

iID[®] software. tools

> *Quick Start Guide iID*[®] software tools

iID[®] INTERFACE config tool iID[®] LAN CONFIGtool

microsensys 2020-06



Introduction

iID[®] INTERFACE config tool is a configuration software solution for customising your MICRO-SENSYS[®] RFID interface to the needs of your application.

Using the iID[®] INTERFACE config tool parameters and processes in the RFID interface are set once and permanently stored. Below you will find an overview of possible set-up parameters and functions:

- Parameters for Bluetooth[™] communication
- Acoustic settings (buzzer)
- Visual settings (display / LED)
- Power management parameters
- Motion sensor settings
- RF front end settings
- Settings for operating mode / loading scripts
- Reader firmware update

The exact scope of setting options depends on the respective hardware connected.

Network interface configuration

In order to allow specific parameter settings of iID[®] contactless RFID interfaces with LAN (network) interface, usage of iID[®] LAN CONFIGtool is required. The installation of iID[®] LAN CONFIGtool is done automatically during the setup of iID[®] INTERFACE config tool.

Setting network parameters is described below in the specific chapter "iID[®] LAN CONFIGtool".



System requirements / installation

The software runs on Microsoft Windows XP to Windows 10 32- and 64-bit (in 32 bit mode). In order to execute, it requires the Microsoft .Net Framework Version 4 Client Profile and optional underlying basic driver for the RFID interface (USB driver). Also needed is the iID[®] CONNECTIONtool for configuration of the reader connection and storage of the configuration file.

In order to execute, the software requires iID[®] 3000 PRO System RFID interface hardware.

The software is installed using the Windows Installer package.

HICROSENSYS iID® Interface Configuration -		×
Willkommen beim Setup-Assistenten von MICROSENSYS iID® Interface Configuration		
Der Installer wird Sie durch die zur Installation von MICROSENSYS ilD® Interface Co erforderlichen Schritte führen.	onfiguration	n
WARNUNG: Dieses Programm ist durch US-amerikanische Urheberrechtsgesetze ur Urheberrechtsverträge geschützt. Unbefugte Vervielfältigung oder unbefugter Vertrie Programms oder eines Teils davon wird sowohl straf- als auch zivilrechtlich verfolgt u schwere Strafen und Schadenersatzforderungen zur Folge haben.	nd internati b dieses nd kann	ionale
Abbrechen <⊒urück	<u>W</u> eiter	>

To install, follow the menu prompts in the setup program. You will be prompted to select the program storage location and access settings.



聞 MICROSENSYS iID® Interface Configuration	-		×
Installationsordner wählen			
Der Installer wird MICROSENSYS ilD® Interface Configuration in folgenden Um in diesem Ordner zu installieren, klicken Sie auf "Weiter". Um in einem a Ordner zu installieren, geben Sie diesen ein oder klicken Sie auf "Durchsuc	n Ordne anderen hen''.	r installiere n vorhande	:n. :nen
Ordner: C:\Program Files (x86)\MICROSENSYS GmbH\MICROSENSYS iD®	D	urchsuche	n
	Speid	cherplatzbe	edarf
Installieren Sie MICROSENSYS iID® Interface Configuration nur für den a für alle Benutzer dieses Computers.	aktuelle	n Benutze	r oder
O Alle Benutzer			
Aktueller Benutzer			
Abbrechen < Zurück	<	Weite	er >

Upon successful completion of the setup procedure a final screen is displayed, from now on the program can be started using "Start Menu / iID^{\circledast} INTERFACE config tool".

₩ MICROSENSYS iID® Interface Configuration	-		×
Installation beendet			
MICROSENSYS IID® Interface Configuration wurde erfolgreich installiert.			
Klicken Sie auf "Schließen".			
Prüfen Sie mit Windows Update, ob wichtige Aktualisierungen für .NET Fra stehen.	mework	zur Verfi	igung
Abbrechen < Zurüci	<	Schli	eßen

Following installation, please check whether updates to the .Net Framework 4 Client Profile are available. The program can subsequently be started from the Start menu.



iID[®] CONNECTIONtool

Before you start the software for the first time, please ensure that an iID[®] 3000 PRO compatible RFID interface is connected to your PC and all necessary drivers are installed for this purpose.

