are not available to windows services. Generally before using network folders, the default service account used for the BarcodeOCR service has to be changed, since the local system account has insufficient rights to access network folders. For support on changing the user, please refer to our support page [Configuration within a network](#).

Successfully processed files are deposited in the output folder. This folder is usually the input folder of a company system that uses the files processed by BarcodeOCR, for example an inventory control system, ERP system, document management or archiving software.

Files that could not be processed by BarcodeOCR are stored in the error folder. This happens, in particular, if a barcode was not recognised or successful processing would create a name conflict.

## Auswählen des Barcodes

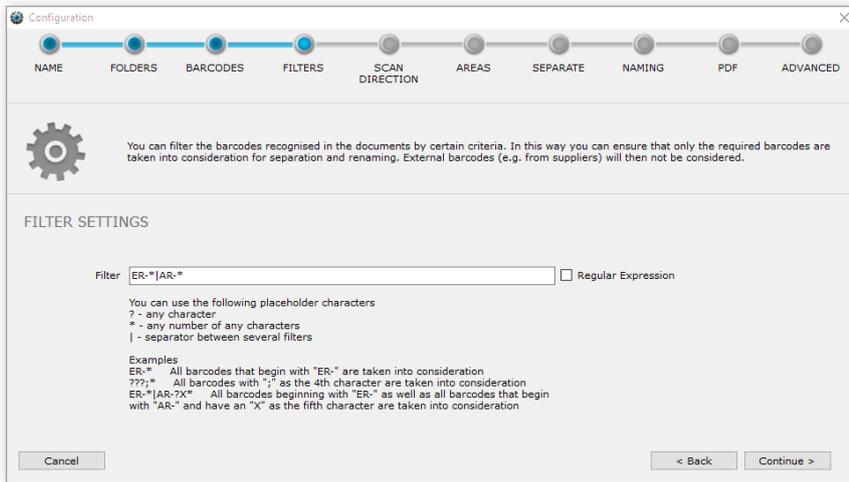
BarcodeOCR recognizes a variety of different barcode types. In this step, you specify the type of barcodes you wish BarcodeOCR to search for in a processed document.



Each selected barcode type requires additional time during processing. Hence only select barcode types, that are actually expected within a processed document.

## Optional: Filter

You can filter barcodes recognized in the document by certain criteria. This way you can ensure that only required barcodes are taken into consideration for separation and renaming. External barcodes (e.g. from suppliers) will then not be considered.



You can use the following placeholders to generate the filter screen:

Placeholder	Description
?	Any single character
*	Any number of characters
	Separator, for specifying several filters one after the other

## Examples for simple filter

Filter	Description
ER-*	Takes into account all barcodes containing information beginning with "ER-".
???*	Takes into account all barcodes containing information with a ";" as the fourth character.
????????	Takes into account all barcodes containing information with a length of eight characters.
AR-* *2011	Takes into account all barcodes that begin with "AR-" <b>as well as</b> all barcodes that end with "2011".

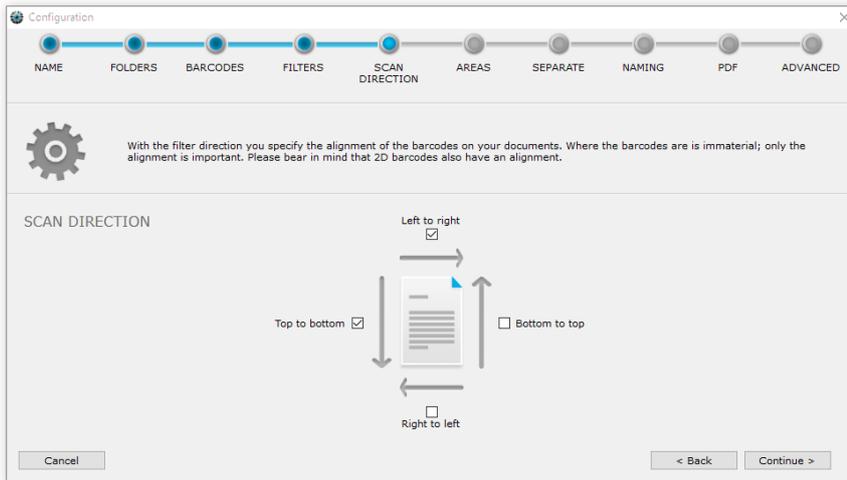
It is possible to extend the functionality and use regular expressions to match barcode values. To activate Regular Expressions, tick the corresponding box. The characters used for simple filtering will be ignored. You have to either use a simple filter or a Regular Expression. Combining the two methods is not possible.

## Example for filter as regular expressions

Filter	Description
<code>\A\p{L}{6}\d{8}</code>	Takes into account all barcodes containing information starting with six characters followed by eight numerals.
<code>\A\d{8}</code>	Takes into account all barcodes containing information with a length of eight characters.
<code>\AER-\d{8}</code>	Takes into account all barcodes containing information starting with "ER-" followed by eight numerals.

## Auswählen der Scanrichtung

Select the direction in which BarcodeOCR is to look for barcodes in the document. The scan direction corresponds to the alignment of the barcode. Selecting the way the barcodes are arranged, speeds up the processing time as well as decreasing the fault rate.



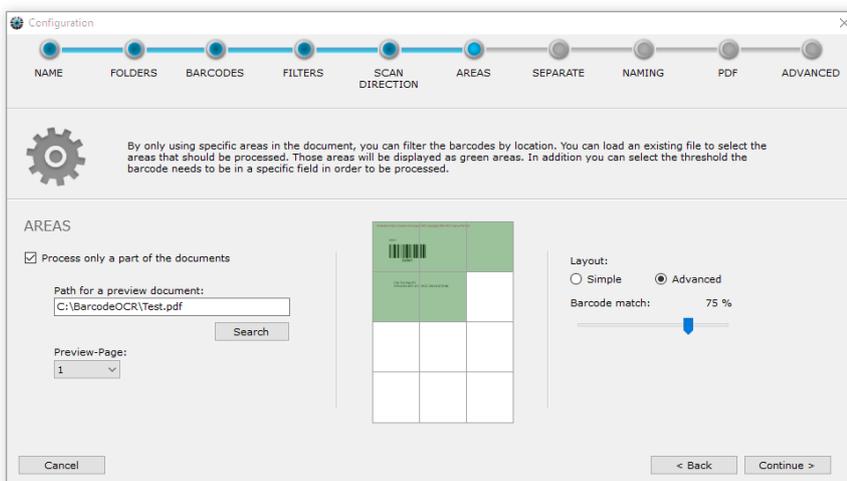
In this example, barcodes that are printed from "left to right" (normal horizontal reading direction) are taken into account, and so are barcodes printed from "top to bottom".

Consider that even some 2D barcodes has a set orientation!

When no orientation is known, temporarily activate all directions to make sure your configuration is working as expected and step by step remove directions to discover the needed orientation of the used barcode type.

## Optional: Festlegen von Bereichen

Additional filtering apart from barcode type, contents and orientation can be implemented by including or excluding predefined scan areas on the documents.



This function can be enabled by ticking the "Process only a part of the document" box. To simplify the definition of the area, you are able to select a representative preview document.

1. Press Search

2. Select a file from your scan folder, which will be processed via BarcodeOCR later on
3. Select a specific page from the document
4. Mark one or more scan areas which contain the barcodes you'd like to recognize

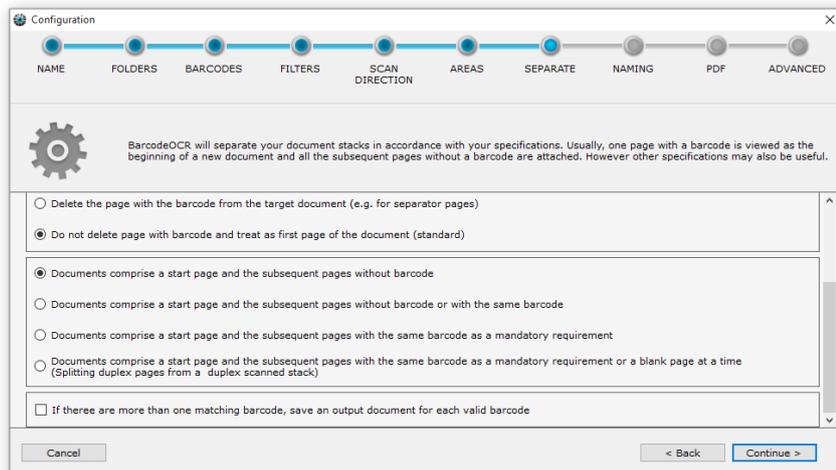
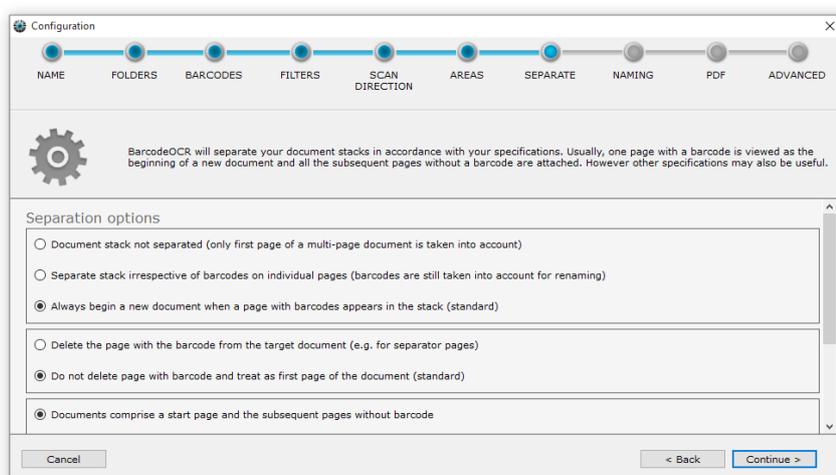
Only barcodes within the green area will be processed. Barcodes inside the white areas will be ignored. The slider on the right enables you to set a recognition percentage ratio. Meaning, if the barcode happens to be between a green and a white area, this ratio will determine, if the barcode will be processed.

