ADAPTIVE RECOGNITION

AutoFill
User Manual

Application for ID Data Transfer into PMS and Other Systems
AutoFill is an application available as an add-on to any Adaptive Recognition ID scanner device.

RELEASE DATE
11.05.2023.

AUTOFILL

USER MANUAL

AutoFill installer: v. 3.0 and above
AutoFill software: v. 2.22
AutoFill Chrome Integration Module installer: v. 2.0
AutoFill Chrome Integration Module: v. 1.12
AutoFill FormFiller Integration Module installer: v. 2.0

Document version: 11.05.2023

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INSTALLATION

1. SYSTEM REQUIREMENTS

The following is the recommended minimum system configuration to operate the Passport Reader devices:

- Intel Pentium 2 GHz CPU (or equivalent x86 compatible CPU)
- 1 GB RAM (depending on application)
- 32 or 64-bit Microsoft Windows Vista/7/8.1/10 operating system
- Integrated USB 2.0 port (on motherboard), except for Network devices

> **Note**
>
> In case of using **USB device**, please follow the steps of the product-specific user manual before starting the software installation (driver version: 2.1.9 and above).

> **Note**
>
> The document reader devices may operate with a PC that has a configuration weaker than the minimum system requirements. However, the use of such configurations may lead to decrease in operating speed and thus user experience.
>
> The speed of image processing greatly depends on the type of hardware used. Generally, the shorter recognition time needed, the faster machine you are advised to use.

2. SOFTWARE INSTALLATION

1. Locate the downloaded software package and run the **.exe** file (e.g., autofill_windows-x64_3_0.exe).

2. The installation starts with the language preferences:
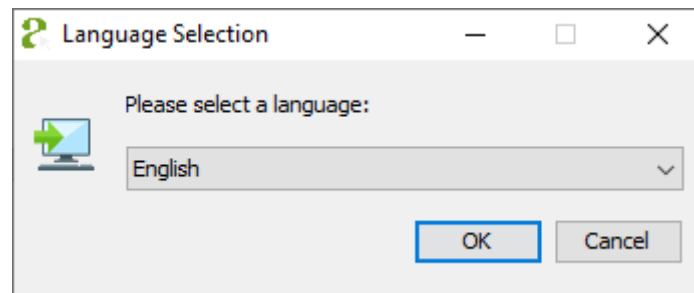
3. After selecting the language, the installation wizard screen is displayed.
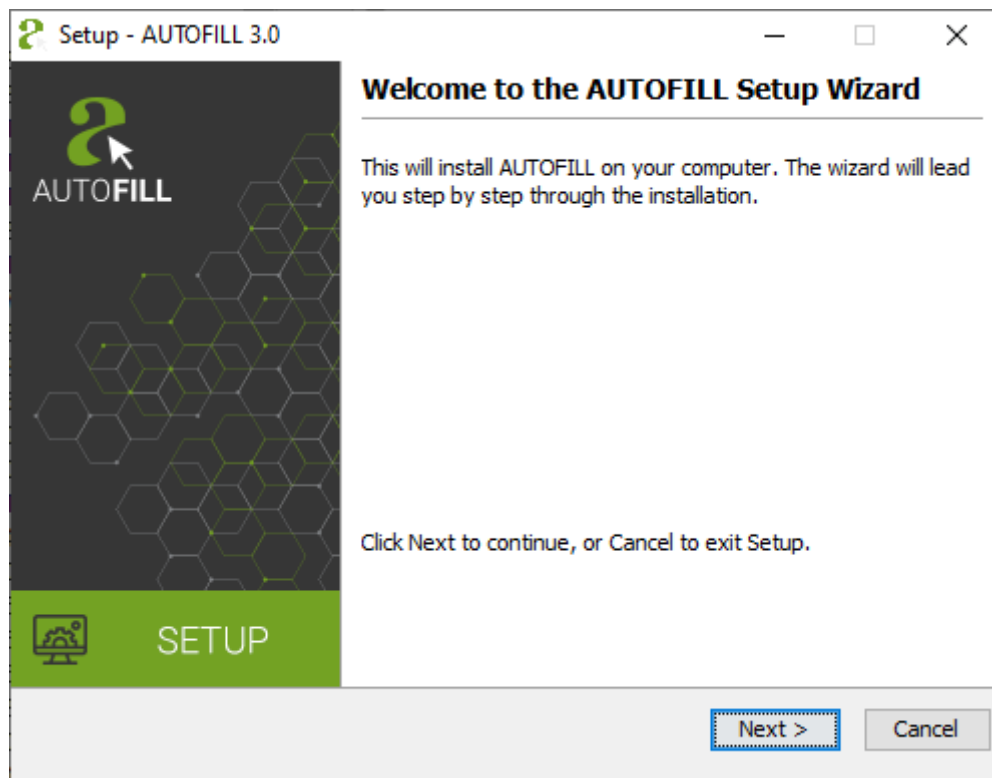
4. Click [Next] or press Alt + Left Arrow keyboard shortcut to start the installation.

5. Read the terms of the **End-User License Agreement** (EULA) and accept the agreement by ticking the corresponding checkbox. After you have accepted the EULA, you can start the custom installation process by clicking on the [Next] button.
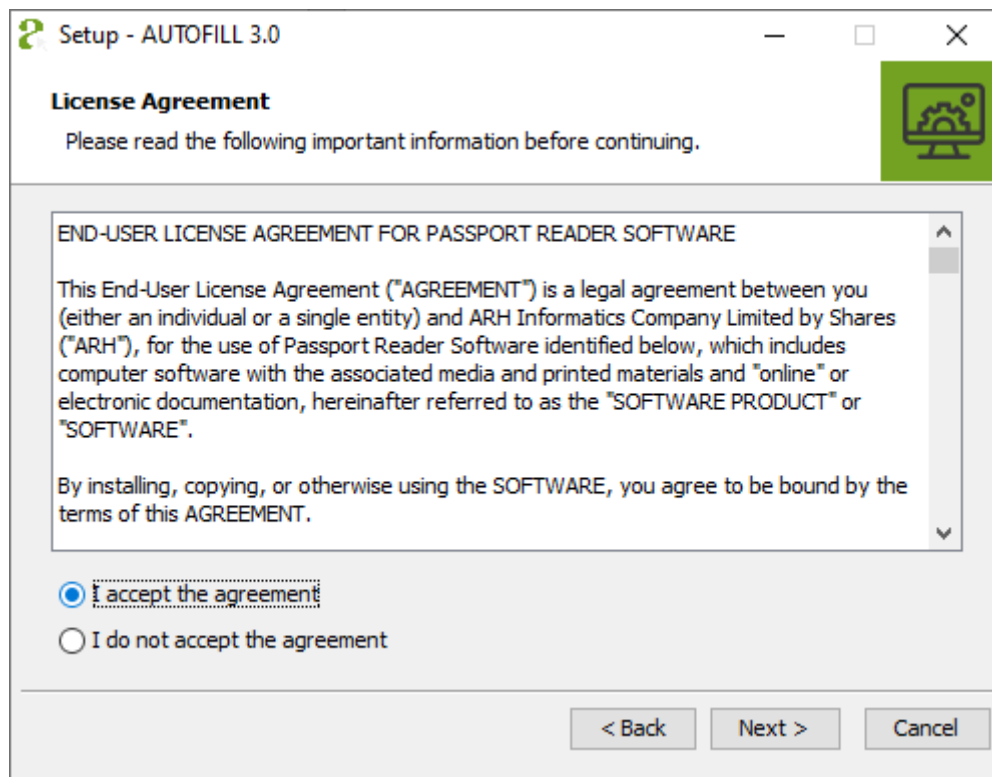
6. Select the directory, where you would like to install the application and click on the [Next] button.
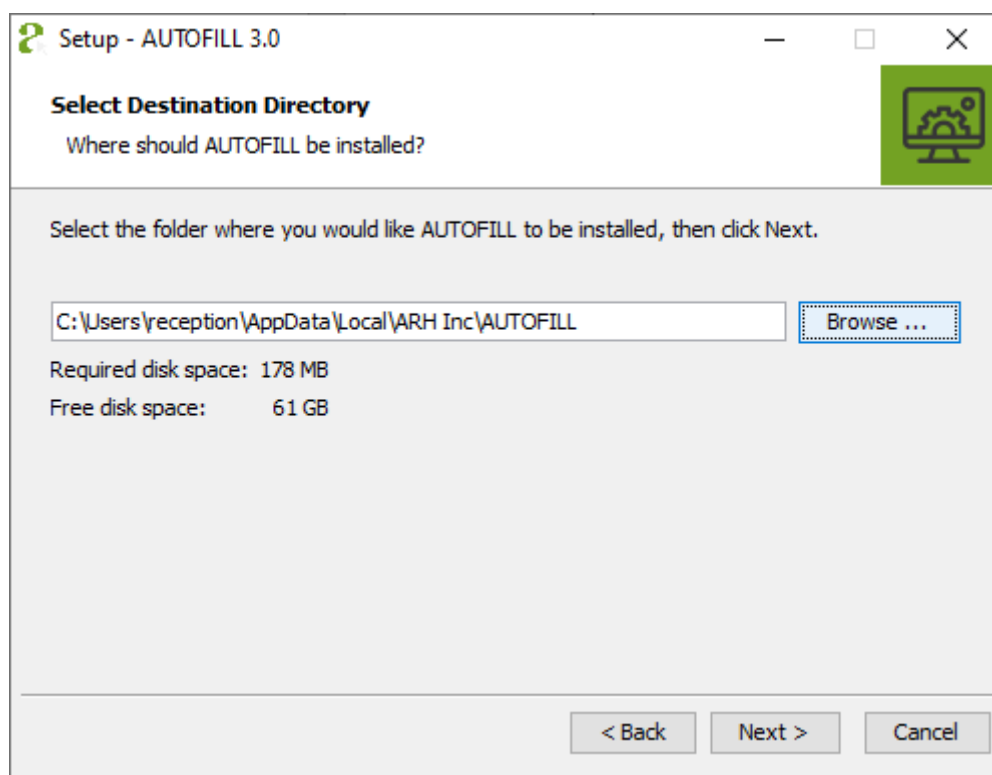
7. In the next screen you can decide to create desktop shortcut. By default, the checkbox is ticked thereby creating the desktop shortcut is enabled. The installation process continues by clicking on the [Next] button.
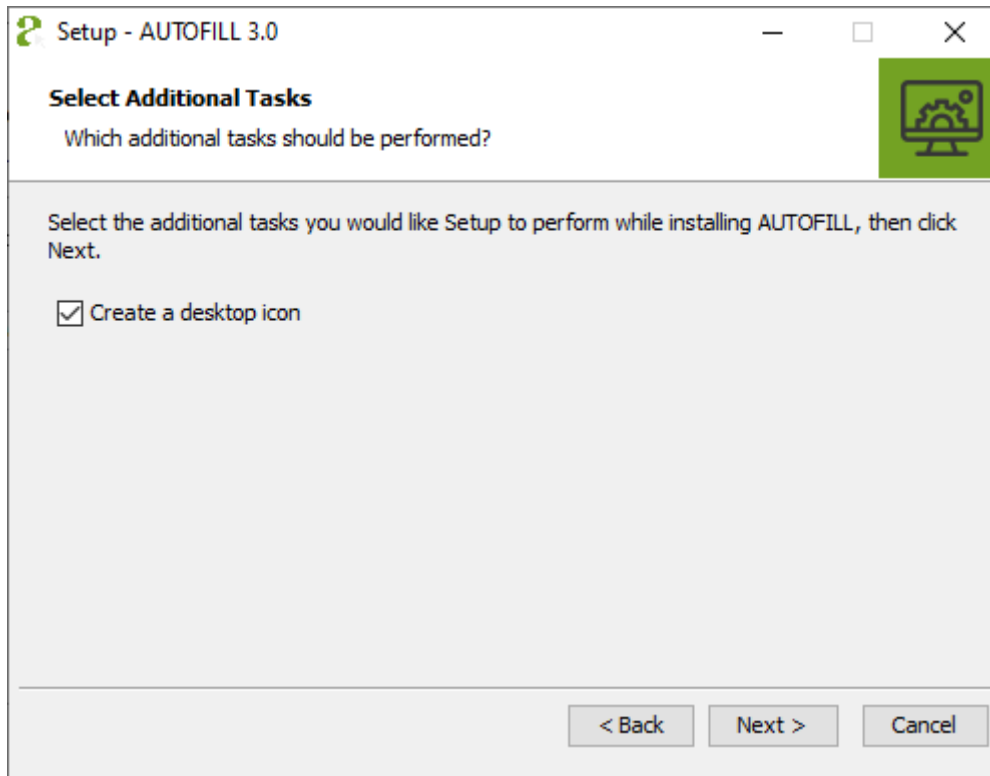
8. Enter password in order to access the **Administrator functions** and click on the [Next] button.

9. The status bar of the installation wizard shows the installation process of the required program elements.

The installation can be interrupted by clicking on the [Cancel] button. In the case of clicking on the [Cancel] button, none of the AUTOFILL elements will be found in the specified path.
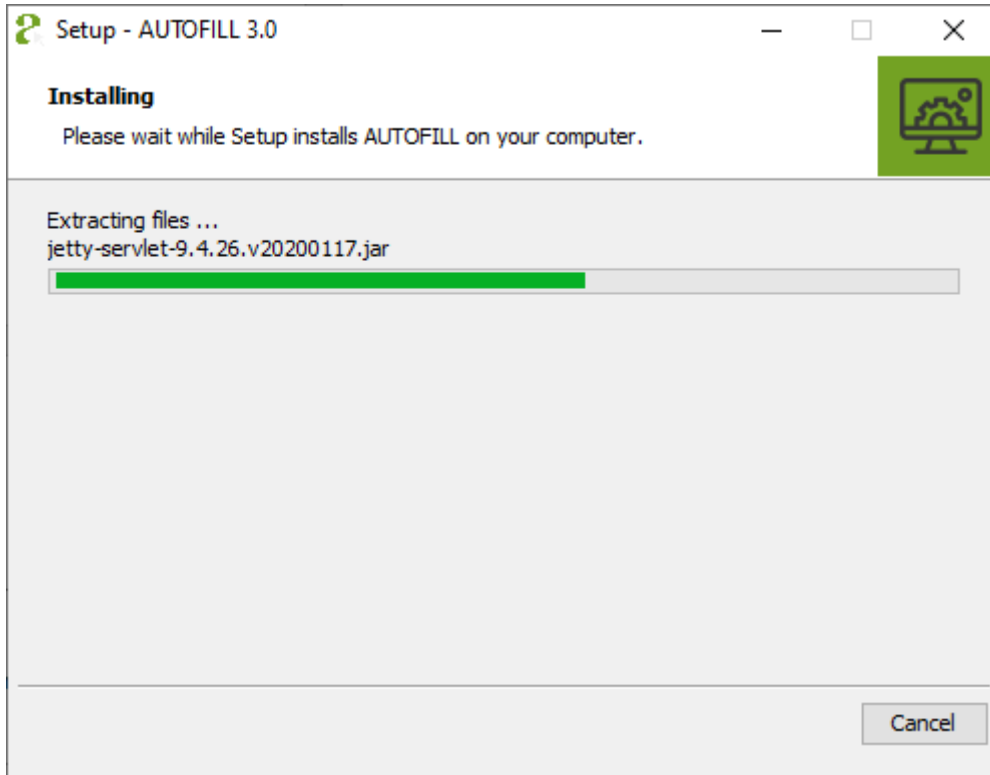
10. The following screen of the wizard indicates the success of the installation. Click [Finish] to complete the installation.
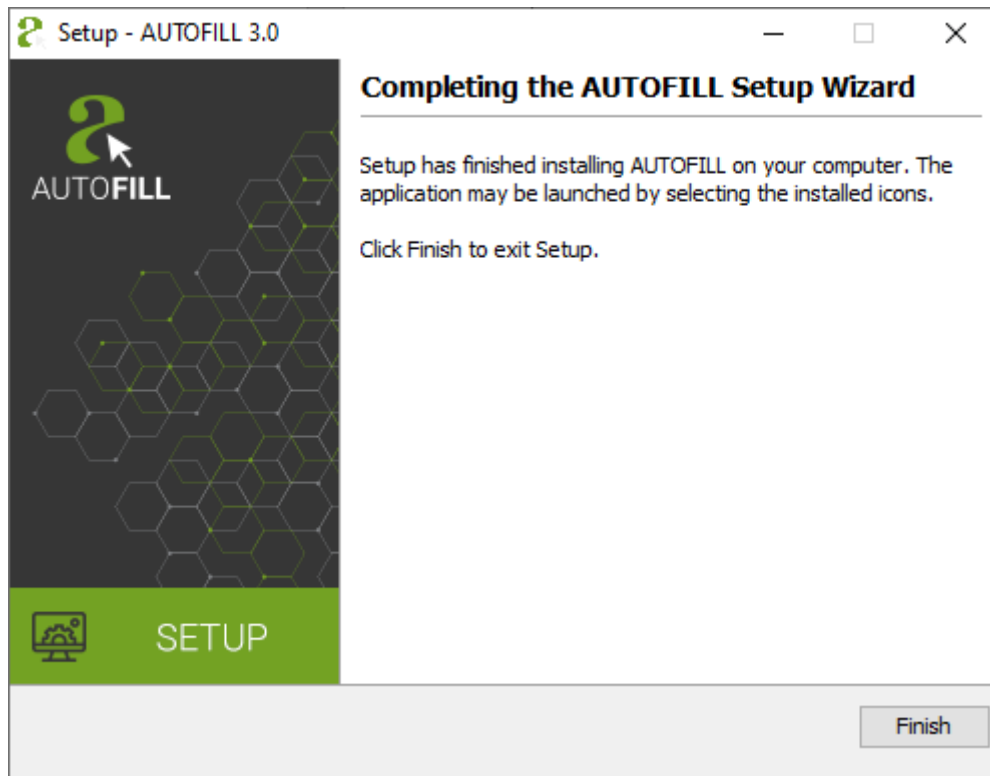
3.   INSTALLATION OF THE CHROME INTEGRATION MODULE

1. Locate the downloaded software package and run the **.exe** file.

   E.g.: autofill-chrome_windows-x64_2_0.exe

2. The installation starts with the language preferences:
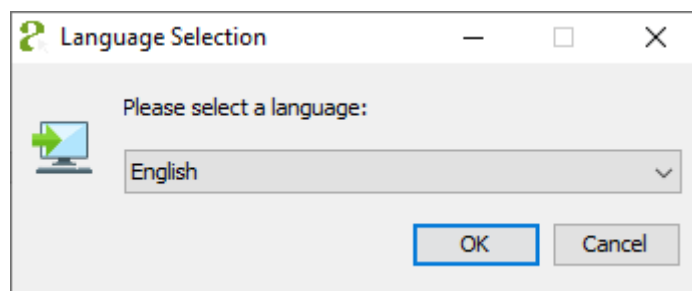
3. After selecting the language, the installation wizard screen is displayed.
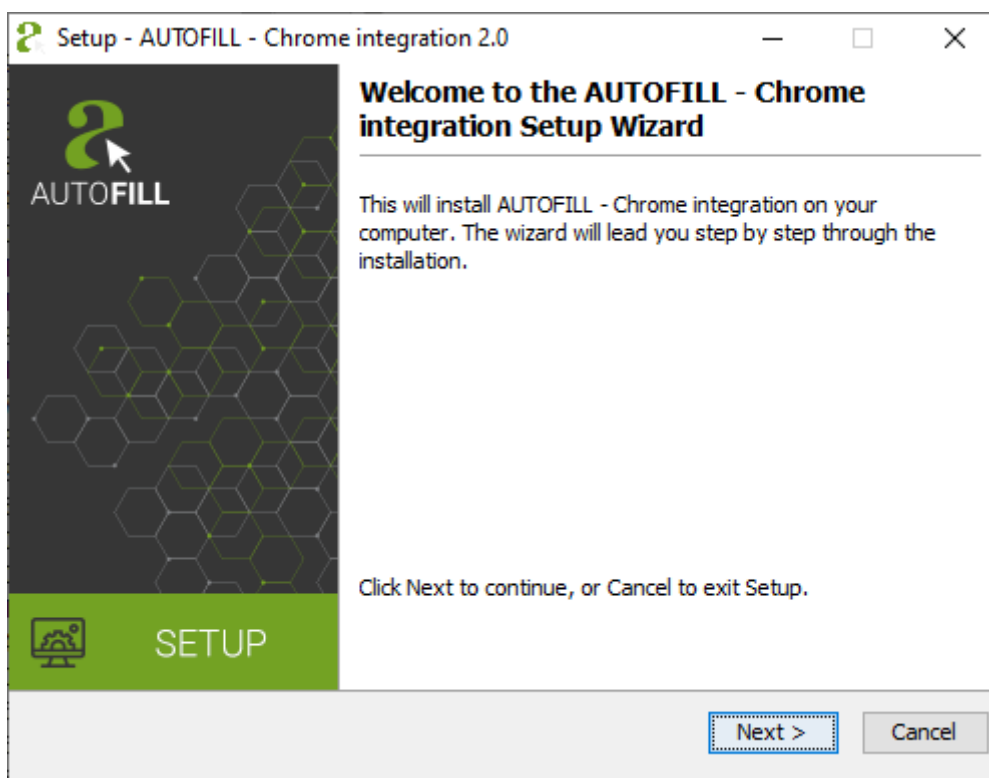
> 📃 Note
>
> The displayed text may vary depending on the type of the device and the software.