Connect the RFID interface automatically with button "Auto Settings" or manual by pressing "Options".



When the configuration is confirmed, the reader ID of the RFID interface should be displayed.





Operation

Once the RFID interface has been installed and configured, no further hardware settings are required in the software.

Errors in the parameterization of the RFID reader will be displayed with the following error message at the program startup of the iID[®] INTERFACE config tool. In this case, please proceed as described on page 5 (chapter "iID[®] CONNECTIONtool") and correct the RFID reader settings!

Error				×
8	he Port could not be oper ry again. The Application (ned. Please check yo will exit now.	ur settings and	
			ОК	

After an error-free startup of the application, the Welcome screen should appear when you first start.



Here you can see a picture of the connected RFID interface and the buttons for selecting the respective functional parameters. When you press one of them, the respective current parameters of the RFID interface are transmitted to the application.



By closing a dialogue with "OK", the new parameters will be stored permanently in the RFID interface. The serial number of the RFID interface and the battery capacity, if it's available, are displayed in the lower area of the Welcome screen.

The various program dialogues are briefly explained throughout this document.

Please note: the possible settings vary depending on the RFID interface which is connected!

Information

Clicking on the *i*con in the lower right area opens the program's information dialogue.



Here you will find information on program version, web URL and a contact email address. It is also possible to change the program language. To change the language setting, the program must be restarted.

The "Update" menu item contains options for updating the iID[®] INTERFACE config tool and the RFID interface firmware.

Data of your RFID interface can be transferred to microsensys for analysis via "Support".



General

This dialogue allows you to change the general properties of your RFID interface.

lease General Settings	×
Display Min	Max
✔ Auto Update Display (Operation res	ult)
Configuration	
✓ Timeout if not connected:	3 min
✓ Timeout if connected:	3 min
PIN Timeout:	0 min
SCAN button enables RF operations	in DOC
☑ Reset Menu enabled	
behavior after disconnect:	standby ~
ОК	Cancel

These include display and LED settings and settings for RFID interface power management. For example, this allows you to adjust the LED brightness of the iID[®] PENmotion. In addition device behaviour after Bluetooth disconnect or in low battery state may be adjusted.

Bluetooth

In the "Bluetooth" dialogue, the RFID interface can be switched between server, client, and auto client mode, and the MAC address and the service port on the host can be parameterized for client mode. For several devices, this dialog allows Bluetooth PIN setting.

OFF	ON SPP	HID
Mode		
Client Mod	de 💿 Server Mode 🛛 Auto Clie	ent
MAC-Addresses	Settings	
MAC-Address:	00:14:85:92:F7:69	
Serviceport:	02	
PIN		
PIN:	1111	
Summary HID -> Use device	e as a Keyboard emulator.	·



G-Sensor

If your RFID interface is activated by a motion sensor, the sensitivity of the sensor can be adjusted to different levels in this dialogue.

Script

Some MICRO-SENSYS[®] RFID interfaces allow the execution of so-called scripts. These handle independent execution of processes by the reader. If your RFID interface supports script mode (SPC), an additional "Script" button appears on the Welcome screen.



The iID[®] INTERFACE config tool allows loading of scripts into the reader as well as switching between DOC (Direct Online Communication) and SPC (Script Programming Communication).

To activate script mode, please select "SPC" in the dialogue which is subsequently displayed.



■ iid © Interfac	E config tool	×
<u>iID®IN</u>	TERFACE config tool micro Sense	sys
(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)(*)<l< th=""><th>Script Configuration X Mode SPC DOC Script Settings Current Script SamsonV1</th><th></th></l<>	Script Configuration X Mode SPC DOC Script Settings Current Script SamsonV1	
٩	Open File	
Reader IE	Profile D: 102088 Batteryvoltage: perfect	<i>(</i>)

The script currently loaded in the RFID interface is displayed, and you will also have the option to select a new script.



