



User Manual

Software Installation for the PC Cards cifX

Installing Drivers and Configuration Software

Hilscher Gesellschaft für Systemautomation mbH

www.hilscher.com

DOC120207UM36EN | Revision 36 | English | 2014-07 | Released | Public

Table of Contents

1	INTRODUCTION.....	5
1.1	About the User Manual.....	5
1.1.1	List of Revisions	5
1.1.2	Notes on Hardware, Firmware, Software and Driver Versions	6
1.1.3	Conventions in this Manual	7
1.2	Contents of the Installation DVD.....	8
1.2.1	Installation Guide, Documentation Overview	8
1.2.2	What's New.....	8
1.3	Legal Notes.....	9
1.3.1	Copyright	9
1.3.2	Important Notes	9
1.3.3	Exclusion of Liability	10
1.3.4	Warranty	10
1.3.5	Export Regulations	11
1.3.6	Registered Trademarks.....	11
1.3.7	Obligation to read and understand the Manual	11
1.4	Licenses.....	11
2	SYSTEM OVERVIEW	12
2.1	Configuration and Diagnosis.....	12
2.2	Remote Connection via Ethernet.....	14
3	CIFX DEVICE DRIVER	17
3.1	SystemRequirements	17
3.2	Installation Overview.....	17
3.2.1	Installation Sequence	17
3.2.2	Where the Driver Setup is to be found?	18
3.2.3	General Notes	18
3.3	Installation under Windows XP (Software First)	19
3.4	Installation under Windows XP (Hardware First).....	24
3.5	Installation under Windows 7 (Software First)	25
3.6	Installation under Windows 8 (Hardware First).....	29
3.7	Installation under Windows 8 (Software First)	30
3.8	Installation under Windows 7 (Hardware First).....	34
3.9	Checking the Driver Installation under Windows XP	35
3.10	Checking the Driver Installation under Windows 7	36
3.11	Checking the Driver Installation under Windows 8	37
3.12	Uninstalling under Windows XP.....	38
3.13	Uninstalling under Windows 7	40
3.14	Uninstalling under Windows 8	45

4	USB DRIVER	50
4.1	SystemRequirements	50
4.2	Installation Overview.....	50
4.3	Installation under Windows XP	51
4.4	Installation under Windows 7	57
4.5	Installation under Windows 8	61
4.6	Uninstalling under Windows XP	64
4.7	Uninstalling under Windows 7	65
4.8	Uninstalling under Windows 8	66
5	SYCON.NET	68
5.1	System Requirements	68
5.2	Installation under Windows XP	69
5.3	Installation under Windows 7	75
5.4	Installation under Windows 8	82
5.5	Uninstalling under Windows XP	89
5.6	Uninstalling under Windows 7	91
5.7	Uninstalling under Windows 8	94
6	NETX CONFIGURATION TOOL	97
6.1	System Requirements	97
6.2	Installation under Windows XP	98
6.3	Installation under Windows 7	104
6.4	Installation under Windows 8	110
6.5	Uninstalling under Windows XP	116
6.6	Uninstalling under Windows 7	118
6.7	Uninstalling under Windows 8	121
7	PC CARDS CIFX PC/104 (ISA).....	124
7.1	SystemRequirements	124
7.2	Installation under Windows XP	124
7.3	Installation under Windows 7	135
8	HARDWARE SETTINGS.....	147
8.1	Slot Number (Card ID)	147
8.1.1	cifX Device Driver Setup	147
8.1.2	SYCON.net.....	148
8.2	“DMA Mode”	149
9	PC SETTINGS	150
9.1	Windows Power Management PC Cards cifX PCI Express.....	150

10	APPENDIX	154
10.1	List of Figures	154
10.2	List of Tables	157
10.3	Glossary.....	158
10.4	Contacts.....	160

1 Introduction

1.1 About the User Manual

This user manual provides step-by-step instructions on **how to install the the software** for the PC cards *cifX PCI, PCI Express, Low Profile PCI Express, Compact PCI, Mini PCI, Mini PCI Express, PCI-104*. The software comprises the drivers and the application programs needed on a host system or configuration PC running under a Windows® operating system to configure and diagnose Hilscher PC cards *cifX* or to update the firmware of the PC cards *cifX*. This manual describes the installation of:

- the **cifX Device Driver**
- the **USB Drivers**
- the **SYCON.net** configuration software
- the **netX Configuration Tool** Slave configuration tool

for the operating systems:

- Windows XP
- Windows 7 (also valid for Windows VISTA)
- Windows 8

Furthermore this manual describes the installation of the **PC cards cifX PC/104 (ISA)** for the operating systems:

- Windows XP
- Windows 7

as well as the required hardware settings

- **Slot Number (Card ID)** (in the *cifX Device Driver Setup* or *SYCON.net*)
- **DMA Mode** (activation in the *cifX Device Driver Setup*)

The drivers and the configuration software are provided on the Communication Solutions DVD.

1.1.1 List of Revisions

Index	Date	Chapter	Revisions
34	12-06-11	3	Chapter <i>cifX Device Driver</i> revised.
35	13-12-10	All, 4	Revised, new: Windows 8, new Versions: SYCONnet netX V1.360.x.x, netXConfigurationTool V1.0510.x.x, <i>cifX Device Driver</i> Version V1.2.x.x. Chapter <i>USB Driver</i> : new installation of the USB driver package via setup.
36	14-07-15	9.1	Chapter 9 with section <i>Windows Power Management PC Cards cifX PCI Express</i> added.

Table 1: List of Revisions

1.1.2 Notes on Hardware, Firmware, Software and Driver Versions



Note on Software Update: For an existing hardware installation for the software update the used firmware, driver and configuration software versions functionally must be related

Driver and Software		Version
SYCON.net	SYCONnet netX setup.exe	1.360.x.x
netX Configuration Tool-Setup	netXConfigurationUtility_Setup.exe	1.0510.x.x
cifX Device Driver	cifX Device Driver Setup.exe	1.2.x.x
Toolkit		1.1.x.x
cifX TCP/IP Server for SYCON.net	cifX TCP Server.exe	2.1.0.0
US Driver	USB Driver of Windows®	5.1.2600.x

Table 2: Reference on Driver and Software



Further information on related version stands of firmware, drivers and software, see the user manual for your device. If necessary please follow all the instructions in the latest manual edition. These can be downloaded from the website www.hilscher.com.

1.1.3 Conventions in this Manual

Notes, operation instructions and results of operation steps are marked as follows:

Notes



Important: <important note you must follow to avoid malfunction>



Note: <general note>



<note, where to find further information>

Operation Instructions

1. <instruction>
2. <instruction>

or

- <instruction>

Results

↪ <result>

1.2 Contents of the Installation DVD

On the **Communication Solutions DVD** you will find these installation instructions about the software installation and the necessary configuration software, the documentation, the drivers and software for your PC Card cifX, and additional auxiliary tools.

1.2.1 Installation Guide, Documentation Overview



The installation guide 'Software Installation and Documentation Overview' on the Communication Solutions DVD are in the directory *Documentation\0. Installation and Overview*. The installation guide includes:

- An overview on the Content of the Communication Solutions DVD (in the section *What is on the Communication Solutions DVD?*)
- Overviews listing the available Documentations for PC cards cifX (in chapter *PC Cards cifX, Software and Documentation*).

1.2.2 What's New



All current version information for hardware and software described in this manual are provided in the folder *\Documentation\What's New - Communication Solutions DVD RL XX EN.pdf* on the Communication Solutions DVD.

1.3 Legal Notes

1.3.1 Copyright

© Hilscher, 2008-2014, Hilscher Gesellschaft für Systemautomation mbH

All rights reserved.

The images, photographs and texts in the accompanying material (user manual, accompanying texts, documentation, etc.) are protected by German and international copyright law as well as international trade and protection provisions. You are not authorized to duplicate these in whole or in part using technical or mechanical methods (printing, photocopying or other methods), to manipulate or transfer using electronic systems without prior written consent. You are not permitted to make changes to copyright notices, markings, trademarks or ownership declarations. The included diagrams do not take the patent situation into account. The company names and product descriptions included in this document may be trademarks or brands of the respective owners and may be trademarked or patented. Any form of further use requires the explicit consent of the respective rights owner.

1.3.2 Important Notes

The user manual, accompanying texts and the documentation were created for the use of the products by qualified experts, however, errors cannot be ruled out. For this reason, no guarantee can be made and neither juristic responsibility for erroneous information nor any liability can be assumed. Descriptions, accompanying texts and documentation included in the user manual do not present a guarantee nor any information about proper use as stipulated in the contract or a warranted feature. It cannot be ruled out that the user manual, the accompanying texts and the documentation do not correspond exactly to the described features, standards or other data of the delivered product. No warranty or guarantee regarding the correctness or accuracy of the information is assumed.

We reserve the right to change our products and their specification as well as related user manuals, accompanying texts and documentation at all times and without advance notice, without obligation to report the change. Changes will be included in future manuals and do not constitute any obligations. There is no entitlement to revisions of delivered documents. The manual delivered with the product applies.

Hilscher Gesellschaft für Systemautomation mbH is not liable under any circumstances for direct, indirect, incidental or follow-on damage or loss of earnings resulting from the use of the information contained in this publication.

1.3.3 Exclusion of Liability

The software was produced and tested with utmost care by Hilscher Gesellschaft für Systemautomation mbH and is made available as is. No warranty can be assumed for the performance and flawlessness of the software for all usage conditions and cases and for the results produced when utilized by the user. Liability for any damages that may result from the use of the hardware or software or related documents, is limited to cases of intent or grossly negligent violation of significant contractual obligations. Indemnity claims for the violation of significant contractual obligations are limited to damages that are foreseeable and typical for this type of contract.

It is strictly prohibited to use the software in the following areas:

- for military purposes or in weapon systems;
- for the design, construction, maintenance or operation of nuclear facilities;
- in air traffic control systems, air traffic or air traffic communication systems;
- in life support systems;
- in systems in which failures in the software could lead to personal injury or injuries leading to death.

We inform you that the software was not developed for use in dangerous environments requiring fail-proof control mechanisms. Use of the software in such an environment occurs at your own risk. No liability is assumed for damages or losses due to unauthorized use.

1.3.4 Warranty

Although the hardware and software was developed with utmost care and tested intensively, Hilscher Gesellschaft für Systemautomation mbH does not guarantee its suitability for any purpose not confirmed in writing. It cannot be guaranteed that the hardware and software will meet your requirements, that the use of the software operates without interruption and that the software is free of errors. No guarantee is made regarding infringements, violations of patents, rights of ownership or the freedom from interference by third parties. No additional guarantees or assurances are made regarding marketability, freedom of defect of title, integration or usability for certain purposes unless they are required in accordance with the law and cannot be limited. Warranty claims are limited to the right to claim rectification.

1.3.5 Export Regulations

The delivered product (including the technical data) is subject to export or import laws as well as the associated regulations of different countries, in particular those of Germany and the USA. The software may not be exported to countries where this is prohibited by the United States Export Administration Act and its additional provisions. You are obligated to comply with the regulations at your personal responsibility. We wish to inform you that you may require permission from state authorities to export, re-export or import the product.

1.3.6 Registered Trademarks

Windows® XP, Windows® Vista, Windows® 7 and Windows® 8 are registered trademarks of Microsoft Corporation.

Linux is a registered trademark of Linus Torvalds.

QNX is a registered trademark of QNX Software Systems, Ltd.

VxWorks is a registered trademark of Wind River Systems, Inc.

IntervalZero RTX™ is a trademark of IntervalZero.

Adobe-Acrobat® is a registered trademark of the Adobe Systems Incorporated.

PCI™, PCI EXPRESS® and PCIe® or MINI PCI™ are trademarks or registered trademarks of the Peripheral Component Interconnect Special Interest Group (PCI-SIG).

CompactPCI™ is a trademark of the PCI Industrial Manufacturers Group (PICMG).

PC/104™, PCI-104™, PCI/104-Express™ and PCIe/104™ are trademarks of the PC/104 Consortium (pc104.org).

All other mentioned trademarks are property of their respective legal owners.

1.3.7 Obligation to read and understand the Manual



Important!

- To avoid property damage to your system or to your device, you must read and understand all instructions in the manual, before installing the software.
 - Keep the product DVD providing the product manuals.
-

1.4 Licenses

If a PC Card cifX is used as a Slave, neither for the firmware nor for the configuration software SYCON.net a license will be required.

Licenses will be required if the PC Card cifX is used with

- a firmware with master functionality*.

* The master license includes the PC Card cifX operating as master and the license for the configuration software SYCON.net for the respective cifX.

2 System Overview

2.1 Configuration and Diagnosis

The following system overviews show which system components must be installed on the PC and how they communicate together to configure the PC Card cifX and to use the diagnosis functions.

PC Card cifX with Master Protocol

If on the PC Card cifX a Real-Time Ethernet protocol or a fieldbus protocol with Master functionality is operated, the configuration and the diagnosis of the PC Card cifX will be done with **SYCON.net**.

