



# IMiS<sup>(R)</sup>/BatchScan Manual

Version 9.1.1412

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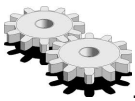
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..... Tips and Shortcuts



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# 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. We wish to use these scanned documents and data in application solutions (ERP, DMS, CRM, BPM, etc.). Using IMiS®/Avalanche or proprietary routing scripts we automatically route them into relevant notations of application solutions on the basis of bar codes and archive them on IMiS®/ARChive Server.

## 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®/Scan 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 (Image and Scanner Interface Specification)** is an industrial scanner interface. It was developed by Pixel Translations in 1990. Today this standard is owned by the EMC 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 EMC. 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** (**W**indows **I**maging **A**rchitecture) 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<br>(1 bit) | Gray (8 bit) | Color (24 bit) |
|-----------------------------|--------------------------|--------------|----------------|
| <b>None</b>                 | 475 KB                   | 5 MB         | 15 MB          |
| <b>CCITT G3</b>             | 85 KB                    | x            | x              |
| <b>CCITT G4 T6</b>          | 45 KB                    | x            | x              |
| <b>JBIG</b>                 | 36 KB                    | x            | x              |
| <b>JBIG 2bit</b>            | x                        | 84 KB        | x              |
| <b>JBIG 3bit</b>            | x                        | 165 KB       | x              |
| <b>JBIG 4bit</b>            | x                        | 420 KB       | x              |
| <b>Packed bits</b>          | 109 KB                   | 5 MB         | 15 MB          |
| <b>LZW</b>                  | 75 KB                    | 3,2 MB       | x              |
| <b>ZIP</b>                  | 56 KB                    | 3 MB         | 9 MB           |
| <b>Wang JPEG</b>            | x                        | 315 KB       | 363 KB         |
| <b>Sequential JPEG</b>      | x                        | 315 KB       | 360 KB         |
| <b>Progressive<br/>JPEG</b> | x                        | 310 KB       | 334 KB         |

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.

### Single-page formats

are capable of recording only one page to a file. 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 (**J**oint **P**hotographic **E**xpert **G**roup)

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.

Multi-page formats enable the recording of multiple pages into a single file. The best known representatives are the TIFF and PDF formats.

### TIFF (**T**agged **I**mage **F**ile **F**ormat)

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<br>(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           |

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) 800Mhz processor or other compatible processor with x86 architecture (must ensure the minimum requirements of the installed operating system);
- 256MB RAM (must ensure the minimum requirements of the installed operating system);
- disk capacity of at least 200MB for IMiS®/Scan 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);
- 1GB high-frequency SDRAM (DDR3/DDR4) or more;
- 50GB 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.

## 5 INSTALLATION

IMiS®/Scan 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.

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

*Primer: imena namestitvenega paketa:*

*IMiS.BatchScan.8.5.1208.Full.msi*

The introductory dialog box appears:



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.

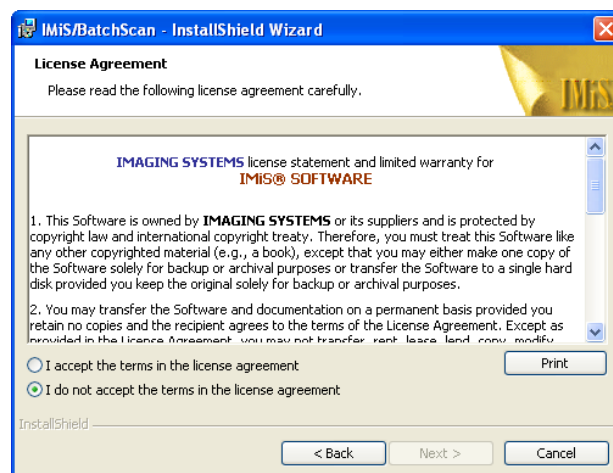
By clicking on the **"Back"** button, you return to the previous installation step.

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

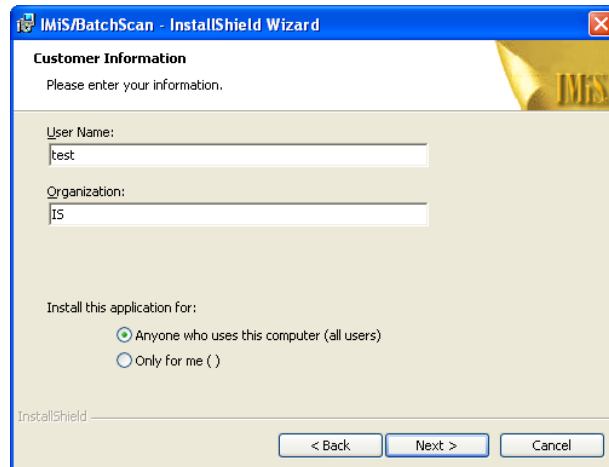
In the next step read the terms of the license agreement carefully. If you agree with them, select

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

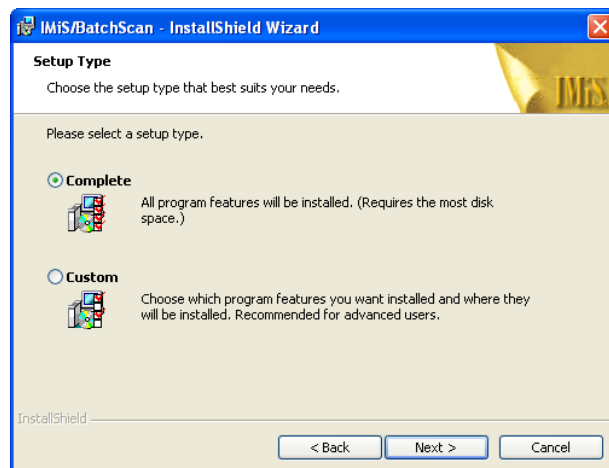
If you do not agree with the license terms, select **"I do not accept terms in the license agreement"** and by clicking on the **"Cancel"** button cancel the installation procedure.



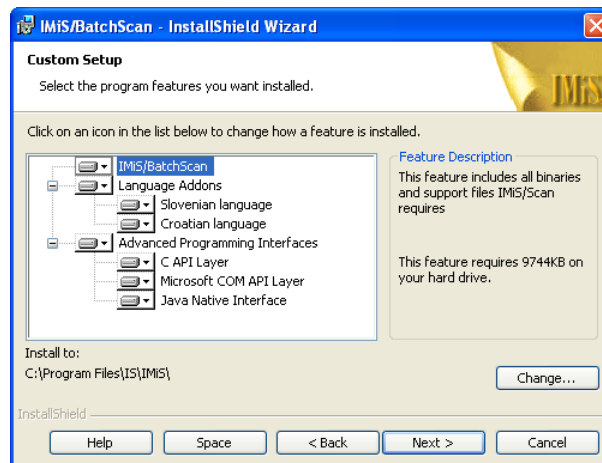
Continue by entering the username and organization. Select whether the application will be installed only for the current user ("**Only for me**") or for all users on this computer ("**Anyone who uses this computer**").



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.

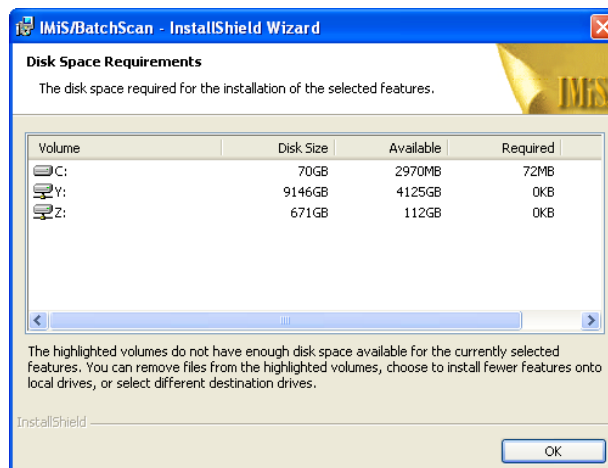


If you have selected the user-customized installation, a dialog box will appear in which you select the IMiS®/BatchScan modules to be installed.



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

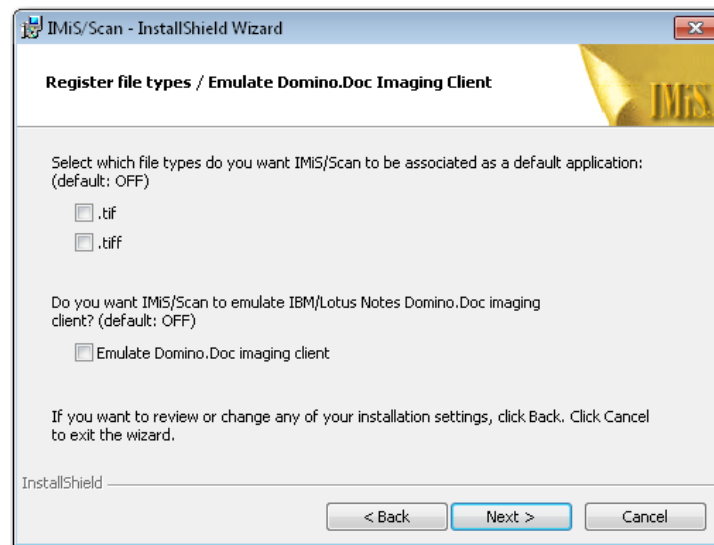
By clicking on the "**Space**" button, a dialog box appears containing a list of all disks, their sizes and free space on each disk. The disks that do not have enough free space for installation are marked.