- If you set a 50% ratio, at least half of the barcode must be within a green area.
- If you set a 100% ratio, the whole barcode must be contained within a green area to be processed further.

You can choose between a simple layout pattern (2x2 blocks) or a advanced layout pattern (3x4 blocks, respectively 3x3 blocks) for a more refined area selection.

## Trennoptionen

A essential function of BarcodeOCR apart from recognizing barcodes, is the ability to split huge document stacks and create separate smaller documents. Recognized barcodes are used as marks to split the document stack. This step will determine how BarcodeOCR is to split the document stack and save the separated documents.



The split options are grouped into different levels, to customize the splitting process according to your needs.

### Selection of the splitting behavior

Split option	Description	Typical example
Do not separate document stack	<ul style="list-style-type: none"> <li>• Only the first page of a multi-page document is taken into account</li> <li>• The document is not divided up into individual pages</li> </ul>	Renaming single paged receipts

Separate stack irrespective of barcodes on individual pages	<ul style="list-style-type: none"> <li>• A multi-page document is divided up into individual documents of one page each, irrespective of barcodes</li> <li>• The individual documents are renamed on the basis of the barcode later on, however</li> </ul>	Multiple single paged receipts are scanned as stack (regardless if it contains a barcode)
Always begin a new document when a page with barcodes appears in the stack	<ul style="list-style-type: none"> <li>• Each page in a multi-page document that has a barcode is viewed as the beginning of a new document (exceptions are defined afterwards)</li> </ul>	Processing of a document stack with varying output page counts

### Selection of the splitting process

Selecting one of the following options is only possible, if the previous option *Always begin a new document when a page with barcodes appears in the stack* was selected.

Option	Description	Typical example
Delete the page with the barcode from the target document	<ul style="list-style-type: none"> <li>• If your documents do not have any barcodes, you can place separator pages with a barcode between the documents before scanning them</li> <li>• If you select this option, the page with the barcode is viewed as a separator page and is not included in the target document</li> </ul>	Preprinted separator sheets are put between documents inside the stack
Do not delete page with barcode and treat as first page of the document	<ul style="list-style-type: none"> <li>• If you select this option, the page with the barcode is viewed as a separator page and is not included in the target document</li> </ul>	The barcode is contained on the first page of every new output file. (i.e. Invoices)

### Selection of the stack type

Selecting one of the following options is only possible, if the previous option *Always begin a new document when a page with barcodes appears in the stack* was selected.

Option	Description	Typical example
Documents comprise a start page with barcode and the subsequent pages without barcode	<ul style="list-style-type: none"> <li>• A page with a barcode in the document stack marks the beginning of a new document</li> <li>• All subsequent pages on which no barcodes are found are attached to this page</li> <li>• The first subsequent page with a different barcode marks the beginning of the next document</li> </ul>	A multi paged invoice has a single unique barcode on the first page
Documents comprise a start page with barcode and the subsequent pages without barcode or with the same barcode	<ul style="list-style-type: none"> <li>• A page with a barcode in the document stack marks the beginning of a new document</li> <li>• All subsequent pages on which no barcodes are found or that have the same barcode as the start page are attached to this page</li> <li>• The first subsequent page with a different barcode marks the beginning of the next document</li> </ul>	A multi paged invoice has a single unique barcode on the first page, but could have the same barcode on the following pages.
Documents comprise a start page with barcode and the subsequent pages with the same barcode as a mandatory requirement	<ul style="list-style-type: none"> <li>• A page with a barcode in the document stack marks the beginning of a new document</li> <li>• All immediate subsequent pages bearing the same barcode as the start page are attached to the start page</li> <li>• The first subsequent page with a different barcode marks the beginning of a new document</li> <li>• Subsequent pages without a barcode are sent to the error folder</li> </ul>	A multi paged invoice requires a identical barcode for each associated page. Pages without barcodes are moved into the error folder.

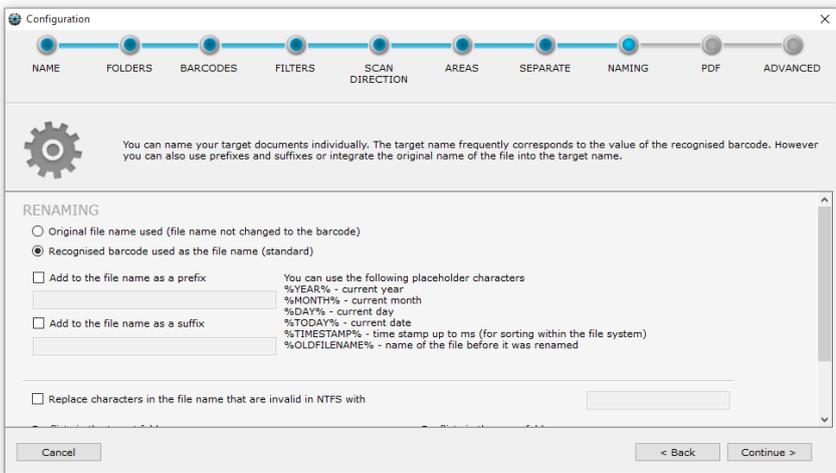
Documents comprise a start page with barcode and the subsequent pages with the same barcode as a mandatory requirement or each with an empty page  (Splitting duplex pages from a duplex stack)	<ul style="list-style-type: none"> <li>Two subsequent empty pages are sent to the error folder</li> <li>At least one matching barcode must be contained in the two subsequent empty pages</li> </ul>	A document is scanned on both sides and the front and back of the document is saved.
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**Behavior**

Option	Description	Typical example
Documents with multiple matching barcodes will be saved as separate files for each matching barcode	<ul style="list-style-type: none"> <li>For each barcode located on a page and matched filter, a new file is created.</li> </ul>	You stick two different barcodes on a receipt and an output file for each barcode should be created.

**Benennung**

Specify the convention for naming documents.



**Selection of the filename**

Renaming options	Description	Typical example
Use original file name	<ul style="list-style-type: none"> <li>The document is only divided up and not renamed on the basis of the barcode</li> <li>Output files use the source document name</li> </ul>	A preprocess already renames the files. The original filename is kept.
Use recognized barcode as the file name	<ul style="list-style-type: none"> <li>The document is renamed based on the recognized barcode</li> </ul>	The processed documents should be searchable by barcode value

**Additional renaming options**

Renaming options	Description	Typical example
Add to the file name as a prefix	<ul style="list-style-type: none"> <li>Puts the characters entered at the beginning of the file name</li> <li>The placeholders specified on the right can be used</li> </ul>	Every file should have a text or timestamp prepended, to enable chronologically sorted files by name inside of a filebrowser
Add to the file name as a suffix	<ul style="list-style-type: none"> <li>Puts the characters entered at the end of the file name</li> <li>The placeholders specified on the right can be used</li> </ul>	To relate the processed file to the original document, the original filename should be attached

<p>Replace characters in the file name that are invalid in NTFS with</p>	<ul style="list-style-type: none"> <li>The following characters are invalid in the file name in the NTFS file system: / ? &lt; &gt; \ : *   ”</li> <li>If the barcodes contain characters such as this you can specify a replacement character that appears in place of the invalid character when the file is saved</li> <li>If no replacement character is specified, the invalid characters are removed</li> </ul>	<p>The barcode value contains invalid characters, that are later used as filename. Since a file with invalid characters can't be created on a NTFS file system, the file will be moved inside the error folder and named "Naming Error"</p>
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### Replace text in the output filename

Additionally you can replace specific characters or strings in your barcode. Just enter the text that BarcodeOCR should file (i.e. INV-) and define, which text should be replaced. (i.e. INVOICE-).

You can choose placeholder or variables listed below, if you need further customization. After entering the text to find and the text that should be replaced, choose "Add to list" to add the replacement to the list.