The following software components are required:

- Configuration and diagnosis program **SYCON.net** (contains the installed component Online Data Manager ODMV3)
- Device Driver (cifX Device Driver)

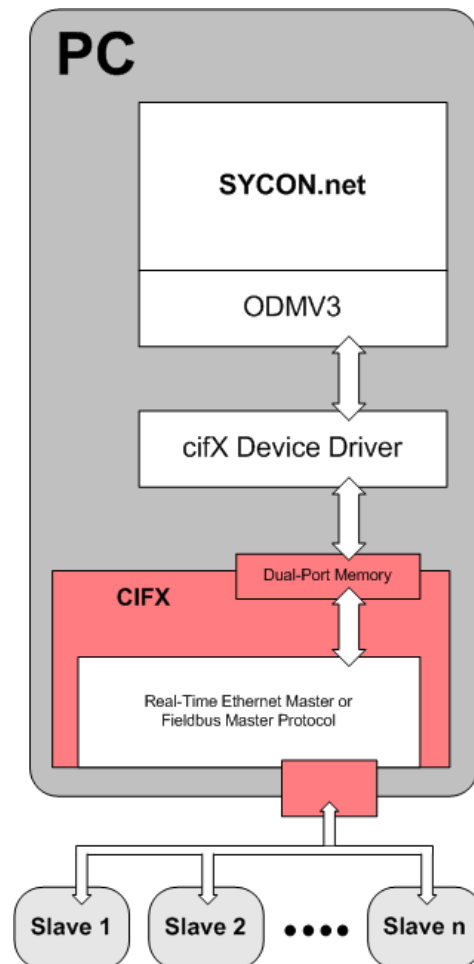


Figure 1: System Overview cifX and SYCON.net

PC Card cifX with Slave Protocol

If on the PC Card cifX a Real-Time Ethernet protocol or a fieldbus protocol with Slave functionality is operated, the configuration and the diagnosis of the PC Card cifX will be done with the configuration software **SYCON.net** or alternatively with the simple Slave configuration tool **netX Configuration Tool**.

If you use **SYCON.net**, the following software components will be required:

- Configuration and diagnosis program **SYCON.net** (contains the installed component Online Data Manager ODMV3)
- Device Driver (cifX Device Driver)

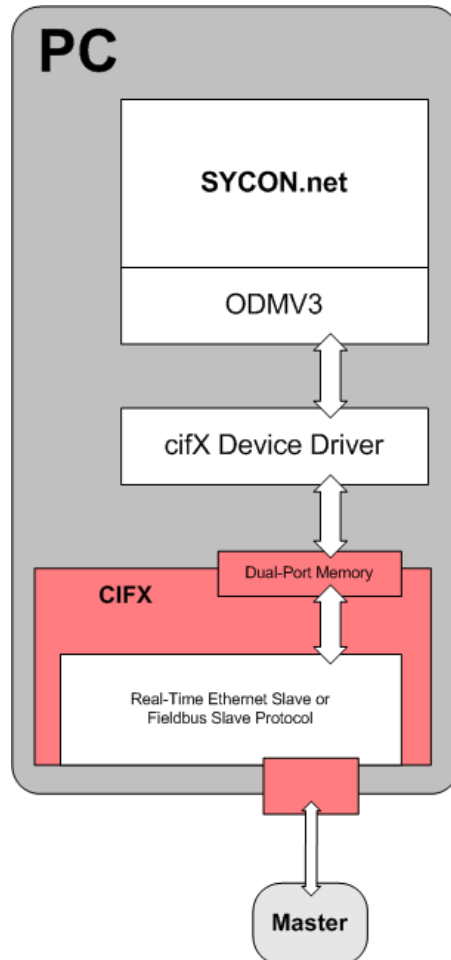


Figure 2: System Overview cifX and SYCON.net

If you use the **netX Configuration Tool**, the following software components will be required:

- Slave configuration tool **netX Configuration Tool** (configuration and diagnosis program)
- Device Driver (cifX Device Driver)

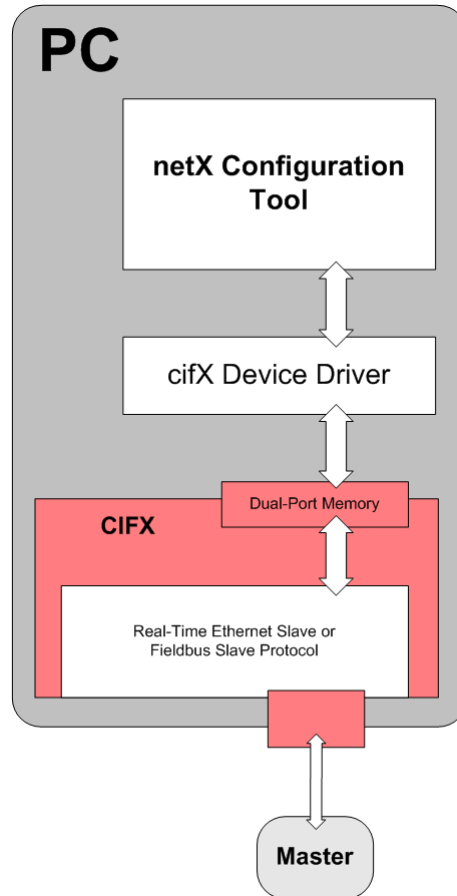


Figure 3: System Overview cifX and netX Configuration Tool

2.2 Remote Connection via Ethernet

Via Ethernet the program **SYCON.net** can establish for *diagnosis purposes* a connection to another PC (in the example PC 2), in which the PC Card cifX is installed.

Beginning with version 2.1.0.0 of the cifX TCP/IP Server for Windows® systems, the Ethernet connection from the remote PC (PC 1) to the PC Card cifX on PC 2 can be used for *remote configuration*. With **SYCON.net** from PC 1 to PC 2 a firmware download and configuration download can be executed as a *remote-download* of the firmware file or configuration file to the PC Card cifX.



Detailed information on remote configuration and remote download can be found in the operating instruction manual "cifX TCP / IP server".

The system overview in *Figure 4* or *Figure 5* show each which components must be installed on the remote PC (PC 1) or the local PC (PC 2) and how they communicate together, so that the diagnosis functions and respectively the remote configuration and the remote download can be used.

The following software components are required for **PC 1** (remote PC):

- Program **SYCON.net** (contains the installed component Online Data Manager ODMV3)

The following software components are required for **PC 2** (local PC):

- Server program (cifX TCP/IP server)
- Device Driver (cifX Device Driver)

Furthermore between PC 1 and PC 2

- Ethernet PC network

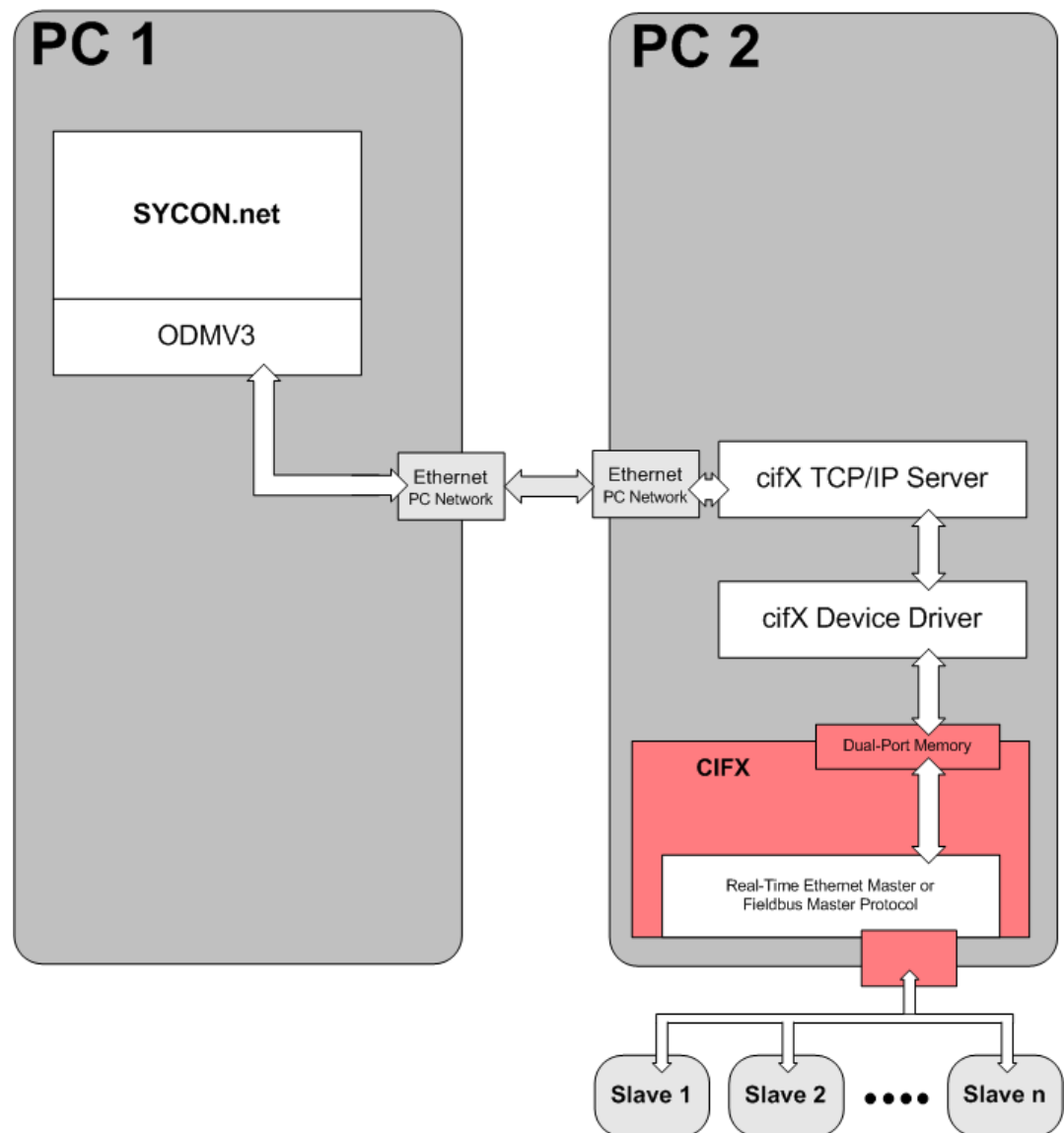


Figure 4: System Overview cifX (Master) and Remote Connection via Ethernet

The Figure 4 shows the case that the PC Card cifX works as a Master with several connected Slave devices.

It is also possible that the PC Card cifX works as a Slave. The *Figure 5* only shows the case that the PC Card cifX works as a Slave.

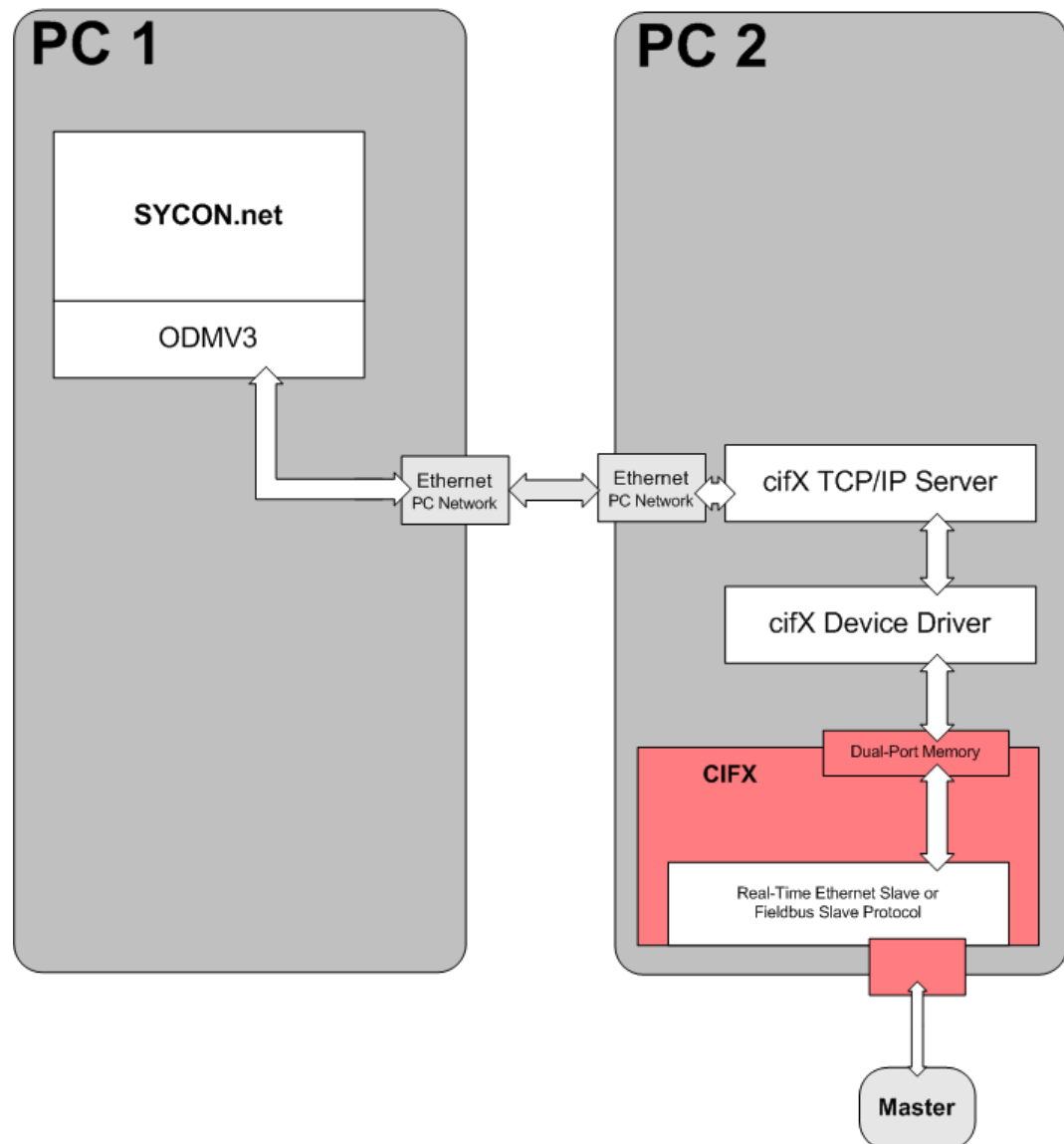


Figure 5: System Overview cifX (Slave) and Remote Connection via Ethernet

Requirements for Use

- The PC Card cifX in **PC 2** (local PC) must be installed and operational, this means, firmware and configuration must already be loaded on the PC Card cifX.
- The device driver (cifX device driver) must be installed and started.
- The server program (cifX TCP/IP server) must be started.

