



bsi.data

SoftWedge
Version 3.x

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Manual SoftWedge Version 3.x
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Chapter 1 - Introduction

With **SoftWedge** for Microsoft® Windows® XP, Windows Vista, Windows 7 and Windows 8 (both 32 bit and 64 bit), received data of (virtual) serial interfaces or TCP/IP connections will be directly forwarded to a window / input field. The received data of SoftWedge are forwarded as simulated keystrokes to the system, where they can not be distinguished from real keystrokes. Special keys, such as Tabs are converted to the appropriate Windows code - further adjustments are not necessary.

Version 3 of SoftWedge has been completely redeveloped. Some of the key features include:

- Supports any number of serial interface ports. USB serial adapters are supported as well, which can be „hot plugged“ during program running.
- Supports any number of network interface ports (TCP/IP port modules running in client mode)
- Supports one network server port (TCP/IP port module running in server mode)
- Runs on XP also available as a system service
- Active control of the serial control line RTS and DTR
- Variable adjustment of the serial data flow control (RTS/CTS, DTR/DSR, Xon/Xoff)
- Adjustable timing of simulated keystrokes for individual adaption to the respective conditions
- Adjustable header and terminator identification for active review and processing of the received data
- Optional automatic terminator for active monitoring and processing of received data that contain no constant terminator identification
- Removing of header and terminator identification from the data stream
- Adding a prefix and suffix when simulating keystrokes. In this way, an application can, for example, assign the data clearly to an external device and run special tasks.
- Character by character translation of the received data (translation table). Full support for extended ASCII character set (256 characters).

- Received data can be translated into a hexadecimal string (hex conversion, string "00" to "FF")
- Extensive editing capabilities of the received data (extended format) for comprehensive control of your input screens
- Supports the forwarding of data to the current window / input box, to a specific window / entry field and to a group of combined input fields (Smart Targets) individually for each port
- Supports Terminal Services from Microsoft or Citrix

1.1 Minimum System Requirements

The following minimum requirements needed for SoftWedge:

CPU:	Pentium or higher, at least 266 MHz
RAM:	min. 256 MB on Windows XP, min. 1024 MB on Windows Vista, Windows 7 or Windows 8
Harddisk:	min. 32 MB
Resolution:	min. 1024 x 768 pixel
OS:	Microsoft® Windows® XP, Windows Vista, Windows 7, Windows 8 (each 32 bit or 64 bit)

1.2 Additional System Requirements

No additional System Requirements needed.

1.3 Versions

SoftWedge is available in different versions. By entering a trial or product key during installation, SoftWedge will be installed with the appropriate properties on the system.

1.3.1 Trial Version

With the trial version, you have the option, to test all functions of SoftWedge during a limited time of 15 minutes. After this time SoftWedge stops working for the next 45 minutes. Upon a restart of SoftWedge after this break, the trial period of 15 minutes starts again.

1.3.2 Standard Version

The Standard Version of SoftWedge supports one serial interface. All other port modules will start in trial mode for a time limit of 15 minutes.

This version must be activated with one corresponding product key per PC.

1.3.3 Professional Version

The Professional Version of SoftWedge supports an unlimited number of serial interfaces, an unlimited number of network interface ports (TCP/IP modules in client mode) and one network server port (TCP/IP module in server mode).

This version must be activated with one corresponding product key per PC.

1.3.4 MLK-Version (Site-License)

The MLK-Version of SoftWedge supports an unlimited number of serial interfaces, an unlimited number of network interface ports (TCP/IP modules in client mode) and one network server port (TCP/IP module in server mode).

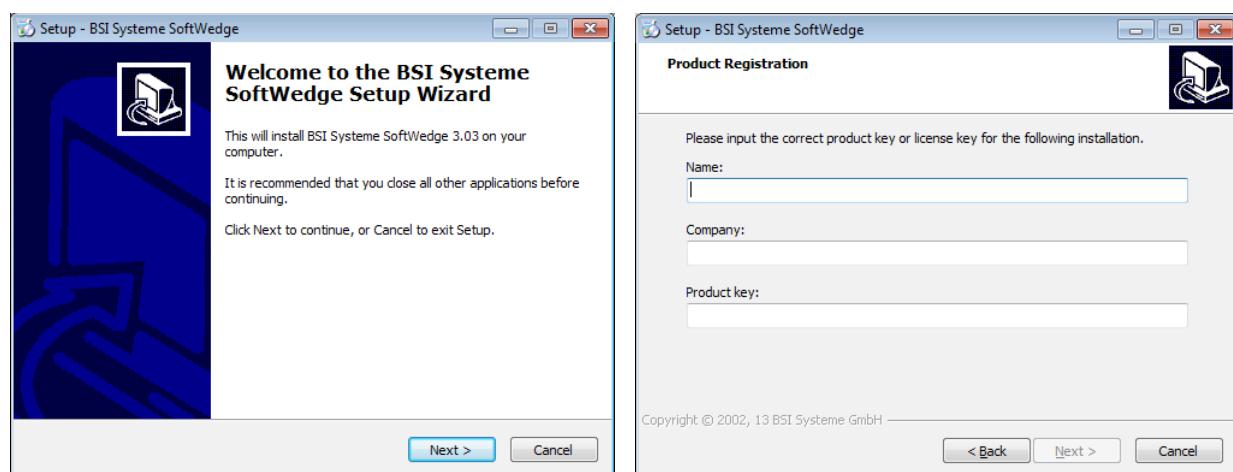
This version will be personalized delivered and can be installed on an unlimited number of PCs in one local site.

Chapter 2 - Installation

To install SoftWedge start the executable file „**SWedgeV3.exe**“, please.

For installation on Windows XP you will need to have administrative rights!

For installation on Windows Vista or newer with activated UAC (User Account Control), the system will ask you for an account with administrative rights.



Please input on the installation page **Product Registration** the trial key or a valid product key and follow the instructions of the setup program.

After purchasing one of the above program versions you will get a valid product key.

After installation you can start the SoftWedge configuration directly. The configuration is done from the currently logged-in user account.

Chapter 3 - First steps

For a successful first launch of SoftWedge after installation, only a few steps are necessary.

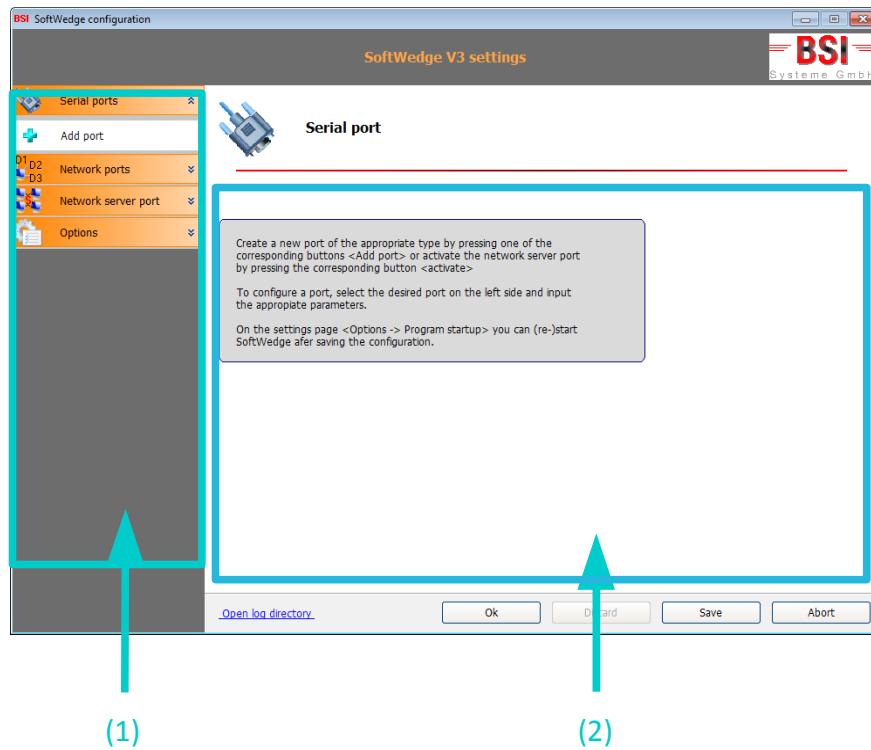
In the following example it is assumed, that a device is connected to a serial interface.

- Start the SoftWedge configuration.
- On the left navigation bar click on **Serial ports → Add port**.
- In the center of the settings page **General** select the setting **Activate port : yes**.
- In the center of the settings page **Transmission parameters** select the desired serial interface and validate / correct the transmission parameters.
- On the left navigation bar click on **Options → Program startup**
- In the center of the settings page **Program startup** select **How should SoftWedge be used ? : As an application (manual start)** and click the button **Start now!**
- Launch the desired target application and place the cursor into the appropriate input field / target window.
- Transmit the data from the connected device. The data will be implemented as simulated keystrokes at the actual cursor position.

Chapter 4 - Settings

SoftWedge configuration is the control center of SoftWedge, from which you can control all settings, change the start mode and start/stop the application.

The SoftWedge configuration window is divided in two main areas: the navigation bar (1) and the settings page (2).