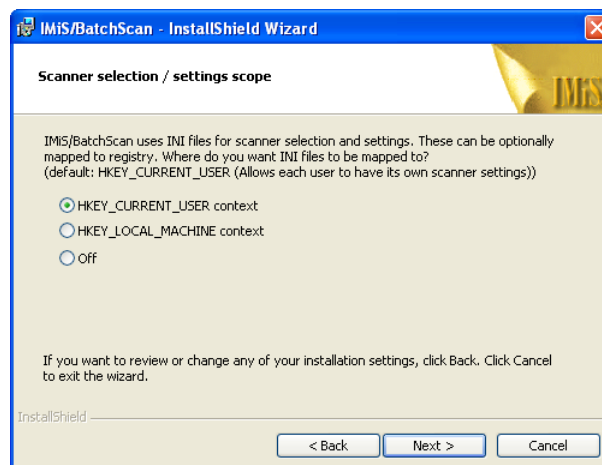
Under the "**Language Add-ons**" tree branch is a list of all languages into which the user interface of the IMiS®/BatchScan application has been translated. Translations into Slovenian and Croatian are available.

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.



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



You can choose between the following options:

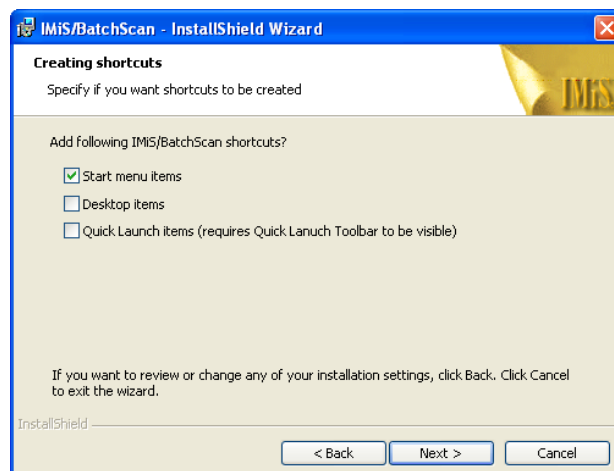
- **"HKEY\_CURRENT\_USER"** enables every user to store his or her settings separately from other users. Changes to the scanner settings apply only to the current user.
- **"HKEY\_LOCAL\_MACHINE"** enables all users on this workstation to have the same scanner settings. Changes to the scanner settings 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.*

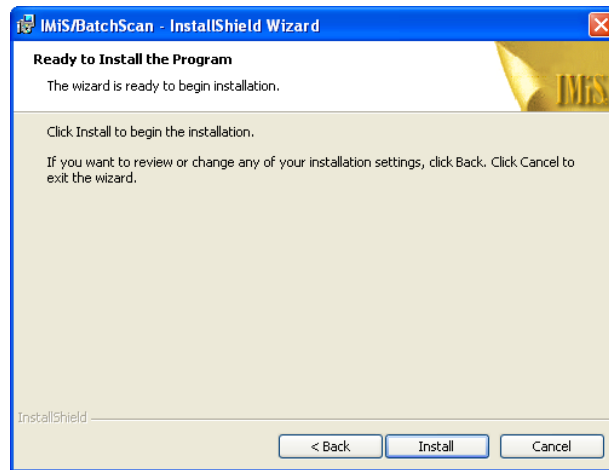
In the next step customize the displaying and adding of IMiS®/BatchScan shortcuts.



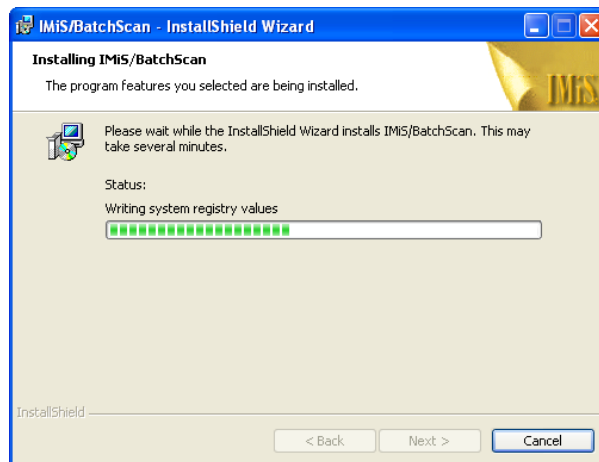
You can choose between the following options:

- **"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.



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

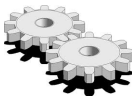


Installation is complete when the last display box appears, which you close by clicking on the **"Finish"** button.



## 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.

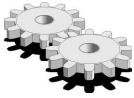


IMiS®/Scan uses the following default file folders for its installation:

- **"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)

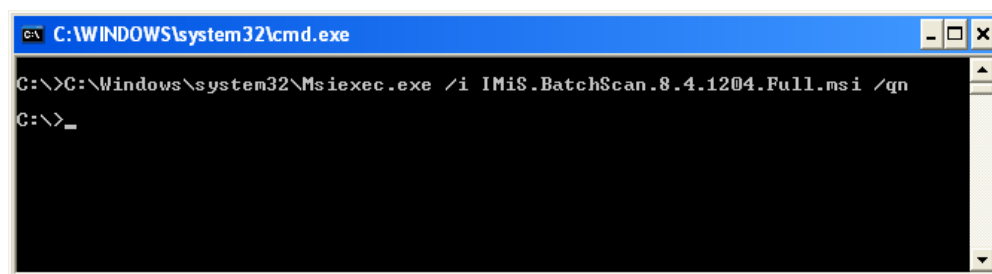
### 5.3.1 Installation Procedure

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.8.5.1208.Full.msi /qn*

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



The table below lists the various silent installation modes:

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

Before launching the installation of the IMiS®/Scan 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.8.5.1208.Full.msi /qn PARAMETER=VALUE
```

The table below describes the supported command bar parameters:

| PARAMETER             | Valid Values   | Description  |
|-----------------------|----------------|--|
| <b>INSTALLDIR</b>     | <folder name>  | This attribute contains the default destination folder for installation files.<br>(Default value = "%PROGRAMFILES%\IS\IMiS\")            |
| <b>USERNAME</b>       | <username>     | This attribute contains the username of the user performing the installation. (The default value is taken from system settings.)         |
| <b>COMPANYNAME</b>    | <company name> | This parameter adds the company name to the installation.<br>(The default value is taken from system settings.)                          |
| <b>SHORTCUT_START</b> | 1              | This parameter is used to inform the installation process to create a shortcut in the "Programs" menu.<br>(Default value=<not selected>) |

| PARAMETER            | Valid Values | Description   |
|----------------------|--------------|---|
| SHORTCUT_QUICKLAUNCH | 1            | This parameter is used to inform the installation process to create a shortcut in the quick launch taskbar.<br>(Default value=<not selected>)   |
| SHORTCUT_DESKTOP     | 1            | This parameter is used to inform the installation process to create a desktop shortcut.<br>(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.<br>1 - HKEY_CURRENT_USER<br>2 - HKEY_CURRENT_MACHINE<br>3 - OFF (uses INI files on the file system)<br>(Default value=1) |

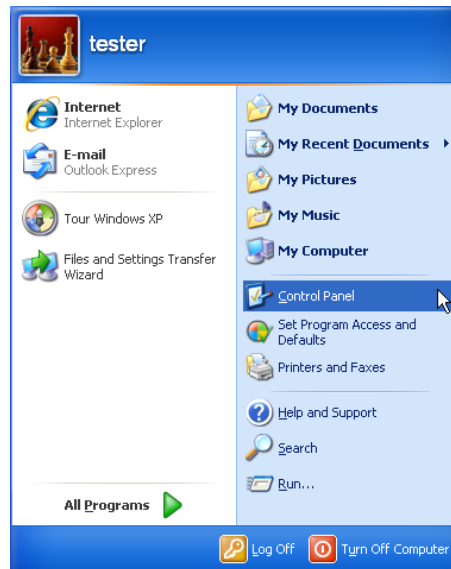
## 5.4 Product Upgrade

Prior to starting the upgrade, make sure that the IMiS®/Scan 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.

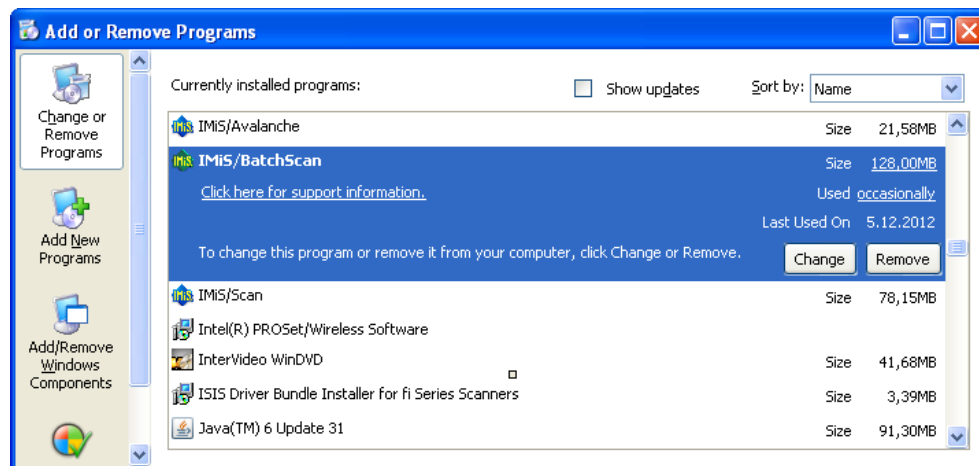
During the upgrade procedure, the previous version of the product is automatically uninstalled. All user settings and created documents are preserved. This is followed by the installation procedure for the new version.

## 5.5 Product Removal

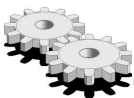
Prior to starting the removal, make sure that the IMiS®/BatchScan application is not currently active. IMiS®/BatchScan product is removed from the computer using the "Add or Remove Programs" program. This program is invoked by clicking on the "**Start**" button, finding the "Control Panel" program and then launch »**Add or Remove programs**«.



By clicking on the **"Remove"** 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.



### 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®/Scan.

The removal procedure goes as follows:

- Make sure that IMiS®/Scan 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 files: `imis.ini` and `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 `imis`.

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: Capture Perfect 3.0. The procedure for removing components goes as follows:*

- *Remove the `\Program Files\Pixtran` folder and all the files in this folder.*
- *Remove the `\Program Files\Common files\Pixtran` folder and all the files in this folder.*
- *Remove the `\Windows\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-BF44-9DBCD80763F9};`
- `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.

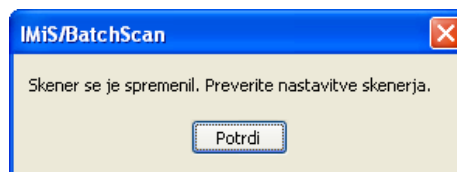
### 6.1.1 IMiS®/BatchScan as an Independent Product

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.



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\BatchScan* 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:



### 6.1.2 Integration of IMiS®/Scan into another Application

The functionality of the IMiS®/Scan 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* and *C:\Windows\SysWOW64* system folder.

*Example of a code in a Lotus Notes script:*

**C-API**

```
...  
  
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  
  
'begin with the scanning process with the profile »test« and save  
results in the 'variable IMiSXMLFile  
IMiSResultLNG =  
    IMiSBatchStart(IMiSBatchProfile, IMiSXMLFile, IMiSExtFlags)  
  
If IMiSResultLNG <> 0 Then  
    'close IMiS/BatchScan application  
    Call IMiSBatchClose ()  
    Exit Sub  
End If  
...
```

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

*Example of a code in VB script:*

```

COM
...
Set batchscan = CreateObject("IMiSBatchScan.Application")

Set Profile = batchscan.CurrentProfile

'display IMiS/BatchScan application
batchscan.Visible = true

'delete all files in current profile
Profile.Clear (True)

'start scanning
batchscan.StartScan (True)

While batchscan.Scanning
Wend

'when scanning is finished save the profile
If Profile.Modified Then
    Profile.Save
End If
...

```

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();

//write the name of current profile
System.out.println("Start scanning in profile <" +
currentProfile.getName() + ">");

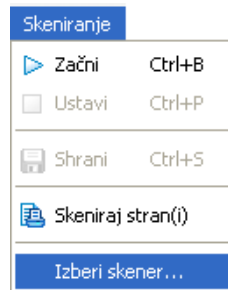
//start scanning
app.StartScan(true);

//write the number of documents in profile
System.out.println("Number of documents = <" +
String.valueOf(currentProfile.getDocuments().size()));
...

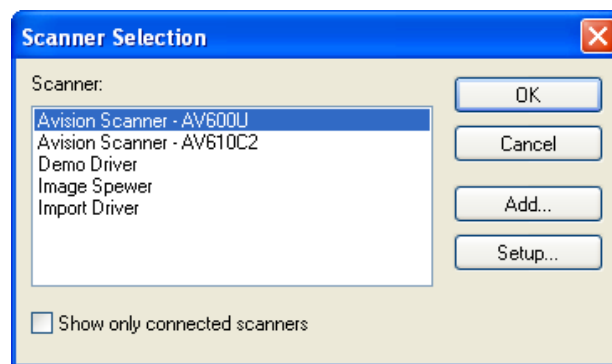
```

## 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.



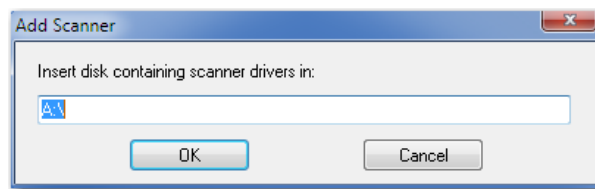
A dialog box for selecting a scanner appears »**Scanner Selection**«. Selection of a scanner is tied to the scanner driver, which is why all the notifications and the user interface are in English.

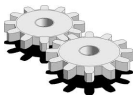


Select the desired scanner from the dialog box and confirm selection by clicking on the »**OK**« button.

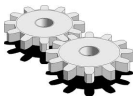
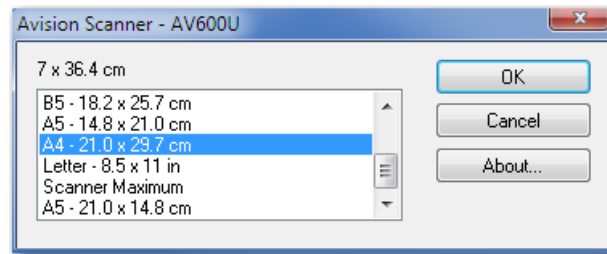
By clicking on the "**Cancel**" button, the settings are canceled and the box closes.

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.





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.



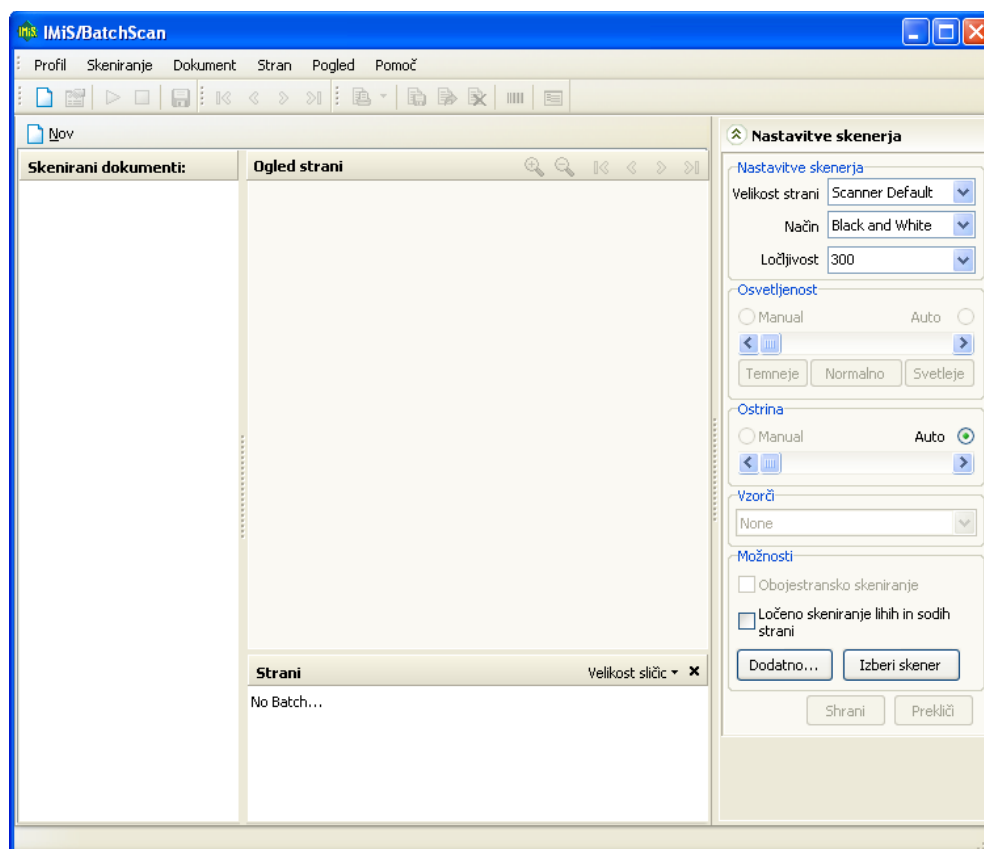
The scanner selection is recorded in the *setscan.ini* file, *Scanner* section and *Driver field*. You can only select one scanner, which remains active until you select another from the list or remove the current one from the settings.

