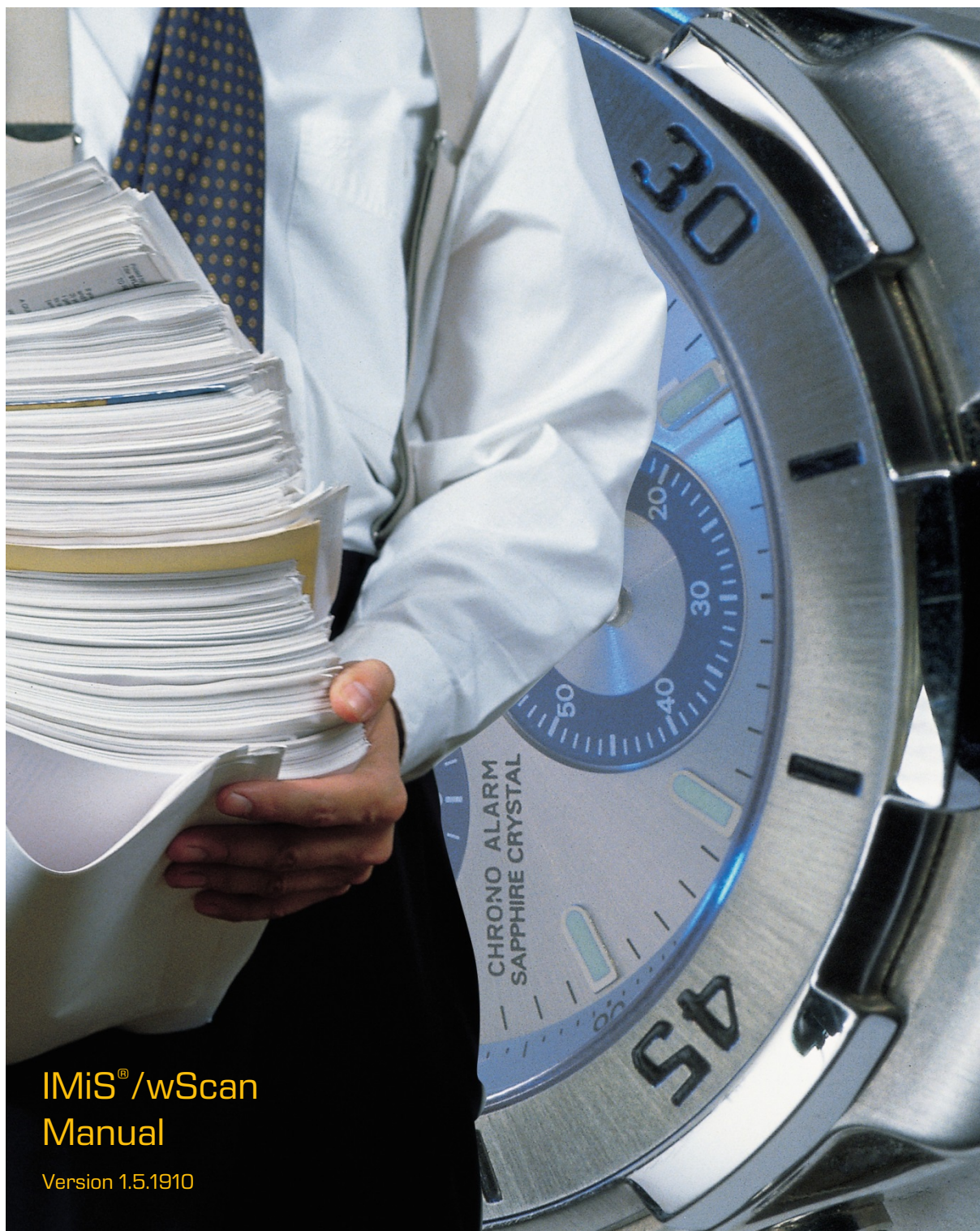




IMiS[®] /wScan
Manual

Version 1.5.1910

**IMAGING
SYSTEMS**

Imaging Systems Inc.

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1 INTRODUCTION

1.1 About manual

This IMiS®/wScan manual describes the functionalities of and working with the IMiS®/wScan application.

1.2 Target audience

It is intended for administrators and application developers with prior technical knowledge who need information about the installation and configuration of the IMiS®/wScan application, its IMiS®/Capture Service core, and integration with third-party applications.

Below is the technical documentation with a detailed description of IMiS®/Capture Service, provided for application developers.

2 GENERAL

IMiS®/wScan is up to date with all contemporary technological, functional and design standards in the field of software for the capture of physical documents. Its design enables fully functional use in a multi-level architecture, with a web browser as the integration point. Owing to its modular and level design it is highly customizable and usable in various implementation scenarios, either with or without user interaction.

Despite the fact that the capture of physical content can hardly be done without using physical computer components (optical scanner), the use of which has practically been prevented by web browser producer, IMiS®/wScan nevertheless enables the digitization of physical documents by using inherently safe technologies in a purely online solution without the use of plug-ins or similar components.

It enables users to capture contents and digitize them in pure online solutions. It has been made in compliance with the ECMAScript 2016 specification. Despite the rather new JavaScript language specification, browser support is guaranteed sufficiently.

The web service meets the following criteria, conceptually:

- It has been designed with pure JavaScript technology without any additional requirements for e.g. plug-ins or access to the “native” protocols NPAPI, COM, etc. Therefore, it is not based on the technologies that browser makers consider unsuitable (dangerous).
- This simple, intuitive and customizable user interface enables application developers' full flexibility when integrating it into any web applications.
- Integration at a sufficiently low level enables application developers' customization even in the event of technological conflicts with an internally used framework should the application developer be unable to use e.g. constructs of the View level of the application.

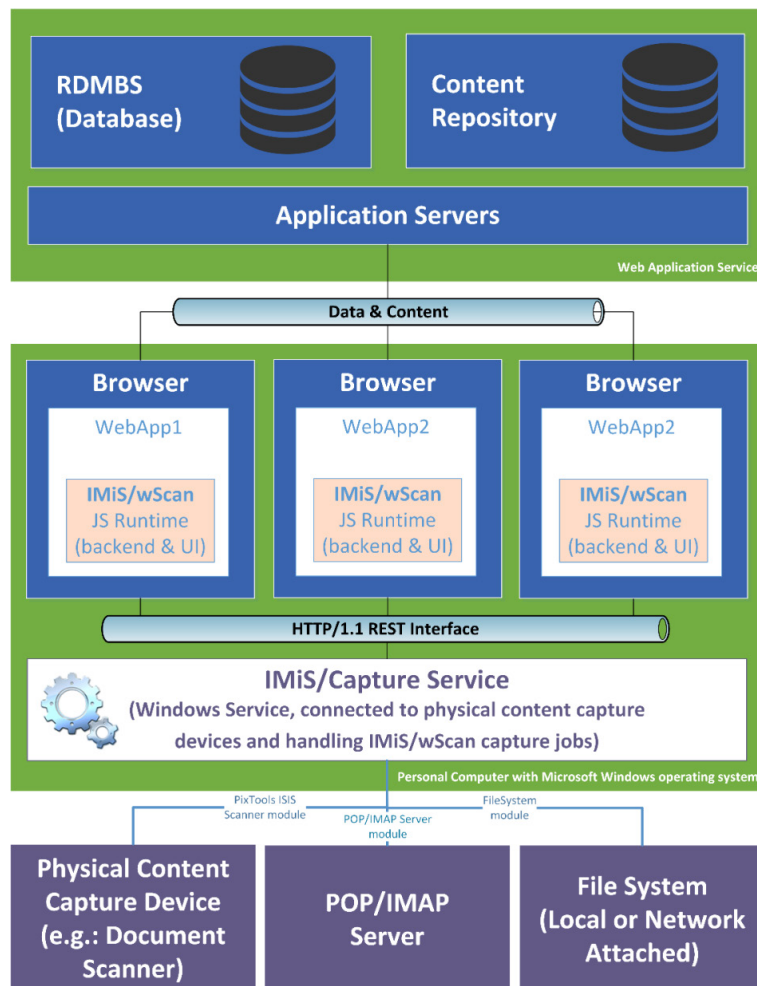


Image 1: Scheme of integrating the product into a multi-level web application

2.1 Architecture

2.1.1 Modular design

IMiS®/Capture Service has a module chain design in which different monolithic building blocks (modules) can be arranged in sequence, depending on the needs of the job. Each module provides a certain functionality (e.g. module for communicating with an optical scanner, module for barcode recognition, module for separating documents, module for merging documents, module for document conversion, module for saving to the archive system, etc.). The modular design enables capture from a different and heterogeneous selection of sources.

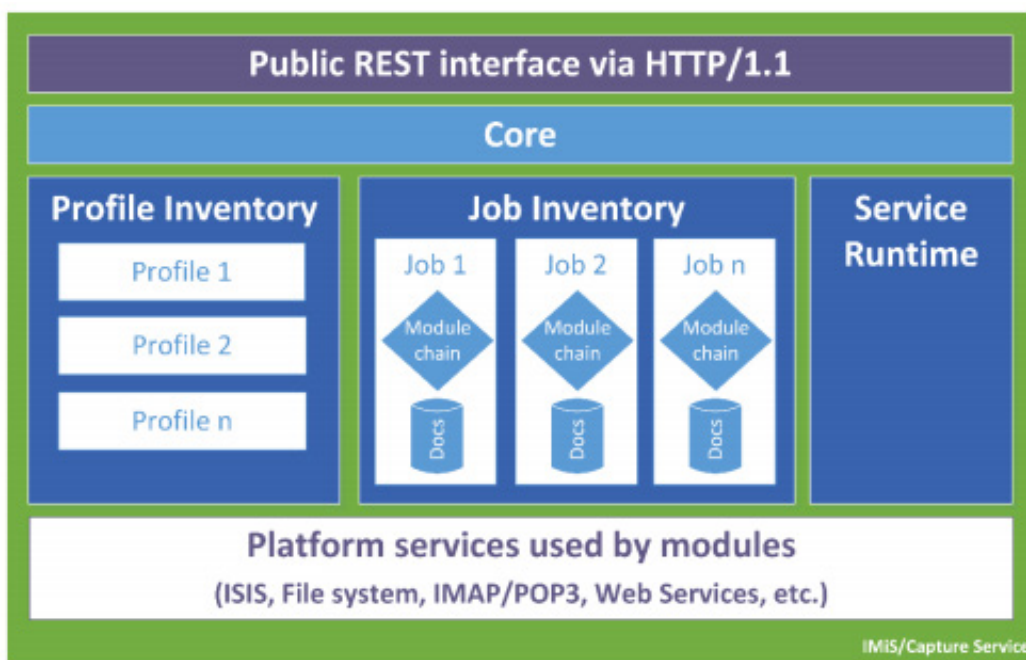


Image 2: Scheme of the IMiS®/Capture Service core service

***Note:** Further development anticipates a gradual introduction of modules for the capture of documents from inboxes via IMAP/POP3 technology, a file system, external sources through various web services, etc.*

The main thing is that this will be a single point of capturing and processing (separating logical documents by barcodes, etc.) for all input documents regardless of the channel used for the capture.

2.1.2 Multi-level architecture

IMiS®/Capture Service is a Windows-compatible backend service for the document capture and control of connected ISIS-compatible optical scanners. These functions make use of the Captiva PixTools technology (<http://documentum.opentext.com/captiva-oem/software/pixtools-toolkit/>) in its Microsoft .NET implementation. In order to provide the widest possible range of options for integration into various technologies, this service has been designed without a user interface.

Its functionality is fully utilized via its REST interface. The latter is accessible via .NET web server, build-into the service and is based on Hypertext Transfer Protocol -- HTTP/1.1 technology (<https://www.w3.org/Protocols/rfc2616/rfc2616.html>).

It functionally provides the service of lifecycle management of:

- Capture settings (the so-called Profile Lifecycle), which can be used for capture (a profile is the saved settings of a document capture job).
- Capture jobs (the so-called Job Lifecycle).
- An individual captured document (the so-called Document Lifecycle).

The program interface of the IMiS®/wScan product is simple, intuitive and highly customizable. It enables application developers to fully adapt the functionalities to arbitrary web applications. It has been designed as a multi-level interface with pure JavaScript technology that does not require external JavaScript frameworks (e.g. plug-ins or access to the “native” protocols NPAPI, COM, etc.).

Through integration developers will be able to descend to a sufficiently low level that will enable the necessary customizations. This will come especially in handy when the user will be unable to use e.g. constructs of the View (UI) level of the application due to technological conflicts with an internally used framework.

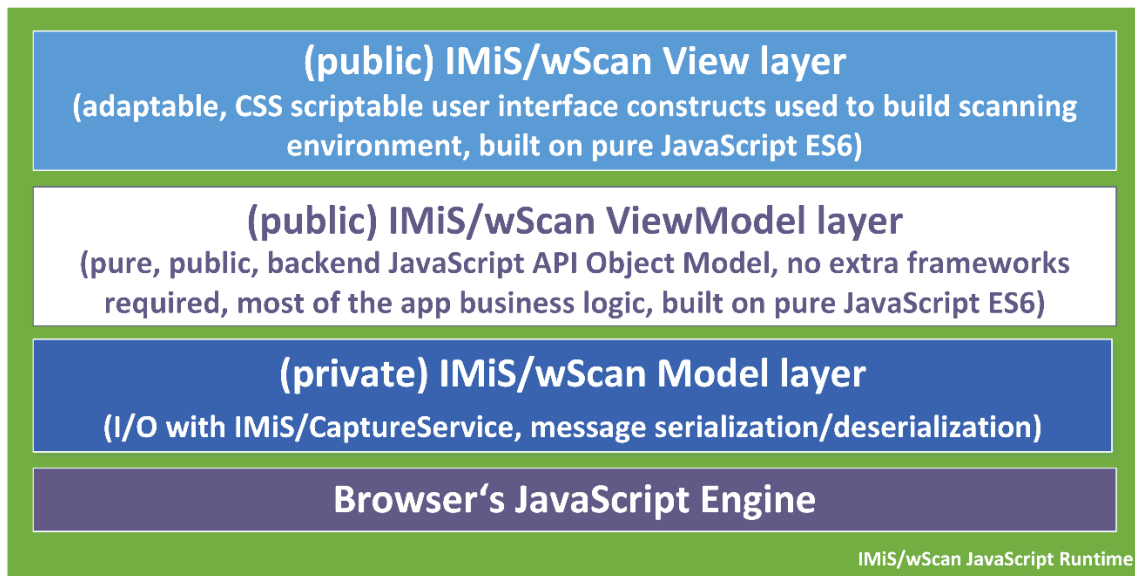


Image 3: Scheme of JavaScript program levels of IMiS®/wScan application

Browser's JavaScript Engine

The Browser's JavaScript Engine is the first and most basic level for communication with physical system components.

Model level

The Model level of the application is a private part of the application and is not intended for points of integration with applications. It connects it with IMiS®/Capture Service via an HTTP link (usually local, but can be remote). It provides support to the ViewModel level. It establishes externally an internal (private) object model, in which all service messages have been deserialized and made available to higher levels in the form of JavaScript objects. It also manages the asynchronous triggering of events originating from events on the service level, which higher levels would not be able to detect and respond to. Through this level all data and commands for operations are exchanged with the service part. Even though this level has been declared private, it has an open source code that can be viewed by external developers, especially during the development of the application, when they can track errors to this level as well.

ViewModel level

The ViewModel level of the application is the heart of the application. To higher levels (and optionally to application developers) it exposes a rich and intuitive JavaScript object model with all of the business logic that ensures the consistency of JavaScript objects and the status of the service it is communicating with.

It is an entirely backend level without any user interface constructs. Its objects enable applications to manage IMiS®/Capture Service, manage the lifecycle of captured documents, etc. Its events model enables the coordination and synchronization of events that originate from the IMiS®/wScan application or from IMiS®/Capture Service.

For capture scenarios in which a user interface is not wanted or needed, the level has been designed to be used without a user interface in a way that does not limit its range of functionalities. These are the more exceptional events enabled by the architecture.

View level

The View level of the application, as the last of the set, comprises a selection of user interface constructs that round off the application for the capture and digitization of physical documents.

It is connected with the ViewModel level. It enables application developers' easy and customizable integration of constructs into the application without possessing exact knowledge of the events and objects that enable the construct its function. The basic appearance of constructs can be customized via their object model (properties) or via CSS styles, with which the developer can customize the details of constructs to the requests and requirements of applications.

Similarly, to the other levels, this level has been built without requiring any additional JavaScript frameworks (e.g. AngularJS, etc.), which is why its integration does not cause conflicts with applications.

Constructs of the View model are conceptually and functionally independent of one another; however, for consistency purposes, the displayed information is interconnected via a network of events, which are forwarded from/to the ViewModel level. These make sure they are consistent as regards their content and status (example of displaying scanning progress).

The events of creating new pages in a document originate from the document capture service. The creation of each page has to be propagated as an event to the visual controls. The latter are connected to the ViewModel level via the events model; the ViewModel level is connected to the Model level and the latter is asynchronously connected to the Service level using WebSocket technology (otherwise it would have to execute service requests in intervals to inquire about status). Such an event is propagated from the Service level to the client's Model level; it in turn forwards it to the ViewModel level, which then refreshes all of the visual constructs that are subscribed to such an event. These constructs are programmed to call such a new page from the service and add it to the displayed list of pages.

2.2 Security

The basic installation does not foresee encryption of the web traffic of the REST interface, because traffic takes place locally via the local network interface "localhost", which means that protection is generally not required. Customization of the settings is possible but requires in-depth knowledge and correct user rights settings. By default the content capture service IMiS®/Capture Service listens on the network interface "localhost" (127.0.0.1 or ::1) on port 5000/tcp, which enables local communication with the IMiS®/wScan application. Additional user authentication is therefore not required.

Every access to the IMiS®/Capture Service must contain a special character string (a security key), which must be recorded in the IMiS®/Capture Service settings. A user with administrator authorization can enter the security key or create it via the IMiS®/wScan administrator module.

Access to the IMiS®/Capture Service is protected with the C.O.R.S. standard (https://en.wikipedia.org/wiki/Cross-origin_resource_sharing), which prevents Web browsers from accessing web domain services that are not specified in the IMiS®/Capture Service. The Web browser will prevent access to the local IMiS®/Capture Service to any application on a different web domain, unless this domain is allowed in the IMiS®/Capture Service. The user with administrative authorization can enter all the allowed web domains via the IMiS®/wScan administrator module.

A user logged in a Windows operating system can access services supported by IMiS®/Capture Service via the IMiS®/wScan application.

IMiS®/Capture Service runs in the system user context (SYSTEM account), which enables the user greater access to the operating system resources than a regular user with limited rights (restricted user). Certain resources are also available to a regular user only via IMiS®/Capture Service and the IMiS®/wScan application.

All IMiS®/Capture Service settings are stored in the Windows Registry or in a file system, which cannot be accessed by a user without administrator rights. The same applies to user-defined scanning profiles. Profile settings can be modified only with the IMiS®/wScan application or with the administrator module of IMiS®/Capture Service.

A user with administrator authorization can modify them outside of these two products but has to have proper knowledge of modifying the Windows Registry. For more information see chapter [Additional administrator settings](#).

2.3 Functionalities

- Capture of contents and control of connected ISIS-compatible optical scanners.
- Capture of contents via various web browsers (e.g. Google Chrome, Mozilla Firefox, Microsoft Edge). A dedicated scanning application is therefore not required.
- The IMiS®/wScan application can be integrated into existing web applications.
- The entire capture of content and its processing is executed in the IMiS®/Capture Service backend service, which is based on Microsoft .NET technology.
- IMiS®/Capture Service contains modules for the capture and processing of content (barcode recognition, capture of metadata, etc.).
- IMiS®/Capture Service has been designed modularly, with each module responsible for its own phase of the capture or processing of content. This enables easy and quick upgrading with additional modules. By updating the profile, you can create your own module execution sequence.

- The IMiS®/wScan application has been designed in a JavaScript language without the use of additional technologies that browser makers consider unsuitable or dangerous (e.g. ActiveX plug-ins or access to “native” protocols NPAPI, COM, etc.).
- IMiS®/wScan libraries enable flexibility, customization, and an easy and quick development of your own web solutions using a JavaScript language.

2.3.1 Module for the capture of content from an optical scanner

IMiS®/Capture Service can capture content from all scanners supporting the ISIS industrial standard. This standard enables a wide range of functionalities and is supported by most scanner makers.

Standard scanner settings can be modified through the IMiS®/wScan application:

- Scanner selection.
- Scanning mode.
- Scanning resolution.
- Size of scanned page.

Additional settings that are specific to an individual scanner cannot be set through the IMiS®/wScan application, but only through the administrator module of IMiS®/Capture Service. For more information see chapter [Additional administrator settings](#).

2.3.2 Module for saving content

IMiS®/Capture Service enables the saving of content to a file system.

Various file formats are available:

- BMP
- GIF
- TIFF
- JPEG
- PCX
- PDF/A
- PNG.

For each save format you can set the color and compression supported by the selected file format.

