

1. BarcodeOCR Dokumentation 18.4.x	2
1.1 Einführung	3
1.2 Installation und Einrichtung	4
1.2.1 Installation	5
1.2.2 BarcodeOCR testen	6
1.2.3 Aktivierung der Lizenz	7
1.2.4 Einrichtung im Netzwerk	9
1.2.5 Updates	10
1.3 Konfiguration einer Arbeitsanweisung	11
1.3.1 Name der Arbeitsanweisung	12
1.3.2 Ordner	13
1.3.3 Auswählen des Barcodes	14
1.3.4 Optional: Filter	15
1.3.5 Auswählen der Scanrichtung	16
1.3.6 Optional: Festlegen von Bereichen	17
1.3.7 Trennoptionen	18
1.3.8 Benennung	21
1.3.9 Optional: PDF Einstellungen	25
1.3.10 Optional: Texterkennung / Erweitert	27
1.4 Verwalten von Arbeitsanweisungen	34
1.5 Dienststeuerung und Logdateien	36
1.6 Migration auf einen anderen Rechner	37
1.7 Deinstallation	39
1.8 FAQ	40
1.8.1 Allgemeine Fragen	41
1.8.2 KWP Installation	43
1.8.3 Lizenz	44
1.8.4 Probleme	46
1.9 Release Notes	52
1.10 Vorherige Versionen	59

BarcodeOCR Dokumentation 18.4.x

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.

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.

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
Multi-page TIF-Images can be split in separated files

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

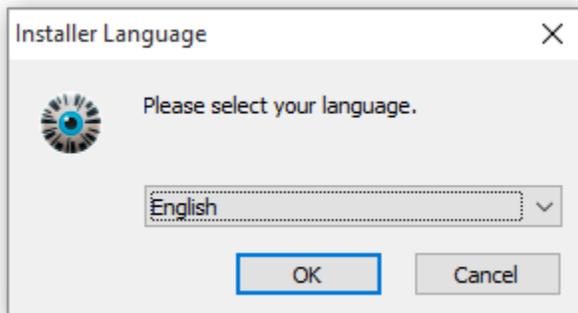
The current version of BarcodeOCR is available at the [download area](#). Here you will find older versions as well as the current version.

 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.

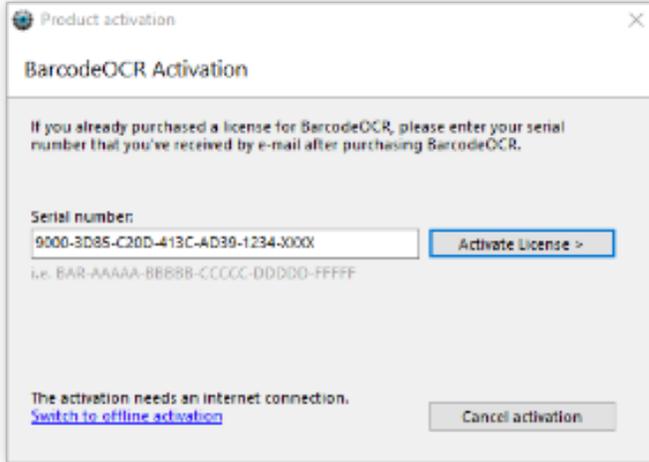
The remaining days of your test period can be seen within the application in the bottom-left corner.

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, click the menu entry "License" and choose "Activate license on this PC"
- In the next window, enter your serial number:



- Click on "Activate License"
- The following page will display your license information and unlocked edition of BarcodeOCR. In the case of problems, while activating your license, more information will be displayed. 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.

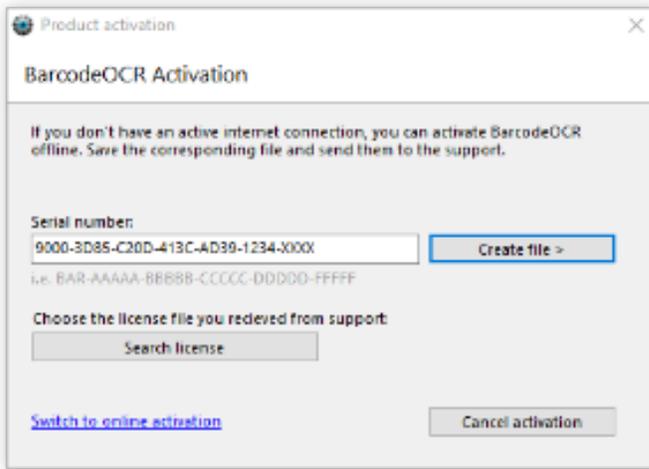
Make sure that the PC is connected to the internet and the connection of BarcodeOCR isn't being blocked by a firewall or proxy server.

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 activation method is not completed within seconds due to the fact that the support needs to generate a special license for your PC. This might take up to 48h.

- Start the application, click the menu entry "License" and choose "Activate license on this PC"
- Click the option "Switch to office activation"

- In the next window, enter your serial number:



- Click "Create file"
 - E-Mail the saved file to the support ([How to contact](#))
 - After manual generation, you will receive a special license file from the support
 - To install the license, open the Activation window again, switch to office activation and click on "Search license" and choose the file from the E-Mail
- After successful activation, you can use the software with the range of functions that you have purchased.

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 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](#))

Updateing

1. Start the Installer and follow the steps
2. Start BarcodeOCR
3. If you upgrade from a 4.x version to a 18.x version another activation of your software will be required. The new demo will embed watermarks.
 - a. If you experience barcode recognition problems or problems regarding the areas, [click here](#)
4. Start the BarcodeOCR service, if not already started (the BarcodeOCR logo will color to green)
5. 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](#)

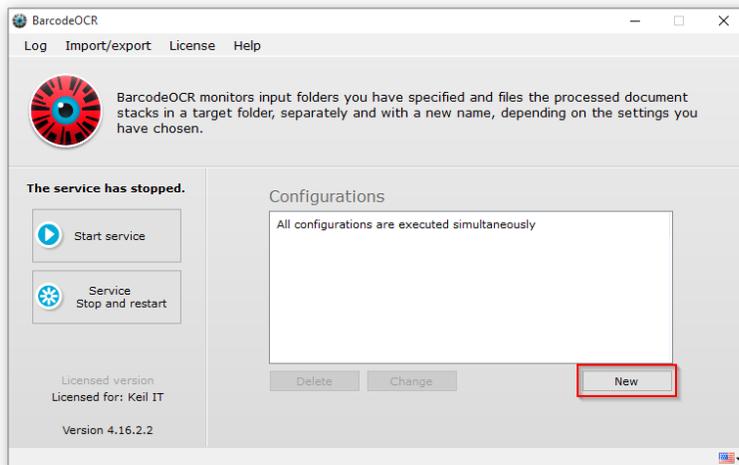
If an error occurs or if the documents won't be processed the usual way, please check if there is already a solution for your problem. If not, please contact the support.

Konfiguration einer 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 stoping
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

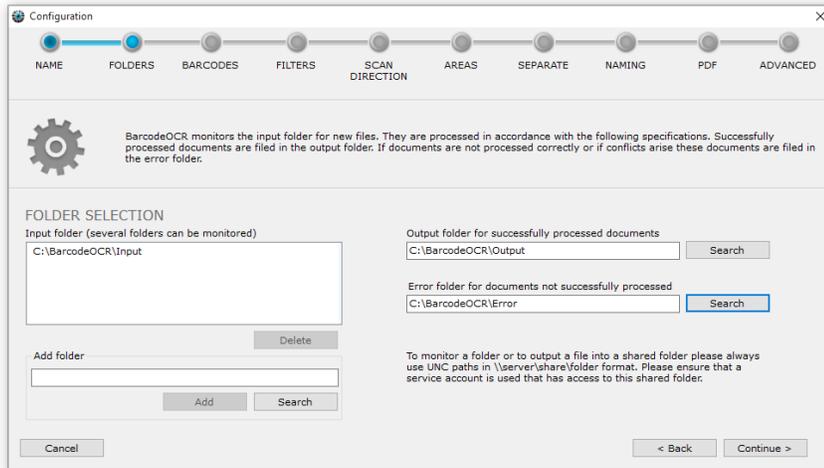
The first step of the wizard will be the assignment of a name for the configuration. The name of the configuration only serves description purposes, to be able to differentiate between multiple configurations.



