



IMiS^(R)/BatchScan Manual

Version 10.1.2010

**IMAGING
SYSTEMS**
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TABLE OF CONTENTS

1	ABOUT THE MANUAL.....	7
1.1	About the IMiS®/BatchScan module	7
1.2	New functionalities in this version	8
2	GENERAL ON SCANNING DOCUMENTS	9
2.1	Methods of scanning documents	9
2.2	Connecting a scanner	9
2.3	Scanning resolution and quality	10
2.4	File compression and size.....	10
2.5	Recording of scanned documents.....	12
2.5.1	Single-page formats.....	12
2.5.2	Multi-page formats.....	13
3	TECHNICAL DOCUMENTATION	15
3.1	Table of valid compressions for different types of files.....	15
3.2	Location for saving documents.....	16
4	SYSTEM REQUIREMENTS.....	17
4.1	Hardware.....	17
4.1.1	Minimum requirements.....	17
4.1.2	Recommended requirements	17
4.2	Software – operating system.....	17
5	INSTALLATION.....	18
5.1	Installation with the wizard	18
5.2	Administrative installation.....	26
5.3	Silent installation.....	26
5.3.1	Installation procedure	27
5.4	Product upgrade.....	29
5.5	Product removal.....	29
5.5.1	Manual product removal.....	31
6	PRODUCT MANAGEMENT	33
6.1	Launching the product	33
6.1.1	IMiS®/BatchScan as an independent product.....	33
6.1.2	Integration of IMiS®/BatchScan into another application	34
6.2	Scanner selection.....	36
6.3	Product setup	38
6.3.1	Creating a profile	38
6.3.2	General profile settings	39
6.3.2.1	Filter setup for image processing.....	42

6.3.2.2	Advanced setup of barcode recognition	46
6.3.3	Document source setup.....	49
6.3.3.1	Scanner as a document source	49
6.3.3.2	Document source is a data system.....	53
6.3.4	Document destination setup.....	55
6.3.5	Content setup.....	57
6.4	Profile editing	60
6.5	Deleting profile	60
6.6	Scanning	62
6.7	Saving a profile	66
6.8	Product shutdown.....	67
7	DOCUMENT MANAGEMENT	69
7.1.1	Barcodes	73
7.1.2	Content.....	74
8	TROUBLESHOOTING	76
8.1	Scanning problems.....	76
8.1.1	Scanner driver is not loaded	76
8.1.2	Paper jammed in scanner	76
8.2	Problems opening documents	77
8.2.1	Incorrect document format.....	77
8.2.2	Document cannot be opened in another viewer	77

TABLE OF IMAGES

Below is a table of images appearing in the manual:

Image 1: Start of installation of the IMiS®/BatchScan client.....	18
Image 2: Viewing and accepting the license terms.....	19
Image 3: Entering information on the IMiS®/BatchScan client user	20
Image 4: Choosing between full or user-customized installation	20
Image 5: Selecting the installation items and location for the IMiS®/BatchScan client.....	21
Image 6: Available disk space notification.....	21
Image 7: Selecting the location of scanner initialization files.....	22
Image 8: Displaying and adding IMiS®/BatchScan shortcuts.....	23
Image 9: Confirming settings prior to installation.....	24
Image 10: Displaying a security warning	24
Image 11: Displaying installation progress.....	25
Image 12: Notification of completing the installation process.....	25
Image 13: Command bar for silent installation of IMiS®/BatchScan.....	27
Image 14: Removing IMiS®/BatchScan using the "Control Panel"	29
Image 15: Entering the "Control Panel"	30
Image 16: Removing IMiS®/BatchScan with "Uninstall wizard"	30
Image 17: Showing the window "About the program".....	33
Image 18: Checking driver performance	34
Image 19: Selecting the action "Choose a scanner" in the popup menu.....	36
Image 20: Selecting a scanner driver from the list.....	37
Image 21: Selecting the driver location	37
Image 22: Setting advanced scanner options.....	37
Image 23: Showing the user window without a selected profile.....	38
Image 24: Selecting the action "New" in the popup menu.....	38
Image 25: The "Set profile" dialog box.....	39
Image 26: Notification of the existence of multiple profiles.....	40
Image 27: Selecting a profile folder from the list	40
Image 28: Adding the selected filter.....	43
Image 29: Notification shown if the barcode detection filter is not on the list	43
Image 30: Notification shown if the blank page detection filter is not on the list	43
Image 31: Setting barcodes for separating document pages	46
Image 32: Example of separating document pages based on a specific barcode.....	47
Image 33: Example of barcode-based document separation	48
Image 34: Example of an IMiS®/BatchScan XML file after saving the profile.....	48
Image 35: Setting the scanner as the document source	49
Image 36: Notification shown if the scanner name does not match the name in the profile.....	50

Image 37: Setting scanner properties	52
Image 38: Setting the file system as the document source	53
Image 39: Setting the file system as the document destination	55
Image 40: Notification shown if an incorrect folder name is entered	56
Image 41: Notification shown if the folder is entered before confirming the profile	56
Image 42: Setting additional data for document content	57
Image 43: Setting preset values	59
Image 44: Selecting the "Edit" command in the popup menu	60
Image 45: Selecting the "Delete" command in the popup menu	60
Image 46: Notification shown if the profile is not empty	61
Image 47: Confirming document deletion	61
Image 48: Selecting the right profile	62
Image 49: Notification shown if a different scanner has been selected than the one specified	62
Image 50: Scanner settings	63
Image 51: Selecting the "Start" command in the popup menu	63
Image 52: Entering the required data for the scanned document	64
Image 53: Selecting the "Save" command in the popup menu	65
Image 54: Notification shown if a document already exists in the profile	65
Image 55: Selecting the "Save" command in the popup menu	66
Image 56: Notification shown when selecting another profile or closing the application	66
Image 57: Selecting the "Exit" command in the popup menu	67
Image 58: Izбира križca za izhod iz IMiS®/BatchScan	67
Image 59: Selecting a command from the toolbar	67
Image 60: Notification for saving before shutdown	68
Image 61: Selecting the "Save as" command in the popup menu	69
Image 62: Selecting the "Move" command in the popup menu	69
Image 63: Selecting a folder for moving the selected documents	70
Image 64: Notification shown if another document has the same name	70
Image 65: Selecting the "Delete" command in the popup menu	71
Image 66: Notification shown when deleting the selected documents	71
Image 67: Selecting the "Scan page(s)" command in the popup menu	72
Image 68: Selecting the "Overwrite" command in the popup menu	72
Image 69: Showing a barcode value recognized on the document page	73
Image 70: Selecting the "Add barcode" command in the popup menu	73
Image 71: Manual entry of the "Company name" value	74
Image 72: Selecting the field in the popup menu	75
Image 73: Error notification "Cannot establish communication with scanner"	76
Image 74: Error notification "Paper jammed in scanner"	76

Image 75: Error notification "Corrupted file"	77
Image 76: Error notification "Cannot open document"	77

LIST OF TABLES

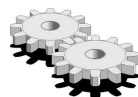
Below is a list of tables appearing in the manual:

Table 1: Compression methods by color depth type.....	11
Table 2: Valid compressions for different file types.....	15
Table 3: Silent installation modes.....	27
Table 4: Supported command bar parameters	28
Table 5: Available filters	46

Symbols Used in the Manual



..... Tips and Shortcuts



..... Instructions for Advanced Users

1 ABOUT THE MANUAL

This user manual describes the functionalities of the IMiS®/BatchScan software module.

The content of the general part of this manual is the same as in the IMiS®/Scan & IMiS®/View manual. The manuals differ in chapters on product and document management.

1.1 About the IMiS®/BatchScan module

IMiS®/BatchScan is a software module for scanning larger quantities of paper documents.

During batch scanning, documents are created automatically on the basis of a distinguishing element (bar code, an empty sheet of paper, a certain number of pages).

Different options for the scanning profile settings (paper size, resolution, color depth, brightness, sharpness, two-page scanning) enable the batch scanning of paper documents of varying readability and quality.

The user interface is completely adapted to batch scanning, causing work to proceed fast and efficiently.

We can achieve quick processing of larger quantities of documents by separating units within each batch. To separate one-page and multi-page documents, we most often use a bar code. In the process of batch scanning, IMiS®/BatchScan searches for and recognizes bar codes on documents (on the whole page or only in a certain area) and enters them into the scanning results, along with other information (which can be used during recording into the information system).

For faster recording of batch scanned documents, we first determine the metadata needed for further processing (compulsory, non-compulsory, textual, numeric, by date, etc.).

These metadata, along with bar codes, form the data that can be used for automatic recording into other information systems. Marking a document section containing data enables users an easier metadata entry.

IMiS®/BatchScan users can remove, insert, transfer, save and delete individual scanned documents or their pages from batch scanned documents. IP (image processing) filters are used to enhance scanned documents of lower quality. A hierarchical chart is formed for assigning names to documents. In settings, users can select the automatic removal of certain bar codes in the event of several bar codes on a single document, based on their values.

Paths to batch scanned documents, together with bar code information and potential metadata, are stored into an XML file. These scanned documents and data are used in the application solutions (ERP, DMS, CRM, BPM, ...). Using IMiS®/Avalanche or proprietary routing scripts we automatically route them into relevant notations (documents) of application solutions on the basis of bar codes and archive them on IMiS®/ARChive Server.

1.2 New functionalities in this version

We have implemented the following new functionalities and improvements to the previous version 9.1.1412 of the IMiS®/BatchScan module:

New functionalities:

- Content of the "Barcode" type can no longer be specified in the "Barcode separator" scanning mode.
- Barcodes and the "Add barcode" button are visible only in the "Barcode separator" scanning mode.
- Scanning does not stop for entering content of the "Barcode" type if only one barcode has been recognized.

Improvements:

- Adding a new profile with the same name in a different case is no longer possible.
- The default status of the "Hide content" option after adding new content using the "Add" button.
- Enabling the "Add barcode" button after scanning the first document.
- Resetting the barcode values when reading document content.
- Saving and reverting the status after canceling the creation of a new profile.

2 GENERAL ON SCANNING DOCUMENTS

2.1 Methods of scanning documents

Scanning is the converting of documents in paper form into a digital data file for the purpose of viewing and saving to storage media. Paper documents can be captured using specialized scanners, multifunction devices or digital cameras.

A scanner is still the most suitable for capturing larger quantities of paper documents.

A scanner can be connected locally or via a computer network.

Based on our experience in scanning, it is recommended that you connect the scanner locally.

2.2 Connecting a scanner

In order to successfully convert paper documents into digital form, you need software in addition to hardware (scanner and computer).

In order for various scanners and the IMiS®/BatchScan software product to successfully scan paper documents, you must take into account the preset protocols or standards for connecting and transferring digital contents. The best known standards are ISIS, TWAIN and WIA.

ISIS (**I**mage and **S**canner **I**nterface **S**pecification) is an industrial scanner interface. It was developed by Pixel Translations in 1990. Today this standard is owned by the OpenText Corporation, which sees to its development and use. Any scanner manufacturer may develop its own ISIS drivers, but must obtain a certificate of compatibility with the ISIS standard from OpenText. In doing so, it must pay a license fee to EMC. In general, all production scanners use ISIS drivers.

TWAIN (**T**ool **W**ithout **A**n **I**mportant **N**ame) is a free scanning application programming interface. It was the first standard to enable the connecting of software to various scanners. The development of this standard is overseen by a consortium of large scanner manufacturers called TWAIN Working Group.

A downside to this standard is that the user interface is integrated into the TWAIN driver, which makes it harder to implement the driver. Another problem is the long waiting periods for innovations. Generally speaking, low-cost scanners use only the TWAIN driver.

WIA (Windows Imaging Architecture) is a driver and API, developed by Microsoft. It only works on the Windows operating system. The entire development of the driver is tied to Microsoft's objectives and does not really take into account the demands of scanner developers.

2.3 Scanning resolution and quality

Scanning works on the principle of detecting light reflected off paper or picture.

The entire surface of the sheet is divided into small pixels. Each pixel is determined by its position, brightness level and color (color scanning). Resolution is the number of pixels per unit of length.

It is usually written down as number of dots per inch (dpi).

A document which is divided into more pixels has better resolution and consequently its conversion into digital form is of higher quality. The scanning resolution is conditioned by the scanner technology. Scanners support a resolution from 100 to 1600 dpi. For the needs of archiving a non-image document, a resolution of 300 dpi is sufficient.

Scanning with a resolution of under 200 dpi may result in unreadable conversion of archived documents. Scanning with more than 300 dpi is sensible if the original text on paper is of poorer quality or when you wish to convert an image of a document into digital form with very high resolution.

2.4 File compression and size

When scanning, a dot on paper is being copied to a digital memory unit.

In the case of black-and-white copying this unit is 1 bit, while in the case of gray or color copying it can be a byte or bytes. The quantity of color or level of brightness which is captured with a scanner is called color depth. Greater color depth gives a broader range of various colors and consequently means greater memory usage. The first row in the table below gives an example of how color scanning can use up to 15 MB of memory.

Color depth	Black & white (1 bit)	Gray (8 bit)	Color (24 bit)
None	475 KB	5 MB	15 MB
CCITT G3	85 KB	x	x
CCITT G4 T6	45 KB	x	x
JBIG	36 KB	x	x
JBIG 2bit	x	84 KB	x
JBIG 3bit	x	165 KB	x
JBIG 4bit	x	420 KB	x
Packed bits	109 KB	5 MB	15 MB
LZW	75 KB	3,2 MB	x
ZIP	56 KB	3 MB	9 MB
Wang JPEG	x	315 KB	363 KB
Sequential JPEG	x	315 KB	360 KB
Progressive JPEG	x	310 KB	334 KB

Table 1: Compression methods by color depth type

Such quantities of obtained digital data may cause problems with the data transfer speed from the scanner to a computer or a lack of space on the storage medium.

For this reason, digital data is compressed. The above table shows which compression methods are suitable for each color depth. Generally speaking, compression methods are divided into "lossless" and "lossy".

Lossless Data Compression

The algorithms of methods in this group look for repeated strings in the digital document and shorten them without losing data. The quality of the scanned document prior to compression remains the same after the data is decompressed. The characteristic methods of this group are G4 T6, LZW and ZIP compressions.

Lossy Data Compression

A characteristic of the algorithm in this group is the removal of unimportant data from scanned documents and assigning similar pixels in the document to a common denominator (e.g.: it changes various shades of a blue sky into a single color for the entire range of blue shades).

Thus the original digital image is modified and the display quality is reduced.

The decompressed image no longer matches the original. A representative of this group is JPEG compression. Repeated compressing and decompressing of an image may significantly affect the quality of a scanned document.

Black-and-white scanning is sufficient for the majority of documents, which is why we do not recommend scanning in gray or color. The majority of scanners intended for document capture uses advanced methods and filters for graphic processing, which ensures the optimum quality of scanned documents.

We recommend that you use lossless compressions for scanning text documents, and compressions from the JPEG family for image documents. For image documents which must preserve their source file you can likewise use the lossless compression method.

2.5 Recording of scanned documents

The recording of scanned documents to a storage medium is executed in preset file formats.

There are different types of file formats; however, not all are suitable for a specific type of document.

In general, file formats are divided into single-page and multi-page. In addition to a digital record of the document, all formats store additional information about the document in their structure.

2.5.1 Single-page formats

Single-page formats are capable of recording one page to a file only. They are used for saving images and are suitable for the further processing of scanned images. The best known formats in this group are BMP, PNG and JPEG.

BMP (Bitmap File Format)

This file format enables the saving of digital images of random height and width in various resolutions and color depths. This format was developed by Microsoft to be used in its applications and the Windows operating system. The fact is that this format is well documented and patent-free, which is why it is present in all image processing programs. A flaw of this format is that it does not support data compression and therefore the files take up a lot of space on the storage medium.