2.3.3 Module for barcode recognition

IMiS®/Capture Service enables the recognition of the following barcodes:

- 1D barcodes:
Addon 2, Addon5, Australian Post, BDC Matrix, Codabar, Code-25 Datalogic, Code-25 IATA, Code-25 Industrial, Code-25 Interleaved, Code-25 Invert, Code-25 Matrix, Code-32,
Code-39, Code-93, EAN-13, EAN-8, Type-128, UCC-128, UPC-A, UPC-E,
- 2D barcodes:
AZTEC, Data Matrix, Intelligent Mail, PDF-417, Postnet, QR Code, Royal Post.

2.4 Application integration

The IMiS®/wScan application consists of three modules:

- **IMiS®/Capture Service:** a backend Windows service that executes the capture and processing of various contents.
- **imis.scan.js:** Javascript library that enables communication with IMiS®/Capture Service.
- **imis.scan.ui.js:** utility JavaScript library for displaying the already created visual components.

Each of the above-mentioned modules can be used for integration with another application.

2.4.1 Integration of IMiS®/Capture Service

Direct integration with IMiS®/Capture Service based on RESTful technology is not covered by this manual.

2.4.2 Integration of imis.scan.js library

The “imis.scan.js” library manages the exchange of data in JSON format with IMiS®/Capture Service using RESTful technology.

Through it, a developer of applications in the JavaScript language can configure profiles or capture content (e.g. scan). It enables the detection of events during scanning, the reading of jobs, documents and pages. This library also serves as a basis for making your own web solutions. It does not need any other JavaScript libraries to work.

The developer must obtain a unique security key that is recorded in the IMiS®/Capture Service.

For obtaining a security key see chapter [Security settings](#).

```
<!DOCTYPE html>
<html>
<head>
  <title>imis.scan.js</title>
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="sample.css" />
</head>
<body class="sample">
  <h1>Sample</h1>
  <p>This example demonstrates reading scan profiles. Profiles are displayed in list.</p>

  <div>Profiles:</div>
  <ol id="profiles"></ol>
  <div id="error"></div>

  <script src="../imis.scan.js"></script>
  <script>
    window.addEventListener('load', function () {
      try {
        // Profiles ordered list
        var ol = document.getElementById("profiles");

        // Create a scan object
        var scan = new imis.scan.Scan();

        // Read profiles
        scan.getProfiles({
          success: function (profiles) {
            for (var i = 0; i < profiles.length; i++) {
              // Add profile to ordered list
              var li = document.createElement("li");
              li.innerHTML = profiles[i].name;
              ol.appendChild(li);
            }
          },
          error: function (error) {
            // Show error
            document.getElementById("error").innerHTML = error;
          }
        });
      } catch (e) {
        // Show error
        document.getElementById("error").innerHTML = e;
      }
    });
  </script>
</body>
</html>
```

Image 4: Example of using imis.scan.js library to read profiles

2.4.3 Integration of imis.scan.ui.js library

The “imis.scan.ui.js” library is intended for quicker and simpler development of your own solutions. It contains some of the most commonly used visual components (for executing, stopping and continuing jobs, selecting and setting profile properties, displaying job progress, displaying the selected page and its properties, and displaying all captured pages). A web application developer can easily build these components into the application and create a useful user interface without advanced knowledge of the HTML or CSS languages. All components come with specific settings, which can be used to change their appearance. All they need to operate is the imis.scan.js library and a unique security key, which is recorded in the IMiS®/Capture Service.

For obtaining a security key see chapter [Security settings](#).

```
<div id="imis-progress"></div>
<div class="main" id="main">
  <div id="thumbnails">Thumbnails</div>
</div>
<script src="imis.scan.js"></script>
<script src="imis.scan.ui.js"></script>
</script>
window.addEventListener('load', function () {

  // Set scan version to title attribute
  document.getElementById("title").setAttribute("title", imis.scan.ui.version);

  try {
    const scan = new imis.scan.ui.Scan({
      //url: "http://example.com",
      thumbnails: new imis.scan.ui.Thumbnails({
        id: "thumbnails",
        //darkMode: false,
        orientation: "horizontal",
        thumbnail: {
          height: 200, // thumbnail height
          title: false
        },
        gallery: true,
        contextMenu: {
          enabled: false
        }
      })
    })
```

Image 5: Example of using imis.scan.ui.js library to set the appearance of the Thumbnails component

2.5 Versions

Product version labeling is based on a scheme that includes the following:

- Three separate numerical identifiers (MAJOR, MINOR, RELEASE).
- An identifier of the 32-bit or 64-bit installation platform (PLATFORM).

The following is an example of a scheme:

IMiS.wScan.MAJOR.MINOR.RELEASE.PLATFORM.msi

The example of IMiS®/wScan installation package name:

IMiS.wScan.1.5.1910.x32.msi

The scheme consists of the name of the IMiS®/wScan module and the following elements:

- **MAJOR:** The identifier in the MAJOR position signifies the main/major version of the product. It is arbitrary and changes with regard to the volume of the changes and functionalities introduced. The identifier in this position changes the least.
In the event that it is changed, it signifies a major difference in the product compared to the previously issued version (with a lower MAJOR version).
This identifier has a range of values from 1-n; it is continuous and can only increase.
- **MINOR:** This identifier indicates a minor version of the product. It changes more frequently than the main version in terms of changes to the system, features and fixes. A change in the minor version represents smaller changes and fixes in the framework of the same product generation (indicated by the main or major version). The range of values is from 1 to n. This number is not continuous. It resets to its base value (1) with each new MAJOR version.

- **RELEASE:** This identifier represents the time component of the product release in accordance with the YYMM scheme.
MM indicates the month of the release (range of values from 01 to 12), and YY indicates the last two digits of the year.

Example: The RELEASE identifier for a product released in October of 2019 will read 1910.

- **PLATFORM:** Indicates the operating systems on which this application can be used.
The 32-bit version can run on a 32-bit Windows operating system, and on a 64-bit one.
The 64-bit version can run only on a 64-bit Windows operating system.

2.6 New functionalities in this version

We have implemented the following new functionalities and improvements to the previous certified version 1.4.1807 of the IMiS®/wScan module:

New functionalities:

- Reading profiles in imis.scan.ui.Scan.
- Reading and setting the selected profile in imis.scan.ui.Scan.

Improvements:

- Enhanced display of icons.

3 SCANNING DOCUMENTS

3.1 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.

It can be connected locally or via a computer network.

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

3.2 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 (**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 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 (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.

3.3 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.

3.4 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

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.

3.5 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 (**B**it**m**ap 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 the 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.

4 SYSTEM REQUIREMENTS

For successful installation and execution, the IMiS®/wScan application has the following hardware and software requirements.

4.1 Hardware

Practically all computers currently available on the market meet the hardware requirements for running IMiS®/wScan.

Minimum and recommended requirements are listed below.

4.1.1 Minimum requirements

Minimum requirements for IMiS®/wScan:

- Intel Core 2 Duo 2 GHz processor
- 1 GB RAM
- 150 MB of unused hard disk space
- TCP/IP network access (IPv4 or IPv6).

4.1.2 Recommended requirements

Recommended requirements for IMiS®/wScan:

- Intel Core i5 3 GHz processor or faster
- 2 GB RAM or more
- 250 MB of unused hard disk space
- TCP/IP network access (IPv4 or IPv6).

4.2 Software

Requirements for IMiS®/wScan:

- .NET 4.5
- Javascript ECMAScript 6
- Browsers with enabled WebSocket technology and ECMAScript6 standard support:
 - Google Chrome: minimum version 50
 - Mozilla Firefox: minimum version 45
 - Microsoft Edge: minimum version 20.
- Supported operating systems:
 - Windows 10; Windows 8.x and Windows 7 SP1.

5 PRODUCT MANAGEMENT

The IMiS®/wScan application is managed by administrators and/or application developers.

Management includes installation, startup, closing, upgrading and uninstallation.

5.1 Installation

The installation can be performed in an environment that meets at least the minimum installation requirements. IMiS®/wScan 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.

Warning:

Prior to installation stop the IMiS®/Scan application, because IMiS®/wScan does not work properly if the IMiS®/Scan application is running.

Warning:

Installation of a 64-bit version of IMiS®/wScan will be unsuccessful if the 32-bit version is already installed on the workstation.

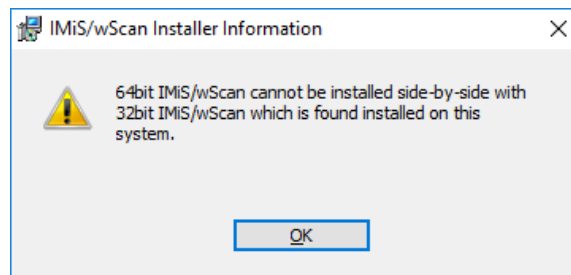


Image 6: Notification of prohibited simultaneous installation of the 64-bit and 32-bit version of IMiS®/wScan

The same applies vice-versa. If the 64-bit version of IMiS®/wScan is already installed on the workstation, installation of a 32-bit version will be unsuccessful.

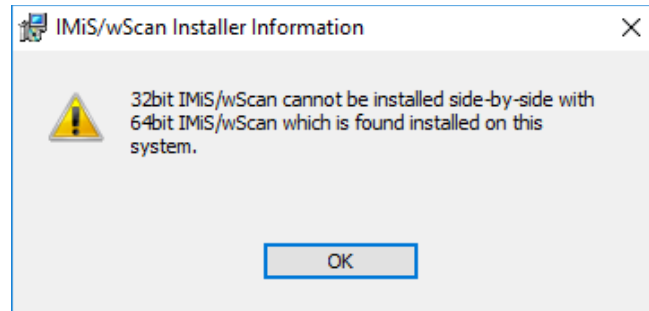


Image 7: Notification of prohibited simultaneous installation of the 32-bit and 64-bit version of IMiS®/wScan

Warning:

Installation of the IMiS®/wScan application is not possible on a workstation on which IMiS®/wBatchScan has already been installed.

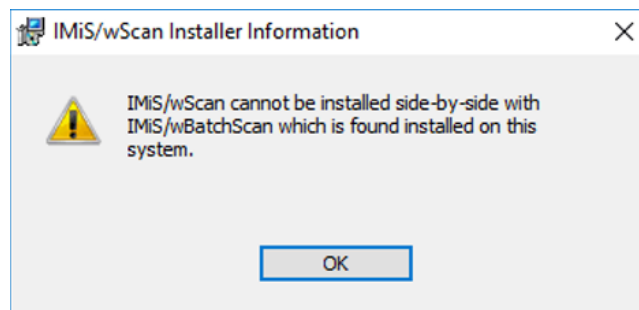


Image 8: Notification of prohibited simultaneous installation of IMiS®/wScan and IMiS®/wBatchScan

Warning:

Installation of the IMiS®/wScan application on a workstation is not possible if .NET Framework 4.5 has not been installed.

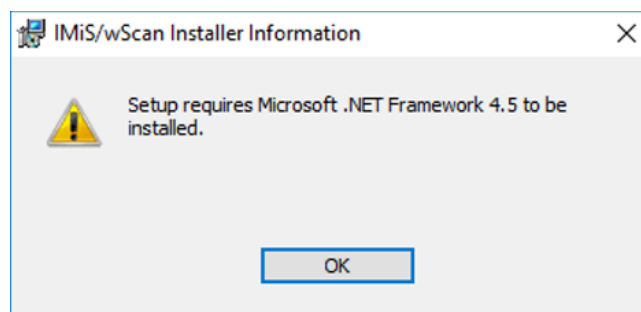


Image 9: Notification of required installation of .NET Framework 4.5

5.1.1 Installation with the Wizard

The user interface of the installation package guides the administrator through the installation procedure.

The administrator installs the IMiS®/wScan application on a workstation in a Windows environment with one or several optical scanners physically connected. This application includes the IMiS®/Capture Service web service and the relevant libraries.

Example of the name of an installation package:

IMiS.wScan.1.5.1910.x64.msi

Installation begins with launching the installation package from the file system. A dialog box appears, informing the administrator that the installation package is preparing for installation.

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.

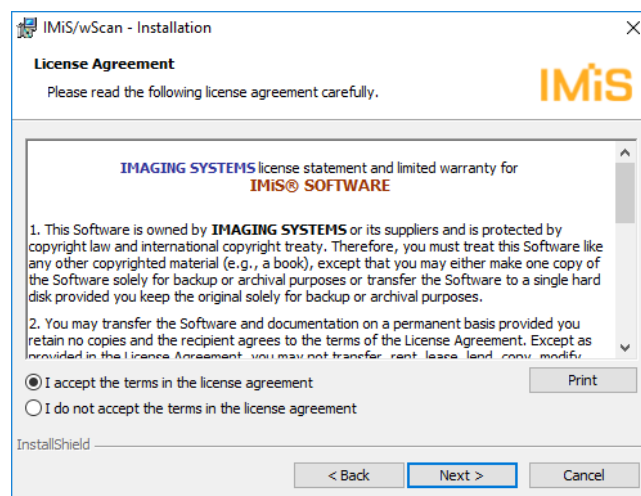


Image 10: Viewing and accepting the license terms

The installation procedure is continued by entering the user name into the input field "User Name" and the organization into the input field "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").

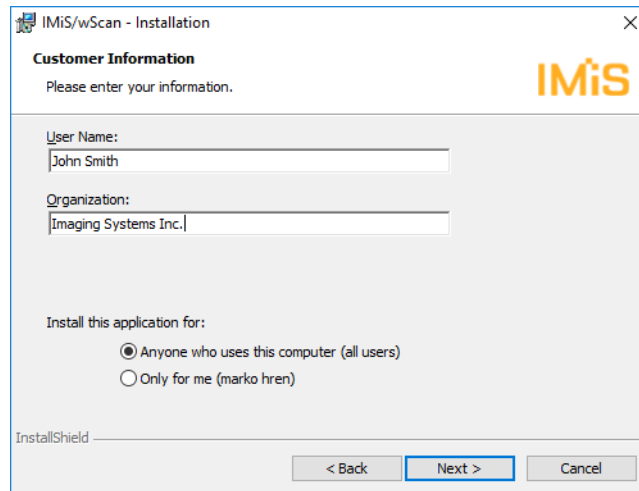


Image 11: Entering data on application user

In the next step select between typical installation ("Typical"), full installation ("Complete") or user-customized installation ("Custom").

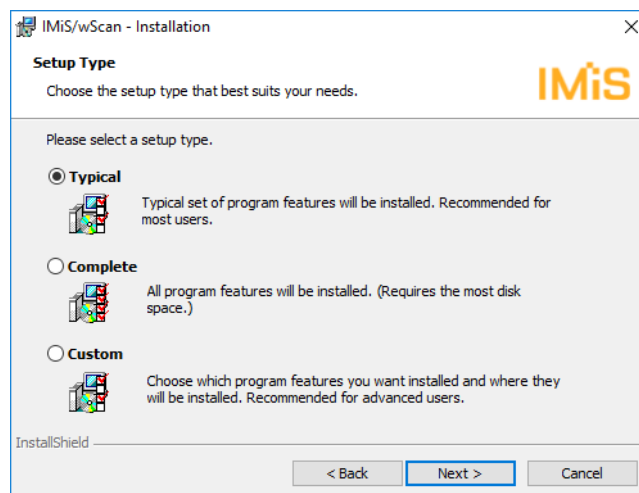


Image 12: Selecting between typical, full or user-customized installation

For all installation types the administrator specifies which shortcuts will be created and which options will be activated during the installation procedure.

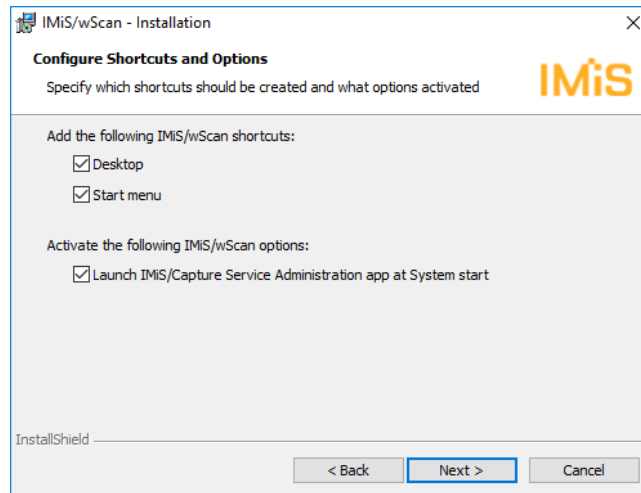


Image 13: Selecting which shortcuts will be created and which options will be activated during installation

If the administrator ticks the choice "Launch IMiS®/Capture Service Administration app at System start", the administration module will launch when the workstation starts.

If you tick the choice "Desktop", shortcuts to the IMiS®/wScan start page and the IMiS®/Capture Service administration module will be installed on the desktop.

If you tick the choice “Start menu”, a shortcut to the IMiS®/wScan start page and the IMiS®/Capture Service administration module will be added to the Start menu.

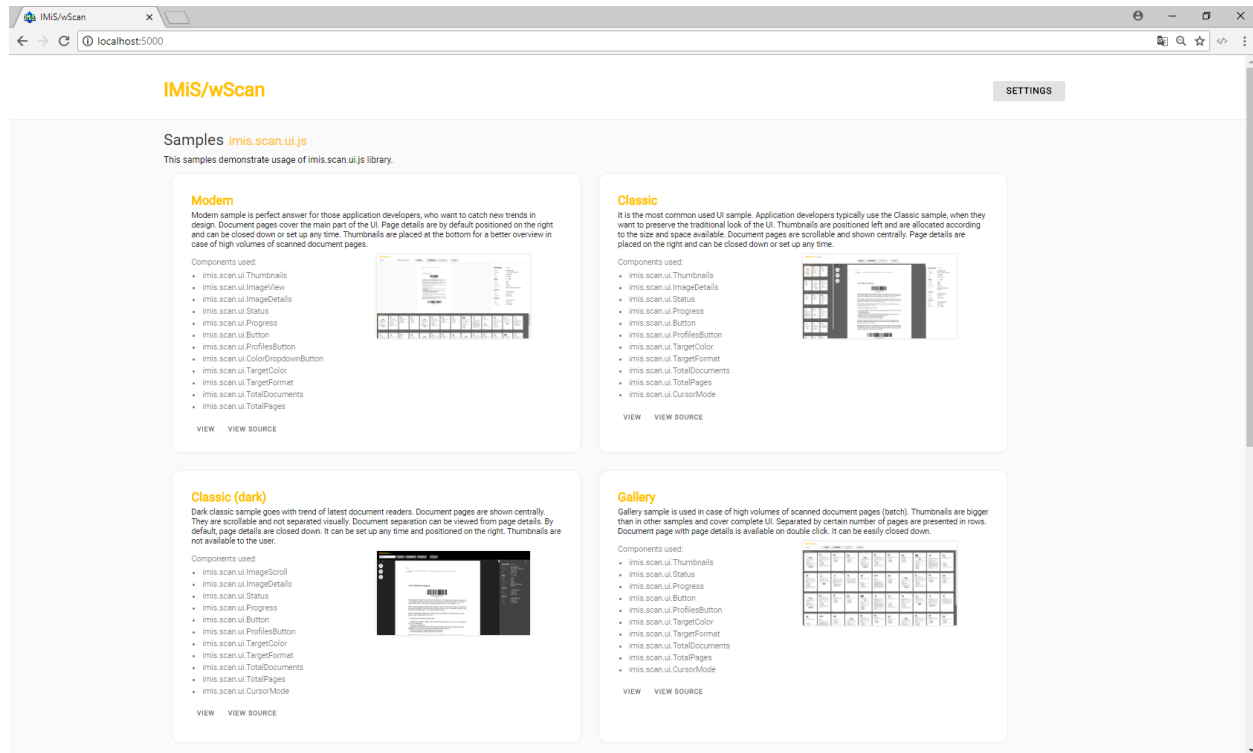


Image 14: Displaying the result of selecting “Start menu”

Typical installation, which is recommended for most users, begins by transferring predefined files to the file system. The administrator confirms the selected installation setting and starts the installation procedure by clicking on the “Install” button.

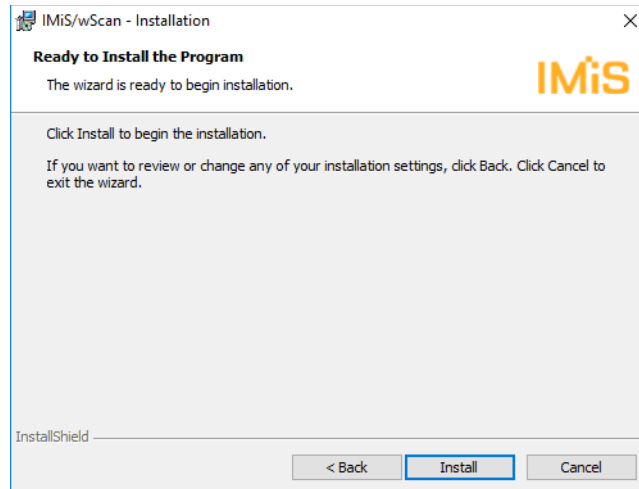


Image 15: Starting the installation procedure

The installation procedure for the IMiS®/wScan software product begins; the progress bar shows information about the transfer of files to the appropriate locations. Installation may take a few tens of seconds, depending on the version of the installation package and computer speed.