The screenshot shows a 'Configuration' wizard window with a progress bar at the top. The progress bar has ten steps: NAME, FOLDERS, BARCODES, FILTERS, SCAN DIRECTION, AREAS, SEPARATE, NAMING, PDF, and ADVANCED. The 'NAME' step is currently selected and highlighted with a blue circle. Below the progress bar, there is a gear icon and the following text: 'Enter a name for the configuration. The name will be shown in the overview and in the log files. Each name can only be assigned once.' Below this text, the heading 'NAME OF THE NEW CONFIGURATION.' is followed by a 'Name:' label and a text input field containing the word 'Invoices'. At the bottom of the window, there are three buttons: 'Cancel', '< Back', and 'Continue >'.

Ordner

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

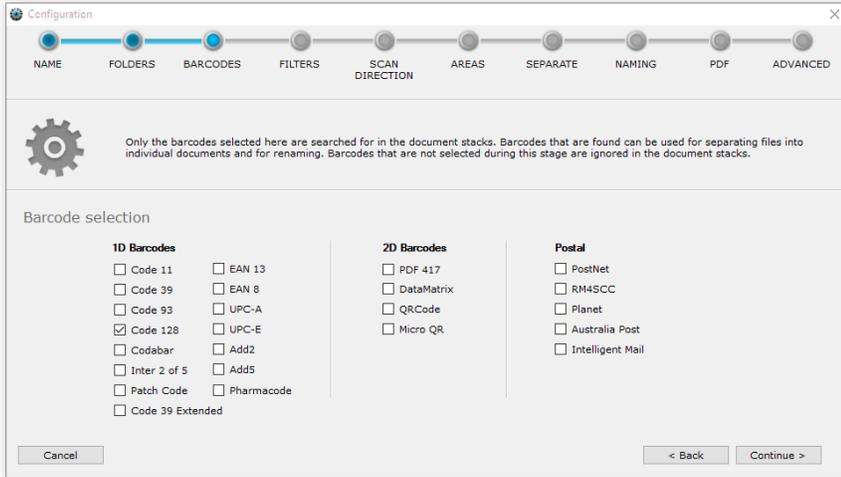
Please remember that shared folders must be specified via a UNC path. System inherent, mapped drives are not available to windows services. Generally before using network folders, the default service account used for the BarcodeOCR service has to be changed, since the local system account has insufficient 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

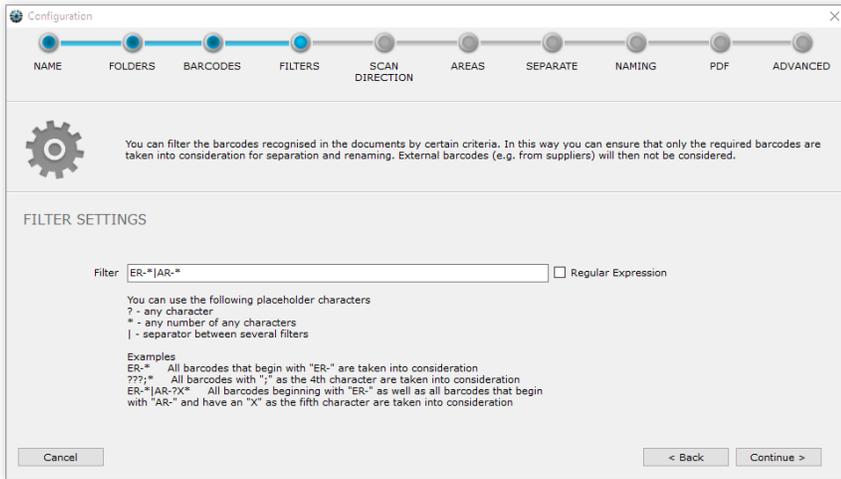
BarcodeOCR recognizes a variety of different barcode types. In this step, you specify the type of barcodes you wish BarcodeOCR to search for in a processed document.



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-" as well as all barcodes that end with "2011".

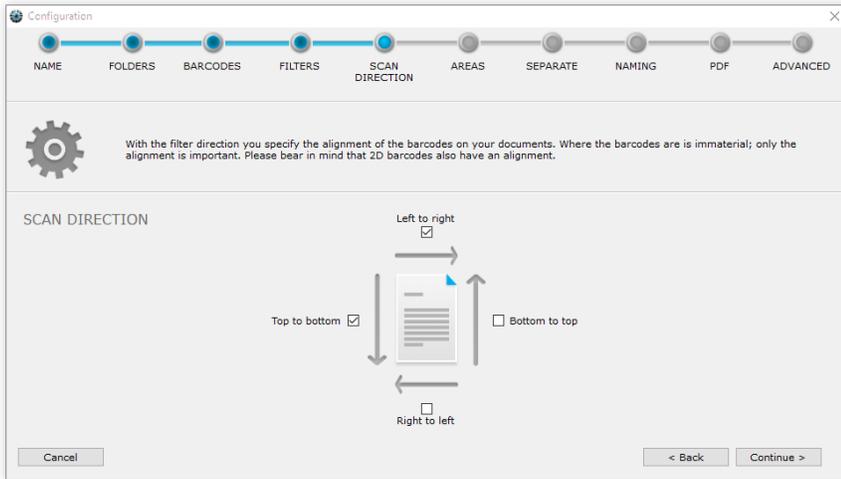
It is possible to extend the functionality and use regular expressions to match barcode values. To activate Regular Expressions, tick the corresponding box. The characters used for simple filtering will be ignored. You have to either use a simple filter or a Regular Expression. Combining the two methods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

Example for filter as regular expressions

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

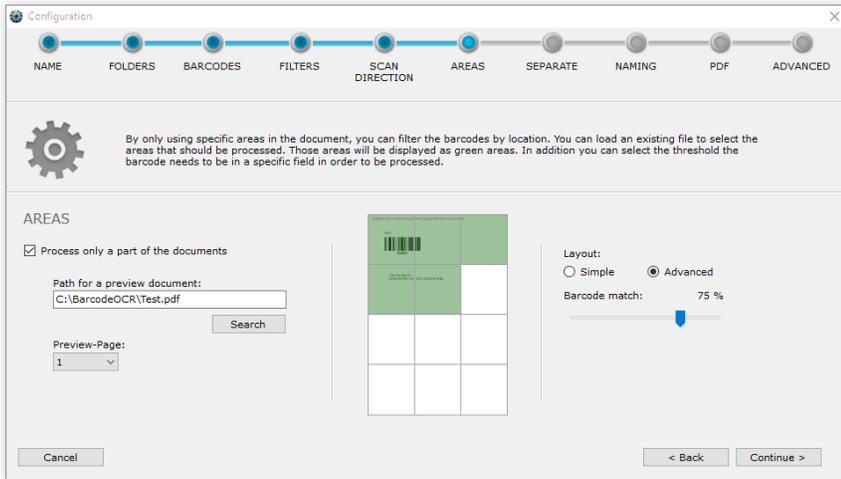
i Consider that even some 2D barcodes has a set orientation!

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

i The whole page is always checked for barcodes. Filtering for ranges is a time-consuming filter option and should only be used if the barcodes cannot be filtered with the other options.