4. Click **[Next]** or press Alt + Left Arrow keyboard shortcut to start the installation.

5. Read the terms of the **End-User License Agreement** (EULA) and accept the agreement by ticking the corresponding checkbox. After you have accepted the EULA, you can start the custom installation process by clicking on the **[Next]** button.
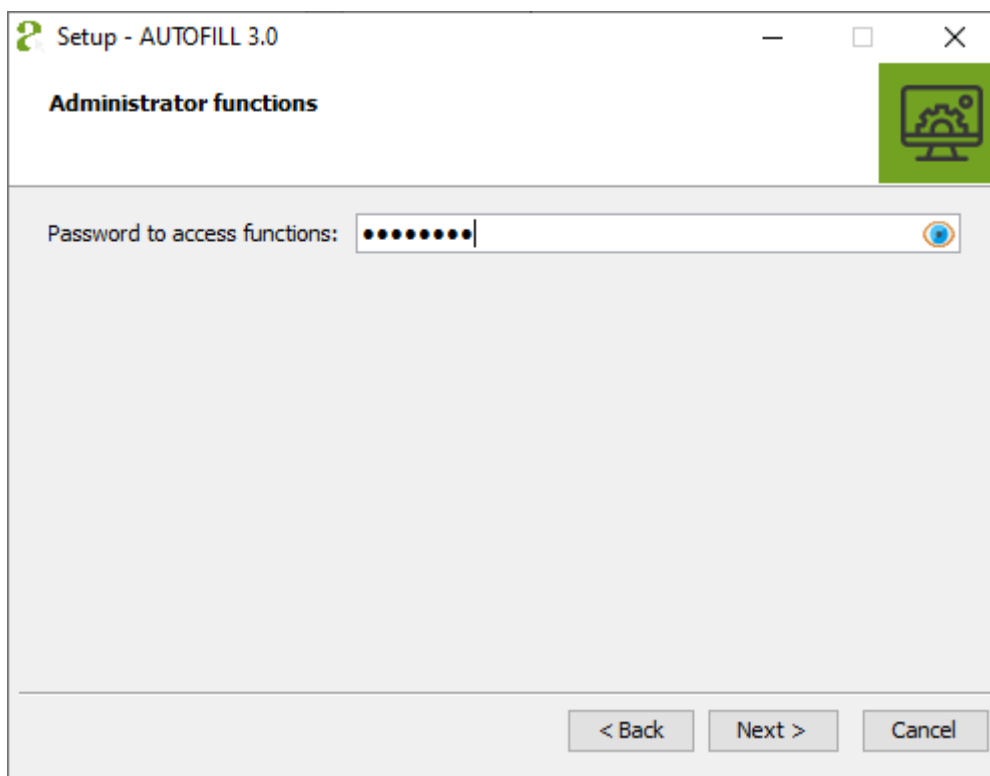
6. The status bar of the installation wizard shows the installation process of the required program elements.

The installation can be interrupted by clicking on the [Cancel] button. In the case of clicking on the [Cancel] button, none of the AUTOFILL elements will be found in the specified path.

7. The following screen of the wizard indicates the success of the installation. Click [Finish] to complete the installation.

The wizard installs the required program modules and the Chrome browser extension in one step. After restarting the browser, the extension icon will be displayed in the toolbar of the Chrome browser:

The browser may ask for permission for the use of the installed extension retrospectively. In this case the ADAPTIVE RECOGNITION extension icon is not displayed in the toolbar.
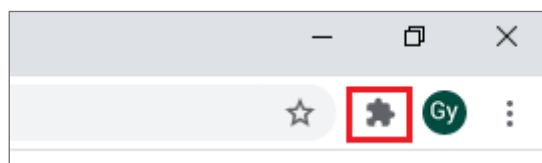
On such occasion the browser extension has to be enabled on the "chrome://extensions" page.
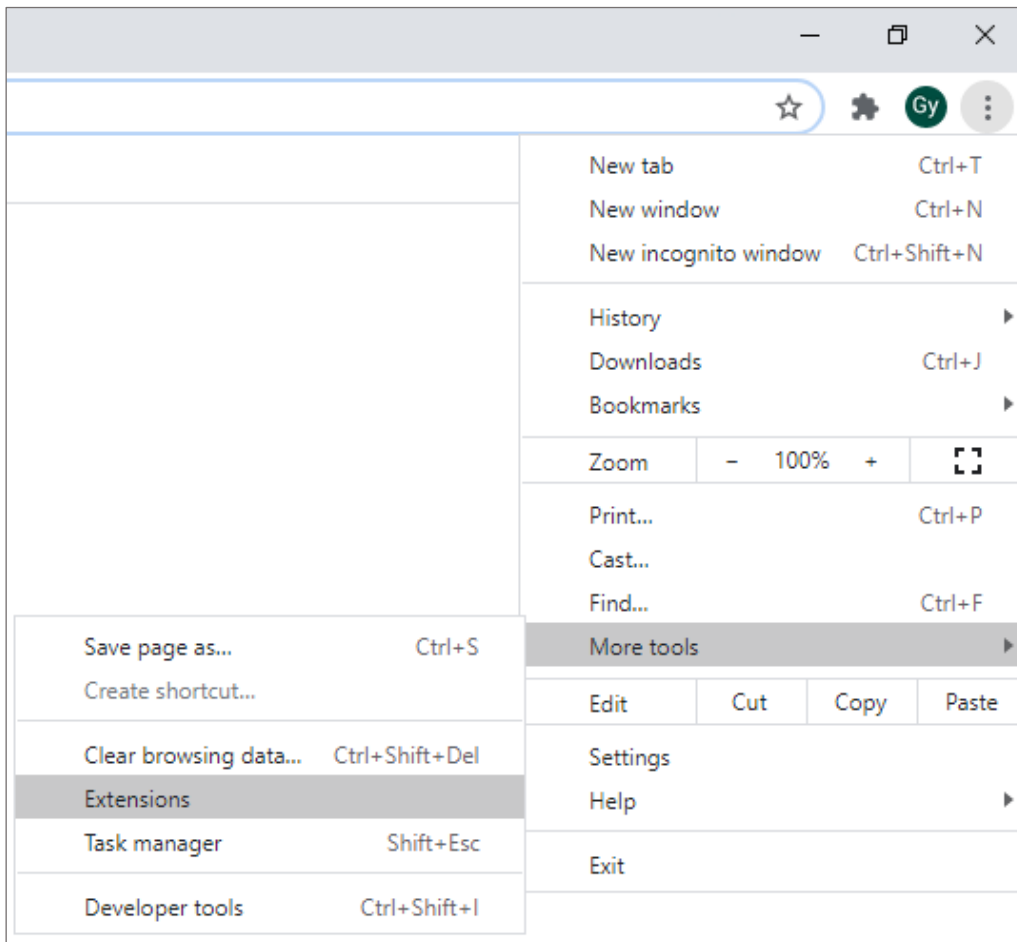
The ADAPTIVE RECOGNITION AUTOFILL extension appears among the installed extensions which are displayed on the opened page. A turned off switch in the bottom-left corner of the panel indicates that the extension is inactive and it has to be activated.
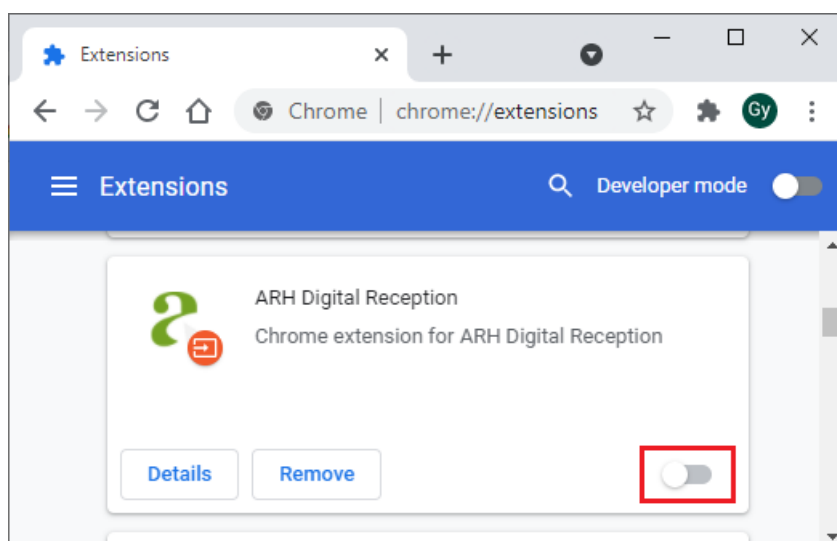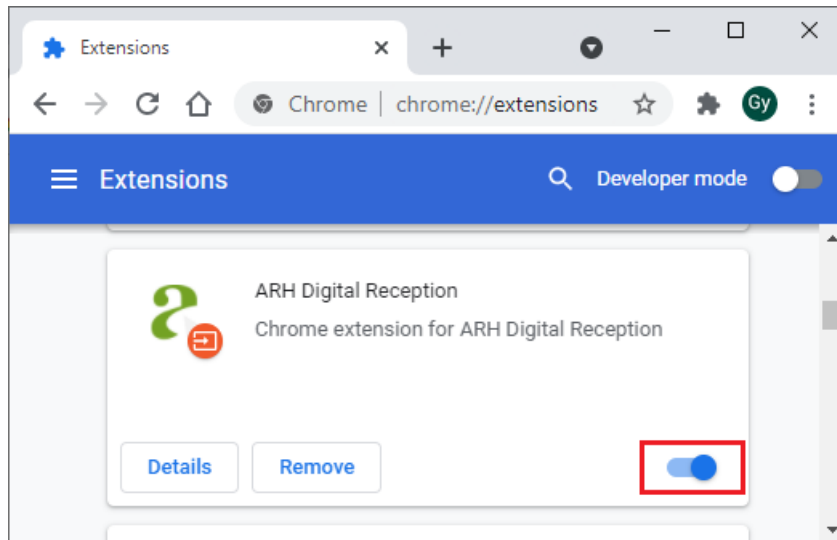
From the Chrome version 76 the browser add-on cannot be automatically seen in the toolbar after the installation. A further setting must be done for the ADAPTIVE RECOGNITION AUTOFILL add-on to appear.
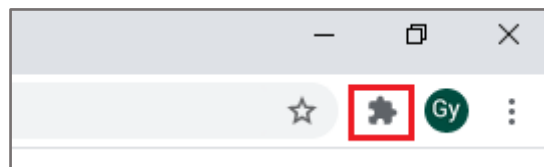
Click on the Extension icon (see picture above). Afterwards, a window pops up where the list of the add-ons installed to the Chrome browser is displayed.
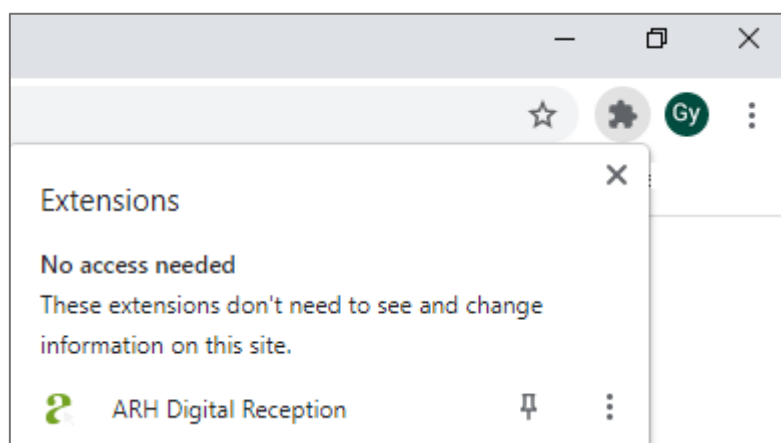
Under **No access needed** can be seen the **ADAPTIVE RECOGNITION AUTOFILL** option and next to it a transparent **Pushpin** icon. By clicking on this icon, the extension is displayed in the toolbar of the Chrome browser.
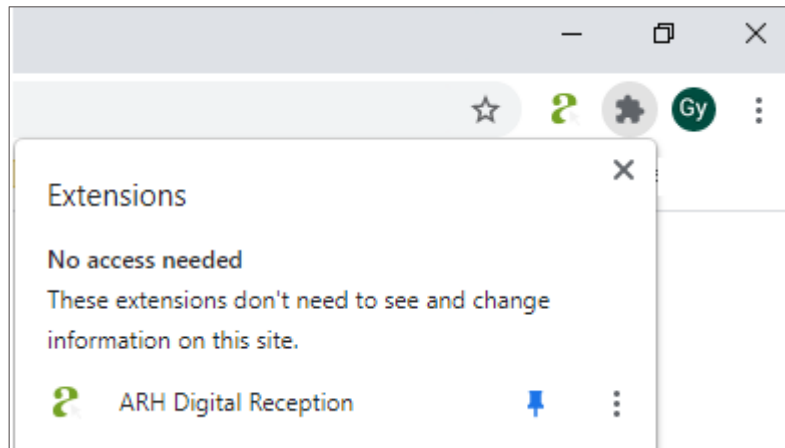
> **⚠ Important!**
>
> The program must be launched from the Chrome extension.

4.   INSTALLATION OF THE FORMFILLER INTEGRATION MODULE

1. Locate the downloaded software package and launch the file.

    For example: autofill-formfiller_windows-x64_2_0.exe

2. The installation starts with the language preferences:
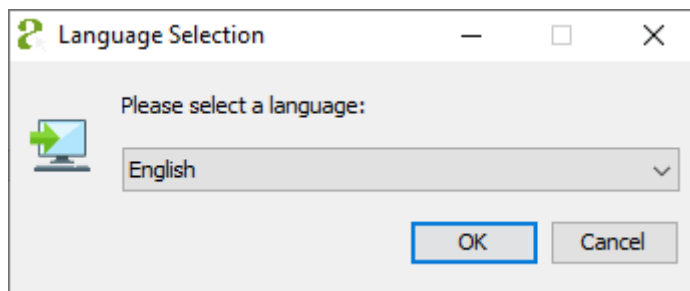
3. After selecting the language, the installation wizard welcome screen appears.
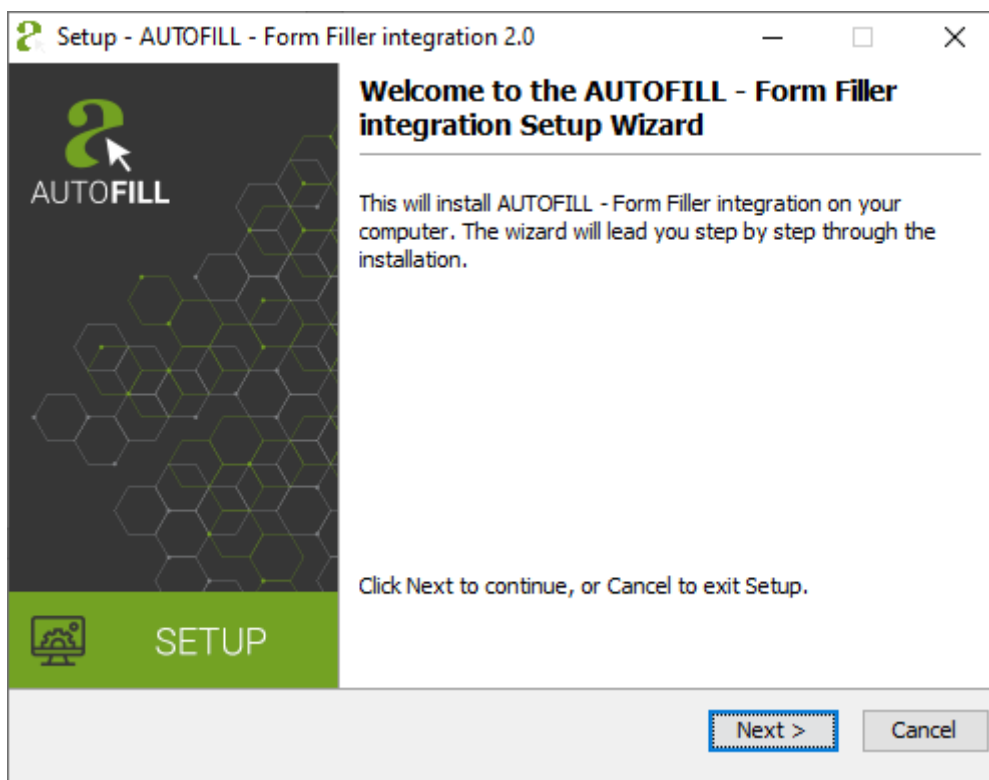
📑 Note

The displayed text may vary depending on device and software type.

4. Click [Next] or press Alt + Left Arrow keyboard shortcut to start the installation.

5. The next step is to check and accept the terms of the **End-User License Agreement**. Once accepted, click **[Next]** to begin the custom installation process.
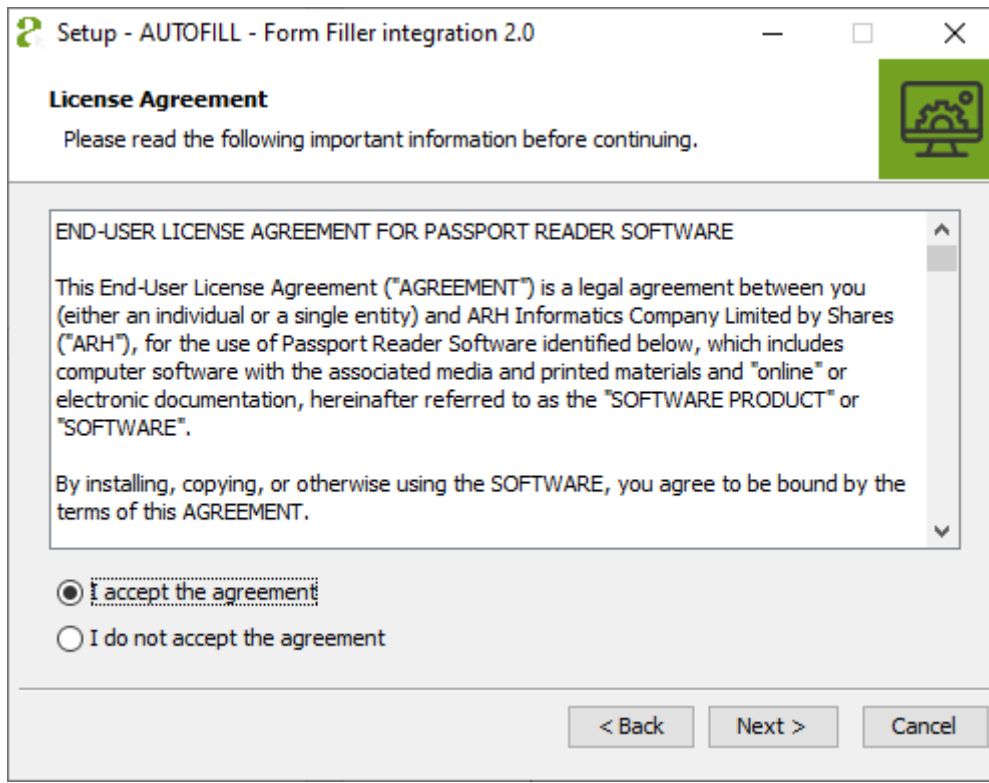
6. The progress bar in the installation wizard shows the process of installing the required program components. The installation can be cancelled by clicking on the [Cancel] button, if necessary. Once aborted, no component of the AUTOFILL FormFiller integration software will be found in the selected path.
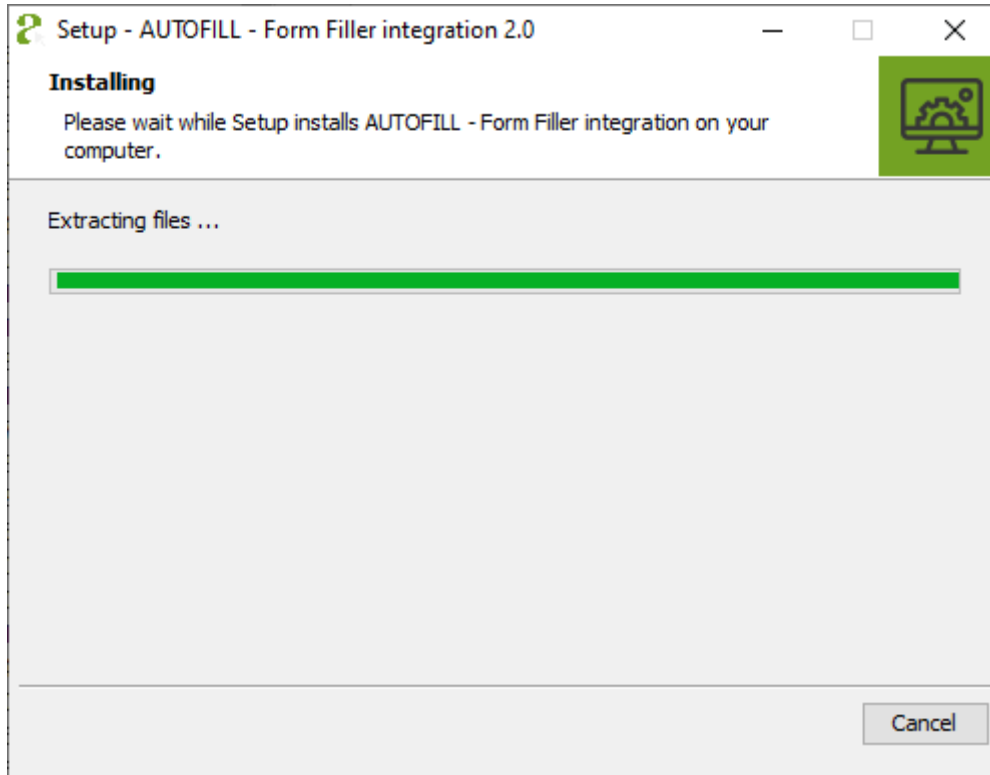
7. The following screen of the wizard indicates the success of the installation. Click [Finish] to complete the installation.
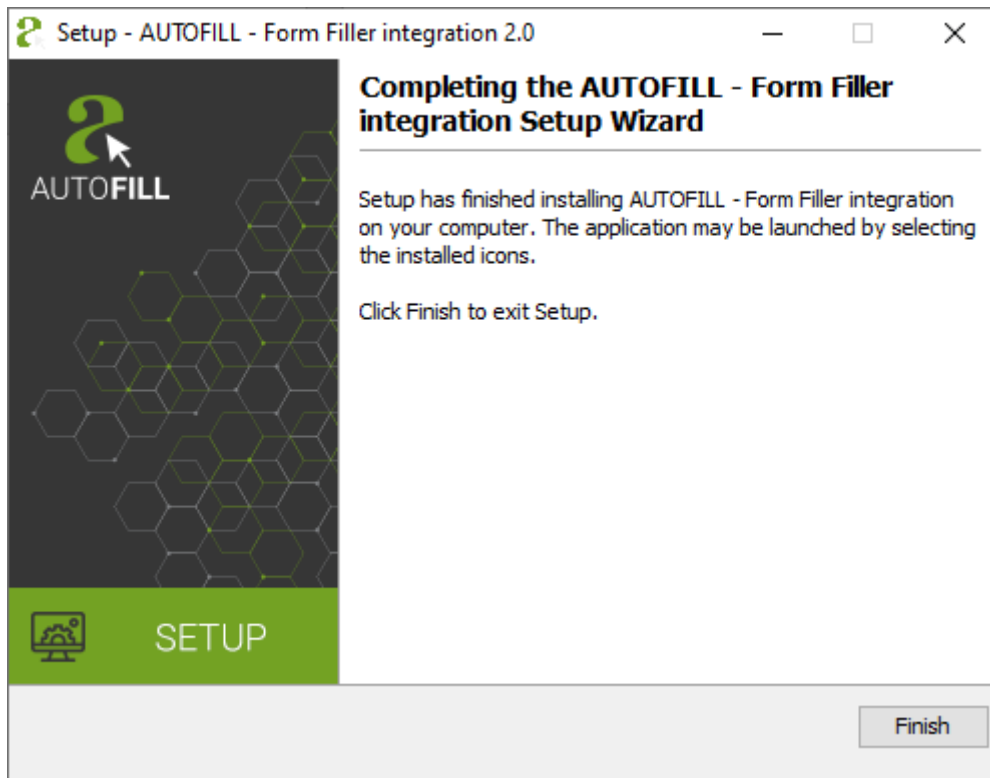
INSTRUCTIONS FOR USE

1. USING THE AUTOFILL APPLICATION

1.1. STARTING THE APPLICATION

There are two options to start the software:

- In the case of launching the PMS software through a **browser** (Chrome), look for the following icon among the extensions in Chrome:

A window will pop up by clicking on the icon. In the pop-up window click on the **[Start App]** button.