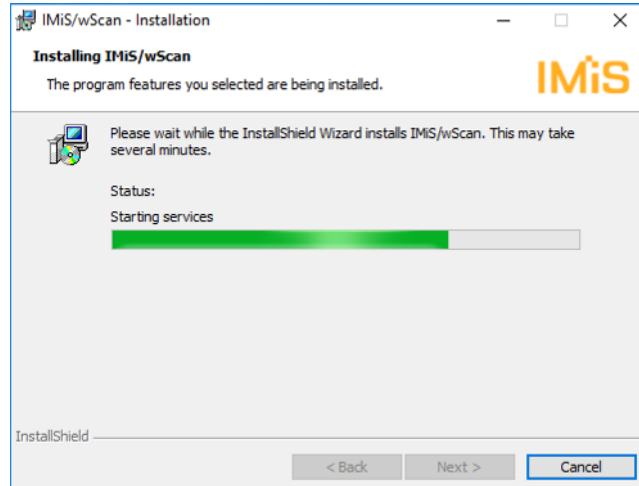


Image 16: Displaying the progress bar during the installation procedure

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



Image 17: Notification of completing the installation procedure

The same procedure as for typical installation is carried out during full installation. Full installation will install all of the features from the installation package in the file system, which is why it requires the most disk space.

User-customized installation ("Custom") will install only specific features in the file system. It is intended for advanced users.

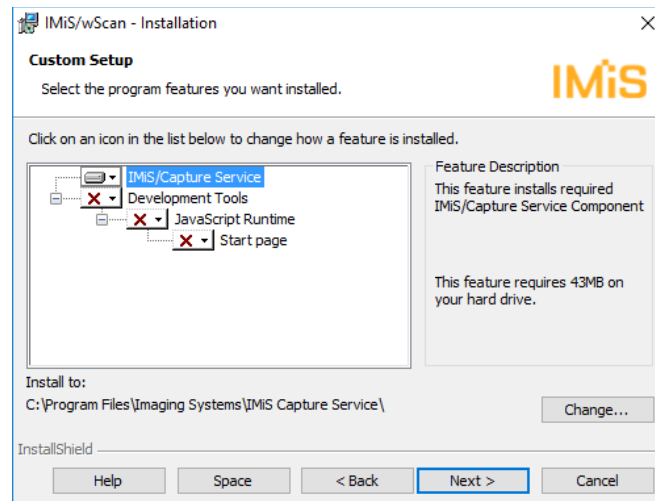


Image 18: Selecting the features of application installation

The administrator confirms the selected installation setting and starts the installation procedure by clicking on the “Install” button. Further steps are the same as for typical and full installation.

5.1.2 Silent installation

The IMiS®/wScan 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).

Installation may take a few tens of seconds, depending on computer speed.

Example of a command bar for silent installation:

C:\Windows\system32\msiexec.exe /i IMiS.wScan.1.5.1910.x64.msi /qn

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

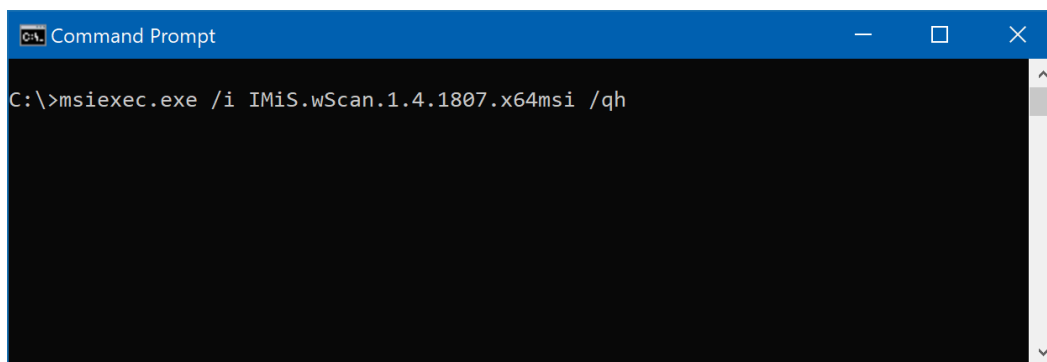


Image 19: Example of a command bar for silent installation in previous version

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 1: Silent installation settings