4.1 General

At various points of SoftWedge configuration, you have the option to enter special characters and control characters. For this you can use the masking < and > to describe any character of the extended ASCII-charset: <*Dec*> or <*xHex*>, in which *Dec* describes an arbitrary number between 0 and 255. If you prefer the hexadecimal notation, you can mark this character by adding a **x** into the sequence as a hexadecimal number: <65> and <x41> both would correspond in this notation the letter A.

Since the character with a value less than 32 (20_{Hex}) have a special meaning, automatically the common symbol notation will be used instead of the ASCII value.

A detailed overview of the symbol notation you will find on the settings page **Translation table**. As an alternative to the symbol notation, you can use also the decimal or hexadecimal notation (e.g. instead of <STX> also <2> or <x2>).

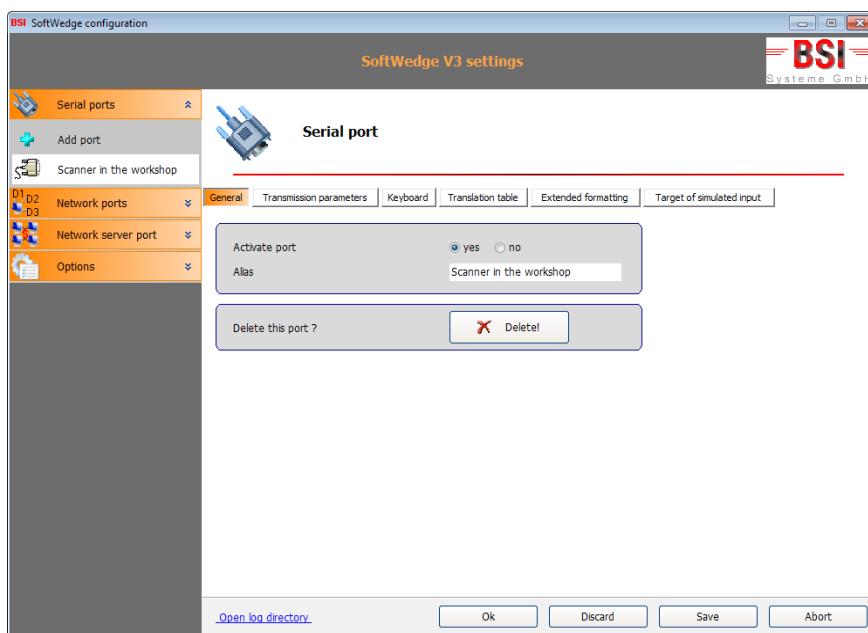
4.2 Ports

In the navigation bar, clicking on the entry **Add port** in the section **Serial ports** or **Network ports** a new **serial port** or **network port** will be created.

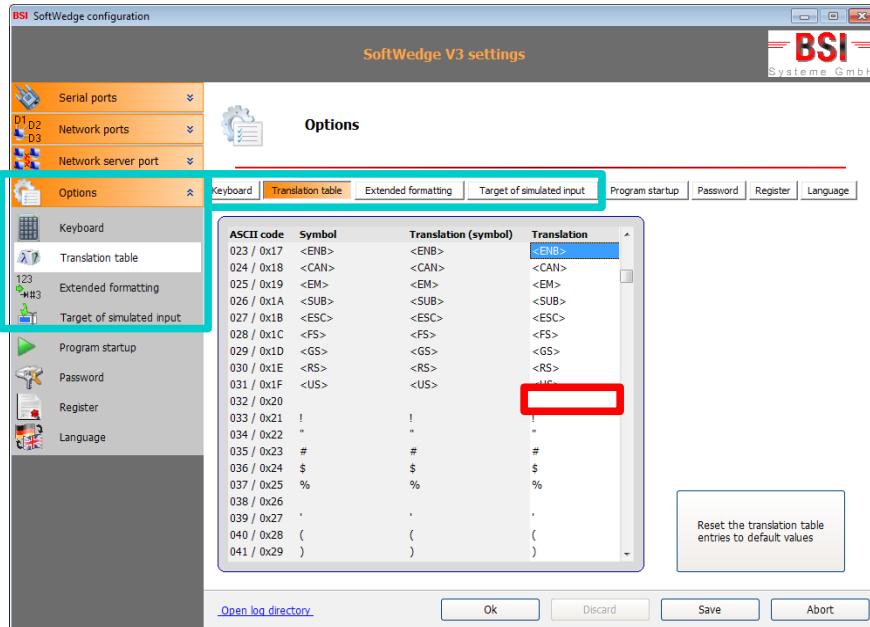
To create a **network server port** for any number of clients, click on **activate** in the section **Network server port**.

On the setting page **General** there can be changed the following settings for any created port:

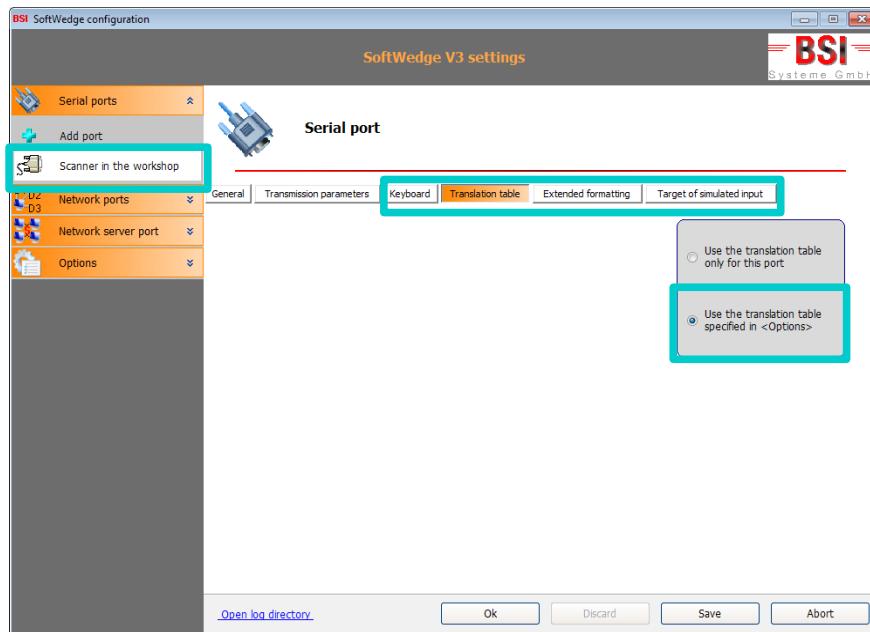
- activate or deactivate the port
- set an alias for a port (e.g. „*Scanner in the workshop*“)
- delete the port after confirmation (alternative: right click the port in the navigation bar and choose → **Delete port**)

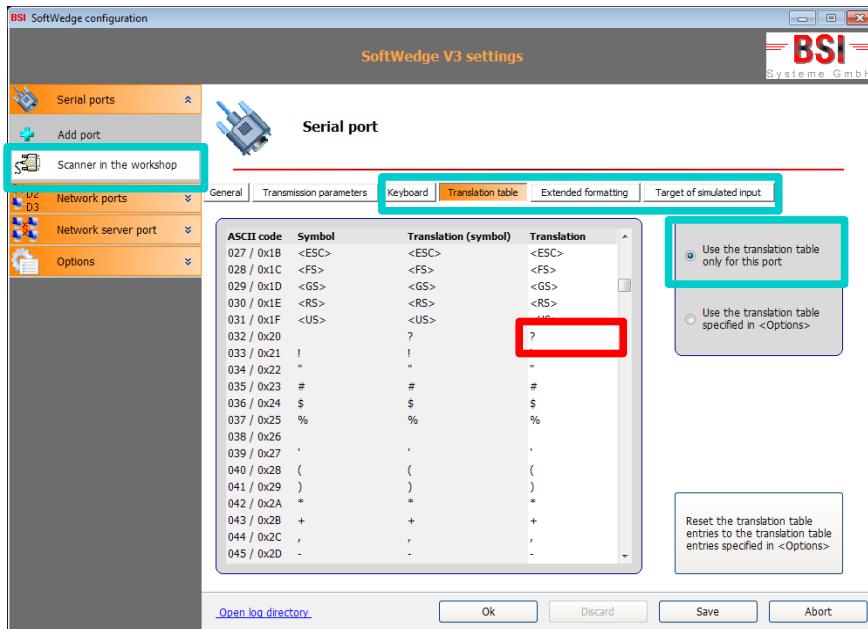


In addition to the settings of the transmission parameters (serial interface ports), and TCP/IP parameters (network interface ports, network server port) all other settings can be made under **Options** for all ports.



For each port you can use the **global** settings or the **local / individual** settings as well.