- In case the AUTOFILL software has been **installed** to your Windows system, launch the program by clicking on the following icon located on the desktop:

> 📄 Note
>
> If you fail to launch the program, please contact your system administrator.

1.2. THE MAIN SCREEN OF THE APPLICATION

When launching the program, the main screen of the application turns up with the following essential elements:

- **Header**: The title and the version number of the AUTOFILL application as well as the name, the license type of the Integration module selected in the **Settings** and the date of manufacture of the released version and the expiry date of the **Integration module**'s license are displayed in the header.

> **✓ Example**
>
> Header: AUTOFILL 3.0 (O:1|R:2020-12-31|L:2023-06-30)
>
> Meaning of this header: version 3.0, 1. type integration module, date of manufacture: 2020-12-31, expiry date of the license: 2023-06-30.

If the Integration module is not selected in the **Settings**, then the header only will contain the title and the version number of the AUTOFILL application.

- **Face image:** displays the face image belonging to the last scanned document (e.g., ID, passport, driver license).

- **Main data**: displays the essential information of the scanned document.

- **Mode**: when it is enabled by ticking the box, the device automatically transmits the data to the PMS software after the document reading without a click (see Chapter 1.4.2).

- **Detailed information**: displays the additional data of the document, and the address in the case of scanning an address card as well as the messages of the checks performed during the scanning process in the drop-down menu by clicking on the selected category.

- **Status bar**: shows the data and signaling related to the operation of the AUTOFILL application.

- **Settings**: by clicking on it a new window pops up where the adjustments related to the AUTOFILL app can be found (see Chapter 1.5).

1.3. SETTINGS AFTER THE INSTALLATION

Once the installer of the AUTOFILL has been run and the installation of the integration module has been finished, the settings of your AUTOFILL app **do not yet contain** all the necessary data to perform their daily tasks.

Therefore, after the installation of the AUTOFILL application the following default settings are to be performed at least once:

1. Launching the AUTOFILL app
2. Opening the **Settings**
3. **Settings / Application / Document reader**

   Settings / Network settings
4. Saving the settings and connecting to the document reader
5. Opening the **Settings**
6. **Settings / Document reader / OCR module** settings
7. **Settings / Application / Integration module** settings
8. Saving the settings and you are ready to use your AUTOFILL app with your reader device

In the following section the elements of the numbered list (see above) will be explained.

1. Launch the AUTOFILL application.
   After the installation, but before performing the default settings, the AUTOFILL application cannot connect to the document reader device. In this case the **Header** does not contain the license data, just the title and the version number of the application. In the **Status bar** a message informs the user about the lack of connected device. ("There is no selected device in settings")

2. Click on the icon of the **Settings**, located at the bottom-right corner of the window. After that, the administrator sign-in interface is displayed adjusted to the screen of the AUTOFILL application.
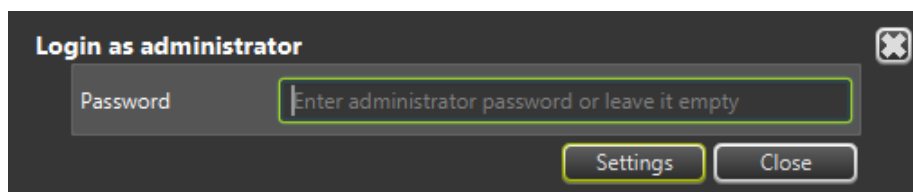
> 📑 Note
>
> In this case entering the password is not required.

3. Click on the [Settings] button in order to perform some essential settings.
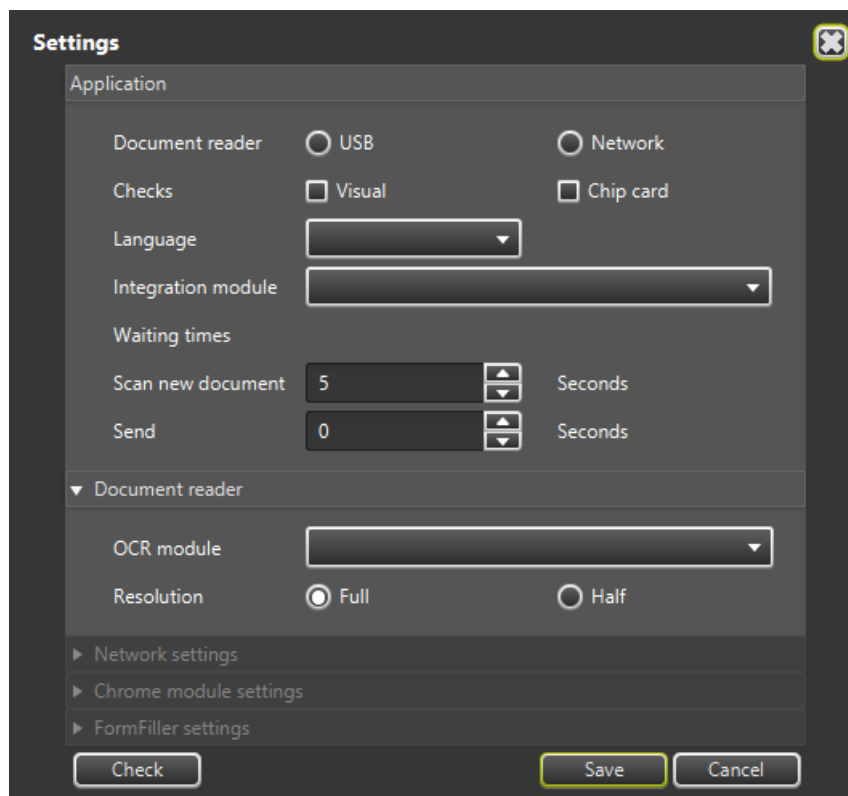
4.   Select the type of your document reader device.

In the **Application** section the settings affecting the fundamental operation of the AUTOFILL app are to be defined.

The type of the **Document reader** depending on the connection of the document reader device and the computer running the AUTOFILL application can be:

‒   **USB:** Select **USB** device, if the document reader device connects to the computer running the Document Reader application via USB connection. In the case of being picked this option, then the details of the **Network settings** panel cannot be seen and the panel cannot be edited.

‒   **Network**: Choose **Network** reader, if the document reader device does not connect to the computer running the Document Reader application via USB connection, but it can be accessed via local network. The additional settings required for operation are to be entered on the **Network settings** panel.

> 📄 Note
>
> After the installation, the **Document reader** adjustment must be specified to either **USB** or **Network**.

4.1   Setting of the USB document reader

In case the document reader device connects to the computer running the Document Reader application via USB connection, select the USB option and after that click on the [Check] button located at the bottom-left corner of the Settings window. Then the AUTOFILL application checks that the driver of the document reader installed to the computer running the AUTOFILL application is available. If the driver is not available, then the application indicates it with an error message:
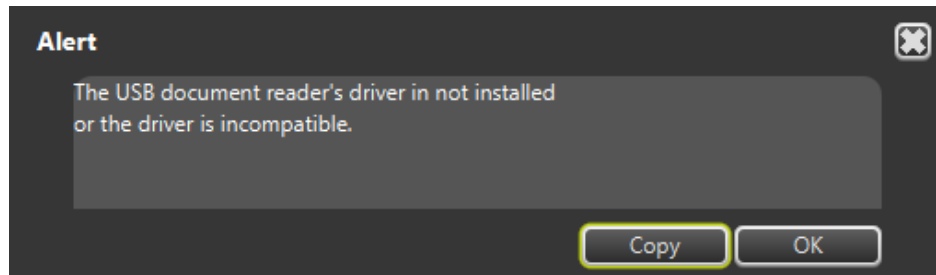
On such occasion close the application, install the programs necessary for the use of the document reader device, then start the AUTOFILL application and perform again the setting of the USB device mentioned above (Settings / Application / Document reader / USB).
After a successful check, save the setting.

4.2   Setting of the Network document reader

In case the document reader device does not connect to the computer running the Document Reader application via USB connection, but it can be accessed via local network, then select the Network option. At this time the Network settings panel drops down automatically on the Settings window.
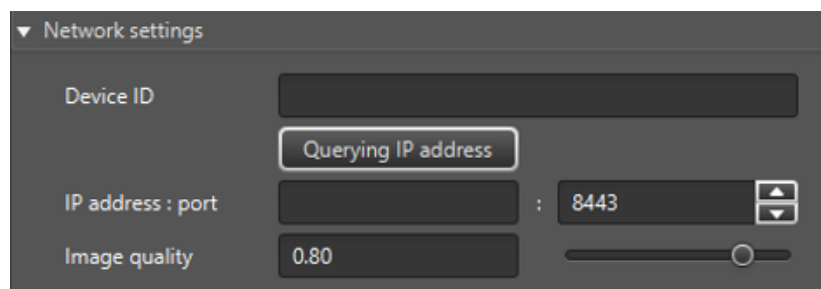
On the **Network settings** panel the following elements are to be entered:

- Device ID

  The **Device ID** can be determined by the following:

  Flip the document reader device over and check the following data:

  – **CONF** value: e.g., LRSW

  – **S/N**: e.g., 1191753. You will need **the last 6 digits**.

  The **Device ID** of your document reader device consists of the following values:

  COMBOSMARTN-[CONF][S/N without the very first character]

  e.g., COMBOSMARTN-LRSW191753

  According to these values define your **Device ID** to the appropriate field.
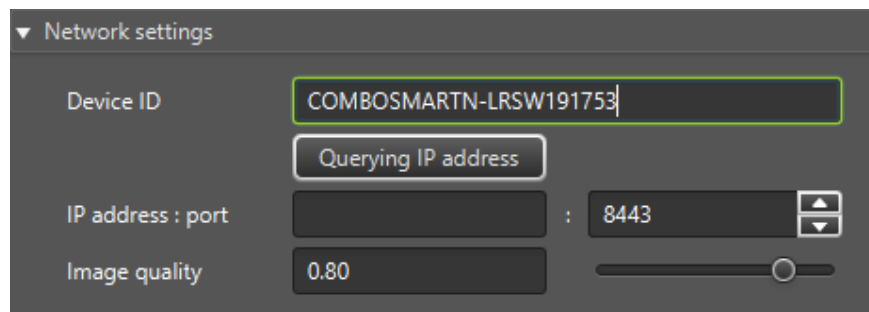
- IP address : port

In order to connect the AUTOFILL app and your network document reader device, it is necessary to specify the IPv4 address of the document reader.

The **port** value is **8443**, the field is filled with this by default.

The **IP address** can be entered manually or it can be queried by clicking on the **[Querying IP address]** button. The process of the querying can have two approaches:

1. On **Windows** operating system, if the user specifies the value of the **Device ID**, then with the knowledge of this the AUTOFILL app queries the IP address of the device from the document reader.

2. On **Linux** and **Mac** operating systems, as well as in case the first method is unsuccessful, the AUTOFILL app queries the IP addresses of ADAPTIVE RECOGNITION manufactured devices that can be found in its own subnetwork.

   2.1   In case the querying results in finding a device, then the IP address of the found device is automatically added to the **IP address** field.

   2.2   In case the querying results in finding more ADAPTIVE RECOGNITION manufactured devices, then after the querying a list will be displayed in a new window, all elements of which are the **IP address** and **MAC address** values of an ADAPTIVE RECOGNITION manufactured device.

   > ⊘ Example
   >
   > 192.168.254.116 00:1D:4D:00:7D:40
   > 192.168.254.37   00:1D:4D:00:7D:54

Pick the appropriate one from this list which matches the MAC address found on the bottom label of your device. After the selection the IP address is displayed in the given field.
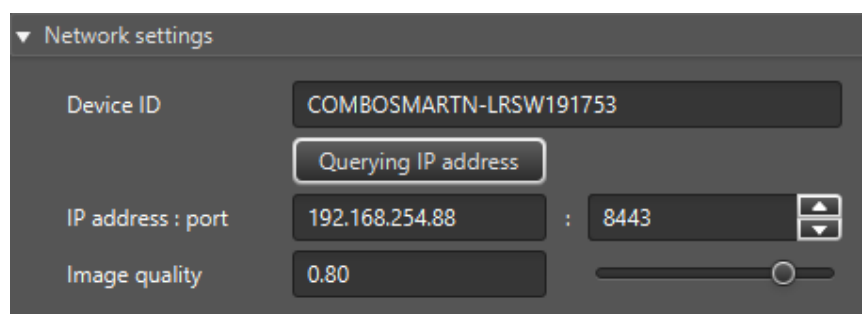
- Image quality

  The specified value defines the quality of the JPEG image to which the network device converts the scanned photo. The input of this is a value in the range of 0.00-1.00, with accuracy of 0.01. On this scale 0.00 means compression resulting in lowest, and 1.00 resulting in highest quality. By increasing the quality, the size of the image transferred through the network will be increased as well. In case the network transfer speed does not allow high quality compression, and thus the transfer of a greater sized file, by reducing this value, the file size can be reduced. The default value is **0.80**.

  The value can be increased by moving the slider next to the input field from left to right, or decreased by moving it in the opposite direction.

Once the **IP address** and **Device ID** has been obtained and/or the **Image quality** has been set, the settings can be saved by clicking the **[Save]** button. After saving, the AUTOFILL application automatically connects to the network type document reader devices.

Upon selecting either USB or network type document reader, the AUTOFILL application is going to connect to the document reader with the saved settings, and read the list of available OCR modules and license data of the Integration modules. Following this, the post-installation setup of the AUTOFILL application can be continued.

5. Open the **Settings** menu again.

6. Perform the following adjustment: **Settings / Document reader / OCR module**

   Select your OCR module and click on the **[Save]** button. The AUTOFILL application automatically applies the selected one.
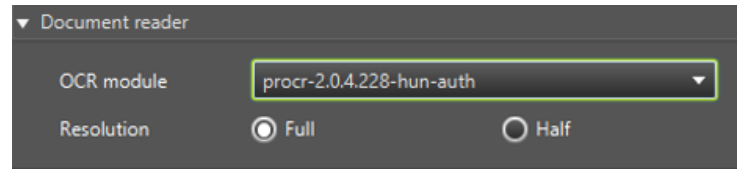
7. Perform the following adjustment: **Settings / Application / Integration module**

   Select your integration module and click on the **[Save]** button. The AUTOFILL application automatically applies the selected one.
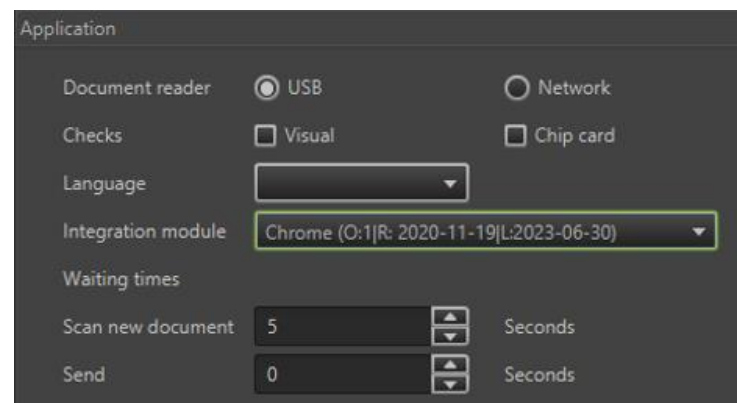
8. After performing the setup (steps 1-7), the application is ready to read documents and transfer the read data.

1.4. USING THE DEVICE

1.4.1. CONNECTIVITY STATUS

The status of device connectivity is signaled by a colored circle and text in the **Status bar** of the AUTOFILL application main screen:

- **red:** connection to device has failed
- **yellow:** connecting to document scanner or document scanning is in progress
- **green**: device is connected and ready to scan

1.4.2. SETTING UP MANUAL AND AUTOMATIC UPLOAD

During a single document scanning process, the AUTOFILL application is capable of reading either both sides of a person's document or multiple pages of more documents and to manage them as a single unit.

The read data is displayed in the AUTOFILL application window. After the scanning process, data is uploaded towards the PMS software. The program can be configured to perform document upload automatically or upon user interaction.

Using the automatic upload is the faster way of operation but it requires greater attention from the operator.

Switching between automatic and manual upload can be done by ticking the **Automatic upload** option on the main screen.

Automatic upload: The **Automatic upload** checkbox is enabled. Using this mode, forwarding data is performed automatically. The system waits for several seconds (as specified at **Settings / Application / Waiting times / Scan new document**) to let the operator putting another document into the document scanner. This can be the other side of the same ID or another document as well. When waiting time is up, the AUTOFILL application creates a unit of all scanned data then sends it to the PMS software automatically.

After the first document scanning process, a countdown timer appears in the **Status bar** that shows the remaining waiting time for new document scanning in seconds. If no document page is inserted into the scanner (the other side of the same ID or other document) before this time is up, then the device finishes the reading process and sends all collected data to the PMS software. If upload fails for any reason, sending can be retried by clicking the **[Resend]** button.

Manual upload: The Automatic upload checkbox is disabled. In this mode, the Send button is present in the AUTOFILL application main screen. After scanning one or more documents, the operator should click the [Send] button to forward scanned data to the PMS software.

After data is sent, the results of the last scanning process still remain on the screen. If forwarding data fails, sending can be retried by clicking on [Send] again.

Displayed data is cleared when scanning documents of another person or another document of the same person (e.g., passport after ID or driver's license).

Scanned data remains on the main screen until the operator deletes it or initiates scanning documents of another person. By clicking on [Delete], all data on the screen is cleared and the Send and Delete buttons disappear.

1.4.3. THE READING PROCESS

A. USING THE AUTOMATIC MODE

1. Switch on the device and make sure that the green circle – signaling that the device is connected – is present in the **Status bar** (see 1.4.1. Connectivity Status).
2. If the **Automatic upload** checkbox is disabled, enable it by a simple mouse click.
3. Open the form in the PMS software that should receive the scanned data.
4. Insert a person's document into the document scanner. Do not move the document during the scanning process.
5. The document scanner detects the inserted document and starts the scanning process automatically. The scanning process is signaled by the document scanner status LEDs as well as by the "**Scanning document**" text in the AUTOFILL program **Status bar.** If none of them is present then take out the document then put it back again. Do not remove the document while the document scanner is processing the document or while the "**Scanning document**" text is present in the AUTOFILL program **Status bar.**
6. Once the scanning process is finished, the document can be removed from the scanner. After the AUTOFILL application has processed all data, the read information and document check results are displayed in the **Face photo**, **Main data** and **Detailed information** sections.

If either the **Visual** or **Chip card** verifications are enabled in the **Settings / Application / Checks** menu and an error message is returned during the verification of document scanning, the **Checks** panel opens automatically to display the error message highlighted by a red rectangle.

If either the Visual or Chip card verifications are enabled in the Settings / Application / Checks menu and no error but a warning message is returned during the verification of document scanning, the Checks panel opens automatically to display the warning message highlighted by a yellow rectangle.

7. After that, the operator has several seconds to insert the next page of the same document or another document. In the **Status bar**, the following message is displayed in yellow: **Waiting for document [remaining seconds]**. The waiting time can be specified in the **Settings / Application / Waiting times / Scan new document** menu (see Chapter 1.4).

8. If new document is inserted before the end of waiting time, there are two ways to proceed:

   a. If an address card or the other page of the same document was inserted into the scanner, then newly read data is displayed besides the data read earlier.

   b. If document of another person or other ID document of the same person was inserted (e.g., Passport after ID or driver's license), then the software handles it as a new reading process, clears all data read earlier – without forwarding it – and overwrites them with the new data.