This format is not recommended for saving scanned documents.

JPEG (Joint Photographic Expert Group)

This format was created in 1992 as an ISO standard for describing the procedure of compressing an image into a byte stream. A characteristic of this format is that the compression of the digital image affects the image display quality. The greater the compression level, the smaller the file and, consequently, poorer image quality when decompressed. The JPEG format gave rise to other versions of file formats for image recording: JBIG, JPEG 2000, sequential JPEG and progressive JPEG.

This format is recommended for saving digitized photographs and images which contain many shades of color.

Scanned text documents which contain sharp contrasts between adjacent pixels are not suitable for being saved in this format.

2.5.2 Multi-page formats

Multi-page formats enable the recording of multiple pages into a single file.

The best known representatives are the TIFF and PDF formats.

TIFF (Tagged Image File Format)

This format began to be developed in 1986 for the purpose of standardizing the saving of scanned documents from various scanners. It aimed to provide high functionality of various scanners and simplicity in exchanging scanned documents among various applications.

It was designed for use in "desktop publishing". The format's structure enables the recording of various metadata about the document, in addition to the compressed digital document. The structure of metadata can be preset and known to many applications or merely to those which enable the displaying of said information. The entire file is dissected into identifiers, with each identifier being either a digitally converted document or information about the document (compression method, document size, resolution, color depth etc.).

This format is present in all applications that are used for capture.

Since 2009 the format has been owned by Adobe System, which sees to its upgrades and modifications.

PDF (**P**ortable **D**ocument **F**ormat)

This format began to be developed in 1993 by Adobe System. Its purpose was to create a file format that would be portable between all file systems and applications. It was to represent a universal format for saving all kinds of computer-generated content.

It was to be used for saving text products, images in vector or raster graphics and other audio-video content. The PDF format enables the saving of a document in its entirety.

Since its beginnings, the format has seen many upgrades and modifications.

One version of the PDF format has become an ISO standard for the long-term archiving of computer-generated content (PDF/A). The PDF/A format guarantees the same content and appearance in various operating systems and applications.

3 TECHNICAL DOCUMENTATION

3.1 Table of valid compressions for different types of files

Not all file formats support all compression methods for all color depths.

IMiS®/BatchScan supports all the known image file formats, of which the most commonly used are TIFF, PDF, JPEG, GIF, PNG and BMP. However, it saves only in a multi-page image format, i.e. TIFF or PDF/A.

Table of valid compressions for saving files:

Color depth	Black & white (1 bit)	Gray (8 bit)	Color (24 bit)
None	TIFF	TIFF	TIFF
CCITT G3	TIFF, PDF/A		
CCITT G4 T6	TIFF, PDF/A		
JBIG	TIFF		
Packed bits	TIFF		
LZW	TIFF	TIFF	TIFF
ZIP	TIFF, PDF/A	TIFF, PDF/A	TIFF, PDF/A
Wang JPEG		TIFF	TIFF
Sequential JPEG		TIFF	TIFF
Progressive JPEG			TIFF

Table 2: Valid compressions for different file types

For rendering documents, we recommend black-and-white color depth using a CCITT Group 4 compression method. The file format can be TIFF or PDF/A, which both ensure long-term archiving. If you wish to capture colors in a document without losing the quality of the scanned image, choose the ZIP compression method and the PDF/A file format.

Some of the older viewers of TIFF files do not support ZIP, JBIG and LZW compression methods; hence documents which have been compressed using these methods cannot be displayed.

3.2 Location for saving documents

A scanned document must be saved to a storage medium for later use and viewing.

IMiS®/BatchScan uses a file system for saving scanned documents.

The scanned document can be saved to a local disk, a network medium or external units (USB flash drive, external hard drive).

Prior to saving them, all scanned documents must be named manually and the correct save location must be chosen. A document saved in this manner can be viewed subsequently in other programs that display files recorded in one of the file formats.

In this case the security level and access rights of individual users to these documents are set at the level of the Windows operating system rights.

4 SYSTEM REQUIREMENTS

4.1 Hardware

Most of the computers that can be bought on the market today meet the requirements of the IMiS®/BatchScan application.

4.1.1 Minimum requirements

- computer with an Intel Pentium 32-bit (x86) or 64-bit (x64) 800 Mhz processor or other compatible processor with x86 architecture (must ensure the minimum requirements of the installed operating system);
- 256 MB RAM (must ensure the minimum requirements of the installed operating system);
- disk capacity of at least 200 MB for IMiS®/BatchScan installation (must ensure the minimum requirements of the installed operating system);
- network access using the TCP/IP protocol (IPv4 or IPv6);
- USB connection to the scanner. All ISIS-compatible scanners are supported.

4.1.2 Recommended requirements

- computer with a multi-core Intel processor (32-bit or 64-bit) with 2GHz (or more);
- 1 GB high-frequency SDRAM (DDR3/DDR4) or more;
- 50 GB disk capacity;
- network access using the TCP/IP protocol (IPv4 or IPv6);
- USB 3.0 connection to the scanner. All ISIS-compatible scanners are supported.

4.2 Software – operating system

The IMiS®/BatchScan application works on a 32-bit or 64-bit Windows operating system. List of supported versions of Windows operating systems:

- Windows 7 (32-bit or 64-bit).

5 INSTALLATION

IMiS®/BatchScan installation can be performed with a setup wizard as administrative installation or "silent" installation. In any case, the displayed notifications and dialog boxes are in English.

5.1 Installation with the wizard

Below is a description of the IMiS®/BatchScan installation procedure using the wizard.

The installation can be performed by a user with administrator rights and in an environment that meets at least the minimum installation requirements. The minimum requirements can be upgraded in accordance with the predicted needs.

For more information see the chapter [Software-operating system](#).

Installation commences when launching the installation package from the file system.

Example of the setup package name:

IMiS.BatchScan.10.1.2010.Full.msi

The introductory dialog box appears:

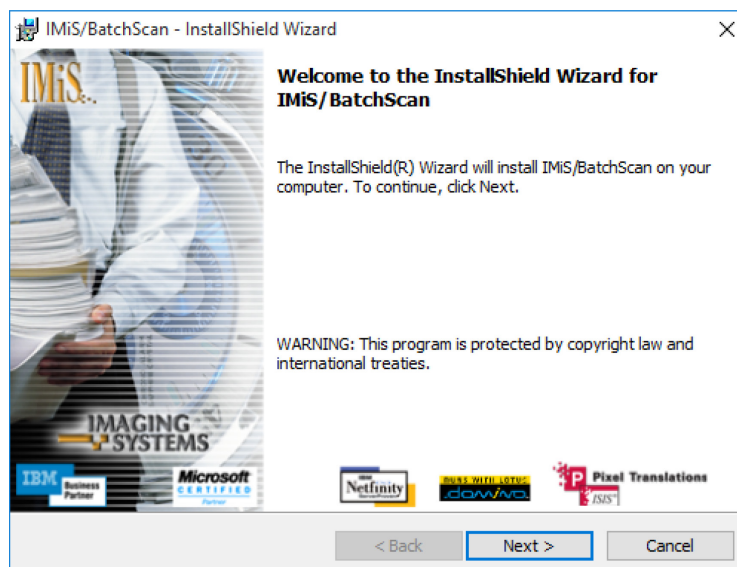


Image 1: Start of installation of the IMiS®/BatchScan client

At any point during the installation procedure, you can abort the procedure by clicking on the "Cancel" button.

A dialog box appears in which you can either abort or continue the installation.

All the files and settings installed in the Windows registry until then are deleted.

By clicking on the "Back" button, you return to the previous installation step.

By clicking on the "Next" button, you continue with the next step.

In the next step read the terms of the license agreement carefully. If you agree with them, select

"I accept the terms in the license agreement" and thus fully accept the license terms.

If you do not agree with the license terms, select "I do not accept terms in the license agreement" and by clicking on the "Cancel" button cancel the installation procedure.

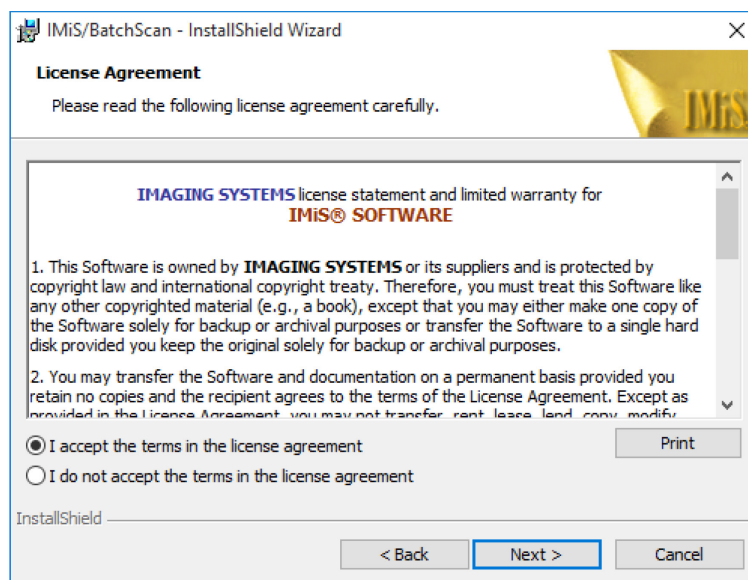
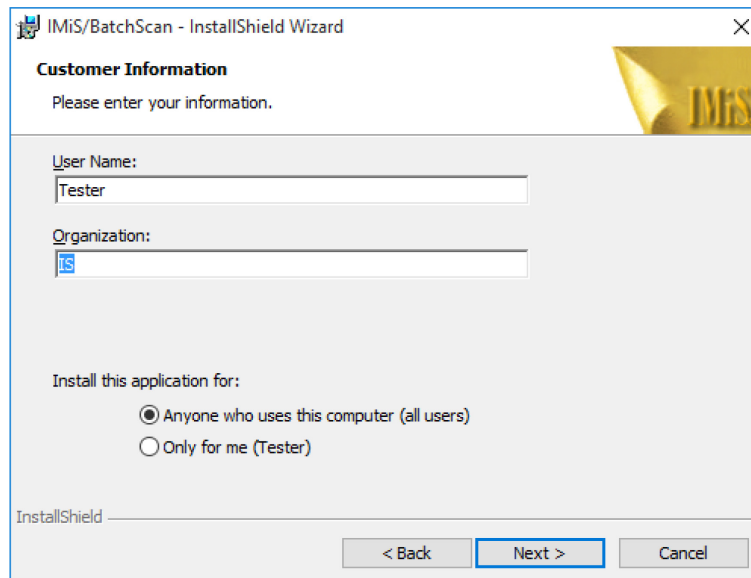


Image 2: Viewing and accepting the license terms

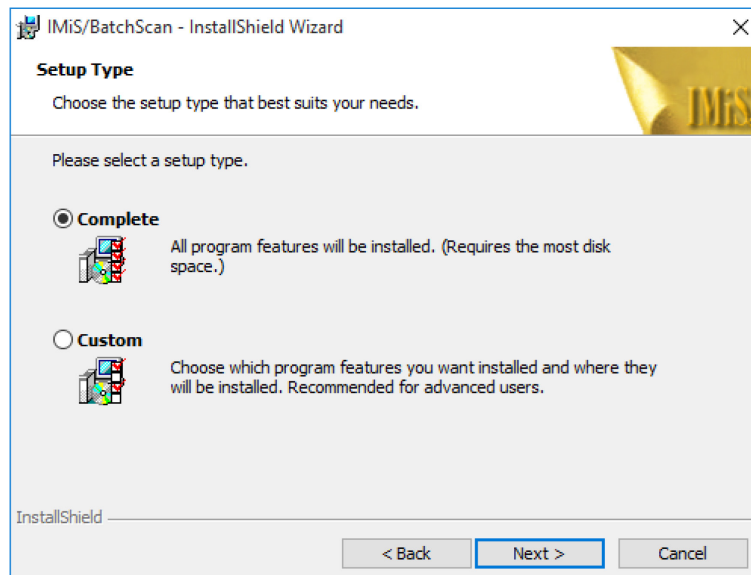
Continue by entering the username and organization. Select whether the application will be installed only for the current user ("Only for me") or for all users on this computer ("Anyone who uses this computer").



The screenshot shows the 'Customer Information' step of the IMiS/BatchScan - InstallShield Wizard. The window title is 'IMiS/BatchScan - InstallShield Wizard'. The main heading is 'Customer Information' with the instruction 'Please enter your information.' Below this, there are two text input fields: 'User Name:' containing 'Tester' and 'Organization:' containing 'IS'. Underneath, the text 'Install this application for:' is followed by two radio button options: 'Anyone who uses this computer (all users)' (which is selected) and 'Only for me (Tester)'. At the bottom left is the 'InstallShield' logo. At the bottom right are three buttons: '< Back', 'Next >' (highlighted with a blue border), and 'Cancel'.

Image 3: Entering information on the IMiS®/BatchScan client user

In the next step select between full installation ("Complete") or user-customized installation "Custom"). Full installation will install all the files in the installation package to the file system.



The screenshot shows the 'Setup Type' step of the IMiS/BatchScan - InstallShield Wizard. The window title is 'IMiS/BatchScan - InstallShield Wizard'. The main heading is 'Setup Type' with the instruction 'Choose the setup type that best suits your needs.' Below this, the text 'Please select a setup type.' is followed by two radio button options: 'Complete' (which is selected) and 'Custom'. Each option has a small icon of a computer with a red flag. The 'Complete' option description is 'All program features will be installed. (Requires the most disk space.)'. The 'Custom' option description is 'Choose which program features you want installed and where they will be installed. Recommended for advanced users.' At the bottom left is the 'InstallShield' logo. At the bottom right are three buttons: '< Back', 'Next >' (highlighted with a blue border), and 'Cancel'.

Image 4: Choosing between full or user-customized installation

If you have selected the user-customized installation, a dialog box will appear in which you select the IMiS®/BatchScan modules to be installed.

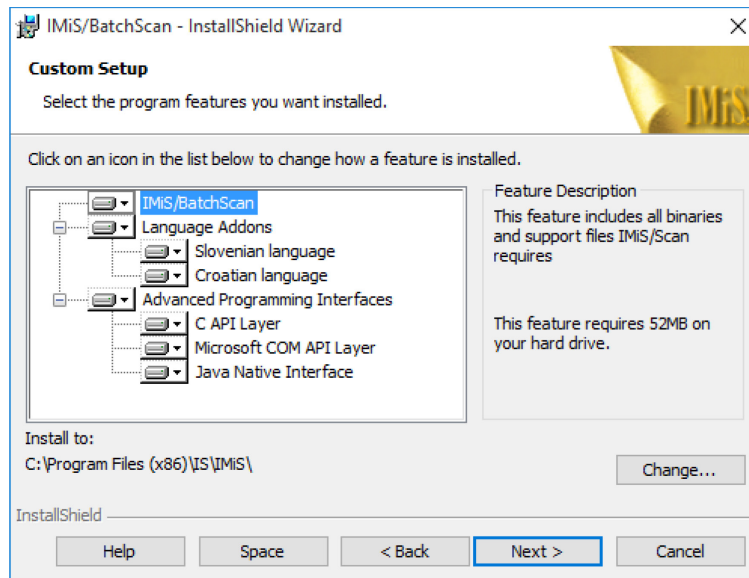


Image 5: Selecting the installation items and location for the IMiS®/BatchScan client

By clicking on the "Change" button, you can customize the installation location for the IMiS®/BatchScan software product.

By clicking on the "Space" button, a dialog box appears containing a list of all disks, their sizes and free space on each disk. The disks that do not have enough free space for installation are marked.