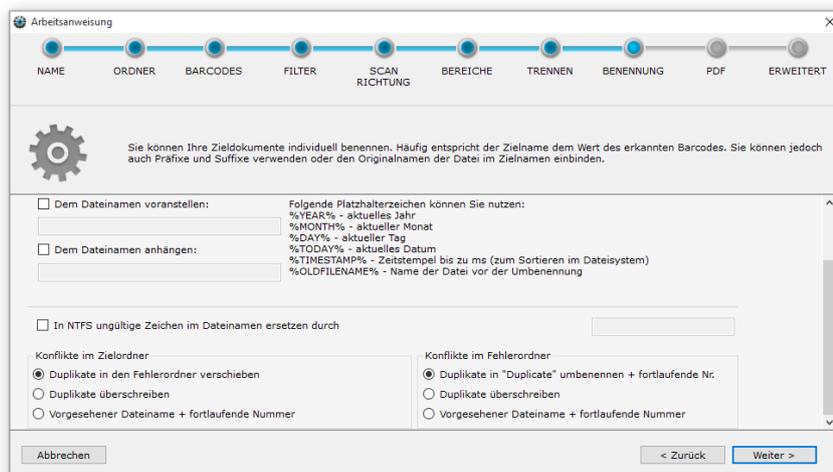
You can save different replacements to the list. They will be processed in the order of display. If you like to delete a replacement, click the entry and choose "Remove from list".

Samples:

Find	Replace with	Barcode text	After replacement
INV-	INVOUCE-	INV-12345	INVOICE-12345
DATE	%TODAY%	SCAN-DATE	SCAN-01.01.16
Invoice	(leer)	Invoice5678	5678

### Placeholder

Placeholder	Sample value	Description
%YEAR%	2016	The current year
%MONTH%	01	The current month
%DAY%	01	The current day
%TODAY%	01.01.16	The current date
%TIMESTAMP%	09-12-06-032	The current timestamp with milliseconds (hh-mm-ss-fff) (recommended for sorting within the filesystem)
%OLDFILENAME%	Scanner-01929284	Filename of the input file
%MD5%	3c4cbcc7b0b7422b2c0e99ecfebdab14	MD5-Hash of the output file



## Conflict resolution

### Conflicts in the target folder

If conflicts arise on saving (e.g. because a barcode appeared twice in a stack) you have the following options:

Solution options	Description	Typical example
Move duplicates to error folder	<ul style="list-style-type: none"> <li>The document is filed in the error folder</li> </ul>	The document was preprocessed and the filename already exists
Overwrite duplicates	<ul style="list-style-type: none"> <li>The newer document overwrites the existing document</li> </ul>	The document was preprocessed and the filename already exists
Intended file name + consecutive number	<ul style="list-style-type: none"> <li>The document is filed under the intended name but a consecutive number is attached to ensure that the file name is unique</li> </ul>	Doubly scanned documents should not be overwritten or sorted out, but instead saved inside the output folder

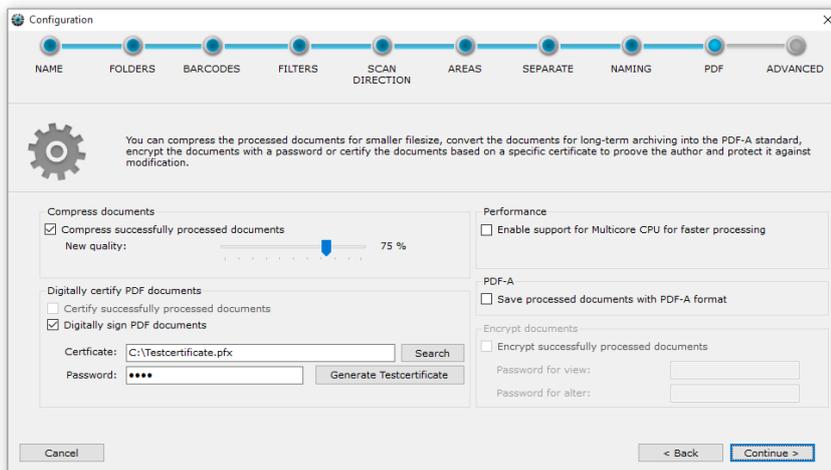
### Conflicts in the error folder

If conflicts arise in the error folder when saving, you have the following options:

Solution options	Description	Typical example
Rename duplicates to "Duplicate" + consecutive number	<ul style="list-style-type: none"> <li>The document is renamed "Duplicate" and is given a consecutive number, to ensure that the file name is unique</li> </ul>	The document was preprocessed and the filename already exists
Overwrite duplicates	<ul style="list-style-type: none"> <li>The newer document overwrites the existing one</li> </ul>	The document was preprocessed and the filename already exists
Intended file name + consecutive number	<ul style="list-style-type: none"> <li>The document is filed under the intended name but a consecutive number is attached to ensure that the file name is unique</li> </ul>	Doubly scanned documents should not be overwritten or sorted out, but instead saved inside the output folder

## Optional: PDF Einstellungen

In this step, you can setup options regarding the PDF-Format or additional features.



### Compress PDF-Documents

Enabling the compression will reduce the filesize of the output documents for specific kinds of documents. In this step, images within the documents will be recompressed. If the scanner does not compress documents at all, this step will reduce the file size by changing the quality of the contained images.

You can setup the ratio of the compression. Based on the graphic format, a value between 75%-90% is a good choice to get a small file with a good graphics quality. Please note, that the compression will remove some minor graphical information to reduce the file size.

### Add a digital signature or certify documents

Using a digital certificate you can add an invisible signature to the file. This will protect the document against changes. It is still possible to add comments to the file, but changing the content isn't possible anymore without breaking the signature.

If the document is altered, you will receive a warning when opening the document, which tells you that the version you are viewing has been changed. This dialog will offer you the option to show the original version. If you prefer so, you can use the "certify" option which will protect the document against all changes.

For creating a digital signature, you will need a X.509-Certificate as well as a private key, embedded within a PKCS#12-file. (either .p12-file or .pfx-file). This file contains both, a public and a private key at the same time. For your own safety, please make sure to protect the file using a password.

For testing purposes, you can create a test certificate by clicking the corresponding button. A certificate will be generated and the necessary password will be entered. Every processed document will be signed or certified using that certificate.

If you prefer your own Certificate, or use a Adobe Certificate from a CA, you can click on "Search" and select your certificate. After that, please make sure to enter the password needed to open the file.

## Support for multicore CPU

BarcodeOCR will process each page from a document in a sequence. This only allows a single page to be processed at a given time and might take some time, if you have a lot of files you need to process.

Enabling this option allows BarcodeOCR to process multiple pages simultaneously and allows your System to allocate parts of its computing power to other services. The amount of pages processed at a given time is specified by the number of cores your CPU has as well as the current load of the system. If you are running critical tasks as a database management system, BarcodeOCR will only request available resources.

## PDF-A

PDF-A is a specific file format for storing information for a long period of time. Several steps will ensure, that all information is embedded to make sure the file can be opened several years later and will be displayed the same way.

If you check this option, BarcodeOCR will convert all processed documents into the PDF/A3b standard and embed information that is important to open the file in some time.

Please note, that the file might be greater in size due to the embedding of fonts.

## Encryption

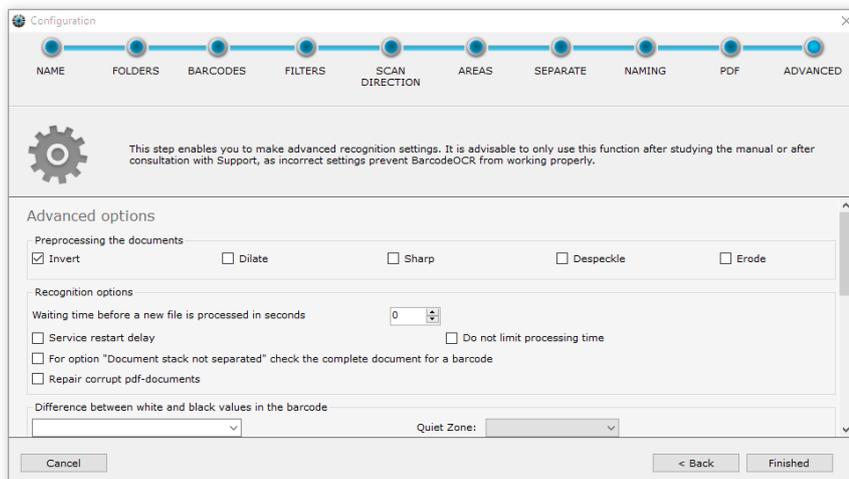
You can ensure security by encrypting the pdf documents using the AES pdf compatibly encryption. Each document will be encrypted using two passwords:

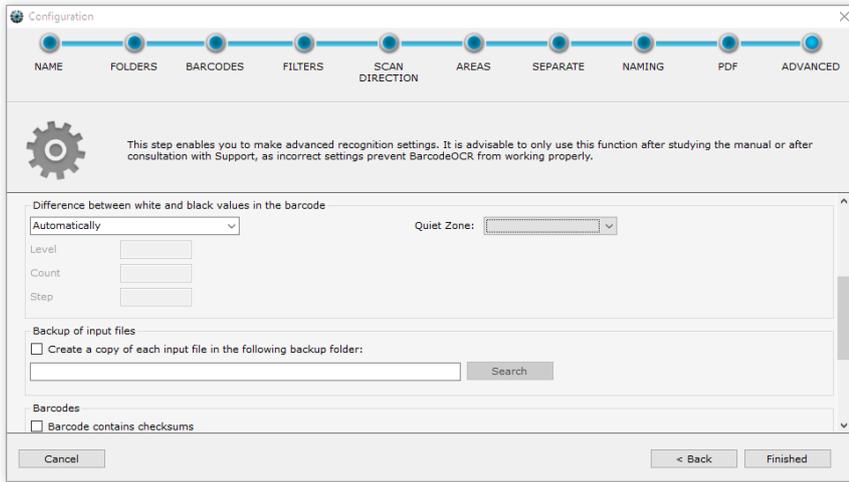
- a password to open the document and view the content
- a password to remove the encryption

The encryption is compatible to all major PDF-Viewers. If you open a document, you will be asked for the password. If you enter the correct one, the file opens without any problems.