[See also the chapter 6.3.3.1.1 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.

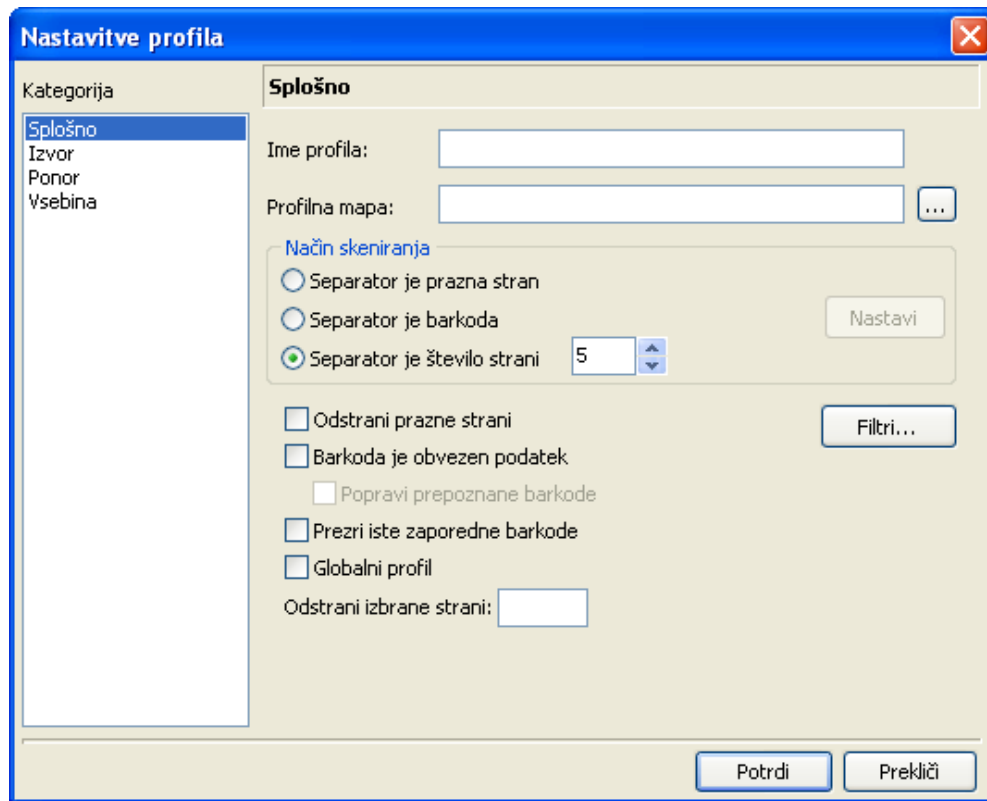


A scanning profile is created by selecting »New« in the »Profile« menu.



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.

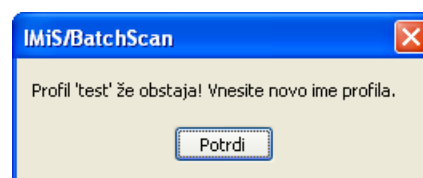


### 6.3.2 General profile settings

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

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

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




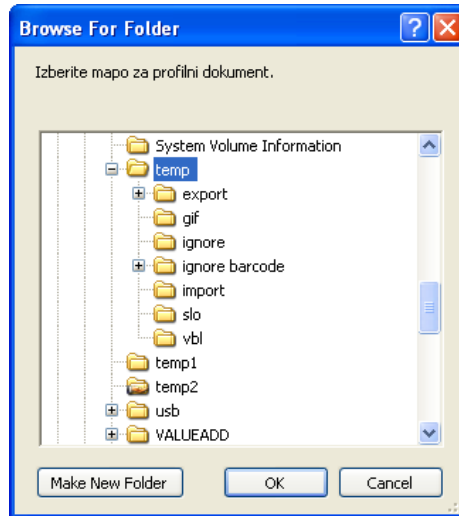
*Note: Profile name cannot be changed later.*



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 .



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.

[See chapter 6.3.2.1 Filter setup for image processing.](#)

You can also set up recognition of a specific barcode structure or a specific barcode.

[\*See chapter 6.3.2.2 Advanced setup for barcode recognition.\*](#)

### **»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. [\*See chapter 6.3.2.1 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.

### **»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.

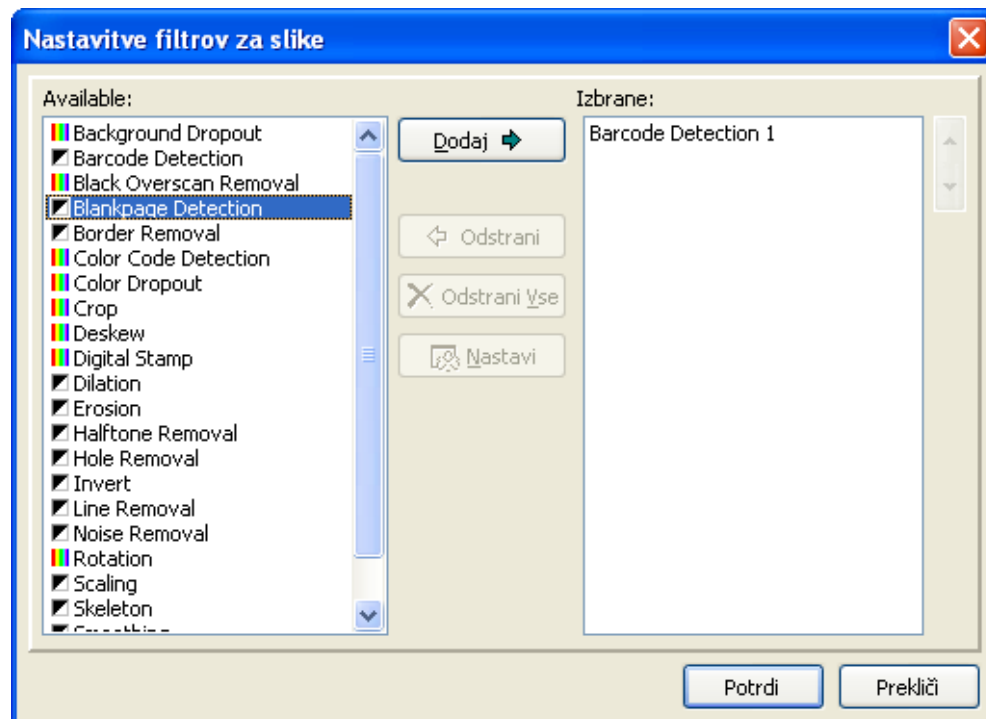
Filter processing is implemented in the same order in which they are given on the list.

[See chapter 6.3.2.1.1 Description of available filters.](#)

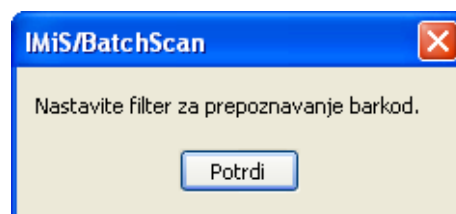
Click on the **»Add«** button to add filters on a list of selected filters.

To customize a selected filter, click on the **»Setup«** button.

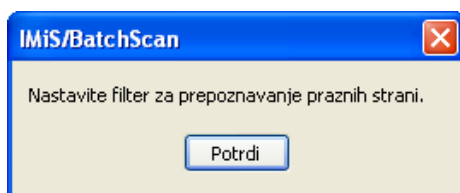
To remove a selected filter from the list of filters, click on the **»Remove«** button.