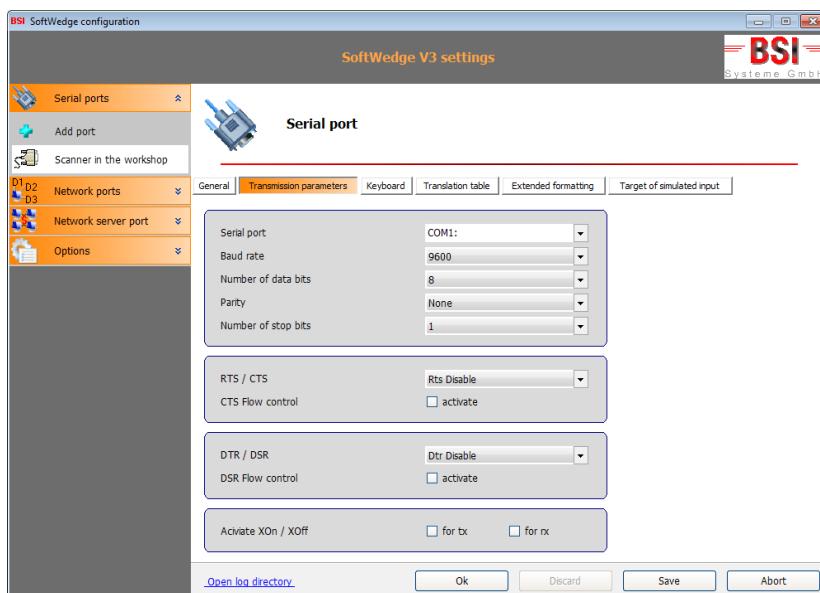
4.2.1 Serial ports

In the section **Serial ports** there can be created any number of serial port modules. USB serial adapters are supported as well, which can be „hot plugged“ during program running. The Standard Version of SoftWedge supports one serial interface. All other port modules will start in trial mode for a time limit of 15 minutes.

4.2.1.1 Transmission parameters

On this settings page the transmission parameters can be changed.

During configuration please be aware, that the settings of your connected device must match the settings of SoftWedge!

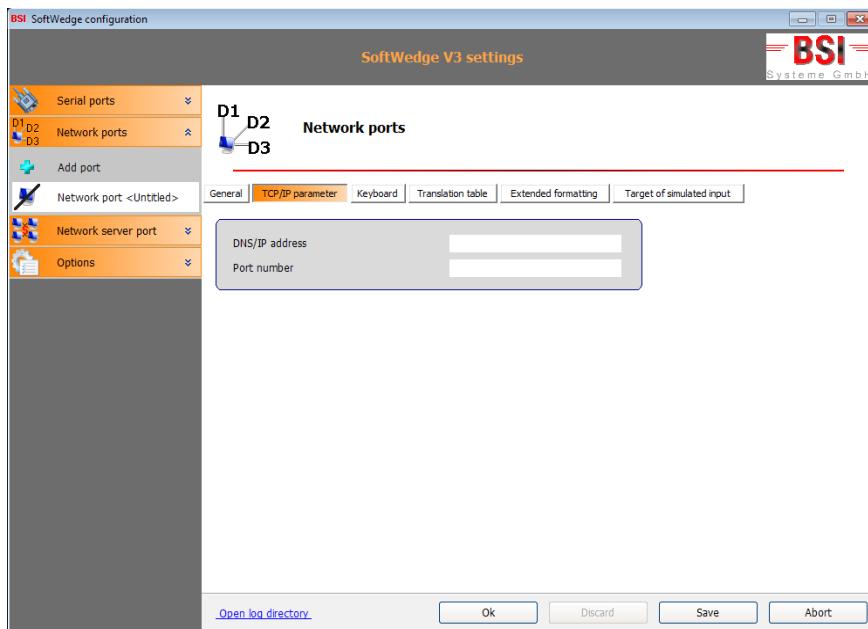


4.2.2 Network ports

In the section **Network ports** there can be created any number of network port modules. In the Standard Version of SoftWedge all network port modules will start in trial mode for a time limit of 15 minutes.

4.2.2.1 TCP/IP parameters

On this settings page the connection parameters for the external device can be changed. Each network port module tries to connect to the external device. In case of connection errors, the connection attempt is repeated.



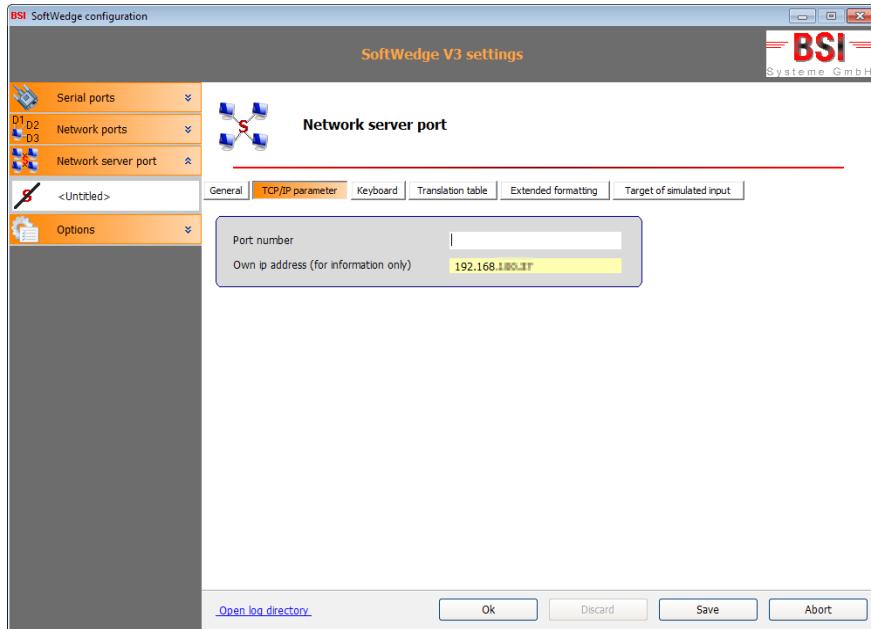
4.2.3 Network server port

In the section **Network server port** there can be created one network server port module. Any number of clients can connect to this network server port module.

In the Standard Version of SoftWedge the network server port module will start in trial mode for a time limit of 15 minutes.

4.2.3.1 TCP/IP parameters

On this settings page the port number will be defined, with which the network server port module is addressable for external clients.



4.3 Options

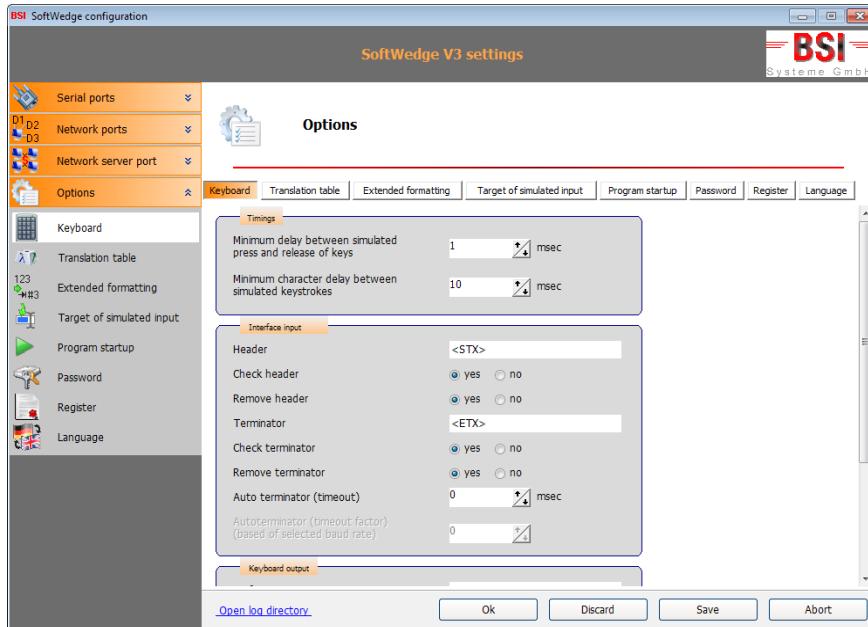
In the section **Options** all port options can be defined as **global**, except the transmission parameters (serial ports) and the TCP/IP settings (network port modules and network server port module). The **global** defined options can be used for each port, or can be changed for each port **local / individual**.

4.3.1 Keyboard

On this settings page the timing parameters for the simulation of keystrokes can be adjusted as well as the control of recognition and processing of contiguous data blocks. Recognition of contiguous blocks of data is necessary for the use of prefix, suffix, or extended format.

4.3.1.1 Timings

In this section you can set the timings for the simulation of keystrokes. If you discover during the simulation of keystrokes that individual characters are "lost", you have the option to adjust the timing parameters matching your hardware and software conditions.



4.3.1.2 Interface input

If your input device (e.g. a handheld scanner) send additional data before / after the actual transmission of the data, you can enter it here. This can be control characters (the normal case) or standard ASCII characters.

Usual settings are e.g.:

Header:	none
Terminator:	Carriage Return and Linefeed (<CR><LF>)
Header:	STX
Terminator:	ETX

These characters can be removed from the data stream by selecting the SoftWedge options **Remove header / terminator**.

It also happens that improper characters are sent by enabling / disabling an input device that should be filtered out. By framing your data between a header / terminator and review this data, SoftWedge make sure that all the data that are not provided with the correct header and terminator are discarded.