Before launching the installation of the IMiS®/wScan 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.wScan.1.5.1910.x64.msi /qn PARAMETER=VALUE
```

The table below describes the supported command bar parameters:

PARAMETER	Valid values	Description
INSTALLDIR	<directory name>	This parameter contains the default destination folder for installation files (default value = "%PROGRAMFILES%\Imaging Systems\IMiS Capture Service\").
USERNAME	<username>	This parameter contains the username of the user performing the installation (default value is taken from system settings).
COMPANYNAME	<company name>	This parameter adds the company name to the installation (default value is taken from system settings).

PARAMETER	Valid values	Description
SHORTCUT_START	1 / 0	This parameter is used to inform the installation process to create a shortcut in the "Programs" menu (Default value is 1).
SHORTCUT_DESKTOP	1 / 0	This parameter is used to inform the installation process to create a desktop shortcut (Default value is 1).
LAUNCH_ADMIN_ON_START	1 / 0	This parameter is used to inform the installation process to create the necessary registry records and enable automatic launch of the IMiS®/Capture Service administration module when the workstation starts. (Default value is 1)
ADDLOCAL	ALL	Enables the silent installation of all components of the installation package, which is equivalent to selecting "Complete" in the installation with the Wizard.

Table 2: Supported command bar parameters

5.2 Startup and closing

IMiS®/Capture Service launches automatically when the workstation connected to the optical scanner starts.

Starting and stopping IMiS®/Capture Service is also possible manually by double-clicking on the IMiS®/wScan administration module. After startup the IMiS® icon appears at the bottom of the desktop.

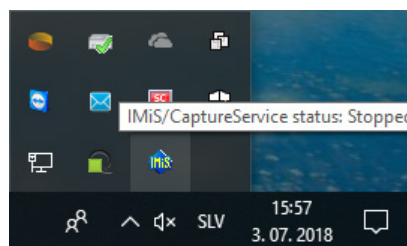


Image 20: Displaying the current status of IMiS®/Capture Service: stopped

By right-clicking on the IMiS® icon, the menu appears. By selecting the option “Start service”, the administrator starts IMiS®/Capture Service.

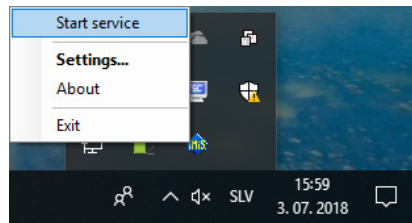


Image 21: Selecting the option to start IMiS®/Capture Service

It takes a few seconds for the service to start, as it initializes properly and checks the suitability of the scanner driver. The current status of the service is visible if you move the mouse over the IMiS® icon.

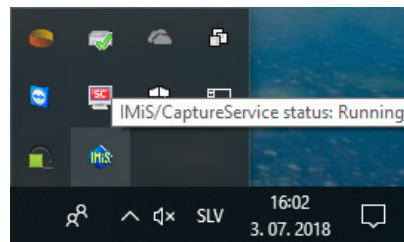


Image 22: Displaying the status of IMiS®/Capture Service: running

The service is stopped by selecting the option “Stop service” in the menu of the IMiS® icon.

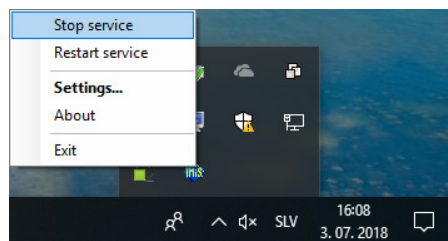


Image 23: Selecting the option to stop IMiS®/Capture Service

If you (the administrator) wish to restart the service, select the option “Restart service” in the menu of the IMiS® icon.

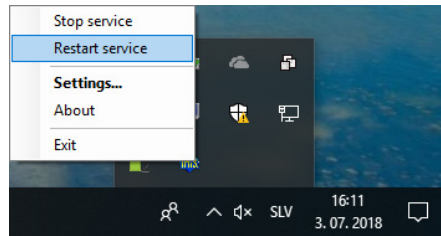


Image 24: Selecting the option to restart IMiS®/Capture Service

Warning: The administrator must refresh IMiS®/wScan application in browser (MS Edge, Mozilla Firefox, Google Chrome, ...), after restarting IMiS®/Capture Service.

5.3 Additional settings

Not all IMiS®/wScan application settings can be implemented via the “imis.scan.js” JavaScript library. The administrator can access additional settings by double-clicking on the IMiS®/wScan administration module. After startup the IMiS® icon appears at the bottom of the desktop.

By right-clicking on the IMiS® icon, the menu appears.

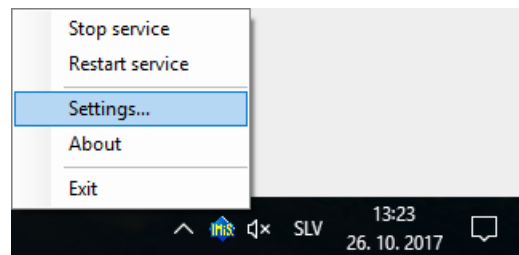


Image 25: Selecting the option to show additional settings

By selecting the option “Settings”, the configuration dialog box appears.

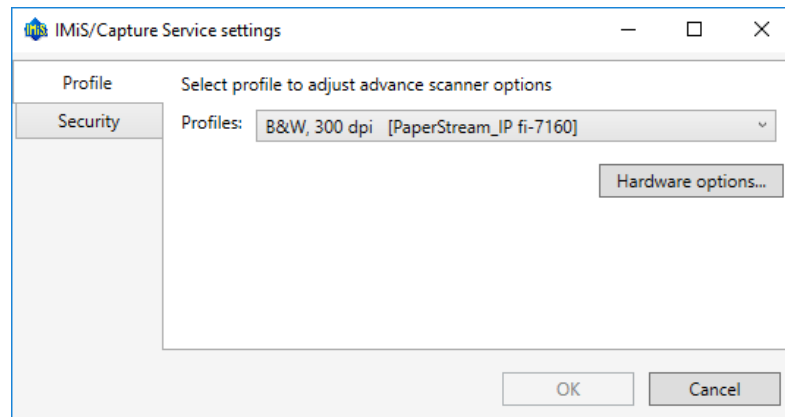


Image 26: Dialog box for setting additional settings

Tabs for additional settings for profiles and security are available. After choosing each of the tabs, additional settings are displayed. After the settings are set, the user with administrator authorization clicks the “OK” button.

If the profile has been modified and IMiS®/Capture Service has not been started, the additional settings will be saved. They will be used at the next startup of IMiS®/Capture Service.

If IMiS®/Capture Service has been started, a dialog box appears for restarting IMiS®/Capture Service.

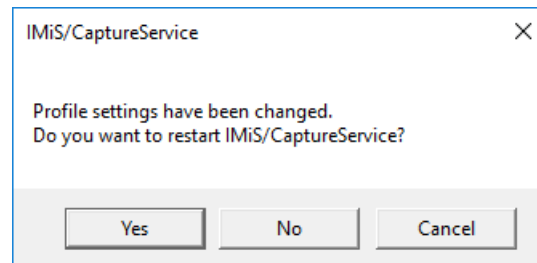


Image 27: Dialog box for restarting IMiS®/Capture Service

Clicking on the “Yes” button starts the process of restarting IMiS®/Capture Service.

The configuration dialog box closes in the process.

By clicking on the “No” button, the changed settings are saved. They will be applied at the next startup of IMiS®/Capture Service. The configuration dialog box closes.

By clicking on the “Cancel” button, the changes are not saved. The configuration dialog box stays open.

If the administrator selects the “Cancel” button in the configuration dialog box, the box closes without saving the changes made to the profile.

***Warning:** The administrator must refresh IMiS®/wScan application in browser (MS Edge, Mozilla Firefox, Google Chrome, ...), after restarting IMiS®/Capture Service.*

5.3.1 Additional profile settings

For additional profile settings, the user with administrator authorization selects the “Profiles” tab. Settings are displayed on the right side. In the »Profiles« dropdown menu all the specified profiles are available. Besides the name of the profile, the scanner model is also displayed.

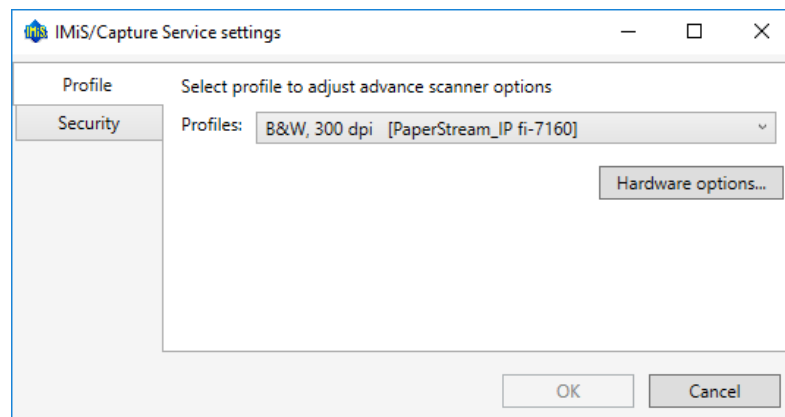


Image 28: Dialog box for profile and security settings

The administrator selects the profile in which to set additional scanner settings (e.g. remove empty pages). After selecting the profile, click on the button “Hardware options...”. The scanner’s configuration dialog box appears.

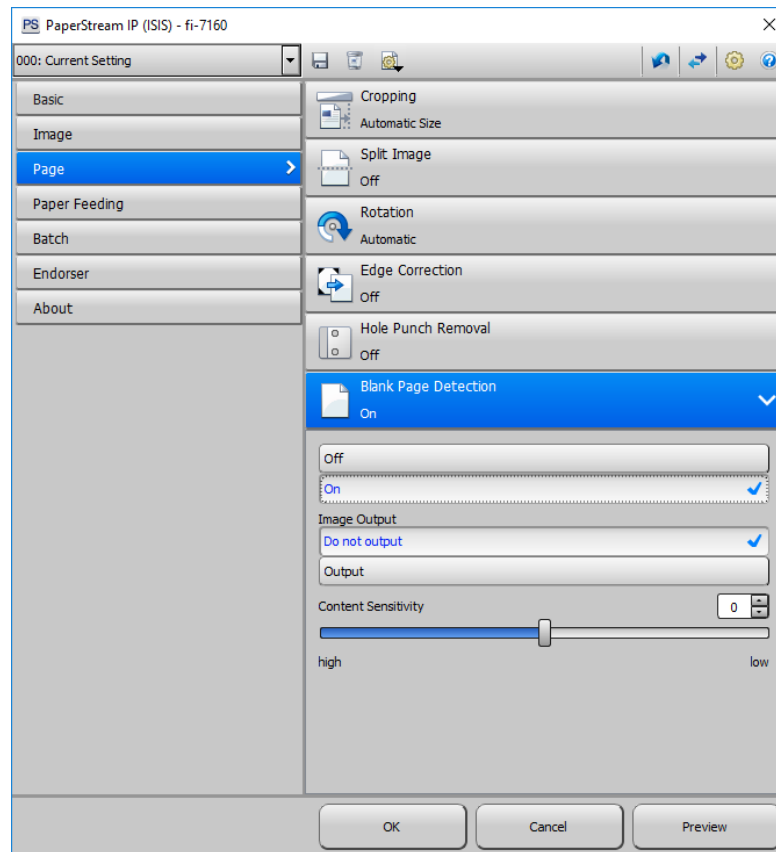


Image 29: Configuration dialog box of Fujitsu PaperStream driver

Note: Scanner makers use different configuration dialog boxes.

After finishing the settings, click on the “OK” button.

5.3.2 Security settings

A user with administrator authorization selects the “Security” tab.

Security settings that include a field for entering or obtaining a security key and entering the allowed indirect web domains is displayed.

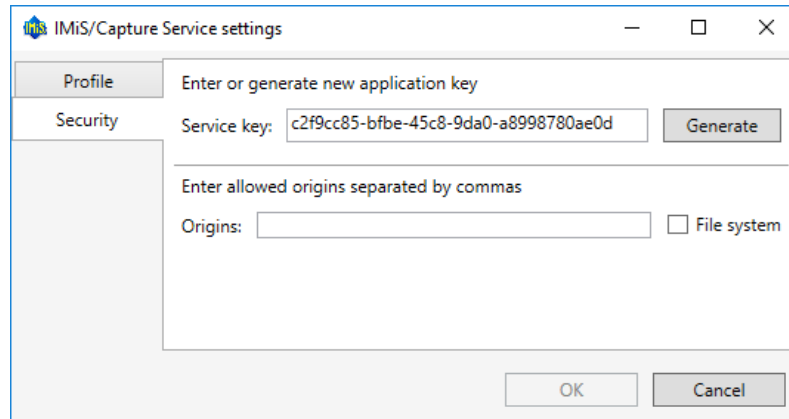


Image 30: Dialog box for security settings

A user with administrator authorization can enter any character string in the “Service key” field or click the “Generate” button to obtain a new unique character string. The developer of the web application enters the security key in his application by forwarding this character string to the **imis.scan.js** javascript library.

For more information see chapter [Integration of imis.scan.js library](#).

The IMiS®/Capture Service will reject all REST requests by web applications that don't contain the same security key as entered in the »Service key« field.

A user with administrator authorization enters all web domains from which the web application can execute REST requests to the IMiS®/Capture Service in the “Origins” field.

Individually entered web domains are separated by commas. If the “Origins” field is empty, only access via the “localhost” local network interface is allowed.

For access from all web domains, the administrator must enter the “ * ” sign (asterisk).

If the web application is executed directly from the file system, a user with administrator authorization must tick the “File system” field.

***Warning:** The administrator must refresh IMiS®/wScan application in browser (MS Edge, Mozilla Firefox, Google Chrome, ...), after restarting IMiS®/Capture Service.*

5.3.3 Additional administrator settings

Profiles can also be configured outside of the IMiS®/wScan application. This can be done by a user with administrator rights and knowledge of updating Windows Registry.

All profile settings are written in Windows Registry under the key

HKEY_LOCAL_MACHINE\SOFTWARE\Imaging Systems\IMiS Capture Service in the *profiles* field.

If IMiS®/Capture Service does not have access rights for this key, the settings are saved to the file system in the *profiles.json* file in the *C:\ProgramData\Imaging Systems\IMiS Capture Service* folder.

The profile settings are written in the JSON file format. They can therefore be copied from one computer to another.

5.4 Uninstallation and modification

Installation modification or uninstallation of the IMiS®/wScan application is performed by the administrator on the workstation using the standard Windows application “Add or Remove Programs”. You access the application by clicking on the “Start” button, locating the “Settings” icon and starting “Add or Remove Programs”. From the Apps & features list the administrator selects the IMiS®/wScan application.

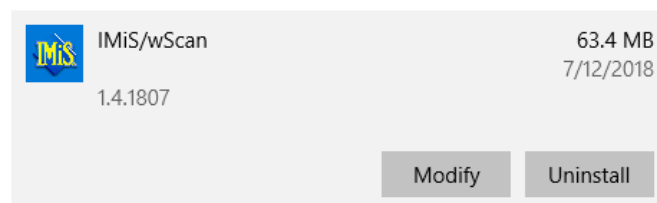


Image 31: Selecting between installation modification and uninstallation of application

5.4.1 Uninstall

By selecting the "Uninstall" option, the administrator begins the procedure of uninstalling the IMiS®/wScan application.

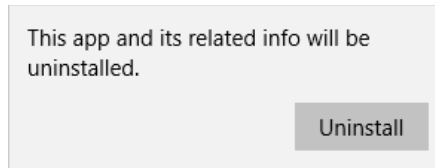


Image 32: Selecting the uninstallation of application

During the uninstallation procedure all files and application settings created by the installation package are removed. The administrator can monitor the progress of the configuration review via a dialog box. By clicking on the "Cancel" button, the review procedure is canceled.

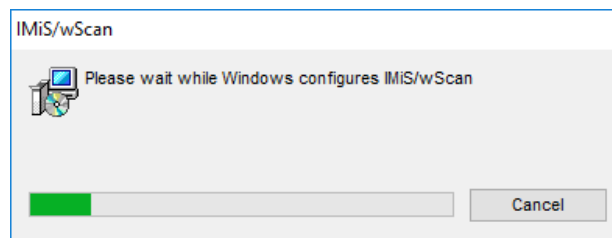


Image 33: Displaying the progress bar of the configuration review

Afterwards the administrator is shown a dialog box for selecting the options: "Modify", "Repair" or "Remove". To remove the installation package, select "Remove". Confirm the selection with the "Next" button.

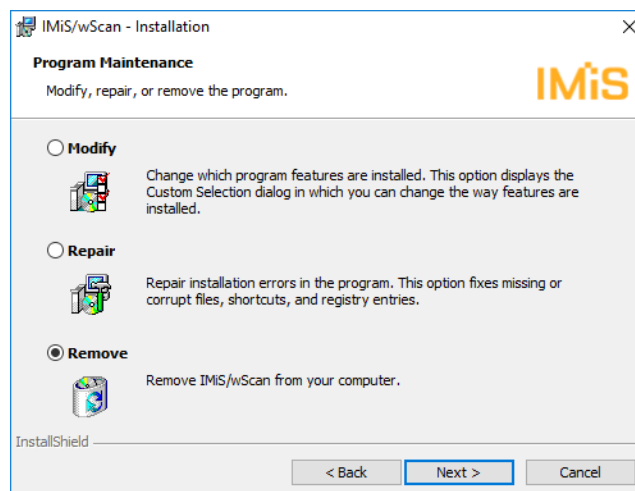


Image 34: Selecting application removal

In the next step confirm the removal by clicking on the “Remove” button.

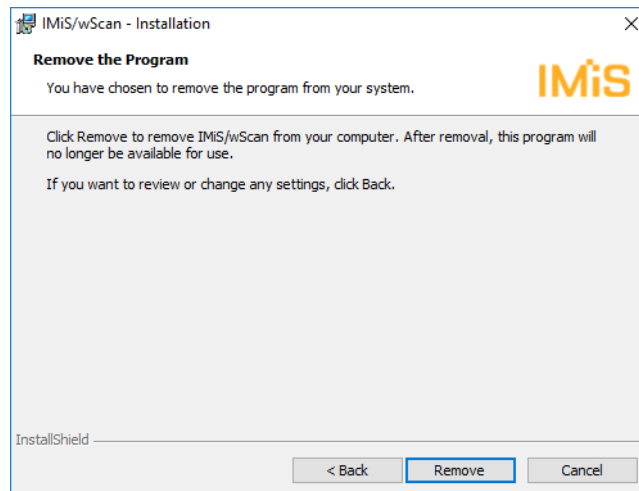


Image 35: Confirming application removal

Uninstallation may take from a few seconds to a few tens of seconds, depending on the version of the installation package and computer speed.

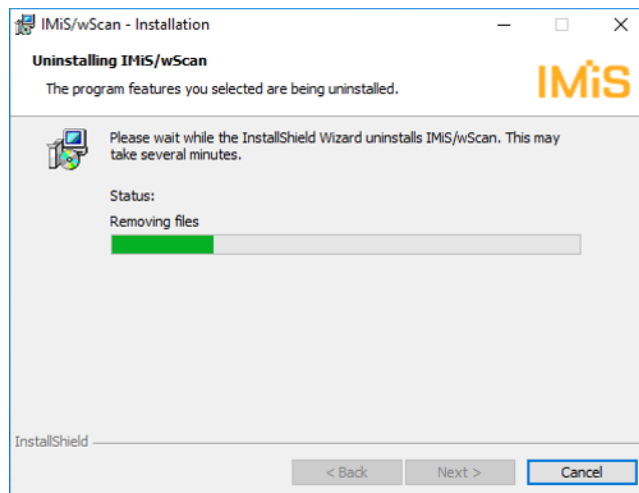


Image 36: Displaying the progress bar during the uninstallation procedure

After finishing uninstalling the application, a dialog box appears, which the administrator closes by clicking on the “Finish” button.



Image 37: Notification of finishing the procedure of uninstalling the installation package

5.4.2 Installation modifications and repairs

The administrator makes modifications and repairs to the installation of the IMiS®/wScan application in a Windows environment via the “Start” button, the “Settings” icon, “Add or Remove Programs”, and an application selected from the Apps & features list.

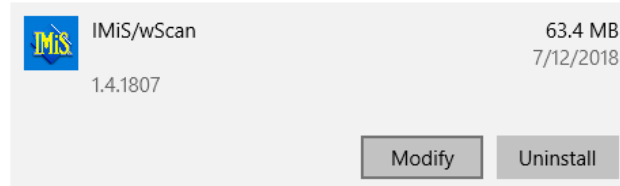


Image 38: Selecting between installation modifications and repairs and removing the installed application

The administrator confirms the selection of installation modifications or repairs by clicking on the “Next” button.

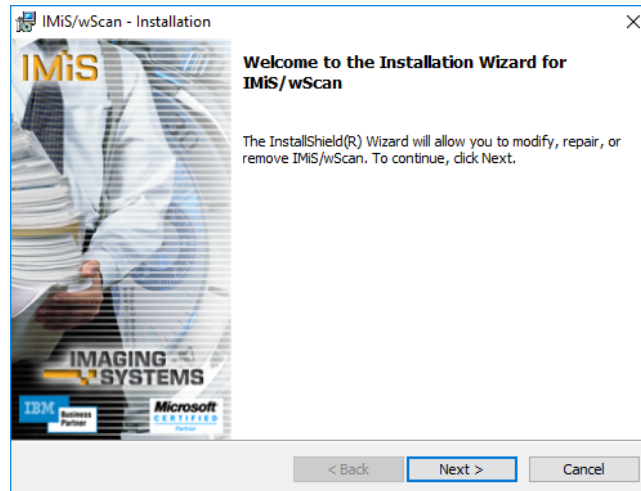


Image 39: Starting the procedure of implementing installation modifications and repairs

5.4.2.1 Installation modifications

The administrator is shown a dialog box in which the option “Modify” has been ticked.

Confirm the selection with the “Next” button.

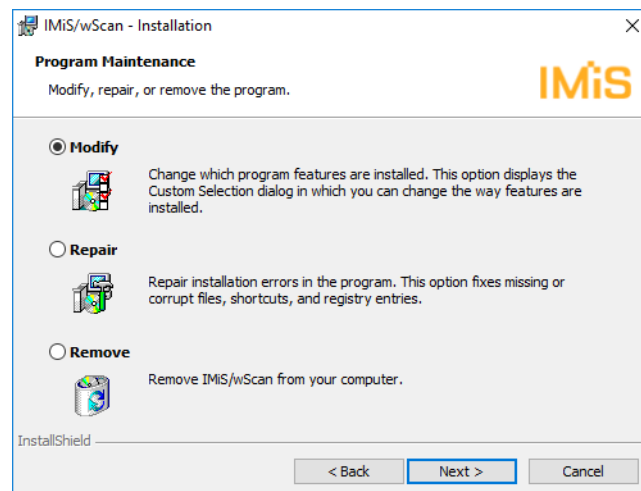


Image 40: Selecting installation modification

By clicking on the icon, the administrator ticks the application features to install.

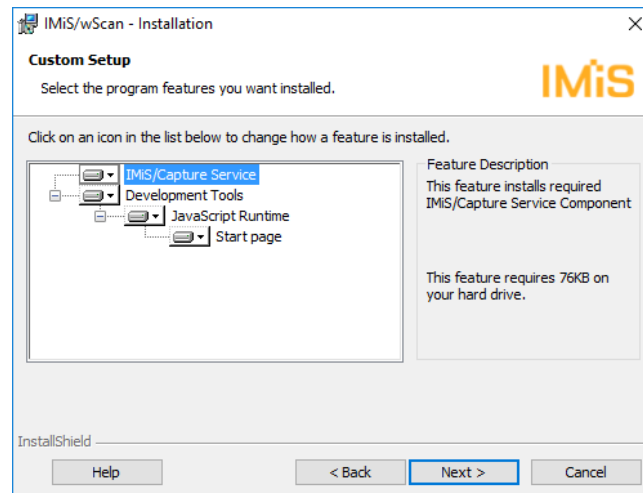


Image 41: Selecting features when modifying installation

By confirming the selection, the administrator starts the installation procedure. Further steps are the same as for typical, full and custom installation. The procedure finishes with the installation of all required application features.

For more information see chapter [Installation with the Wizard](#).

5.4.2.2 Installation repairs

If installation files, shortcuts or register entries were damaged during the installation of the IMiS®/wScan application or later, the administrator can repair them.

After starting the procedure of making modifications and repairs to the installation, the administrator is shown a dialog box in which the option “Repair” has been ticked.

Confirm the selection with the “Next” button.

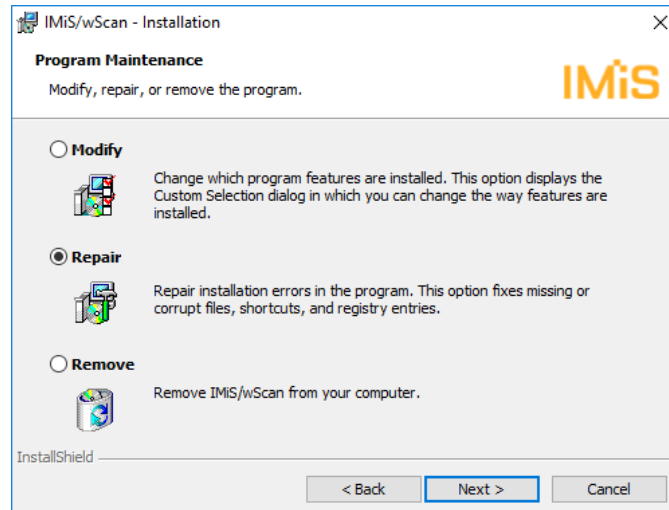


Image 42: Selecting installation repairs

Installation repairs are executed in the next few steps. The procedure finishes with the installation of all required application features and does not require administrator intervention. For more information see chapter [Installation with the Wizard](#).

5.5 Upgrade

When a new IMiS®/Scan version is issued, the new version must be installed on each workstation. 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 are preserved. This is followed by the procedure of installing the new version. For more information see chapter [Installation with the Wizard](#).

6 TECHNICAL DOCUMENTATION

This documentation has been prepared for developers with knowledge of the JavaScript programming language and who are familiar with the concepts of object-oriented programming.

It is divided into `imis.scan.js` and `imis.scan.ui.js`, and examples of using both libraries.

6.1 `imis.scan.js`

The **`imis.scan.js`** JavaScript library manages data exchange with IMiS®/Capture Service.

This library is built on the ECMAScript 6 standard.

This library enables different functionalities:

- Adding, reading, modifying, deleting profiles.
- Adding, reading, executing, stopping jobs.
- Reading and deleting documents.
- Reading, deleting, moving, changing orientation and cropping document pages.
- Reading barcodes on page.
- Reading and deleting redactions on page.
- Reading modules.

6.1.1 `imis.scan.Scan`

This object represents methods for exchanging data with the IMiS®/Capture Service server.

It enables reading, creating, updating and deleting profiles, and reading and creating jobs.

It enables the detection of creating and deleting profiles and of creating jobs.

Before starting the library, the developer must obtain a security key to access the IMiS®/Capture Service. For obtaining a security key see chapter [Security settings](#).

Constructor

imis.scan.Scan(options)	Creates a new object for data exchange and establishes a connection to the IMiS®/Capture Service server.	
	Options object:	
	url	string Address to IMiS®/Capture Service, the default value is http://localhost:5000 (optional).
	apiKey	string Key to access the IMiS®/Capture Service.
	reconnect	boolean Specifies whether it attempts to automatically reconnect on unsuccessful connection to IMiS®/Capture Service (optional, default value <i>false</i>).
	onConnect	callback Callback on successful connection to IMiS®/Capture Service (optional). callback: function()
	onConnectError	callback Callback on unsuccessful connection to IMiS®/Capture Service (optional). callback: function(error: string)
	onDisconnect	callback Callback on disconnection to IMiS®/Capture Service (optional).
	onError	callback Callback on error (optional). callback: function(error: string)
	onReconnect	callback Callback on successful connection (optional).
	onReconnecting	callback Callback on successful reconnection (optional).

Methods

connect()	Establishes a connection to the IMiS®/Capture Service server.
onCreateProfile(callback)	Callback on creating a new profile. Callback is triggered if IMiS®/Capture Service detects that a new profile has been created. Parameters: - callback: function(profile: imis.scan.Profile)

Methods (cont.)

onDeleteProfile(callback)	Callback on deleting a profile. Callback is triggered if IMiS®/Capture Service detects that a profile has been deleted. Parameters: - callback: function(id: String)										
onCreateJob(callback)	Callback on creating a job. Callback is triggered if IMiS®/Capture Service detects that a job has been created. Parameters: - callback: function(job: imis.scan.Job)										
onError(callback)	Callback on error. Parameters: - callback: function(error: string)										
getProfile(options)	Returns a profile. Options object: <table border="1"> <tr> <td>id</td><td>string</td><td>Unique profile identifier</td></tr> <tr> <td>success</td><td>callback</td><td>Callback on successful reading of a profile. callback: function(profile: imis.scan.Profile)</td></tr> <tr> <td>error</td><td>callback</td><td>Callback on unsuccessful reading of a profile. callback: function(error: string)</td></tr> </table>		id	string	Unique profile identifier	success	callback	Callback on successful reading of a profile. callback: function(profile: imis.scan.Profile)	error	callback	Callback on unsuccessful reading of a profile. callback: function(error: string)
id	string	Unique profile identifier									
success	callback	Callback on successful reading of a profile. callback: function(profile: imis.scan.Profile)									
error	callback	Callback on unsuccessful reading of a profile. callback: function(error: string)									
getProfiles(options)	Returns a collection of profiles. Options object: <table border="1"> <tr> <td>success</td><td>callback</td><td>Callback on successful reading of a collection of profiles. callback: function(profiles: imis.scan.Profile[])</td></tr> <tr> <td>error</td><td>callback</td><td>Callback on unsuccessful reading of a collection of profiles. callback: function(error: string)</td></tr> </table>		success	callback	Callback on successful reading of a collection of profiles. callback: function(profiles: imis.scan.Profile[])	error	callback	Callback on unsuccessful reading of a collection of profiles. callback: function(error: string)			
success	callback	Callback on successful reading of a collection of profiles. callback: function(profiles: imis.scan.Profile[])									
error	callback	Callback on unsuccessful reading of a collection of profiles. callback: function(error: string)									

Methods (cont.)

createProfile(options)	Creates a profile.		
	Options object:		
	profile	imis.scan.Profile	New profile.
	success	callback	Callback on successful creation of a profile. callback: function(profile: imis.scan.Profile)
getJob(options)	error	callback	Callback on unsuccessful creation of a profile. callback: function(error: string)
	Returns a job.		
	Options object:		
	id	string	Unique job identifier.
getJobs(options)	success	callback	Callback on successful reading of a job. callback: function(job: imis.scan.Job)
	error	callback	Callback on unsuccessful reading of a job. callback: function(error: string)
	Returns jobs.		
	Options object:		
createJob(options)	success	callback	Callback on successful reading of jobs. callback: function(job: imis.scan.Job[])
	error	callback	Callback on unsuccessful reading of jobs. callback: function(error: string)
	Creates a job; after successful creation destroys the last job created.		
	Options object:		
	profile	string or imis.scan.Profile	Unique profile identifier or profile.
	success	callback	Callback on successful creation of a job. callback: function(job: imis.scan.Job)
	error	callback	Callback on unsuccessful creation of a job. callback: function(error: string)

Methods (cont.)

getModules(options)	Returns a collection of modules.		
	Options object:		
	success	callback	Callback on successful reading of a collection of modules. callback: function(job: imis.scan.Module[])
	error	callback	Callback on unsuccessful reading of a collection of modules. callback: function(error: string)
close()	Closes the scan and terminates the connection to the IMiS®/Capture Service server. After calling this method, the scan object is no longer usable.		

6.1.2 imis.scan.Profile

This object represents a profile. It enables the detection of profile modification.

Constructor

imis.scan.Profile()	Creates a new profile.
---------------------	------------------------

Methods

setModule(module: imis.scan.Module)	Sets the module in the profile. "Save" must be called in order to save.
setModules(modules: imis.scan.Module [])	Sets a collection of modules in the profile. A module is removed if the remove property is set to <i>true</i> , if not, it is modified or added. "Save" must be called in order to save.
addModule(module: imis.scan.Module)	Adds a new module to the profile. "Save" must be called in order to save.
removeModule(module: imis.scan.Module)	Removes a module from the profile. "Save" must be called in order to save.
onChange(callback)	Callback on profile modification. Callback is triggered if IMiS®/Capture Service detects that the profile has been modified. Parameters: - callback: function(profile: imis.scan.Profile)

Methods (cont.)

save(options)	Saves a profile. Parameters: - options.success: function(profile: imis.scan.Profile) - options.error: function(error: string)
delete(options)	Deletes a profile. Parameters: - options.success: function() - options.error: function(error: string)
clone()	Returns a copy.
equals(profile: imis.scan.Profile)	Returns <i>true</i> if the profiles are equal, if not, it returns <i>false</i> .

Properties

id	string	Returns a unique profile identifier.
name	string	Returns or sets the profile name.
disabled	Boolean	Returns whether the profile has been disabled.
disabledMessage	string	Returns the reason for the disabled profile.
source	string	Returns or sets the module identifier at the source.
target	string	Returns or sets the module identifier at the target.
scannerSource	imis.scan.ScannerModule	Returns the scanner module.
folderTarget	imis.scan.FolderTargetModule	Returns the target module in charge of saving.
barcodeExtractor	imis.scan.BarcodeExtractorModule	Returns the module that recognizes barcodes.
changed	Boolean	Returns whether an object has been changed.
modules	imis.scan.Module[]	Returns a collection of modules.
readOnly	boolean	Returns or sets the read-only profile.

6.1.3 imis.scan.Job

This object represents a job, enables startup, canceling, detection of modifications to properties and detection of document creation.

Constructor

imis.scan.Job(options)	Creates a new object.
------------------------	-----------------------

Methods

start(options)	Starts a job. The offset defines the identifier in front of which the inserting or overwriting of pages begins. Options object: <table><tr><td>offset</td><td>string</td><td>The identifier in front of which the continuation of a job begins (optional).</td></tr><tr><td>overwrite</td><td>boolean</td><td>Overwriting of new pages, starting from the offset (optional).</td></tr><tr><td>insert</td><td>boolean</td><td>Inserting new pages in front of the offset (optional).</td></tr><tr><td>success</td><td>callback</td><td>Callback on successfully starting a job. callback: function(job: imis.scan.Job)</td></tr><tr><td>error</td><td>callback</td><td>Callback on unsuccessfully starting a job. callback: function(error: string)</td></tr></table>			offset	string	The identifier in front of which the continuation of a job begins (optional).	overwrite	boolean	Overwriting of new pages, starting from the offset (optional).	insert	boolean	Inserting new pages in front of the offset (optional).	success	callback	Callback on successfully starting a job. callback: function(job: imis.scan.Job)	error	callback	Callback on unsuccessfully starting a job. callback: function(error: string)
offset	string	The identifier in front of which the continuation of a job begins (optional).																
overwrite	boolean	Overwriting of new pages, starting from the offset (optional).																
insert	boolean	Inserting new pages in front of the offset (optional).																
success	callback	Callback on successfully starting a job. callback: function(job: imis.scan.Job)																
error	callback	Callback on unsuccessfully starting a job. callback: function(error: string)																
cancel(options)	Cancels a job. Options object: <table><tr><td>success</td><td>callback</td><td>Callback on successfully canceling a job. callback: function(job: imis.scan.Job)</td></tr><tr><td>error</td><td>callback</td><td>Callback on unsuccessfully canceling a job. callback: function(error: string)</td></tr></table>			success	callback	Callback on successfully canceling a job. callback: function(job: imis.scan.Job)	error	callback	Callback on unsuccessfully canceling a job. callback: function(error: string)									
success	callback	Callback on successfully canceling a job. callback: function(job: imis.scan.Job)																
error	callback	Callback on unsuccessfully canceling a job. callback: function(error: string)																

Methods (cont.)

onChange(callback)	Callback on changing a job. Parameters: - callback: function(job: imis.scan.Job)		
onCreateDocument(callback)	Callback on creating a document. Parameters: - callback: function(document: imis.scan.Document)		
getJob(options)	Returns a job. Options object:		
	success	Callback	Callback on successful reading of a job. callback: function(job: imis.scan.Job)
	error	callback	Callback on unsuccessful reading of a a job. callback: function(error: string)
getDocuments(options)	Returns a collection of documents. Options object:		
	success	callback	Callback on successful reading of documents. callback: function(documents: imis.scan.Document[])
	error	callback	Callback on unsuccessful reading of documents. callback: function(error: string)

Methods (cont.)

getDocument(options)	Returns a document.		
	Options object:		
	success	callback	Callback on successful reading of a document. callback: function(document: imis.scan.Document)
	error	callback	Callback on unsuccessful reading of a document. callback: function(error: string)
getNextDocument(document: imis.scan.Document)	Returns the next document imis.scan.Document if it exists.		
getPrevDocument(document: imis.scan.Document)	Returns the previous document imis.scan.Document if it exists.		
onError(callback)	Callback on job error. Parameters: - callback: function(error: string)		
destroy()	Destroys a job and all documents.		
download(callback, errorCallback)	Returns the URL to transfer all documents in a task. Parameters: - callback: function(uri: string) - errorCallback: function()		
isCompleted()	Returns whether the task has been completed.		
isCancelled()	Returns whether the task has been cancelled.		
isCreated()	Returns whether the task has been created.		
isInProgress()	Returns whether the task is in progress.		
isPending()	Returns whether the task is pending.		
isError()	Returns whether an error occurred.		

Methods (cont.)

addRedactions(options)	Adds redactions on the page.	
	Options object:	
	success	callback Callback on successful adding of redactions.
	error	callback Callback on unsuccessful adding of redactions.
	data.regions	AddRedactionElement [] Collection of redactions.
	AddRedactionElement object:	
	id	string Page identifier.
	region.left	number Left offset on page.
	region.top	number Top offset on page.
	region.height	number Height of redaction.
	region.width	number Width of redaction.

Properties

id	string	Returns a unique job identifier.
index	number	Returns a job index.
name	string	Returns a job name.
error	string	Returns a job error message.
created	string	Returns the date and time of job creation. Format 2018-07-03T09:58:15.9225533+02:00.
documentCount	number	Returns the number of documents in a job.
pageCount	number	Returns the number of pages in all documents in a job.
fileName	string	Returns the name of the task file.
documents	imis.scan.Document []	Returns the collection of documents in a job.

6.1.4 imis.scan.Document

This object represents a document, enables the detection of creating pages within a document, changes to document properties, reading of pages and deleting a document.

Methods

getFirstPage()	Returns the first page imis.scan.Page in a document.						
getLastPage()	Returns the last page imis.scan.Page in a document.						
getNextPage(page: imis.scan.Page)	Returns the next page imis.scan.Page in a document.						
getPrevPage(page: imis.scan.Page)	Returns the previous page imis.scan.Page in a document.						
onChange(callback)	Callback on changing a document. Returns the same document with changed properties. Parameters: - callback: function(document: imis.scan.Document)						
onCreatePage(callback)	Callback on creating a page within a document. Returns the new page within a document. Parameters: - callback: function(page: imis.scan.Page)						
-onDelete(callback)	Callback on deleting a document. Parameters: - callback: function(document: imis.scan.Document)						
onError(callback)	Callback on document error. Parameters: - callback: function(error: string)						
destroy()	Destroys a document and document pages.						
download(callback, errorCallback)	Obtains a link for document transfer. Parameters: - callback: function(uri: string) - errorCallback: function()						
delete(options)	Deletes a document. Options object: <table><tr><td>success</td><td>callback</td><td>Callback on successful deletion.</td></tr><tr><td>error</td><td>callback</td><td>Callback on unsuccessful deletion.</td></tr></table>	success	callback	Callback on successful deletion.	error	callback	Callback on unsuccessful deletion.
success	callback	Callback on successful deletion.					
error	callback	Callback on unsuccessful deletion.					

Properties

id	String	Returns a unique document identifier.
name	String	Returns a document name.
mime	String	Returns the type of document content.
pageCount	Number	Returns the number of pages in a document.
created	String	Returns the date and time of creation. Format: 2018-07-03T09:56:26.4618227+02:00
length	Number	Returns the size of the document in bytes.
filename	String	Returns the name of the task file.
previousId	string	Returns the identifier of the previous document.
pages	imis.scan.Page[]	Returns the collection of pages on a document.

6.1.5 imis.scan.Page

This object represents a page, enables the detection of changes to properties, reading a page preview, reading a page in basic size, deleting, moving, changing orientation, cropping, reading and deleting redactions.

Methods

getThumbnailUri(options)	Obtains the link to the page preview URI in the image/png format.		
	Options object:		
	height	Number	Height of page preview.
	width	Number	Width of page preview.
	success	Callback	Call when connection was successful. Parameters: - callback: function(uri: string)
	error	Callback	Call when connection failed. Parameters: - callback: function()

Methods (cont.)

getImage(callback, errorCallback)	Obtains the link to the page URI in the image/png format. Parameters: - callback: function(uri: string) - errorCallback: function()									
onChange(callback)	Callback on changing a page. Returns the page with changed properties. Parameters: - callback: function(page: imis.scan.Page)									
onMove(callback)	Callback on moving a page. Returns the new document in which the page is located. Parameters: - callback: function(document: imis.scan.Document)									
onDelete(callback)	Callback on deleting a page. Parameters: - callback: function()									
removeRedaction(options)	Deletes a redaction. Options object: <table><tr><td>redaction</td><td>imis.scan.Redaction</td><td>Redaction.</td></tr><tr><td>success</td><td>callback</td><td>Callback on successful deletion of a redaction.</td></tr><tr><td>error</td><td>callback(error: string)</td><td>Callback on unsuccessful deletion of a redaction.</td></tr></table>	redaction	imis.scan.Redaction	Redaction.	success	callback	Callback on successful deletion of a redaction.	error	callback(error: string)	Callback on unsuccessful deletion of a redaction.
redaction	imis.scan.Redaction	Redaction.								
success	callback	Callback on successful deletion of a redaction.								
error	callback(error: string)	Callback on unsuccessful deletion of a redaction.								
rotate(options)	Changes the page orientation. Options object: <table><tr><td>orientation</td><td>number</td><td>Sets a new orientation. The set of values: -270, -180, -90, 0, 90, 180, 270.</td></tr><tr><td>success</td><td>callback</td><td>Callback on successful change of orientation.</td></tr><tr><td>error</td><td>callback(error: string)</td><td>Callback on unsuccessful change of orientation.</td></tr></table>	orientation	number	Sets a new orientation. The set of values: -270, -180, -90, 0, 90, 180, 270.	success	callback	Callback on successful change of orientation.	error	callback(error: string)	Callback on unsuccessful change of orientation.
orientation	number	Sets a new orientation. The set of values: -270, -180, -90, 0, 90, 180, 270.								
success	callback	Callback on successful change of orientation.								
error	callback(error: string)	Callback on unsuccessful change of orientation.								

Methods (cont.)

move(options)	Moves a page. The offset defines the identifier of the page in front of which the page is being moved or the identifier of the document if you are inserting a page at the end of the document. Options object: <table> <tr> <td>offset</td><td>string</td><td>Defines the identifier of the page in front of which the page is being moved or the identifier of the document if you are inserting a page at the end of the document.</td></tr> <tr> <td>success</td><td>callback</td><td>Callback on successful move.</td></tr> <tr> <td>error</td><td>callback</td><td>Callback on unsuccessful move.</td></tr> </table>		offset	string	Defines the identifier of the page in front of which the page is being moved or the identifier of the document if you are inserting a page at the end of the document.	success	callback	Callback on successful move.	error	callback	Callback on unsuccessful move.									