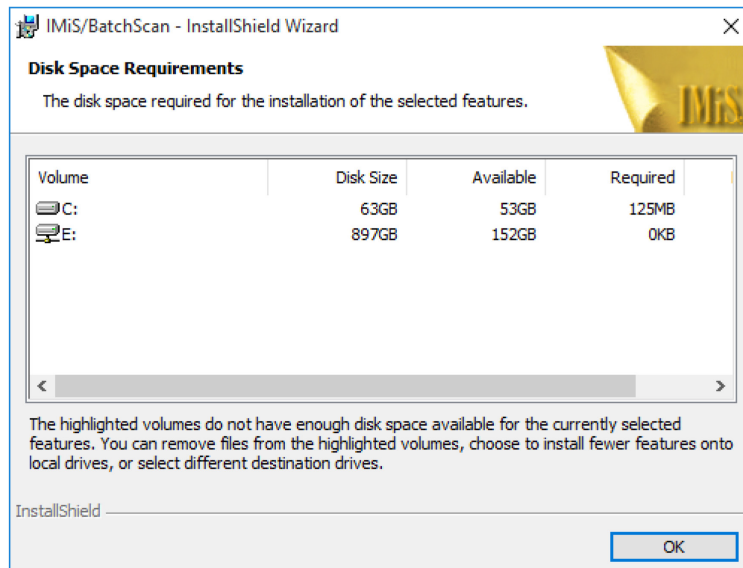


Image 6: Available disk space notification

Under the "Language Add-ons" tree branch is a list of all languages into which the user interface of the IMiS®/BatchScan application has been translated. Translations into Slovenian and Croatian are available.

By removing these options, you lose the option of using the translated versions of IMiS®/BatchScan.

Under the "Advanced Programming Interfaces" tree branch is a list of options of connecting the IMiS®/BatchScan software product to other applications.

In the next step select the location of the scanner's initialization files, in which the settings of the selected scanner are stored.

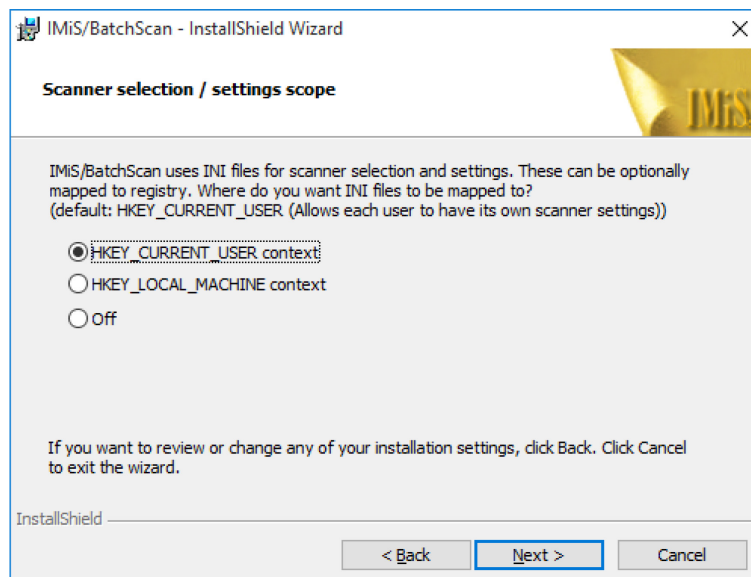


Image 7: Selecting the location of scanner initialization files

The initialization files can be saved to the Windows registry or to a file system.

You can choose between the following options:

- "HKEY_CURRENT_USER": enables every user to store his or her settings separately from other users. Changes to the scanner settings apply only to the current user.
- HKEY_LOCAL_MACHINE: enables all users on this workstation to have the same scanner settings. Changes to the scanner settings apply to all users on this workstation. In order to change the scanning parameters, users must have additional rights.
- Off: executes the installation of the initialization file to the file system. With this method the rights to individual initialization files can be set more thoroughly.

Example: Only one user on the workstation has the right to change scanner settings.

In the next step customize the displaying and adding of IMiS®/BatchScan shortcuts.

Warning: If roaming profiles are in use and HKEY_CURRENT_USER is selected, problems can occur with scanner use. Settings are transferred together with the profile and when changing the user of a scanning device, it is possible that the current and correct settings are replaced by unwanted settings.

In the next step customize the displaying and adding of IMiS®/BatchScan shortcuts.

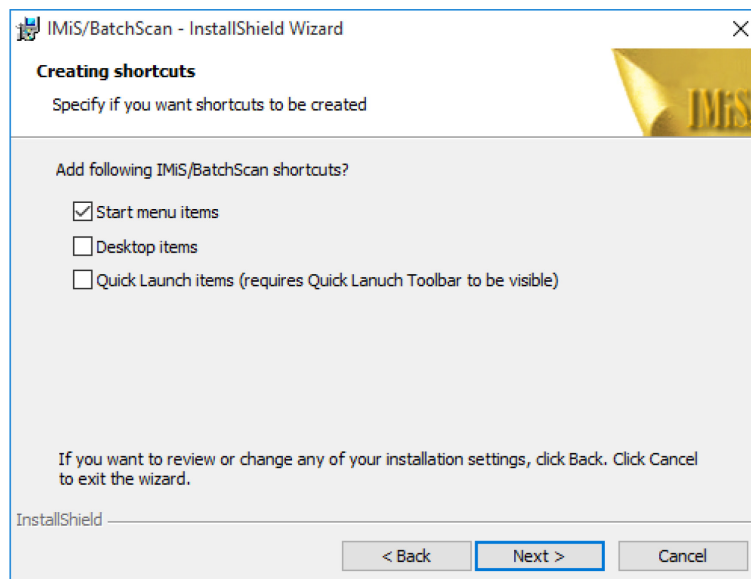


Image 8: Displaying and adding IMiS®/BatchScan shortcuts

You can choose between the following options:

- Start menu items: enables the display of the IMiS® icon in the "All Programs" menu.
- Desktop items: installs the IMiS® icon on the desktop.
- Quick Launch: displays the IMiS® icon in the quick launch taskbar.

The final step of the installation wizard is the confirmation of settings prior to installation by clicking on the "Install" button.

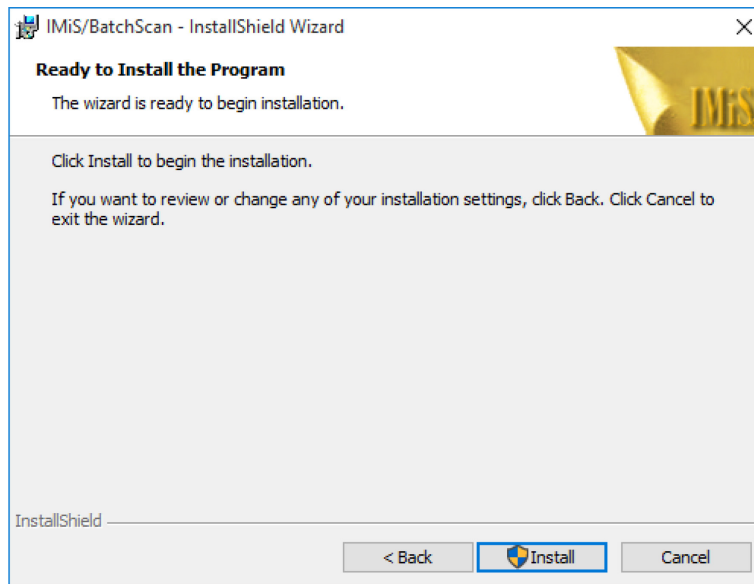


Image 9: Confirming settings prior to installation

The "User Account Control" dialog box appears, by clicking on the "Install" button.

Clicking on the "Yes" button allows the user with administrative rights the installation.

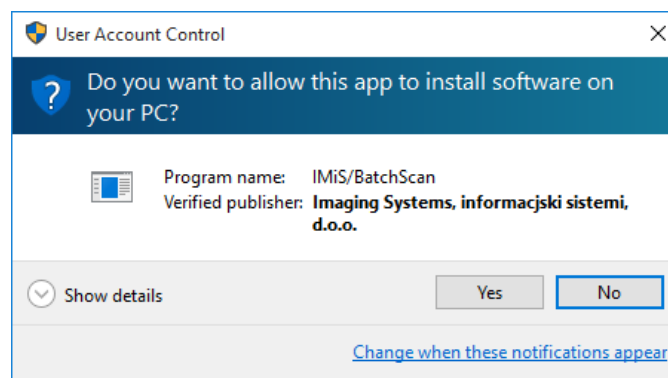


Image 10: Displaying a security warning

The installation procedure for the IMiS®/BatchScan software product commences;
the progress bar shows information about the transfer of files to the appropriate locations.

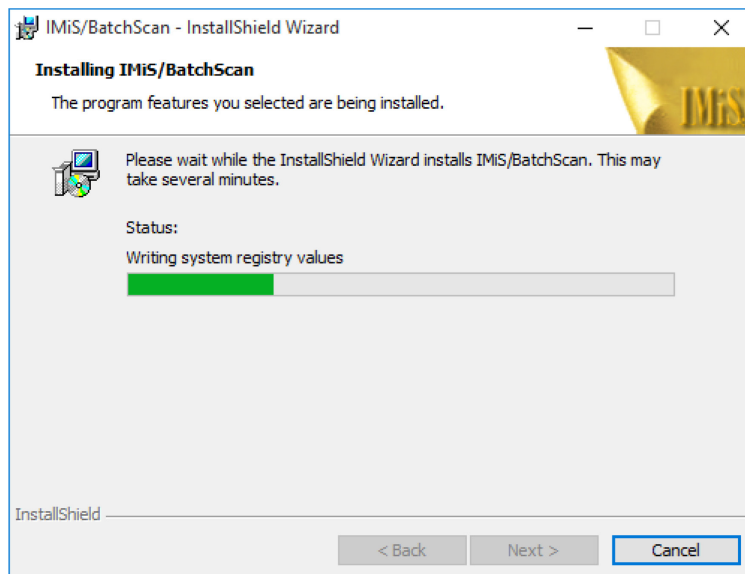


Image 11: Displaying installation progress

Installation is complete when the last display box appears, which you close by clicking on the "Finish" button.

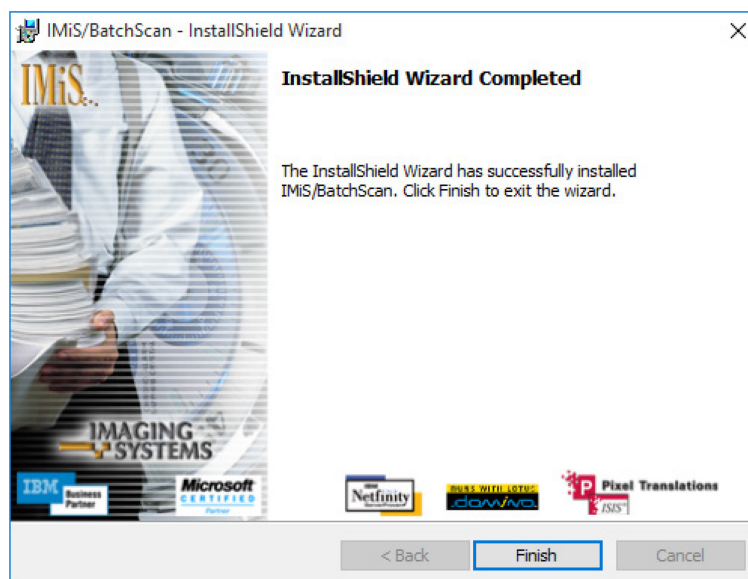
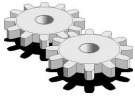


Image 12: Notification of completing the installation process

5.2 Administrative installation

For specific installations you need to manually specify the location of certain files and prepare appropriate records in the Windows registry.

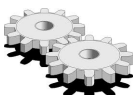


IMiS®/BatchScan uses the following default file folders for its installation:

- "C:\Program files\IS\IMiS" folder contains the executable file batchscan.exe with the corresponding language versions and the following utility libraries:
 - IMiSW32batchscan.jar: interface for JAVA applications
 - batchscan.slv: booklet with Slovenian translation
 - batchscan.hrv: booklet with Croatian translation.
- "C:\Windows\System32" folder contains the following utility libraries:
 - imisbapi.dll: module for connecting IMiS®/BatchScan to another application via a C-API interface
 - imisbjapi.dll: module for connecting IMiS®/BatchScan to another application via a JAVA interface
 - set of utility libraries for scanning and processing scanned documents (pix*.dll).
- "C:\Windows\PixTran" folder contains a driver for the installed scanner, modules for working with various image formats, modules for various compression methods, and drivers for converting between different file formats.

5.3 Silent installation

The IMiS®/BatchScan application can also be installed without user control. Installation is performed silently, without displaying the user interface. The installation is executed via the *msiexec.exe* utility program. This tool is a part of the Microsoft installation product and is used for performing various types of maintenance in applications that are installed in the Windows operating system.



For a full list of the supported functions of the msiexec.exe program, turn to the Microsoft article collection:

[http://msdn.microsoft.com/en-us/library/windows/desktop/aa367449\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/aa367449(v=vs.85).aspx)

The utility program is executed from the command bar.

For a list of all parameters, turn to the Microsoft website:

[http://msdn.microsoft.com/en-us/library/windows/desktop/aa367988\(v=vs.85\).aspx](http://msdn.microsoft.com/en-us/library/windows/desktop/aa367988(v=vs.85).aspx).

5.3.1 Installation procedure

Installation can take from ten seconds to two minutes, depending on the computer speed.

Example of a command bar for silent installation:

c:\windows\system32\msiexec.exe /i IMiS.BatchScan.10.1.2010.Full.msi /qn

Below is a command bar for the silent installation of IMiS®/BatchScan:

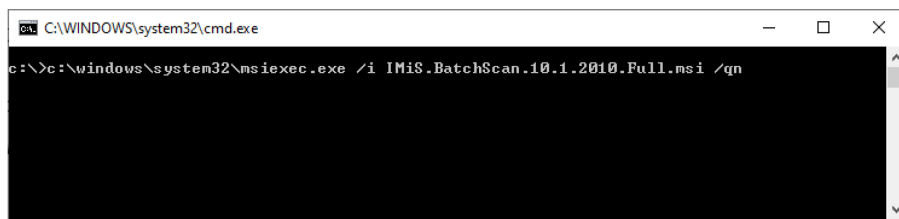


Image 13: Command bar for silent installation of IMiS®/BatchScan

The table below lists the various silent installation modes:

Command bar parameters	Description
/q, /qn	No user interface.
/qn+	No user interface with a modal window at the end of installation.
/qb	Basic user interface with a simple progress bar. The "/gb!" parameter is used to hide the "Cancel" button.
/qr	Simplified user interface without a modal window at the end of installation.
/qf	A full user interface with all the display boxes, a progress bar and error message at the end of installation.

Table 3: Silent installation modes

Before launching the installation of the IMiS®/BatchScan application, you can specify various parameters that are specific to this installation.

Add them to the end of the command bar using the syntax:

```
c:\windows\system32\msiexec.exe /i IMiS.BatchScan.10.1.2010.Full.msi /qn PARAMETER=VALUE
```

The table below describes the supported command bar parameters:

PARAMETER	Valid Values	Description
INSTALLDIR	<folder name>	This attribute contains the default destination folder for installation files. (Default value = "%PROGRAMFILES%\IS\IMiS\")
USERNAME	<username>	This attribute contains the username of the user performing the installation (the default value is taken from system settings.)
COMPANYNAME	<company name>	This parameter adds the company name to the installation (the default value is taken from system settings.)
SHORTCUT_START	1	This parameter is used to inform the installation process to create a shortcut in the "Programs" menu (default value = <not selected>).
SHORTCUT_QUICKLAUNCH	1	This parameter is used to inform the installation process to create a shortcut in the quick launch taskbar (default value = <not selected>).
SHORTCUT_DESKTOP	1	This parameter is used to inform the installation process to create a desktop shortcut (default value = <not selected>).
INI_MAPPINGS	1,2,3	This parameter is used to inform the installation process to copy INI files to the Windows registry. 1 - HKEY_CURRENT_USER 2 - HKEY_CURRENT_MACHINE 3 - OFF (uses INI files on the file system) (default value=1).