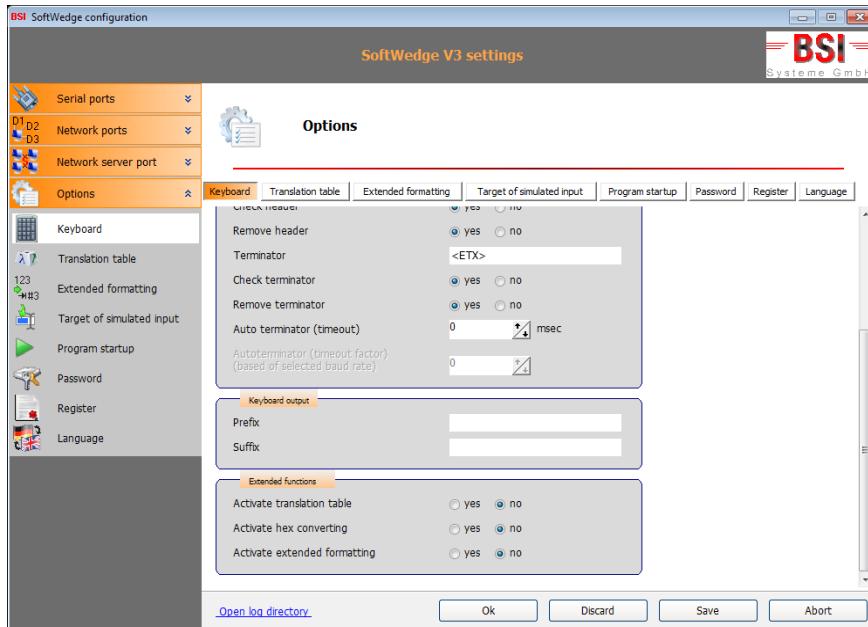
If your input device does not send a terminator character, you can alternatively specify a time (in milliseconds) for the parameter **Auto terminator**.

Is detected in accordance with a long pause when receiving data, the data is interpreted as terminated, and can be further processed as a contiguous block of data.

4.3.1.3 Keyboard output

In this section the characters / strings are given, which are inserted before (prefix) or behind (suffix) each received or processed data block.

A prerequisite for the use of the prefix and suffix that either one or more terminator characters are defined and either "Check for terminator" option or the "Auto Terminator" is enabled !



4.3.1.4 Extended functions

In this section, the translation table, the HEX conversion and enhanced formatting can be activated/deactivated.

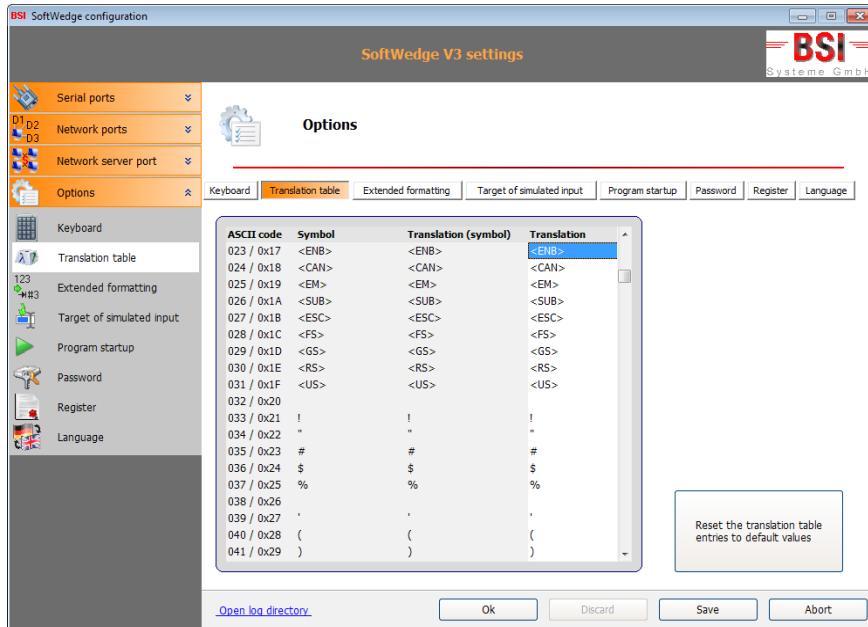
For the translation table, see chapter [4.3.2 Translation table](#).

In the HEX conversion, each character is converted to its two-digit hexadecimal representation. For example, the received value **A** will be passed as **41**.

For extended formatting, see chapter [4.4 Extended formatting](#).

4.3.2 Translation table

On this settings page, for each received character a new character can be defined. The full extended ASCII character set (256 characters) is supported.



If the translation table has been enabled in the settings page **Keyboard** of the port, each character received will be translated 1:1 as indicated in the translation table, after receiving and the first analyze (header / terminator). **Characters which are translated to <NUL> will not be forwarded to the target application (→ filtered)!**

Using the translation table for example you can convert alphanumeric bar codes, coded based on a AS400 typical character set, to the for Germany usual WIN1252 character set (especially to translate vowel mutations).

4.3.3 Extended Formatting

The extended formatting is described extensively in Chapter [4.4 Extended formatting](#).

4.3.4 Target of simulated input

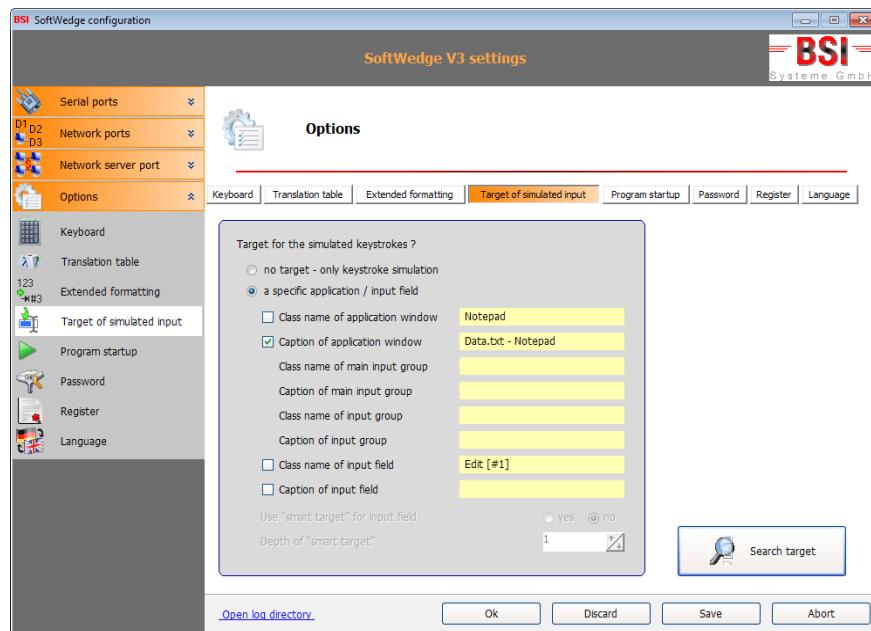
On this settings page the target for the simulated keystrokes is defined.

By default, the simulated keystrokes will be sent to the window / input field that currently has the input focus.

To set a specific window / input field for the simulated keystrokes, you do the following :

- Start the target application.
- In the SoftWedge configuration click on the button **Search target**. In the color-coded display fields continually all of the information concerning the Windows display element found underneath the mouse pointer.
- Move the mouse over the target window / target input field.
- Press both Shift keys simultaneously.
All information found in the Windows element located under the mouse pointer are saved as targeting information for the simulated keyboard input.

Received data will not be passed as simulated keystrokes, if the target with the given information is not found.

Example 1:

In the example above the input area of the Windows Notepad editor was selected as the target for the simulated keyboard input.

If SoftWedge receives new data for the transfer, it is searching for the target as follows:

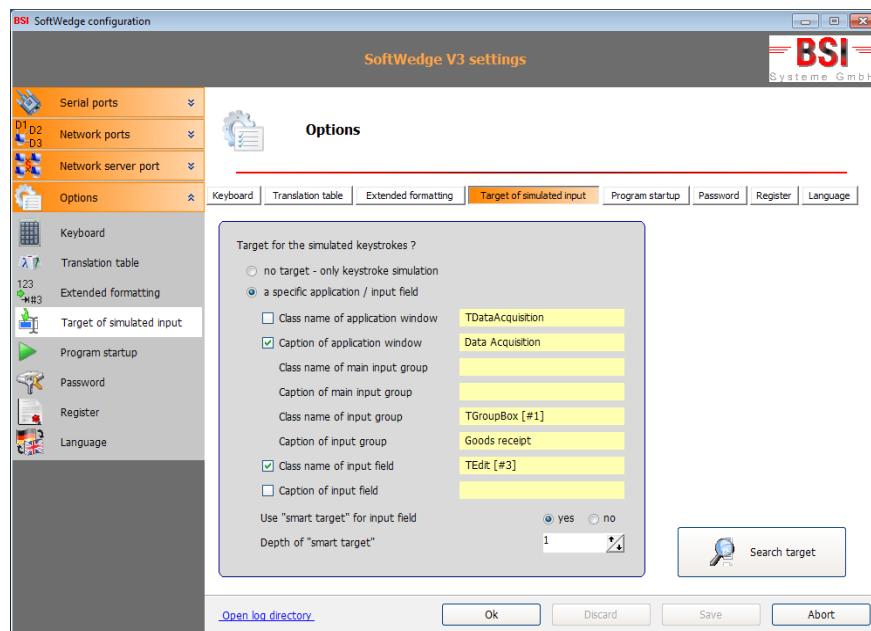
1. SoftWedge search for an application window labeled **Data.txt – Notepad**.
2. If the target item is found, the data is passed as simulated keyboard input to this input element

For this, you should consider the following:

1. The data is sent in these specifications to any application with the application window caption **Data.txt - Notepad**.
But, if the target only to be the Windows Notepad, the Notepad application window class name must be selected.
2. The data is sent in these specifications only to an application with the application window caption **Data.txt - Notepad**.
If the data is to be sent also to the application with another application window caption, window class name of the application must be selected and the application window caption be deselected.