The cifX TCP/IP server program is on the Communication Solutions DVD in the directory *Tools \ cifXTCPServer * and has the name *cifXTCPServer.exe*. The program must not be installed, but needs only be executed.

3 cifX Device Driver

3.1 System Requirements

The system requirements listed below are valid for the **cifX Device Driver**:

- PC with 586-, Pentium® processor or higher
- Operating system: Windows® XP, Windows® Vista (32-Bit), Windows® 7 (32-Bit), Windows® 7 (64-Bit), Windows® 8 (32-Bit) oder Windows® 8 (64-Bit)
- Administrator privilege is required for installation and to configure the driver
- Free disk space: min. 100 MByte
- DVD ROM drive
- PC card cifX

3.2 Installation Overview

3.2.1 Installation Sequence

First, install the cifX Device Driver and afterwards your device hardware.



Note: Uninstall a previous Version of the Driver

If you have already installed a previous version of the cifX Device Driver than first uninstall this.

You can uninstall the cifX Device Driver via **Start > Settings > Control Panel > Add or Remove Programs > cifX Device Driver Vx.x.x.x** and click **Remove**.

1. Install the Driver

Important: Install the cifX Device Driver only by help of the cifX Device Driver Setup.

Note: You need administrator privileges for the cifX Device Driver installation!

The cifX Device Driver Setup installation automatically detects your Windows operating system and installs the corresponding driver. Follow the installation instruction on the screen. A detailed description can be found in this manual in the sections *Installation under Windows XP (Software First)* page 19, *Installation under Windows 7 (Software First)* page 25 and *Installation under Windows 8 (Software First)* page 30.

2. Install the Hardware

3. Check the Installation

After you have completed the installation of the cifX Device Driver and the device hardware, you can use the Windows Device Manager to check the correct installation and if the hardware is detected by the driver.



Note: The device hardware still has to be configured.



For further details refer to the operating instruction manual **cifX Device Driver, Installation and Operation for Windows XP, Windows Vista, Windows 7 and Windows 8** on the **Communication Solutions DVD**.

3.2.2 Where the Driver Setup is to be found?

The cifX Device Driver setup program, you either find on the installation CD or DVD, or you can download it from the Hilscher website.

Medium	Name/Address	Directory / Menu Item
CD / DVD	NXDRV-WIN CD	\Installation
	Communication Solutions DVD	\Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation
Web	www.hilscher.com	Support > Download

Table 3: Where the Driver Setup is to be found?

3.2.3 General Notes



Note: For Windows® XP/Vista/7/8 the cifX Device Driver setup detects if the 32 bit driver or the 64 bit driver are to be installed.

- For 32 bit systems the name **cifX Device Driver (x86)** is displayed and
- for 64 bit systems the name **cifX Device Driver (x64)** is displayed.

3.3 Installation under Windows XP (Software First)

Requirement

The following steps describe the installation of the cifX Device Driver for Windows® XP via the cifX Device Driver Setup if the device hardware is not installed yet.

Installation Steps

1. Insert the Communication Solutions DVD into the local DVD-ROM drive.
 2. Start the driver setup by a double-click on the *cifX Device Driver Setup.exe* file in the ...*Installation* directory or via the startup screen.
- The startup screen **Communication Solutions** is displayed.



Figure 6: Start the Installation for the cifX Device Driver

- Click on **Drivers, Software and Tools > Install cifX / netJACK Device Driver**.
- The language of the graphical user interface of the cifX Device Driver setup is selected automatically for *German, French and English* and for all the other languages the graphical user interface is in *English*.
- The **License Agreement** pane is displayed.



Figure 7: cifX Device Driver-Setup - License Agreement

3. Check **I accept the terms in the License Agreement**.

➤ Click **Install**.

➤ The cifX Device Driver installation is started.

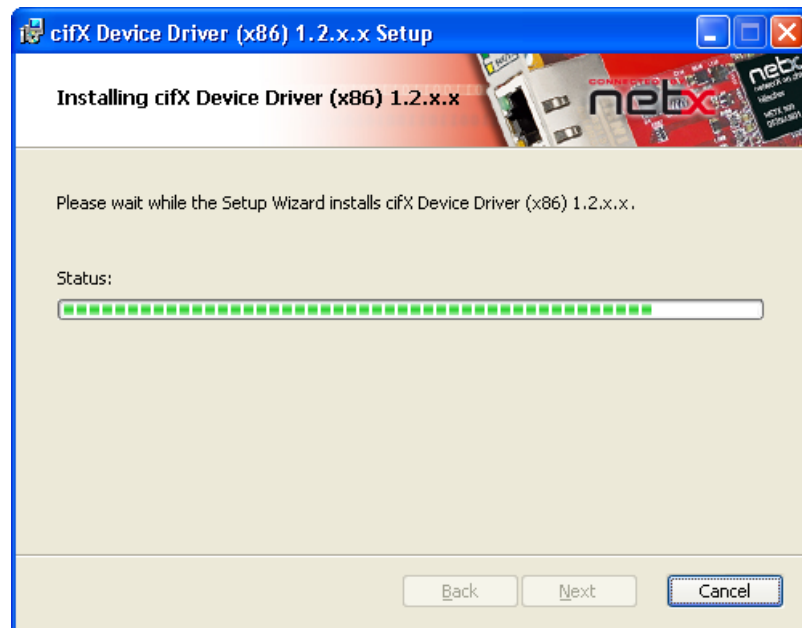


Figure 8: Installing cifX Device Driver

➤ Then the **Completed the cifX Device Driver Setup Wizard** pane is displayed.



Figure 9: Finish Installation for cifX Device Driver

➤ Click **Finish**.

4. Now shut down your PC and install your device hardware.

You need to perform the installation of the device hardware according to the specifications given in the user manual for your device.



Important: For the hardware installation, you must observe all safety precautions and warnings in the user manual.

5. Restart the PC.



Note: When the installation of the cifX Device Driver and of the device hardware is complete, you need to restart your PC, to activate the current configuration of the device driver.

Note for Windows XP: After executing the cifX Device Driver setup the installation files of cifX Device Driver are backed up in the driver directory. If you have installed your devices hardware and restarted the PC system, Windows will detect the new hardware and asks you via the **Found New Hardware Wizard** to perform final installation steps. To complete the installation of the cifX Device Driver, for Windows XP, you must run the wizard manually, as described hereafter. Using the wizard, then the physical installation of your device is performed, during which various driver installation files will be copied from the driver directory into the Windows directory.

How to run the Wizard for Windows XP manually:

➤ After you have executed the cifX Device Driver setup and installed the device hardware or restarted the PC, for Windows XP the **Found New Hardware Wizard** appears:



Figure 10: Found New Hardware Wizard: Select 'No, not this time'

- Select **No, not this time**.
- Click **Next**.

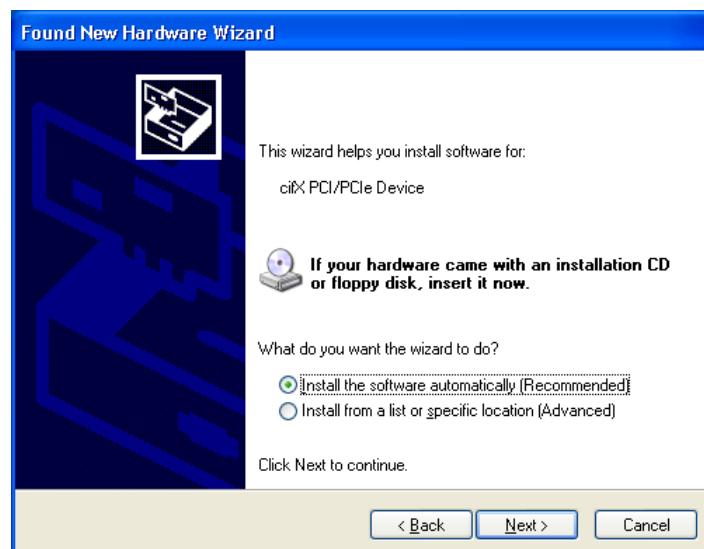


Figure 11: Found New Hardware Wizard: Select 'Install the software automatically'

- Select **Install the software automatically [Recommended]**.
- Then click **Next**.
- Windows copies the driver installation files to the Windows directory.

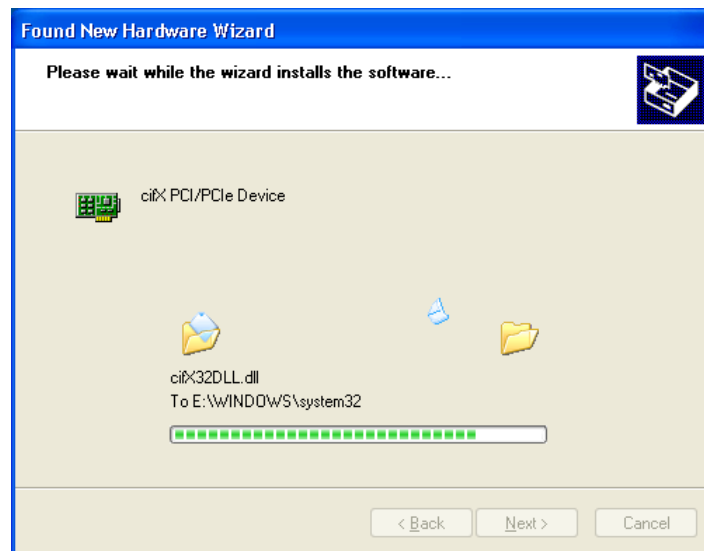


Figure 12: Found New Hardware Wizard: Software is installed

➤ Then the **Finish** pane appears:

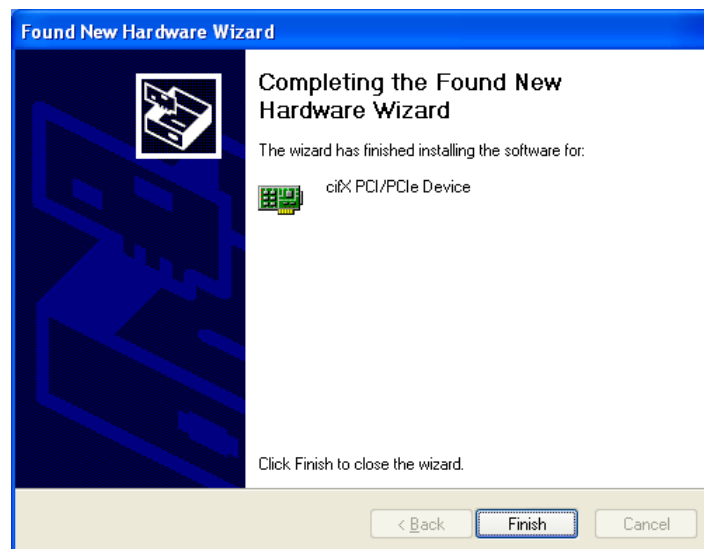


Figure 13: Found New Hardware Wizard: Click 'Finish'

➤ Click **Finish**.

➤ The Installation of the cifX Device Driver is complete and the cifX Device Driver is ready for operation.

3.4 Installation under Windows XP (Hardware First)

Requirement

The following steps describe the installation of the cifX Device Driver for Windows® XP, when the hardware installation is already complete.



Note: If the hardware gets installed at the PC before the cifX Device Driver installation has been done, the Windows® Found New Hardware Wizard is started and the operating system Windows® asks for the driver.

Preparation

The installation of the device hardware you need to perform according to the specifications given in the user manual for your device.



Important: For the hardware installation, you must observe all safety precautions and warnings in the user manual.