Table 4: Supported command bar parameters

5.4 Product upgrade

Prior to starting the upgrade, make sure that the IMiS®/BatchScan product is not currently active. If it is running, close it. When a new IMiS®/BatchScan version is issued, individual users must perform an installation procedure for the new version. This procedure is carried out with the Installation Wizard and matches the procedure for product installation.

During the upgrade procedure, the previous version of the product is automatically uninstalled. All user settings and created documents are preserved. This is followed by the installation procedure for the new version.

5.5 Product removal

Prior to starting the removal, make sure that the IMiS®/BatchScan application is not currently active. IMiS®/BatchScan product is removed from the computer using the "Control Panel" program.

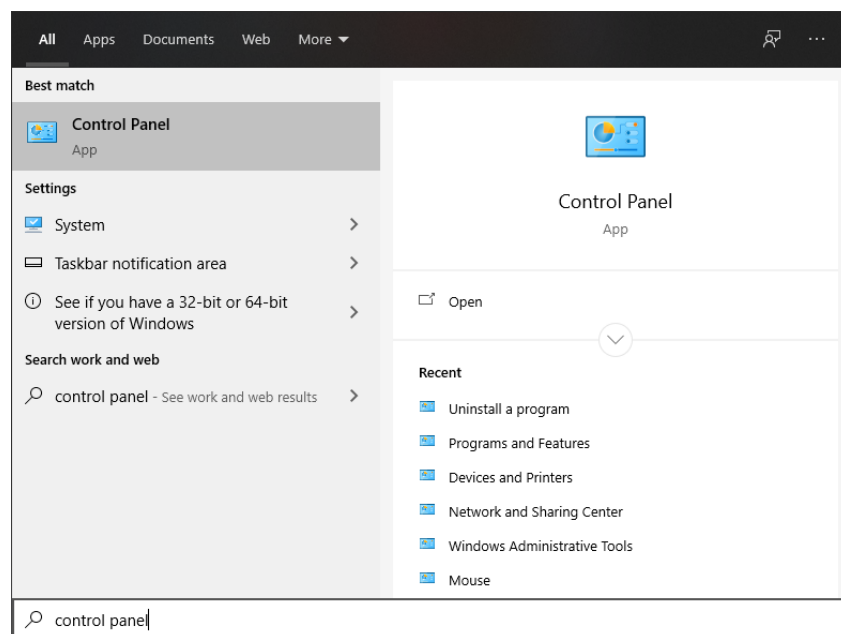


Image 14: Removing IMiS®/BatchScan using the "Control Panel"

This program is invoked by clicking on the "Start" button. Enter the search string "control panel" and use the command "Open".

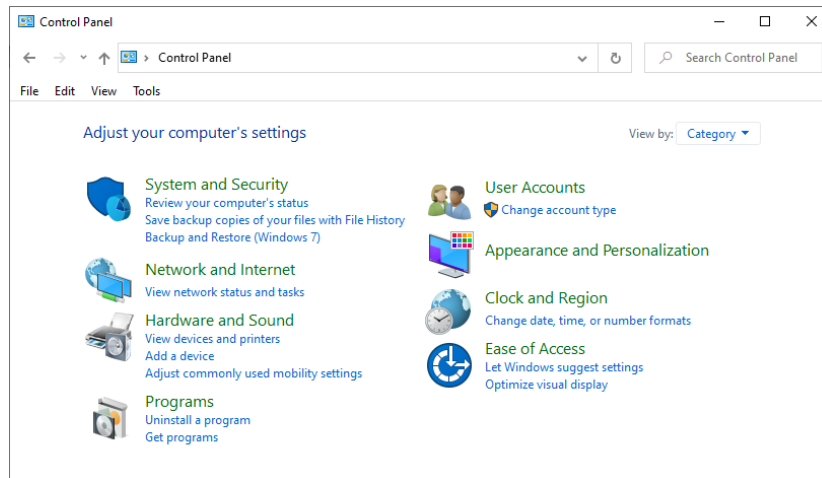


Image 15: Entering the "Control Panel"

In the "Control Panel" window select "Uninstall a program", which opens the window "Programs and features". There, find and select IMiS®/BatchScan.

By clicking on the "Uninstall" button, the "Uninstall Wizard" is launched. The removal procedure removes all files and settings created by the installation package. User settings and created documents are not deleted.

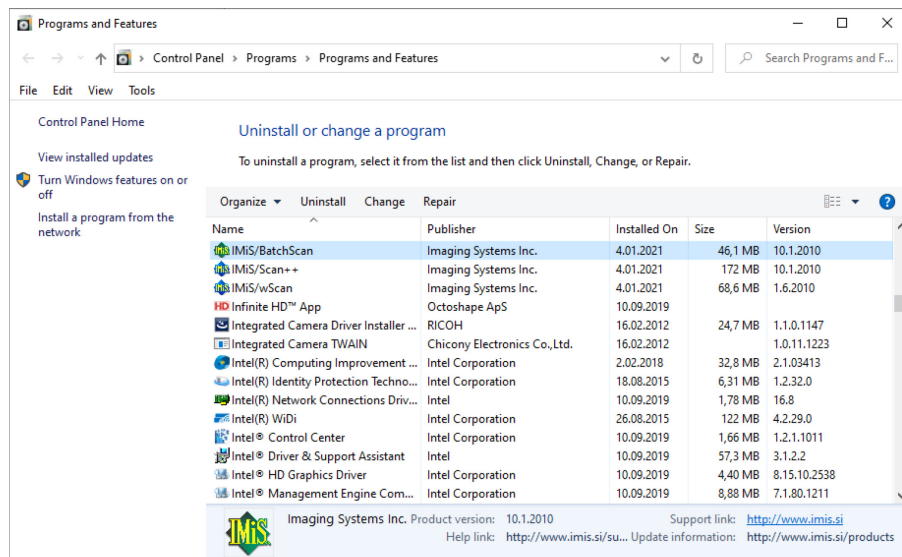
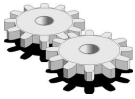


Image 16: Removing IMiS®/BatchScan with "Uninstall wizard"

5.5.1 Manual product removal



"Manual" removal of all settings and files is also possible. Make sure that no other application for scanning or viewing images is installed on the computer which uses the same additional components as IMiS®/BatchScan.

The removal procedure goes as follows:

- Make sure that IMiS®/BatchScan is not running.
- Delete the \Program Files\IS\IMiS folder and all the files and subfolders of this folder.
- In the \Windows folder delete the file: setscan.ini. Depending on the settings during installation, these files may not exist.
- Remove the following files from the \Windows\System32 folder: imisapi.dll and imisbjapi.dll.
Depending on the settings during installation, some of these files do not exist.
- In the \Windows\Prefetch folder remove all files starting with batchscan.exe.

The procedures described below are intended for the removal of additional components. The same components may be used by another application, so be careful.

Example: The procedure for removing components goes as follows:

- *Remove the \Program Files (x86)\Common files\Pixtran folder and all the files in this folder.*
- *Remove the \Program Files\Pixtran folder and all the files in this folder.*
- *In the \Windows\System32 folder remove all files starting with pix.*

Below are instructions for removing keys from the Windows registry. Open the "Registry" program, find the following keys and remove them:

- HKEY_LOCAL_MACHINE\SOFTWARE\IS.
- HKEY_LOCAL_MACHINE\SOFTWARE\Pixel Translations.
- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID\ {1AA9C9CE-9CEB-4019-BF44-9DBC80763F9}.

- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID \ {31266B34-A737-457D-A186-6082A749ED24};
- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID \ {7FE36CD2-76CC-46B2-8230-396A7C48A1B8};
- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID \ {8A1137AA-3F5B-4832-B7B2-AAFE3F305A09};
- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID \ {90459988-02BB-4E22-A6C3-22FAFEB1DBB2};
- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID \ {988B0359-000B-4BAC-851A-CA6F68E97EAC};
- HKEY_LOCAL_MACHINE\SOFTWARE\Classes\CLSID \ {D3252D3F-0A0A-452B-9BB1-20B98150DC61};
- HKEY_CLASSES_ROOT\ IMiSBatchScan.Application;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.ContentFieldSettings;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.ContentFieldsSettings;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.Document;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.Profile;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.ProfileSettings;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.UIControl;
- HKEY_CLASSES_ROOT\ IMiSBatchScan.Profile;
- HKEY_CLASSES_ROOT\CLSID\ {7FE36CD2-76CC-46B2-8230-396A7C48A1B8};
- HKEY_CLASSES_ROOT\CLSID\ {8A1137AA-3F5B-4832-B7B2-AAFE3F305A09};
- HKEY_CLASSES_ROOT\CLSID \ 90459988-02BB-4E22-A6C3-22FAFEB1DBB2};
- HKEY_CLASSES_ROOT\CLSID \ {D3252D3F-0A0A-452B-9BB1-20B98150DC61};
- HKEY_CLASSES_ROOT\CLSID \ {D3252D3F-0A0A-452B-9BB1-20B98150DC61};
- HKEY_CURRENT_USER\Software\IS;
- HKEY_CURRENT_USER\Software\Pixel Translations.

6 PRODUCT MANAGEMENT

The IMiS®/BatchScan software product is intended for batch document scanning.

It is intended for users scanning a large number of similar documents.

By setting up various profiles, various scanning needs are met. Documents are created automatically during the process of scanning depending on the separator, which can be a page containing a bar code, a blank page or a fixed number of pages. If a bar code is the separator, the path to an individual document and its barcode are saved in an XML file after scanning.

6.1 Launching the product

The IMiS®/BatchScan software product can be launched independently or as part of an application, to which it is connected via an API or COM interface. All IMiS®/BatchScan functionalities become available only when connected to another application.

6.1.1 IMiS®/BatchScan as an independent product

It is launched by clicking on the desktop icon or via the "Start" menu. Unless turned off in the settings, a splash screen appears briefly at start-up, containing information about the product version.



Image 17: Showing the window "About the program"

During the launching of the application, the following is executed:

- The scanner driver is loaded. Its name is read from the setscan.ini settings file.
The appropriate scanner driver is loaded from the <Windows path>\PixTran folder.
- The last selected user profile, which is recorded in the Active Profile field in the Windows Registry under the HKEY_CURRENT_USER\Software\IS\IMiS\IBatchScan key, is set.
- Scanner settings are read from the user settings. The settings are saved in the Windows Registry in the ScannerState field and the <path>\IMiS\BatchScan\<profile name> key.
- The driver is checked if working properly. If a different scanner is selected in the profile than it is connected, the following notification appears:

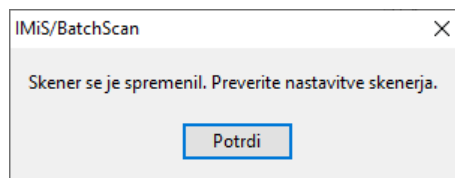


Image 18: Checking driver performance

6.1.2 Integration of IMiS®/BatchScan into another application

The functionality of the IMiS®/BatchScan product can be integrated into any Windows or JAVA application. Integration is possible via technological solutions C-API, COM or Java interfaces.

Note: The application that integrates IMiS®/BatchScan via a JAVA interface must be run on a Windows OS.

Integration via a C-API solution is performed by invoking the supported functions in the imisbapi.dll. library. For this purpose, imisbapi.dll library must be installed in the C:\Windows\System32 ali C:\Windows\SysWOW64 system folder.

Example of a code in a Lotus Notes script:

C-API
<pre> ... Declare Function IMiSBatchInit Lib "imisbapi.dll" () As Long Declare Function IMiSBatchClose Lib "imisbapi.dll" () As Long Declare Function IMiSBatchStart Lib "imisbapi.dll" (Byval Profile As String, Batchfile As String, Byval ExtFlags As Long) As Long ... IMiSBatchProfile = "test" IMiSXMLFile = String\$(260, Asc(".")) ... IMiSExtFlags = IMiS_DOBATCH_AUTO 'začni postopek skeniranja s profilom »test« in shrani rezultat v 'spremenljivko IMiSXMLFile IMiSResultLNG = IMiSBatchStart(IMiSBatchProfile, IMiSXMLFile, IMiSExtFlags) If IMiSResultLNG <> 0 Then 'zapri IMiS/BatchScan aplikacijo Call IMiSBatchClose () Exit Sub End If ... </pre>

Integration via a COM interface is performed by creating registered BatchScan COM objects and using their methods. Registration of BatchScan COM objects is performed during IMiS®/BatchScan installation.

Example of a code in VB script:

COM
<pre> ... Set batchscan = CreateObject("IMiSBatchScan.Application") Set Profile = batchscan.CurrentProfile 'prikazi IMiS/BatchScan aplikacijo batchscan.Visible = true 'pobriši vse datoteke v trenutnem profilu Profile.Clear (True) 'zaženi skeniranje batchscan.StartScan (True) While batchscan.Scanning Wend 'ko je skeniranje končano shrani profil If Profile.Modified Then Profile.Save End If ... </pre>

Integration via a JAVA interface is performed by creating IMiS® JAVA objects that are implemented into the IMiSW32BatchScan.jar Java library. A reference to this library must be included in the application into which IMiS®/BatchScan is being integrated. The system folder (C:\Windows\System32 or C:\Windows\SysWOW64) must contain the imisbjapi.dll library.

Example of a code in Java:

JAVA

```
...
Application app = Application.getInstance();

Profile currentProfile = app.getProfiles().getCurrent();

//izpiši ime trenutnega profila
System.out.println("Start scanning in profile <" + currentProfile.getName() + ">");

//prični s skeniranjem
app.StartScan(true);

//izpiši število dokumentov v profilu
System.out.println("Number of documents = <" + String.valueOf(currentProfile.getDocuments().size());
...

```

6.2 Scanner selection

When you run the product for the first time after installation, select a scanner you will use. Check if the scanner is connected. Select a scanner by selecting "Choose a scanner" in the "Scanning«" menu.

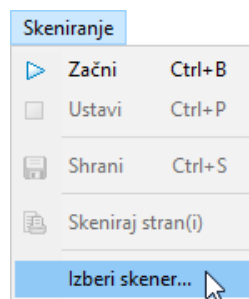


Image 19: Selecting the action "Choose a scanner" in the popup menu

A dialog box for selecting a scanner appears "Scanner Selection". Selection of a scanner is tied to the scanner driver, which is why all the notifications and the user interface are in English.

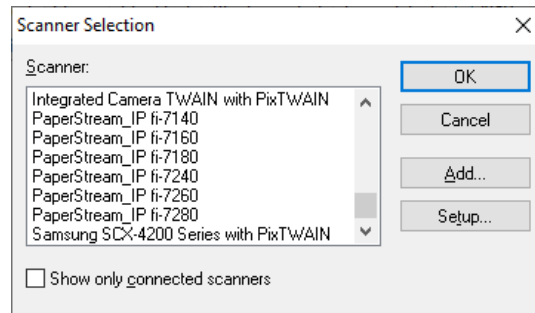


Image 20: Selecting a scanner driver from the list

Select the desired scanner from the dialog box and confirm selection by clicking on the "OK" button.