Example 2:

You have selected an input element as the target for the simulated keystrokes, which was summarized along with other input elements in the target application as a group.



In the example above in an application window with the caption **Data Acquisition** an input element labeled **TEdit** is selected as the target for the simulated keyboard input.

This input element belongs to the first input group named **TGroupBox** and labeled **Goods receipt**.

Without activating the option **Smart Target** all simulated keyboard input would be sent only to this selected input element.

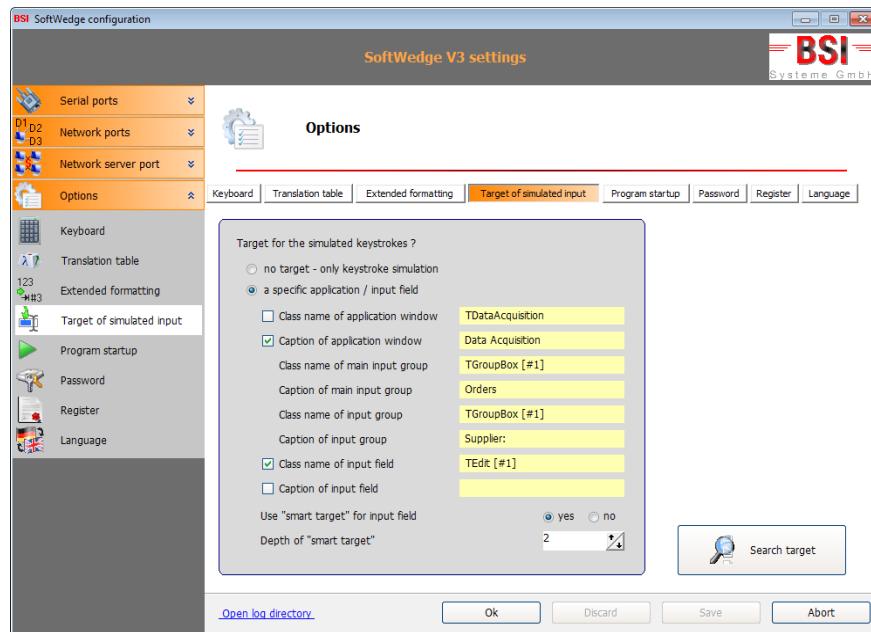
By activating of **Smart Target** with **depth 1** any selected input field would be accepted as a target if it is located in an application window with the caption **data acquisition** and belongs to the same group as the third input box **TEdit**.

If the currently selected input field does not meet the above conditions, the initially configured target is selected.

In practice, this could be a data entry screen, after each entry the next input field of the same input group is activated. Through the activation of **Smart Target** SoftWedge would also accept this field as a target for the simulated keyboard input.

Example 3:

You have selected an input element as the target for the simulated keyboard input in an application window that summarizes several fields in a group. Several of these groups are grouped into a main group.



In the example above in an application window with the caption **Data acquisition** an input element labeled **TEdit** is selected as a target for the simulated keyboard input.

This input element belongs to the first input group named **TGroupBox** and labeled **Supplier**:

This input group belongs in turn to the first main input group with the name **TGroupBox** and the label **Orders**.

The option **Smart Target** is activated with **Depth 2**.

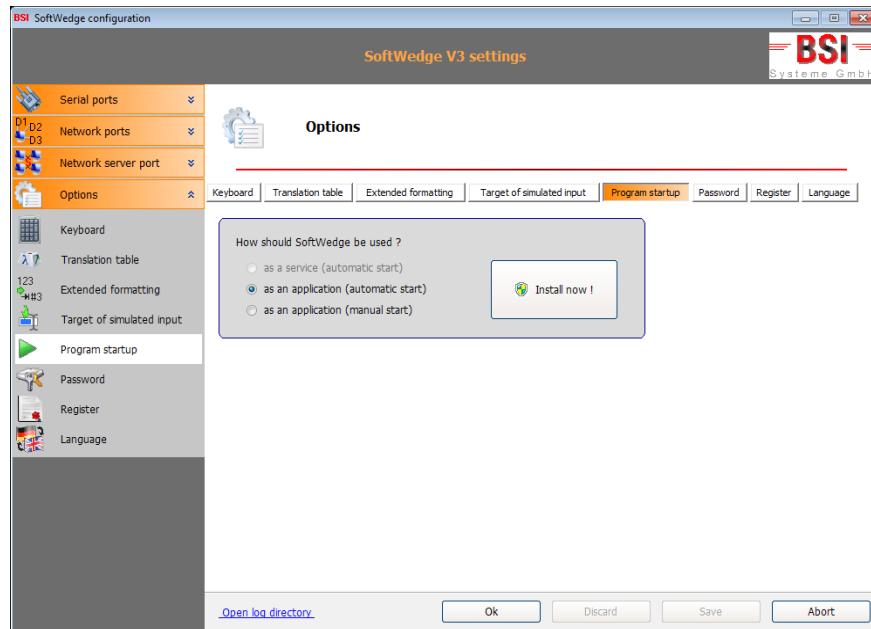
SoftWedge will now accept all enabled input elements as a target for the simulated keystrokes, matching the following conditions:

- The application window must be labeled **Data Acquisition**
- In the application window there must be an input group with the name **TGroupBox** and the label **Orders**
- In this input group there must be located more input groups
- The currently selected input element must be located in one of the further input groups

If the currently selected input field does not meet the above conditions, the initially configured target is selected.

4.3.5 Program startup

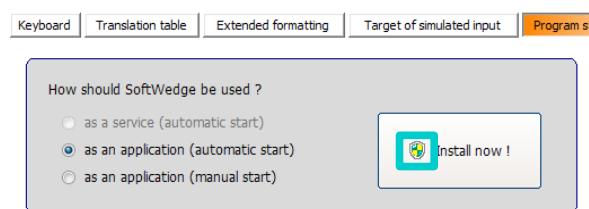
On this settings page the SoftWedge start behavior can be configured.



The following startup options can be chosen:

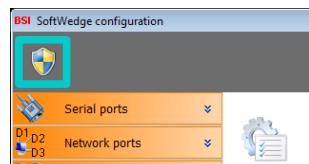
- as an application (manual start)
The SoftWedge-Application will be started / stopped after clicking on the button **Start now!**
- as an application (automatic start)
After clicking the button **Install now! / Start now!** the SoftWedge-Application will be registered / started / stopped as an Autostart-Application.
After a user logon the SoftWedge application is started automatically.
Important: To configure SoftWedge as an autostart application, administrative privileges are needed.
- as a service (automatic start)
After clicking the button **Install now! / Start now!** the SoftWedge-Application will be registered / started / stopped as a service.
Each time the computer is started, the SoftWedge service is started automatically.
Important: To configure SoftWedge as a service, administrative privileges are needed.
Note: The SoftWedge Service is only available for Windows XP!

If the SoftWedge configuration is started by a user account without administrative privileges, an icon in the button for the functions is displayed in which administrative rights are required.



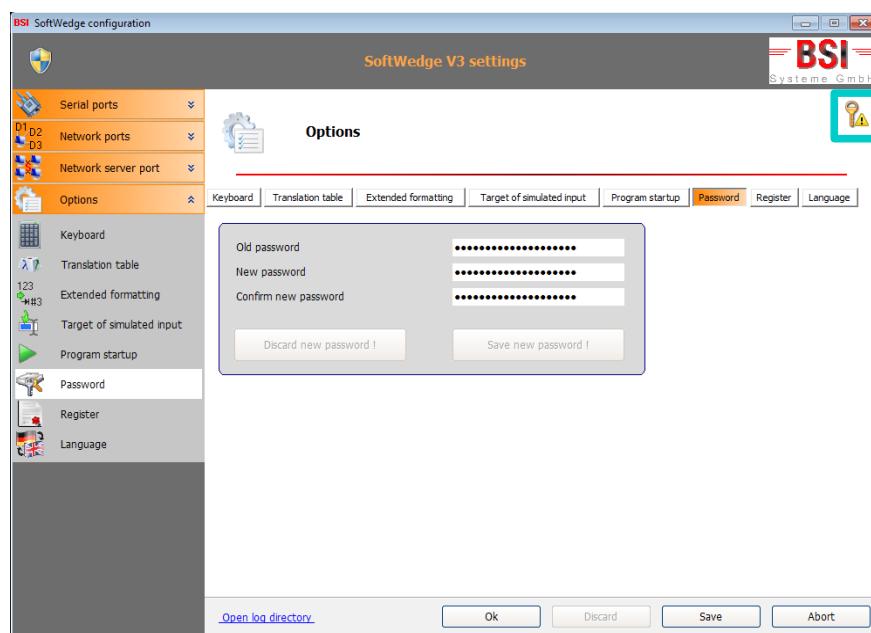
When the button is pressed, a user account with the required administrative rights is queried.

If the SoftWedge configuration is started by a user with administrative rights, this is indicated by an icon in the upper left pane of the configuration window.