## Optional: Erweitert

The advanced options are only required in special situations and should only be deployed by experienced users or following consultation with Support.





## Preprocessing the documents

Various filters can improve barcode recognition before the scanned documents are processed. The filters are only applied during processing and they do not change the document.

Filter	Description	Helpfull with
Invert	<ul style="list-style-type: none"> <li>switches black and white values</li> </ul>	<ul style="list-style-type: none"> <li>Documents with low contrast</li> </ul>
Despeckle	<ul style="list-style-type: none"> <li>removes speckles and white dots from black barcode areas that can be produced on a black and white scan</li> </ul>	<ul style="list-style-type: none"> <li>Black and white documents with a strong compression</li> <li>1D-Barcodes with "dotted lines"</li> </ul>
Dilate	<ul style="list-style-type: none"> <li>dilates the colour values</li> </ul>	<ul style="list-style-type: none"> <li>Deformed barcodes</li> </ul>
Erode	<ul style="list-style-type: none"> <li>erodes the colour values</li> </ul>	<ul style="list-style-type: none"> <li>Deformed barcodes</li> </ul>
Sharpen	<ul style="list-style-type: none"> <li>sharpens the image</li> </ul>	<ul style="list-style-type: none"> <li>Blurry barcodes</li> </ul>

## Waiting time before a new file is processed in seconds

Some scanners do not only file the documents when all the pages have been scanned, but create temporary files during the scanning process which contain the pages already scanned. To prevent BarcodeOCR from starting recognition of not yet fully scanned documents, you can use this box to specify a time limit before processing of a new file commences. The number specified is the time in seconds that has to have elapsed since the time the file was created.

## Cancellation of the processing after a unusually long processing time

BarcodeOCR has a safety mechanism, that sorts out files, if they are being processed for a unusually long time. That way a unobstructed processing of the file queue can be ensured. The default processing time is 15 minutes.

If you happen to process large documents (page size or resolution) or use filter options, the default time of 15 minutes might not suffice. If the option "Service restart delay" is enabled, the process time for each page is set to 90 minutes. If you don't want to limit the process time, enable the "Do not limit processing time" option.

## For option "Document stack not separated" check the complete document for a barcode

The splitting option "Document stack not separated" only searches on the first page for a valid barcode. If no valid barcode is located, the document will be moved to error folder. Enable this option to search the whole document for valid barcodes and rename the output file according to the barcode value.

## Fix damaged PDF files

PDF files created by a scanner might not be compliant to the PDF standard. This option attempts to fix non compliant PDF files. If the attempt to fix the file fails, the file will be named "corrupted file" and moved to the error folder.

Following steps will be applied amongst others:

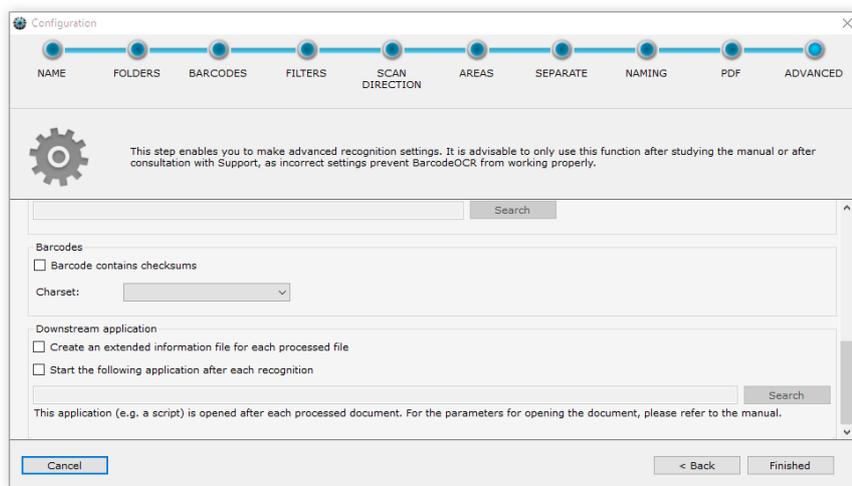
- Removal of a PDF-A signatur, to exclude faultily saved PDF-A files
- Removal of meta information within the file
- Removal of unnecessary or duplicate informationstreams within the PDF file

- Attempt to restore the file structure

## Difference between white and black values in the barcode

BarcodeOCR has to stipulate the threshold between white and black values in the document in order to separate the light areas in the barcode from the dark ones. There are two options for this.

- *Automatically*
  - The threshold between white and black characters in the document is detected automatically.
- *Iteratively*
  - The recognition process initially starts at the threshold specified in the "Level" field (valid values 0 to 255), and attempts recognition with this setting.
  - If this proves unsuccessful, the threshold is reduced by the value in the "Step" field and recognition is tried again. Then, the threshold in "Level" is increased by "Step" and recognition is attempted once more.
  - The value in "Step" is doubled for the next run. The "Count" field indicates the number of runs. The iterative method is particularly useful if grey or coloured paper is involved.



## Backing up input files

Ensure that your input files are backed up, before testing new processing options or prerelease versions of BarcodeOCR. Make sure your documents are being processed without fault, before disabling the backup of your input files.

The input files will be moved to a backup folder before processing and a random string will be attached to the filename, to always have a backup of the original document at hand after processing. The backup folder won't be cleaned automatically.

## Checksum and character set

Checksums and character set refer to the value of the barcode.

- *Barcode contains checksum*
  - By enabling this option, the contained checksum will be removed
- *Character set*
  - Determines the character set of the output

## Downstream application

BarcodeOCR is able to launch 3rd party software after a file has been processed successfully. That way the file processing capabilities of BarcodeOCR can be extended by 3rd party applications or scripts.

### **Create a information file with extended barcode information for each output file**

- A XML file will be created for each output file with any kind of information for the processed document (source file and destination file as well as value, position of the barcode, format, barcode type, etc.)
- The file will be saved within the output folder and the same name as the processed file with the extension ".xml" appended

### **Downstream application after each recognized barcode**

The application will be executed with each successful saving process within the output or error folder. (Meaning that it might be executed multiple times, if the document is multi paged)

Please bear in mind that the application will run within the security context of the Windows service of BarcodeOCR and, in this case as well, access to the network must be specified with UNC paths.

The following parameters are available for importing or moving:

Parameter	Description
-result	Result of scan (either error or success)
-configurationNAME	Name of the configuration that was executed
-source	Path to the source file
-destination	Path to the target file
-pageFrom	Start page of target file
-pageTo	Last page of target file
-errorReason	Reason why the file could not be processed (if result=error, otherwise blank)
-detectedBarcode	The barcode that was detected

### ***Downstream application after each input file***

The application will be launched before the input file is removed and represents the last processing step. During this last step the processed file is already moved to the error or output folder and the application will be launched for each processed file.

Please bear in mind that the application will run within the security context of the Windows service of BarcodeOCR and, in this case as well, access to the network must be specified with UNC paths.

The following parameters are available for importing or moving:

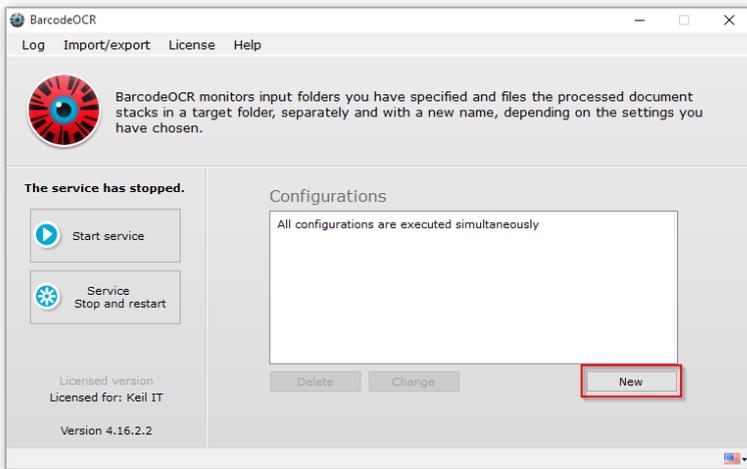
Parameter	Description
-source	Path to the source file
-files	List of saved documents with informations about the filename, barcode value and a value if the file was saved successfully. Single file values are separated with a comma (,) and entire file entries are separated via semicolon (;) <u>Signature of a single entry:</u> Description: "filename.pdf", "BarcodeValue", "Successfully processed?" Example: "ER-12345.pdf", "ER-12345", "True" Complete example: "ER-12345.pdf", "ER-12345", "True"; "AR-12345.pdf", "AR-12345", "True"; "Duplicate.pdf", "", "False"

The service will be restarted after the last step of the wizard is completed. The configuration will be active afterward.