9. If no new document is inserted before the end of waiting time, then the AUTOFILL software forwards the data read so far and fills in the required fields in the form. If any field should be modified that can be done in the PMS software, after the forwarding process is finished.

10. Previously read data remain displayed on the screen until new document is inserted into the scanner.

11. If data upload fails for any reason, sending can be retried by clicking the **[Resend]** button.

📑 Note

If a document is expired, the AUTOFILL application displays the expiry date in the **Document data / Date of expiry** field, in red.

B. USING THE MANUAL MODE

1. Switch on the device and make sure that the green circle – signaling that the device is connected – is present in the **Status bar**.

2. If the **Automatic upload** checkbox is enabled, disable it by a simple mouse click.

3. If there is any data present in the **Main data** or **Detailed information** sections then click the **[Delete]** button.

4. Open the form in the PMS software that should receive the scanned data.

5. Insert a person's document into the document scanner. Do not move the document during the scanning process.

6. The document scanner detects the inserted document and starts the scanning process automatically. The scanning process is signaled by the document scanner status LEDs as well as by the **Scanning document** text in the AUTOFILL program **Status bar.** If none of them is present, then take out the document and put it back again. Do not remove the document while the document scanner is processing it or while the **Scanning document** text is present in the AUTOFILL program **Status bar.**

7. Once the scanning process is finished, the document can be removed from the scanner. After the AUTOFILL application has processed all data, the read information is displayed in the **Face photo**, **Main data** and **Detailed information** sections, together with the **Send** and **Delete** buttons.

If either the **Visual** or **Chip card** verifications are enabled in the **Settings / Application / Checks** menu and an error message is returned during the verification of document scanning, the **Checks** panel opens automatically to display the error message highlighted by a red rectangle.

If either the **Visual** or **Chip card** verifications are enabled in the **Settings / Application / Checks** menu and no error but a warning message is returned during the verification of document scanning, the **Checks** panel opens automatically to display the warning message highlighted by a yellow rectangle.

8. Repeat steps 5-7 with the rest of the document pages to scan, optionally with document that has no face photo on it (address card).

9. After all data has been read, click the **[Send]** button. The forwarding process passes through all fields present on the PMS software screen and fills in the appropriate ones. If any field should be modified that can be done in the PMS software, after the forwarding process is finished.

10. If the read data is no longer required to be displayed in the application, the screen can be reset to its default state and the data read previously can be cleared by clicking on the **[Delete]** button.

11. Previously read data remain displayed on the screen until new document is inserted into the scanner.

12. If data upload fails for any reason, sending can be retried by clicking the **[Resend]** button.

1.5. SETTINGS

Settings function can be used to specify values required for the operation of the AUTOFILL application and to set the parameters of the various integration modules. Some of the settings can be set for all users, but editing the parameters of the integration modules is allowed only for users with administrator privileges.

1. On the AUTOFILL application screen, press ⚙ button in the lower right corner of the window.
2. Adapted to the AUTOFILL application screen, the administrator login screen appears:

In the **Password** field, the installation administrator password can be specified. After entering the password, press the **[Settings]** button. If no password is specified, **Settings** is displayed in User mode, if the password is entered and correct, **Settings** is displayed in Administrator mode.

If you open the **Settings** screen with an administrator password, and then close the **Settings** screen without pressing the **[Log out]** button in the **Administrator settings** section, administrator privileges remain, and reopening the **Settings** screen will automatically appear in administrator view. The status of the administrator login is indicated by a green button in the lower right corner of the AUTOFILL application screen.

3. After pressing the [Settings] button, the **Settings** screen appears:

There are three buttons at the bottom of the **Settings** screen: **Check, Save**, and **Cancel.**

- **Check**: After pressing the **[Check]** button, the AUTOFILL application checks without saving the settings whether the settings can be saved with the set values displayed on the screen. If the entered values are correct, the AUTOFILL application will inform you in a window:
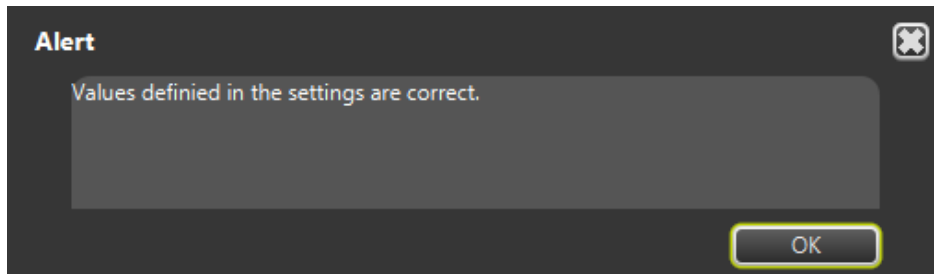
- **Save**: After pressing the **[Save]** button, the AUTOFILL application checks the content on the screen, then if the check considers the values to be correct, the settings are saved and the **Settings** screen closes automatically. After closing, the AUTOFILL application makes changes to its appearance and operation.

- **Cancel**: After pressing the **Cancel** button, the **Settings** screen is closed, and any values that may have been changed on the screen before the button is pressed will not be saved.

The **Settings** can be organized into several groups: **Application**, **Administrator settings**, **Document reader**, **Network settings**, and the panel or modules of the installed integration module.

> **Note**
>
> The **Chrome module settings** appears on the **Settings** screen, if the Chrome integration module is installed.
> The **Settings** screen displays the **FormFiller settings** group if the FormFiller integration module is installed.

3.1   Application

In the **Application** section, you need to specify the settings that affect the basic operation of the AUTOFILL application.

– **Document reader**: The value of **Document reader** is depending on the connection between the document reader device and the computer running the AUTOFILL application:

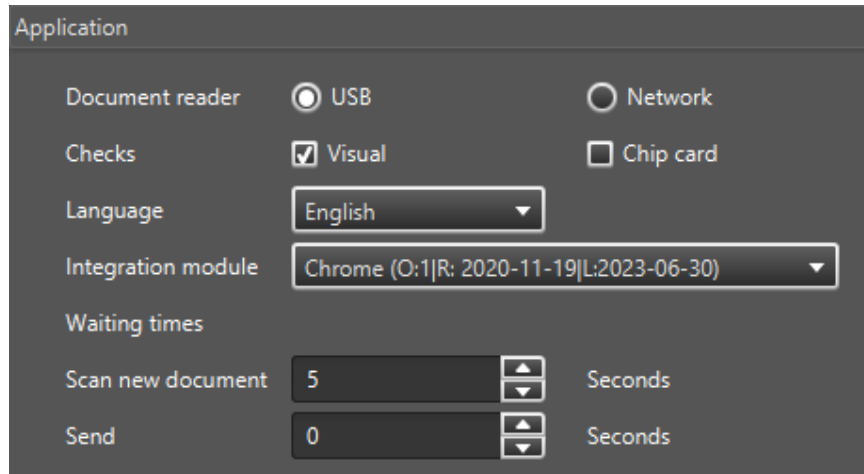- **USB**: The USB reader must be selected when the document reader is connected to the computer via a USB connection. If **USB** is selected, the **Network Settings** section of the **Settings** screen will be closed and cannot be edited.

  USB document reader setup:
  If the document scanner is connected to the computer via USB connection, select **USB** type, then press the **[Check]** button. The AUTOFILL application checks available document reader driver installed on the computer. If the driver program is not available, the AUTOFILL application will indicate this with an error message:

  Alert ✖

  The USB document reader's driver in not installed
  or the driver is incompatible.

  Copy   OK
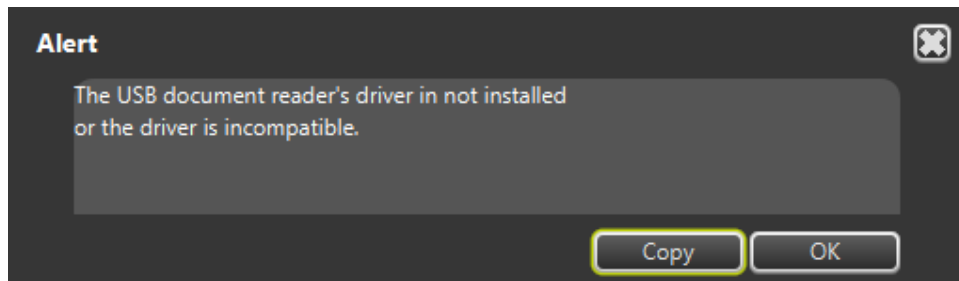
- **Network**: The network reader must be selected if the document reader device is NOT connected to the computer via USB connection, but via local network. Further settings required in the **Network settings** section to access network reader.

  Network document reader setup:
  To set **Network document reader**: See Section 3.4

– **Checks:** This setting allows you to control checks that AUTOFILL application executes when reading documents:

- **No control:** neither **Visual** nor **Chip card** are turned on.
- **Visual**: checks the visually visible verification data of the document.
- **Chip card:** checks the validity of the content of the chipcard and compares it with the MRZ data, and examines the level of similarity of the visually appearing image and the one stored in the chipcard.

📄 **Note**

The **Visual** and **Chip card** controls work side by side, the controls complete each other.

Adaptive Recognition **America**
Adaptive Recognition **Hungary**

Adaptive Recognition **Nordic**
Adaptive Recognition **Singapore**

REQUESTINFO@ADAPTIVERECOGNITION.COM
WWW.ADAPTIVERECOGNITION.COM

– **Language:** This setting allows you to set the language for the texts that appear on the AUTOFILL application screen and for the messages that appear during the program run.
Possible values:

- English

- Hungarian

If the default language of the computer is Hungarian, the AUTOFILL application displays screens and messages in **Hungarian**, in all other cases, the language of the screens and messages is **English.**

– **Integration module**: In this setting you can select the integration module that transfers personal and document data from the document reader to the PMS software.
The AUTOFILL **Integration module** can be installed separately, it must be specified in the restarted AUTOFILL application after the integration module has been installed.

– **Waiting times**:

- **Scan new document**: It can be set from 0 to 10. The entered value is displayed in seconds. The purpose of this setting is to scan all pages of a multi-page document, and then transfer the data scanned in multiple parts uniformly to the PMS software interface. The value specified in the setting is displayed in seconds, which is the amount of time that AUTOFILL application waits for inserting the other side of the document or an additional document in the document reader. If the value of the setting is 0 seconds, the transfer to the PMS software will start automatically, without waiting after each document to read.

- **Send**: It can be set from 0 to 10. The entered value is displayed in seconds. The purpose of this setting is to allow time to bring the appropriate window of the PMS software to the forefront, before transferring the scanned document data. If the AUTOFILL application is able to automatically bring the data receiving window of the PMS software to the foreground, or the foreground is not required for data transfer, the value of the setting should be 0.

3.2. Administrator settings

In the **Administrator settings**, you can change the password created during installation or you can log out.

– **Password:** The current password must be entered into the field.
– **New password**: Enter the new password into the field. It is important that the password contains at least 8 characters.
– **Confirm new password**: The value of the new password must be repeated in the field.

The password is changed after pressing the **[Save]** button. The AUTOFILL application checks before saving that:

- The **Password** matches the current administrator password.
- The content of the new password is correct.
- Whether the **New password** and the **Confirm password** fields have the same value.

The AUTOFILL application remains in administrator mode even after saving.

– **Log out:** After clicking on the button, the AUTOFILL application exits the administrator mode and the **Settings** screen returns to the user mode. After logging out, the **Settings** screen remains open and you can continue editing the settings.
If you open the **Settings** screen with an administrator password, and then close the **Settings** screen without pressing the **[Log out]** button in the **Administrator settings** section, administrator privileges remain, and reopening the **Settings** screen will automatically appear with administrator privilege.

3.3   Document reader

In the **Document reader** section, you must specify the parameters that the AUTOFILL application forwards to the document reader when connecting to it. These parameters affect the recognition of data on the documents.
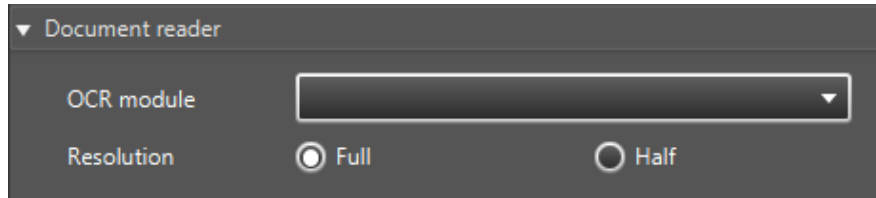
– **OCR module**: Select installed OCR module for the document reader. The drop-down menu displays the selectable OCR modules after **Application / Document reader** setup has been completed and saved, as well as when the AUTOFILL application has successfully connected to the document reader and read a list of possible OCR modules.

– **Resolution**: The document reader can take an image of the document in two resolutions for OCR processing. Possible values are **Full** or **Half**. If the **Half** setting is reliable for recognizing and interpreting document data, it is recommended to use the **Half** setting. If the recognition of document data in the **Half** setting is uncertain, the **Full** setting must be applied.

3.4. Network settings

If the document reader is network type, means that the device is NOT connected via USB connection to the computer, but it is available via local network. In this case select **Network** value.
The **Network settings** panel opens automatically on the **Settings** screen.
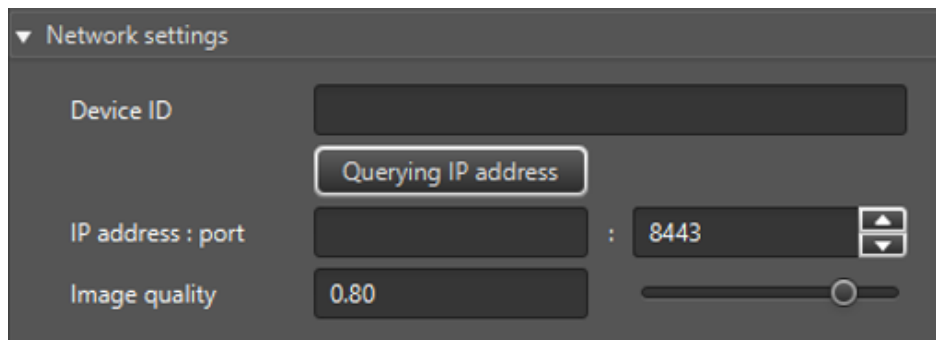
– **Device ID**

The **Device ID** can be determined by the following:

Flip the document reader device over and check the following data:

– **CONF** value: e.g., LRSW

– **S/N**: e.g., 1191753. You will need **the last 6 digits**.

The **Device ID** of your document reader device consists of the following values:

COMBOSMARTN-[CONF][S/N without the very first character]

e.g., COMBOSMARTN-LRSW191753

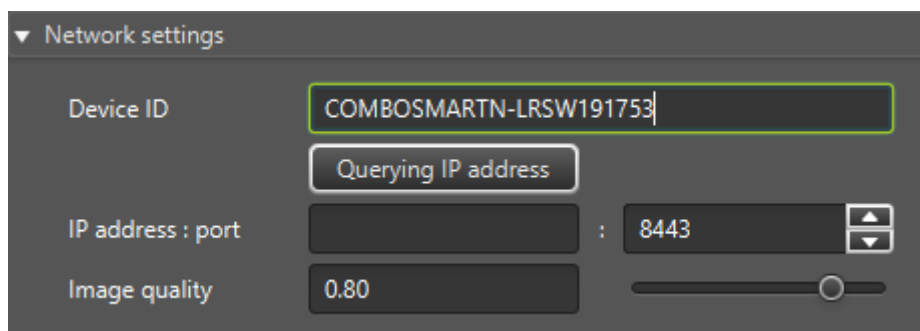According to these values define your **Device ID** to the appropriate field.

– IP address : port

In order to connect the AUTOFILL app and your network document reader, it is necessary to specify the IPv4 address of the document reader.

The **port** value is **8443**, the field is filled with this by default.

The **IP address** can be entered manually or it can be queried by clicking on the **[Querying IP address]** button. The process of the querying can have two approaches:

1. On **Windows** operating system, if the user specifies the value of the **Device ID**, then with the knowledge of this the AUTOFILL app queries the IP address of the device from the document reader.

2. On **Linux / MacOS**, and if the method fails as described in 1. section, the AUTOFILL application will query the IP addresses of the ADAPTIVE RECOGNITION devices on its own subnet.

   a. If the query finds one device, the IP address of the found device is automatically entered in the IP address field.

   b. If the query finds more than one ADAPTIVE RECOGNITION device, a drop-down menu will appear in a window after the query, each element of which will have IP address and MAC ADDRESS is a value of an ADAPTIVE RECOGNITION device.

   E.g.:
   192.168.254.116 00:1D:4D:00:7D:40
   192.168.254.37 00:1D:4D:00:7D:54

Select the appropriate value from the menu, based on which menu item's MAC ADDRESS value matches the MAC ADDRESS value found on the document reader's datasheet. Once selected, the IP address will appear in the input field.
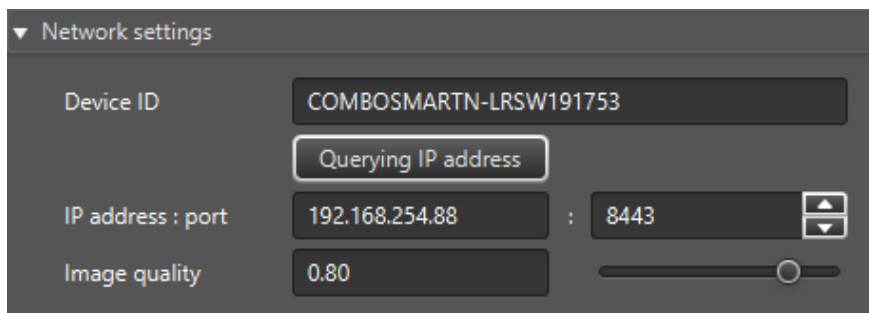
– Image quality

The given value in this setting controls that in which quality the network device converts a JPEG image of an image scanned from a document. In the setting, a value between 0.00 and 1.00 can be entered with an accuracy of 0.01. A value of 0.00 means the least good quality compression and 1.00 represents the best. As the quality increases, the size of the image transmitted over the network increases. If you cannot use a high-quality file due to its size and the network transfer rate, you can reduce the size of the transferred image by a smaller value. The default setting is 0.80. The value can be increased by moving the slider next to the input field from left to right, to decrease value, move to the opposite direction.

After successfully searching for the **IP address** and setting the **Image quality**, the settings can be saved by pressing the **[Save]** button. After saving, the AUTOFILL application automatically connects to the network-type document reader.

ADAPTIVE RECOGNITION

2. USING THE CHROME INTEGRATION MODULE

2.1. PURPOSE OF THE CHROME INTEGRATION MODULE

The Chrome integration module of the AUTOFILL application transmits data to the PMS software, if the PMS software has been launched from such browser applications that support the Google Chrome Native Messaging service. The data transmission takes place using a mechanism provided by the Chrome browser or Chromium based browser. During the data transmission, the data structure containing the data provided by the document reader due to the AUTOFILL application, is handed over to the browser application, transformed to such standard text information (JSON) which when reconstructed the same way, the browser application is able to apply it during automatic filling in. The PMS software running in the browser application fills in the corresponding fields of the page displayed on the screen based on the received data structure and set to the given page with a program (JAVASCRIPT) developed for this purpose. If the PMS software detects error during data filling, then the PMS software may resend this error as a response to the AUTOFILL application. This message is displayed in a message window by the AUTOFILL application.

2.2. USE OF THE CHROME INTEGRATION MODULE

The integration module hands over the JavaScript program located in the selected template as well as the data structure containing the data to the Chromium based browser after scanning the document(s). The browser runs the JavaScript program with the received data, the expected result of which is that the corresponding fields of the PMS software are filled in by this process.

The basic condition of the Chrome integration module's operation is that the AUTOFILL application is to be launched from the Chromium based browser.
(The Native Messaging supported by the Google Chrome is based on the STDOUT-STDIN console communication. The application sending the data writes the message to the system console from which the receiving application is able to read as an incoming message. Therefore, the basis of the Native Messaging's use is that it is launched from the browser.)

Steps of the AUTOFILL application's launching:

1. Click on the icon displayed in the toolbar of the Google Chrome or Chromium based browser:

2. By clicking on this icon, a window pops up. On this window click on the **[Start application]** button.
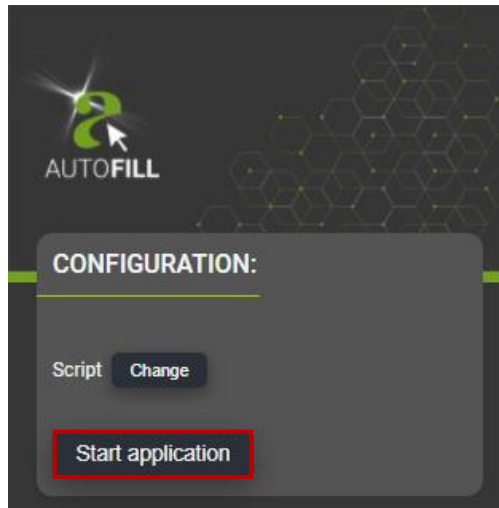
3. The AUTOFILL application checks that it has been started from the browser. If the AUTOFILL application has not been started from the browser, then the application informs the user about it with a message.
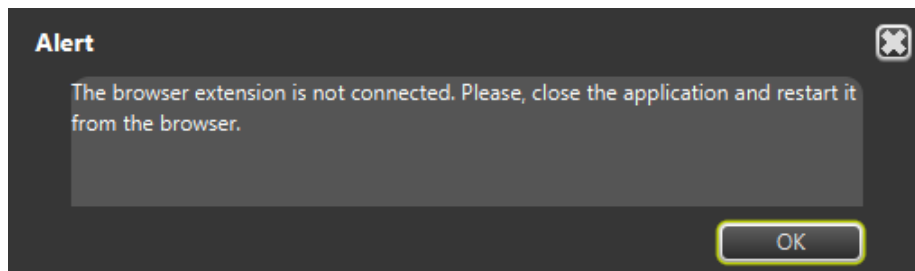
4. The use of the AUTOFILL application is the same as described in the **USING THE AUTOFILL APPLICATION** chapter with the exception of the application launching.