By clicking on the "Cancel" button, the settings are canceled and the box closes.

If the desired scanner is not on the list, clicking on the "Add" button will open a window in which you can search for the driver location in the file system.

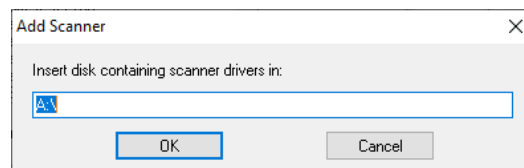
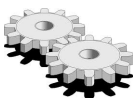


Image 21: Selecting the driver location



By clicking on the "Setup" button, you open a window in which you can set the advanced scanner options.

The appearance and content of the window are adjusted to an individual selected scanner, which is why the display may differ from the example provided.

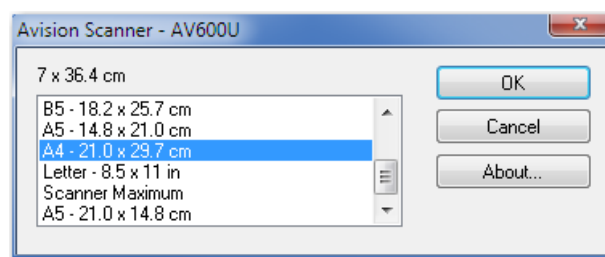
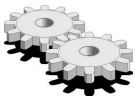


Image 22: Setting advanced scanner options



The scanner selection is recorded in the setscan.ini file, “Scanner” section and “Driver” field. You can only select one scanner, which remains active until you select another from the list or remove the current one from the settings.

For more information see chapter [Description of individual scanner settings](#).

6.3 Product setup

6.3.1 Creating a profile

At first start-up after the installation of IMiS®/BatchScan, a user window appears without the selected profile.

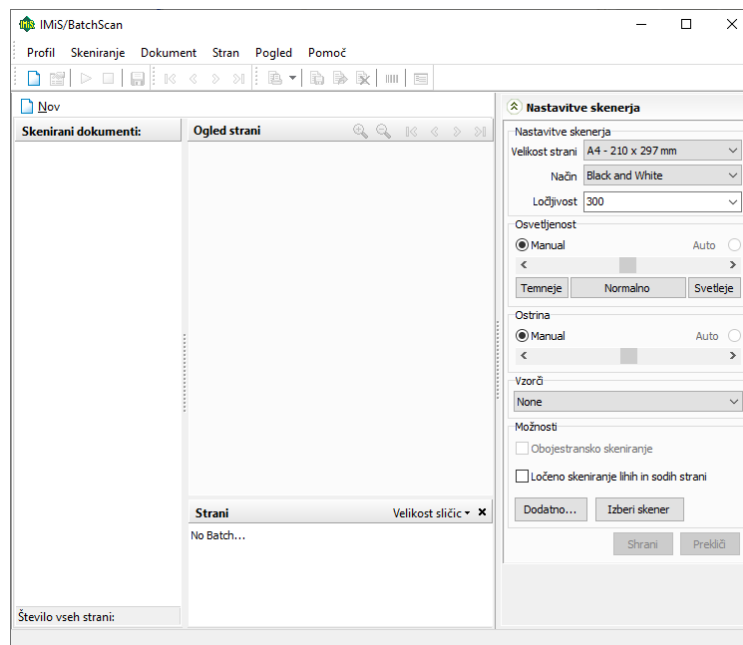


Image 23: Showing the user window without a selected profile

A scanning profile is created by selecting “New” in the “Profile” menu.

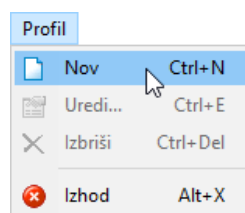



Image 24: Selecting the action "New" in the popup menu



Click on the “New”  icon in the toolbar or use the “Ctrl+N” key combination.

A dialog box “Set profile” appears in which you enter all profile parameters that are relevant in document scanning. The setting is divided into four categories: General, Source, Destination and Content.

Image 25: The "Set profile" dialog box

6.3.2 General profile settings

In the “General” category and the “Profile settings” window, enter a name of profile in the “Profile name” field.

The name should be unique as two profiles cannot share the same name.

If the entered name already exists, the following notification appears:

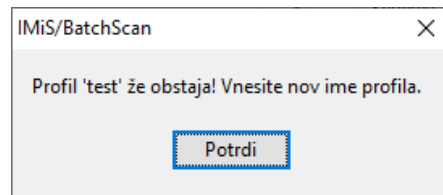



Image 26: Notification of the existence of multiple profiles

Note: Profile name cannot be changed later.

At profile setup, it is mandatory to enter the name of folder in the “Profile folder” field. The profile document will be saved in the Profile folder. A profile document is an XML file that contains data on scanned documents in a profile. A profile folder can be selected from a folder list by clicking on this button .

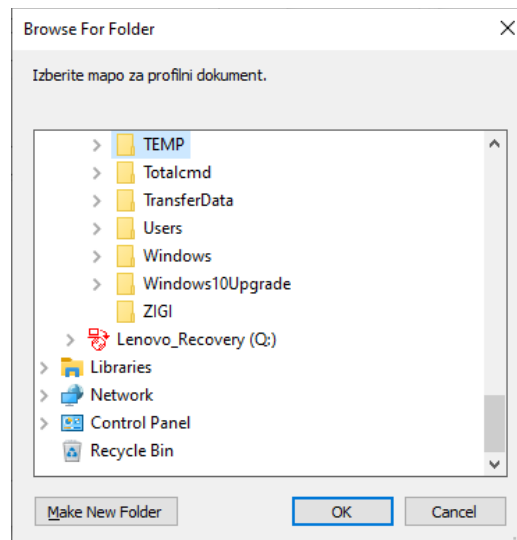


Image 27: Selecting a profile folder from the list

The entered profile folder is automatically copied to the “Folder” field in the “Destination” category and can be changed.

In the “Methods of Scanning” group, specify what separates individual paper documents that are loaded into the scanner feeder. IMiS®/BatchScan will recognize the separator and create a new document. Scanning will continue into a new file.

You can choose between the following separators:

Separator is a blank page

Insert blank paper sheets between documents. Check that there is no blank sheet within a document by mistake.

Separator is a barcode

A page with a barcode is recognized as the first page of a new document. Be careful that only the first page of a document has a barcode. If you select this option, you have to also set up the right filter for barcode recognition.

For more information see chapter [Filter setup for image processing](#).

By clicking on the “Setup” button, you can also set up recognition of a specific barcode structure or a specific barcode.

For more information see chapter [Advanced setup of barcode recognition](#).

Note: Cannot be used when using a barcode separator

Separator is a number of pages

Insert the number of pages of each document. This option is advisable if you have multiple documents with the same number of pages.

Blank page removal

If you select this option, all blank pages are skipped during scanning. Set up a blank page filter. The option is unavailable if the selected separator is a blank page.

By clicking on the “Filters...” button, you set up filters for processing a scanned document in detail. For more information see chapter [Filter setup for image processing](#).

Barcode is mandatory data

If you select this option, a barcode is a mandatory data of every document.

When IMiS®/BatchScan reaches the page separator, the scanning process stops until the barcode is inserted manually.

Repair the recognized barcodes

If you select this option, you can change the value of recognized barcodes during scanning. When IMiS®/BatchScan recognizes a page barcode, the scanning stops until the recognized barcode is confirmed.

Ignore identical barcodes

If all the document pages have an identical barcode, only the barcode on the first page is recognized as a document separator.

Hide barcodes

If you select this option, barcodes recognized in the “Barcode separator” scanning mode will not be shown in the right window under the category “Content”.

Global profile

If you select this option, the profile is available to all users of IMiS®/BatchScan on the computer.

Remove the selected pages

If you enter a page into this field, you select which pages will be ignored during scanning. This option is advisable for automatic removal of all first pages of the scanned documents.

6.3.2.1 Filter setup for image processing

IMiS®/BatchScan has several available filters, which can influence the processing of scanned pages. By clicking on the “Filters...” button, an optional window opens where you can select filters you wish to use for the scanned documents.

Filter processing is implemented in the same order in which they are given on the list.

For more information see chapter [Description of available filters](#).

Click on the “Add” button to add filters on a list of selected filters.

To customize a selected filter, click on the “Setup” button.

To remove a selected filter from the list of filters, click on the “Remove” button.

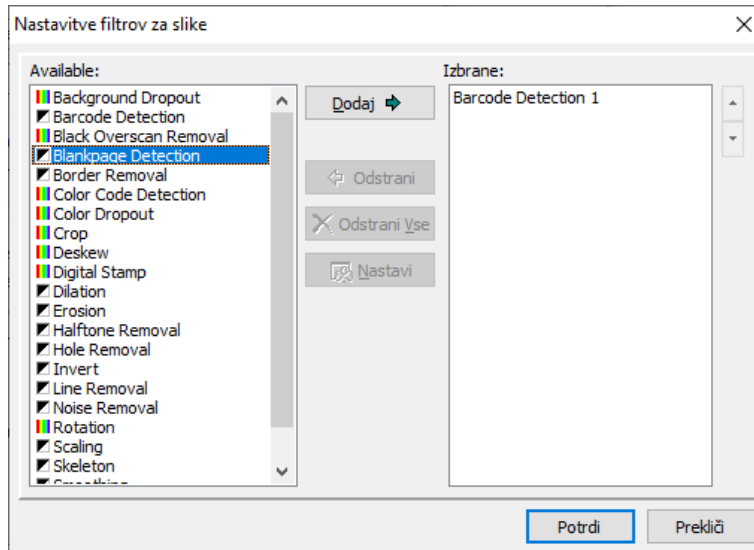


Image 28: Adding the selected filter

***Warning:** If one of the “Separator is a blank page” or “Separator is a barcode” option is selected and none of the “Barcode detection” or “Blankpage Detection” filters is on the selected filter list, the following notification appears:*

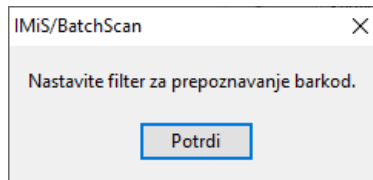


Image 29: Notification shown if the barcode detection filter is not on the list

or:

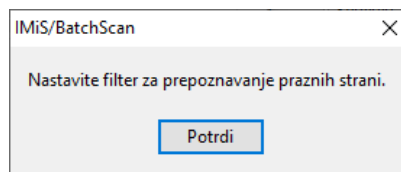


Image 30: Notification shown if the blank page detection filter is not on the list

After clicking on the “Confirm” button, the setting for each filter appears.

6.3.2.1.1 Description of available filters

The following table describes available filters.

Barcode Detection	<p>It recognizes and deciphers barcodes on scanned documents.</p> <p>The number of barcodes it can recognize on a page is unlimited.</p> <p>Several methods for barcode recognition are supported:</p> <p>Interleaved 2 of 5, CODABAR, Code 32, Code 39, Code 93, Code 128, UPC-A, UPC-E, EAN-8, EAN-13, ISBN Addon 2, ISBN Addon 5, Code 2/5 Industry, Code 2/5 IATA, Code 2/5 Datalogic, Code 2/5 Inverted, Code BCD Matrix, Code 2/5 Matrix, UCC/EAN128, PDF417 code.</p>
Black Overscan Removal	It removes the black area around the scanned document.
Blankpage Detection	It detects blank pages. Sensitivity denotes tolerance of disturbances. If enabled, IMiS®/BatchScan leaves out all the blank pages.
Border Removal	It removes black edges that are sometimes visible around scanned or photocopied documents. The black edges are replaced by white edges.
Color Dropout	It changes certain colors on a color scanned document with other colors. The filter contains a list of color gamut mapping that is used with filter startup.
Crop	It creates edges around documents and removes the blank space around a binary or scanned document.
Deskew	<p>It aligns a binary or color scanned document if there are obvious deviations from the right position. Asymmetry occurs when the source document is not positioned straight in the scanner.</p> <p>The filter checks the scanned document, specifies the angle of indent and rotates the document. Due to alignment, the content of the scanned document is more easily readable and the OCR results are improved.</p>

Digital Stamp	<p>Specify stamp position on the scanned document.</p> <p>The user can specify font, style and size to text annotations.</p> <p><i><u>Warning:</u> each filter places only one annotation per page. If more annotations are needed, the »Digital Stamp« filter must be added separately for each annotation.</i></p>
Dilation	It emphasizes black objects on a scanned image which can improve image quality and text visibility.
Erosion	<p>The black marked areas of the scanned document become paler.</p> <p>The use of this filter can result in a partial loss of content details of the scanned document.</p>
Halftone Removal	It removes black hole punches from the edges of a scanned document. It does not affect other parts of the image.
Hole Removal	<p>It removes black hole punches from the edges of a scanned document.</p> <p>It does not affect other parts of the scanned document.</p> <p>This filter does not have any additional settings.</p>
Invert	It converts a scanned document to its negative.
Line Removal	<p>It removes or repairs lines based on a form prepared in advance.</p> <p>Line removal gives better results of OCR recognition.</p>
Noise Removal	It removes disturbances in a scanned document. Disturbances occur when copying with indigo paper or dirt particles that are piling up in scanners, faxes or copying machines.
Rotation	It enables mirroring and rotation of binary and color scans with 90-degree rotations.
Scaling	It changes a scanned document's width and height and preserves the initial ratio.
Skeleton	Black objects on a scanned document are reduced to the size of one pixel of a truncated version. This option should be used carefully as it can warp a scanned document.

Smoothing	It removes indentations and bumps on letters and other graphical objects in a scanned document. Smoothing is an efficient method for enhancing visibility.
Threshold	It converts a scanned document from a 24-byte to a binary string. All the pixels in a color image that are darker than selected are changed to black and the others to white.

Table 5: Available filters

6.3.2.2 Advanced setup of barcode recognition

Advanced setup of barcodes is used when you want to specify in detail, which barcodes should be recognized as document page separators.

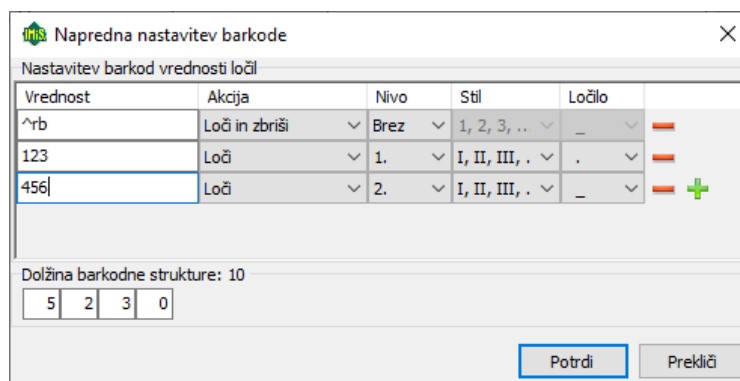


Image 31: Setting barcodes for separating document pages

Enter the selected barcode or a group of barcodes in the “Regular expression” field.

From the “Action” list select an action to be implemented at barcode recognition.

Options:

- “Separate”: When a barcode is recognized during scanning, the recognized barcode functions as document separator.
- “Separate and delete”: When a barcode is recognized during scanning, the recognized barcode functions as document separator, but this page is not written in the scanned document. The page that is a separator is not included in the scanned document.

Example: The document contains several barcodes, however, only the barcode that begins with “rb” is the separator.