## Arbeitsanweisungen

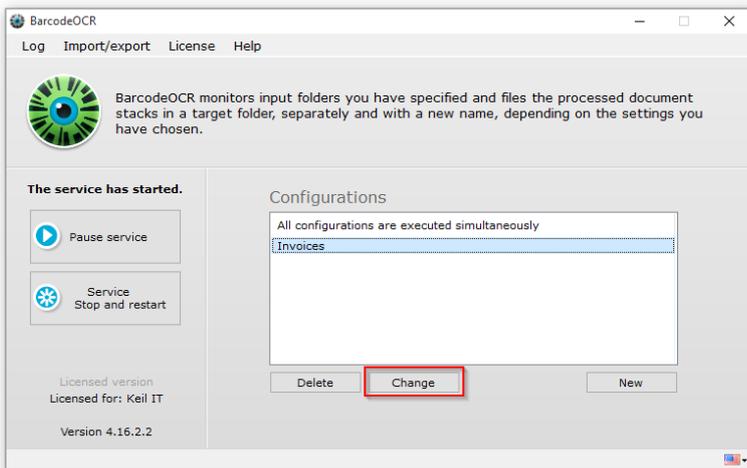
### **Create a new configuration**

Inside the right side of the user interface, the configurations are listed with which the BarcodeOCR service monitors folders and processes files. Create your first configuration by pressing "New".



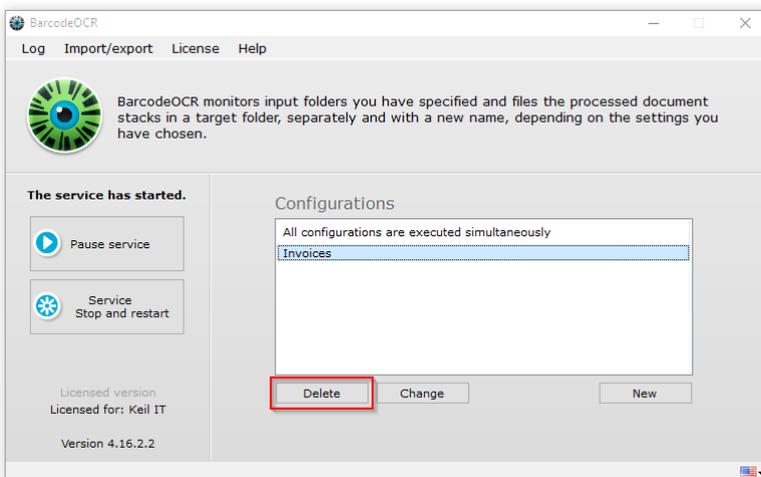
## Change

A configuration can be changed at any time using the "Change" button on the start page. Changing a configuration is done the same way as creating a new one. If you cancel the wizard during the change process, no changes will be saved.



## Delete

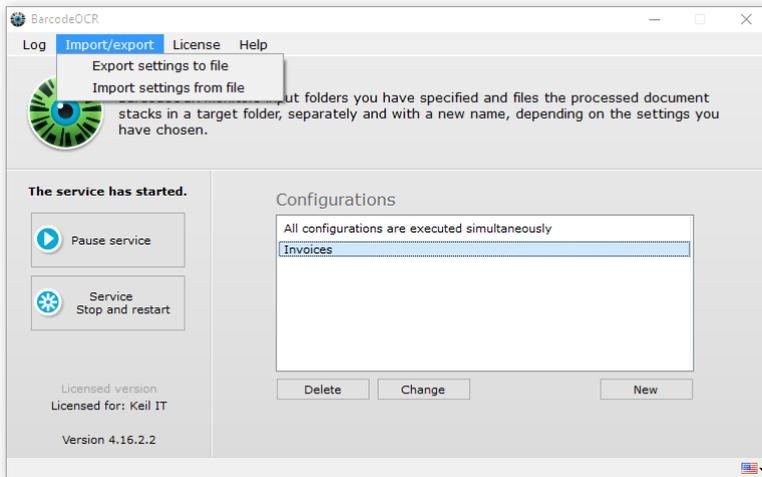
A configuration can be deleted at any time using the "Delete" button on the start page.



## Import/Export a configuration

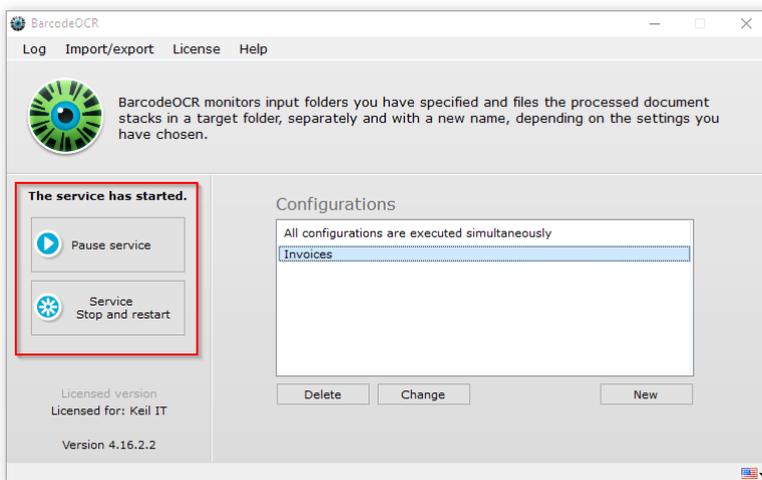
If you want to back up your configurations, e.g. in order to test the settings, to migrate the software to a different PC or make it available to Support, you can use the "Export settings to file" option on the start page. You will be asked to specify a name and a folder for the export. All configurations and the current log files are backed up.

To import settings, select "Import settings from file". Then select the previously exported ZIP file. When you confirm the prompt, the exported configurations are imported. The current configurations are overwritten.



## Dienststeuerung und Logdateien

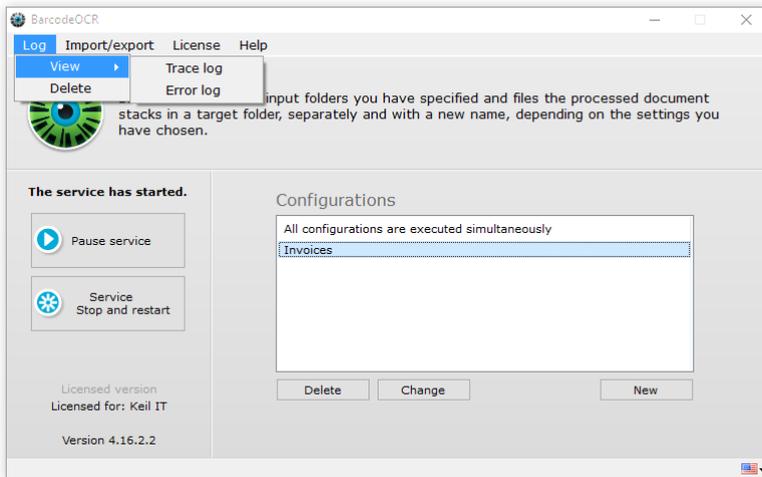
### Service control



When a configuration is saved, the BarcodeOCR service is automatically restarted. If, for example, folders are not available or the service account is incorrect, the service may not be able to start. You will see a red BarcodeOCR logo on the start page and a message stating that the service has not started. You can then restart the service from the start page by clicking on "Start service". Likewise, you can stop the current service by clicking on "Pause service". You can of course also use the Windows Service Controller.

### Logs

BarcodeOCR records successful and unsuccessful actions in log files. You can open these in the start page by clicking on the "Log" menu item. The trace log records all the successful activities of the service. The error log contains all the error messages and name conflicts that have arisen during the recognition processes. You can erase the logs by clicking "Delete".



## Migration auf einen anderen Rechner

If you would like to use BarcodeOCR on a different computer, you must first deactivate the license on the old PC.