offset	string	Defines the identifier of the page in front of which the page is being moved or the identifier of the document if you are inserting a page at the end of the document.																		
success	callback	Callback on successful move.																		
error	callback	Callback on unsuccessful move.																		
crop(options)	Crops a page. Options object: <table> <tr> <td>left</td><td>number</td><td>Left offset on page.</td></tr> <tr> <td>top</td><td>number</td><td>Top offset on page.</td></tr> <tr> <td>width</td><td>number</td><td>Width of page.</td></tr> <tr> <td>height</td><td>number</td><td>Height of page.</td></tr> <tr> <td>success</td><td>callback</td><td>Callback on successful cropping of a page.</td></tr> <tr> <td>error</td><td>callback(error: string)</td><td>Callback on unsuccessful cropping of a page.</td></tr> </table>		left	number	Left offset on page.	top	number	Top offset on page.	width	number	Width of page.	height	number	Height of page.	success	callback	Callback on successful cropping of a page.	error	callback(error: string)	Callback on unsuccessful cropping of a page.
left	number	Left offset on page.																		
top	number	Top offset on page.																		
width	number	Width of page.																		
height	number	Height of page.																		
success	callback	Callback on successful cropping of a page.																		
error	callback(error: string)	Callback on unsuccessful cropping of a page.																		
isLandscape()	Returns <i>true</i> if the page is landscape, if not, it returns <i>false</i> .																			
isPortrait()	Returns <i>true</i> if the page is portrait, if not, it returns <i>false</i> .																			
destroy()	Destroys the page and all the obtained links to the page.																			

Properties

id	string	Returns a unique page identifier.
width	number	Returns the page width.
height	number	Returns the page height.
xresolution	number	Returns the horizontal page resolution in DPI.
yresolution	number	Returns the vertical page resolution in DPI.
barcodes	imis.scan.Barcode[]	Returns the collection of barcodes on the page.
colorFormat	imis.scan.ColorFormat	Returns the page color format.
previousId	string	Returns the identifier of the previous page.
created	string - DateTime	Returns the date and time of page creation.

Properties (cont.)

redactions	imis.scan.Redaction[]	Returns the collection of redactions on page.
------------	---------------------------------------	---

6.1.6 imis.scan.Barcode

This object represents the properties of the barcode on a page.

Properties

height	number	Returns the barcode height.
width	number	Returns the barcode width.
text	string	Returns the recognized barcode content.
point1	number	Returns the top left point of the barcode.
point2	number	Returns the top right point of the barcode.
point3	number	Returns the bottom right point of the barcode.
point4	number	Returns the bottom left point of the barcode.
posX	number	Returns the horizontal offset of the barcode on the page.
posY	number	Returns the vertical offset of the barcode on the page.
type	string	Returns the barcode type.

6.1.7 imis.scan.Redaction

This object represents the properties of the redaction on a page. It is used to hide specific parts of a document. The redaction is drawn over the area which the user wants to hide. After saving, the redacted content is no longer visible. The redaction can be deleted only before saving the job or document.

Properties

id	string	Redaction identifier.
width	number	Returns the redaction width.
height	number	Returns the redaction height.
left	number	Returns the left offset on page.
top	number	Returns the top offset on page.

6.1.8 imis.scan.Module

This object represents the basis of the module, from which different modules have been derived.

Methods

clone()	Returns a copy.
---------	-----------------

Properties

id	string	Returns a unique module identifier.
sendTo	string[]	Returns or sets a collection of module identifiers, to which the module sends data.
type	string	Returns the module type. Set of values: - Scanner_source - Barcode_extractor - Folder_target.
remove	boolean	Returns or sets the value that determines whether the module will be removed; applies only when calling the setModules method on imis.scan.Profile .

6.1.9 imis.scan.ScannerModule

This object represents the scanner module, which enables the reading and changing of scanner settings.

This class has been derived from [imis.scan.Module](#).

Properties

driverName	string	Returns or sets the driver name.
scannerModel	string	Returns the scanner model.
scannerValues	imis.scan.ScannerValue []	Returns a collection of all connected scanners.
paperSize	string	Returns or sets the paper size.
paperSizes	string[]	Returns the collection of paper sizes for the selected driver (driverName).
resolution	number	Returns or sets the scanning resolution.

Properties (cont.)

resolutions	number[]	Returns a collection of scanning resolutions for the selected driver (driverName).
colorFormat	imis.scan.ColorFormat	Returns or sets the scanning color.
colorFormats	imis.scan.ColorFormat[]	Returns a collection of scanning colors for the selected driver (driverName).
duplex	boolean	Returns or sets whether duplex scanning is enabled.

6.1.10 imis.scan.FolderTargetModule

This object represents the target module, which enables the setting of properties of saving files to the file system, with the option of setting the directory, file format, color and compression.

This class has been derived from [imis.scan.Module](#).

Properties

folder	string	Returns or sets the path to the directory.
fileRoot	string	Returns or sets the file name.
fileFormat	string	Returns or sets the file format.
fileFormats	string[]	Returns a set of file formats. Set of values: - BMP - GIF - TIFF - JPEG - PCX - PDF/A - PNG.
colorFormat	imis.scan.ColorFormat	Returns or sets the color format.
colorFormats	imis.scan.ColorFormat[]	Returns a collection of color formats; this collection is connected to the file format (fileFormat).
compression	string	Returns or sets the compression.
compressions	string[]	Returns a collection of compressions; this collection is connected to the color format (colorFormat) and file format.

6.1.11 imis.scan.BarcodeExtractorModule

This object represents the module which enables the detection of barcodes on an individual page.

This class has been derived from [imis.scan.Module](#).

Properties

types	string[]	Returns or sets a collection of barcode types for recognition.
typesValues	string[]	Returns a collection of barcode types. Set of values: - addon2 - addon5 - australianpost - aztec - bcdmatrix - codabar - code25_datalogic - code25_iata - code25_industrial - code25_interleaved - code25_invert - code25_matrix - code32 - code39 - code93 - datamatrix - ean13 - ean8 - intelligentmail - pdf417 - postnet - qrcode - royalpost - type128 - ucc128 - upc_a - upc_e.
orientation	string	Returns or sets the option of barcode orientation.

Properties (cont.)

orientationValues	string[]	Returns a collection of barcode orientations. Set of values: - horizontal: Detection of horizontal barcodes. - vertical: Detection of vertical barcodes. - both: Detection of horizontal or vertical barcodes. - horizontalverticaldiagonal: Detection of horizontal, vertical or 45° barcodes.
mode	string	Returns or sets the barcode detection mode.
modeValues	string[]	Returns a collection of barcode detection modes. Set of values: - normal: Normal mode, faster than enhanced. - enhanced: Improved mode, enables better detection; detection is slower.

6.1.12 imis.scan.ScannerValue

This object represents scanner properties.

Properties

driverName	string	Returns the driver name.
scannerModel	string	Returns the scanner model.
colorFormats	imis.scan.ColorFormat[]	Returns a collection of colors.
paperSizes	string[]	Returns a collection of paper sizes.
resolutions	number[]	Returns a collection of resolutions.

6.1.13 imis.scan.ColorFormat

This object represents the properties of the color format.

Properties

colorMode	string	Returns the image color type. Set of values: - blackwhite: Black-and-white image; - grayscale: A grayscale image; - color: A color image.
colorDepth	number	Returns the image color depth.
photometric	string	Returns the mode of reading image data.
compressions	string[]	Returns a collection of compressions; this collection exists only when reading the properties of colorFormats on imis.scan.FolderTargetModule .

6.2 imis.scan.ui.js

This library enables easy use of components, which can be used for displaying scanning.

The displaying of components is managed by the main component [imis.scan.ui.Scan](#), where we specify all of the components we will be using.

The imis.scan.js library is required for it to work.

The library Material Icons is used for displaying icons (more at: <https://material.io/tools/icons>).

6.2.1 imis.scan.ui.Scan

This object represents the main component, which manages the displaying of various components. When creating this component, the components are initialized. Enables reading profiles and setting the selected profile.

Constructor

imis.scan.ui.Scan(options: ScanOptions)	Creates a new object and components are initialized.
--	--

Methods

show(callback)	Establishes a connection to the IMiS®/Capture Service server and data is loaded into the components. Parameters: - callback: Callback on successful establishment of a connection to the server (optional).
getProfiles(callback)	Returns all profiles. Parameters: - callback: The callback on successful reading of profiles returns imis.scan.Profile []
getSelectedProfile()	Returns the selected profile imis.scan.Profile .
setSelectedProfile(profile)	Sets the selected profile imis.scan.Profile .

Properties

job	imis.scan.Job	Current job.
-----	-------------------------------	--------------

6.2.1.1 ScanOptions

This object represents the [imis.scan.ui.Scan](#) settings options.

Properties

url	string	Address to IMiS®/Capture Service. The default value is http://localhost:5000 (optional).
apiKey	string	Key to access the IMiS®/Capture Service.
notifications	boolean	Displaying notifications in a browser; the default value is true (optional).
language	string	Language settings (optional). If the language has not been defined, the language specified in the browser is set as default. Set of values: en English sl Slovene
thumbnails	imis.scan.ui.Thumbnails or ThumbnailsOptions	Displaying documents and pages (optional).

settings	imis.scan.ui.Settings or SettingOptions	The settings of all profiles (optional).
imageView	imis.scan.ui.ImageView or ImageviewOptions	Displaying a selected page (optional).
images	imis.scan.ui.ImageScroll or ImageScrollOptions	Displaying all pages (optional).
status	imis.scan.ui.Status or StatusOptions	Displaying status (optional).
imageDetails	imis.scan.ui.ImageDetails or ImageDetailsOptions	Details of a selected page (optional).
progress	imis.scan.ui.Progress or ProgressOptions	Displaying job status (optional).
buttons	UIScanButtonsOptions	Buttons settings.
useLocalStorage	boolean	Specifies the use of saving settings (currently selected profile) to the browser; if the value is set to false, the saved settings are deleted; the default value is true (optional).
reconnect	boolean	Specifies whether reconnection is attempted on termination of the connection to the IMiS®/Capture Service; if the connection is successful, the page reloads (optional, default value false).
targetColor	imis.scan.ui.TargetColor ali TargetColorOptions	Shows the color for saving (optional).
targetFormat	imis.scan.ui.TargetFormat ali TargetFormatOptions	Shows the format for saving (optional).
totalDocuments	imis.scan.ui.TotalDocuments ali TotalDocumentsOptions	Shows the number of documents in a job (optional).
totalPages	imis.scan.ui.TotalPages ali TotalPagesOptions	Shows the number of pages in a job (optional).

6.2.1.2 ScanButtonsOptions

This object represents the settings options for buttons.

Properties

scan	imis.scan.ui.Button or ButtonOptions	The button for starting a scan. If the profile has been disabled and an error exists, it is shown in the popup notification that appears when placing the cursor on the element.
continue	imis.scan.ui.Button or ButtonOptions	The button for continuing the scan (optional).
cancel	imis.scan.ui.Button or ButtonOptions	The button for canceling the scan (optional).
download	imis.scan.ui.Button or ButtonOptions	The button for downloading all scanned documents (optional).
color	imis.scan.ui.ColorDropdownButton or ColorDropdownOptions	The list of possible colors if a scanner is available; changes are saved only temporarily for each job started (optional).
profiles	imis.scan.ui.ProfilesButton or ProfilesButtonOptions	A collection of profiles and the option of temporarily editing the selected profile; changes are saved only for each job started (optional).
cursorMode	imis.scan.ui.CursorMode or CursorModeOptions	Button for selecting the insert or add mode (optional). The default mode is adding to the end.

6.2.2 imis.scan.ui.Button

This object represents the button component, which represents the basic component that can be used to control the start, continuation, cancellation and download of a job.

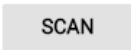


Image 43: Button component

Constructor

imis.scan.ui.Button(options)	Creates a new button. Parameters: - options: ButtonOptions
------------------------------	--

Methods

disable()	Disable button.
enable()	Enable button.
showProgress()	Shows progress within the button.
hideProgress()	Hides progress within the button.

Properties

app	imis.scan.ui.Scan	Returns the main component.
-----	-----------------------------------	-----------------------------

6.2.2.1 ButtonOptions

This object defines the properties that can be set on the button.

id	string	Unique identifier of an element in an HTML document as the id attribute.
element	HTMLElement	Element in HTML document (optional).
text	string	Button text (optional).
tooltip	string	Contents of the popup notification below the button (optional).
darkMode	boolean	Dark display mode (optional, default value <i>false</i>).
color	string	Color of button text (optional).
backgroundColor	string	Color of button background (optional).
fontSize	string	Size of button text (optional).
width	string	Minimum button width (optional).
height	string	Button height (optional).
onClick	callback	Callback on clicking on the button (optional). Parameters: - callback: function()

icon	string	The icon displayed on the left side of the button; the icon is of the Material Icons type (optional).
customStyle	boolean	Specifies whether the external appearance of the button has been defined. Only the functionalities connected to the job work (optional, default value <i>false</i>).

6.2.3 imis.scan.ui.ColorDropDownButton

This object represents the component for selecting the color of scanning. This value only affects the job which will be started by pressing the scan button. This component will display values if a scanner module exists in the selected profile and if it has color selection values.

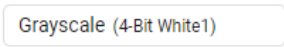


Image 44: Component for selecting the color of scanning

Constructor

imis.scan.ui.ColorDropDownButton(options)	Creates a new dropdown menu for selecting the color of scanning. Parameters: - options: ColorDropDownOptions
---	--

6.2.3.1 ColorDropDownOptions

This object defines the properties that can be set on the component for selecting the scanning color.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).

6.2.4 imis.scan.ui.ProfilesButton

This object represents the component for selecting the profile and changing the settings of the scanning profile. Changes to the profile will be applied only at the start of each new job.

The selected profile will be saved to the browser (Local Storage), if saving has been enabled.

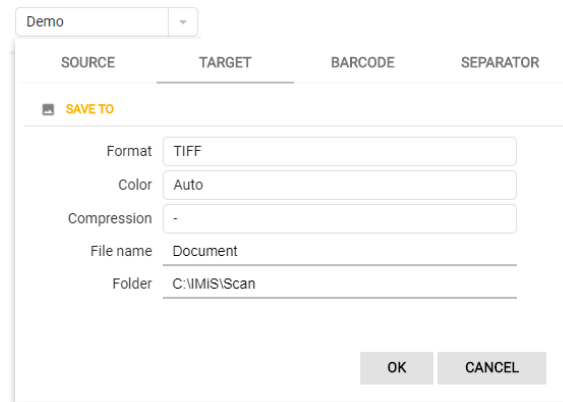


Image 45: Component for selecting the profile and changing the settings of the scanning profile

Constructor

imis.scan.ui.ProfilesButton(options)	Creates a new dropdown menu for selecting the profile with the option of changing the settings for a new job. Parameters: - options: ProfilesButtonOptions
--------------------------------------	--

6.2.4.1 ProfilesButtonOptions

This object defines the properties that can be set on the component for selecting the profile and temporarily changing the settings.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
color	string	Color of the titles of profile modules.

6.2.5 imis.scan.ui.ImageDetails

This object represents the component for displaying information about the currently selected page. It shows the recognized barcodes if a barcode recognition module exists. By placing the cursor on the barcode, the latter is tagged in the component which shows the full-size page. It also shows the redactions, which can be removed by selecting the Remove action.

For it to work, the component [imis.scan.ui.ImageView](#) or [imis.scan.ui.ImageScroll](#) in [imis.scan.ui.Scan](#) must be used.

Document	1 / 1
Name	Document_1
Created	16. 10. 2017 15:35:54
Type	image/tiff
Size	699.53 KB
Page	1 / 18
Width	2480
Height	3507
Resolution	300 dpi
Color	Black & White (1-Bit White0)
BARCODE	
Text	123456789012
Type	Type-128
Position	(935, 829)
BARCODE	
Text	ABCxyz#\$\$%15z
Type	Type-128
Position	(773, 2626)

Image 46: Component for displaying information about the currently selected page

Constructor

imis.scan.ui.ImageDetails(options)	Creates a component for displaying details of the selected page. Parameters: - options: ImageDetailsOptions
------------------------------------	---

6.2.5.1 ImageDetailsOptions

This object defines the properties that can be set on the component for showing information on the currently selected page.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
color	string	Color of the page property.
closed	boolean	Specifies whether the component is hidden (optional, default value false).
close	boolean	Specifies whether the close button is shown (optional, default value true).
darkMode	boolean	Dark display mode (optional, default value false).
onClose	callback	Callback on clicking on the close button (optional).
background	string	Background color (optional).

6.2.6 imis.scan.ui.ImageView

This object represents the component for displaying the currently selected page. This component enables changing the size (zooming in/zooming out or showing the whole page), moving to the next or previous page, changing the orientation, deleting a page, adding redactions, cropping a page.



Image 47: Component for displaying the currently selected page

Constructor

imis.scan.ui.ImageView(options)	Creates a component for displaying the selected page. Parameters: - options: ImageViewOptions
---------------------------------	---

6.2.6.1 ImageViewOptions

action.crop	boolean	Specifies whether cropping is enabled (optional, default value <i>true</i>).
action.delete	boolean	Specifies whether deleting is enabled (optional, default value <i>true</i>).
action.redaction	boolean	Specifies whether the adding of redactions is enabled (optional, default value <i>true</i>).
action.rotate	boolean	Specifies whether the changing of orientations is enabled (optional, default value <i>true</i>).
background	string	Background color (optional).
fitToSize	boolean	Specifies whether each newly selected image is automatically adjusted to the size of the element (optional, default value <i>false</i>).
id	string	Unique identifier of an element in an HTML document as the id attribute.
element	HTMLElement	Element in HTML document (optional).
onPropertiesSelected	callback	Callback on selecting properties in the context menu (optional). callback: function()

6.2.7 imis.scan.ui.ImageScroll

This object represents the component for displaying a collection of pages. This component enables changing the size (zooming in/zooming out or showing the whole page), moving to the next or previous page, changing the orientation, deleting a page, adding redactions, cropping a page.



Image 48: Component for displaying a collection of pages

Constructor

imis.scan.ui.ImageScroll(options)	Creates a component for displaying a collection of pages. Parameters: - options: ImageScrollOptions
-----------------------------------	---

6.2.7.1 ImageScrollOptions

action.crop	boolean	Specifies whether cropping is enabled (optional, default value <i>true</i>).
action.delete	boolean	Specifies whether deleting is enabled (optional, default value <i>true</i>).
action.redaction	boolean	Specifies whether the adding of redactions is enabled (optional, default value <i>true</i>).
action.rotate	boolean	Specifies whether the changing of orientations is enabled (optional, default value <i>true</i>).
background	string	Background color (optional).
contextMenu.enabled	boolean	Specifies whether a context menu for an individual page has been enabled (optional).

contextMenu.onPropertiesSelected	callback	Callback on selecting properties in the context menu (optional). callback: function()
controls	boolean	Shows controls for zooming in, zooming out, adjusting the image to the screen, the add redactions mode and the crop mode (optional, default value <i>true</i>).
darkMode	boolean	Dark display mode (optional, default value <i>false</i>).
element	HTMLElement	Element in HTML document (optional).
focusNewPage	boolean	When adding a new page, it is shown in focus (optional, default value <i>true</i>).
id	string	Unique identifier of an element in an HTML document as the id attribute.

6.2.8 imis.scan.ui.Progress

This object represents the component for showing the progress of the current job.

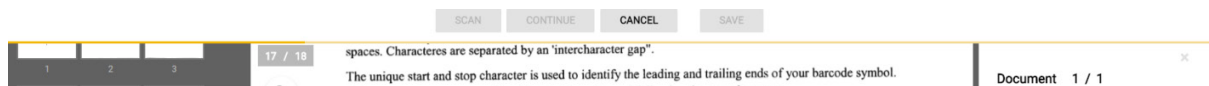


Image 49: Component for showing the progress of the current job

Constructor

imis.scan.ui.Progress(options)	Creates a component for showing the progress of the current job. Parameters: - options: ProgressOptions
--------------------------------	---

6.2.8.1 ProgressOptions

This object defines the properties that can be set on the component for showing the progress of the job.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
darkMode	boolean	Dark display mode (optional, default value <i>false</i>).
color	string	Component color while executing the job (optional).

6.2.9 imis.scan.ui.Status

This object represents the component for displaying the status, which specifies whether a connection with IMiS®/Capture Service has been established.



Image 50: Component for displaying the status

Constructor

imis.scan.ui.Status(options)	Creates a component for displaying the status. Parameters: - options: StatusOptions
------------------------------	---

6.2.9.1 StatusOptions

This object defines the properties that can be set on the component for showing the status.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).

6.2.10 imis.scan.ui.Thumbnails

This object represents the component for showing documents and pages. This component enables adjusting the size of individual page previews, orientation of a collection of documents, or the gallery mode, which shows the page and details in a dialog. With the context menu you can move an individual page, change the orientation of an individual page, delete an individual page, or show details. This component enables the moving of an individual page. With the cursor you can set the position of subsequent scanning, where the add or overwrite mode is defined in the component [imis.scan.ui.CursorMode](#).

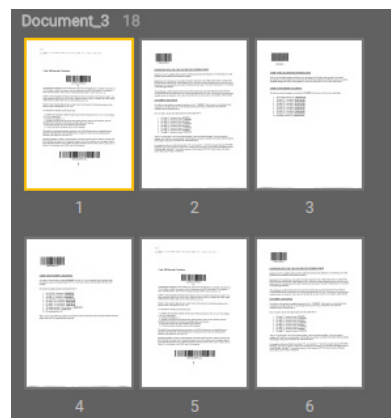


Image 51: Component for showing documents

Constructor

imis.scan.ui.Thumbnails(options)	Creates a component for showing the page as a preview. Parameters: - options: ThumbnailsOptions
----------------------------------	---

6.2.10.1 ThumbnailsOptions

backgroundColor	string	Background color (optional).
cursor.enabled	boolean	Specifies whether the cursor for adding or overwriting pages is enabled (optional, default value <i>false</i>).
cursor.color	string	Color of cursor background (optional).
darkMode	boolean	Dark display mode (optional, default value <i>false</i>).
document.action.delete	boolean	Specifies whether deletion of a document is enabled (optional, default value <i>true</i>).
document.contextMenu.enabled	boolean	Specifies whether the context menu for an individual document is enabled (optional, default value <i>true</i>).
document.color	string	Color of the document title (optional).
document.icon	string	Documents icon, possible set of icons from Material Icons.
document.iconColor	string	Color of the document icon (optional).
document.separatorColor	string	Color of the document tag (optional).
element	HTMLElement	Element in HTML document (optional).
focusNewPage	boolean	When adding a new page, it is shown in focus (optional, default value <i>true</i>).
gallery.enabled	boolean	The gallery mode; enables double-clicking on an individual page, which opens a dialog with the zoomed-in page and details (optional, default value <i>false</i>).
gallery.fitToSize	boolean	Specifies whether the pages adjust to the dialog size (optional, default value <i>false</i>).
gallery.action.crop	boolean	Specifies whether cropping is enabled in a dialog (optional, default value <i>true</i>).
gallery.action.delete	boolean	Specifies whether deleting a page is enabled in a dialog (optional, default value <i>true</i>).
gallery.action.redaction	boolean	Specifies whether the adding of redactions is enabled in a dialog (optional, default value <i>true</i>).

gallery.action.rotate	boolean	Specifies whether the changing of page orientation is enabled in a dialog (optional, default value <i>true</i>).
gallery.contextMenu.enabled	boolean	Specifies whether the context menu is enabled for an individual page in the dialog (optional, default value <i>true</i>).
id	string	Unique identifier of an element in an HTML document.
orientation	string	Orientation of a collection of documents. Set of values: - horizontal; - vertical. Default value <i>horizontal</i> (optional).
thumbnail.action.delete	boolean	Specifies whether deleting a page is enabled (optional, default value <i>true</i>).
thumbnail.action.move	boolean	Specifies whether the moving of a page is enabled (optional, default value <i>true</i>).
thumbnail.action.rotate	boolean	Specifies whether the changing of page orientation is enabled (optional, default value <i>true</i>).
thumbnail.contextMenu.enabled	boolean	Specifies whether the context menu is enabled for an individual page (optional, default value <i>true</i>).
thumbnail.contextMenu.onPropertiesSelected	callback	Callback on selecting properties in the context menu (optional). callback: function()
thumbnail.selectedColor	string	Color of the line of the selected page (optional).
thumbnail.textColor	string	Color of the text of the sequential page number (optional).
thumbnail.width	number	Page width (optional).
thumbnail.height	number	Page height (optional, default value 150).
thumbnail.title	boolean	Specifies whether the page title is shown (optional, default value <i>true</i>).
thumbnail.titleColor	string	Color of the page title (optional).

6.2.11 imis.scan.ui.Settings

This object represents the component for setting profiles. This component enables showing, adding, changing, deleting or locking profiles.

The screenshot displays the 'imis.scan.ui.Settings' component. At the top, there's a 'Demo' dropdown and a 'NEW PROFILE' button. Below this, the 'Demo' profile is selected, and a 'SAVE' button is present. The interface is divided into four tabs: 'SOURCE', 'TARGET', 'BARCODE', and 'SEPARATOR'. The 'SAVE TO' section is expanded, showing a list of settings: 'Format' (TIFF), 'Color' (Color (8-Bit RGB)), 'Compression' (ZIP), 'File name' (Document), and 'Folder' (C:\IMiS\Scan). Each setting has a corresponding input field.

Image 52: Component for setting profiles

Constructor

imis.scan.ui.Settings(options)	Creates and displays a new component for showing the settings. Parameters: - options: SettingsOptions
--------------------------------	---

6.2.11.1 SettingsOptions

This object defines the properties that can be set on the component for setting profiles.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).

6.2.12 imis.scan.ui.AlertDialog

This object represents the component for displaying a dialog. This component enables setting the title and text and detecting whether a user has confirmed or canceled a dialog.

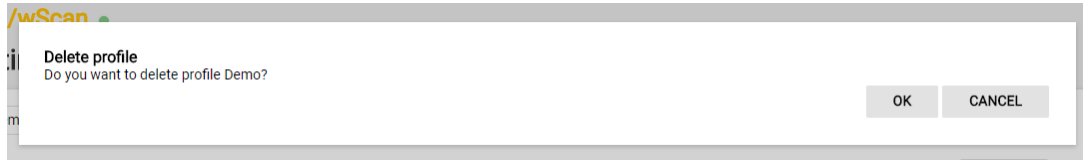


Image 53: Component for displaying a dialog

Constructor

imis.scan.ui.AlertDialog(options)	Creates and displays a new dialog. Parameters: - options: AlertDialogOptions
-----------------------------------	--

6.2.12.1 AlertDialogOptions

This object defines the properties that can be set on the component for showing the dialog.

title	string	Dialog title.
text	string	Dialog content.
ok	callback	Callback on pressing the OK button. callback: function()
cancel	callback	Callback on pressing the cancel button. callback: function()

6.2.13 imis.scan.ui.TargetColor

This object represents the component for showing the currently selected color for saving the job. This component enables setting the color.

Constructor

imis.scan.ui.TargetColor(options)	Creates and displays a component if values exist. Parameters: - options: TargetColorOptions
-----------------------------------	---

6.2.13.1 TargetColorOptions

This object defines the properties that can be set on the component for showing the color for saving.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
color	string	Component color (optional).

6.2.14 imis.scan.ui.TargetFormat

This object represents the component for showing the currently selected format for saving the job. This component enables setting the color.

Constructor

imis.scan.ui.TargetFormat(options)	Creates and displays a component if values exist. Parameters: - options: TargetFormatOptions
------------------------------------	--

6.2.14.1 TargetFormatOptions

This object defines the properties that can be set on the component for showing the format for saving.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
color	string	Component color (optional).

6.2.15 imis.scan.ui.TotalDocuments

This object represents the component for showing the number of documents in the current job. This component enables setting the color.

Constructor

imis.scan.ui.TotalDocuments(options)	Creates and displays a component if values exist. Parameters: - options: TotalDocumentsOptions
--------------------------------------	--

6.2.15.1 TotalDocumentsOptions

This object defines the properties that can be set on the component for showing the number of documents.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
color	string	Component color (optional).

6.2.16 imis.scan.ui.TotalPages

This object represents the component for showing the number of pages in the current job. This component enables setting the color.

Constructor

imis.scan.ui.TotalPages(options)	Creates and displays a component if values exist. Parameters: - options: TotalPagesOptions
----------------------------------	--

6.2.16.1 TotalPagesOptions

This object defines the properties that can be set on the component for showing the number of pages.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).
color	string	Component color (optional).

6.2.17 imis.scan.ui.CursorMode

This object represents the component for selecting the mode of adding or overwriting new pages in the current job.

Constructor

imis.scan.ui.CursorMode(options)	Creates and displays a component. Parameters: - options: CursorModeOptions
----------------------------------	--

6.2.17.1 CursorModeOptions

This object defines the properties that can be set on the component for display.

id	string	Unique identifier of an element in an HTML document.
element	HTMLElement	Element in HTML document (optional).

6.3 Examples of use imis.scan.js

These examples show the use of the “imis.scan.js” library. Developers can easily learn to use the library with the help of these prepared examples. Examples of reading profiles, modifying a profile, starting a job and deleting a job are shown. These examples can be accessed from the start page if they were turned on during installation and are executable.

6.3.1 Reading profiles

An example of reading profiles shows the basic use of the library. If reading is successful, a collection of profiles will appear in the feature with the ‘profiles’ identifier; if an error occurs, it will be visible in the feature with the ‘error’ identifier. When the page has finished loading, a scan object will be created, which will be used to read all the profiles. If they were read successfully, they will appear on a list, if not, an error will appear.