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

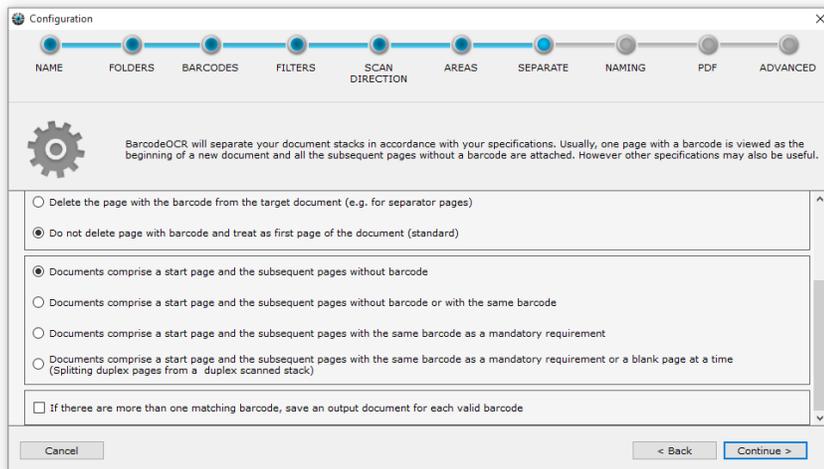
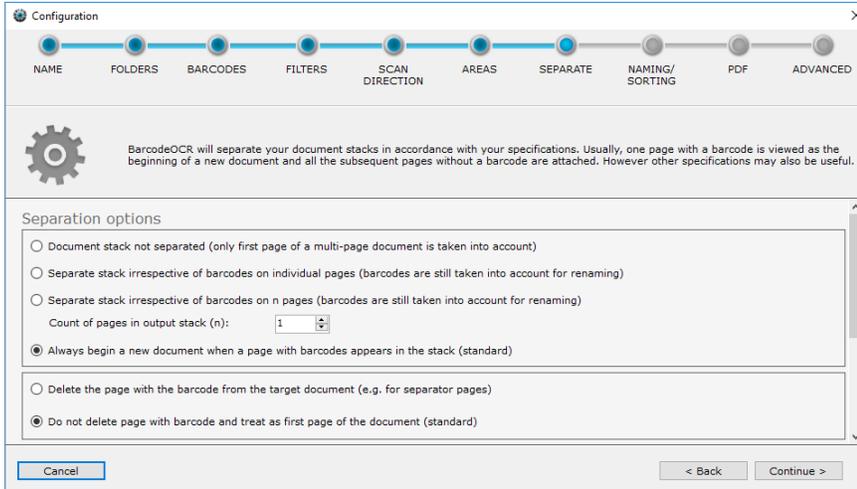
Only barcodes within the green area will be processed. Barcodes inside the white areas will be ignored. The slider on the right enables you to set a recognition percentage ratio. Meaning, if the barcode happens to be between a green and a white area, this ratio will determine, if the barcode will be 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 an 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"> Only the first page of a multi-page document is taken into account The document is not divided up into individual pages 	Renaming single paged receipts
Separate stack irrespective of barcodes on individual pages	<ul style="list-style-type: none"> A multi-page document is divided up into individual documents of one page each, irrespective of barcodes The individual documents are renamed on the basis of the barcode later on, however 	Multiple single paged receipts are scanned as stack (regardless if it contains a barcode)

Separate stack irrespective of barcodes on n pages	<ul style="list-style-type: none"> • A multi-page document is separated into partial stacks of n pages independently of barcodes. • However, the partial stacks are later renamed according to the barcodes. 	Processing of double-sided forms. If the barcode is not recognized, the document is still separated.
Always begin a new document when a page with barcodes appears in the stack	<ul style="list-style-type: none"> • Each page in a multi-page document that has a barcode is viewed as the beginning of a new document (exceptions are defined afterwards) 	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"> • If your documents do not have any barcodes, you can place separator pages with a barcode between the documents before scanning them • If you select this option, the page with the barcode is viewed as a separator page and is not included in the target document 	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"> • If you select this option, the page with the barcode is viewed as a separator page and is not included in the target document 	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"> • A page with a barcode in the document stack marks the beginning of a new document • All subsequent pages on which no barcodes are found are attached to this page • The first subsequent page with a different barcode marks the beginning of the next document 	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"> • A page with a barcode in the document stack marks the beginning of a new document • All subsequent pages on which no barcodes are found or that have the same barcode as the start page are attached to this page • The first subsequent page with a different barcode marks the beginning of the next document 	A multi paged invoice has a single unique barcode on the first page, but could have the same barcode on the following pages.

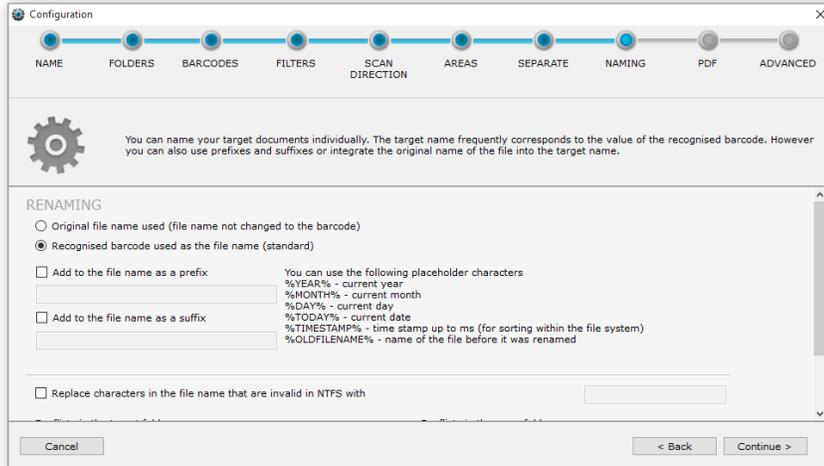
<p>Documents comprise a start page with barcode and the subsequent pages with the same barcode as a mandatory requirement</p>	<ul style="list-style-type: none"> • A page with a barcode in the document stack marks the beginning of a new document • All immediate subsequent pages bearing the same barcode as the start page are attached to the start page • The first subsequent page with a different barcode marks the beginning of a new document • Subsequent pages without a barcode are sent to the error folder 	<p>A multi paged invoice requires a identical barcode for each associated page. Pages without barcodes are moved into the error folder.</p>
<p>Documents comprise a start page with barcode and the subsequent pages with the same barcode as a mandatory requirement or each with a empty page (Splitting duplex pages from a duplex stack)</p>	<ul style="list-style-type: none"> • Two subsequent empty pages are sent to the error folder • At least one matching barcode must be contained in the two subsequent empty pages 	<p>A document is scanned on both sides an the front and back of the document is saved.</p>

Behavior

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

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"> The document is only divided up and not renamed on the basis of the barcode Output files use the source document name 	A preprocess already renames the files. The original filename is kept.
Use recognized barcode as the file name	<ul style="list-style-type: none"> The document is renamed based on the recognized barcode 	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"> Puts the characters entered at the beginning of the file name The placeholders specified on the right can be used 	Every file should have a text or timestamp prepended, to enable chronologically sorted files by name inside of a file browser
Add to the file name as a suffix	<ul style="list-style-type: none"> Puts the characters entered at the end of the file name The placeholders specified on the right can be used 	To relate the processed file to the original document, the original filename should be attached
Replace characters in the file name that are invalid in NTFS with	<ul style="list-style-type: none"> The following characters are invalid in the file name in the NTFS file system: / ? < > \ : * " ' & # % & # 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 If no replacement character is specified, the invalid characters are removed 	The barcode value contains invalid characters, that are later used as a filename. Since a file with invalid characters can't be created on an NTFS file system, the file will be moved inside the error folder and named "Naming Error"

Replace text in the output filename

Use a template for the sort

Most requirements can already be accomplished using a preconfigured template for creating a subfolder structure. Some of the templates can be used using a parameter to adjust the template to your needs:

Name of template	Parameter is used for	Sample (bold = subfolder structure)
Date (Format: yy-MM-dd)	no parameter needed	Sample Barcode: INVOICE-1234 Path: Outputfolder\2017-07-12\INVOICE-1234.pdf
Date (Format: MM-dd)	no parameter needed	Sample Barcode: INVOICE-1234 Path: Outputfolder\07-12\INVOICE-1234.pdf
Date (Format: MM-dd-HH)	no parameter needed	Sample Barcode: INVOICE-1234 Path: Outputfolder\07\INVOICE-1234.pdf
Day (dd)	no parameter needed	Sample Barcode: INVOICE-1234 Path: Outputfolder\2017-07-12\INVOICE-1234.pdf
Hour (HH)	no parameter needed	Sample Barcode: INVOICE-1234 Path: Outputfolder\2017-07-12\INVOICE-1234.pdf
Subfolder based on delimiter	delimiter	Sample Barcode: INVOICES@2017@004 Parameter: @ Path: Outputfolder\INVOICES\2017\004\INVOICES@2017@004.pdf
Custom Date Format	date format)	Sample Barcode: INVOICE-1234 Parameter: yyyyMMddHHmmss Path: Outputfolder\20170712191045\INVOICE-1234.pdf
Use the first X characters from barcode as subfolder	count of characters	Sample Barcode: INVOICE-1234 Parameter: 7 Path: Outputfolder\INVOICE\INVOICE-1234.pdf
Use the last X characters from barcode as subfolder	count of characters	Sample Barcode: INVOICE-1234 Parameter: 4 Path: Outputfolder\1234\INVOICE-1234.pdf

Use an external script to define the name of the subfolder



There are sample files in the folder "Script Samples" in the BarcodeOCR installation folder showing how to customize BarcodeOCR to your needs

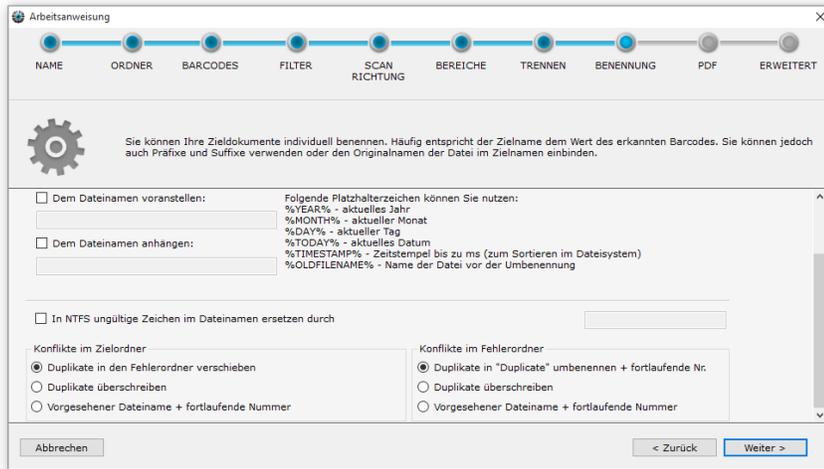
If you need to create complex folder structures, the template might not provide all flexibility. In these cases, you can use a PowerShell script to determine the subfolder (or nested subfolders) as well as set the output filename. This script will be launched while processing the file before saving the document into the output folder. All information regarding the document and the source stack will be passed as a parameter to the script to ensure that you have all information in order to create your folder structure.

You can access all collected information regarding the recognized text (if the document was OCRed) as well as all information regarding barcodes and use the information without restricted to determine the filename and the folder structure.

Using this option you can achieve:

- Sort the documents into subfolders - based on keywords within the recognized text (A sample is included as script in the folder "Script Samples" in the Installation directory)
- Sort Invoices into an "Invoice folder", Offers into a separate "Offers folder" as well as all other documents into another folder - based on keywords within the barcode
- Determine the subfolder path using your own algorithm (you can use all script options from PowerShell to do so)
- Set a completely new file name that is not associated with the recognized barcode
- Create a nested folder structure
- Use recognized but ignored barcodes (using filters) as subfolder name
- All kind of other scriptable options

Please note, that PowerShell-Scripts needs to be signed before using them, or the ExecutionPolicy needs to be adjusted to your needs. If the PowerShell script can't be executed, BarcodeOCR won't be able to use the script to determine the folder structure. In this particular case, a new entry in the error log will be created and the filename won't be saved on your custom path. If you need more information regarding the ExecutionPolicy, please see the sample scripts.



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

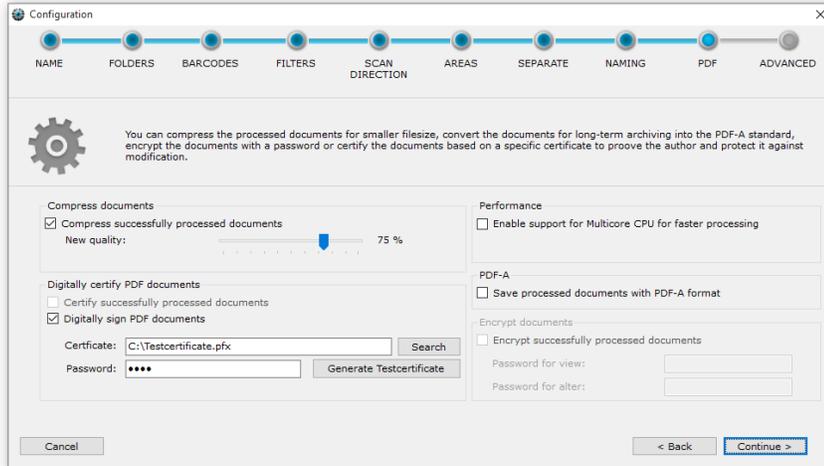
Conflicts in the error folder

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"> The document is renamed "Duplicate" and is given a consecutive number, to ensure that the file name is unique 	The document was preprocessed and the filename already exists
Overwrite duplicates	<ul style="list-style-type: none"> The newer document overwrites the existing one 	The document was preprocessed and the filename already exists
Intended file name + consecutive number	<ul style="list-style-type: none"> The document is filed under the intended name but a consecutive number is attached to ensure that the file name is unique 	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: Texterkennung / Erweitert

Text Recognition and OCR-Options



Make PDF-documents searchable (Text OCR)

If enabled, BarcodeOCR will be recognized text in scanned images and layers the recognized text as an invisible layer on top. If you search in an output document for a specific text, the corresponding result will be highlighted on the correct position. If you using a document management system or a system for indexing the meta information (i.e. windows explorer) you can search the content of the documents and find the file you are searching for very easy.

If enabled, all input documents will be recognized and converted to a searchable pdf file. This also applies to the files that will be saved in the error folder. Enabling this function will change the change the contents of the pages and will result in invalid digital signatures if the files are already signed. Due to this fact, existing PDF/A Certifications or digital signatures will be removed before conversion.

Optimize algorithms

You can adjust the level of quality or the level of speed by moving the arrow to the dedicated side. If you need more precision on the recognized text, move the cursor to the right.

Only detect the following characters

If you want to define what characters might be detected, you can enter all allowed characters without any delimiter (i.e. ABCDEF).

Ignore the following characters

If you want to define what characters *should not* be detected, you can enter all disallowed characters without any delimiter (i.e. ABCDEF).

Optimized processing speed through utilization of all processor cores

This results in a more optimal utilization of several processor cores. When this option is activated, up to 16 processor cores are automatically used. If this option is not checked, multiple processor cores are also used for detection, but processing is not as effective in this case.

If the function is enabled, blank page removal cannot be activated and when PowerShell scripts (subfolder and downstream application) are called, the text per page is not passed as parameter.

Convert documents to black-white documents to reduce filesize

Documents scanned in color can be converted into black white scans and can be compressed by using the CCITT Group 4 Compression-Algorithm, to ensure that the resulting file size is small.

This option will be performed after the Barcode recognition.

Change the resolution of the source documents

If you are forced to scan the documents in a high resolution in order to recognize all barcodes, you can use this option to rerender the images to a specific resolution (DPI). You can combine this function with the "Compress documents" Option from PDF in order to receive even smaller documents.

This option will be performed after the Barcode recognition.