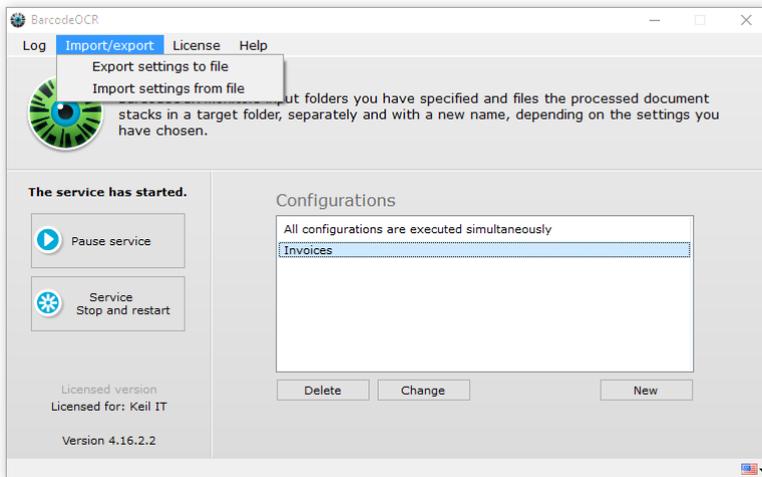
An internet connection is needed for deactivation. If you are not connected to the internet, copy the deactivation confirmation code and send it to Support together with your serial number and the deactivation date.

**A freshly installed version of BarcodeOCR on a new system, will automatically start its 30-days trial period. During this trial period your files will be processed as always until it runs out or you activate BarcodeOCR by applying a valid license.**

## Export your settings

It is possible to migrate your configurations and settings to a new system.

Open the "Import/Export" menu and select the "Export settings to file" option.



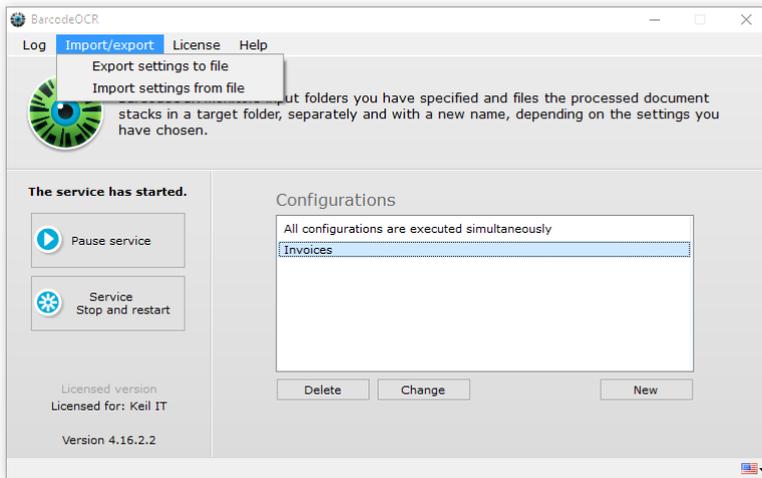
You will be asked to specify a filename for the file archive. All configurations and the current log files are backed up.

## Deactivate license on the old system

To do this, select the "Deactivate license for migration to a different PC" menu item from the "license" menu.



Open the "Import/Export" menu and select the "Import settings from file" option.



When you confirm the prompt, the exported configurations are imported. The current configurations are overwritten.

Launch the service afterwards and skim the error log for possible errors. A common error occurs, if the BarcodeOCR service is not set up properly to process documents in network folders.

## Deinstallation

You must deactivate the license before uninstalling BarcodeOCR. This will enable you to run the software again at a later date. To deactivate the license, please follow the steps in the "[Migrating BarcodeOCR to a different computer](#)" section.

To uninstall BarcodeOCR from a PC, please select "Uninstall" in the start menu entry. You can also find an appropriate entry in the program folder (%ProgramFiles%\BarcodeOCR\). Please follow the instructions provided by the wizard.

Note:

## FAQ

The following pages will give you answers for frequently asked questions

- [General Questions](#)
- [KWP Installation](#)
- [License](#)
- [Problems](#)

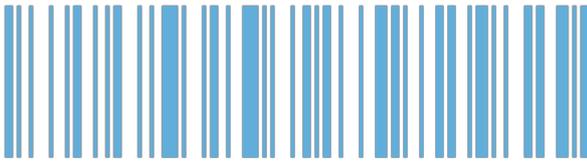
## Allgemeine Fragen

- [What is a barcode?](#)
- [What is OCR?](#)
- [What are the system requirements?](#)
- [Which scanners are recommended for achieving the best possible results with BarcodeOCR?](#)
- [How do I receive the latest Updates?](#)
- [How do I install the latest Updates?](#)
- [How do I process files inside a network folder?](#)

## What is a barcode?

A barcode is an image containing information that is encrypted by means of a special algorithm. This information may be a character string or specially formatted information (address card, internet address, ...).

Different barcodes exist: 1 dimensional and 2 dimensional. They primarily distinguish themselves in size and number of characters they can encode inside a barcode. The below examples contain the same text.



1D



2D

## What is OCR?

The term OCR stands for “Optical Character Recognition”.

## What are the system requirements?

BarcodeOCR has been successfully tested on:

- Windows 7 (32-Bit and 64-Bit)
- Windows 8 (32-Bit and 64-Bit)
- Windows 8.1 (32-Bit and 64-Bit)
- Windows 10 (32-Bit and 64-Bit)
- Windows Server 2008 (64-Bit)
- Windows Server 2008 R2 (64-Bit)
- Windows Server 2012 (64-Bit)
- Windows Server 2012 R2 (64-Bit)

Additionally to this, you will need the .NET Framework 4.0 installed on your computer. The setup will check if you already installed the Framework and will install it, if necessary.

The performance of BarcodeOCR is up to the configuration and your documents. We recommend to test BarcodeOCR on the specific system to get a real benchmark.

## Which scanners are recommended for achieving the best possible results with BarcodeOCR?

Generally all scanners are supported. To use all the features of BarcodeOCR, however, we recommend working with a high-quality scanner that can process several documents in the network quickly and automatically. The scanner should deposit the scanned documents on the server in one piece as a PDF.

## How do I receive the latest Updates?

If you have a valid maintenance contract you are eligible to receive the latest updates.

You can download the latest version for your license, by entering your serial number in the corresponding dialog on the download page.

## How do I install the latest Updates?

A guide on installing updates can be found in the documentation: [Updates](#)

## How do I process files inside a network folder?

A guide on setting up BarcodeOCR within a network can be found in the documentation: [Setting up for networks](#)

## KWP Installation

This page has not yet been translated to English.

### Lizenz

- [I have purchased BarcodeOCR. How do I activate it?](#)
- [How can I transfer BarcodeOCR to a new computer?](#)
- [Can I upgrade to the latest version?](#)
- [I purchased my license from a reseller. Who should I contact if I have any questions?](#)
- [Reseller & partner program](#)
- [Upgrade your license \(Change editions / Extend your license\)](#)

### I have purchased BarcodeOCR. How do I activate it?

When you purchase BarcodeOCR, you also receive a license key. You can activate this in the software on your PC. The license menu also allows you to reactivate the software, so you can use it on a different PC.

### How can I transfer BarcodeOCR to a new computer?

Download the BarcodeOCR software from our download page and install it on your new computer. Deactivate the licence on your old PC and activate it on the new one.

### Can I upgrade to the latest version?

Customers with older versions (before Version 4) can use all versions up to and including 3.4.1 regardless of whether or not they have a support and update warranty. In addition, if they have purchased a support and update warranty, they can use the latest version.

### I purchased my license from a reseller. Who should I contact if I have any questions?

If you have ordered BarcodeOCR from one of our partners, please address any questions concerning your order or any technical issues to them.

### Reseller & partner program

Are you interested in BarcodeOCR and would you like to offer our software to your customers?

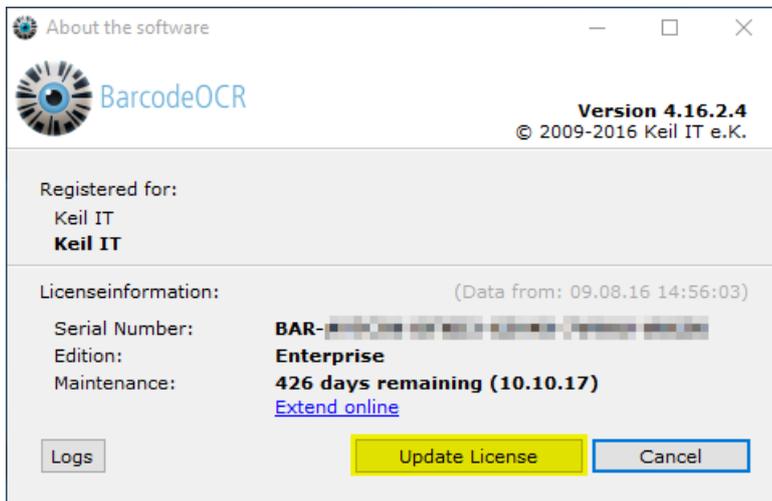
Then get in touch with us! As a reseller, you will benefit from special terms and conditions for resellers, and we will provide you with support any time you need it.

Furthermore, we provide our resellers with the greatest possible customer protection, and remain discreetly in the background as the software supplier. If you are interested in our partner program, please simply send us an e-mail to [support@barcode-ocr.com](mailto:support@barcode-ocr.com). We will then get back in touch with you soon after.

### Upgrade your license (Change editions / Extend your license)

If your serial number starts with "BAR-":

1. Launch BarcodeOCR
2. Open the "Help" menu and select the "About" option.
3. If your Licensing information hasn't updated already, press "Update License".