```
<!DOCTYPE html>
<html>
<head>
  <title>imis.scan.js</title>
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="sample.css" />
</head>
<body class="sample">
  <h1>Sample</h1>
  <p>This example demonstrates reading scan profiles.</p>

  <div>Profiles:</div>
  <ol id="profiles"></ol>
  <div id="error"></div>

  <script src="../imis.scan.js"></script>
  <script>
    window.addEventListener('load', function () {
      try {
        // Profiles ordered list
        var ol = document.getElementById("profiles");

        // Create a scan object
        var scan = new imis.scan.Scan(
          apiKey = API_KEY);

        // Read profiles
        scan.getProfiles({
          success: function (profiles) {
            for (var i = 0; i < profiles.length; i++) {
              // Add profile to ordered list
              var li = document.createElement("li");
              li.innerHTML = profiles[i].name;
              ol.appendChild(li);
            }
          },
          error: function (error) {
            // Show error
            document.getElementById("error").innerHTML = error;
          }
        });
      } catch (e) {
```

```

        // Show error
        document.getElementById("error").innerHTML = e;
    }
});
</script>
</body>
</html>

```

6.3.2 Changing a profile

An example of changing the profile name shows the basis for changing profile properties.

A collection of all profiles is loaded to the 'select' feature with the 'profiles' identifier, where you select the current profile to be changed. Clicking on the 'button' feature with the 'btn-update' identifier initiates a profile update and updates the collection of profiles. When the page has finished loading, a scan object will be created, which will be used to read all the profiles.

If they were read successfully, they will appear on a list and the name of the selected profile will be loaded to the input field, if not, an error will appear.

When changing the profile in the drop-down menu, the input field will be updated with the profile name. When pressing the Update button, the new profile name will be saved to the profile and this change will be saved to the server; if saved successfully, the list of profiles will be updated, if not, an error will appear.

```

<!DOCTYPE html>
<html>
<head>
  <title>imis.scan.js</title>
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="sample.css" />
</head>
<body class="sample">
  <h1>Sample</h1>
  <p>This example demonstrates updating profile name.</p>

  <h2>Update profile</h2>
  Select profile <select id="profiles"></select>

  <h3>Edit</h3>
  Profile name <input id="profile-name" type="text" placeholder="Profile name" />
  <button id="btn-update">Update</button>
  <div id="error"></div>

  <script src="../imis.scan.js"></script>
  <script>
    window.addEventListener('load', function () {
      var profilesList = [], // Profiles list
          selectedProfile = null, // Selected profile
          profilesSelectUI = document.getElementById("profiles"), // Profiles drop-down list
          profileNameUI = document.getElementById("profile-name"); // Selected profile name
input text

      try {
        // Create a scan object
        var scan = new imis.scan.Scan(
          apiKey = API_KEY);

```

```

// Load profiles to drop-down list
var load = function () {
    scan.getProfiles({
        success: function (profiles) {
            profilesList = profiles;
            // Clear options
            profilesSelectUI.innerHTML = "";

            for (var i = 0; i < profiles.length; i++) {
                // Add profile option
                const profile = profiles[i];
                var option = document.createElement("option");
                option.value = profile.id;
                option.text = profile.name;
                if (null === selectedProfile)
                    selectedProfile = profile;
                option.selected = profile.equals(selectedProfile)
                profilesSelectUI.add(option);
            }

            // Update selected profile name text input
            if (null !== selectedProfile)
                profileNameUI.value = selectedProfile.name;
        },
        error: function (error) {
            // Show error
            document.getElementById("error").innerHTML = error;
        }
    });
};

// Call load
load();

// Selected profile change listener
profilesSelectUI.addEventListener("change", function () {
    // Update selected profile
    selectedProfile = null;
    var selectedValue = profilesSelectUI.options[profilesSelectUI.selectedIndex].value;
    for (var i = 0; i < profilesList.length; i++) {
        if (profilesList[i].id === selectedValue) {
            selectedProfile = profilesList[i];
            break;
        }
    }

    // Update selected profile name text input
    if (null !== selectedProfile)
        profileNameUI.value = selectedProfile.name;
});

// Update button click listener
document.getElementById("btn-update").addEventListener("click", function () {
    if (null == selectedProfile || null == profileNameUI.value || "" ==
profileNameUI.value ||
        selectedProfile.name == profileNameUI.value)
        return;

    // Update profile name
    selectedProfile.name = profileNameUI.value;

    // Save profile
    scan.updateProfile({
        profile: selectedProfile,
        success: function (profile) {
            // Load profiles
            load();
        },
        error: function (error) {
            // Show error
            document.getElementById("error").innerHTML = error;
        }
    });
});

```



```

    });
  });
} catch (e) {
  // Show error
  document.getElementById("error").innerHTML = e;
}
});
</script>
</body>
</html>

```

6.3.3 Starting a job

An example of starting a job; shows job management and displays the scanning result.

A collection of all profiles is loaded to the 'select' feature with the 'profiles' identifier, where you select the current profile to create and start a job. Clicking on the 'button' feature with the 'btn-start' identifier initiates the creation and start of a job.

Status is shown in the feature with the 'job-progress' identifier. The entire job can be downloaded by clicking on the feature with the 'job-download' identifier, after the job has been finished.