For further information about hardware configuration options and script mode, please refer to your hardware manual or system documentation iID[®] SPC.



Updating firmware

Besides the setting of parameters, the iID[®] INTERFACE config tool is used for updating your RFID interface firmware. If there's an internet connection available during startup of the iID[®] INTERFACE config tool, software automatically checks for firmware updates of the readers you using. If any exist, the updates are downloaded to your PC and you receive notification on the Welcome screen from the connected RFID interface that an update is available. In some cases, you may need to install a firmware file, which has to be saved locally. If microsensys provides such a firmware file with the extension ".rff", you should copy it to the path "...\Documents\ MICROSENSYS\iID® Interface Configuration\Update Files". Be sure to delete unnecessary files later, to avoid conflicts with the automatic update process.





Caution: as with any electronic device, if the update terminates or malfunctions it may cause the device to cease functioning properly. Perform firmware updates only when new functions are absolutely necessary for your RFID interface! Please also note that data collected on your RFID interface, as well as settings, may be overwritten by the update.

Before making updates, please ensure that your host and the RFID interface have enough battery voltage available and the data connection to the RFID interface is stable. The update will take a few minutes.



🧃 Information		×
About	Software Update	
Language		
Update	coming soon	
Support	✓ Firmware Update Device: 88.44 Current Version: F3.00.17	
	Start Update	
	OK	

If you wish to start the update process, please click on (i), then on "Update".

Now select "Start Update" and a status window will open and the update process starts.

	Information	×	FW Update Log ×
About	Software Update		Update File C:\Users\\02\PENmini_AA02_980406_2015-04-15.rff Check File
Language Update	comming soon		Update File OK Start Update procedure Completed
Support	Firmware Update	ĺ	Erase memory Completed
	Current Version: 98.04.05		Completed
	Start Update		Check transferred data
	Estimated 20 sec left]	Write Update Information Waiting Check Update Information Waiting Finish Update procedure Waiting
	ОК		

This prepares your device for the update, which will be transferred to the device.



After a successful transfer, the "Update" window can be closed and the status window will also close.



At the end of the firmware update process the application restarts automatically the RFID interface, which means that the new firmware is immediately active without any further steps.

In individual cases, microsensys will provide firmware updates as a file. In this case, you will receive instructions for installation on your RFID interface. For more information on firmware updates, please refer to your hardware manual.



Network-specific parameters for iID[®] contactless RFID interfaces are set by using the LAN configuration tool. The LAN configuration tool is installed automatically together with the installation of the iID[®] INTERFACE config tool.

Attention: The setting of network-specific parameters should only be carried out by qualified personnel, since the communication with the *i*ID[®] contactless RFID interface can be impaired by setting incorrect parameters.

Follow these instructions to set network parameters:

- Connect your LAN-capable iID[®] contactless RFID interface to network infrastructure and power supply
- start the iID[®] LAN configuration tool

To connect to the iID[®] contactless RFID interface, please use the button "search" or the "Manual" tab for IP-based search, see the following illustrations.

n iid® lan c	ONFIGtool					×
iID [®] LAN	I CONF	Gtool			<u>microS</u> er	nsys
					RFID in motion	
Automatic	Manual Lo	g				
MAC address		IP address		Firmware		
					Stop searching	
					Clear List	
Settings						
UDP	node TCP server			DHCP		
IP settings					Upload	
Reader IP	0.0	. 0 . 0	Port	0		
Subnet	0.0	. 0 . 0				
Gateway	0.0	. 0 . 0			Discard	
Server IP	0.0	. 0 . 0	Port	0	Changes	(\mathbf{i})
· · · · · · · · · · · · · · · · · · ·						