If your serial number starts with "STD-":

1. You will receive a new serial number while changing editions
2. Launch BarcodeOCR
3. Open the "License" menu and press "Deactivate license for migration to a different PC"
4. Follow the instructions provided by the wizard and deactivate your copy of BarcodeOCR.
5. Launch BarcodeOCR again and press "Activate"
6. Insert your new serial number
7. Press "Activate"

Your old serial number will be invalidated and can't be used to activate BarcodeOCR anymore.

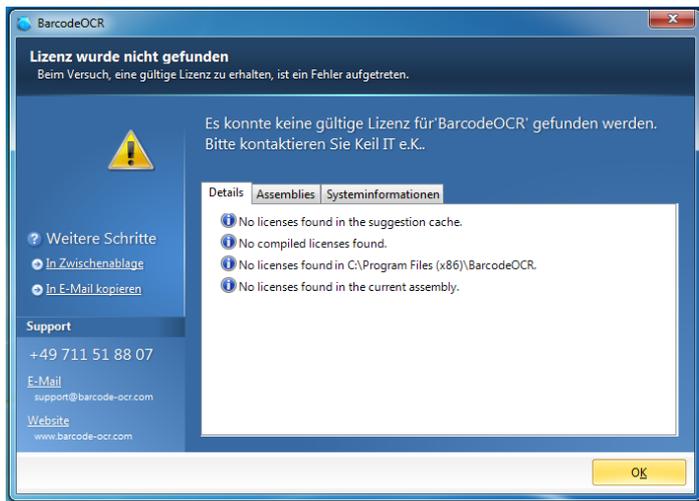
Your license portal can be accessed via your new serial number.

## Probleme

- No valid license could be found
- Error message: "Token was not expected"
- What does BarcodeOCR do with PDFs that are created not scanned?
- The log will contain the error message: Cannot handle iref streams.
- Why is the recognized file name " FNC1 4100002561.pdf", for example?
- Code 39 barcodes are recognized faultily
- Pharmacode barcodes are recognized faultily
- The underlying connection was closed: Could not establish trust relationship for the SSL/TLS secure channel
- I am forced to enter the proxy information
- How do I create a debug log?

## No valid license could be found

The following dialog appears, if BarcodeOCR is launched after deactivation:



#### **Solution until version 4.13.4.4**

Use the BarcodeOCR\_Setup.exe and reinstall BarcodeOCR. The current version does not have to be uninstalled, to solve the problem.

Your settings will prevail. This function is available from version 4.0.0.3 onwards

#### **Solution from version 4.13.4.4 onwards**

It is not necessary to reinstall BarcodeOCR. Only special issued licenses (through the BarcodeOCR support) need to be reinstalled.

If that is the case, the BarcodeOCR support should be contacted.

### **Error message: "Token was not expected"**

#### **Error description**

This problem may occur if you export a pdf file with the software "Nuance Paperport" which will be processed by BarcodeOCR. BarcodeOCR may recognize the Barcodes, but won't generate a file in the output folder. The error message "Token was not expected" will be displayed within the error log.

This problem can occur within BarcodeOCR 4.12.4.7 and earlier. Please upgrade to Version 4.13.2.1 to process these documents without any problems.

### **What does BarcodeOCR do with PDFs that are created not scanned?**

If you work with PDFs that have been created not scanned, the barcodes are not present as images but as vector objects. In "Advanced", check the option "View PDF files as images during processing", then the document will be converted to an image beforehand.

To enable the processing of the document, activate the "View PDF files as images during processing" option inside the "ADVANCED" step of the configuration wizard. This way, the document is converted into a image before the recognition process.

### **The log will contain the error message: Cannot handle iref streams.**

If you create a document directly with Adobe Acrobat, please save it in Version 1.5 (compatible with Acrobat 5 or later, preferably PDF/A. Otherwise, splitting is not possible. No scanner that we know of saves in a format later than 1.5.

We are able to process the files on the latest BarcodeOCR 4 version

### **Why is the recognized file name " FNC1 410002561.pdf", for example?**

Your software is generating an incorrect barcode type. You have probably selected recognition of Code 128, but your software is generating EAN 128.

## Code 39 barcodes are recognized faultily

Reading a 1D-barcode (Typ: Code 39 Extended / Full ASCII) with following settings:

- Barcode type: Code 39
- Scan direction: Any

### Error description

Instead of lowercase letters, uppercase letters with a preceding '+'-character abgelegt. Additionally special characters are wrongly displayed as %-characters.

### Solution

Select the option "Code39 Extended" at step 3 (BARCODES) of the configuration wizard, to enable the processing of those documents. This option is only available from BarcodeOCR versions 4.12.4.1 and upwards.

## Pharmacode barcodes are recognized faultily

Reading a 1D-barcode (Typ: Pharmacode) with following settings:

- Barcode type: Pharmacode
- Scan direction: All or right to left

### Error description

Instead of the encoded characters, others are being recognized.

### Solution

Select the direction "Left To Right" at step 4 (SCANDIRECTION) of the configuration wizard, to enable the processing of those documents. This option is only available from BarcodeOCR versions 4.12.4.1 and upwards.

Pharmacodes can be read from both "Left To Right" and "Right To Left". Depending on scan direction the results may vary. Generally the direction "Right to Left" should be used. Under special circumstances the direction "Left to Right" might be necessary. This is usually the case, if your scanner rotates the scanned document by 180° but the graphic rotated again to display the PDF correctly.

## The underlying connection was closed: Could not establish trust relationship for the SSL/TLS secure channel

### Error description

The online activation shows the following error and stops:

*Could not activate license at server*

- Die zugrunde liegende Verbindung wurde geschlossen: Für den geschützten SSL/TLS-Kanal konnte keine Vertrauensstellung hergestellt werden.
- The underlying connection was closed: Could not establish trust relationship for the SSL/TLS secure channel
- les statut entrant : échec - la connexion sous-jacente a été fermée : Impossible d'établir une relation de confiance pour le canal sécurisé SSL/TLS
- stato posta in arrivo: errore: connessione sottostante chiusa: Impossibile stabilire una relazione di trust per il canale sicuro SSL/TLS

The error message may be displayed in the language of your operating system.

### Problem

The problem is that BarcodeOCR could not establish a secured connection to the BarcodeOCR activation server. This may be the case if the operating system (i.e. Windows XP or Windows Server 2003) hasn't got the latest updates installed or there is no support for the latest encryption methods available. BarcodeOCR uses the latest encryption methods while exchanging sensitive data. In addition the components

(setup, application and application files) are digitally signed to verify that the binaries are not changed. These technologies require the latest signature algorithms.

There may be no support for older operating systems. Please note, that Microsoft discontinued the support for older systems. BarcodeOCR is not supported on those machines.

## Solution

### Step 1)

Please update the root certificates on your operating system. There is an [overview on the Microsoft Download Center](#) which shows all available updates for the operating systems.

### Step 2)

Please make sure, that your operating system supports the latest X509-Certificates (i.e. SSL-Certificates with SHA256 signature algorithms). Windows XP and Windows Server 2003 require additional Hotfixes that needs to be installed. Please check if they are installed.

The following Hotfixes can be downloaded from Microsoft in order to support the certificates:

- [KB938397](#)
- [KB968730](#)

If you have installed the missing components, restart BarcodeOCR and activate the software using your serial number.

## I am forced to enter the proxy information

If you are using a proxy server, the activation wizard of BarcodeOCR may not reach the activation server. In this case, you will be prompted to enter your proxy information while activating BarcodeOCR to ensure connectivity. If the window doesn't show up or if you are forced to enter the proxy information all the time, you can setup those information manually.

When updating BarcodeOCR, these information may be overwritten. After updating BarcodeOCR, please make sure that your customized settings are still available.

1. Open the program directory (usually C:\Programs\BarcodeOCR)
2. Copy the file "BarcodeOCR.exe.config" to your desktop
3. Open the file with a text editor
4. Change the file as displayed below
5. Save the file
6. Copy the file to the program directory, choose "Yes" when asked if you like to overwrite the file

### BarcodeOCR.exe.config

```
<!-- If you need to configure a proxy for contacting the activation
server, you can define the credentials below -->

<licensing>
  <proxy
    address="<adress of the proxy-server:port>"
    username="username"
    password="password"
    domain="domain"
  />
</licensing>
```

## How do I create a debug log?

Under special circumstances it is required to create a debug log in order to track down a specific problem when processing files. This log contains detailed information regarding the processing that might help solving the problem and finding an option to process the document without problems.

## Enable the debug mode

1. Stop the BarcodeOCR service
2. Switch to the installation folder of BarcodeOCR (typically "C:\Programs (x86)\BarcodeOCR\)
3. Create a file named "Debug.txt"
4. Start the BarcodeOCR service
5. Since now the log will be written

## Reproduce the error

Repeat the steps that triggered the problem. (i.e. processing a specific file, changing network configuration, ...) BarcodeOCR will log all information regarding the processing the file and allow the support team to track down the problem.