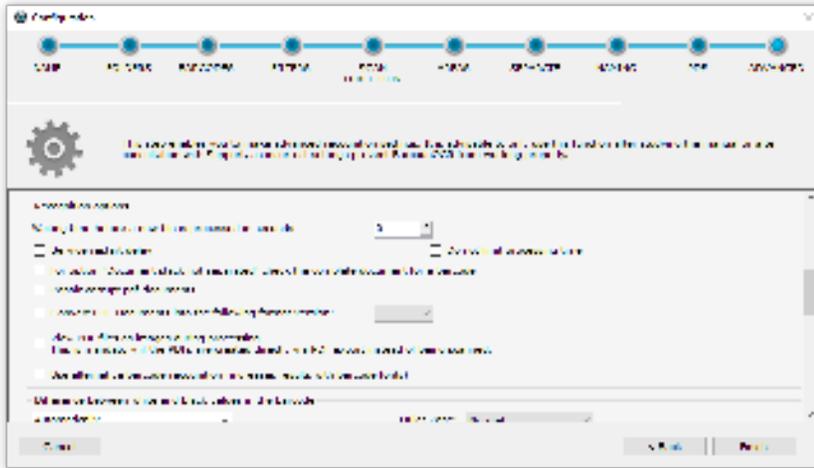
Remove blank pages from the scanned documents

If BarcodeOCR should delete pages with a low amount of information (remove blank pages), you can set up an information threshold. Once activated, every page will be analyzed and a factor will be calculated. If the factor is below the threshold set, the document will be deleted. If the factor is above the threshold, the document will be used in the output document.

To set an initial factor, you can analyze a scanned pdf page using the option "Determine by sample scan".

When activated, the log will contain all factors for each page so that you can adjust the value to the optimal level to remove blank pages but do not delete important pages by accident.

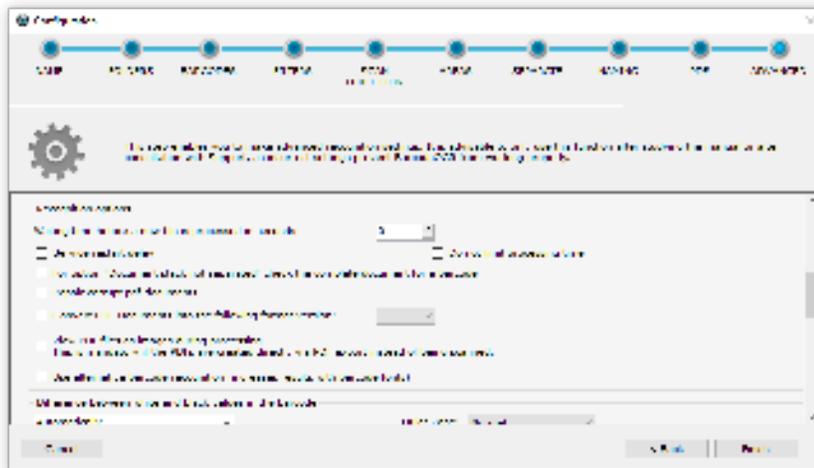
Preprocessing the documents



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

Recognizing options



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 an unusually long processing time

BarcodeOCR has a safety mechanism, that sorts out files if they are being processed for an unusually long time. That way an unobstructed processing of the file queue can be ensured. The default processing time is 60 minutes (15 minutes in older versions). If the file was partially processed the resulting error and output files won't be deleted and the source file from the watcher folder will be copied to the error folder and deleted from the watcher folder.

If you happen to process large documents (page size or resolution) or use filter options, the default time of 60 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 noncompliant 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 signature, to exclude faultily saved PDF-A files
- Removal of meta information within the file
- Removal of unnecessary or duplicate information streams within the PDF file
- Attempt to restore the file structure

Convert PDF-Documents into a specific format version

BarcodeOCR keeps the PDF-Format-Version from the input file and uses the same format as the output file. If you need to change this behaviour, you can set the PDF-Version from the output document to a specific version.

View PDF file as images during processing

If the documents were not scanned in by scanner, but exported as a file from an application, no barcode will probably be recognized without activating this function. If your scanner already saves the document as a searchable file, the option is also required.

If the document has multiple layers, the scanner embed cutting masks in the PDF files or certain optimizations have been applied, enabling this option can also lead to the detection of barcodes.

Compatibility mode: barcode recognition

This type of detection was used by version 4.x. In this case, a graphic is created from each page which is then analyzed.

The amount of time and memory required is considerably higher, but may be required for vectorized PDF files that use a barcode font and are not recognized by the option "View PDF files as images during processing".

In addition, this mode must be switched on for the area detection so that the areas can be assigned without errors. If range detection is activated, this mode is automatically activated and must be switched off manually.

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.

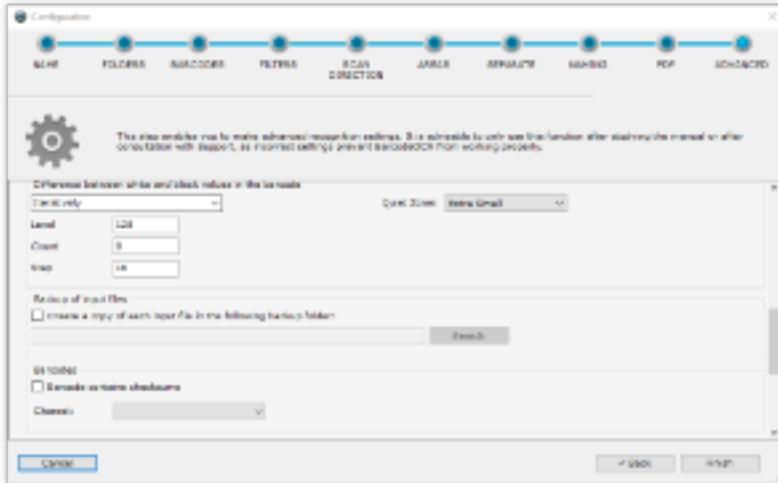
Backing up input files



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.

Barcodes



Barcode contains checksum

By enabling this option, the contained checksum will be removed

Character set

Determines the character set of the output

Downstream application (per output file)

 There are sample files in the folder "Script Samples" in the BarcodeOCR installation folder showing how to customize BarcodeOCR to your needs



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)

i 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 (per 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.

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

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

Starting a PowerShell script (per output file)



There are sample files in the folder "Script Samples" in the BarcodeOCR installation folder showing how to customize BarcodeOCR to your needs

After each processed file, a PowerShell script is started, which receives an extensive data structure with information about the recognition process.

An example script is automatically installed and can be found in the installation folder under "Script Samples" "External Application - Powershell write all parameters to file. ps1".

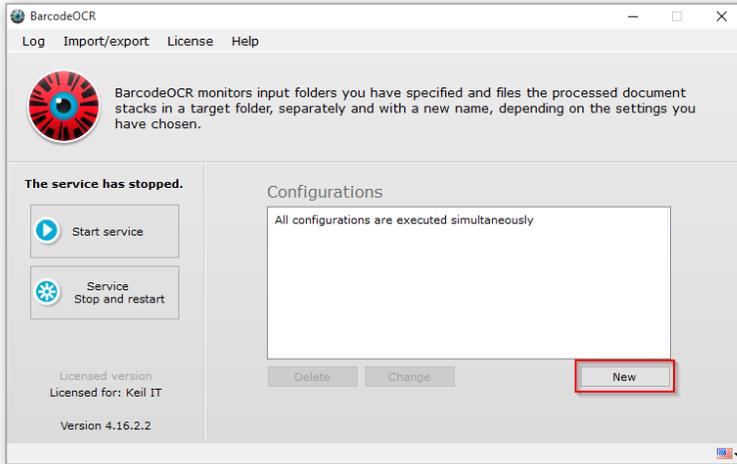
The example script writes all transferred information to a text file and shows all possible data fields, e. g. the following example:

- the configuration used (name and unique ID)
- the file was processed successfully, if no error reason
- the barcode used
- the processing time
- Storage location of any backups created
- Target path and any created subfolders
- Number of pages and page numbers from the original document
- and for each individual page:
 - page number
 - recognized text (if corresponding option is set)
 - detected barcodes (text, type and position)

Verwalten von Arbeitsanweisungen

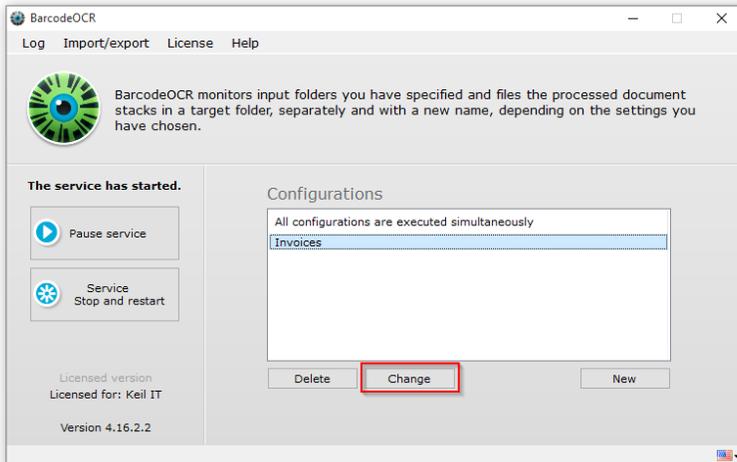
Create a new configuration

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".