Installation Steps

To install the cifX Device Driver proceed as described hereafter:

1. After the installation of the device hardware restart your PC.
 - Windows® XP recognizes the PCI based device hardware automatically.
 - The message **Found New Hardware** is displayed.



Figure 14: Found New Hardware (Example for PC card cifX)

2. Close the **Found New Hardware** message.
3. Now install the cifX Device Driver via the *cifX Device Driver Setup.exe* file.



Note: After you have completed the installation of the device hardware and of the cifX Device Driver, you need to restart your PC.

- After the restart the PC automatically detect your netX based device hardware and the cifX Device Driver is started.

3.5 Installation under Windows 7 (Software First)

Requirement

The following steps describe the installation of the **cifX Device Driver** for Windows® VISTA and Windows® 7 via the cifX Device Driver Setup if the device hardware is not yet installed.

Installation Steps

1. Insert the Communication Solutions DVD into the local DVD-ROM drive.
 2. Start the driver setup by a double-click on the *cifX Device Driver Setup.exe* file in the ...*Installation* directory or via the startup screen.
- The startup screen **Communication Solutions** is displayed.



Figure 15: Start the Installation for the cifX Device Driver

- Click on **Drivers, Software and Tools > Install cifX / netJACK Device Driver**.

Or



Note: Reduce the number of Windows® safety questions by running the setup via **Run as Administrator**. You also need administrator rights to uninstall the software.

- Right click on the *cifX Device Driver Setup.exe* file and then click **Run as Administrator**.

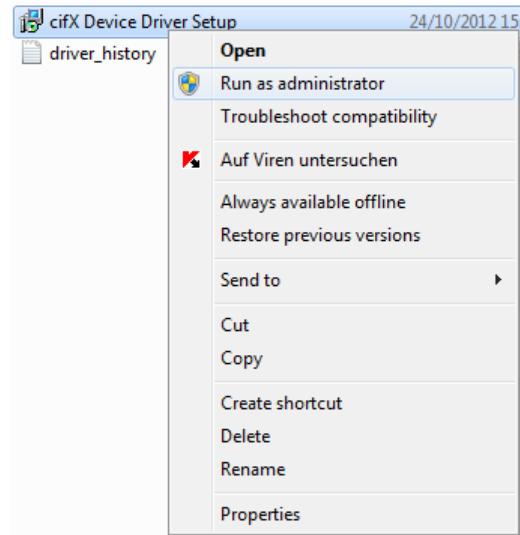


Figure 16: cifX Device Driver Setup.exe - Run as Administrator

- Answer the Windows® security question with **Yes**.
- The **License Agreement** pane is displayed.

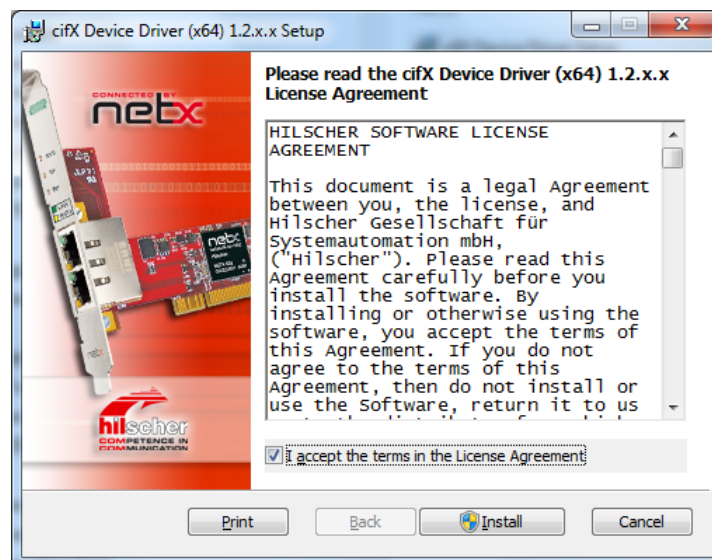


Figure 17: cifX Device Driver Setup - License Agreement

3. Check **I accept the terms in the License Agreement**.
- Click **Install**.
4. If Windows® displays a security question, answer it with **Install**.
- The cifX Device Driver installation is started.

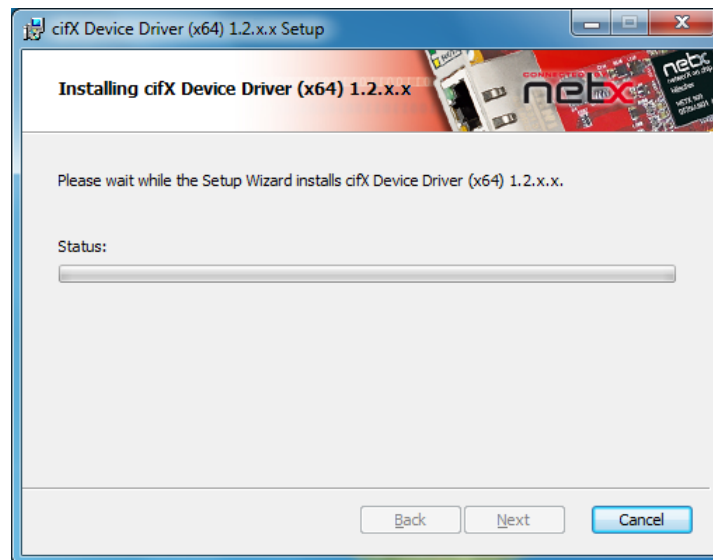


Figure 18: Installing cifX Device Driver is installed

4. If Windows® displays a security question, answer it with **Yes**.

➤ The cifX Device Driver installation is continued.

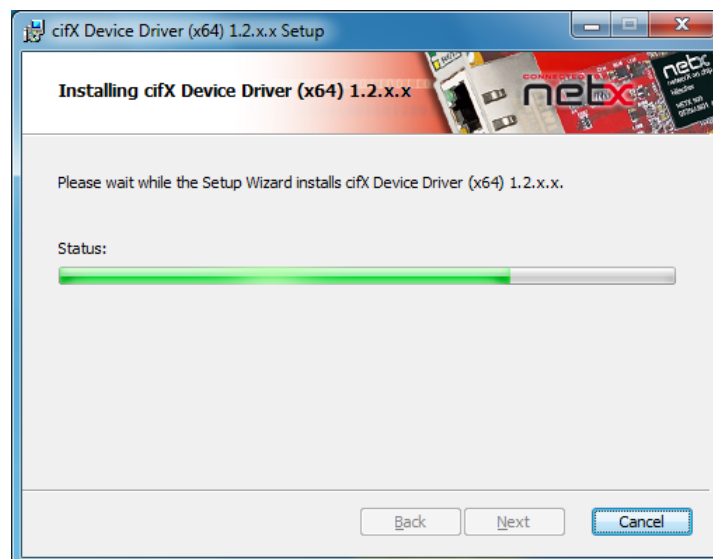


Figure 19: Installation for cifX Device Driver – Installation is continued

➤ Then the **Completed the cifX Device Driver Setup Wizard** pane is displayed.



Figure 20: Installation for cifX Device Driver completed

➤ Click **Finish**.

5. Now shut down your PC and install your device hardware.

The installation of the device hardware you need to perform according to the specifications given in the user manual for your device.



Important: For the hardware installation, you must observe all safety precautions and warnings in the user manual.

6. Restart the PC.



Note: When the installation of the cifX Device Driver and of the device hardware is complete, you need to restart your PC, to activate the current configuration of the device driver.

➤ After restart, the PC automatically detects your netX based device hardware, and the cifX Device Driver is started.

3.6 Installation under Windows 8 (Hardware First)

Requirement

The following steps describe the installation of the cifX Device Driver for Windows® 8, when the hardware installation is already complete.



Note: If the hardware gets installed at the PC before the cifX Device Driver installation has been done, the Windows® **Found New Hardware Wizard** is started and the operating system Windows® asks for the driver.

Preparation

The installation of the device hardware you need to perform according to the specifications given in the user manual for your device.



Important: For the hardware installation, you must observe all safety precautions and warnings in the user manual.

Installation Steps

To install the cifX Device Driver proceed as described hereafter:

1. After the installation of the device hardware restart your PC.
 - Windows® 8 recognizes the PCI based device hardware automatically.
2. Now install the cifX Device Driver via the *cifX Device Driver Setup.exe* file.



Note: After you have completed the installation of the device hardware and of the cifX Device Driver, you need to restart your PC.

- After the restart the PC automatically detect your netX based device hardware and the cifX Device Driver is started.

3.7 Installation under Windows 8 (Software First)

Requirement

The following steps describe the installation of the **cifX Device Driver** for Windows® 8 via the cifX Device Driver Setup if the device hardware is not yet installed.

Installation Steps

1. Insert the Communication Solutions DVD into the local DVD-ROM drive.
 2. Start the driver setup by a double-click on the *cifX Device Driver Setup.exe* file in the ...*Installation* directory or via the startup screen.
- The startup screen **Communication Solutions** is displayed.



Figure 21: Start the Installation for the cifX Device Driver

- Click on **Drivers, Software and Tools > Install cifX / netJACK Device Driver**.

Or



Note: Reduce the number of Windows® safety questions by running the setup via **Run as Administrator**. You also need administrator rights to uninstall the software.

- Right click on the *cifX Device Driver Setup.exe* file and then click **Run as Administrator**.

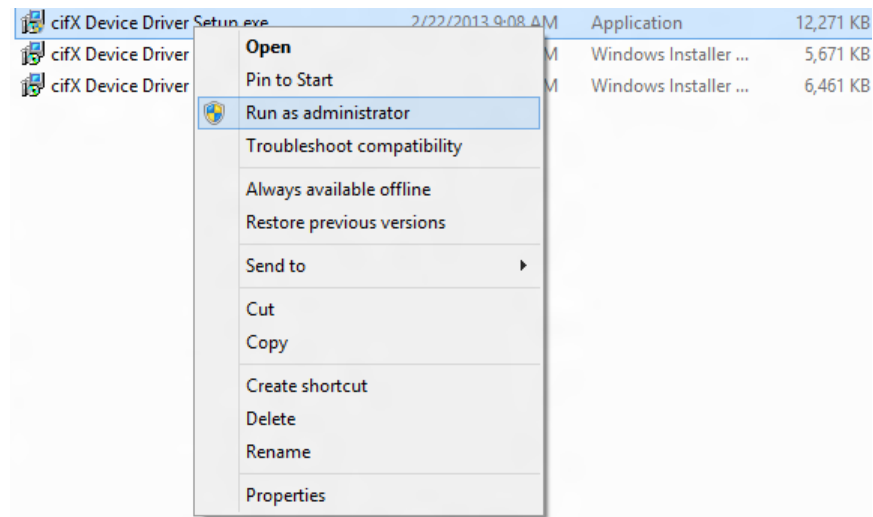


Figure 22: cifX Device Driver Setup.exe - Run as Administrator

- Answer the Windows® security question with **Yes**.
- The **License Agreement** pane is displayed.

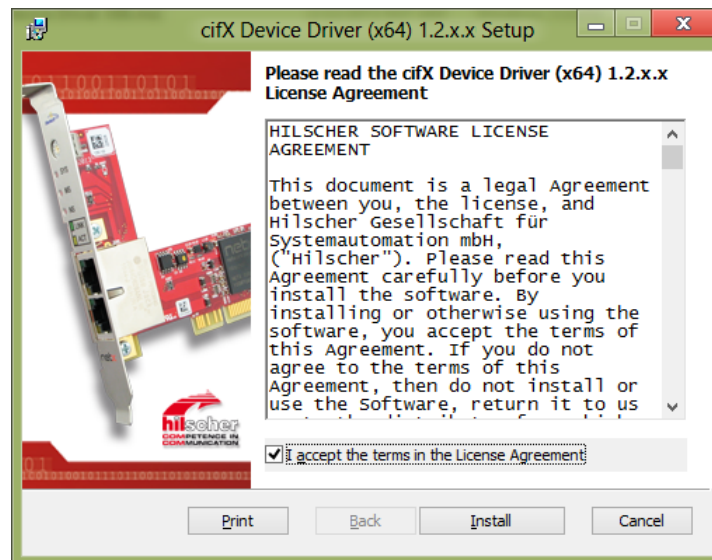


Figure 23: cifX Device Driver Setup - License Agreement

3. Check **I accept the terms in the License Agreement**.
 - Click **Install**.
 - The cifX Device Driver installation is started.
4. If Windows® displays a security question, answer it with **Install**.