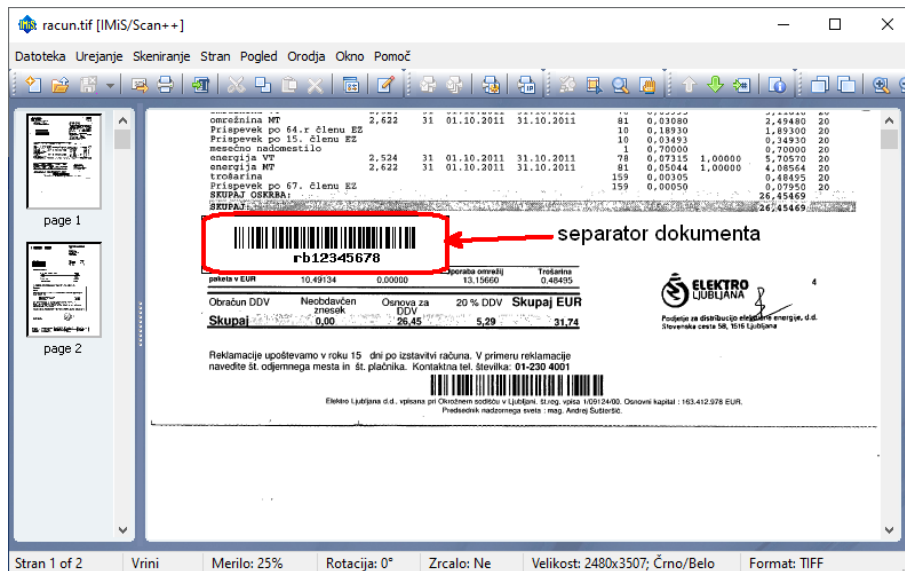


Image 32: Example of separating document pages based on a specific barcode

In order for IMiS®/BatchScan to correctly recognize the separator barcode, enter the “^rb” value in the »Advanced barcode setup« window. This way, only barcodes starting with “rb” are recognized.

Hierarchically creating a document name

Advanced barcode setup is also used for hierarchically creating a document name.

Specify the level of hierarchy each recognized barcode belongs to. In the “Level” list, select which chapter level the entered barcode presents.

In the “Style” list, specify the record format for that level. In the “Separator” list, select the separation level during recording. For more information see chapter [Document destination setup](#).

Example: You wish to scan instructions and each chapter level has its own barcode. During scanning, a new file is created for each chapter in the profile and it contains the name of chapter level. To use this functionality in scanning, enter the “%h” string in the “Name root” field at destination setup.

Barcode structure

A recognized barcode can be recorded in a profile also as a string of its components.

In the “Length of barcode structure” field, insert the length of every barcode string component. When recognized, every string will be recorded in its own field in an XML file. For a barcode to be divided into pre-determined string length, the length of a recognized barcode must be equal to the total length of all pre-determined strings.

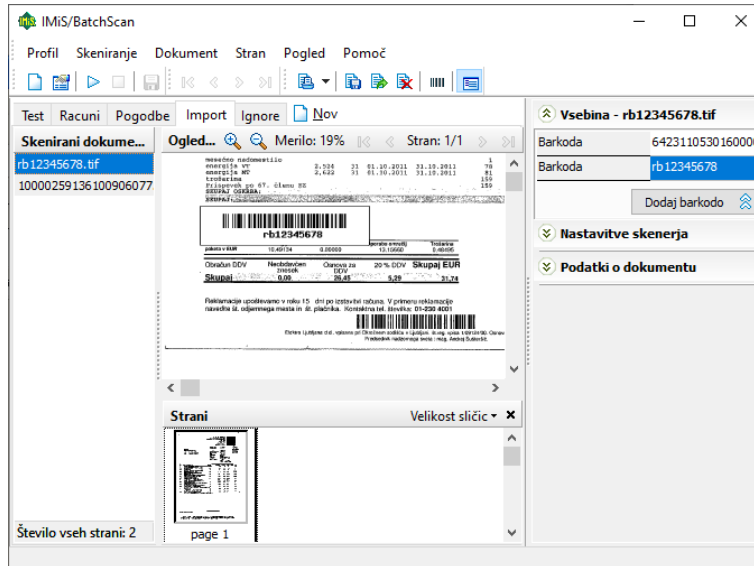


Image 33: Example of barcode-based document separation

```

- <BATCH Profile="Import">
- <PATH Dir="Y:\test\docs">
- <DOC File="rb12345678.tif">
  <DATE>16.1.2013</DATE>
  <TIME>14:01:37</TIME>
  <SIZE>52920</SIZE>
  <PAGES>1</PAGES>
- <BARCODES>
  <BARCODE PAGEINDEX="1">64231105301600003174</BARCODE>
  <BARCODE PAGEINDEX="1">rb12345678</BARCODE>
</BARCODES>
<CONTENT />
</DOC>
- <DOC File="10000259136100906077.tif">
  <DATE>16.1.2013</DATE>
  <TIME>14:01:38</TIME>
  <SIZE>52334</SIZE>
  <PAGES>1</PAGES>
- <BARCODES>
  <BARCODE PAGEINDEX="1">10000259136100906077</BARCODE>
</BARCODES>
<CONTENT />
</DOC>
</PATH>
</BATCH>

```

Image 34: Example of an IMiS®/BatchScan XML file after saving the profile

6.3.3 Document source setup

In the “Source” category in the “Profile settings” window, select the source for document capture. Documents can be captured with a scanner or via files from a data system that have been prepared beforehand, for example documents or files in image formats.

6.3.3.1 Scanner as a document source

Set up the scanner before use. Scanner settings must be adjusted for each type of document, as some documents are smaller, two-sided, of poor quality, etc. Take into consideration all these possibilities when setting up a scanner. For more information see chapter [Scanner selection](#).

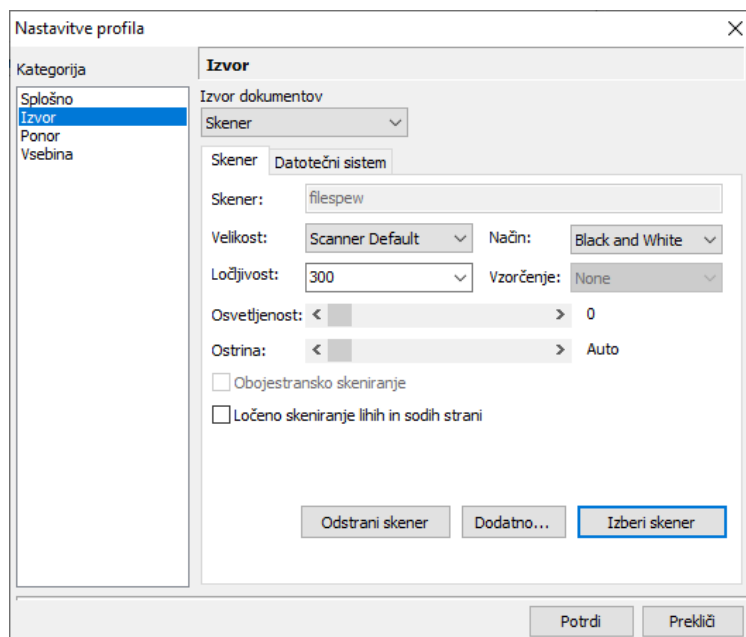


Image 35: Setting the scanner as the document source

***Warning:** Name of scanner is saved in the profile. If the scanner that is selected in the “Scanner selection” is not the same as in the profile, the following notification appears:*

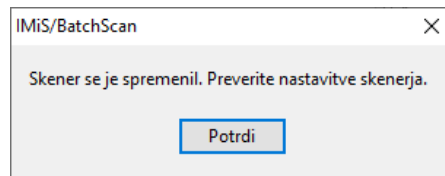


Image 36: Notification shown if the scanner name does not match the name in the profile

For more information see chapter [Scanner selection](#).



When changing scanners, it is advisable to check the selected profile's settings, as different scanners support different settings. When you change a scanner, it is possible that scanner settings in the profile are not appropriate.

The notification closes by clicking on the “OK” button.

6.3.3.1.1 Description of individual scanner settings

Settings options that change, depending on the selected scanner.

Size

Select the size and format of scanning. The most often scanned paper format is A4 or Letter. In the case of several different paper sizes in one document you can select “Scanner's Maximum”. This creates a lot of blank space in the scanned document.

Mode

Select in which mode the documents are to be scanned (black and white, grey, color). The »color mode« option will not be shown if the scanner does not support color scanning. For more information see chapter [File compression and size](#).

***Note:** Mode selection has a great impact on the size of the scanned document file.*

Resolution

Select the desired scanning resolution from the drop-down menu. Only the resolutions supported by the selected scanner will be shown. For more information see chapter [File compression and size](#).

Note: A high resolution selection has a great impact on the size of the scanned document file.

Patterning

By selecting patterning, you can replace the color or gray with a suitable pattern of pixels of a lower color depth. The values depend on an individual scanner.

Example: Gray can be patterned as a chessboard of small black and white squares.

Brightness

Brightness affects the sensitivity of the scanner to non-white dots on the sheet.

Greater brightness scans a document with fewer black or color dots. Reducing the brightness gives the scanned document a more "smudged" look. That is because the non-white dots are emphasized.

Sharpness

By setting the sharpness of a scanned document, you increase/decrease the difference between a light and dark dot. For better scanning of documents with poorer quality, set the correct ratio between brightness and sharpness.

Example: A darker document is scanned with smaller brightness, whereas brightness is increased for a lighter document.

Two-sided scanning

If the scanner enables two-sided scanning, you can select the option "Two-sided scanning".

When scanning individual sheets of paper, it will scan both pages. IMiS®/BatchScan performs two-sided scanning of sheets only if you apply "Scan multiple pages" in the "Scan" menu.

When performing two-sided scanning, it is recommended that you use the "Remove empty pages" setting, which is not enabled by all scanners.

Separate scanning of odd and even pages

IMiS®/BatchScan also enables two-sided scanning on one-sided scanners.

Select the option "Separate scanning of odd and even pages". First scan the odd pages of the document, then turn the document around and scan the even pages.

IMiS®/BatchScan will automatically insert the pages into the correct spot in the document.

Remove scanner

By clicking on the "Remove scanner« button, you remove the currently selected scanner in the settings. After implementing this action, the scanner cannot be used until it is selected again.

Additional settings

By clicking on the "Additional..." button, a window with factory scanner settings appears.

The appearance and content of the window depend on the selected scanner.

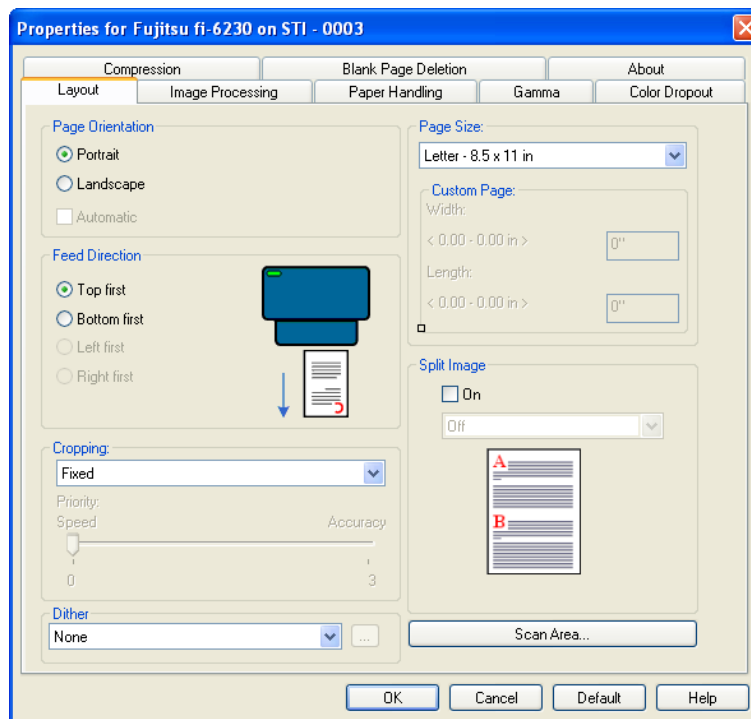


Image 37: Setting scanner properties

Choose a scanner

By clicking on the “Choose a scanner” button, a window with all the installed scanner drivers appears. Select the connected scanner and confirm by clicking on the “OK” button.

6.3.3.2 Document source is a data system

By selecting “Data system” in the “Data source” list, files saved in a data system are used for document capture rather than a scanner.

Files must be prepared in a format that is supported by IMiS®/BatchScan.

IMiS®/BatchScan supports all widely used image file formats (PDF, PDF/A, TIFF, BMP, GIF, JPEG ...).

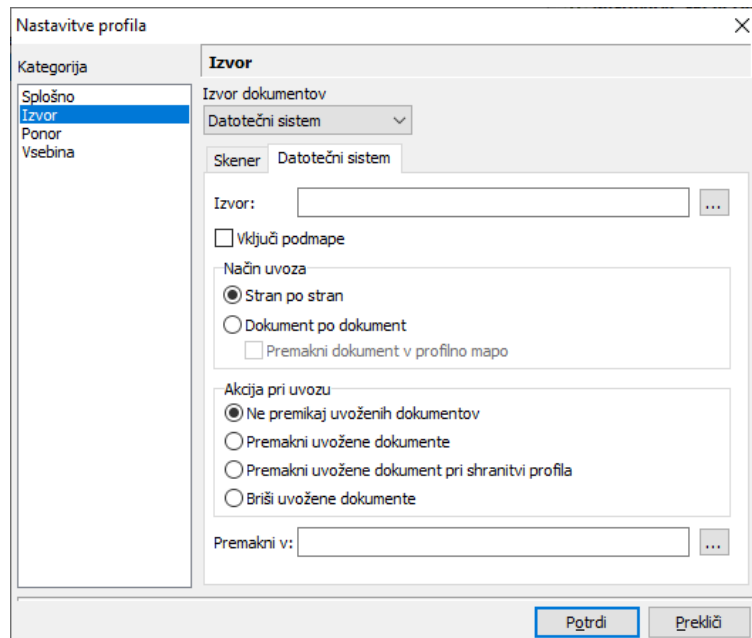




Image 38: Setting the file system as the document source

In the “Source” field, enter the path and name of the folder containing the files or select it by clicking on .

By selecting the “Include the subfolders” option, you enable import of files that are located in the subfolders of the currently selected folder.

In the group of “Import actions” settings, you can remove files from the source folder by selecting the “Move imported files” action or “Move imported files at profile save” action. The difference is that with the first action, the files are removed from the source folder immediately after profile import, whereas with the second action they are removed after the documents have been scanned, when the profile is saved.

The “Do not move imported files” option is used when you want the imported files to stay in the folder.

Enter the path and name of folder where you want the imported files to move in the “Move to:” field or select it by clicking on .

Warning: If this field is empty, the imported files can be deleted only from the source folder.

In the “Import type” group, select how the source files are processed. By selecting the “Page by page” option, one page of the source document at a time is imported.

Based on the profile setting, it is possible that the number of pages in the imported document does not match the number of pages in the source folder (e.g., due to deletion of blank pages).

If you want to import only the prepared and sorted documents, select the “Document by document” option. The whole document from the source folder is imported in the profile.

Regardless of profile settings, the document will be identical to the one in the source folder.

If you want a copy of the source file in the profile, confirm the “Move document to profile folder” option.

In both cases, filter processing is implemented on the imported pages.

Example: If the barcode filter is activated, all the recognized barcodes are imported to the profile.

6.3.4 Document destination setup

In the “Profile setup” window in the “Destination” category, specify location for saved captured documents and their file format.