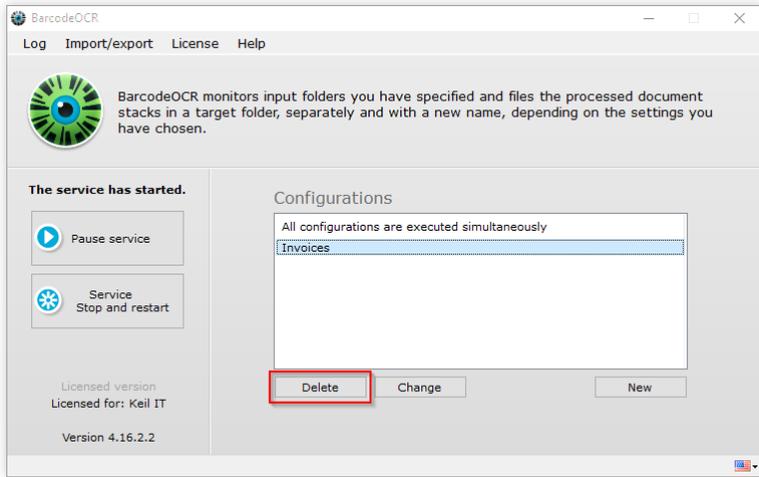
Change

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

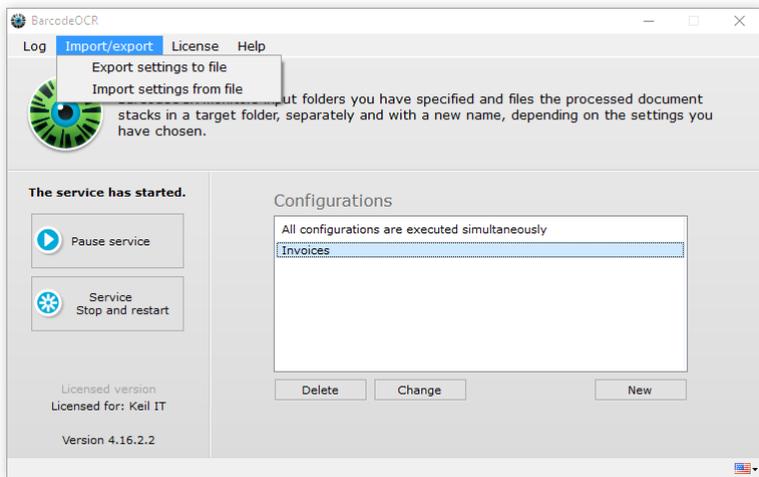
A configuration can be deleted at any time using the "Delete" button on the start page.



Import/Export a configuration

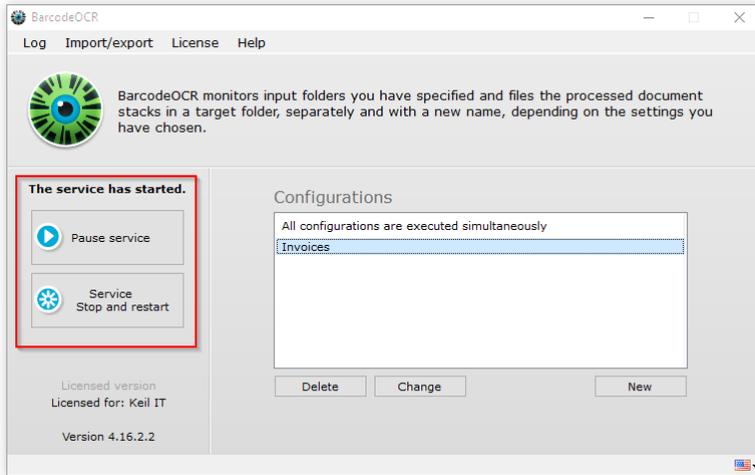
If you want to back up your configurations, e.g. in order to test the settings, to migrate the software to a different PC or make it available to Support, you can use the "Export settings to file" option on the start page. You will be asked to specify a name and a folder for the export. All configurations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

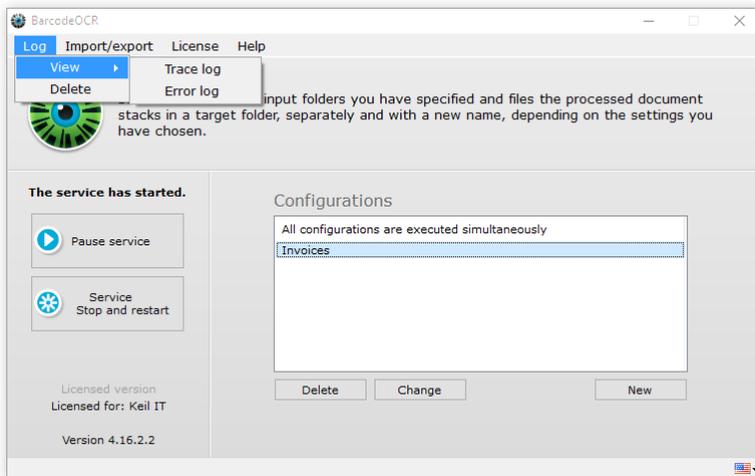
Service control



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".



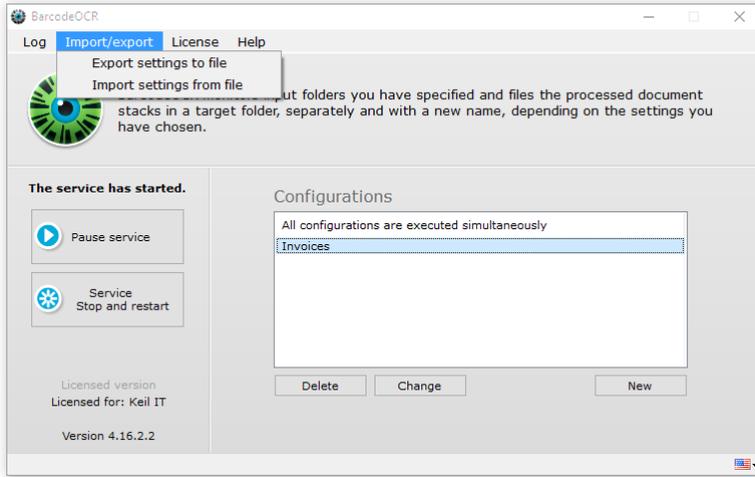
Migration auf einen anderen Rechner

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

Export your settings

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

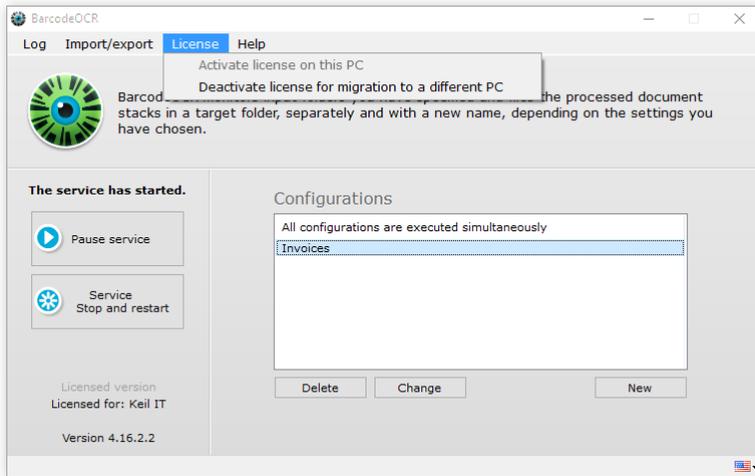
Open the "Import/Export" menu and select the "Export settings to file" option.