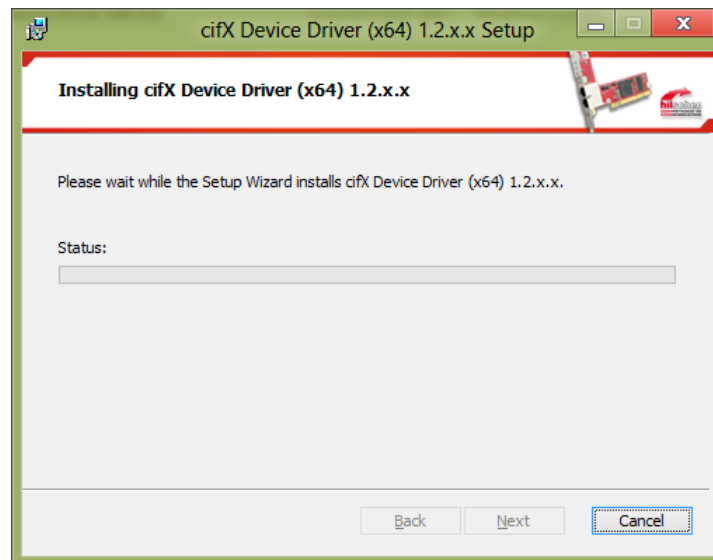


Figure 24: Installing cifX Device Driver is installed

➤ The cifX Device Driver installation is continued.

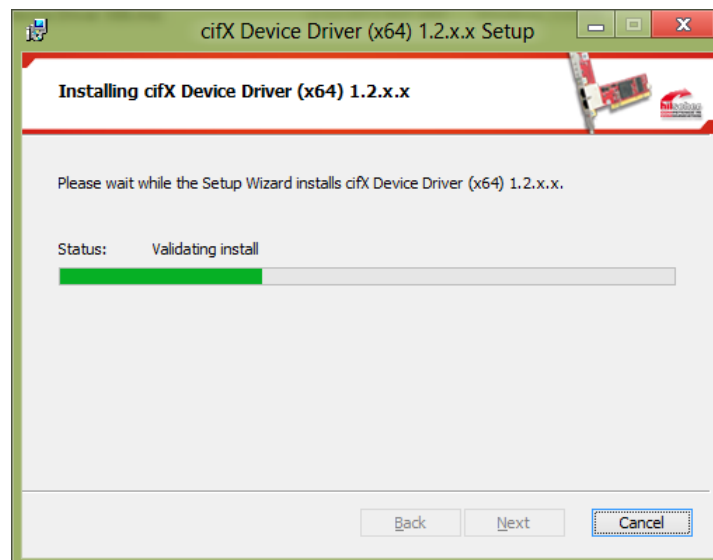


Figure 25: Installation for cifX Device Driver – Installation is continued

➤ Then the **Completed the cifX Device Driver Setup Wizard** pane is displayed.



Figure 26: Installation for cifX Device Driver completed

- Click **Finish**.

5. Now shut down your PC and install your device hardware.

The installation of the device hardware you need to perform according to the specifications given in the user manual for your device.



Important: For the hardware installation, you must observe all safety precautions and warnings in the user manual.

6. Restart the PC.



Note: When the installation of the cifX Device Driver and of the device hardware is complete, you need to restart your PC, to activate the current configuration of the device driver.

- After restart, the PC automatically detects your netX based device hardware, and the cifX Device Driver is started.

3.8 Installation under Windows 7 (Hardware First)

Requirement

The following steps describe the installation of the cifX Device Driver for Windows® VISTA and Windows® 7, when the hardware installation is already complete.



Note: If the hardware gets installed at the PC before the cifX Device Driver installation has been done, the Windows® Found New Hardware Wizard is started and the operating system Windows® asks for the driver.

Preparation

The installation of the device hardware you need to perform according to the specifications given in the user manual for your device.



Important: For the hardware installation, you must observe all safety precautions and warnings in the user manual.

Installation Steps

To install the cifX Device Driver proceed as described hereafter:

1. After the installation of the device hardware restart your PC.
- Windows® VISTA respectively Windows® 7 recognize the PCI based device hardware automatically.
- The message **Device driver software was not successfully installed** is displayed.

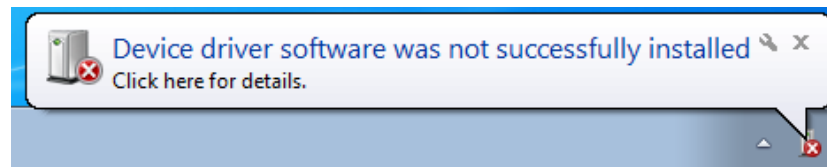


Figure 27: Device Driver Software was not successfully installed

2. Close the **Device driver software was not successfully installed** message.
3. Now install the cifX Device Driver via the *cifX Device Driver Setup.exe* file.



Note: After you have completed the installation of the device hardware and of the cifX Device Driver, you need to restart your PC.

- After the restart the PC automatically detect your netX based device hardware and the cifX Device Driver is started.

3.9 Checking the Driver Installation under Windows XP

When the installation of the cifX Device Driver and installation of the device hardware are complete, check in the Device Manager whether your netX based device hardware is installed properly. Do the following steps:

1. Open the Device Manager.
 - Select **Start > Settings > Control Panel**.
 - Double click on the icon **System**.
 - The **System Properties** pane is displayed.

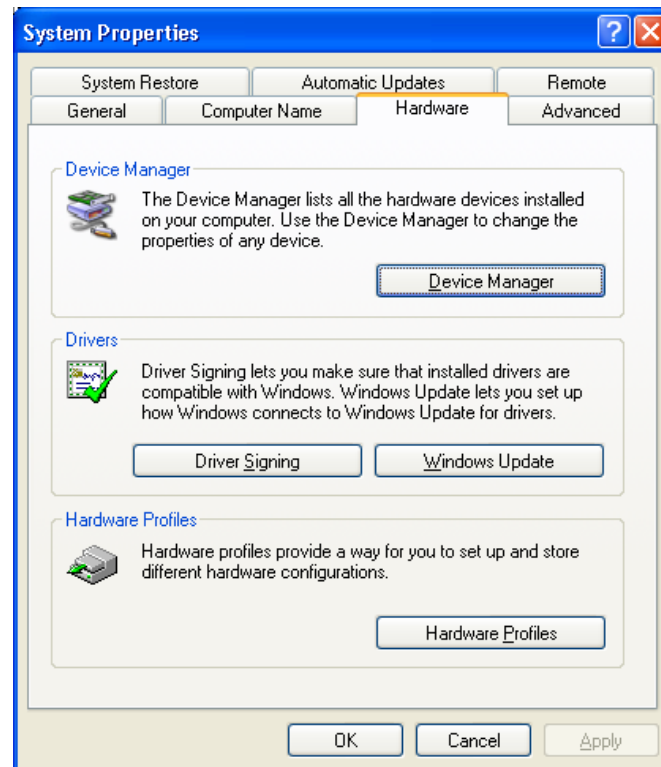


Figure 28: System Properties

- Click on **Device Manager**.
 - The Device Manager starts.
2. Check, whether the Windows® Device Manager display shows the correct name for your device.

Example: This example shows the name **CIFx Communication Interface > cifX PCI/PCIe Device** for the PC card cifX



Note: The device hardware still has to be configured.

3.10 Checking the Driver Installation under Windows 7

When the installation of the cifX Device Driver and the device hardware are complete, check in the Device Manager, whether your netX based device hardware is installed correctly. Do the following steps:

1. Open Start

➤ Click on **Start** .

2. Search and start the Device Manager

➤ Enter **Device Manager** into the search field.

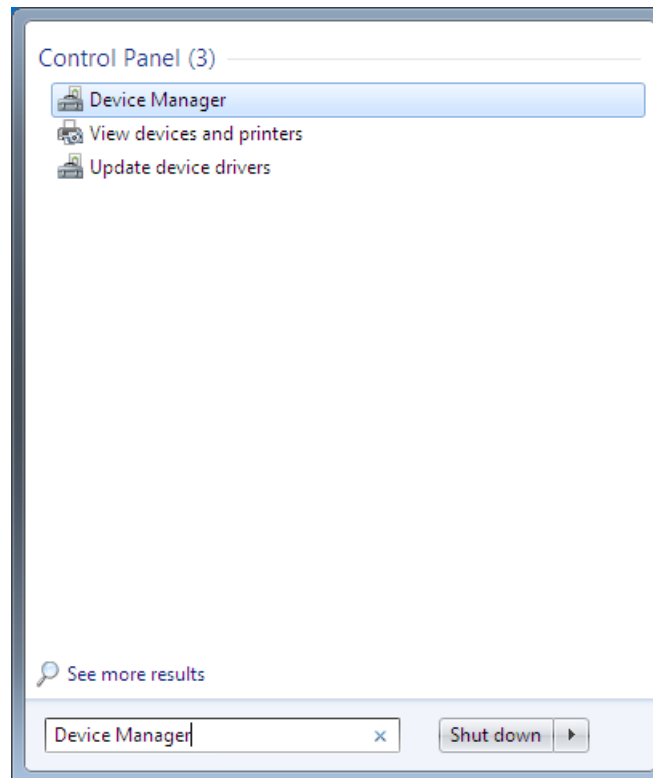


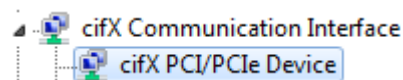
Figure 29: Control Panel

➤ Click on **Device Manager**.

➤ The Device Manager starts.

3. Check, whether the Windows® Device Manager display shows the correct name for your device.

Example: This example shows the name **cifX Communication Interface** > **cifX PCI/PCIe Device** for the PC card cifX



Note: The device hardware still has to be configured.

3.11 Checking the Driver Installation under Windows 8

When the installation of the cifX Device Driver and the device hardware are complete, check in the Device Manager, whether your netX based device hardware is installed correctly. Do the following steps:

1. Open Windows® 8 Start Screen.

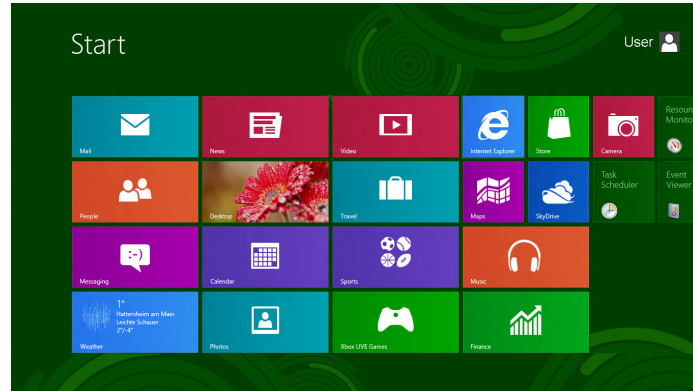


Figure 30: Startbildschirm Windows 8

2. Search and start the Device Manager.
 - Press the keys **[Win]** and **[F]**.
 - Select **Settings**.
 - Enter **Device Manager** into the search field.

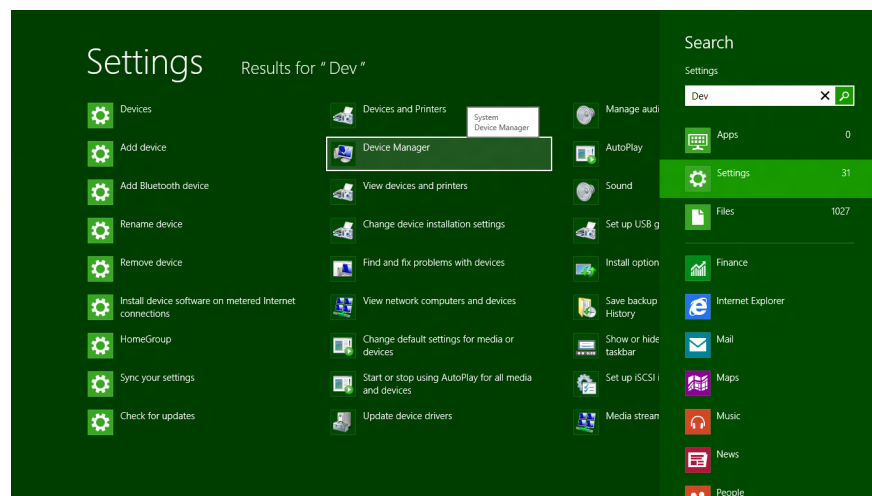
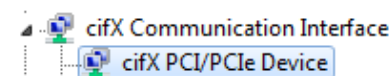


Figure 31: Search and start the Device Manager

- Click on **Device Manager**.
 - The Device Manager starts.
3. Check, whether the Windows® Device Manager display shows the correct name for your device.

Example: This example shows the name **cifX Communication Interface > cifX PCI/PCIe Device** for the PC card cifX



Note: The device hardware still has to be configured.

3.12 Uninstalling under Windows XP

Requirement



Note: You need administrator privileges Windows® XP to uninstall the cifX Device Driver software from your PC.

Steps for Uninstalling

To uninstall the cifX Device Driver proceed as follows:

1. Select **Start > Settings > Control Panel**.
 - Select the symbol **Add or Remove Program** from the list and double click **Add or Remove Program**.
 - The **Add or Remove Program** pane is displayed.