4.3.6 Password

On this settings page, the SoftWedge configuration can be password protected.



Once a password has been entered by pressing the button **Save new password!**, loading and saving the configuration is possible only after entering the password.

When the configuration is protected by a password, this is indicated by an icon in the upper right corner of the configuration window.

4.3.7 Register

On this settings page, the trial version of SoftWedge can be changed to full version by entering a purchased product key. The full version must be finally activated within one month by entering an activation key.

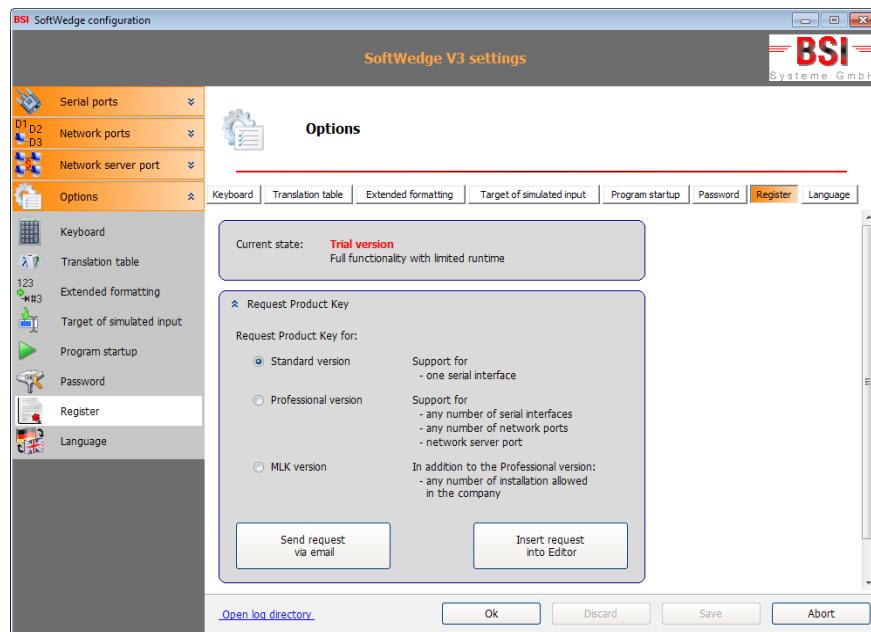
If you have already entered your purchased product key during installation of SoftWedge, there is no need for the steps **Request product key** and **Product key input**.

If you want to transfer SoftWedge (standard or professional version) with your license on a new machine, the previous SoftWedge license must be deactivated first. During deactivation a **Revocation Key** will be created. This key is needed during the request of an activation for the newly installed SoftWedge.

4.3.7.1 Request Product Key

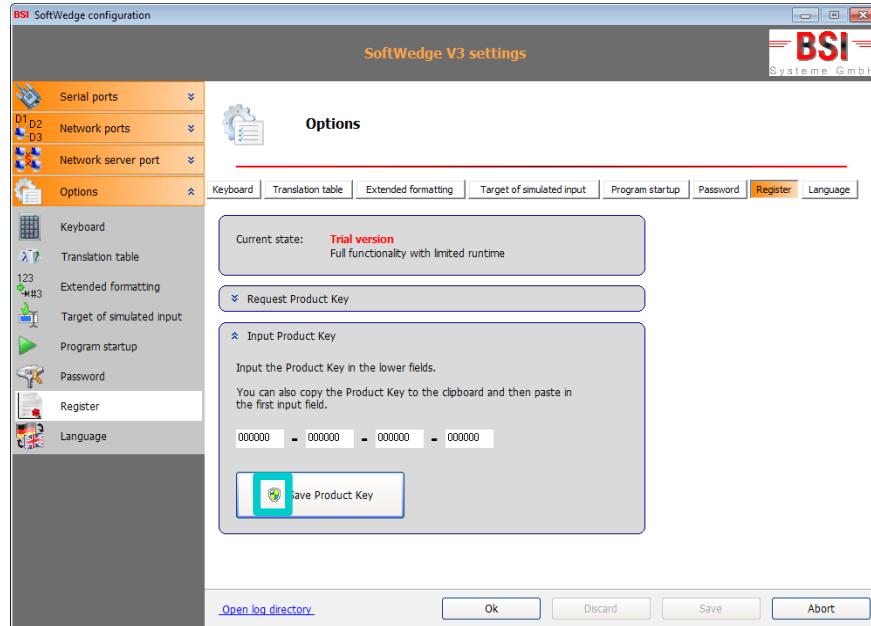
To request a product key you select in the expanded area **Request Product Key** the desired version of SoftWedge. By clicking on the button **Send request via email** an email will be generated, which you send to us after completing the needed information.

If the computer has no Internet connection, the request body can be created in Notepad by pressing the button **Insert request into Editor** and then sent by email to us.



4.3.7.2 Input Product Key

To input a product key, enter the received SoftWedge product key in the expanded area **Input Product Key** into the four input fields. Also you can insert the product key by using the clipboard.



To save the product key, administrative rights are required. If the configuration is started by a user account without administrative privileges, an icon is displayed in the button **Save Product Key**. When the button is pressed, a user account with the required administrative rights is queried.

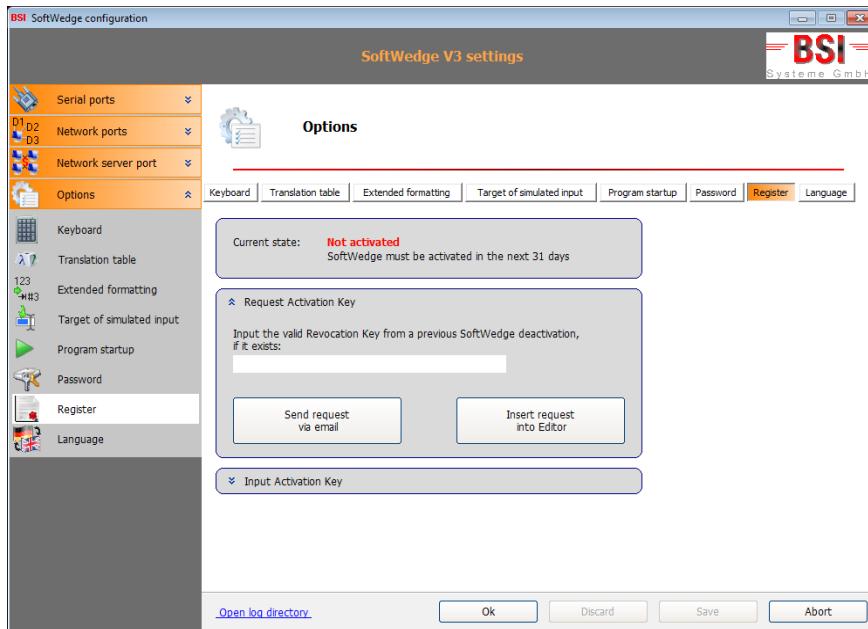
4.3.7.3 Request Activation Key

After entering the product key SoftWedge must be finally activated within one month.

To request an activation key you click in the expanded area **Request Activation Key** the button **Send request via email** for generating a corresponding email which you send to us.

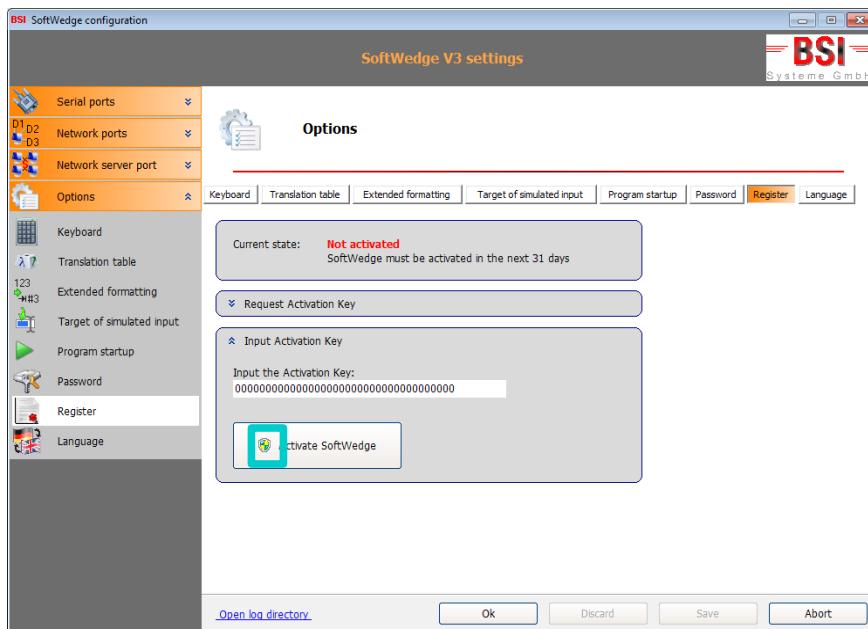
If the computer has no Internet connection, the request body can be created by pressing the button **Insert request into Editor** in Notepad and then sent by email to us.

If you already have a previously deactivated SoftWedge-Installation, you have to specify the **Revocation Key** to get an activation key for the identical SoftWedge license.