*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:*



or:



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      | It recognizes and decyphers barcodes on scanned documents. The number of barcodes it can recognize on a page is unlimited. Several methods for barcode recognition are supported: 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. |
| 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           | 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. 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. |
| Digital Stamp    | Specify stamp position on the scanned document.<br>The user can specify font, style and size to text annotations.<br><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>  |
| Dilation         | It emphasizes black objects on a scanned image which can improve image quality and text visibility.  |
| Erosion          | The black marked areas of the scanned document become paler.<br>The use of this filter can result in a partial loss of content details of the scanned document.  |
| 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     | It removes black hole punches from the edges of a scanned document.<br>It does not affect other parts of the scanned document.<br>This filter does not have any additional settings.   |
| Invert           | It converts a scanned document to its negative.  |
| Line Removal     | It removes or repairs lines based on a form prepared in advance.<br>Line removal gives better results of OCR recognition.  |
| 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. |

### 6.3.2.2 Advanced setup of barcode recognition



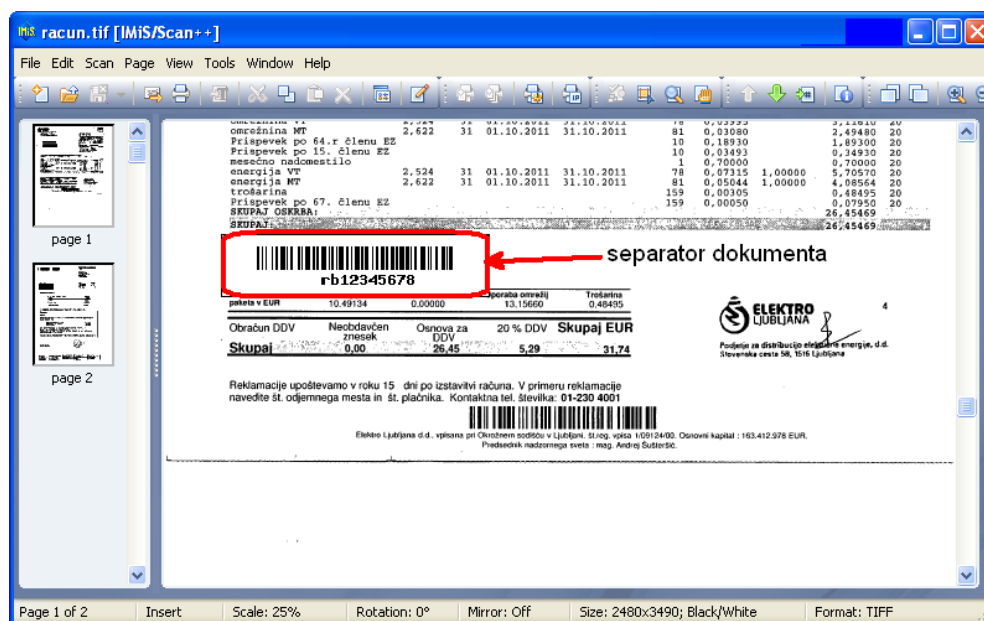
Advanced setup of barcodes is used when you want to specify in detail, which barcodes should be recognized as document page separators.

Enter the selected barcode or a group of barcodes in the **»Value«** 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.*



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. [See chapter 6.3.4 Document Destination Setup](#).

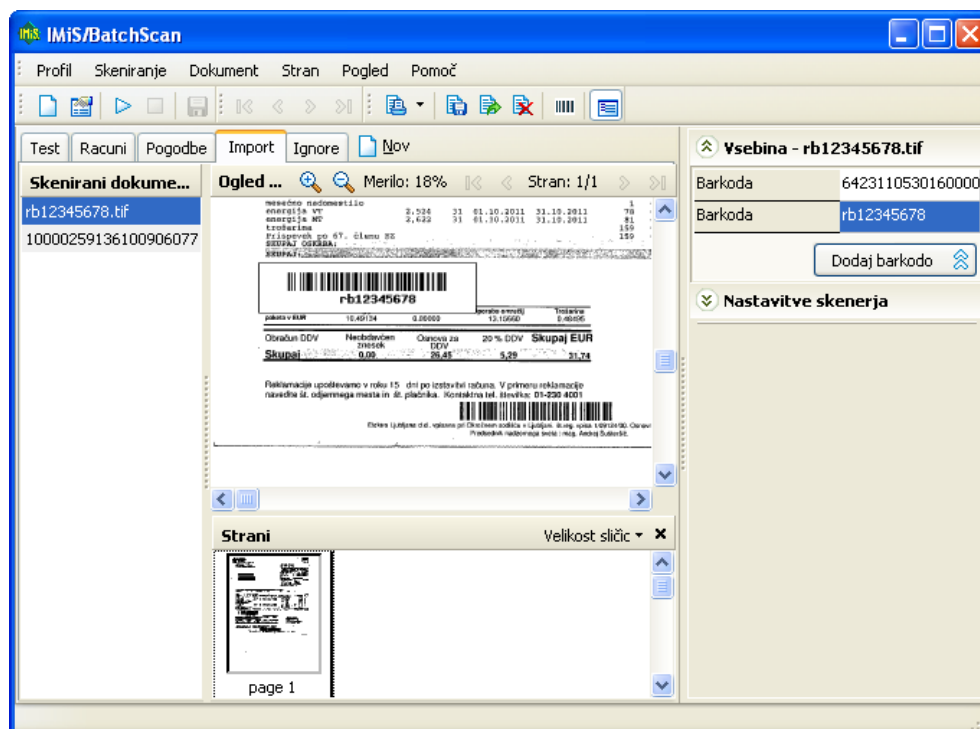
***Example:** You wish to scan instructions and each chapter level has its own barcode. During scanning, a new file is created for each chapter in the profile and it contains the name of chapter level. To use this functionality in scanning, enter the »%h« string in the "Name root" field at destination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

*Example: The following image shows a scanned document, where the separator is a specified barcode. Under the image, the appearance of an IMiS®/BatchScan, XML file after the profile has been saved is shown.*





```

- <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>

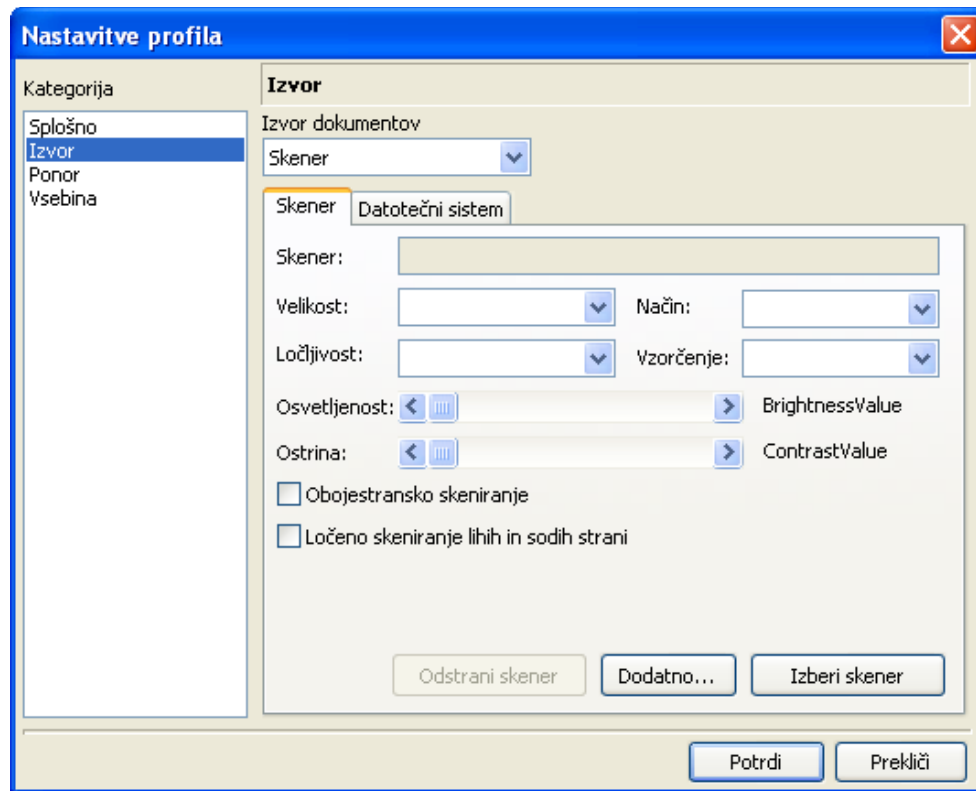
```

### 6.3.3 Document Source Setup

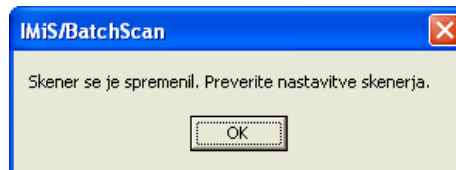
In the »Source« category in the »Profile settings« window, select the source for document capture. Documents can be captured with a scanner or via files from a data system that have been prepared beforehand, for example documents or files in image formats.

#### 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. [See chapter 6.2 Scanner Selection.](#)



*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:*



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. [See chapter 2.4 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. [See chapter 2.4 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.