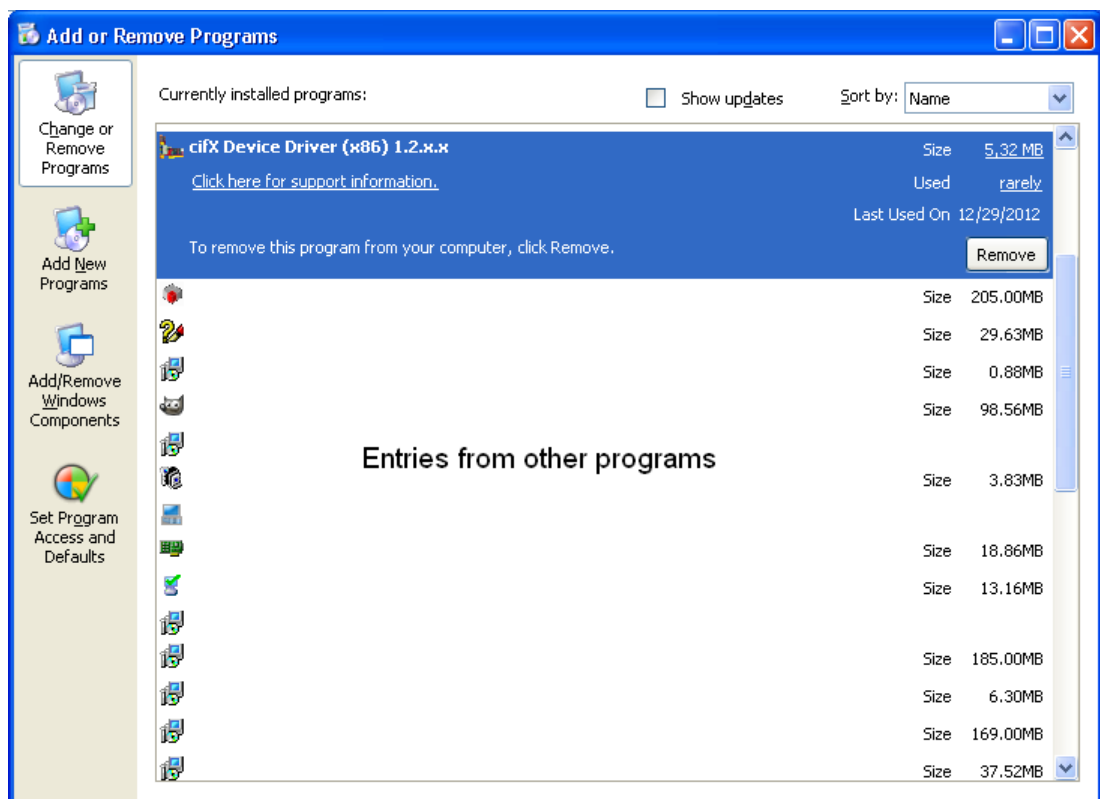


Figure 32: „Software“ Pane

2. Click on the cifX Device Driver entry.
 - Click on **Remove**.
 - The security message **Add or Remove Programs** is displayed.

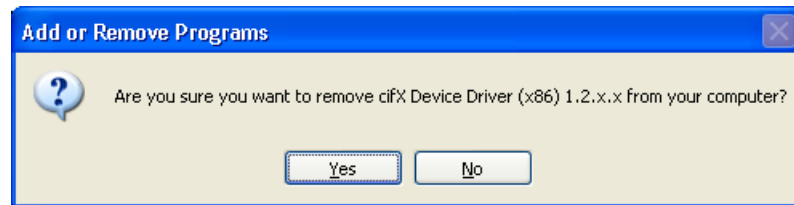


Figure 33: Message „Software“

➤ Click on **Yes**.

➤ The cifX Device Driver is uninstalled from your PC.

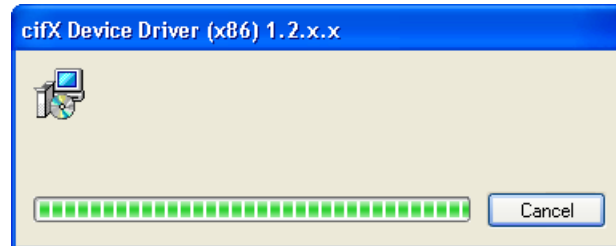


Figure 34: cifX Device Driver is uninstalled

3. Restart your PC.

3.13 Uninstalling under Windows 7

Requirements



Note: You need administrator privileges under Windows® VISTA and Windows® 7 to uninstall the cifX Device Driver software from your PC.

Steps for Uninstalling

To uninstall the cifX Device Driver, proceed as follows:

1. Open Start

- Click on **Start** .

2. Search and start the Device Manager.

- Enter **Device Manager** into the search field.

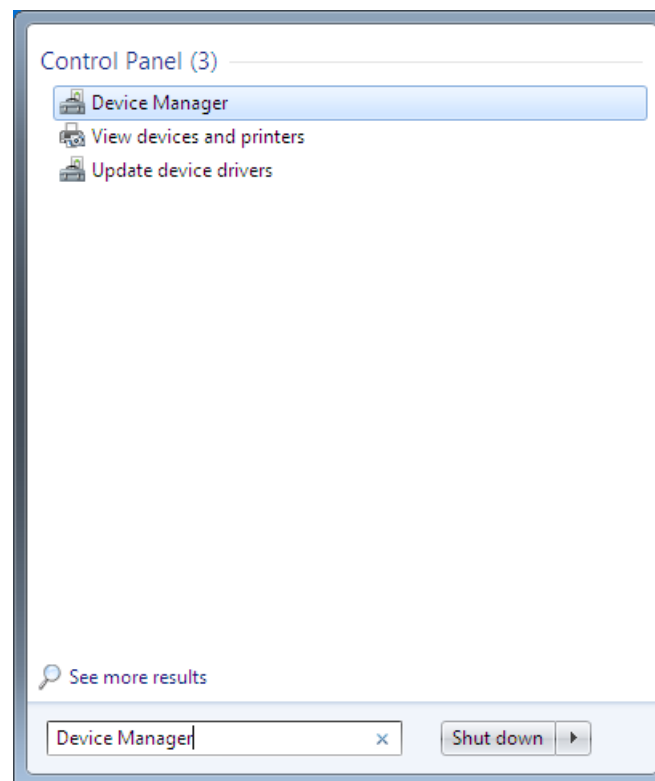


Figure 35: Control Panel

- Click on **Device Manager**.

- The Device Manager starts.

3. Uninstall the cifX Device Driver.

- Right click in the **Device Manager** on the entry of your device.
- Click on **Properties**.

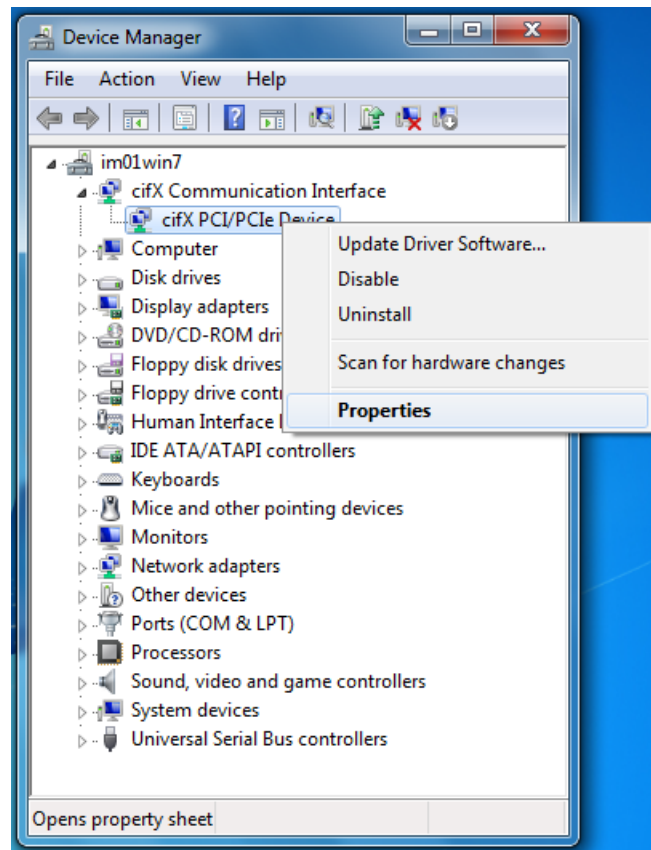


Figure 36: Device Manager (Example for PC card cifX)

➤ ... **Device Properties > General** is displayed.

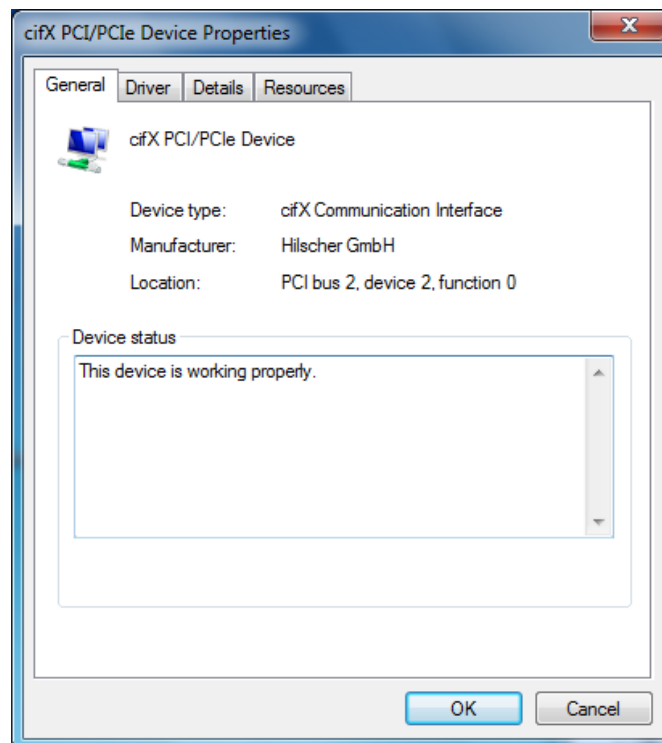


Figure 37: Device Properties > General (Example for PC card cifX)

➤ Select the **Driver** tab.

➤ ... **Device Properties > Driver** is displayed.

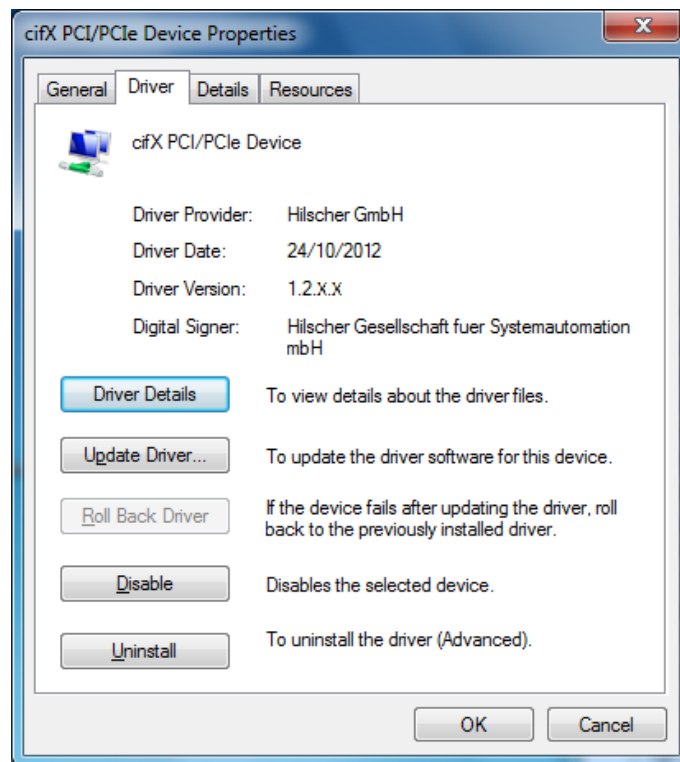


Figure 38: Device Properties > Driver (Example for PC card cifX)

➤ Select **Uninstall**.

➤ **Confirm Device Uninstall** is displayed.



Figure 39: Confirm Device Uninstall (Example for PC card cifX)

➤ Check **Delete the driver software for this device**.

➤ Click **OK**.

➤ The cifX Device Driver for this device gets uninstalled.

4. Repeat step 1 to 3 for other devices if necessary.

Then uninstall the entry for the cifX Device Driver from the list **Uninstall or change programs**.

5. Open **Start**

➤ Click on **Start** .

6. Uninstall program.

- Enter **Uninstall a program** into the search field.

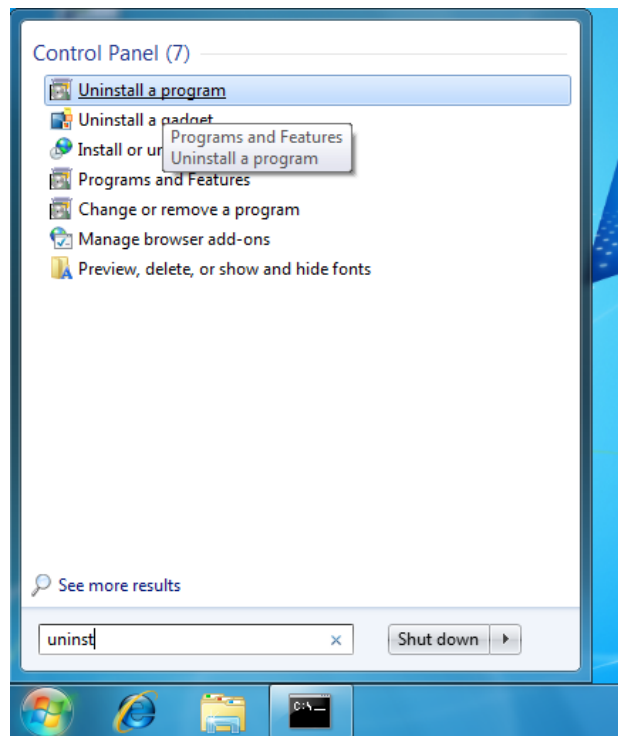


Figure 40: Control Panel > Uninstall a program

- Click on **Device Manager**.
- **Uninstall or change a program** is displayed.