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.



Confirm the prompt to deactivate BarcodeOCR.

The deactivation requires an active internet connection. If the PC doesn't have an active internet connection, send the exported settings as well as the serial number to the support.

Activate the license on the new system

Activation the license follows the same steps as the first activation: [Activation of the license](#)

Import your settings

Copy the exported archive from the first step onto the new system.

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.

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

Keine Übersetzung für Englisch vorhanden.

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?](#)
- [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 license on your old PC and activate it on the new one. Further information is provided in the corresponding article: [Migration to a different computer](#).

Can I upgrade to the latest version?

Customers with a maintenance contract benefit from access to the latest BarcodeOCR releases. The latest release for your license can be downloaded from the Download website.

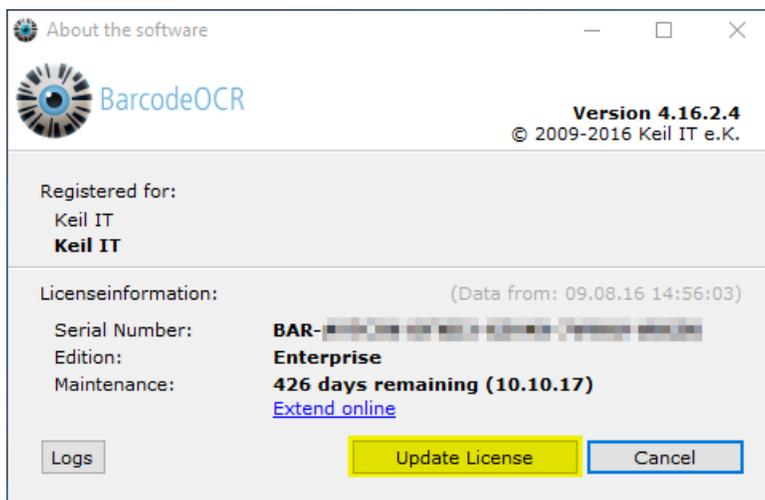
I purchased my license from a reseller. Who should I contact if I have any questions?

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

Upgrade your license (Change editions / Extend your license)

An internet connection is required for updating your license.

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



Probleme

- After updating from 4.x to 17.x a license error is shown on the first start of BarcodeOCR, even if no serial number was entered
- After updating to 17.x some barcodes won't be recognized as well as there are problems recognizing barcodes in specific areas
- No valid license could be found
- Error message: "Token was not expected"
- When using a PowerShell script, a DLL could not be loaded
- 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?

After updating from 4.x to 17.x a license error is shown on the first start of BarcodeOCR, even if no serial number was entered

Error description and environment

- This error is generated after updating an existing 4.x installation to version 17.x
- The error message indicates that no trial or full license could be found
- BarcodeOCR 17.x was installed and an existing installation was not uninstalled / the install dir was not removed

OR

- A special license for that Computer is used

Solution

The problem is caused by a file which wasn't removed on the installation. The file is called "runtime.lic" and can be located in the installation folder.

Delete the file manually and restart BarcodeOCR. After the restart, BarcodeOCR will show the main window and indicates that the Demo was loaded. You can now proceed to activate the software using your serial number as described in the documentation.

After updating to 17.x some barcodes won't be recognized as well as there are problems recognizing barcodes in specific areas

Error description and environment

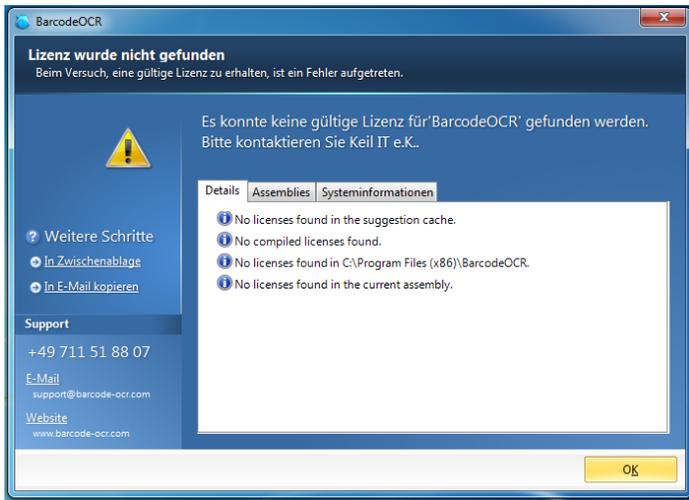
Version 17.x uses a new and optimized recognition routine which is able to read and recognize barcodes much faster with lower impact on the system resources. In some minor cases where barcode fonts are used or special recognition filters are used, there might be a decreased recognition rate or some problems recognizing barcodes in special areas.

Solution

Edit the configuration where you explore the problems and activate the option "Use alternative barcode recognition".

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 upwards

Solution from version 4.13.4.4 upwards

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.

When using a PowerShell script, a DLL could not be loaded

Error message:

```
Add-Type : Could not load file or assembly "file:///C:\Program Files (x86)\BarcodeOCR\BarcodeOCR.PowerShellModels.dll"  
This assembly is built by a runtime newer than the currently loaded runtime and cannot be loaded.
```

Please make sure that the .NET Framework v4.0.30319 was loaded into PowerShell:

```
Windows PowerShell
Copyright (C) 2014 Microsoft Corporation. Alle Rechte vorbehalten.

PS C:\Windows\System32\WindowsPowerShell\v1.0> $psversiontable

Name                           Value
----                           -
PSVersion                      4.0
BuildNumber                     9600
CLRVersion                      4.0.30319.42000
BuildVersion                    6.0.6002.18072
CompatibleVersions              (1.0, 2.0, 3.0, 4.0)
BuildOperatingProtocolVersion  2.2

PS C:\Windows\System32\WindowsPowerShell\v1.0>
```

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.

i 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 4100002561.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="<address 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 license by entering your serial number within the download area on the BarcodeOCR website.

- [BarcodeOCR 18.4.2 from 12.12.2018](#)
- [BarcodeOCR 18.3.3 from 26.09.2018](#)
- [BarcodeOCR 18.2.3 from 04.05.2018](#)
- [BarcodeOCR 18.2.1 from 05.04.2018](#)
- [BarcodeOCR 18.1.4 from 22.03.2018](#)
- [BarcodeOCR 18.1.3 from 28.02.2018](#)
- [BarcodeOCR 18.1.2 from 23.02.2017](#)
- [BarcodeOCR 18.1.1 from 18.01.2017](#)
- [BarcodeOCR 17.4.1 from 17.11.2017](#)
- [BarcodeOCR 17.3.2 from 28.07.2017](#)
- [BarcodeOCR 17.3.1 from 12.07.2017](#)
- [BarcodeOCR 17.2.7 from 04.07.2017](#)
- [BarcodeOCR 17.2.6 from 24.06.2017](#)
- [BarcodeOCR 17.2.5 from 18.05.2017](#)
- [BarcodeOCR 17.1.1 from 01.02.2017](#)
- [BarcodeOCR 4.17.1.1 from 01.02.2017](#)
- [BarcodeOCR 4.16.4.5 from 09.12.2016](#)
- [BarcodeOCR 4.16.3.1 from 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 18.4.2 from 12.12.2018

Changes

- Improved: File size of Tiff files now automatically optimized (server operating systems only)
- Changed: configurations are now displayed sorted alphabetically (A-Z)
- Changed: The service is not restarted after a configuration has been changed if it was stopped before
- Changed: Main window of BarcodeOCR can now be enlarged vertically
- Fixed: On some systems, a problem with the software license can occur after a certain use
- Fixed: Values for "Threshold" under "ADVANCED" are overwritten when a work instruction is edited again.