```

<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <title>imis.scan.js</title>
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="sample.css" />
</head>
<body class="sample">
  <h1>Sample</h1>
  <p>This example demonstrates starting job and displaying documents and pages.</p>

  <h2>Start Job</h2>
  <select id="profiles"></select>
  <button id="btn-start">Start</button>
  <br /><br />

  <div>Status: <span id="job-progress">None</span></div>
  <div id="error"></div>
  <a id="job-download" href="#">Download</a>
  <br /><br />

  <div><b>Documents</b></div>
  <div id="job">None</div>

  <script src="../imis.scan.js"></script>
  <script>
    window.addEventListener('load', function () {
      var profilesList = [], // Profiles list
          profilesSelectUI = document.getElementById("profiles"), // Profiles drop-down list
          jobUI = document.getElementById("job"); // Job documents

      try {
        // Create a scan object
        var scan = new imis.scan.Scan(
          apiKey = API_KEY);

        // Get profiles

```

```

scan.getProfiles({
  success: function (profiles) {
    profilesList = profiles;
    // Clear options
    profilesSelectUI.innerHTML = "";

    for (var i = 0; i < profiles.length; i++) {
      // Add profile option
      const profile = profiles[i];
      var option = document.createElement("option");
      option.value = profile.id;
      option.text = profile.name;
      profilesSelectUI.add(option);
    }
  },
  error: function (error) {
    console.error("getProfiles: " + error);
  }
});

// Start job button click listener
document.getElementById("btn-start").addEventListener("click", function () {
  // Clear download link
  document.getElementById("job-download").setAttribute("href", "#");

  // Find selected profile
  var selectedValue = profilesSelectUI.options[profilesSelectUI.selectedIndex].value;
  var profile = null;
  for (var i = 0; i < profilesList.length; i++) {
    if (profilesList[i].id === selectedValue) {
      profile = profilesList[i];
      break;
    }
  }
  if (null == profile)
    return;

  // Create job
  scan.createJob({
    profile: profile.id,
    success: function (job) { // Job successfully created

      // Clear job documents
      jobUI.innerHTML = "";

      // Start job
      job.start({
        success: function () { // Job successfully started
          // Update job progress
          document.getElementById("job-progress").innerHTML =
            imis.scan.JobStatus.toString[job.status];

          // Job changed callback
          job.onChange(function (job) {
            // Update job progress
            document.getElementById("job-progress").innerHTML =
              imis.scan.JobStatus.toString[job.status];
            if (imis.scan.JobStatus.COMPLETED === job.status)
              document.getElementById("job-download").setAttribute("href",
                job.download);
          });

          // Document created callback
          job.onCreateDocument(function (newDocument) {
            const documentElement = document.createElement("div");
            documentElement.style.marginBottom = "55px";

            // Document name
            const documentName = document.createElement("div");
            documentName.style.fontWeight = "bold";
            documentName.style.fontSize = "16px";

```

```

        documentName.innerHTML = newDocument.name + " [" + newDocument.pageCount +
    "]);

    documentElement.appendChild(documentName);
    jobUI.appendChild(documentElement);

    // On create page callback
    newDocument.onCreatePage(function (page) {
        const pageElement = document.createElement("div");
        pageElement.style.display = "inline-block";

        // Page image
        const img = document.createElement("img");
        img.setAttribute("src", page.getThumbnailUri({ height: 150 }));
        pageElement.appendChild(img);

        // Page index
        const pageIndex = document.createElement("div");
        pageIndex.innerHTML = "Page " + page.index;
        pageElement.appendChild(pageIndex);

        documentElement.appendChild(pageElement);
    });

    // Document change callback
    newDocument.onChange(function (changedDocument) {
        documentName.innerHTML = changedDocument.name + " [" +
changedDocument.pageCount + "]);
    });
},
error: function (error) {
    // Show error
    document.getElementById("error").innerHTML = error;
}
});
},
error: function (error) {
    // Show error
    document.getElementById("error").innerHTML = error;
}
});
} catch (e) {
    // Show error
    document.getElementById("error").innerHTML = e;
}
});
</script>
</body>
</html>

```

6.3.4 Deleting a profile

An example of deleting a profile shows the basic use of the library. If read successfully, the collection of profiles will appear in the drop-down menu, where you can select the profile for deletion. The profile will be deleted by clicking on the delete button and confirming the deletion dialog. This example deletes a profile saved on the server.

```

<!DOCTYPE html>
<html>
<head>
    <title>imis.scan.js</title>
    <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
    <link rel="stylesheet" href="sample.css" />

```

```

</head>
<body class="sample">
  <h1>Sample</h1>
  <p>This example demonstrates deleting profile.</p>

  <h2>Delete profile</h2>
  <select id="profiles"></select>
  <button id="btn-delete">Delete</button>
  <div id="error"></div>

  <script src="../imis.scan.js"></script>
  <script>
window.addEventListener('load', function () {
  var profilesList = [], // Profiles list
      profilesSelectUI = document.getElementById("profiles"); // Profiles drop-down list

  try {
    // Create a scan object
    var scan = new imis.scan.Scan(
      apiKey = API_KEY);

    // Load profiles to drop-down list
    var load = function () {
      scan.getProfiles({
        success: function (profiles) {
          profilesList = profiles;
          // Clear options
          profilesSelectUI.innerHTML = "";

          for (var i = 0; i < profiles.length; i++) {
            // Add profile option
            const profile = profiles[i];
            var option = document.createElement("option");
            option.value = profile.id;
            option.text = profile.name;
            profilesSelectUI.add(option);
          }
        },
        error: function (error) {
          // Show error
          document.getElementById("error").innerHTML = error;
        }
      });
    }
    // Call load
    load();

    document.getElementById("btn-delete").addEventListener("click", function () {
      // Find selected profile
      var selectedValue = profilesSelectUI.options[profilesSelectUI.selectedIndex].value;
      var profile = null;
      for (var i = 0; i < profilesList.length; i++) {
        if (profilesList[i].id === selectedValue) {
          profile = profilesList[i];
          break;
        }
      }
      if (null == profile)
        return;

      // Show confirmation dialog
      if (confirm("Do you want to delete profile '" + profile.name + "'?")) {
        // Delete profile
        scan.deleteProfile({
          profile: profile,
          success: function () {
            // Load profiles
            load();
          },
          error: function (error) {
            // Show error

```

```
        document.getElementById("error").innerHTML = error;
    }
    });
}
});
} catch (e) {
    // Show error
    document.getElementById("error").innerHTML = e;
}
});
</script>
</body>
</html>
```

6.4 Examples of use imis.scan.ui.js

These examples show the use of the “imis.scan.ui.js” library. Developers can easily learn to use the library with the help of these prepared examples. It shows examples of classic, modern, classic dark and gallery sample. These examples use different components with a specific position on the page. The developers can create a customized page layout from individual components.

These examples can be accessed from the start page if they were turned on during installation.

6.4.1 Classic sample

Classic sample is the most commonly used user interface example. Application developers choose it when they want to preserve the traditional appearance of the user interface. The thumbnails of document pages are located on the left side of the user interface. They are sorted by available space and thumbnail size (portrait, landscape). Document pages are shown in the center.

The user navigates between pages with the slider. Page details are sorted on the right and can be easily closed or reopened by selecting the menu on an individual page.

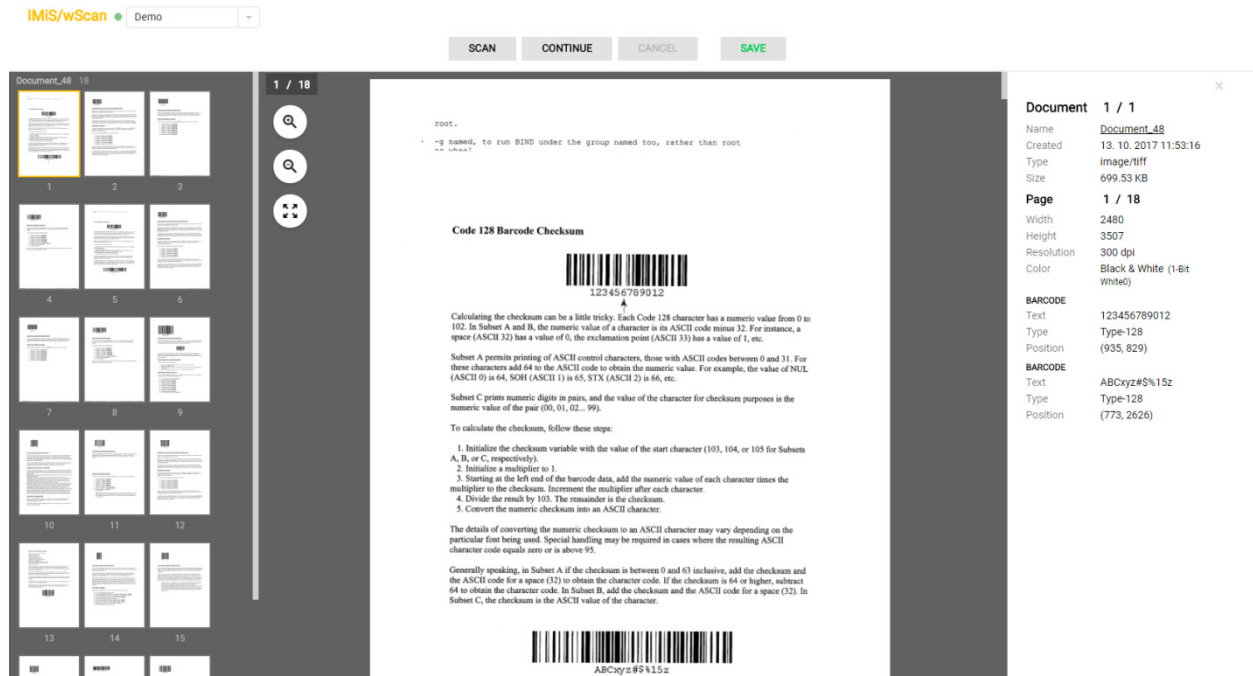


Image 54: Example of using the classic sample of a user interface display

In the classic sample, the following components are used:

- `imis.scan.ui.Thumbnails`
- `imis.scan.ui.ImageDetails`
- `imis.scan.ui.Status`
- `imis.scan.ui.Progress`
- `imis.scan.ui.Button`
- `imis.scan.ui.ProfilesButton`

6.4.1.1 classic.html

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <title>IMiS/wScan Classic</title>
  <link rel="shortcut icon" type="image/png" href="img/favicon.png" />
  <link rel="stylesheet" href="imis.scan.ui.css" />
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="style/classic.css" />
</head>
```

```

<body>
  <div class="imis-scan-app">
    <nav id="nav-top">
      <div id="title" class="title"><a href="/">IMiS/wScan</a><div id="scan-
status"></div></div>
      <div id="imis-profile"></div>
    </nav>
    <nav id="nav" style="width: 500px; margin:auto;">
      <div id="scan-btn">Scan</div>
      <div id="continue-btn">Continue</div>
      <div id="cancel-btn">Cancel</div>
      <div id="download-btn">Save</div>
    </nav>
    <div id="imis-progress"></div>
    <div class="main" id="main">
      <div id="thumbnails" class="main-left">Thumbnails</div>
      <div id="images" class="main-center"></div>
      <div id="image-details" class="main-right">Details</div>
    </div>
  </div>
  <script src="imis.scan.js"></script>
  <script src="imis.scan.ui.js"></script>
</script>
window.addEventListener('load', function () {

  // Set scan version to title attribute
  document.getElementById("title").setAttribute("title", imis.scan.ui.version);

  // Create image details object
  const imageDetailsUI = new imis.scan.ui.ImageDetails({
    id: "image-details",
    onClose: function () {
      // Hide details
      imageDetailsUI.hide();
      // Resize images
      document.getElementById("images").setAttribute("style", "flex: 1");
    }
  });
  try {
    // Create a scan object
    var scan = new imis.scan.ui.Scan({
      //url: "http://example.com",
      apiKey = API_KEY,
      thumbnails: new imis.scan.ui.Thumbnails({
        id: "thumbnails",
        orientation: "vertical",
        thumbnail: {
          width: 80, // Thumbnail width
          title: true
        },
        contextMenu: {
          enabled: true,
          properties: true,
          onPropertiesSelected: function () {
            // Show details
            imageDetailsUI.show();
            // Reset images style
            document.getElementById("images").setAttribute("style", "");
          }
        }
      })
    });
  }
});

```

```

    imageDetails: imageDetailsUI,
    status: new imis.scan.ui.Status({ id: "scan-status" }),
    progress: new imis.scan.ui.Progress({ id: "imis-progress" }),
    images: new imis.scan.ui.ImageScroll({
      id: "images",
      controls: true,
      pageIndex: true,
      contextMenu: {
        onPropertiesSelected: function () {
          // Show details
          imageDetailsUI.show();
          // Reset images style
          document.getElementById("images").setAttribute("style", "");
        }
      }
    }),
    buttons: {
      scan: new imis.scan.ui.Button({ id: "scan-btn" }),
      profiles: new imis.scan.ui.ProfilesButton({ id: "imis-profile" }),
      download: new imis.scan.ui.Button({ id: "download-btn" }),
      cancel: new imis.scan.ui.Button({ id: "cancel-btn" }),
      continue: new imis.scan.ui.Button({ id: "continue-btn" })
    },
    onError: function (message) {
      // Show dialog with error message
      new imis.scan.ui.AlertDialog({ title: "Error", text: message });
    }
  });
  scan.show();
  refreshLayoutHeight();
} catch (e) {
  console.error(e);
}
});

// Resizes height of main element
function refreshLayoutHeight() {
  var titleHeight = document.getElementById("nav-top").offsetHeight;
  var navHeight = document.getElementById("nav").offsetHeight +
document.getElementById("imis-progress").offsetHeight;
  var mainHeight = (window.innerHeight - titleHeight - navHeight);
  document.getElementById("main").style.height = mainHeight + "px";
}
// Resize event listener
window.addEventListener('resize', function (event) {
  refreshLayoutHeight();
});
</script>
</body>
</html>

```


6.4.1.2 classic.css

```
body {
  margin: 0;
  background: #fff;
  height: 100%;
  width: 100%;
  font-family: 'Roboto', sans-serif;
}

a {
  text-decoration: none;
  color: inherit;
}

.title {
  background: #fff;
  color: #FFC107;
  font-size: 20px;
  padding-top: 15px;
  font-weight: bold;
}

nav {
  margin: 0;
  position: relative;
  padding-bottom: 10px;
  padding-left: 25px;
  padding-right: 25px;
  background: #fff;
}

nav > div {
  display: inline-block;
  margin-right: 2px;
}

.main {
  background: #EEEEEE;
  display: flex;
  height: 500px;
  position: relative;
  box-shadow: 0 0 2px 2px rgba(0,0,0,0.075);
  z-index: 1000;
}

.main-left,
.main-right {
  flex: 0.25;
}

.main-center {
  flex: 0.50;
}

#download-btn {
  margin-left: 25px;
}
```

6.4.2 Modern sample

Modern sample is suitable for application developers that keep up with the more recent trends in user interface appearance. Document pages take up most of the user interface. By default, page details are located on the right. A user can easily close or reopen them by selecting the menu on an individual page. For greater transparency the thumbnails of document pages are sorted at the bottom, which is especially suitable for larger volumes of scanned documents.

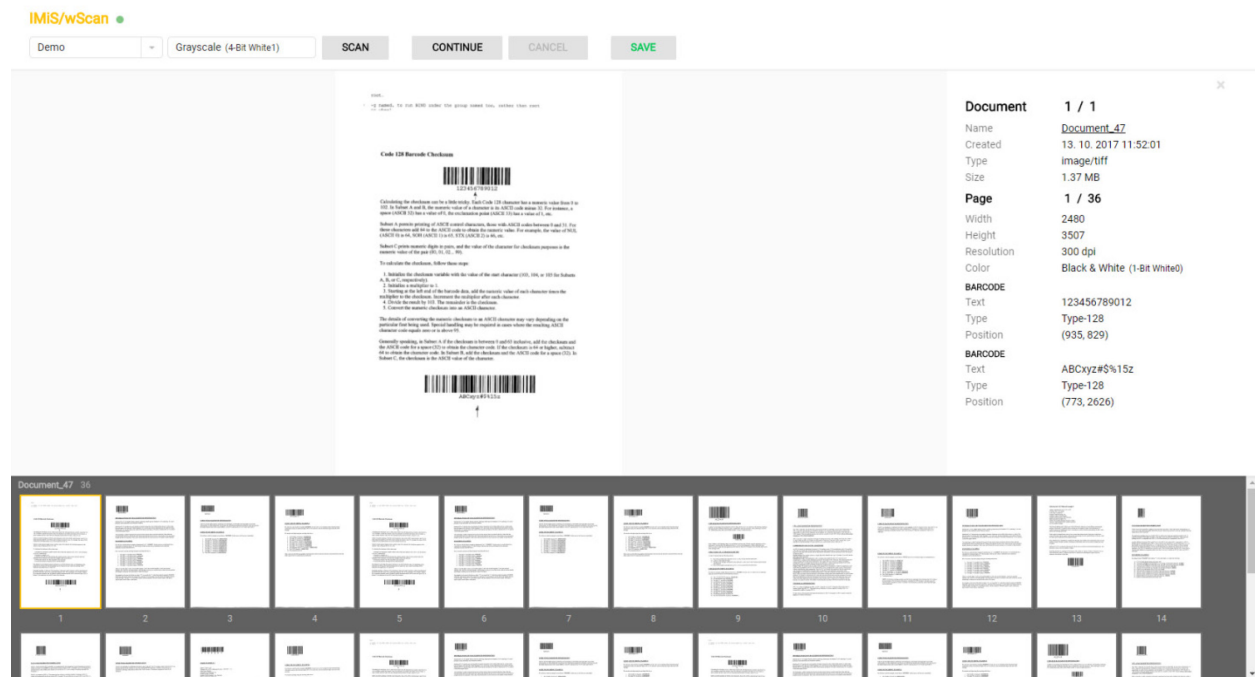


Image 55: Example of using the modern sample of a user interface display

In the modern sample, the following components are used:

- `imis.scan.ui.Thumbnails`
- `imis.scan.ui.ImageView`
- `imis.scan.ui.ImageDetails`
- `imis.scan.ui.Status`
- `imis.scan.ui.Progress`
- `imis.scan.ui.Button`
- `imis.scan.ui.ProfilesButton`
- `imis.scan.ui.ColorDropDownButton`

6.4.2.1 modern.html

```

<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <title>IMiS/wScan Modern</title>
  <link rel="shortcut icon" type="image/png" href="img/favicon.png" />
  <link rel="stylesheet" href="imis.scan.ui.css" />
  <link href="https://fonts.googleapis.com/css?family=Roboto" rel="stylesheet">
  <link rel="stylesheet" href="style/modern.css" />
</head>
<body>
  <nav id="nav-top">
    <div id="title" class="title"><a href="/">IMiS/wScan</a><div id="scan-status"></div></div>
  </nav>
  <nav id="nav">
    <div id="imis-profile"></div>
    <div id="imis-profile-color"></div>
    <div id="scan-btn"></div>
    <div id="continue-btn" style="margin-left:25px;"></div>
    <div id="cancel-btn"></div>
    <div id="download-btn"></div>
  </nav>
  <div id="imis-progress"></div>
  <div class="main" id="main">
    <div id="image-view" class="main-center"></div>
    <div id="image-details" class="main-right"></div>
  </div>
  <div id="thumbnails"></div>
  <script src="imis.scan.js"></script>
  <script src="imis.scan.ui.js"></script>
<script>
  window.addEventListener('load', function () {

    //imis.scan.ui.Resource.lang = "si";

    document.getElementById("title").setAttribute("title", imis.scan.ui.version);

    try {
      var scan = new imis.scan.ui.Scan({
        //url: "http://beno:5000",
        //url: "https://beno:5443",
        //url: "http://localhost:5000",
        //notifications: false,
        //useLocalStorage: false,
        apiKey = API_KEY,
        thumbnails: new imis.scan.ui.Thumbnails({
          id: "thumbnails",
          //backgroundColor: "#f5f5f5",
          //color: "#0f0",
          //focusNewPage: false,
          //orientation: "horizontal",
          thumbnail: {
            //width: 25,
            //height: 250,
            //title: false
            //titleColor: "#00f"
          },
        },
        contextMenu: {
          enabled: true,
          onPropertiesSelected: function() {
            document.getElementById("image-details").style.display = null;
            document.getElementById("image-view").style.width = null;
          }
        }
      }),
      imageView: new imis.scan.ui.ImageView({
        id: "image-view",
        onPropertiesSelected: function () {
          document.getElementById("image-details").style.display = null;

```

```

        document.getElementById("image-view").style.width = null;
    }
    }),
    imageDetails: new imis.scan.ui.ImageDetails({
        id: "image-details",
        //background: "#000",
        //color: "#0f0",
        onClose: function () {
            document.getElementById("image-details").style.display = "none";
            document.getElementById("image-view").style.width = "100%";
        }
    }),
    status: new imis.scan.ui.Status({ id: "scan-status" }),
    progress: new imis.scan.ui.Progress({ id: "imis-progress" }),
    buttons: {
        scan: new imis.scan.ui.Button({ id: "scan-btn" }),
        profiles: new imis.scan.ui.ProfilesButton({ id: "imis-profile" }),
        download: new imis.scan.ui.Button({ id: "download-btn" }),
        cancel: new imis.scan.ui.Button({ id: "cancel-btn" }),
        continue: new imis.scan.ui.Button({ id: "continue-btn" }),
        color: new imis.scan.ui.ColorDropdownButton({ id: "imis-profile-color" })
    },
    onError: function (message) {
        new imis.scan.ui.AlertDialog({ title: "Error", text: message });
    }
    });
    scan.show();
    refreshLayoutHeight();
} catch (e) {
    console.error(e);
    // Display error dialog
    new imis.scan.ui.AlertDialog({title: "Error", text: e});
}
});

// Resize main and thumbnails height
function refreshLayoutHeight() {
    var navHeight = document.getElementById("nav-top").offsetHeight +
        document.getElementById("nav").offsetHeight + document.getElementById("imis-
progress").offsetHeight;
    var thumbnailsHeight = window.innerHeight * 0.30; // 30% of window size
    // Main height
    document.getElementById("main").style.height = (window.innerHeight - navHeight -
thumbnailsHeight) + "px";
    // Thumbnails height
    document.getElementById("thumbnails").style.height = thumbnailsHeight + "px";
}

// Window resize event
window.addEventListener('resize', function (event) {
    console.log("resize");
    refreshLayoutHeight();
});
</script>
</body>
</html>

```

6.4.2.2 modern.css

```
body {
  margin: 0;
  background: #fff;
  height: 100%;
  width: 100%;
  font-family: 'Roboto', sans-serif;
}

a {
  text-decoration: none;
  color: inherit;
}

.title {
  background: #fff;
  color: #FFC107;
  font-size: 20px;
  padding-top: 15px;
  font-weight: bold;
}

nav {
  margin: 0;
  position: relative;
  padding-bottom: 10px;
  padding-left: 25px;
  padding-right: 25px;
  background: #fff;
}

nav > div {
  display: inline-block;
  margin-right: 2px;
}

.main {
  background: #EEEEEE;
  overflow: hidden;
  height: 500px;
  position: relative;
  box-shadow: 0 0 2px 2px rgba(0,0,0,0.075);
  z-index: 1000;
}

.main-left {
}

.main-center {
  float: left;
  width: 75%;
}

.main-right {
  float: left;
  width: 25%;
}

#download-btn {
  margin-left: 25px;
}

.imis-status {
  display: inline-block;
  margin-left: 10px;
}
```

6.4.3 Classic dark sample

Classic dark sample follows the latest trends of important document viewers. Document pages are shown in the center. The user navigates between pages with the slider. Documents are not visually separated from one another. It is clear from the page details to which documents the pages belong. By default, page details are not displayed. The user opens them by selecting the menu on an individual page. They are shown on the right side of the user interface. Thumbnails of document pages are not available.