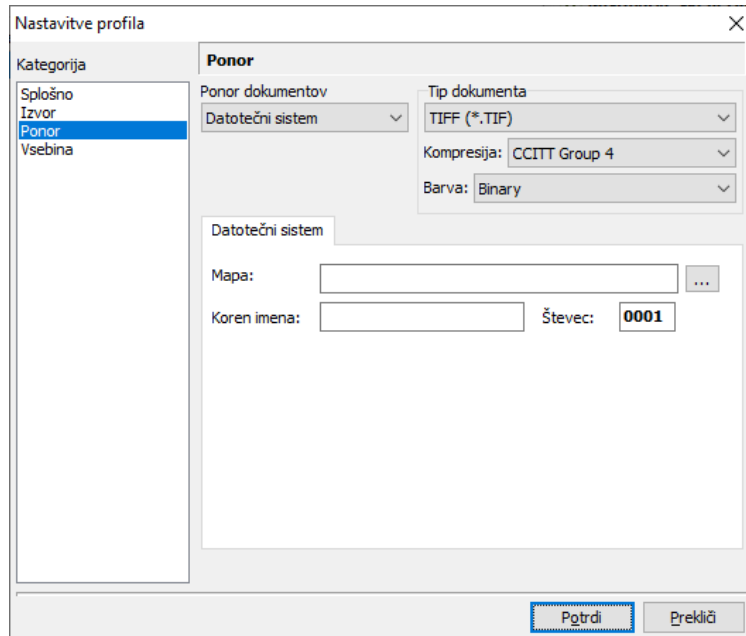



Image 39: Setting the file system as the document destination

Only file system is available for document saving.

In the “Document type” list, select the file format for recording new documents. For each selected format, the values in the “Compression” and “Color” lists will change. Each image format has its own values. For more information see chapter [Technical Documentation](#).

***Note:** The most common formats are available. Several pages can be recorded in the same file only in TIFF and PDF formats. With other formats, each document page is saved in its own file.*

Specify the folder where the scanned documents will be saved by inserting it in the “Folder” field or clicking on . The folder must exist in the data system and must be entered when creating a profile.

If the entry is incorrect, the following notification appears when the profile is confirmed:

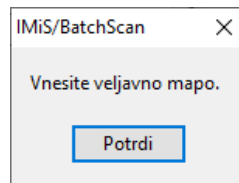


Image 40: Notification shown if an incorrect folder name is entered

If the folder has not been entered before the profile is confirmed, the following notification appears:

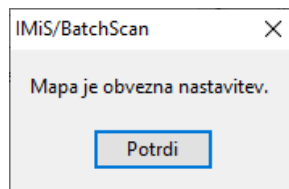


Image 41: Notification shown if the folder is entered before confirming the profile

In the “Name root” field, enter the fixed name component of the scanned document file. The name of a new document consists of a fixed component and a four-digit counter that automatically increases with each new scanned document.

6.3.5 Content setup

You can add data to a scanned document during the process of scanning with IMiS®/BatchScan.

Image 42: Setting additional data for document content

In the “Profile setup” window in the “Content” category, specify data that you wish to have in the document. Data can be added or removed only if the profile is empty (without documents). The created fields and entered values are used during scanning at document content entry.

Data update

To add new data, click on the “Add” button.

To remove selected data, click on the “Remove” button.

In the “Name” field, enter the name of data.

In the “Description” field, enter a detailed description of data.

In the optional “Type” field, select type of data.

IMiS®/BatchScan supports five (5) types of content:

- binary – True (1) and False (0) are the possible values
- number – integers and real numbers
- date – for valid date values
- string (character string) – for various character strings
- barcode – for recognized barcodes.

Barcode-type content is not available if "Barcode separator" has been selected as the scanning mode in the General profile settings.

For more information see chapter [General profile settings](#).

Content position

Content position is an area of a page preview that zooms in when the content element is selected during scanning or document viewing. Content position cannot be specified in profile settings. It is specified at page preview when at least one document is created.

Specifying fixed component of value

You can specify a fixed value that is shown when content is entered in advance.

Example: The user enters one part of an account number that is always the same.

The fixed component can be changed even when documents are already saved in the profile.

Entering preset values

Preset values are available for all content types other than binary. Values on the list are of the same type as the data type.



In the "Values" field, enter values individually and confirm them by clicking on , so they are added to the value list. A selected value can be removed by clicking on . List values must be unique. Values can be added or removed also when a profile already contains documents.

Image 43: Setting preset values

Defining a value validation expression

Content value validation is available for all content types other than binary. The value entered in the "Validation" field is a regular expression. It defines the valid values when entering content during a scan. If the validation value has not been defined in the settings, any value entered is valid.

Specifying a filter

Values can be filtered only for content of the "Barcode" type. The value entered in the "Filter" field is a regular expression. It specifies which of the recognized barcodes are to be offered to the user for selecting a barcode when entering content during a scan.

If the filter value has not been defined in the settings, the user is offered all the recognized barcodes to choose from. If only contents of the "Barcode" type have been defined in the settings and only one barcode per content has been recognized, scanning does not stop for content to be entered.

6.4 Profile editing

You can change settings of an active profile by selecting “Edit...” in the Profile menu.

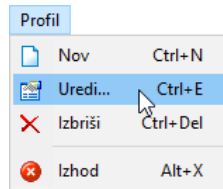


Image 44: Selecting the "Edit" command in the popup menu



Click on the “Edit...” item  in the toolbar or use the “Ctrl+E” key combination.

The “Profile settings” dialog box opens, where you can change profile settings.

The name of profile that you specify when creating a new profile cannot be changed.

The same goes for profile folder and data values in the “Content” category.

They can be changed only if the profile is empty (without scanned documents). In the “Content” category, you can change or add only the “Values” data in a list of individual data, and the “Fixed part” values for individual data.

By clicking on the “Confirm” button, changes in the profile settings are saved.

By clicking on the “Cancel” button, the changes are cancelled.

***Warning:** If more substantial changes are needed in a profile, consider creating a new profile.*

6.5 Deleting profile

The current selected profile can be deleted by selecting “Delete” in the “Profile” menu.

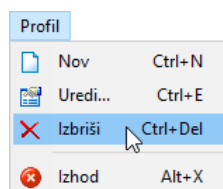


Image 45: Selecting the "Delete" command in the popup menu



“Ctrl+Delete” key combination.

Only profiles which are empty and do not contain any documents can be deleted. If a profile is not empty, the following notification appears:

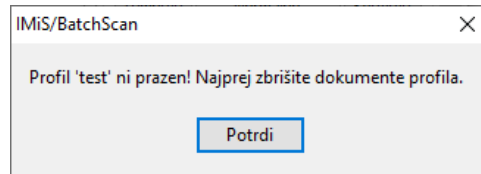


Image 46: Notification shown if the profile is not empty

Scanned documents in a profile can be deleted by marking them in the “Document” menu and selecting “Delete”. A dialog box with appears:

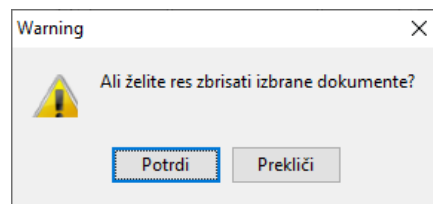


Image 47: Confirming document deletion

By clicking on the “Confirm” button, you delete the documents in a profile.



Mark all documents in a profile with the “Ctrl+A” key combination and then press “Delete”.

6.6 Scanning

If several profiles are available, make sure the right profile is selected before scanning.

Profiles can be selected by clicking on the tab with profile name.

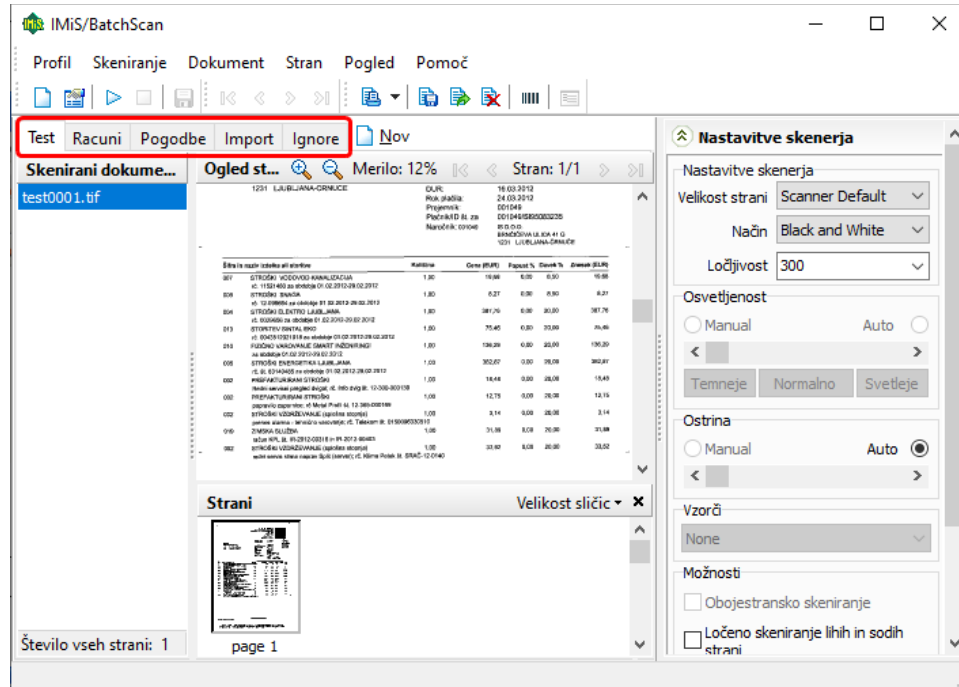


Image 48: Selecting the right profile

When a profile is changed, scanner settings change as well. Hence, when a different scanner is selected than specified in a profile, the following notification appears:

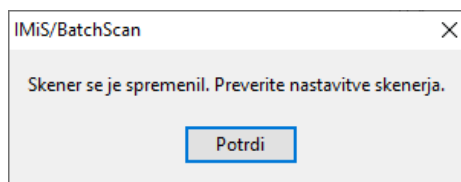


Image 49: Notification shown if a different scanner has been selected than the one specified

Click on the “Confirm” button in the right pane in the “Scanner settings” category to check the appropriateness of scanner settings.

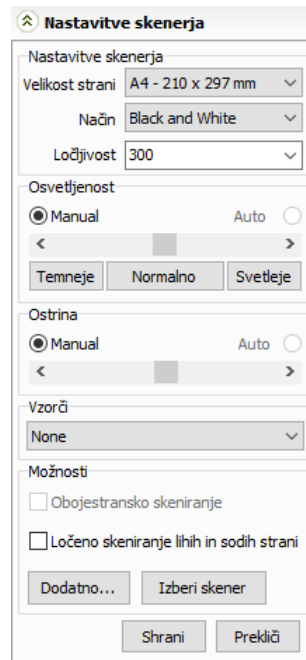


Image 50: Scanner settings

After specifying the profile settings, you can start with batch scanning.

IMiS®/BatchScan supports ADF (Automatic Document Feeder) scanners, namely scanners with automatic paper feeder.

Place documents in the paper feeder and click on “Start” in the “Scanning” menu.

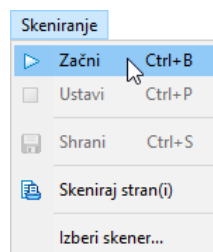


Image 51: Selecting the "Start" command in the popup menu



Click on the “Start” icon  in the toolbar or use the “Ctrl+B” key combination.

IMiS®/BatchScan has an automatic paper feeder that feeds paper and scans.

It separates new documents in a profile, based on the page separator. The name of a new document consists of a root of choice and a four-digit counter.

For more information see chapter [Document destination setup](#).

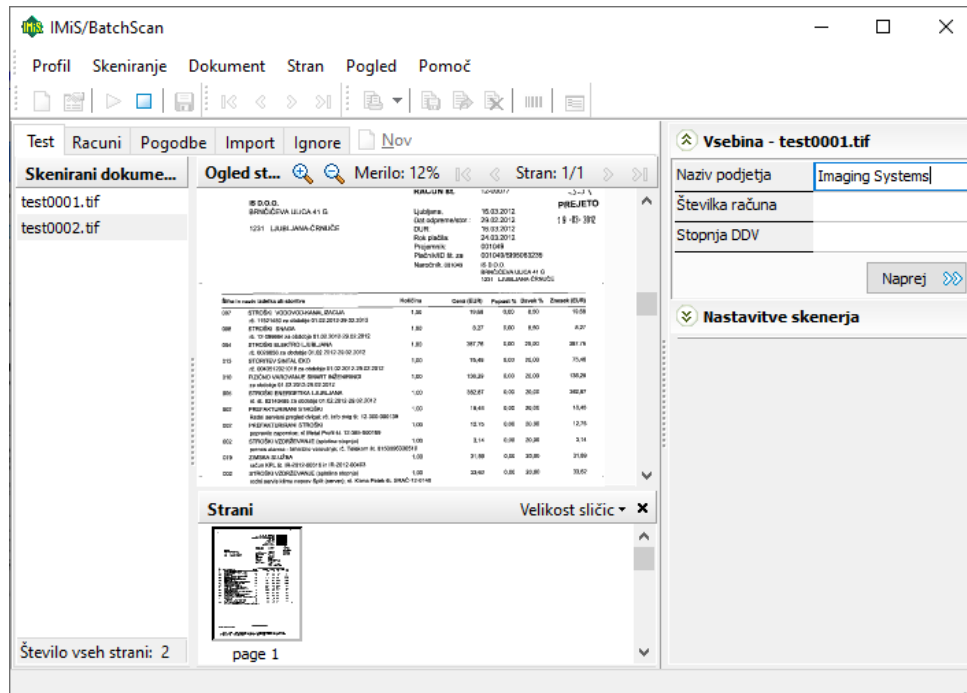



Image 52: Entering the required data for the scanned document

If you have specified content entry in the profile, enter and save information on mandatory data for each scanned document in the right pane in the “Content” category.

For more information see chapter [Content setup](#).

After the entry, click on the “Next” button and continue scanning, or the “Finish” button and finish scanning. Scanning is finished when no paper is left in the feeder.

To cancel scanning, select “Cancel” in the “Scanning” menu or the “Cancel” button  in the toolbar.

When the scanning is finished, save the profile with documents by selecting “Save” in the “Scanning” menu.

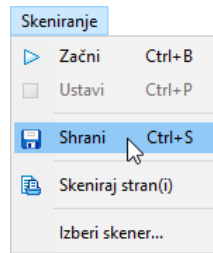


Image 53: Selecting the “Save” command in the popup menu



Click on the “Save” icon  in the toolbar or use the “Ctrl+S” combination.

For more information see chapter [Saving Profile](#).

If you realize during batch scanning that a document with the same name already exists in the profile, the following dialog box appears:

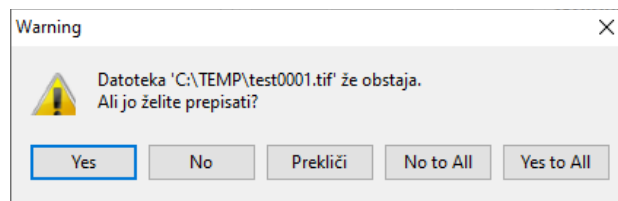


Image 54: Notification shown if a document already exists in the profile

The following options are available:

- Select “Yes” to overwrite the existing document.
- The “No” option gives the scanned document a name with the counter increased by 1. If the profile contains a document with this name as well, a dialog box with a question reappears.
- By clicking on the “Cancel” button, batch scanning is cancelled.
- The “No to all” option automatically gives the document a name with the counter increased by 1. If this document name also exists in the profile, the counter is increased by 1 more and so on until an unexisting document name is found. The setting applies to all scanned documents. A dialog box does not reappear.

- “Yes to all” overwrites the current and all the following found documents with the same name as the scanned documents. A dialog box does not reappear.

6.7 Saving a profile

Every time when new documents are created in the IMiS®/BatchScan application, the profile must be saved, otherwise the unsaved documents are deleted.