The AUTOFILL application and the Chrome extension perform checks during the data transmission. The AUTOFILL application displays the result of the checks in a message:

- The data transmission is unsuccessful because the browser settings are opened, selected.
  Please, select the appropriate tab or navigate to the page to be filled in.

- The data transmission is unsuccessful because the browser extension was restarted.
  Please, reload the page to be filled in.

- The data transmission is unsuccessful because not the appropriate browser window is opened, selected.
  Please, select the appropriate window.

- The data transmission is unsuccessful because the appropriate form cannot be found.
  Please, select the appropriate tab or navigate to the page to be filled in.

- The browser extension is not connected.
  Please, close the application, then restart it from the browser.

- The respond from the browser extension did not arrive in time. It is possible that the browser extension has been disconnected.
  If the data transmission is unsuccessful, then close the application and restart it from the browser.

- There is no selected script.
  Create a new one or select from the drop-down list in the **Settings**.

2.3. SETTING OF THE CHROME INTEGRATION MODULE

According to the Chapter 2.2., settings are to be performed during installation and configuration to the PMS software. The setting of the Chrome integration module can be executed at **AUTOFILL application / Settings**. The **Chrome module settings** is displayed in the **Settings** menu, if the Chrome module is installed. The **Chrome module settings** is active, if the **Chrome** option is selected at **Settings / Integration module**.

At **Chrome module settings** in user mode the selection of the integration script is restricted. If there is a need for editing the integration script, then you have to sign in as administrator.
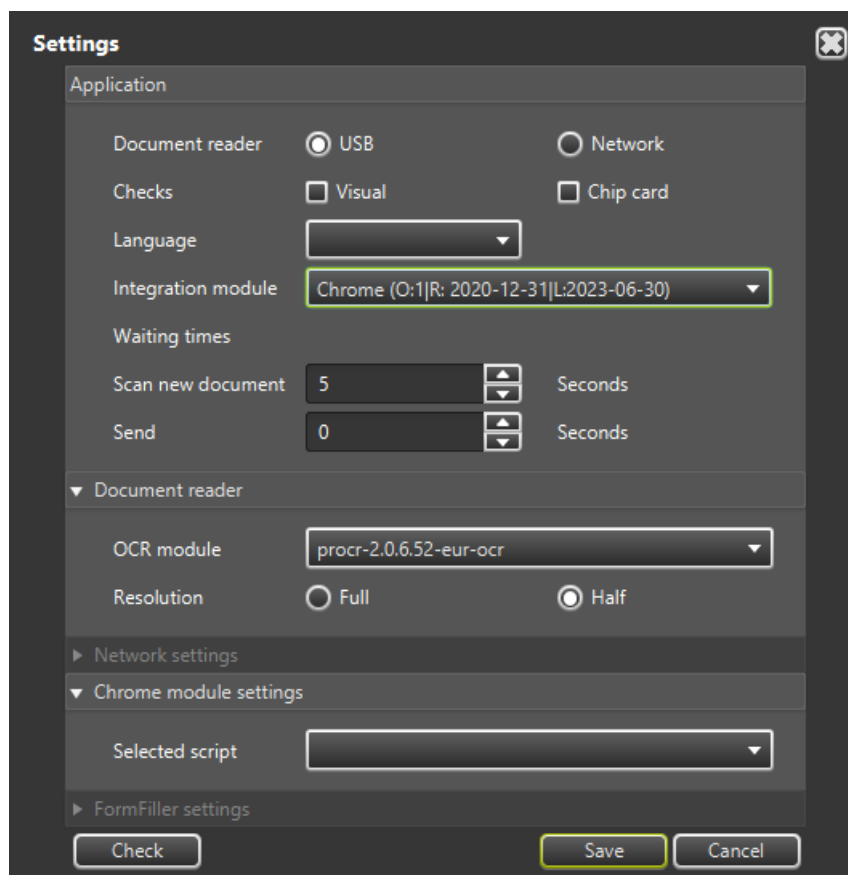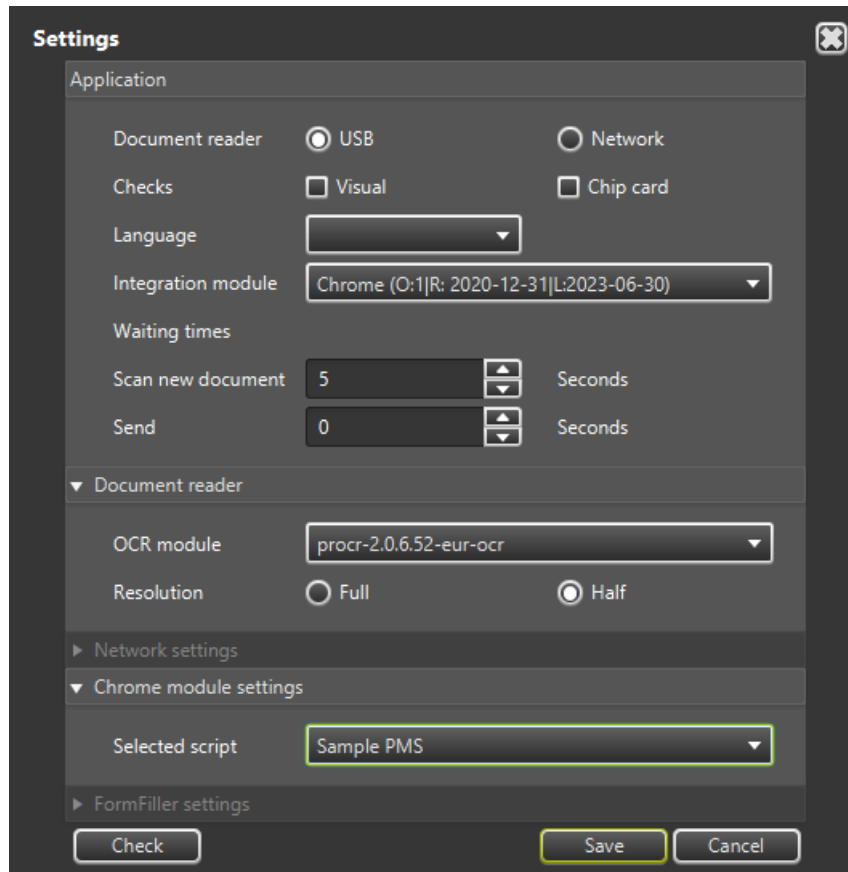

If the selected **Integration module** is the **Chrome**, then the data input interface of the **Chrome module settings** is opened and can be edited.

The **Chrome module settings** consists of two parts:

1. Selection of the integration script
2. Maintenance of the integration script

2.4. SELECTION OF THE INTEGRATION SCRIPT

The **Chrome module settings / Selected script** drop-down menu contains one or more preset setting(s) by which the handing over can be performed. An element is to be selected from the drop-down list.

After the selection the modified setting is to be recorded by clicking on the [Save] button.

> 📄 Note
>
> When the Chrome integration module loads the content of the XML file from the file system, then a check for the javascript element will run. If the javascript is incorrect according to the check, then the name of the integration script equal to the XML file will not be displayed in the **Settings / Chrome module settings / Selected script** drop-down menu.

2.5.   MAINTENANCE OF THE INTEGRATION SCRIPT

The **Chrome module settings / Selected script** drop-down menu contains one or more preset setting(s). In the maintenance the user is able to create, modify and/or delete integration script(s).

📑 Note

> The toolbar required for the editing will only be displayed in the **Chrome module settings**, if the **Settings** has been opened as administrator.

The program language of the integration script is **javascript**. The data of the integration script is stored in XML type text files which can be found in the **scripts/** subdirectory under the root directory of the installed AUTOFILL Chrome module application. In the subdirectory every XML file contains an integration script.

✓ Example

> scripts/samplepms.xml, scripts/sabeeapp.xml, scripts/hotelgram.xml,
---

The XML file contains the script ID, the script address, the timer value related to the transmission, permission of the profile image's transmission, as well as the **javascript** program in character data format (CDATA) to be executed by the Chromium browser.

The maintenance of the script consists of 3 phases:

1. Creation
2. Modification
3. Deletion

The maintenance of the script is accessible by using one of the following buttons located below the **Chrome module settings / Selected script** drop-down menu:

In case of **Modification** and **Deletion** the maintenance of the script is available by using the **Selected script** drop-down menu.

2.5.1. CREATION

To create new script, please click on the following button:

After clicking on this button, a new window will pop up, where the required settings can be performed.

On the **New script / Script settings** window the script data can be entered. The script can be created and modified in the text editor section located below the data fields.

The following elements can be defined under **Script settings**:

- **Identifier**: The specified value identifies the setting. The name of the saved setting is the value entered to the **Identifier** field. The file extension is **.xml**.

> ⚠ **Important!**
>
> The identifier must be unique, since it cannot be reused in the setting of another integration script.

- **Name**: The specified value is descriptive. The defined value will be displayed in the **AUTOFILL application / Settings / Chrome module settings / Selected script** drop-down menu.

- **Response time**: The specified value defines the time frame between the current browser process and the arrival of the reply message following the handing over. The value is in milliseconds. The minimum value is 500 milliseconds.

- **Send profile image**: If the box is unticked, then the scanned face image data is not included in the data handed over. If the box is ticked, then the scanned face image data is included in the data handed over. The data to be transmitted is encoded with the BASE64 encoding algorithm.

The javascript program which is run by the Chromium browser can be written in the text editor section located below the data fields. The editor continuously checks the entered values during the editing process. The editor provides suggestions. This can be acquired with the Ctrl + Space keyboard shortcut, as seen below:
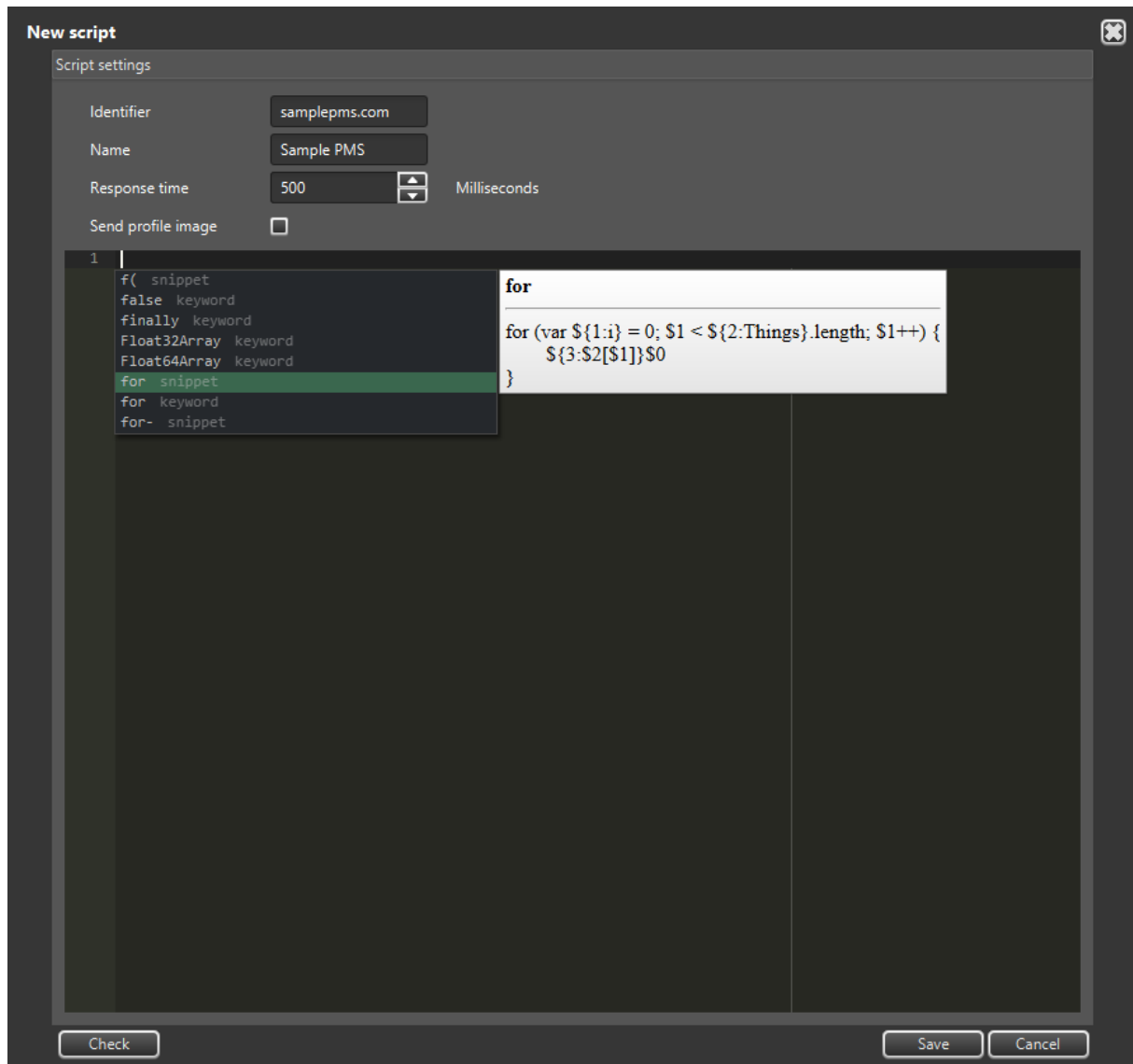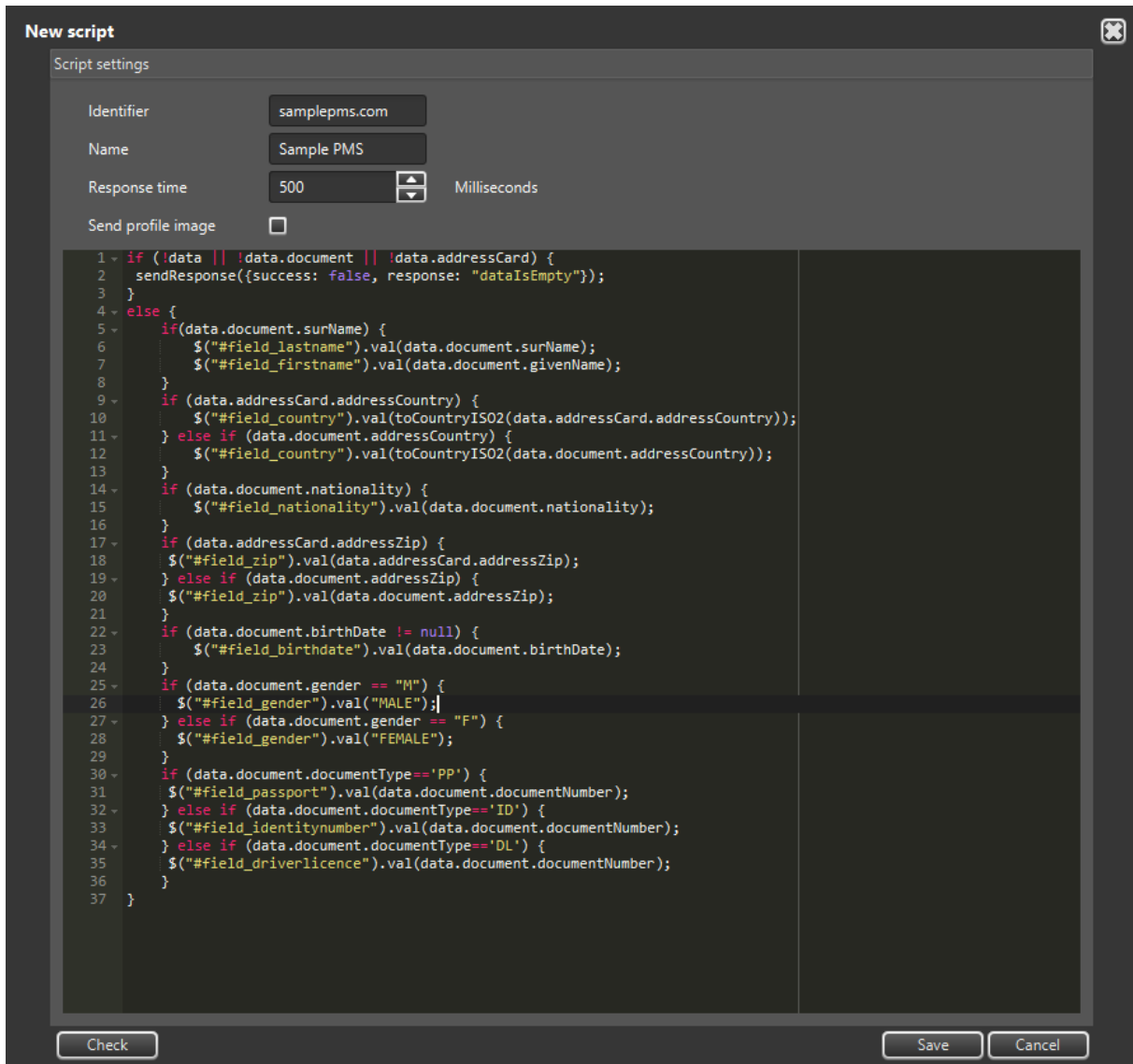
The AUTOFILL program hands over the data in the **data** variable. The **data** variable contains two main data structures: **data.document**, **data.addressCard**. In the help menu those variable names are displayed which describe the data structure received from the AUTOFILL program.
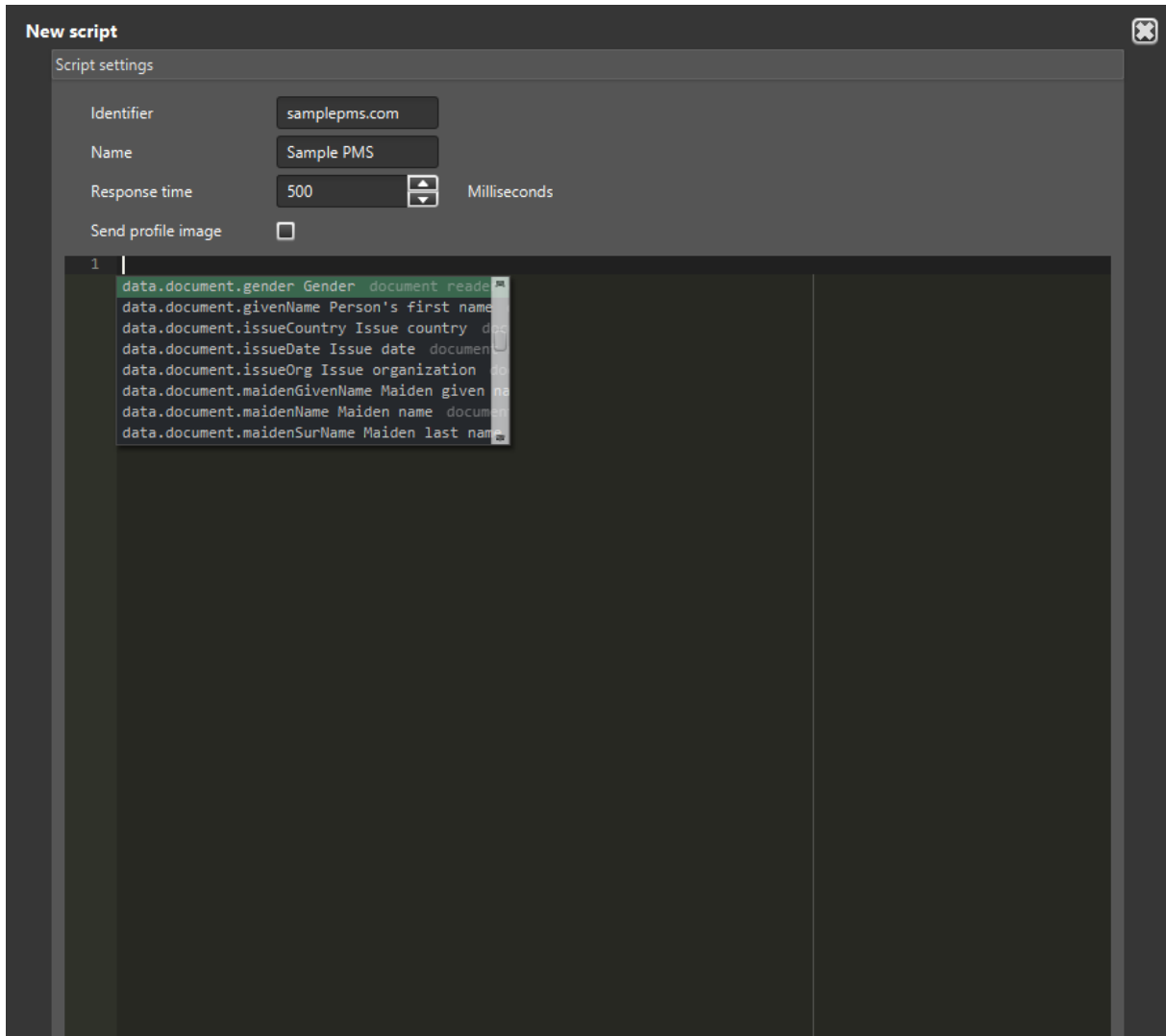
After the editing is completed, the settings and the content of the script can be recorded by clicking on the [Save] button. Prior to saving, the setting editor checks if the setting is appropriately filled in. The saving process can only be performed if the Identifier and the Name fields are specified as well as the script is not blank nor contains any errors.