The amount of log data is limited. BarcodeOCR will discard older logs to make sure, that the extensive information won't fill your hard drive. If you monitor your BarcodeOCR installation make sure to stop the logging after the problem has been reproduced.

Please note down when the problem occurred.

## Deactivate the debug mode

1. Stop the BarcodeOCR service
2. Switch to the installation folder of BarcodeOCR (typically "C:\Programs (x86)\BarcodeOCR\)
3. Delete the "Debug.txt" file
4. Start the BarcodeOCR service
5. Since now the log will be written

## Export the data

1. Start BarcodeOCR
2. Click "Import/Export"
3. Click "Export settings to file"
4. Save the file

Please send the file, a description of the problem and additional information to the BarcodeOCR Supportteam. If you are not using the latest version, please note down the version you use.

## Release Notes

The release notes lists changes, enhancements and new functions of every version. Please note, that you can download the latest version for your licence by entering your serial number within the download area on the BarcodeOCR website.

- BarcodeOCR 4.16.3.1 vom 12.08.2016
- BarcodeOCR 4.16.2.4 from 17.06.2016
- BarcodeOCR 4.16.2.2 from 12.04.2016
- BarcodeOCR 4.16.2.1 from 06.04.2016
- BarcodeOCR 4.16.1.2 from 25.01.2016
- BarcodeOCR 4.16.1.1 from 12.01.2016
- BarcodeOCR 4.15.4.5 from 13.11.2015
- BarcodeOCR 4.15.4.4 from 12.11.2015
- BarcodeOCR 4.15.4.3 from 11.11.2015
- BarcodeOCR 4.15.4.2 from 21.10.2015
- BarcodeOCR 4.15.3.3 from 29.07.2015
- BarcodeOCR 4.15.3.2 from 16.07.2015
- BarcodeOCR 4.15.3.1 from 30.06.2015
- BarcodeOCR 4.15.1.2 from 23.03.2015
- BarcodeOCR 4.14.2.4 from 23.05.2014
- BarcodeOCR 4.14.2.3 from 23.05.2014
- BarcodeOCR 4.13.4.4 from 28.11.2013
- BarcodeOCR 4.13.2.1 from 25.04.2013
- BarcodeOCR 4.12.4.7 from 12.02.2013
- BarcodeOCR 4.12.3.2 from 27.09.2012
- BarcodeOCR 4.0.0.3 from 30.11.2012
- BarcodeOCR 3.4.1 from 25.06.2011

## **BarcodeOCR 4.16.3.1 vom 12.08.2016**

### **Changes**

- New: Text within Barcodes can now be replaced
- Fixed: An error while importing settings to BarcodeOCR

## **BarcodeOCR 4.16.2.4 from 17.06.2016**

### **Changes**

- Fixed: Problems processing some PDF-A compatible files
- Enhanced: File size of processed pdf files
- New Options: Launch a downstream application once for each input file

## **BarcodeOCR 4.16.2.2 from 12.04.2016**

### **Changes**

- Enhanced: Repair of incompatible files
- Fixed: Pages may not be deleted from signed documents
- Fixed: General UI errors

## **BarcodeOCR 4.16.2.1 from 06.04.2016**

### **Changes**

- New: Documents can be digitally signed
- New: Option: Repair PDF documents
- Enhanced: Recognition of Barcodes within documents
- Enhanced: Faster processing using multiple processing cores
- Enhanced: using timestamp renaming option, milliseconds will be formatted to three digits
- Fixed: Problems using digital certificates generated by Adobe Acrobat
- Fixed: General UI errors
- Fixed: Problems replacing illegal characters within file name
- Fixed: Problems processing large files

## **BarcodeOCR 4.16.1.2 from 25.01.2016**

### **Changes**

- Added and Fixed: Support for creating multiple documents for one page, if the page contains more than one valid document

## **BarcodeOCR 4.16.1.1 from 12.01.2016**

### **Changes**

- New: If there is more than one valid barcode, the document can be saved for each valid barcode
- New: The limit on recognition time per File can be disabled
- Enhanced: DataMatrix recognition is more accurate
- Fixed: General UI errors

## **BarcodeOCR 4.15.4.5 from 13.11.2015**

### **Changes**

- Fixed: documents without barcodes may be saved twice within the output folder

## **BarcodeOCR 4.15.4.4 from 12.11.2015**

### **Changes**

- New: The output and error folder may be a subfolder of a incoming folder
- Fixed: Input files may not be deleted if processed by the duplex split option
- Fixed: documents without barcodes may be saved twice within the output folder

### **BarcodeOCR 4.15.4.3 from 11.11.2015**

#### **Changes**

- New: Better recognition of Code 39 barcodes
- Fixed: Error in UI, that prevented changes within the split options under specific circumstances.

### **BarcodeOCR 4.15.4.2 from 21.10.2015**

#### **Changes**

- New: Documents within the error folder will also be digitally signed, compressed and and encrypted
- New: Better recognition of Code 128 barcodes
- New: Increased performance while recognizing barcodes and processing pdf documents
- Fixed: Documents may be saved with multiple file extensions
- Fixed: Invalid metadata within the documents may produce an error
- Fixed: Problem saving a document within the pdf-a standard
- Fixed: Problems launching external applications
- Fixed: Reading DataMatrix and Code 128 Barcodes

### **BarcodeOCR 4.15.3.3 from 29.07.2015**

#### **Changes**

- Fixed: Problems with the activation when updating from a previous version
- Fixed: Documents in the error folder my be duplicated under specific circumstances

### **BarcodeOCR 4.15.3.2 from 16.07.2015**

#### **Changes**

- Fixed: To large output files
- Fixed: No launch of downstream application of the input file was a .jpg-file
- Fixed: The path of other graphic files was not passed to the downstream application
- Fixed: Files are saved twice when using "Split to single pages"

### **BarcodeOCR 4.15.3.1 from 30.06.2015**

#### **Changes**

- new function: certify documents with a compatible pfx certificate
- new function: convert documents to a pdf-a compatible format for long-term archiving
- new function: support for multiple multicore processors for faster processing of documents
- new function: encryption of output documents
- new function: compression of documents for smaller output size
- new function: create a copy of each input file in a separate folder
- new function: support for different text encodings
- new function: filter barcodes based on location
- new function: split documents based on two same barcodes on consecutive pages (duplex)
- added support for checksums in barcodes
- added support for checksums in barcodes
- optimized speed and recognition quote of the following barcode types: PDF417, Code 93, Code 39, Code 128, Inter 2of5
- fixed some error in the UI
- solved some problems monitoring directories with specific scanners
- faster recognition and processing of barcodes and documents
- optimization in service and protocol

### **BarcodeOCR 4.15.1.2 from 23.03.2015**

#### **Changes**

- Better recognition of Code 128, Code 39, QR-Code or Inter2of5-Barcodes
- Optimized repairing and converting of incompatible files
- Optimized the performance of recognizing barcodes
- Fixed some possible problems concerning the recongition of documents on network shares.
- Support for more pdf file formats
- Fixed some display problems within the error log
- Incompatible or corrupted documents that couldn't be repaired automatically will be moved to error folder
- Some minor UI improvements

## **BarcodeOCR 4.14.2.4 from 23.05.2014**

### **Changes**

- Fixed problem in reading PDF files with large size embedded images
- Bug fix in QR code decoding
- Recognition improvements of Interleaved 2of5 barcodes with checksum
- Regular Expressions now may contain pipe characters
- Minor UI Changes

## **BarcodeOCR 4.14.2.3 from 23.05.2014**

### **Changes**

- Improved logging of events
- Archiving of old log files
- DataMatrix barcodes recognition accuracy improvements
- Recognition accurarcy adjustments for Code 39 barcodes
- Problem with reading PDF document in A0 format is fixed
- Bug is fixed in QR codes decoding
- The Data Matrix barcodes recognition speed is increased up to 30%.
- Support for regular expressions within filters
- Improved detection of temporary scanner files
- Blacklisting of files if they are not processed and the service needs to restart
- Performance improvements
- Fixed some minor UI problems

## **BarcodeOCR 4.13.4.4 from 28.11.2013**

### **Changes**

- Support of newer PDF-File formats (version 1.5 and newer)
- Automatic repair of incorrect documents before processing
- New Option: Set a Quiet-Zone for the recognition
- Minor changes to the UI

## **BarcodeOCR 4.13.2.1 from 25.04.2013**

### **Changes**

- Using the option "Document stack not separated" you can specify to analyze the whole document
- Minor changes to the UI

## **BarcodeOCR 4.12.4.7 from 12.02.2013**

### **Changes**

- Recognition Code39 Extended, Pharmacode and MicroQR-Code
- Minor bugfixes

## **BarcodeOCR 4.12.3.2 from 27.09.2012**

### **Changes**

- Recognition of cyrillic barcodes

- Changes for the external application to support new parameters
- Changes to the UI

## **BarcodeOCR 4.0.0.3 from 30.11.2012**

### **Changes**

- New and simpler UI
- Import and export for configurations (not compatible with 3.x configurations)
- Easier Licensing
- New Setup

## **BarcodeOCR 3.4.1 from 25.06.2011**

### **Änderungen**

- Last Release