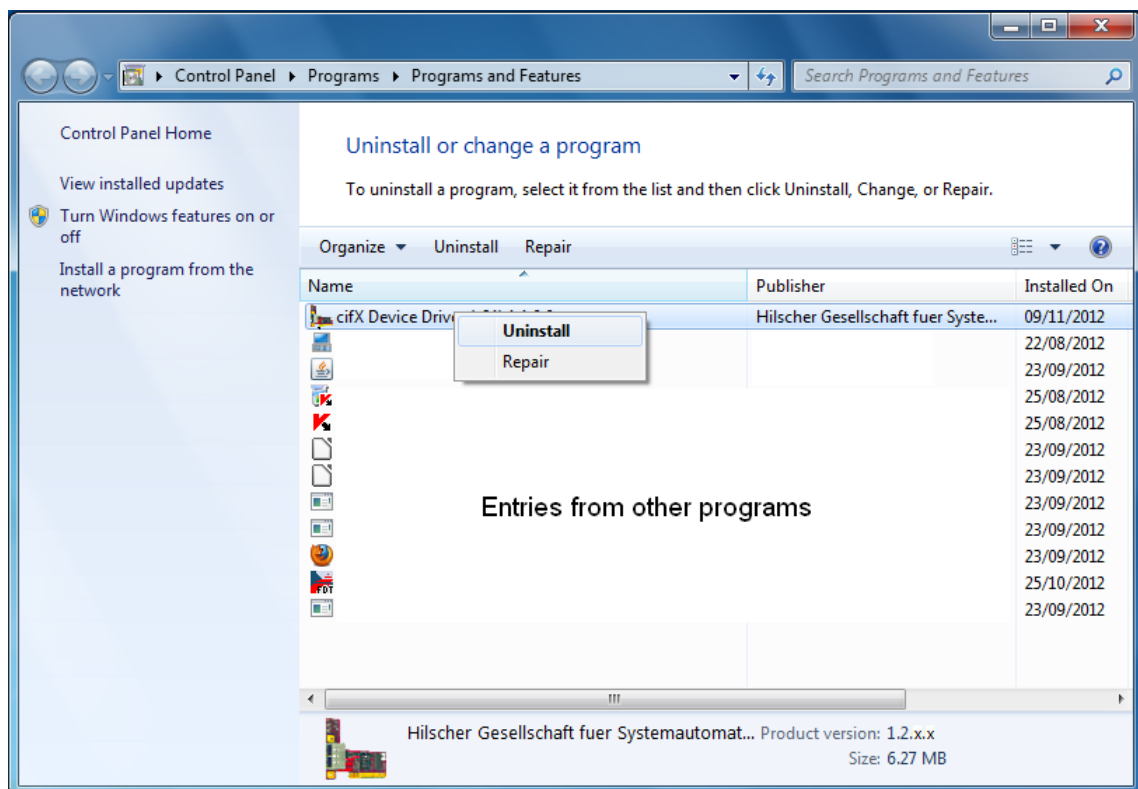


Figure 41: Uninstall or change a program > Uninstall

7. Uninstalling cifX Device Driver.
 - Rightclick on the cifX Device Driver entry.
 - Click on **Uninstall**.
 - The **Programs and Features** is displayed.

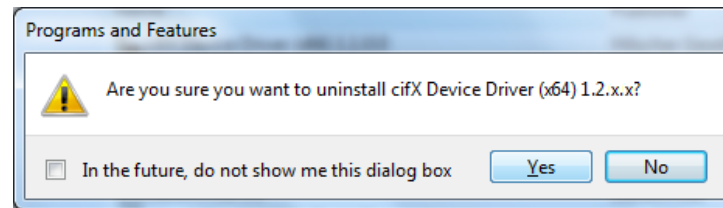


Figure 42: Programs and Features

- Click on **Yes**.
- The cifX Device Driver is uninstalled from your PC.

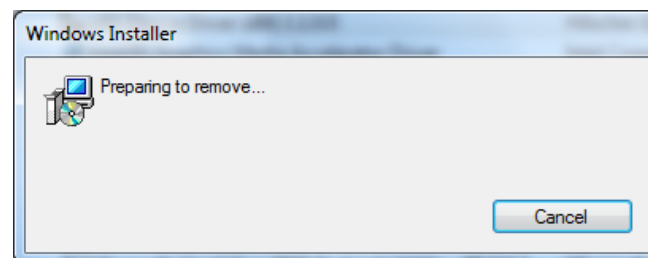


Figure 43: Windows Installer

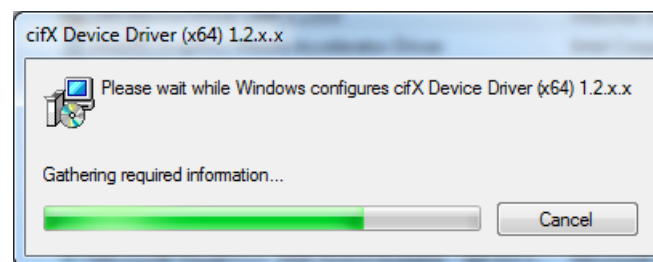


Figure 44: Uninstalling cifX Device Driver

- The cifX Device Driver pane is closed and the uninstall procedure is completed.

3.14 Uninstalling under Windows 8

Requirements



Note: You need administrator privileges under Windows® 8 to uninstall the cifX Device Driver software from your PC.

Steps for Uninstalling

To uninstall the cifX Device Driver, proceed as follows:

1. Open Windows® 8 Start Screen.



Figure 45: Start Screen Windows 8

2. Search and start the Device Manager.
 - Press the keys **[Win]** and **[F]**.
 - Select **Settings**.
 - Enter **Device Manager** into the search field.

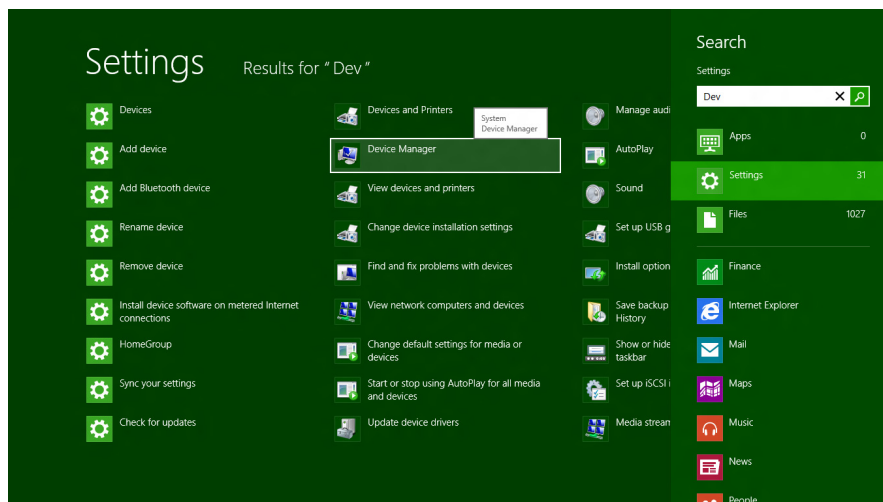


Figure 46: Search and start the Device Manager

- Click on **Device Manager**.
 - The Device Manager starts.
3. Uninstall the cifX Device Driver.
 - Right click in the Device Manager on the entry of your device.
 - Click on **Properties**.

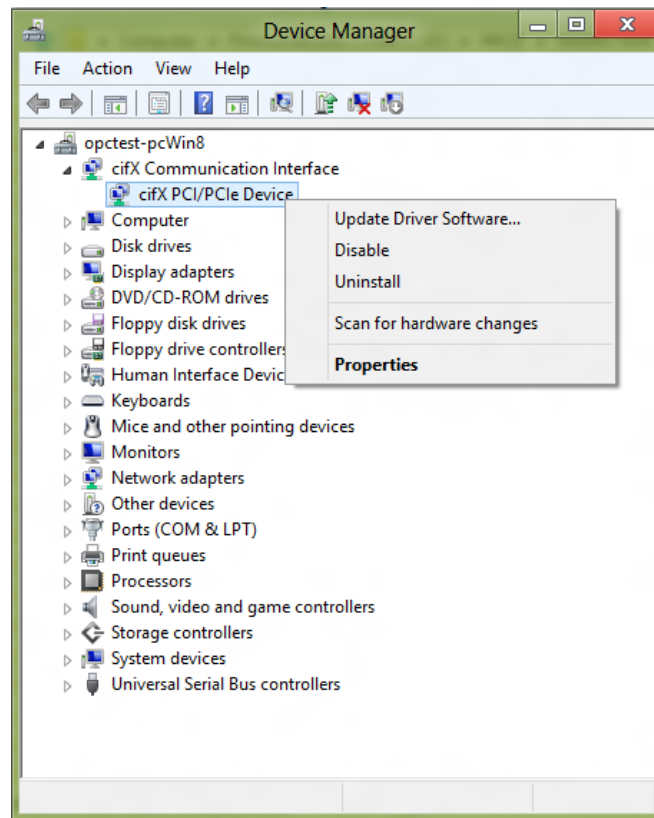


Figure 47: Device Manager (Example for PC card cifX)

➤ ... **Device Properties > General** is displayed.

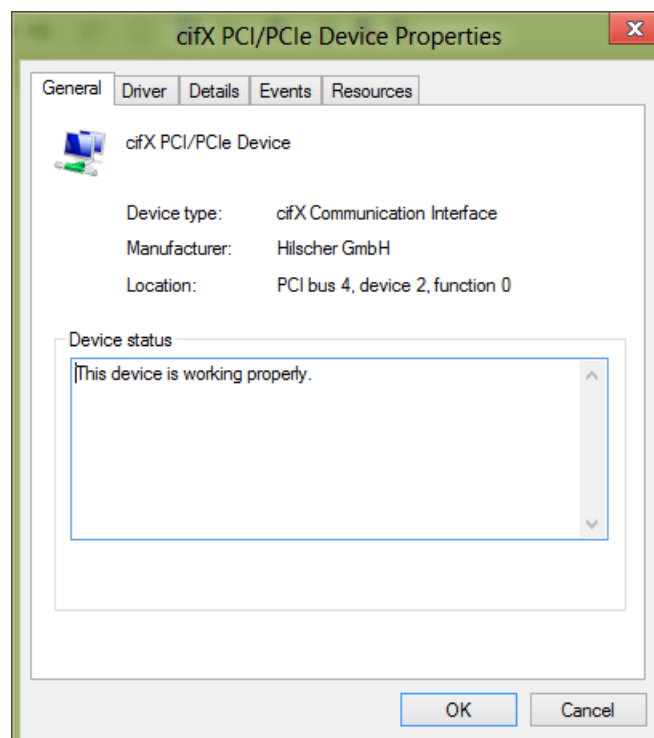


Figure 48: Device Properties > General (Example for PC card cifX)

➤ Select the **Driver** tab.

➤ ... **Device Properties > Driver** is displayed.

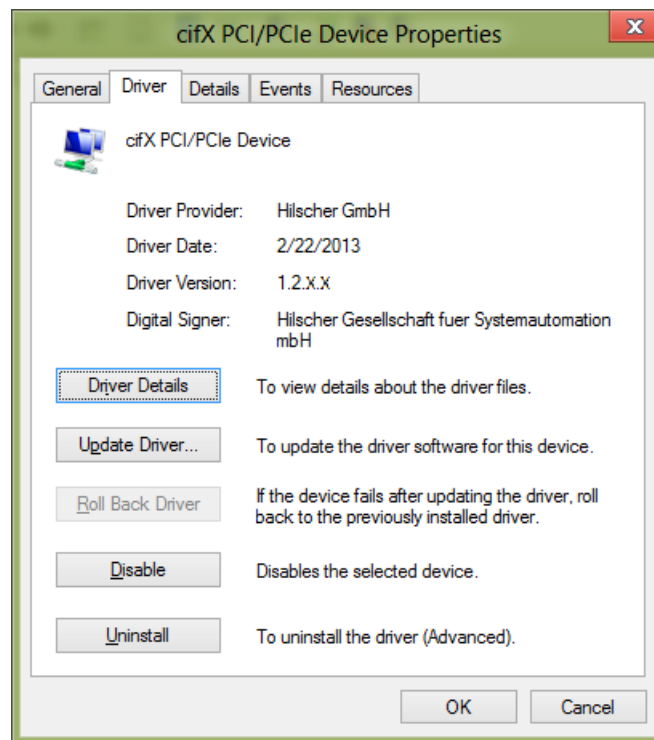


Figure 49: Device Properties > Driver (Example for PC card cifX)

- Select **Uninstall**.
- **Confirm Device Uninstall** is displayed.