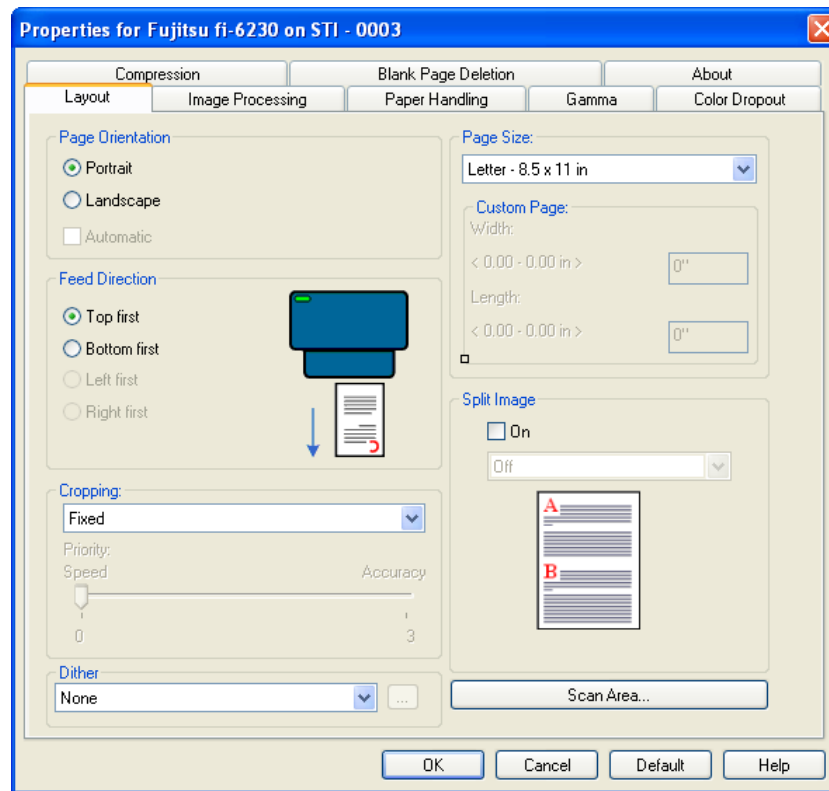
**»Remove scanner«**

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.



### »Choose a scanner«

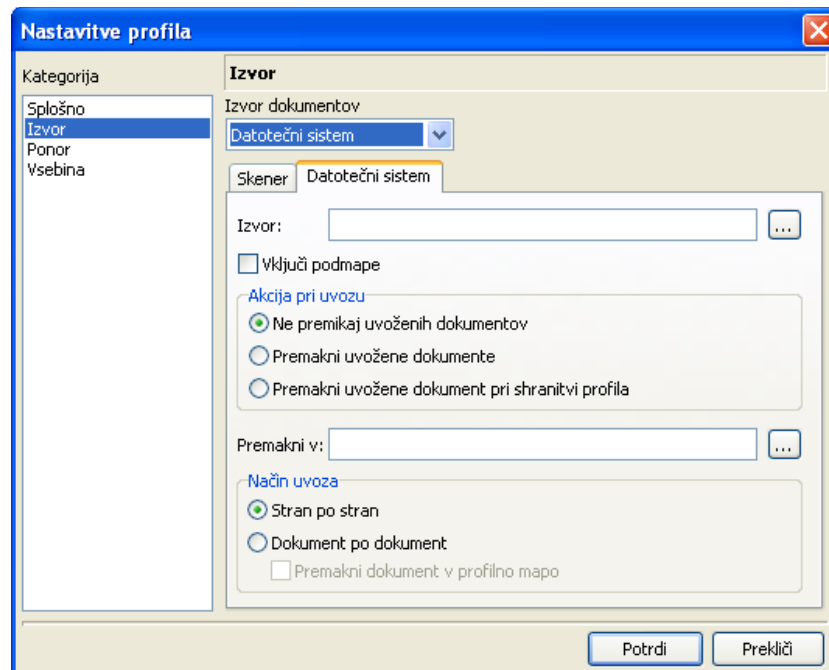
By clicking on the **»Choose a scanner«** button, a window with all the installed scanner drivers appears. Select the connected scanner and confirm by clicking on the **»OK«** button.


### 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 ...).




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.

The screenshot shows the 'Nastavitve profila' (Profile Settings) window with the 'Ponor' (Destination) tab selected. The 'Kategorija' (Category) list on the left includes 'Splošno', 'Izvor', 'Ponor', and 'Vsebina'. The 'Ponor dokumentov' (Destination documents) section has a dropdown menu set to 'Datotečni sistem'. The 'Tip dokumenta' (Document type) section shows 'TIFF (\*.TIF)' selected, with 'Kompresija' (Compression) set to 'CCITT Group 4' and 'Barva' (Color) set to 'Binary'. The 'Datotečni sistem' (File system) section includes a 'Mapa' (Path) field with a browse button (...), a 'Koren imena' (Root name) field, and a 'Števec' (Counter) field set to '0001'. At the bottom right are 'Potrdi' (Confirm) and 'Prekliči' (Cancel) buttons.

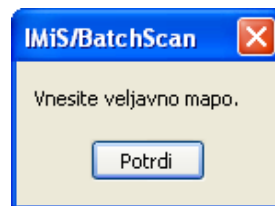
Only file system is available for document saving.

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. [See chapter 3 Technical Documentation.](#)

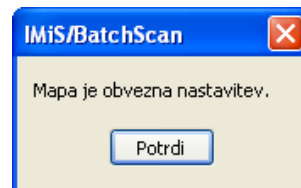
*Note: The most common formats are available. Several pages can be recorded in the same file only in TIFF and PDF formats. With other formats, each document page is saved in its own file.*

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:



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



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.

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 four 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.

For all types except the binary type can be changed predetermined values on the list.



Values on the list are of the same type as data type.

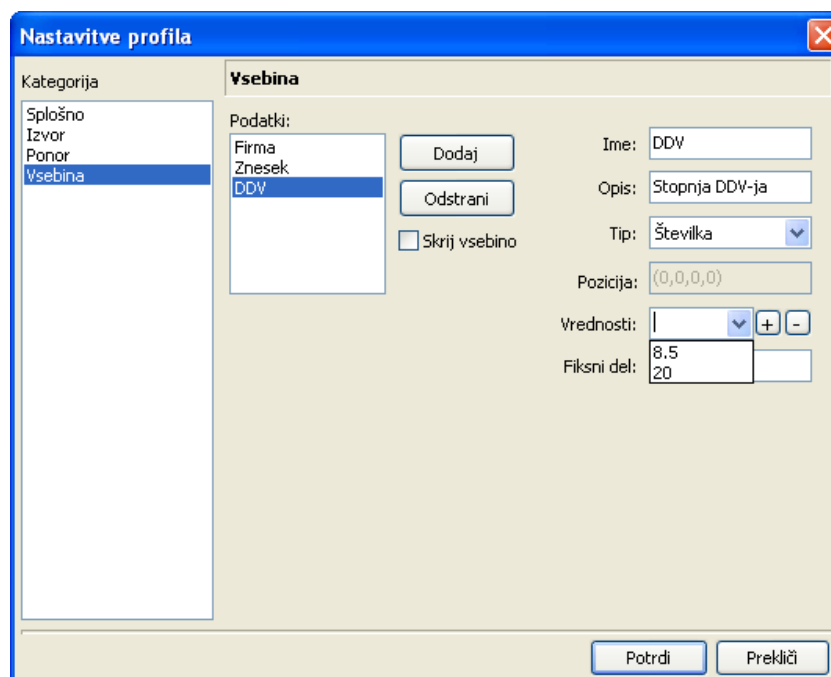
### Content position

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.

### Value entry

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 uniform. Values can be added or removed also when a profile already contains documents.



### Specifying fixed component of value

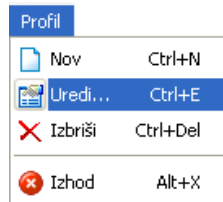
You can specify a fixed value that is shown when content is entered in advance.


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.

## 6.4 Profile editing

You can change settings of an active profile by selecting **»Edit...«** in the Profile 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.

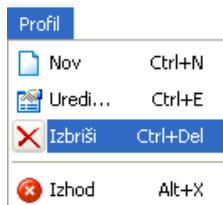
By clicking on the **»Confirm«** button, changes in the profile settings are saved.

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.*

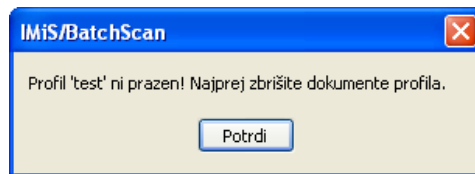
## 6.5 Deleting Profile

The current selected profile can be deleted by selecting **»Delete«** in the **»Profile«** menu.