■∰ iID® LAN CONFIGtool	×
iID [®] LAN CONFIGtool	micro Sensys
Automatic Manual Log	RFID in motion
IP address 192 , 168 , 001 , 238	Cancel
MAC address	Disconnect
Settings Operation mode © UDP ○ TCP server P settings	Upload
Reader IP 0 . 0 . 0 Port 0 Subnet 0 . 0 . 0 . 0	
Gateway 0 . 0 . 0 . 0 Server IP 0 . 0 . 0 . 0 Port 0	Discard Changes

The manual connection to the iID[®] contactless RFID interface via TCP port 1461 is recommended if the reader is on a remote network or the UDP port 1460 is blocked by firewall or port rules. For manual connection, please enter the known IP address of the iID[®] contactless RFID interface into the IP address field.

Attention: Please make sure that the PC and RFID interface are in the same LAN sub-net for the time of configuration.

If one or more iID[®] contactless RFID interfaces are listed in the search box, press stop searching.

•혳 iID® LAN CONFIGtool	×
iID [®] LAN CONFIGtool	micro Sensus
	RFID in motion
Automatic Manual Log	
MAC address IP address Firmware	
00:08:DC:53:53:27 192.168.1.254 05.0D	Stop
	searching
	Clear List
Settings	
Operation mode	
UDP O TCP server DHC	Unload
IP settings	opioad
Reader IP 0 . 0 . 0 . 0 Port 0	
Subnet 0 . 0 . 0 . 0	
Gateway 0 . 0 . 0 . 0	Discard
Server IP 0 . 0 . 0 . 0 Port 0	



By selecting the desired participant, the LAN parameters of the RFID interface are displayed in the "TCP/IP Settings" area. It is also possible to adapt the desired parameters.

iID [®] LAN CONFIGtool	micro Sensys				
	RFID in motion				
Automatic Manual Log					
MAC address IP address Firmware					
00:08:DC:53:53:27 192.168.1.254 05.0D	Search				
	ClearList				
	Ciedi List				
Settings					
Operation mode					
UDP O TCP server	HCP				
IP settings	Upioad				
Reader IP 192 . 168 . 1 . 254 Port 52415					
Subnet 255 . 255 . 0 . 0					
Gateway 192 . 168 . 0 . 1	Discard				
Server IP 192 . 168 . 1 . 252 Port 52146					

By pressing the button "upload" the updated data is transferred to the RFID interface.

If your network infrastructure has a DHCP-Server you can use the DHCP mode by checking this function. Thereby the interface will get all necessary configuration data.

n ID I LAN CONFIGtool				×
iID [®] LAN CON	FIGtool		micro Ser	nsys
			RFID in motion	_
Automatic Manual L	og			
MAC address	IP address	Firmware		
00:08:DC:53:3F:27	192.168.1.254	05.0D	Search	
00:08:DC:54:F0:F0	192.168.220.90	05.0D	conton	
Settings Operation mode				
UDP O TCP server DHCP IP settings		Upload		
Reader IP 0 . 0	. 0 . 0 Port	52415		
Subnet 0 . 0	. 0 . 0			
Gateway 0 . 0	. 0 . 0		Discard	
Server IP 192 . 168	1 . 252 Port	52416	Unallyes	(\mathbf{i})

Attention: Changing the LAN settings of the RFID interface can make a reboot system necessary, e.g. when UDP data packets are to be sent to a new destination address in the script operation mode.



The following table describes the setting parameters:

Parameter	Description
Reader IP	IP address of RFID interface
(Reader) Port	Port of the RFID interface for incoming data
Subnet	IP-Subnet of RFID interface and host system
Gateway	IP-Gateway in the subnet
Server IP	IP address of host system (e.g. for UDP packets in script mode)
(Server) Port	Outbound data port of the RFID interface / port of the host system for incoming data



Do you have any questions? Contact us:

microsensys GmbH Office Park im GVZ In der Hochstedter Ecke 2 D-99098 Erfurt, Germany e-mail: <u>info@microsensys.de</u> tel: +49 361 59874 0 fax: +49 361 59874 17