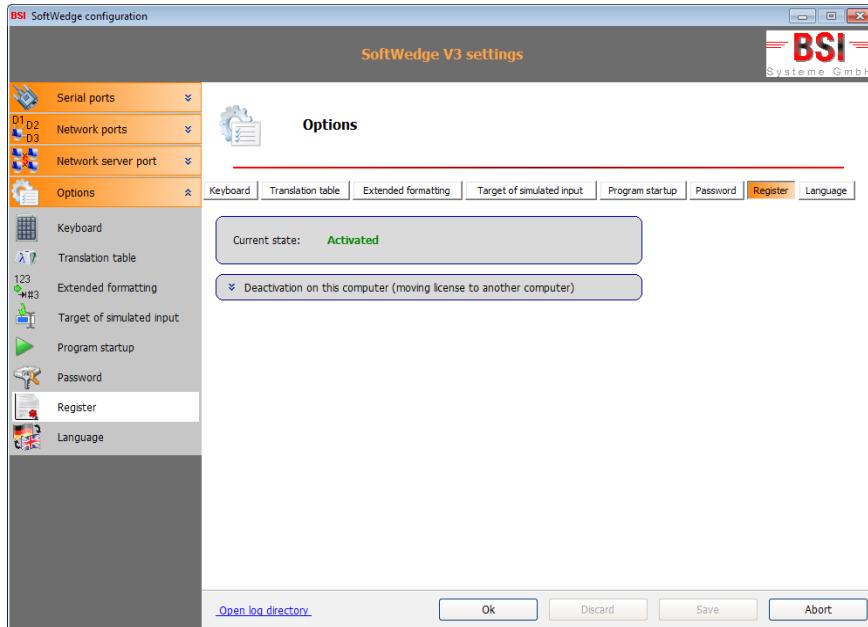


4.3.7.4 Input Activation Key

To input an activation key, enter the received SoftWedge activation key in the expanded area **Input Activation Key** into the input field.



To activate SoftWedge, administrative rights are required. If the configuration is started by a user account without administrative privileges, an icon is displayed in the button **Activate SoftWedge**. When the button is pressed, a user account with the required administrative rights is queried.



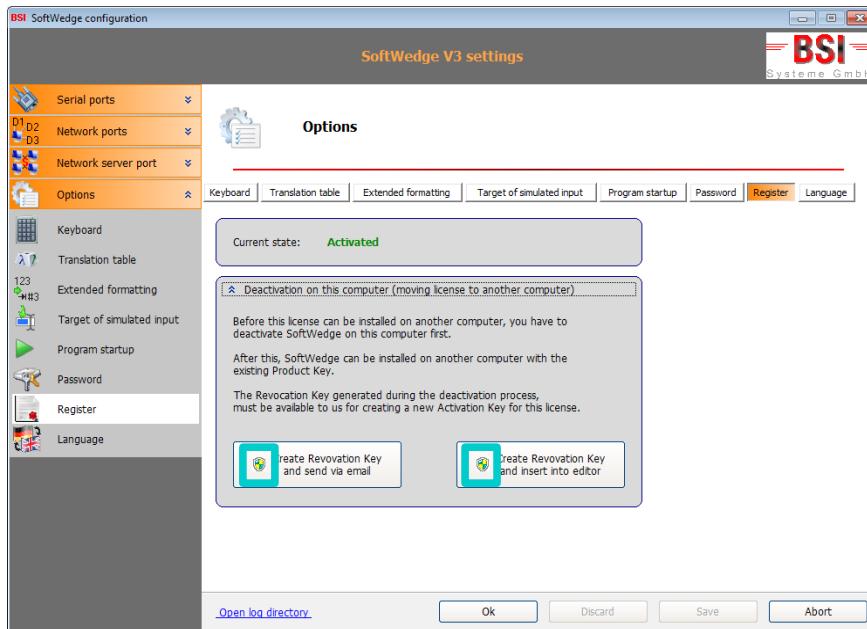
4.3.7.5 Moving SoftWedge to another computer

If you want to transfer your activated SoftWedge-License (Standard or Professional) to a new computer, first the previous SoftWedge-License must be deactivated. Here, a revocation key is created that needs to be reported directly to us, or at least during the request for a new activation key. The revocation key is entered in the logbook and stored in the clipboard.

To generate and report the Revocation Key you click in the expanded area **Deactivation on this computer (moving license to another computer)** the button **Create Revocation Key and send via email** for generating a corresponding email which you send to us.

If the computer has no Internet connection, the request body can be created by pressing the button **Create Revocation Key ans insert into Editor** in Notepad and then sent by email to us.

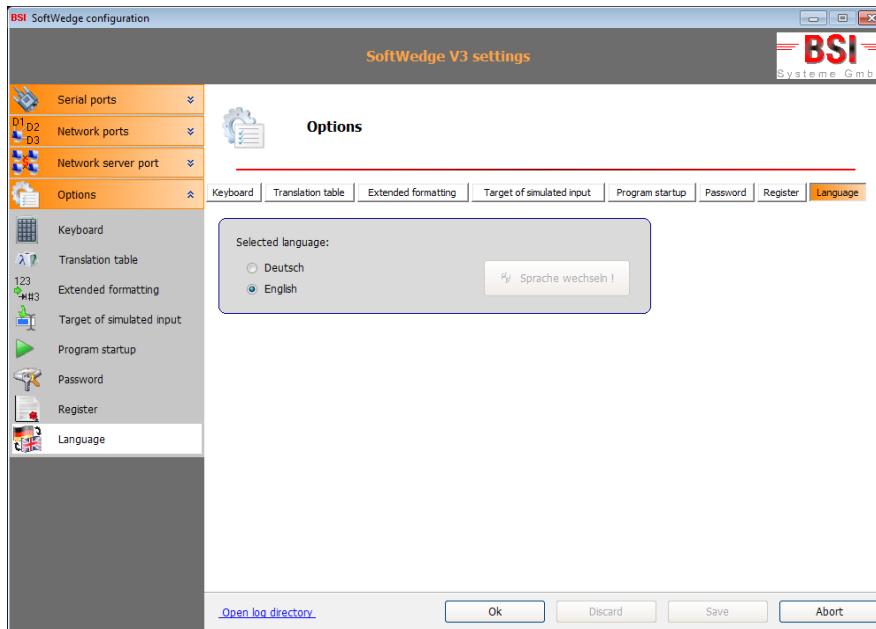
To deactivate SoftWedge, administrative rights are required. If the configuration is started by a user account without administrative privileges, an icon is displayed in the button **Dectivate SoftWedge**. When the button is pressed, a user account with the required administrative rights is queried.



4.3.8 Language

On this settings page you can choose the language of SoftWedge configuration and SoftWedge application. The default language is the chosen language for SoftWedge installing. The logs are always in German language.

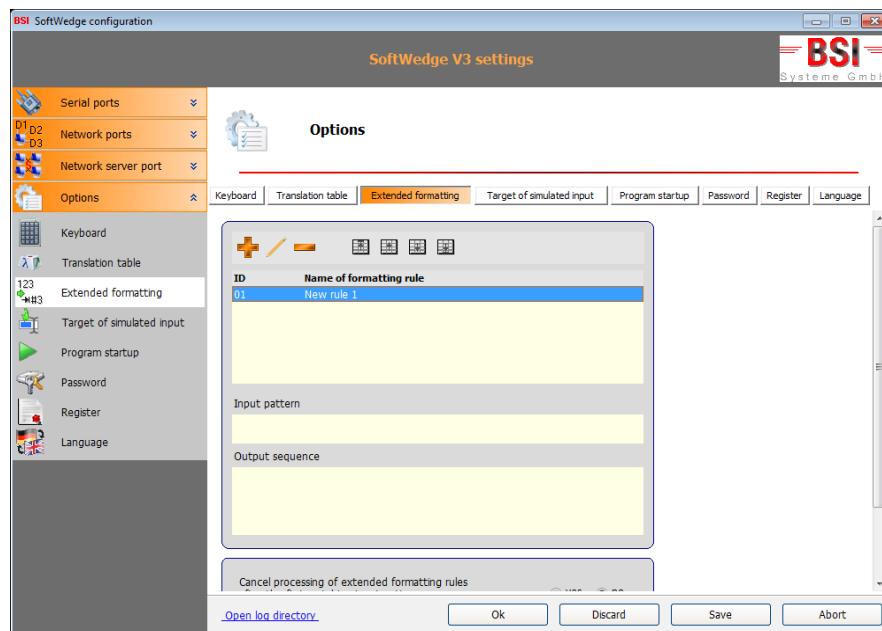
The language may be modified only by a user with administrative rights. After pressing the button to select a language a user account with the required administrative rights is queried if needed.



4.4 Extended formatting

Using the extended formatting, the received input sequence (and already translated by the activated translation table) before passing the keyboard simulation, are processed very extensive.

Extended formatting can be specified both **for specific** and **for all** input patterns.



A new blank rule is created by clicking on or pressing **Ins**.