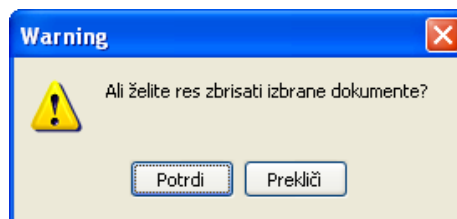


**»Ctrl+Delete«** key combination.

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



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



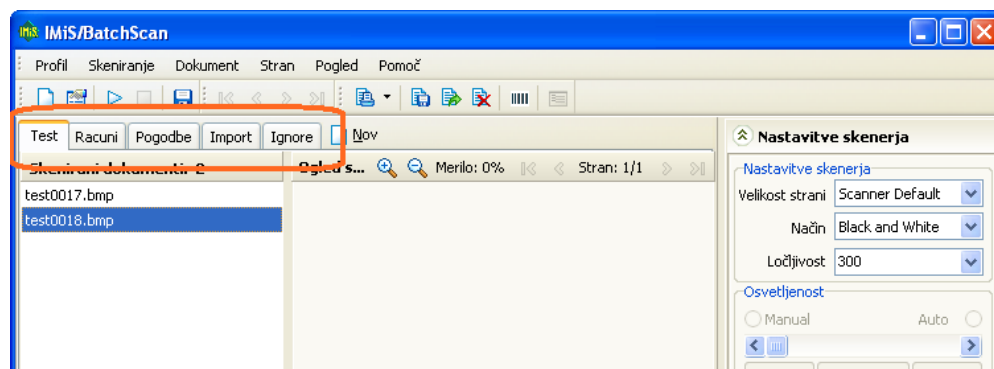
By clicking on the »Confirm« button, you delete the documents in a profile.



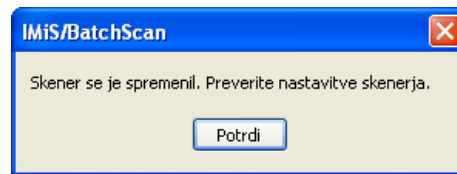
Mark all documents in a profile with the »Ctrl+A« key combination and then press »Delete«.

## 6.6 Scanning

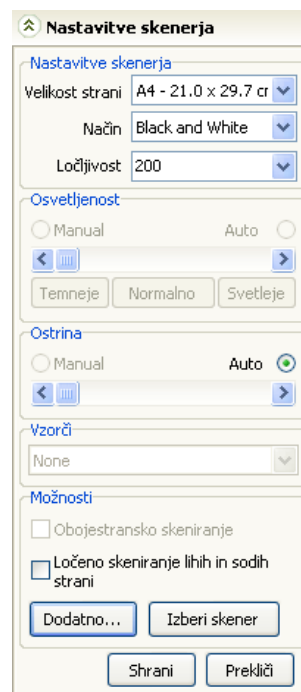
If several profiles are available, make sure the right profile is selected before scanning. Profiles can be selected by clicking on the tab with profile name.



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:



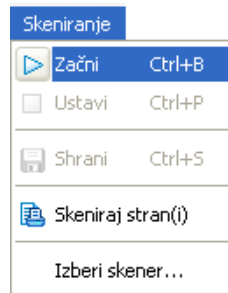
Click on the **»Confirm«** button in the right pane in the »Scanner settings« category to check the appropriateness of scanner settings.




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.

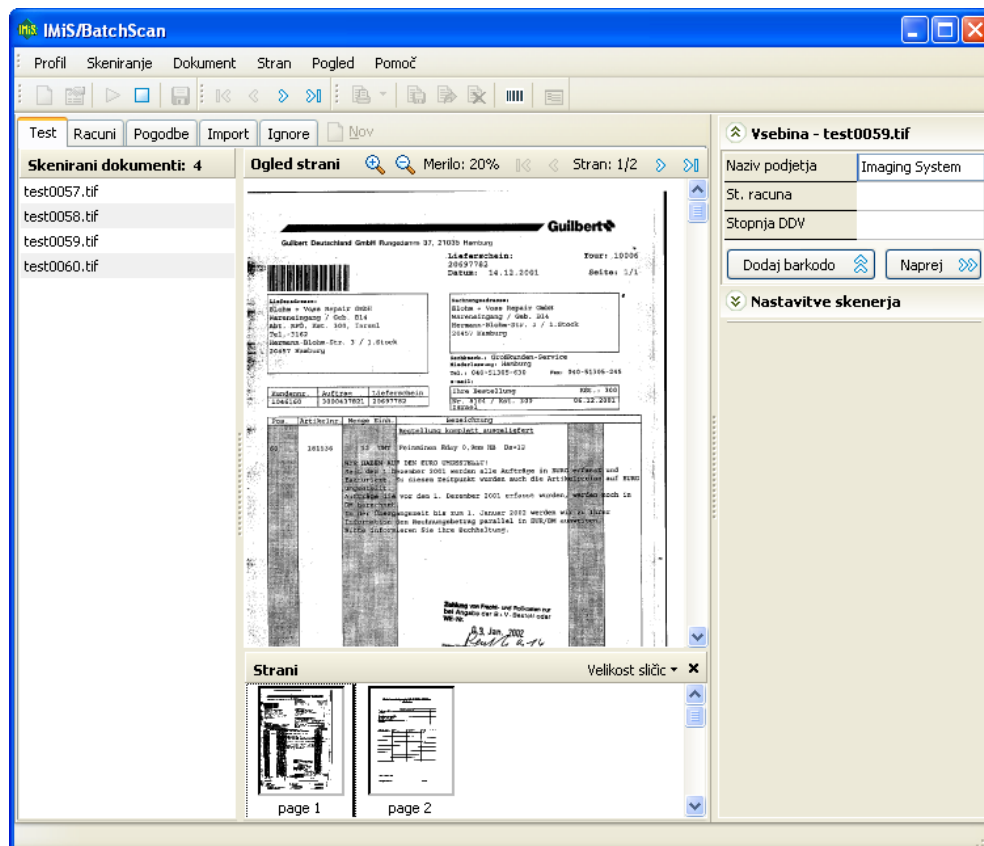


Click on the **»Start«** icon  in the toolbar or use the **»Ctrl+B«** key combination.

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.

[See chapter 6.3.4 Document Destination Setup.](#)

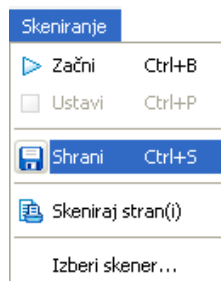


If you have specified content entry in the profile, enter and save information on mandatory data for each scanned document in the right pane in the »Content« category. [See chapter 6.3.5 Content Setup](#).

After the entry, click on the »Next« button and continue 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.

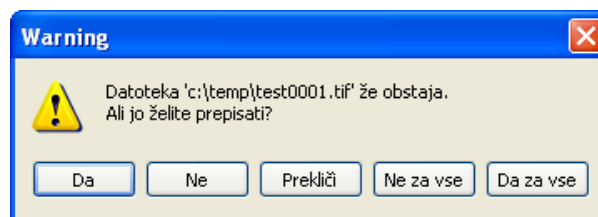
When the scanning is finished, save the profile with documents by selecting »**Save**« in the »Scanning« menu.



Click on the »**Save**« icon  in the toolbar or use the »Ctrl+S« combination.

[See chapter 6.7 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:



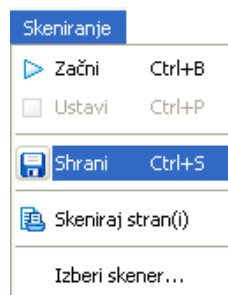
The following options are available:

- 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.

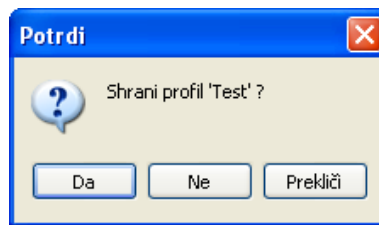
By clicking on **»Save«** in the »Scanning« menu, document changes are saved in the profile.



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:



By clicking on the **»Yes«** button, all the changes are saved in the profile file.

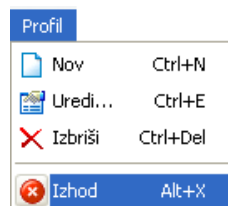
By clicking on the **»No«** button, all the changes are discarded and the new scanned documents are deleted in the profile folder.

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.



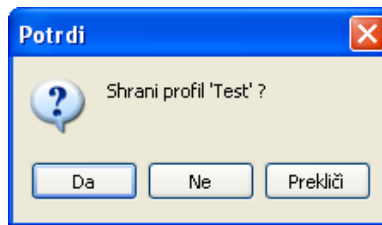
- or click on the icon  on the right side of the address bar window;



- or right-click the IMiS®/BatchScan icon in the toolbar and then select **»Close«**.



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

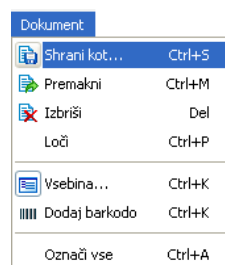
By clicking on the **»Cancel«** button, closing of application is cancelled.

## 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.

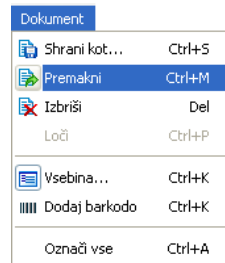



Click on the **»Save as«** icon  in the toolbar or use the «Ctrl+S» key combination.