Prior to saving, the checking process can be omitted by clicking on the [Check] button. If the setting is appropriately filled in, then a message of approval will be displayed in a message window.
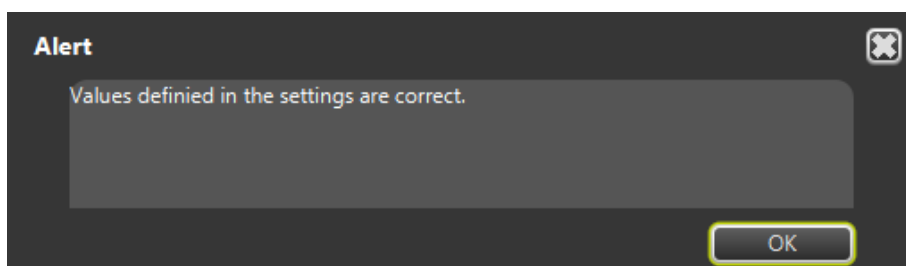
During the script editing process the editor continuously performs analysis. The analysis may indicate error or return warning or support the user with information. The icons marking these events are displayed before the row numbers.
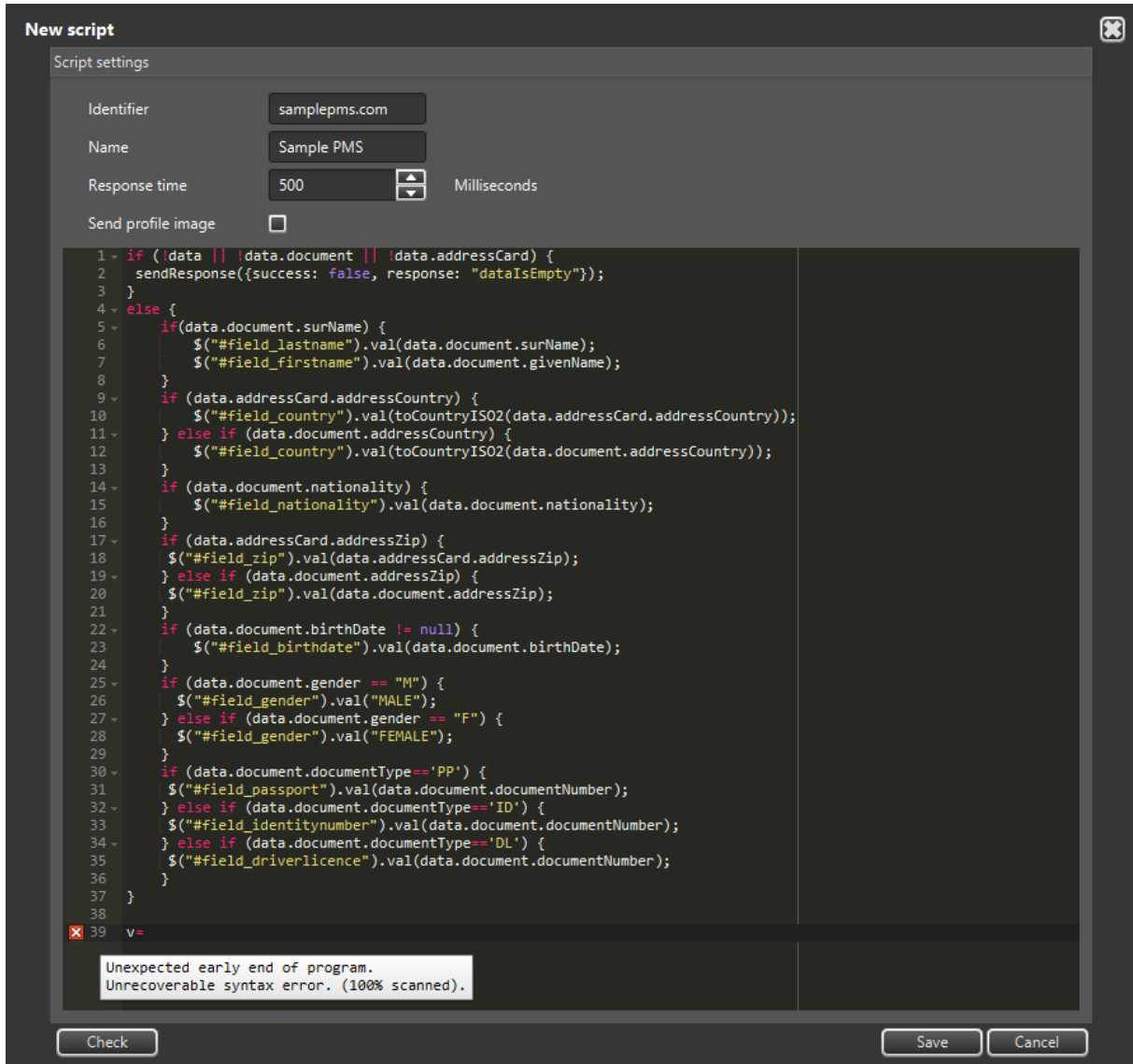
Before saving the setting containing the script, the check runs automatically. If the check finds error, then every possible error read from the editor will be listed in an error message.
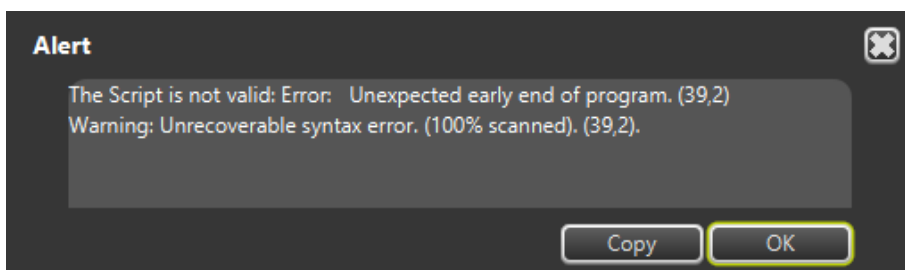
2.5.2. MODIFICATION

To modify the content of the script, please select the name of the script to be modified in the **Chrome module settings / Selected script** drop-down menu. Afterwards, click on the following button:

After clicking on this button, a new window will pop up, where the modification of the script can be performed. On this window the input fields contain the current values.
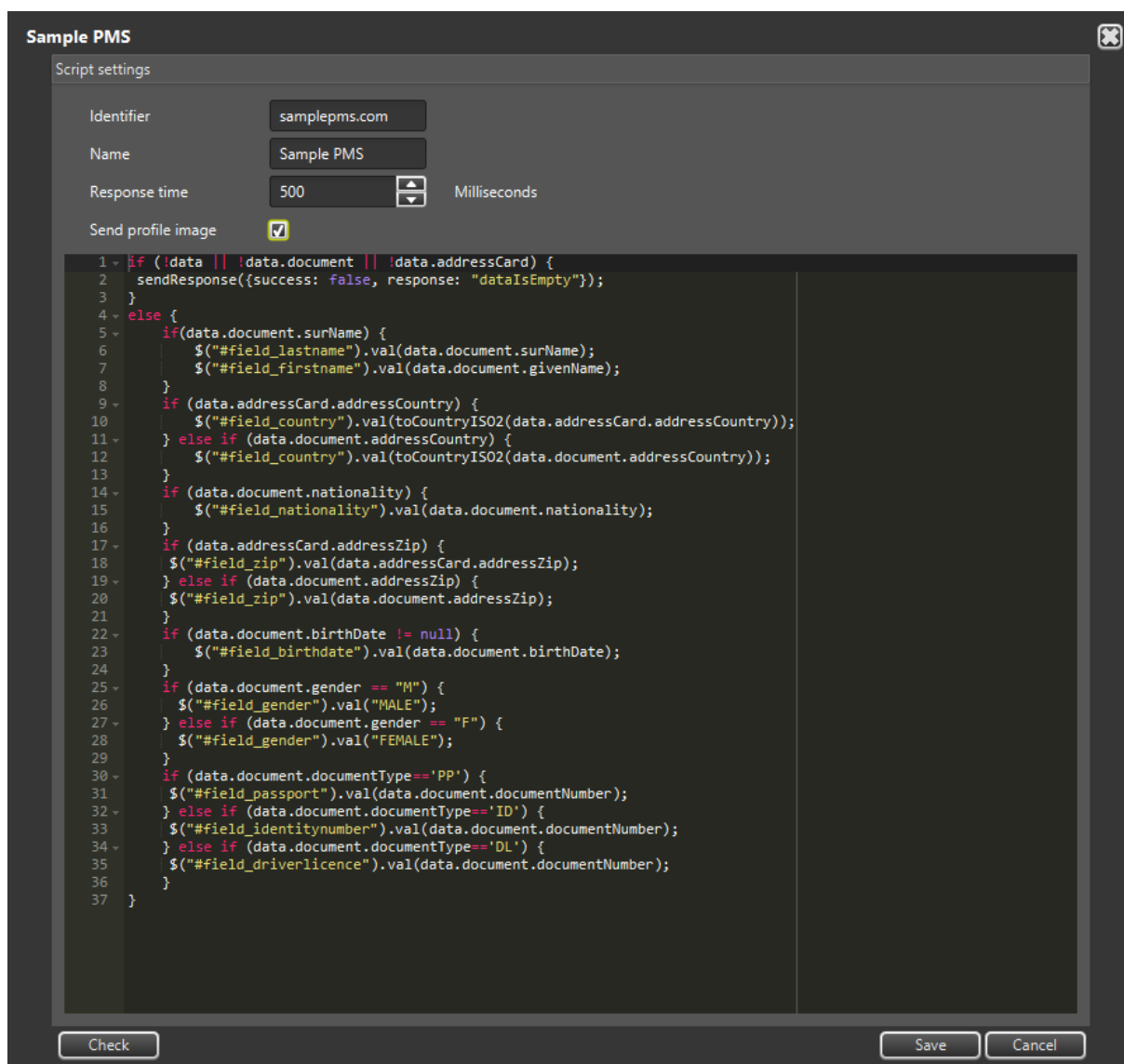
> **Note**
>
> The steps of the modification are the same as described in the CREATION chapter.

> **⚠ Important!**
>
> The setting can be renamed with the **Modification** tool.

After the modification of the **Identifier** field's content, the AUTOFILL application saves the setting as the file name created from the modified identifier, also the application simultaneously deletes the former file belonging to the identifier.

> **⊘ Example**
>
> Former **Identifier**: pms hotel1.com
> New **Identifier**: pms hotel2.com
>
> The setting will be saved as pms hotel2.com.xml and the pms hotel1.com.xml file will be deleted.

2.5.3. DELETION

To delete the script, in the **Chrome module settings / Selected script** drop-down menu select the name of the script to be deleted, then the deletion can be initiated by pressing the following button:

Prior to the deletion of the script, a confirmation message pops up, selecting **OK** will delete the template.

Adaptive Recognition **America**
Adaptive Recognition **Hungary**

Adaptive Recognition **Nordic**
Adaptive Recognition **Singapore**

REQUESTINFO@ADAPTIVERECOGNITION.COM
WWW.ADAPTIVERECOGNITION.COM
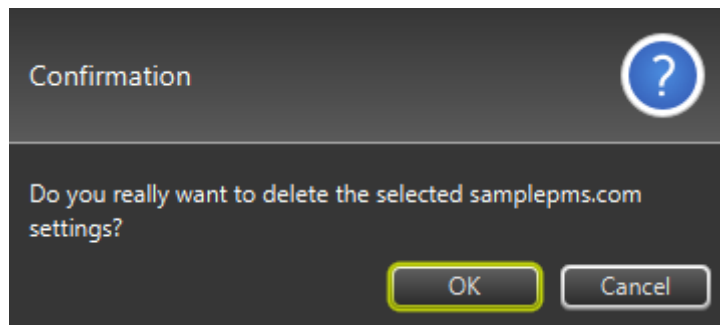
3. USING THE FORMFILLER INTEGRATION MODULE

3.1. PURPOSE OF FORMFILLER INTEGRATION MODULE

FormFiller transfers data to the PMS software, when the PMS software is a desktop application, i.e., it is not running in a browser. The transfer of data is performed by using a so-called robot that simulates the users' keystrokes, mouse clicks, and clipboard usage. FormFiller's template system is suitable for transferring data to such PMS software which waits for the automated and controlled data capture on one or more screens in a process of transferring. The module constantly monitors the transfer process, actively monitors the PMS software window, and during the transfer, when the PMS window is no longer active, FormFiller interrupts the transfer process and notifies the user in a pop-up window.

3.2. USE OF THE FORMFILLER INTEGRATION MODULE

FormFiller can be selected in **Settings / Integration module**. The integration module transfers the data corresponding to the setting described in the SETTING UP THE FORMFILLER INTEGRATION MODULE section and performs the specified operations in the PMS software area as if it were performed by the user. The values that can be passed are data from the document reader, constant texts if necessary. FormFiller is able to perform certain operations on the data to be transmitted from the document reader prior to transmission:

- Convert to uppercase
- Convert to lowercase
- Remove accents
- Replace blank data
- Convert ISO 3166 country codes

FormFiller is able to perform keystrokes and mouse actions in the field of PMS software:

- Pressing the 0-9, A-Z, F1-F12, esc, home, end, enter, windows, tab, space, del, backspace, left, right, up, down, pageUp, pageDown keyboard buttons
- Pressing the 0-pageDown combined keystrokes with the Alt key
- Pressing the 0-pageDown combined keystrokes with the Ctrl key
- Pressing the 0-pageDown combined keystrokes with the Shift key
- Pressing the 0-pageDown combined keystrokes with Alt + Shift
- Pressing the 0-pageDown combined keystrokes with Alt-Ctrl
- Pressing the 0-pageDown combined keystrokes with Ctrl + Shift
- Pressing the 0-pageDown combined keystrokes with Alt-Ctrl + Shift
- Moving the mouse and left-click
- Moving the mouse and right-click

3.3. SETTING UP THE FORMFILLER INTEGRATION MODULE
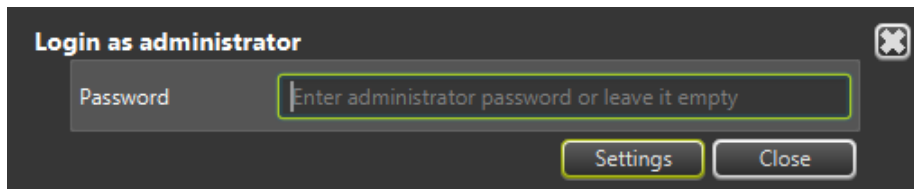
To utilize the knowledge described in the <u>USE OF THE FORMFILLER INTEGRATION MODULE</u> chapter, settings must be made during installation and integration with the PMS software. FormFiller can be configured on the **AUTOFILL Application / Settings** screen. The **FormFiller settings** appears on the **Settings** screen if FormFiller is installed. The **FormFiller settings** will be active if FormFiller is selected in the **Settings / Integration module** setting.

Setting FormFiller in user mode is limited to select a template. If you need to change the FormFiller template, you can do after logging in as an administrator to **Settings**.

The **FormFiller settings** screen appears after **Network settings**, even in the settings of additional installed integration modules:

On the AUTOFILL application screen, press the [⚙] button in the lower right corner of the window. The Administrator login screen will appear aligned to the AUTOFILL application screen:

If you want to create a new screen template or need to change an existing one, you need to enter the Administrator password.

In the **FormFiller settings** module of the AUTOFILL program, it is possible to create several different templates that allow the program to transfer data to several receiving programs by selecting the template.

The **FormFiller settings** basically consists of two parts:

1. Select template
2. Edit template

3.3.1. SELECT TEMPLATE

The template can be selected from the **Selected template** drop-down menu. Once selected, the setting must be saved by pressing the **[Save]** button. Then, the AUTOFILL program transfers the data according to the selected template.
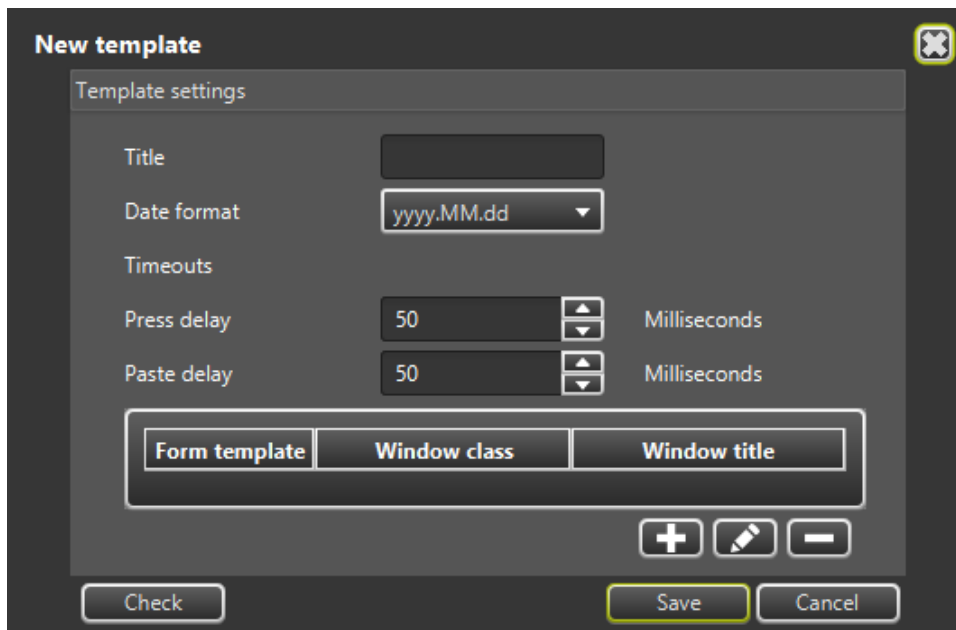
3.3.2. EDIT TEMPLATE

> **📃 Note**
>
> The **FormFiller settings** screen will display editing buttons, when you open the **Settings** screen in Administrator mode.

There are three ways to edit a template:

1. **Create:** create a new template
2. **Edit:** modification and improvement of an existing template, tracking of changes of the PMS software.
3. **Delete:** delete a template when the template is no longer needed.

Create: You can create a new template on the screen that appears after you press the button.

The **New template / Template settings** panel consists of two main parts:

1. General values:

- Title:

  The title of the template must be entered in the field. The title can contain numbers, English ABC characters, spaces and punctuation, as well as accented characters, either lowercase or uppercase.

- Date format:

  The date format can be selected from a drop-down menu. FormFiller passes the date content values from the document reader to the PMS software formatted with the set value.
  Possible values:
    - yyyy.MM.dd: This corresponds to the Hungarian date format.
    - dd.MM.yyyy: This corresponds to the Western European date format.
    - dd.MM.yy: This corresponds to the Western European abbreviated date format.

- Timeouts:

  - **Press delay**: Waiting between keystrokes

    The purpose of this setting is to affect how often the robot can send data to the PMS software. There may be times when the PMS software cannot process consecutive keystrokes that arrive at very short intervals, so some of them may be lost. This setting specifies the number of milliseconds that the AUTOFILL software waits between keystrokes transmitted to the PMS software. This setting controls each keystroke transmitted to the PMS software is processed securely (see also delay() function). Possible values are 0-1000, in units of milliseconds. If the value is 0 milliseconds, there is no waiting between each keystroke.

  - **Paste delay**: Waiting between copies to the clipboard

    The purpose of this setting is to influence how often the robot can copy data to the clipboard. There may be times when the PMS software cannot process consecutive data copied to a clipboard in very fast succession. If the AUTOFILL software copies new data to the clipboard before PMS software finishes the processing, the PMS software will only receive the latter data, the data previously intended to be transferred to the clipboard will be lost. In this setting, you can specify how long the data transferred from the clipboard is available to the PMS software, before the AUTOFILL software copies new data to the clipboard. Possible values are 0-1000, in units of milliseconds. If the value is 0 milliseconds, there is no waiting between each data copies to the clipboard.

2. **Form Template:** A table of screen templates for filling in one or more screens managed in a FormFiller template.

    The steps to perform the FormFiller task are the following:
    1. Bring the data receiving window of the PMS software to the fore.
    2. Fill in the current fields of the foreground window.
        a. Navigation to the next input field
        b. Fill in the input field
    3. Open an additional input screen for the PMS software, if required.
    4. Waiting to finish filling in another input screen that is being filled.

    The process for an input screen is to perform the steps 1-4. described in **Form template**. The data entry requirement of a PMS software may also be that the required full data entry has multiple screens. Each screen has a **Form template**.
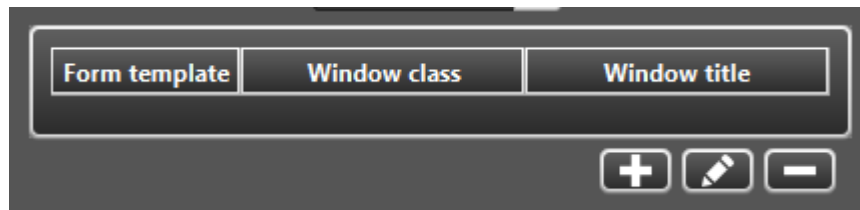
    Creating a new **Form template** and uploading its data, as well as specifying the data to be transferred must be done in the window that appears after pressing the button.

    Modifying an existing **Form template** must be done in the window that appears after pressing the button.
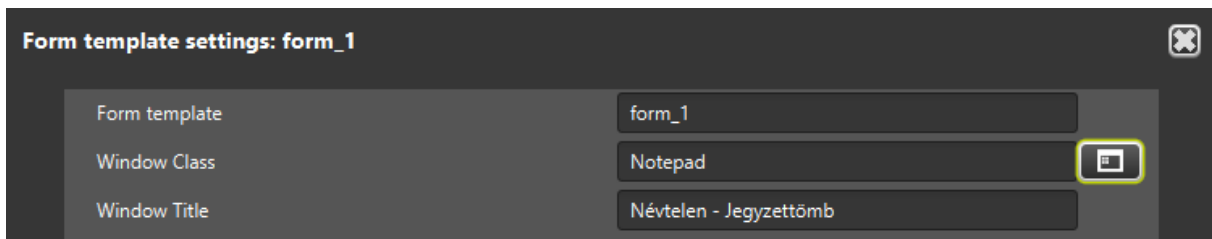
3.4. FORMFILLER TEMPLATE SETTINGS

Template details:

– **Form Template:** The name of the form template. This is provided automatically by the AUTOFILL software. The first template is named fill_1, the next is named fill_2, and so on.