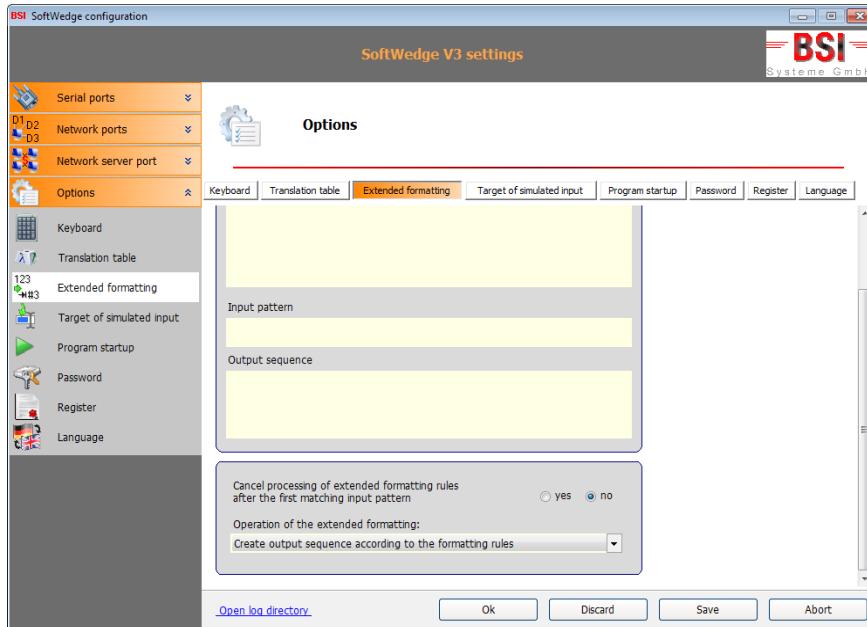
The currently selected rule is deleted by clicking on or pressing **Del** on confirmation.

The currently selected rule is changed by clicking on or pressing **Enter**.

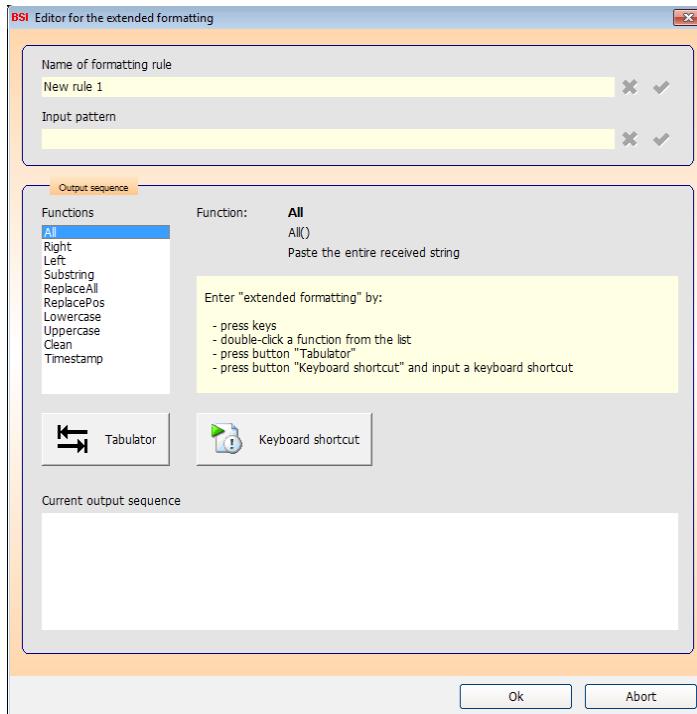
Any convenient formatting rule is applied either to the input sequence or the result of an already processed by a previous rule applied starting sequence.

The result of a matching extended formatting rule is added to either of the output sequence or entered in the previous output sequence.

Extended formatting can cancel the processing of the input sequence after applying the first matching rule or apply all appropriate rules to the input sequence.



The editor for extended formatting is invoked by selecting a rule and clicking on or pressing **Enter**.



4.4.1 Name of formatting rule

In this field you can enter a descriptive name of the formatting rule.

4.4.2 Input pattern

In this field you specify the input pattern for which the rule should apply. If the rule should always be applied, the input pattern has to be empty.

4.4.3 Output sequence

In this area you can incorporate simple key sequences or special key combinations in the output sequence. Also provides a list of functions to edit the input sequence.

Each function selected in the list is described in the middle of the window.

After selecting the function by double click, the input fields for the individual function parameters are displayed.

The inputs of the function parameters are taken with the **Enter** key or click on the **green confirmation hook** behind the last parameter in the output sequence.

The currently compiled output sequence is displayed in the lower part of the window.

To remove the last key / keyboard shortcut / function, press the **Delete** or **Backspace** key.

Please note that depending on the operating system for certain key combinations operating system functions are stored. It is not guaranteed that the simulation of the sequence corresponding to the internal operating system function is actually called.

4.4.3.1 Simple key sequence

Tap the desired keys on the keyboard; the output sequence is extended by the desired keys. By clicking the **Tab** button, a tab will be added to the output sequence.

4.4.3.2 Shortcut

After pressing the **Keyboard Shortcut** button any standard key on the keyboard can be selected. This can be combined with the special keys **Ctrl**, **Alt** and **Shift**.

To enter a Tab-based keyboard shortcut, press the **Tab** button.

4.4.3.3 Function All()

This function inserts the entire input sequence into the output sequence.

Example:

<Tabulator><All()>

Input sequence: 1234567890
Output sequence: <TAB>1234567890

4.4.3.4 Function Right(...)

This function inserts the specified number of characters from the right side of the input sequence into the output sequence.

Example:

<Tabulator><Right(5)>

Input sequence: 1234567890
Output sequence: <TAB>67890

4.4.3.5 Function Left(...)

This function inserts the specified number of characters from the left side of the input sequence into the output sequence.

Example:

<Tabulator><Left(3)>

Input sequence: 1234567890
Output sequence: <TAB>123

4.4.3.6 Function Substring(...)

This function inserts a specified part of the input sequence into the output sequence. The start and stop position of the partial sequence may be specified as absolute position and length.

Example:

<Tabulator><Substring(position:5;count:3)>

Input sequence: 1234567890
Output sequence: <TAB>567

The start and stop position of the partial sequence may also be specified as variable position. The resulting position can be adjusted with the parameter **offset**.

Example:

```
<Tabulator><Substring(search:a#offset:1;search:b#offset:0)>
```

Input sequence: 123a456b7890
Output sequence: <TAB>456b

4.4.3.7 Function ReplaceAll(...)

This function replaces all matching search pattern of the input sequence with a given character sequence (also empty character sequence allowed) and inserts the resulting string into the output sequence.

Examples:

```
<Tabulator><ReplaceAll(345;---)>
```

Input sequence: 1234567834590
Output sequence: <TAB>12---678---90

```
<Tabulator><ReplaceAll(345;)>
```

Input sequence: 1234567890
Output sequence: <TAB>1267890

4.4.3.8 Function ReplacePos(...)

This function replaces a part of the input sequence with a given character sequence (also empty character sequence allowed) and inserts the resulting string into the output sequence. The start and stop position of the part may be specified as absolute position and length.

Example:

```
<Tabulator><ReplacePos(position:3;count:6;abc)>
```

Input sequence: 1234567890
Output sequence: <TAB>12abc90

The start and stop position of the partial sequence may also be specified as variable position. The resulting position can be adjusted with the parameter **offset**.

Example:

```
<Tabulator><ReplacePos(search:3#offset:1;search:8#offset:-1;-)>
```

Input sequence: 1234567890
Output sequence: <TAB>123-890

4.4.3.9 Function Lowercase()

This function converts all letters of the input sequence to lowercase and inserts the resulting string into the output sequence. This function must be at the beginning of the output sequence.

Example:

```
<Lowercase()>
```

Input sequence: abcDEFghi
Output sequence: abcdefghi

4.4.3.10 Function Uppercase()

This function converts all letters of the input sequence to uppercase and inserts the resulting string into the output sequence. This function must be at the beginning of the output sequence.

Example:

```
<Uppercase()>
```

Input sequence: abcDEFghi
Output sequence: ABCDEFGHI

4.4.3.11 Function Clean()

This function removes all non printable characters from the input sequence and inserts the resulting string into the output sequence.

Example:

```
<Clean()>
```

Input sequence: 12345<BEL>67890
Output sequence: 1234567890

4.4.3.12 Function Timestamp(...)

This function inserts the current date and time into the output sequence. During input of the format string the resulting string will be displayed below the input field.

Example:

```
<Tabulator><Timestamp(mm'/dd'/yyyy hh:nn:ss,zzz)>
```

Output sequence: <TAB>02/04/2013 11:46:19,884

Format variables:

d:	Day expressed as a value (1-31)
dd:	Day expressed as two digits (01-31)
ddd:	Short day name
dddः:	Full day name
m:	Month expressed as a value (1-12)
mm:	Month expressed as two digits (01-12)
mmm:	Short month name
mmmm:	Full month name
yy:	Year expressed as two digits (00-99)
yyyy:	Year expressed as four digits (0000-9999)
h:	Hour expressed as a value (0-23)
hh:	Hour expressed as two digits (00-23)
n:	Minute expressed as a value (0-59)
nn:	Minute expressed as two digits (00-59)
s:	Seconds expressed as a value (0-59)
ss:	Seconds expressed as two digits (00-59)
z:	Milliseconds expressed as a value (0-999)
zzz:	Milliseconds expressed as three digits (000-999)
/	Returns the system date separator
:	Returns the system time separator
'xx' / "xx"	Characters that are enclosed in single or double quotes are applied without any special formatting