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

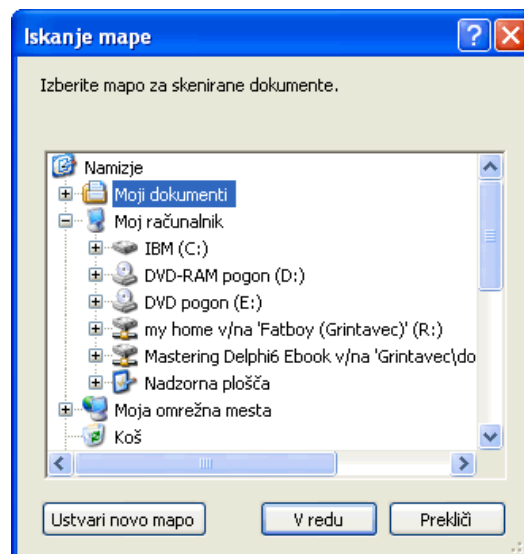
## »Move«

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

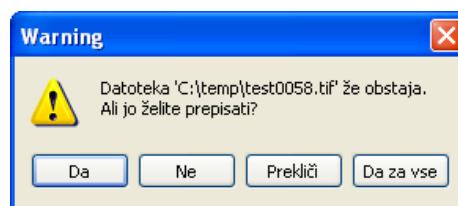


Click on the **»Move«** icon  in the toolbar or use the »Ctrl+M« key combination.

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



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



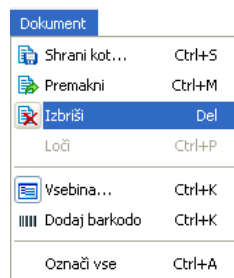
The following options are available:


- 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.*

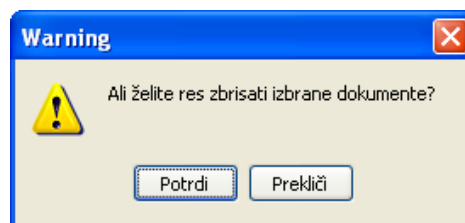
### **»Delete documents«**

Selected documents can be deleted. In the scanned document list, select documents and select **»Delete«** in the »Document« menu.



Click on the »Delete« icon  in the toolbar or use the »Delete« key.

The following dialog box appears:



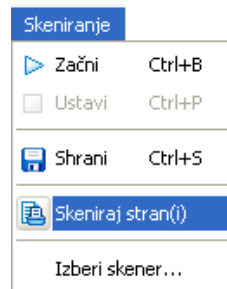
By clicking on the **»Confirm«** button, the deletion is confirmed. Each deleted document will be automatically deleted from the profile file, so there is no need to save the profile.


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

By clicking on the **»Cancel«** button, the deletion is cancelled.

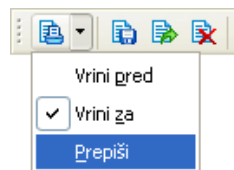
## »Scan page(s)«

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. [See chapter 6.6 Scanning.](#)



Click on the **»Scan page(s)«** icon  in the toolbar.

The following options are available for adding pages:



- **»Insert before«**. Scanning in this mode inserts pages between the current page and the previous page.
- **»Insert after«** is the default mode. Scanning in this mode inserts pages between the current page and the following page.
- **»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

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. 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.

**Vsebina - racuni0063.pdf**

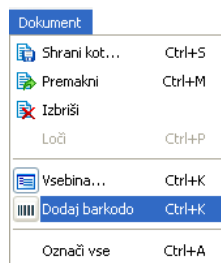
|         |            |
|---------|------------|
| Barkoda | 123456789  |
| Barkoda | ABCDEFHIJK |

**Dodaj barkodo**

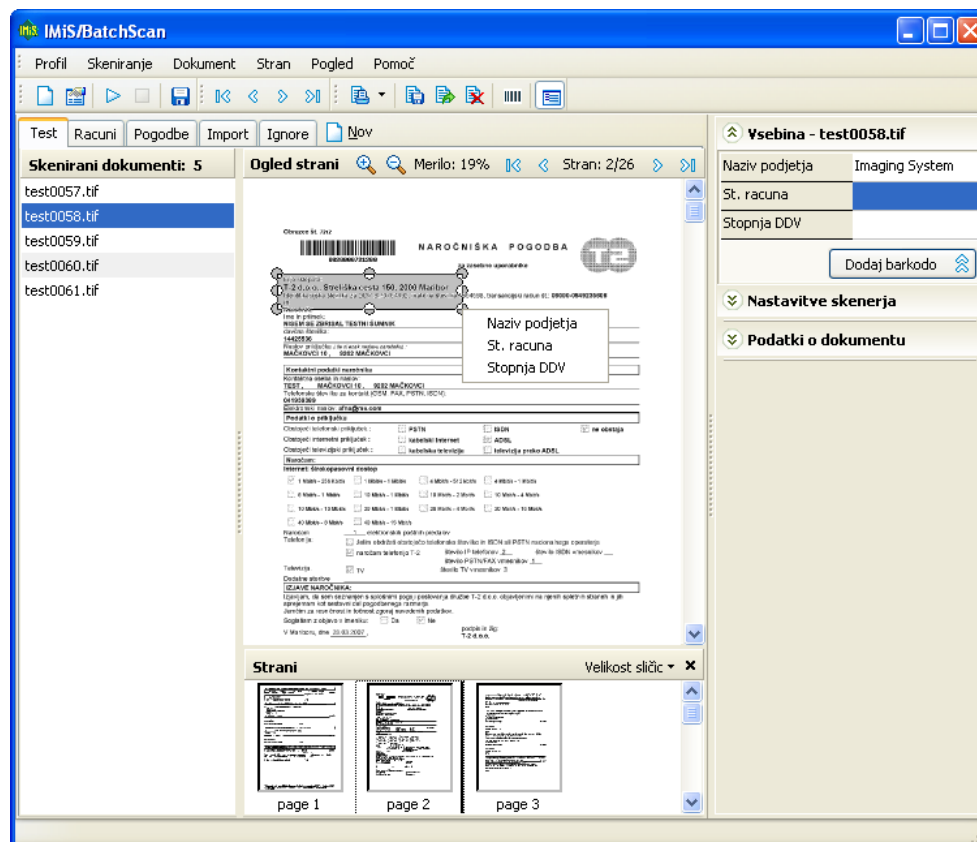
By clicking on the **»Add barcode«** button, a new barcode value can be added manually. This mode is used if a barcode has not been automatically recognized.

All the barcode values can be changed manually.

A barcode can be added manually by selecting **»Add barcode«** in the »Document« menu.



## 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.

| Vsebinska - test0059.tif                     |                |
|--|----------------|
| Naziv podjetja                               | Imaging System |
| St. racuna                                   |                |
| Stopnja DDV                                  |                |
| <input type="button" value="Dodaj barkodo"/> |                |

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.

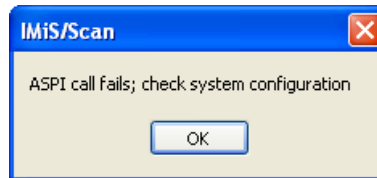
Specify the position of content on a document image by manually dragging the content area on the image and then select which field it applies to in the dropdown menu.

| NAROČNIŠKA POGODBA  |  |
|---------------------|--|
| za poslovno uporabo |  |
| Naziv podjetja      |  |
| St. racuna          |  |
| Stopnja DDV         |  |

## 8 TROUBLESHOOTING

### 8.1 Scanning problems

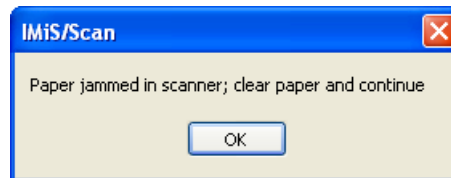
#### 8.1.1 Scanner driver is not loaded



*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



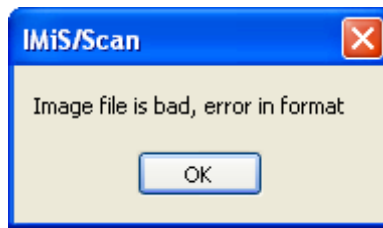
*Cause:* The feeder in the scanner has pulled the paper in incorrectly.

*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

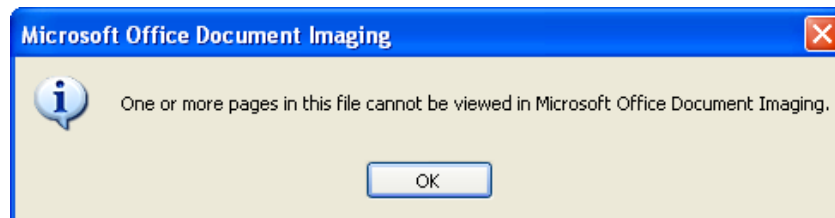


*Cause:* The document's file record is incorrect or damaged.

*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](mailto:support@imis.eu), where technical support will try to restore the record.

### 8.2.2 Document Cannot Be Opened in another Viewer



*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. [See chapter 6.3.4 Document Destination Setup](#)