– **Window Class:** The operating system level ID of the PMS software window. This is special textual information that is pre-defined by the PMS software developer or assigned to the application by the running operating system. The ID is not displayed on the screen, the AUTOFILL software will help you determine it.

Steps to determine the **Window Class**:

1. Start the PMS software.
2. In the PMS software, open the input screen to be filled out. The window should appear on the screen so that it is not covered by other software windows, including AUTOFILL software.
3. Return to the **AUTOFILL software / Form template settings** screen.
4. Click on the ▣ button next to the **Window Class** input field.
5. Click on the PMS software input screen.
6. After clicking, the ID and address of the input screen of the selected PMS software will be displayed in the **Window Class** input field and the **Window Title** input field.

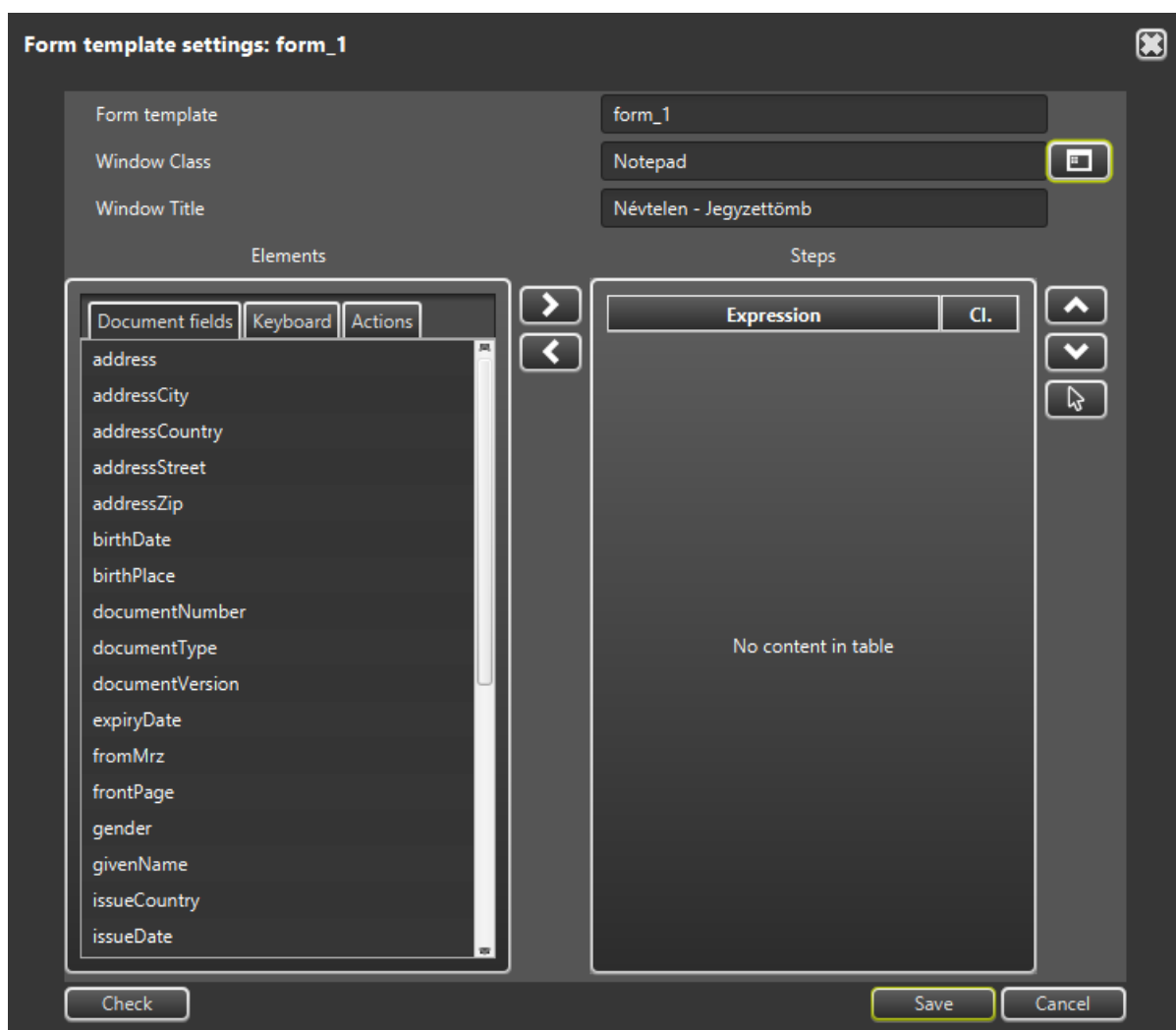For example, if the host program is Notepad, the result will be:

Form template settings: form_1		
Form template	form_1	
Window Class	Notepad	▣
Window Title	Névtelen - Jegyzettömb	

In the following, the transfer **Steps** must be defined: the keystrokes and mouse operations that ensure the navigation between the data to be transferred and the data entry fields of the PMS software. The specified steps are performed in the order of entry.

The **Steps** can be selected from the **Elements** table.

The sub-table of possible steps can be selected by clicking on the appropriate name. Each row in the sub-table is a selectable step that can be added to the **Steps** list by selecting the item and clicking on the ➤ button or double-clicking on the selected item. If you need to delete a step from the **Steps** list, you must select the steps in the **Steps** list on the right, and click the ◄ button to remove the step from the **Steps** table.

Form template settings: form_1

Form template	form_1
Window Class	Notepad
Window Title	Névtelen - Jegyzettömb

Elements | Steps

Document fields | Keyboard | Actions

address
addressCity
addressCountry
addressStreet
addressZip
birthDate
birthPlace
documentNumber
documentType
documentVersion
expiryDate
fromMrz
frontPage
gender
givenName
issueCountry
issueDate

| Expression | Cl. |

No content in table

Check | Save | Cancel

⚠ **Important!**

A step can be transferred from the **Elements** page to the **Steps** list more than once, for example: a tab keystroke for navigation.

There are three lists to choose from under the **Elements** tab:

1. Document fields
2. Keyboard
3. Actions

1. **Document fields:**

Each document field is a step that can be interpreted on its own. The selected step appears in the **Steps** table on the right.
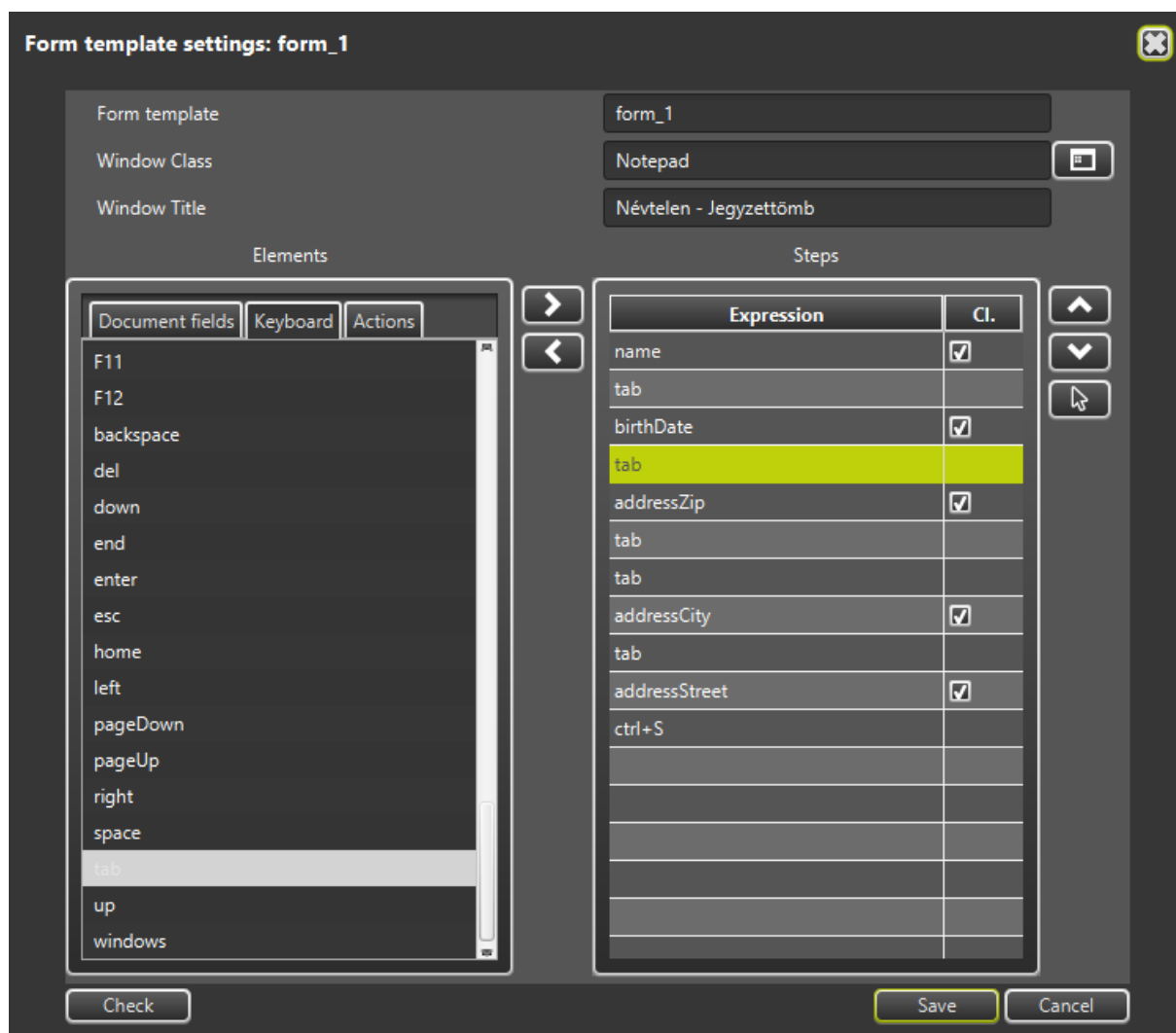
A check box appears next to the document field names. The check box is off by default.

The transfer passes the content of the document field to the PMS software in a split-key sequence, and the AUTOFILL program waits for the time specified in the **Timeouts / Press delay** after each keystroke.

example: name = Kis

Implementation:

Press **shift** key,

Press the **K** key

Release **K** key

Release **shift** key

Waiting for the time specified in the Timeouts

Press **I** key

Release **I** key

Waiting

Press the **S** key

Release **S** key

If the check box is selected, the content of the document field is placed on the clipboard, and then by pressing Ctrl-V, the AUTOFILL program waits for the time specified in the **Timeouts / Paste delay** option after each copy to the clipboard.

After pressing the Ctrl-V key combination, the PMS software reads the content of the clipboard and inserts it in one step into its own current input field.

example: name = Kis

Implementation:

A **Kis** string is placed on the clipboard as text information and then;

Press Ctrl key,

Press V key

Release V key

Release Ctrl key

2. Keyboard:

0-9, A-Z, F1-F12, esc, home, end, enter, windows, tab, space, del, backspace, left, right, up, down, pageUp, pageDown keys are self-executing steps, the alt, ctrl and shift keys can only be used in combination with the above.

The selected step appears in the **Steps** table on the right. For a **Keyboard** type step, the check box does not appear.
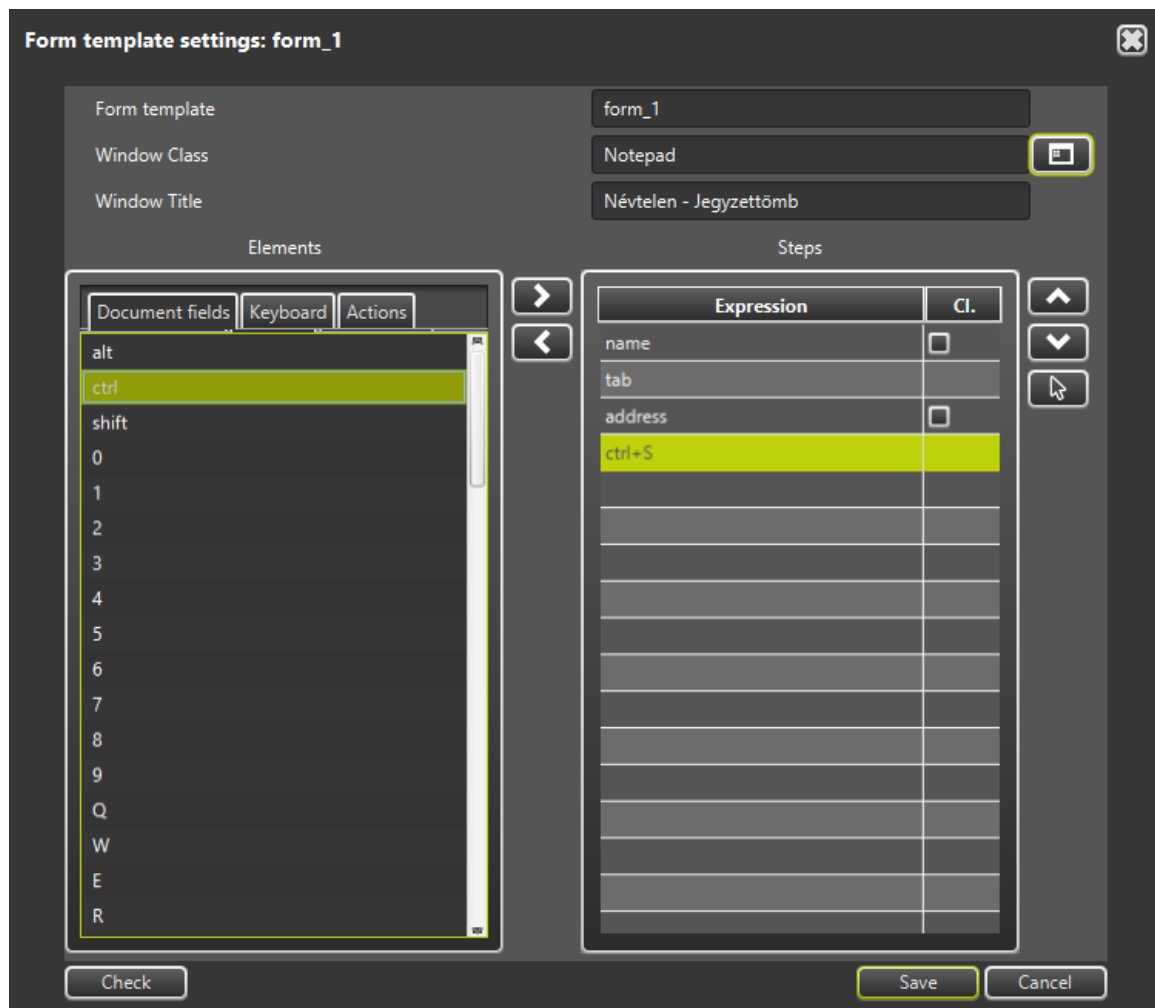
Example: create alt + S step

Selection process:

- Select the **Keyboard** tab

- Find and add the **S** key to the **Steps** list by double-clicking or pressing the [>] button

- Find and add the **alt** modifier to step **S** selected in the **Steps** list. As a result of the selection, **alt + S** is displayed instead of step **S**.

Example: change **alt + S** step to **ctrl + S** key combination

Selection process:

- In the **Steps** list, select **alt + S**.
- After pressing the [◄] button, the previous **alt** modifier will be deleted from the **alt + S** step. As a result of the deletion, the name **S** is displayed instead of the **alt + S** step.
- Add the **ctrl** modifier to step **S** selected in the **Steps** list. As a result of the selection, **ctrl + S** is displayed instead of step **S**.

Example: create **alt + ctrl + S** step

The process of selection:

- Select the **Keyboard** tab
- Add the **S** key to the **Steps** list by double-clicking or pressing the [►] key
- Add the **alt** modifier to step **S** selected in the **Steps** list. As a result of the selection, **alt + S** is displayed instead of step **S**.
- Add the **ctrl** modifier to the **Alt + S** step selected in the **Steps** list. As a result of the selection, **alt + ctrl + S** is displayed instead of step **alt + S**.

Example: delete **alt + ctrl + S** step

The deletion process is the reverse of the creation process. Deleting a step with a modifier, first deletes the modifier, and then if the step no longer has a modifier, the default key is also deleted from the **Steps** list:

- Select **alt + ctrl + S** in the **Steps** list
- After pressing the [◄] button, the previous **ctrl** modifier will be deleted from the **alt + ctrl + S** step. As a result of the deletion, **alt + S** is displayed instead of the **alt + ctrl + S** step.
- After pressing the [◄] button, the previous **alt** modifier will be deleted from the **alt + S** step. As a result of the deletion, the name **S** is displayed instead of the **alt + S** step.
- After pressing the [◄] button, the previous **S** key step is deleted from the **Steps** list.

3. Actions:

The group of **Actions** includes the following options:

3.1. Modifications:

The data received from the document reader is transferred to the PMS software by post-processing, which includes the following: **converting to uppercase**, **converting to lowercase**, **exchanging accented characters for their unaccented counterparts**, **substitutions**. (There may be more options, depending on what user needs indicate.)

Modifications are functions that modify the content of the data obtained in their parameters. These modifier functions cannot stand on their own, so they cannot be added to the **Steps** list, but can be assigned to a document field step already added to the **Steps** list.

Modifications option includes the following:

- **toUpperCase**: It converts to uppercase. The function can only have one parameter.
- **toLowerCase**: It converts to lowercase. The function can only have one parameter.
- **stripAccents**: It replaces accented characters with the corresponding character in the English ABC. The function can only have one parameter.
- **substitute**: The function has two parameters. The function returns the value obtained in the first parameter, if it is not empty text. If empty, it returns the text received in the second parameter. If the value obtained in the second parameter is also empty, the return value will also be empty.
- **toCCA2**: The purpose of the function is to search for the 2-character version of the ISO 3166 for the country code obtained in its parameter. The parameter can be a 2- or 3-character ISO 3166 country code.
- **toCCA3**: The purpose of the function is to search for the 3-character version of the ISO 3166 for the country code obtained in its parameter. The parameter can be a 2- or 3-character ISO 3166 country code.
- **toCountryName**: The purpose of the function is to search for the ISO 3166 country name for the country code obtained in its parameter. The parameter can be a 2- or 3-character ISO 3166 country code.

For each modifier, the use of the check box is interpreted, which controls the use of the transfer via clipboard function.

Example:

– **toUpperCase(surName)**: It passes the content of the surName = Kovács document field converted to uppercase, KOVÁCS.

– **tolowerCase(addressCity)**: It passes the content of the addressCity = Budapest document field converted to lowercase, budapest.

– **stripAccents(name)**: The accented characters from the content of the name = Kovács Józsefné document field are replaced by their unaccented equivalents, and the text Kovacs Jozsefne is displayed in the PMS software.

– **stripAccents(toUpperCase(name))**: The content of the name = Kovács Józsefné document field will be converted to uppercase, after which the accented characters will be replaced by their unaccented equivalent, the text KOVACS JOZSEFNE will appear in the PMS software.

– **toCCA2(countryCode)**: Based on the content of the issueCountry = HUN document field, the HU value is passed to the PMS software. It is important to mention that it does not matter that the parameter is 2 or 3 characters long, the value passed to the PMS software will be the 2-character code.

– **toCCA3(countryCode)**: Based on the content of the issueCountry = HU document field, the HUN value is passed to the PMS software. It is important to mention that it does not matter that the parameter is 2 or 3 characters long, the value passed to the PMS software will be the 3-character code.

Example:

Create **toUpperCase(surName)** step

Selection process:

- Select the **Document fields** tab

- Add **surName** to the **Steps** list by double-clicking or pressing the [image: button] button. As a result of the addition, the **surName** step is displayed and is going to be active.

- Select **Actions** tab

- Add the **toUpperCase** modifier function to the **Steps** list by double-clicking or pressing the [image: button] button. As a result of the addition, the **toUpperCase(surName)** step is displayed instead of the **surName** step.

Example:

Create the **stripAccents(toUpperCase(surName))** step

Selection process:

- Select the **Document fields** tab

- Add **surName** to the **Steps** list by double-clicking or pressing the ![button] button. As a result of the addition, the **surName** step is displayed and is going to be active.

- Select **Actions** tab

- Add the **toUpperCase** modifier function to the **Steps** list by double-clicking or pressing the ![button] button. As a result of the addition, the **toUpperCase(surName)** step is displayed instead of the **surName** step.

- Add the **stripAccents** modifier function to the **Steps** list by double-clicking or pressing the ![button] button. As a result of the addition, the **stripAccents(toUpperCase(surName))** step is displayed instead of the **toUpperCase(surName)** step.

Example:

Delete **stripAccents(toUpperCase(surName))** step

The deletion process is the reverse of the creation process. Deleting a step created with a function, first deletes the function, and then if the step no longer has a modifier, the document field step is also deleted from the **Steps** list:

- Select the **stripAccents(toUpperCase(surName))** step in the **Steps** list

- After pressing the ![button] button, the previous **stripAccents** function is deleted from the **stripAccents(toUpperCase(surName))** step. As a result of the deletion, the name **toUpperCase(surName)** is displayed instead of the **stripAccents(toUpperCase(surName))** step.

- After pressing the ![button] button, the previous **toUpperCase** function is deleted from the **toUpperCase(surName)** step. As a result of the deletion, the name **surName** is displayed instead of the **toUpperCase(surName)** step.

- After pressing the ![button] button, the previous **surName** step is deleted from the **Steps** list.