BarcodeOCR 18.3.3 from 26.09.2018

Changes

- New: Support of Aztec barcodes
- New: Separation option "Separate stacks independently of barcodes into partial stacks with n pages (barcodes will still be considered when renaming)".
- Changed: If processing of a file is aborted due to the processing limit, the file is now stored as "TIMEOUT" instead of "CORRUPT_FILE"
- Changed Limit of processing: Limit of processing of a file increased from 15 minutes to 60 minutes (with option under ADVANCED for increase 90 minutes or deactivation)
- Modified: Also, breaks within the barcode are replaced by the function "Replace NTFS non-compliant characters".
- Improved: Intelligent Mail Barcode Recognition
- Improved: Recognition of Interleaved 2of5 barcodes
- Fixed an error in the user interface: Error in the user interface when selecting subfolder generation
- Fixed: Tiff file is not saved in error folder

- Fixed: Reading problems with TIFF files where frame pages do not contain metadata
- Fixed: Problems with passing special characters in the name of the work instruction to downstream .bat scripts
- Fixed: Subfolders are not created when processing a one-sided image
- Fixed: JPEG graphics with the file extension .jpeg instead of .jpg are ignored
- Fixed: Error messages for PowerShell scripts in the log: Error messages for PowerShell scripts in log, although no script should be executed according to configuration
- Fixed: Service was not restarted automatically in rare cases despite clicking "Restart"

BarcodeOCR 18.2.3 from 04.05.2018

Changes

- New: Custom OCR settings can now be set via work instructions
- Fixed: Error in the user interface
- Fixed: Cleaning of the temporary folder caused an error on some systems and the input file was not deleted
- Fixed: Page number in PowerShell script or the info xml does not match recognized text if the input document has more than 50 pages

BarcodeOCR 18.2.1 from 05.04.2018

Changes

- Fixed: Subfolder is not created if the complete content of the barcode is to be used as subfolder
- Fixed: When using the PowerShell script, when using a counter variable, it is incorrectly incremented
- Fixed: Downstream application may not start if special characters are contained in the barcode name

BarcodeOCR 18.1.4 from 22.03.2018

Changes

- New: Powershell: NumberOfRemovedPages parameter, which passes the number of pages removed by blank page detection
- Fixed: Powershell: NumberOfPages parameter has the wrong number of pages if blank page detection already removed pages
- Fixed: End date of maintenance is displayed incorrectly formatted for some licenses

BarcodeOCR 18.1.3 from 28.02.2018

Changes

- New: Support of the "Essentials"subscription
- Fixed: Blank page detection does not remove documents with a factor of 0.
- Fixed: If the first page of a batch is recognized as a blank page, an error may occur when saving if the target document has only one page.

BarcodeOCR 18.1.2 from 23.02.2017

Changes

- New: Support for subscriptions
- Fixed: In individual cases, in case of a defective PDF file, the input file is deleted during the saving process instead of being moved to the error folder as a "Corrupt_File".
- Fixed: Problems with fonts of processed files saved as PDF files by Microsoft Word
- Changed: Demo version without watermark can now process 5000 pages per month

BarcodeOCR 18.1.1 from 18.01.2017

Changes

- Fixed: Problems with trial version with special license key of support
- Fixed: PowerShell for determining the file name is ignored without subfolder variable
- Fixed: Error in the user interface
- Improved: Internal optimizations for upcoming updates
- Improved: Recognition of QR codes with a logo (design QR codes)
- Improved: Incompatible files remain in the input folder and are not moved to the error folder as incompatible files.

BarcodeOCR 17.4.1 from 17.11.2017

Changes

- New: Support for calling PowerShell scripts as a downstream application with advanced information (Enterprise only)
- Improved: Optimal utilization of existing CPU cores for text recognition (new option under "Advanced")
- Improved: Handling meta data in PDF files
- Improved: Error messages regarding subfolders are now displayed in the error log
- Improved: English translation
- Improved: Tab characters are also recognized as "illegal" characters and removed/replaced
- Fixed: Problems with recognition of barcodes within single-sided. tiff documents
- Fixed: Problems with selection and transfer to the downstream application "per input file".

BarcodeOCR 17.3.2 from 28.07.2017

Changes

- Enhanced: Faster processing of files, if the target resolution should be changed
- Fixed: Problems while resizing the UI in step "RENAMING"
- Fixed: Problems while recognizing text on files with hundreds of pages
- Fixed: The character " " will now be replacing when using the "replace illegal NTFS characters" feature
- Fixed: When using the area filtering, valid barcodes could be excluded

BarcodeOCR 17.3.1 from 12.07.2017

Changes

- New: Creating sub folder and sort files into these folders dynamically (based on script, only Enterprise)
- New: Set a custom file when sorting files into sub folders (using a script, only Enterprise)
- New: Creating sub folder and sort files into these folders dynamically (based on predefined templates, Standard edition and above)
- Enhanced: "Replace characters in barcodes" is able to replace spaces
- Enhanced: Default installation now includes sample scripts

BarcodeOCR 17.2.7 from 04.07.2017

Changes

- New: Alternative Barcode-Recognition for better recognition results using Barcode-Fonts
- Enhanced: Recognition Code 128
- Enhanced: Recognition Code 39 and Code 39 Extended
- Enhanced: Recognition QR-Barcodes
- Enhanced: Recognition DataMatrix-Barcodes
- Enhanced: Performance optimizations while recognizing Barcodes
- Fixed: Problems in the UI (Regarding OCR section)
- Fixed: Renaming signed or certified PDF-documents might break the existing digital signature
- Fixed: Problems using the trial on specific operating systems

BarcodeOCR 17.2.6 from 24.06.2017

Changes

- New: New parameter for renaming: file counter per configuration (%LOCALCOUNTER%)
- New: New parameter for renaming: file counter per BarcodeOCR installation (%GLOBALCOUNTER%)
- New: New parameter for renaming: page count of the output file (%PGCNT%)
- New: Replace Text within the barcodes
- New: Notification while starting the application when a new update is available
- New: 'Check for Updates'-Button
- Enhanced: Converting of PDF files into PDF/A Standard
- Enhanced: License won't be reset when restoring a backed up configuration
- Enhanced: If the file could not be converted into PDF/A standard, a log entry within the error log will be written
- Enhanced: Info if the maintenance expires within the next 45 days
- Fixed: Problems with the license after installing Version 17.x

BarcodeOCR 17.2.5 from 18.05.2017

Changes

- Fixed: UI problems

BarcodeOCR 17.1.1 from 01.02.2017

Changes

- New: Empty pages can now be removed from the destination document (BETA)
- New: Support for splitting tiff pages with multiple pages
- New: pdf file format can now be defined for output documents
- New: Info.xml file now contains the recognized text from OCR
- Enhanced: Performance optimizations
- Enhanced: Activation
- Fixed: Wrong splitting within the error folder using the split option "Documents comprise a start page and the subsequent pages with the same barcode as a mandatory requirement"
- Fixed: UI problems

BarcodeOCR 4.17.1.1 from 01.02.2017

Changes

- Enhanced: Text recognition for special characters
- Fixed: Error while saving the settings for the "downstream application"
- Fixed: Translation errors

BarcodeOCR 4.16.4.5 from 09.12.2016

Changes

- New: Text recognition and creation of searchable documents (OCR)
- New: Automatic alignment of the input pages based on reading direction
- New: Converting input documents to specific resolutions (DPI)
- New: Converting input documents to B/W documents and compressing using CCITT Group 4 algorithm
- New: Existing configurations can now be cloned
- Enhanced: Recognition of DataMatrix barcodes
- Enhanced: Recognition of QR-Code barcodes
- Enhanced: Performance optimizations
- Enhanced: Processing of network files
- Enhanced: Info-Xml-File now contains the path to the backup input file
- Fixed: Certified documents may not be saved with a digital signature
- Fixed: Problems when processing DIN-A0 images

BarcodeOCR 4.16.3.1 from 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 an 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 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 may 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 accuaracy 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

Vorherige Versionen

If you are not using the latest version of BarcodeOCR, you can download the corresponding manual right here:

Version	German	English
4.16.3.x	Download	Download
4.17.1.x	Download	Download
17.3.x	Download	Download
17.4.x	Download	Download
18.1.x	Download	Download