By clicking on “Save” in the “Scanning” menu, document changes are saved in the profile.

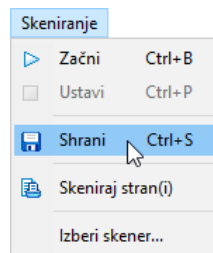


Image 55: Selecting the "Save" command in the popup menu



Click on the “Save” icon  in the toolbar or use the “Ctrl+S” key combination.

If you want to select another profile or close the application, the following dialog box appears:

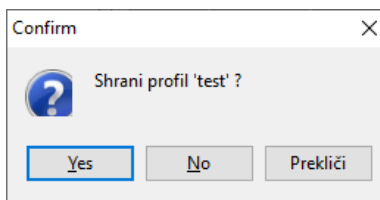


Image 56: Notification shown when selecting another profile or closing the application

By clicking on the “Yes” button, all the changes are saved in the profile file.

By clicking on the “No” button, all the changes are discarded, and the new scanned documents are deleted in the profile folder.

By clicking on the “Cancel” button, saving is cancelled. You return to the IMiS®/BatchScan user window and the changes are not saved.

6.8 Product shutdown

IMiS®/BatchScan can be shut down in the following ways:

- Select the “Exit” option in the “Profile” menu.

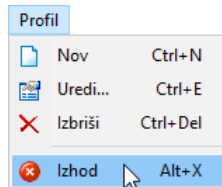


Image 57: Selecting the "Exit" command in the popup menu


- or click on the icon  on the right side of the address bar window;



Image 58: Izbira križca za izhod iz IMiS®/BatchScan

- or right-click the IMiS®/BatchScan icon in the toolbar and then select “Close”.

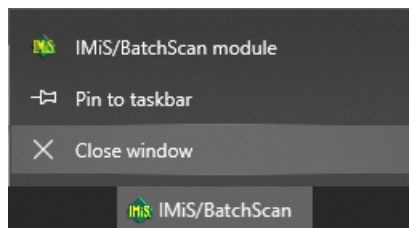


Image 59: Selecting a command from the toolbar

If you have not saved the current profile, the following dialog box appears before IMiS®/BatchScan shutdown:

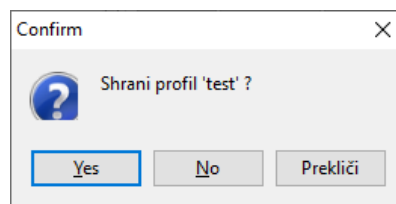


Image 60: Notification for saving before shutdown

By clicking on the “Yes” button, the profile is saved. If documents have been already scanned, they are saved as well. IMiS®/BatchScan closes.

By clicking on the “No” button, the profile is not saved. If documents have been scanned, they are not saved. IMiS®/BatchScan closes.

By clicking on the “Cancel” button, closing of application is cancelled.

7 DOCUMENT MANAGEMENT

With IMiS®/BatchScan, selected documents in a profile can be saved, moved or deleted.

Save as...

If you select “Save as...” in the “Document” menu, a copy of a selected scanned document is created in a selected folder.

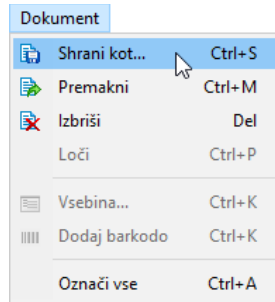


Image 61: Selecting the "Save as" command in the popup menu



Click on the “Save as” icon  in the toolbar or use the “Ctrl+S” key combination.

If you want to save document as a copy, you need to select document before.

Move

Selected scanned documents can be moved to another folder. Select documents in the scanned document list and select “Move” in the “Document” menu.

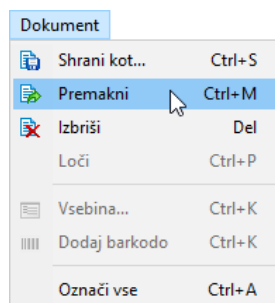



Image 62: Selecting the "Move" command in the popup menu



Click on the “Move” icon  in the toolbar or use the “Ctrl+M” key combination.

A dialog box appears, and you select a folder in which to move the selected documents.

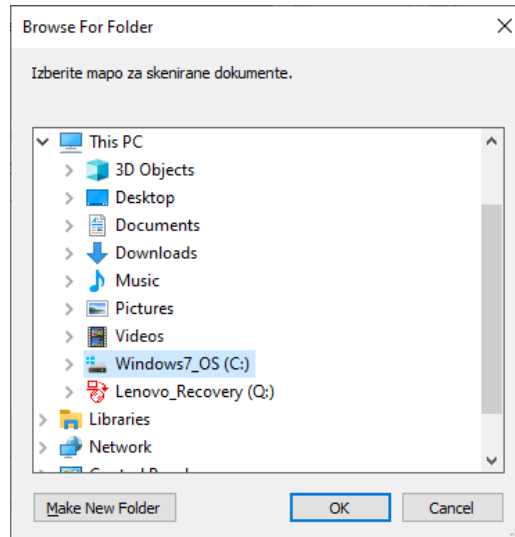


Image 63: Selecting a folder for moving the selected documents

If a document with the same name is located in the target folder, a dialog box appears:

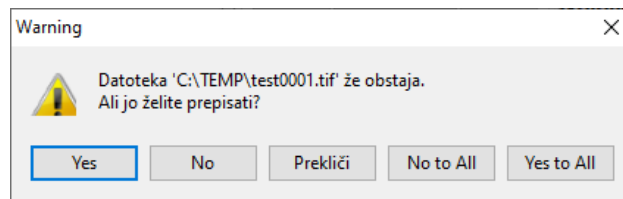


Image 64: Notification shown if another document has the same name

The following options are available:

- Select “Yes” to overwrite the existing document.
- Select the “No” option if you do not want to change the scanned document.
- “Yes to all” overwrites the current and all the next found documents with the same name as the scanned documents. A dialog box does not appear.
- By clicking on the “Cancel” button, the move is cancelled.

***Warning:** A move cancellation does not affect the already moved documents. The moved documents are permanently removed from the profile.*

Delete documents

Selected documents can be deleted. In the scanned document list, select documents and select “Delete” in the “Document” menu.

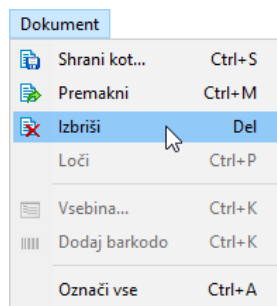



Image 65: Selecting the "Delete" command in the popup menu



Click on the “Delete” icon  in the toolbar or use the “Delete” key.

The following dialog box appears:

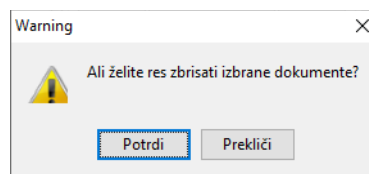


Image 66: Notification shown when deleting the selected documents

By clicking on the “Confirm” button, the deletion is confirmed. Each deleted document will be automatically deleted from the profile file, so there is no need to save the profile.

This applies only if the profile has been saved before the deletion.

By clicking on the “Cancel” button, the deletion is cancelled.

Scan page(s)

The “Scan page(s)” option is used when you want to insert new pages in an existing document. The document pages can be overwritten. New pages are added to the current document until the paper feeder is empty or the scanning is stopped.

Start the action by selecting “Scan page(s)” in the “Scanning” menu.

For more information see chapter [Scanning](#).

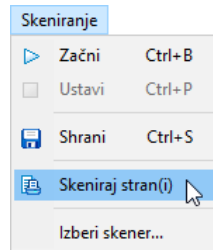



Image 67: Selecting the “Scan page(s)” command in the popup menu



Click on the “Scan page(s)” icon  in the toolbar.

The following options are available for adding pages:

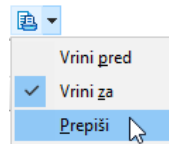


Image 68: Selecting the “Overwrite” command in the popup menu

- “Insert before”: Scanning in this mode inserts pages between the current page and the previous page.
- “Insert after”: Scanning in this mode inserts pages between the current page and the following page. It is the default mode.
- “Overwrite”: Scanning in this mode overwrites the current page and the pages that follow the current document, so the number of pages equals the number of inserted pages.

7.1.1 Barcodes

Barcode recognition is possible in the "Barcode separator" scanning mode or with "Barcode" type contents. The two options are mutually exclusive. In both cases, the "Barcode detection" filter for image processing must be set up.

For more information see chapter [Filter setup for image processing](#).

The recognized barcodes in a selected document can be checked in the right pane in the "Content" category.

The value of a barcode is recorded in the "Barcode" field in the "Barcode separator" scanning mode.

If several barcodes are recognized in a document, all of them are recorded.

By clicking on each barcode value, the page containing the barcode appears in main view.

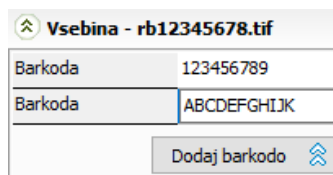


Image 69: Showing a barcode value recognized on the document page

By clicking on the "Add barcode" button, a new barcode value can be added manually.

This mode is used if a barcode has not been automatically recognized.

All the barcode values can be changed manually.

A barcode can be added manually by selecting "Add barcode" in the "Document" menu.

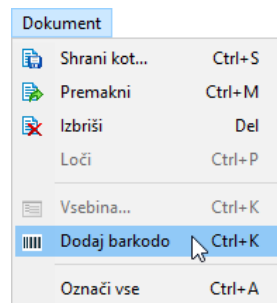
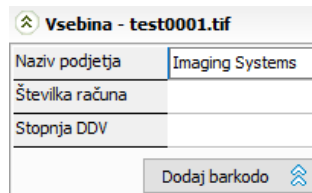


Image 70: Selecting the "Add barcode" command in the popup menu

7.1.2 Content

Content is added during scanning. For each new document in a profile, the scanning stops and manual entry of values is enabled. Entry fields are in the right pane in the “Content” category. Scanning continues after confirmation.

The content can be changed after the scanning is finished.




Vsebina - test0001.tif	
Naziv podjetja	Imaging Systems
Številka računa	
Stopnja DDV	
Dodaj barkodo 	

Image 71: Manual entry of the "Company name" value

Content enables adding information in a document. Content can be specified in the “Profile settings” window in the “Content” category. Enter and save the content in the “Content” form. This applies to all documents.

A useful tool for document scanning of the same type is specifying the position of content on a scanned page. In that case, the preview zooms in the selected area. This tool also functions during document viewing.

Specify the position of content on a document image by manually dragging the content area on the image and then select which field it applies to in the dropdown menu.

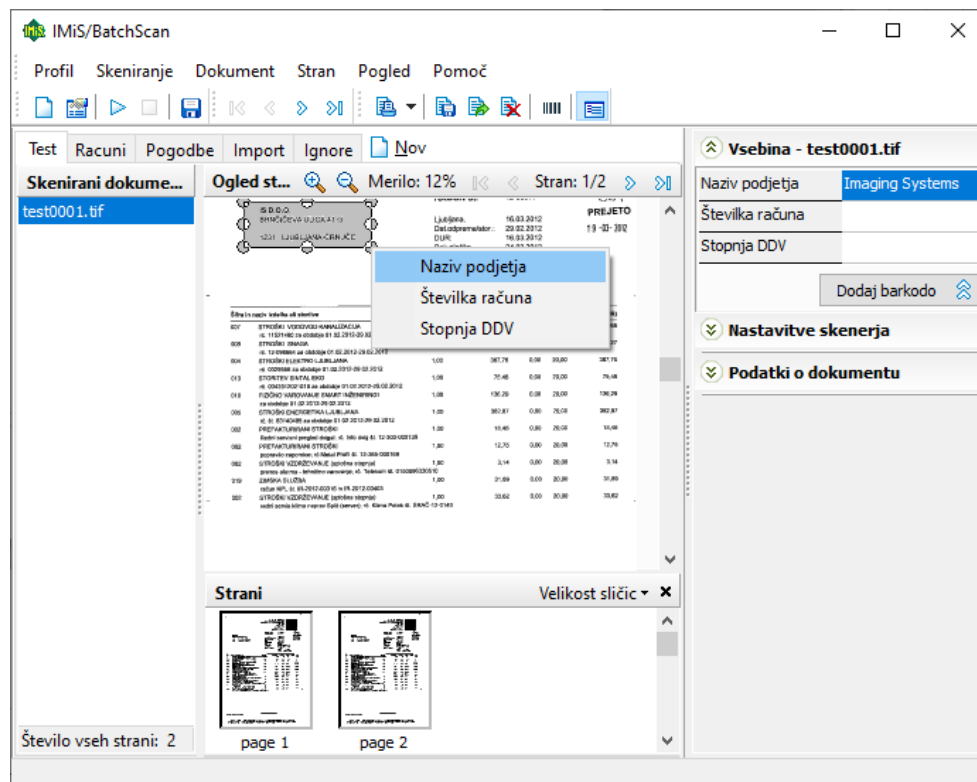


Image 72: Selecting the field in the popup menu

8 TROUBLESHOOTING

8.1 Scanning problems

8.1.1 Scanner driver is not loaded

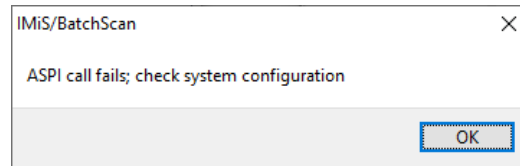


Image 73: Error notification "Cannot establish communication with scanner"

Cause: The scanner driver is not installed in the IMiS®/BatchScan application or cannot connect with the scanner.

Eliminating the error: Check the power and data cables going from the scanner to the computer. Turn the scanner off and turn it on again. Stop and rerun the IMiS®/BatchScan application. Check if the correct driver for the connected scanner is installed in scanner settings.

8.1.2 Paper jammed in scanner

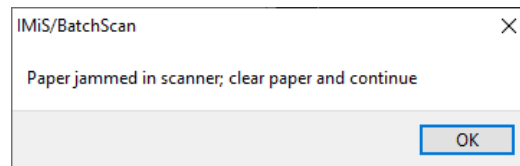


Image 74: Error notification "Paper jammed in scanner"

Cause: The feeder in the scanner has pulled the paper in incorrectly.

Eliminating the error: Turn the scanner off, physically remove the paper from the mechanism, and turn the scanner on. Restart the scan. For some scanner types the IMiS®/BatchScan application must be restarted.

8.2 Problems opening documents

8.2.1 Incorrect document format

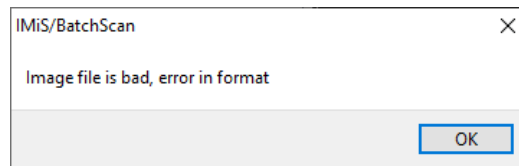


Image 75: Error notification "Corrupted file"

Cause: The document's file record is incorrect or damaged.

Eliminating the problem:

- Request an undamaged copy of the document from the author of the damaged document.
- Send the damaged document to support@imis.eu, where technical support will try to restore the record.

8.2.2 Document cannot be opened in another viewer

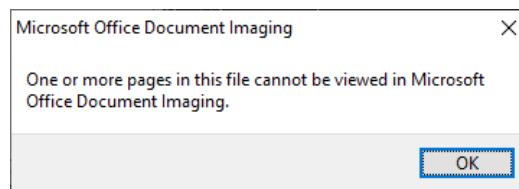


Image 76: Error notification "Cannot open document"

Cause: When saving the document, a patented compression method was used which is not supported by all programs for viewing.

Eliminating the error: Select another compression method before scanning documents in the IMiS®/BatchScan application. For more information see chapter [Document destination setup](#).