3.2. Mouse action:

Left-click or right-click based on the coordinates entered in the current PMS window.

The mouse action functions do not transfer data, but move the mouse to the specified coordinates in the PMS software's window identified with the properties of the **Window Class** and **Window Title**, and there a left-click or right-click is performed. Using these functions allows you to select such menu items and press such buttons which cannot be accessed in the PMS software by entering key combination.

Mouse action option includes the following:

- **mouseClick**: left-click on the position specified in the parameter and calculated relative to the upper left corner of the PMS software window.
- **mouseRightClick**: right-click on the position specified in the parameter and calculated relative to the upper left corner of the PMS software window.

Example:

mouseClick(24,40):

The function execution directs the mouse to the point 24 from left and to the point 40 from the top in the PMS software's window identified with the properties of the **Window Class** and **Window Title**, and there a left-click (default) is performed. It is important to note that the coordinate is always a relative value calculated from the upper left corner of the PMS window. The coordinate entered in this way will be valid in all cases, regardless of where the PMS software window is opened in full screen. If the physical coordinate of the upper left corner of the PMS software window is 500,450, then the click will actually occur at screen point 524,490. If the user moves the PMS software window to the position of 1000,200, then during the next transfer the 1024,240 screen point will be clicked.

Example:

Create the **mouseClick(24,40)** step

Selection process:

- Start the PMS software.
- Open the input screen to be filled out in the PMS software. The window should appear on the screen so that it is not covered by other software windows, including AUTOFILL software.
- Return to the **AUTOFILL Software / Template settings** screen.
- Add **mouseClick** to the **Steps** list by double-clicking or pressing the [>] button. The addition will result in displaying the **mouseClick()** step and is going to be active. There will be no parameters in parentheses.
- Click on the [cursor] button to the right of the **Steps** list.
- Click on the position of the PMS software input screen, where the mouse click must be performed during the transfer.
- After clicking, the selected coordinate, **mouseClick(24,40)** appears in the **Steps** list as a parameter to the **mouseClick()** function. It is important that the ID and address of the input screen of the selected PMS software are entered in both the **Window Class** input field and the **Window Title** input field.

Example:

Delete the **mouseClick(24,40)** step

The deletion process is the reverse of the creation process. Deleting a step first deletes the second parameter of the function, then the first, and then, if the step no longer has a parameter, the function step is also deleted from the **Steps** list:

- Select the **mouseClick(24,40)** step in the **Steps** list

- After pressing the [◄] button, the previous second parameter, **40** is deleted from the **mouseClick(24,40)** step. As a result of the deletion, **mouseClick(24)** is displayed instead of **mouseClick(24,40)**.

- After pressing the [◄] button, the previous first parameter is deleted from step **mouseClick(24)**. As a result of the deletion, **mouseClick()** is displayed instead of the **mouseClick(24)** step.

- After pressing the [◄] button, the previous **mouseClick()** step is deleted from the **Steps** list.

It is important to note that a function call with missing parameter, **mouseClick(24)** is created after the deletion of the second parameter. The check performed before saving the setting will indicate this as an error, so the setting cannot be saved in this form. The deletion must either be completed completely or the parameter of the **mouseClick** function must be completely determined using the method described.

3.3. Waiting (delay) for a predetermined time:

The operation does not transfer data to the PMS Software, but controls the operation of the FormFiller module. The AUTOFILL program waits for the milliseconds specified in its parameter for the step specified by the operation.

Example:

delay(500)

The handover process is pending for 500 milliseconds, i.e., half a second by executing the operation. This may be necessary when the PMS software needs time to complete the data transfer previously received. This may be the case when the PMS software retrieves the value used in its own system from a list of hundreds of items during receiving the country code, and displays this value in the appropriate input field. The PMS software may not be immediately available to receive the next data, and it is a good idea to delay the execution of the next step in the AUTOFILL program at this point.

Example:

Create the **delay(500)** step

- Select **Actions** tab

- Add **delay()** to the **Steps** list by double-clicking or pressing the ▶ button. As a result of the addition, the **delay()** step is displayed and is going to be active. There will be no parameters in parentheses.

- In the **Steps** list, double-click the **delay()** step. As a result of the double-click, an edit box appears in the active row of the **Steps** list. In the edit box, enter the expected latency in milliseconds in parentheses: **(500)**

- In order to finish the editing on the edit box interface, press the **[Enter]** key.

- When you exit editing, the name **delay(500)** appears in the **Steps** list.

⚠ **Important!**

The **delay()** step cannot be saved without a parameter.

Example:

Delete the **delay(500)** step

The deletion process is the reverse of the creation process. Deleting a step first deletes the parameter of the function, and then, if the step no longer has a parameter, the function step is also deleted from the **Steps** list:

- Select the **delay(500)** step in the **Steps** list

- After pressing the button, the previous parameter, **500**, is deleted from the **delay(500)** step. As a result of the deletion, **delay()** is displayed instead of **delay(500)**.

- After pressing the button, the previous **delay()** step is deleted from the **Steps** list.

> **(!) Important!**
>
> The **delay()** step cannot be saved without a parameter.

3.4. Waiting to complete the execution of another template:

The operation does not transfer data to the PMS software, but controls the operation of FormFiller. The step specified by the operation waits until the steps defined in the template of its parameter are completed.

> **⚠ Important!**
>
> The waiting can be up to 60 seconds long.

Example:

wait('fill_2')

The execution of the operation assumes that a template with ID **fill_2** exists. This step waits for the process described in the **fill_2** template to be completed. If the execution of **fill_2** has completed, it will proceed to the next step of the template that calls **wait('fill_2')**.

Example:

Create the **wait('fill_2')** step

- Select **Actions** tab
- Add **wait()** to the **Steps** list by double-clicking or pressing the [▶] button. As a result of the addition, the **wait()** step is displayed and is going to be active. There will be no parameters in parentheses.
- In the **Steps** list, double-click on the **wait()** step. As a result of the double-click, an edit box appears in the active row of the **Steps** list. In the edit box, enter the expected template name in parentheses. The name must be enclosed in single or double quotation marks: **'fill_2'**
- Press the **[Enter]** key on the edit box interface to finish editing.
- When you exit editing, the name **wait('fill_2')** appears in the **Steps** list.

> **⚠ Important!**
>
> The **wait()** step cannot be saved without a parameter.

Example:

Delete the **wait('fill_2')** step

The deletion process is the reverse of the creation process. Deleting a step first deletes the function parameter, and then, if the step no longer has a parameter, the function step is also deleted from the **Steps** list:

- Select the **wait('fill_2')** step in the **Steps** list

- After pressing the [◀] button, the previous **'fill_2'** parameter will be deleted from the **wait('fill_2')** step. As a result of the deletion, **wait()** is displayed instead of **wait('fill_2')**.

- After pressing the [◀] button, the previous **wait()** step is deleted from the **Steps** list.

3.5. Switch to execute another template

The operation does not transfer data to the PMS software, but controls the operation of FormFiller. The step specified by the operation brings to the fore the window belonging to **Window Class** and **Window Title** defined in the template of its parameter.

Example:

switchTo('fill_3')

The execution of the operation assumes that a template with ID **fill_3** exists. The step retrieves the **fill_3** template and brings to the fore the window belonging to **Window Class** and **Window Title**. The **fill_3** filler is waiting in the background to start the execution belonging to the foreground screen.

Example:

Create the **switchTo('fill_3')** step

- Select **Actions** tab

- Add **switchTo()** to the **Steps** list by double-clicking or pressing the ![button] button. As a result of the addition, the **switchTo()** step is displayed and is going to be active. There will be no parameters in parentheses.

- In the **Steps** list, double-click on the **switchTo()** step. As a result of the double-click, an edit box appears in the active row of the **Steps** list. In the edit box, enter the expected template name in parentheses. The name must be enclosed in single or double quotation marks: **'fill_3'**

- Press the **[Enter]** key on the edit box interface to finish editing.

- When you exit editing, the name **switchTo('fill_3')** appears in the **Steps** list.

⚠ **Important!**

The **switchTo()** step cannot be saved without a parameter.

Example:

Delete the **switchTo('fill_3')** step

The deletion process is the reverse of the creation process. Deleting a step first deletes the parameter of the function, and then, if the step no longer has a parameter, the function step is also deleted from the **Steps** list:

- Select the **switchTo('fill_3')** step in the **Steps** list

- After pressing the button, the previous **'fill_3'** parameter is deleted from the **switchTo('fill_3')** step. As a result of the deletion, **switchTo()** will be displayed instead of the **switchTo('fill_3')** step.

- After pressing the button, the previous **switchTo()** step is deleted from the **Steps** list.
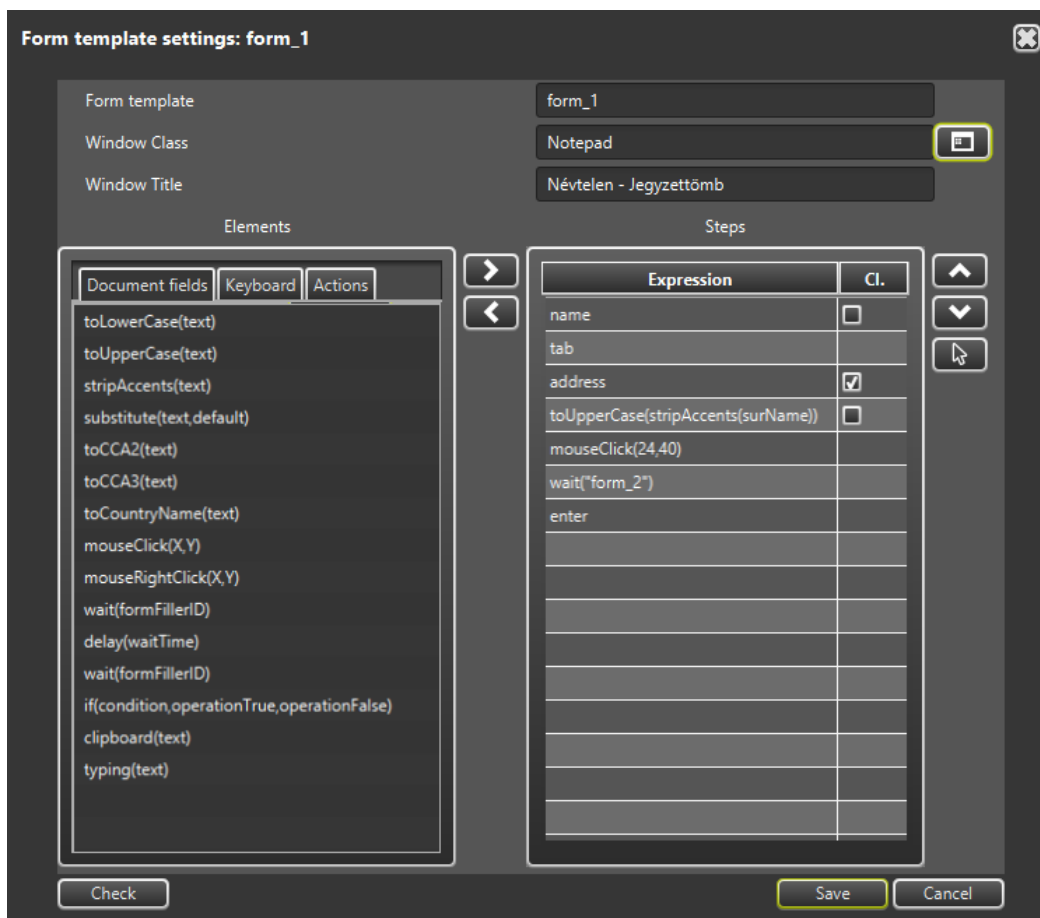

3.6. Copy to the clipboard:

Copy to the clipboard as it takes place in the case of document field data.

**3.7. Data transfer with keystrokes:**

Data transfer with keystrokes as it takes place in the case of document field data.

3.8. Conditional execution

After setting the properties and steps of the template, click [Save] to save the content of the template.

Before saving, the AUTOFILL program checks the settings. If the check finds an error, the error message will appear in a pop-up window and no saving will be performed.
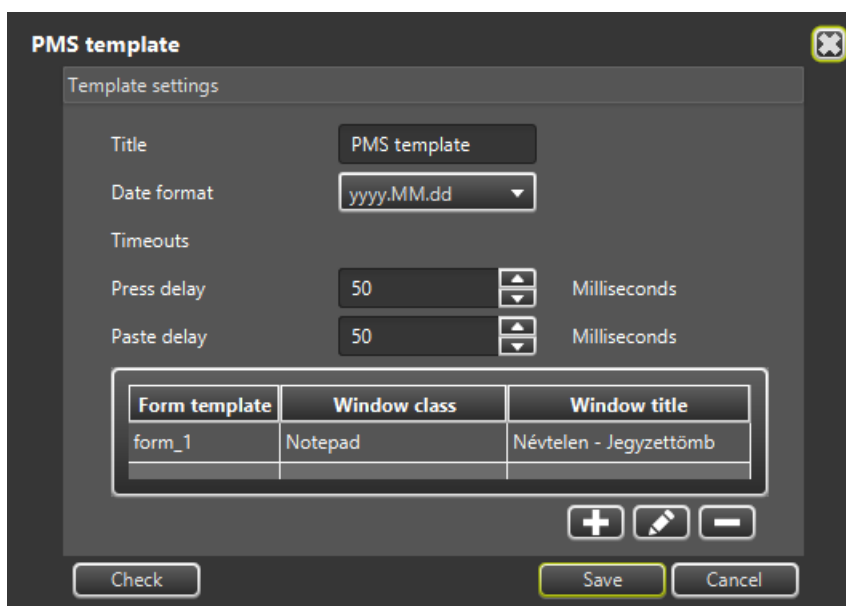
After saving the correct settings, the **Template settings** window closes.

The **AUTOFILL / Settings / FormFiller settings** will include the template with the previously edited steps.

> 📑 **Note**
>
> The entire FormFiller configuration has not yet been saved so that it can be used after restarting the AUTOFILL program. FormFiller can handle multiple templates, you must compile them one after the other, and then save the entire **FormFiller settings**.
> To save the entire settings, press the **[Save]** button on the **Settings** screen.

When you click the **Save** button, the settings are saved and the FormFiller integration module restarts automatically. With the modified settings, the transfer of data to the PMS software can be started immediately without restarting the AUTOFILL program.
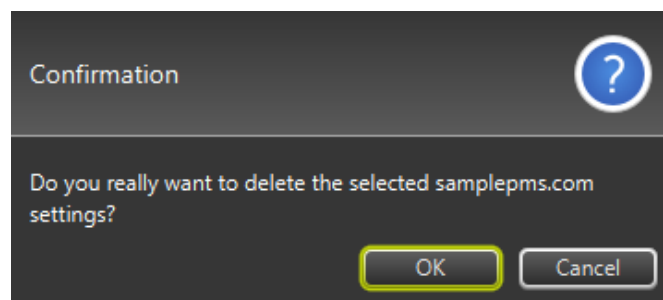

📄 Note

After creating a new template, the AUTOFILL program will use the template during handover, if the new template is selected. To do this, select the template on the **FormFiller settings** screen after creation, and then click **[Save]** on the default **Settings** screen.

3.5.   DELETE THE FORMFILLER TEMPLATE

To delete a template, select the template you want to delete in the **FormFiller settings** panel, and then press the ⊟ button to initiate deletion of the template. Before deleting the template, a security question window pops up on which press [OK] to delete the template.
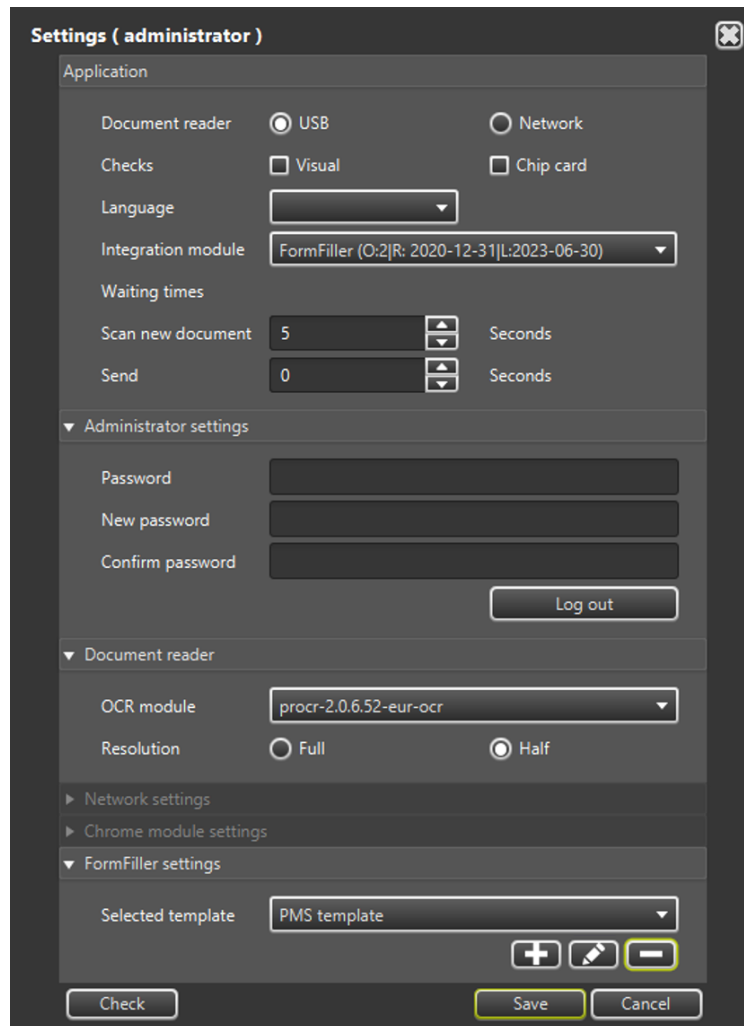
> **Note**
>
> If the template was deleted on the previously active template, after deleting the template, the previously selected template will disappear from the FormFiller settings screen, so a new template must be specified.

APPENDIX

Appendix to the Chrome Integration Module

data.document:

data.document.personalNumber: Personal number
data.document.name: Person\\'s name
data.document.surName: Person\\'s last name
data.document.middleName: Person\\'s middle name
data.document.givenName: Person\\'s first name
data.document.maidenName: Maiden name
data.document.maidenSurName: Maiden last name
data.document.maidenGivenName: Maiden given name
data.document.birthPlace: Birth place
data.document.birthDate: Birth date
data.document.motherName: Mother name
data.document.motherSurName: Mother last name
data.document.motherGivenName: Mother first name
data.document.gender: Gender
data.document.fromMrz: Document MRZ page
data.document.frontPage: Document front page
data.document.documentNumber: Document number
data.document.documentType: Document type
data.document.documentVersion: Document version
data.document.issueCountry: Issue country
data.document.issueOrg: Issue organization
data.document.issueDate: Issue date
data.document.expiryDate: Expiry date
data.document.nationality: Person\\'s nationality
data.document.address: Full address on ID card
data.document.addressCity: Address city on ID card
data.document.addressCountry: Address country on ID card
data.document.addressZip: ZIP code on ID card
data.document.addressStreet: Address street
data.document.faceImage: Face image (Base64)

data.addressCard:

data.addressCard.name: Person\\'s name on the address card

data.addressCard.surName: Person\\'s last name on the address card

data.addressCard.middleName: Person\\'s middle name on the address card

data.addressCard.givenName: Person\\'s last name on the address card

data.addressCard.birthPlace: Birth place on the address card

data.addressCard.birthDate: Birth date on the address card

data.addressCard.motherName: Mother name on the address card

data.addressCard.motherSurName: Mother last name on the address card

data.addressCard.motherGivenName: Mother first on the address card

data.addressCard.fromMrz: Back of address card

data.addressCard.frontPage: First page of address card

data.addressCard.documentNumber: Document number of address card

data.addressCard.documentVersion: Version of address card

data.addressCard.issueCountry: Issue country of address card

data.addressCard.issueOrg: Issue organization of address card

data.addressCard.issueDate: Issue date of address card

data.addressCard.address: Address

data.addressCard.addressCity: Address city

data.addressCard.addressCountry: Address country

data.addressCard.addressZip: Address zip code

data.addressCard.addressStreet: Address street and house number

Description of XML:

e.g.: scripts/samplepms.xml

```xml
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<script id="samplepms.com">
      <name>Minta PMS</name>
<timeout>500</timeout>
              <profile-image>true</profile-image>
      <body>     <![CDATA[if (!data || !data.document || !data.addressCard)
{
  sendResponse({success: false, response: "dataIsEmpty"});
} else {
    if(data.document.surName) {
        $("#field_lastname").val(data.document.surName);
        $("#field_firstname").val(data.document.givenName);
    }
}]]></body>
</script>
```

In the XML **<script id=…>** contains the identifier of the script and also determines the name of the file, e.g.: id=samplepms.com with the file name being samplepms.com.xml.

The **<name>** contains the language version of the title.

The **<timeout>** contains the value of the time frame in which the reply message following the handing over is to be received. This value is in milliseconds.

The **<profile-image>** holds information on whether the profile image scanned from the document is to be transmitted during data transmission. When this value is set to true, the profile image is going to be transmitted. By default, it is set to Boolean false.

The **<body><![CDATA[…]]></body>** part contains the complete text of the javascript.

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Adaptive Recognition Hungary Technical Support System (ATSS) is designed to provide you the fastest and most proficient assistance, so you can quickly get back to business.

Information regarding your hardware, latest software updates and manuals are easily accessible for customers via our Documents Site (www.adaptiverecognition.com/doc) after a quick registration.

New User

If this is your first online support request, please contact your sales representative to register you in our Support System. More help here (www.adaptiverecognition.com/support)!

Returning User

All registered ATSS customers receive a personal access link via e-mail. If you previously received a confirmation message from ATSS, it contains the embedded link that allows you to securely enter the support site.