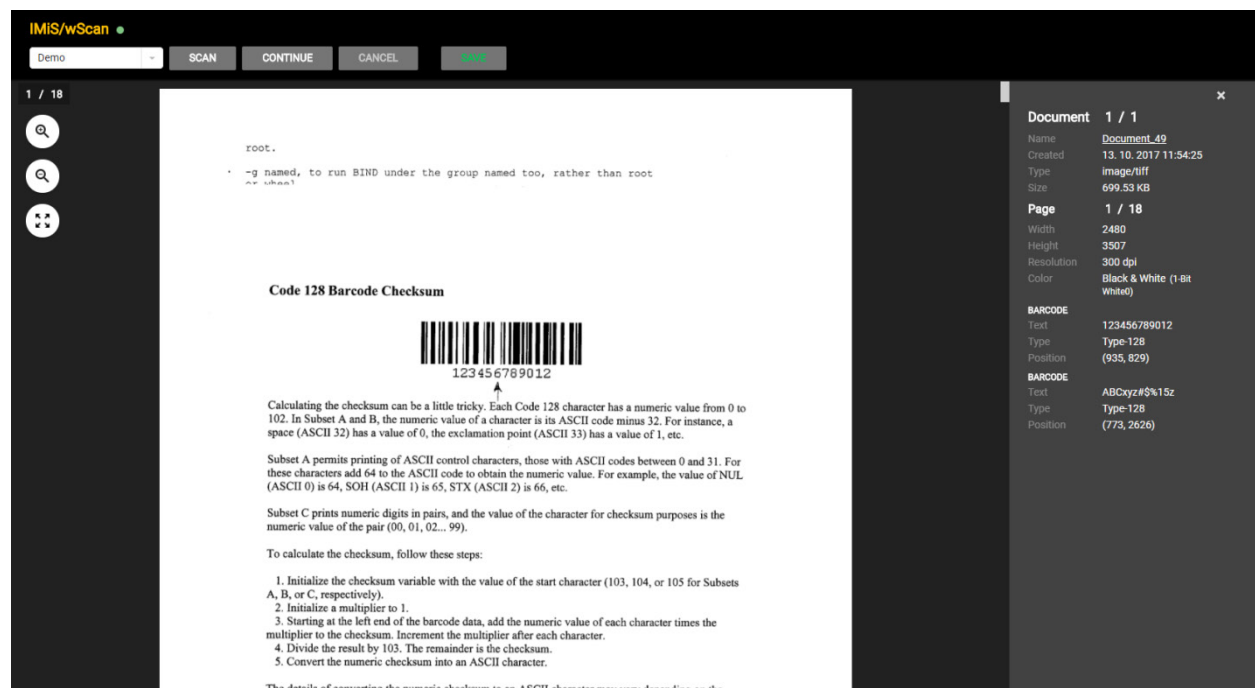


Image 56: Example of using the classic (dark) sample of a user interface display

In the classic (dark) sample, the following components are used:

- imis.scan.ui.ImageScroll
- imis.scan.ui.ImageDetails
- imis.scan.ui.Status
- imis.scan.ui.Progress
- imis.scan.ui.Button
- imis.scan.ui.ProfilesButton

6.4.3.1 classic_dark.html

```

<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <title>IMiS/wScan Classic (dark)</title>
  <link rel="shortcut icon" type="image/png" href="img/favicon.png" />
  <link rel="stylesheet" href="imis.scan.ui.css" />
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="style/classic.dark.css" />
</head>
<body>
  <nav id="nav-top">
    <div id="title" class="title"><a href="/">IMiS/wScan</a><div id="scan-status"></div></div>
  </nav>
  <nav id="nav">
    <div id="imis-profile"></div>
    <div id="scan-btn">Scan</div>
    <div id="continue-btn">Continue</div>
    <div id="cancel-btn">Cancel</div>
    <div id="download-btn">Save</div>
  </nav>
  <div id="imis-progress"></div>
  <div class="main" id="main">
    <div id="images" class="main-center"></div>
    <div id="image-details" class="main-right">Details</div>
  </div>
  <script src="imis.scan.js"></script>
  <script src="imis.scan.ui.js"></script>
</script>
  window.addEventListener('load', function () {

    // Set scan version to title attribute
    document.getElementById("title").setAttribute("title", imis.scan.ui.version);

    // Create image details object
    var imageDetailsUI = new imis.scan.ui.ImageDetails({
      id: "image-details",
      closed: true,
      darkMode: true,
      onClose: function () {
        // Hide details
        imageDetailsUI.hide();
        // Resize images
        document.getElementById("images").style.flex = 1;
      }
    });

    // Resize images
    document.getElementById("images").style.flex = 1;
  });

```

```

try {
  var scan = new imis.scan.ui.Scan({
    //url: "http://example.com",
    apiKey = API_KEY,
    imageDetails: imageDetailsUI,
    status: new imis.scan.ui.Status({ id: "scan-status" }),
    progress: new imis.scan.ui.Progress({ id: "imis-progress", darkMode: true }),
    images: new imis.scan.ui.ImageScroll({
      id: "images",
      //background: "#f5f5f5",
      darkMode: true,
      focusNewPage: false,
      contextMenu: {
        enabled: true,
        onPropertiesSelected: function () {
          imageDetailsUI.show();
          document.getElementById("images").style.flex = undefined;
        }
      }
    })
  }),
  buttons: {
    scan: new imis.scan.ui.Button({ id: "scan-btn", darkMode: true }),
    profiles: new imis.scan.ui.ProfilesButton({ id: "imis-profile" }),
    download: new imis.scan.ui.Button({ id: "download-btn", darkMode: true }),
    cancel: new imis.scan.ui.Button({ id: "cancel-btn", darkMode: true }),
    continue: new imis.scan.ui.Button({ id: "continue-btn", darkMode: true })
  },
  onError: function (message) {
    // Show dialog with error message
    new imis.scan.ui.AlertDialog({ title: "Error", text: message });
  }
});
scan.show();
refreshLayoutHeight();
} catch (e) {
  console.error(e);
}
});

// Resizes height of main element
function refreshLayoutHeight() {
  var titleHeight = document.getElementById("nav-top").offsetHeight;
  var navHeight = document.getElementById("nav").offsetHeight +
document.getElementById("imis-progress").offsetHeight;
  var mainHeight = (window.innerHeight - titleHeight - navHeight);
  document.getElementById("main").style.height = mainHeight + "px";
}

// Resize event listener
window.addEventListener('resize', function (event) {
  console.log("resize");
  refreshLayoutHeight();
});
</script>
</body>
</html>

```


6.4.3.2 classic.dark.css

```
body {
  margin: 0;
  background: #fff;
  height: 100%;
  width: 100%;
  font-family: 'Roboto', sans-serif;
}
a {
  text-decoration: none;
  color: inherit;
}

.title {
  color: #FFC107;
  font-size: 20px;
  padding-top: 15px;
  font-weight: bold;
}

nav {
  margin: 0;
  position: relative;
  padding-bottom: 10px;
  padding-left: 25px;
  padding-right: 25px;
  background: #000;
}

nav > div {
  display: inline-block;
  margin-right: 2px;
}

.main {
  background: #EEEEEE;
  display: flex;
  height: 500px;
  position: relative;
  box-shadow: 0 0 2px 2px rgba(255,255,255,0.1);
  z-index: 1000;
}

.main-center {
  flex: 0.75;
}

.main-right {
  flex: 0.25;
}

#download-btn {
  margin-left: 25px;
}
```

6.4.4 Gallery sample

Gallery sample is suitable for displaying larger volumes of scanned documents or for batch scanning. Thumbnails of document pages are bigger and more visible than in the other samples. They are displayed in rows across the entire user interface. Documents are separated based on the number of pages specified in the settings. Page details appear to the user by double-clicking on an individual page.

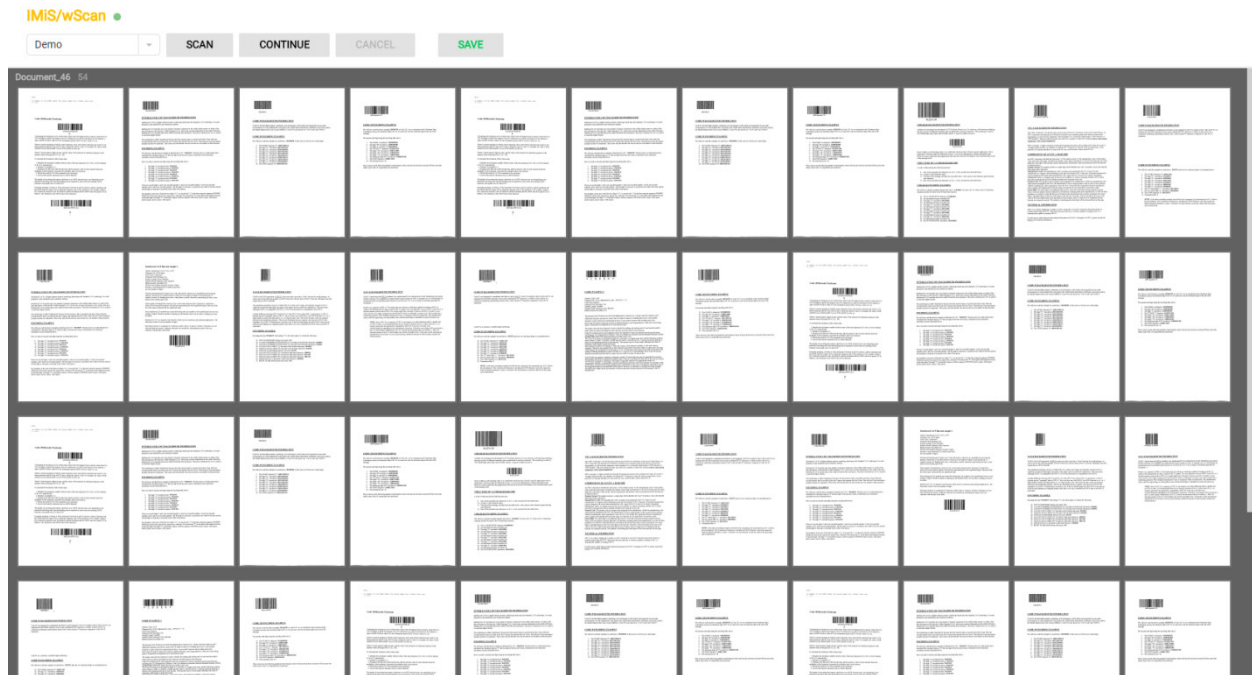


Image 57: Example of using the gallery sample of a user interface display

In the gallery sample, the following components are used:

- imis.scan.ui.Thumbnails
- imis.scan.ui.Status
- imis.scan.ui.Progress
- imis.scan.ui.Button
- imis.scan.ui.ProfilesButton

6.4.4.1 gallery.html

```

<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8" />
  <title>IMiS/wScan Gallery</title>
  <link rel="shortcut icon" type="image/png" href="img/favicon.png" />
  <link rel="stylesheet" href="imis.scan.ui.css" />
  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto" />
  <link rel="stylesheet" href="style/gallery.css" />
</head>
<body>
  <nav id="nav-top">
    <div id="title" class="title"><a href="/">IMiS/wScan</a><div id="scan-status"></div></div>
  </nav>
  <nav id="nav">
    <div id="imis-profile"></div>
    <div id="scan-btn">Scan</div>
    <div id="continue-btn">Continue</div>
    <div id="cancel-btn">Cancel</div>
    <div id="download-btn">Save</div>
  </nav>
  <div id="imis-progress"></div>
  <div class="main" id="main">
    <div id="thumbnails">Thumbnails</div>
  </div>
  <script src="imis.scan.js"></script>
  <script src="imis.scan.ui.js"></script>
</script>
  window.addEventListener('load', function () {

    // Set scan version to title attribute
    document.getElementById("title").setAttribute("title", imis.scan.ui.version);

    try {
      const scan = new imis.scan.ui.Scan({
        //url: "http://example.com",
        apiKey = API_KEY,
        thumbnails: new imis.scan.ui.Thumbnails({
          id: "thumbnails",
          //darkMode: false,
          orientation: "horizontal",
          thumbnail: {
            height: 200, // thumbnail height
            title: false
          },
          gallery: true,
          contextMenu: {
            enabled: false
          }
        }),
        status: new imis.scan.ui.Status({ id: "scan-status" }),
        progress: new imis.scan.ui.Progress({ id: "imis-progress" }),
        buttons: {
          scan: new imis.scan.ui.Button({ id: "scan-btn" }),
          profiles: new imis.scan.ui.ProfilesButton({ id: "imis-profile" }),
          download: new imis.scan.ui.Button({ id: "download-btn" }),
          cancel: new imis.scan.ui.Button({ id: "cancel-btn" }),
          continue: new imis.scan.ui.Button({ id: "continue-btn" })
        },
        onError: function (message) {
          // Show dialog with error message
          new imis.scan.ui.AlertDialog({ title: "Error", text: message });
        }
      });
      scan.show();
      refreshLayoutHeight();
    } catch (e) {

```

```

        console.error(e);
        // Show dialog with error message
        new imis.scan.ui.AlertDialog({ title: "Error", text: e });
    }
});

// Resizes height of main element
function refreshLayoutHeight() {
    var titleHeight = document.getElementById("nav-top").offsetHeight;
    var navHeight = document.getElementById("nav").offsetHeight +
document.getElementById("imis-progress").offsetHeight;
    document.getElementById("main").style.height = (window.innerHeight - titleHeight -
navHeight) + "px";
}

// Resize event listener
window.addEventListener('resize', function (event) {
    refreshLayoutHeight();
});
</script>
</body>
</html>

```

6.4.4.2 gallery.css

```

body {
    margin: 0;
    background: #fff;
    height: 100%;
    width: 100%;
    font-family: 'Roboto', sans-serif;
}

a {
    text-decoration: none;
    color: inherit;
}

.title {
    background: #fff;
    color: #FFC107;
    font-size: 20px;
    padding-top: 15px;
    font-weight: bold;
}

nav {
    margin: 0;
    position: relative;
    padding-bottom: 10px;
    padding-left: 25px;
    padding-right: 25px;
    background: #fff;
}

nav > div {
    display: inline-block;
    margin-right: 2px;
}

.main {
    position: relative;
    z-index: 1000;
}

#download-btn {
    margin-left: 25px;
}

```

7 TROUBLESHOOTING

7.1 Problems using IMiS®/wScan

Below, issues frequently encountered when using IMiS®/wScan application are described and instructions for resolving them are given.

7.1.1 Error “Forbidden”

Cause of problem

The web application has not forwarded the correct security key via the “imis.scan.js” library to the IMiS®/Capture Service.

Solution for problem

The user with administrator authorization must verify that the security key is the same both in the IMiS®/Capture Service and the web application. If a new security key was entered or created in the IMiS®/Capture Service, a user with administrator authorization must restart the service. After the restart, the browser’s web page for displaying scanned documents must be refreshed.

7.1.2 Error “Error in establishing connection”

Cause of problem

The web application accesses the IMiS®/Capture Service via a domain that is not allowed in the IMiS®/Capture Service.

Solution for problem

A user with administrator authorization must enter the allowed domains from which the web application can access the IMiS®/Capture Service. After entering them in the IMiS®/Capture Service, the service must be restarted. After the restart, the browser’s web page for displaying scanned documents must be refreshed.

7.1.3 Error “Socket connection error”

Cause of problem

The web service IMiS®/Capture Service has not been started or the client does not have access rights for the address at which IMiS®/Capture Service is located.

Solution for problem

The administrator has to restart IMiS®/Capture Service. After restarting the service refresh the web page in the browser to show the scanned documents.

7.1.4 Error “Error in establishing connection” or “Socket connection error”

Cause of problem

MS Edge is a UWP application that runs in isolation from the local computer and which does not have access to the localhost if called from another domain.

Solution for problem

The solution is running the command in the command bar as a user with administrator authorization:

CheckNetIsolation LoopbackExempt -a -n=Microsoft.Windows.Spartan_cw5n1h2txyewy

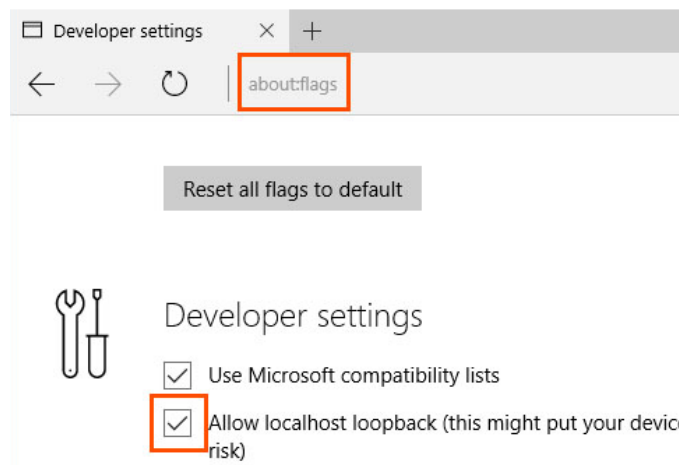


Image 58: Shows the entry in the MS Edge title bar

If executing the above command still does not enable access, the user with administrator authorization can run the following command:

```
CheckNetIsolation LoopbackExempt -a -p=S-1-15-2-3624051433-2125758914-1423191267-1740899205-1073925389-3782572162-737981194
```

Detailed information on the problem and how to resolve it is available at these links:

<https://blogs.msdn.microsoft.com/msgulfccommunity/2015/07/01/how-to-debug-localhost-on-microsoft-edge/>

<http://solidlystated.com/software/edge-windows-10-cant-reach-localhost-sites/>

7.1.5 Error “No scanner is connected”

Cause of problem

When starting IMiS®/Capture Service, the service could not locate or load a driver for the connected scanner.

Solution for problem

The administrator has to check whether the scanner is turned on and connected to the computer. Next, check if the IMiS®/Scan application is running. If it is running, you have to stop it and restart IMiS®/Capture Service. For more information see chapter [Startup and closing](#).

7.1.6 Error “Scanner: ‘{scanner name}’ cannot be loaded”.

Cause of problem

Prior to starting the scan IMiS®/Capture Service was unable to load a driver for the selected scanner.

Solution for problem

The administrator has to check whether the scanner is turned on and connected to the computer. Next, check if the IMiS®/Scan application is running. If it is running, you have to stop it and try scanning in the IMiS®/wScan application. If scanning is still not working, you have to restart IMiS®/Capture Service. For more information see chapter [Startup and closing](#).

7.1.7 Scanning cannot be continued after successful scanning

Cause of problem

During scanning the data connection between the scanner and computer was terminated.

Solution for problem

The administrator has to turn the scanner off and disconnect it from the workstation. Then turn the scanner back on and connect it to the workstation. Start the scanning procedure again in the IMiS®/wScan application. If scanning is still not working, open the Task Manager program. Find the process named "fjictwsw.exe" among all the processes and end it by clicking on the button "End process".

7.1.8 During scanning empty pages are not being removed

Cause of problem

In the profile settings the scanner settings for removing empty pages have not been configured.

Solution for problem

After configuring the profile in the IMiS®/wScan application, the administrator starts the IMiS®/wScan administration module and follows the procedures described in chapter [Additional settings](#).

7.1.9 Error "Your browser does not support Javascript ES6. Update browser."

Cause of problem

The "imis.scan.js" library does not work if the browser does not support the ECMAScript6 JavaScript standard.

Solution for problem

The existing browser has to be updated to the latest version.

Warning: The latest version of the Internet Explorer browser does not support this standard.

7.1.10 Error “Your browser does not support WebSockets. Update browser.”

Cause of problem

The “imis.scan.js” library does not work if the browser does not support WebSocket technology.

Solution for problem

The existing browser has to be updated to the latest version.

Warning: The latest version of the Internet Explorer browser does not support this standard.