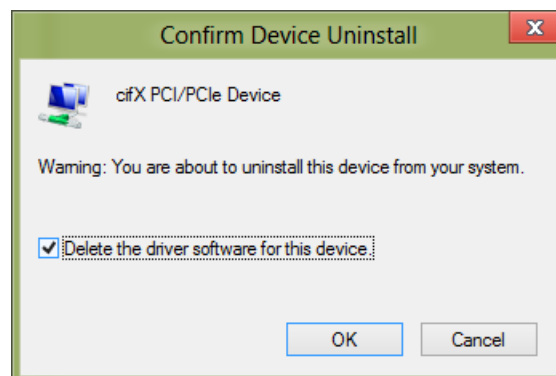


Figure 50: Confirm Device Uninstall (Example for PC card cifX)

- Check **Delete the driver software for this device**.
- Click **OK**.
- The cifX Device Driver for this device gets uninstalled.

4. Repeat step 1 to 3 for other devices if necessary.

Then uninstall the entry for the cifX Device Driver from the list **Uninstall or change programs**.

5. Open Windows® 8 Start Screen.
 - Press the keys **[Ctrl]** and **[ESC]**.
6. Uninstall program.
 - Press the keys **[Win]** and **[F]**.
 - Select **Settings**.

- Enter **Uninstall a program** into the search field.

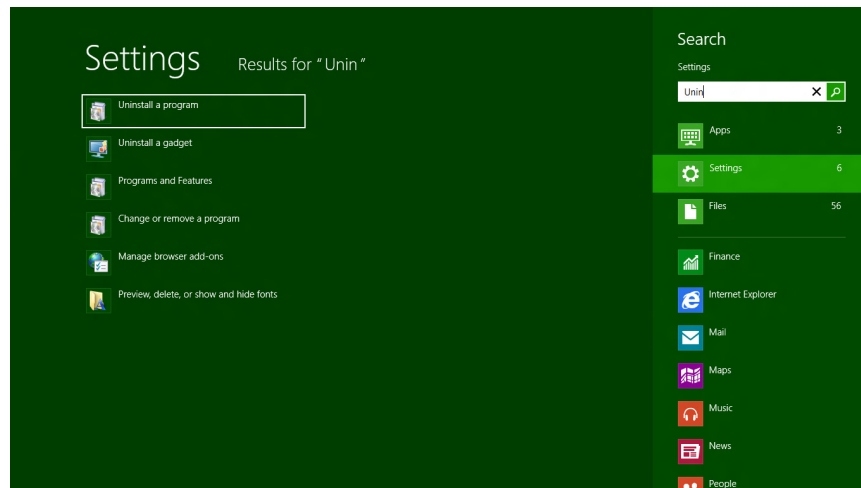


Figure 51: Uninstall a program

- Click on **Uninstall a program**.
- **Uninstall or change a program** is displayed.

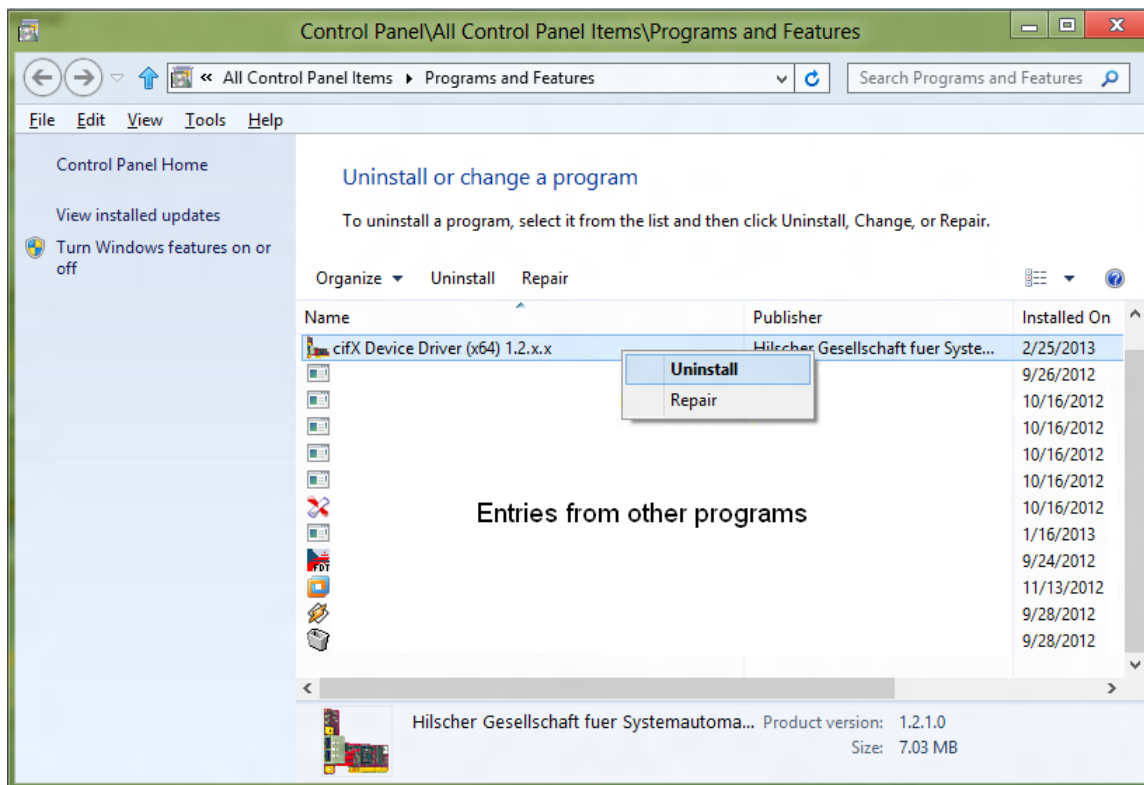


Figure 52: Uninstall or change a program > Uninstall

- Uninstalling cifX Device Driver.
 - Rightclick on the cifX Device Driver entry.
 - Click on **Uninstall**.
 - The **Programs and Features** is displayed.

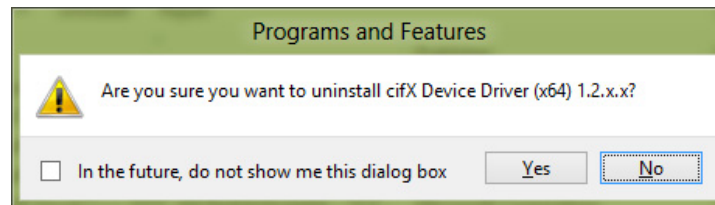


Figure 53: Programs and Features

- Click on **Yes**.
- The cifX Device Driver is uninstalled from your PC.

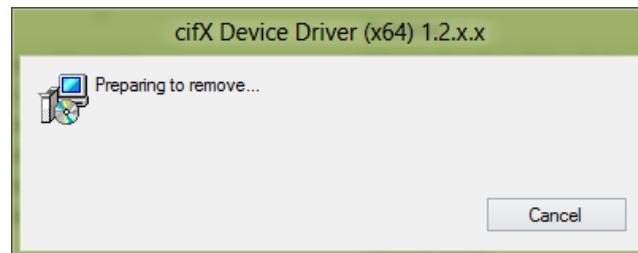


Figure 54: Windows Installer

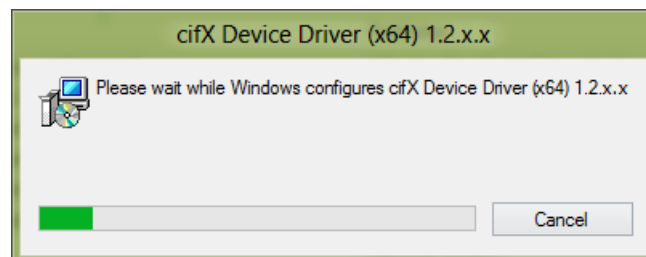


Figure 55: Uninstalling cifX Device Driver

- The cifX Device Driver pane is closed and the uninstall procedure is completed.

4 USB Driver

4.1 System Requirements

The system requirements listed below are valid for the **USB Driver**:

- PC with 586-, Pentium® processor or higher
- Windows® XP, Windows® Vista (32-Bit), Windows® 7 (32-Bit), Windows® 7 (64-Bit), Windows® 8 (32-Bit) oder Windows® 8 (64-Bit)
- Administrator privilege is required during installation
- DVD ROM drive

4.2 Installation Overview

The installation of the USB driver as driver for the diagnosis interface is only required for the PC cards cifX which are equipped with an USB interface

- Compact PCI (CIFX80),
- PCI-104 (CIFX 104C),
- PC/104 (CIFX 104)

and for the PC cards cifX equipped with the assembly interface diagnostic (AIFX-DIAG)

- PCI-104 (CIFX 104C\F) and
- PC/104 (CIFX 104\F).

Install the USB Driver if the USB interface shall be used for diagnosis purposes. The USB driver is required, if SYCON.net or netX Configuration Tool shall be used for diagnosis via the USB interface. For PC cards cifX PC/104 the USB interface can also be used to download the firmware or the configuration.

Note:

- Always use the installation program, if possible, to install the USB driver, as described on the following pages.
- If older USB driver versions are installed on your system, uninstall them first before you install the new version.
- Install the USB driver *before* you connect your PC card cifX to your PC via USB cable ("software first" principle).



Important: As you can use the USB diagnostic interface of the PC card cifX, you must have completed the firmware download to the PC card cifX. When you connect the PC card cifX to the PC via USB cable, Windows can identify the appropriate USB driver only if a firmware is running on the PC card cifX. Details on how to download the firmware you will find in the online help of your configuration system.

- After installing the USB driver and connecting your PC card cifX via USB cable, check in the Windows Device Manager if the driver has been correctly installed and if Windows recognizes the connected PC card cifX.

4.3 Installation under Windows XP

Requirement

The following steps describe the installation of the USB driver under Windows® XP if no USB driver for the PC card cifX is installed.

Installation Steps

1. Start the USB driver installation program.

➤ Insert the Communication Solutions DVD into your local DVD-ROM drive.

➤ The start screen of the **Communication Solutions DVD** is displayed:

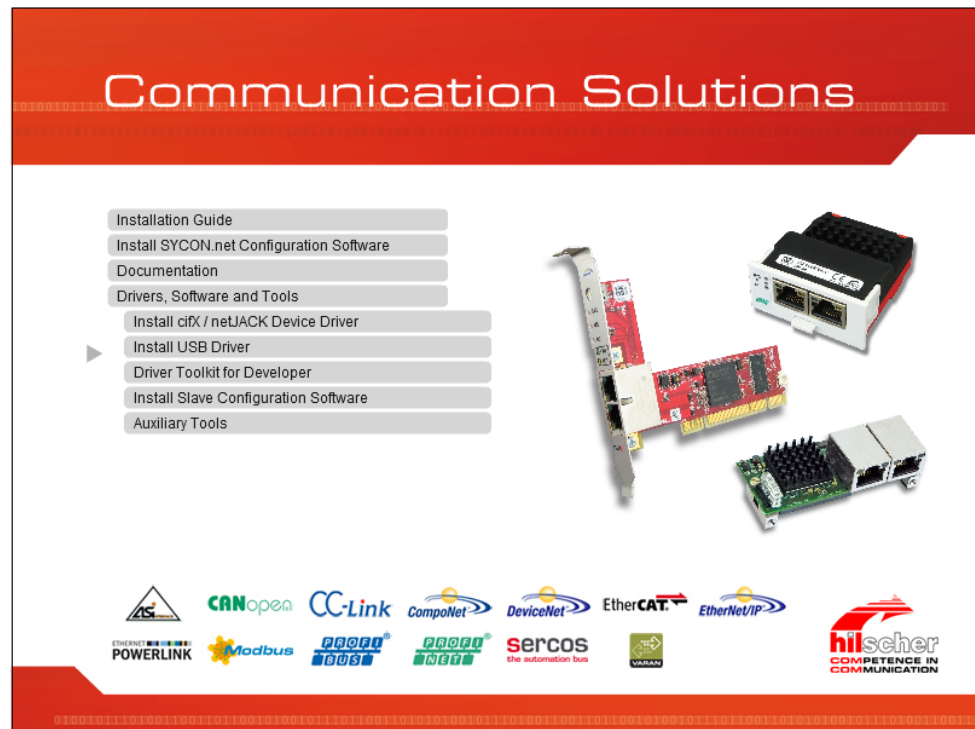


Figure 56: Start Screen Communication Solutions – Install USB Driver

➤ In the menu, select **Drivers, Software and Tools > Install USB Driver**.



Note: Alternatively, you can also start the USB driver installation program (i. e. the **Device Driver Installation Wizard**) by double-clicking the *setup.exe* file in the *Driver and Toolkit\USB Driver* folder on the Communication Solutions DVD.

- The **Device Driver Installation Wizard** (i. e. the USB driver installation program) opens:



Figure 57: Device Driver Installation Wizard – Start Screen

2. Start the installation.

- Click **Next**.

- The installation of the USB drivers is started.

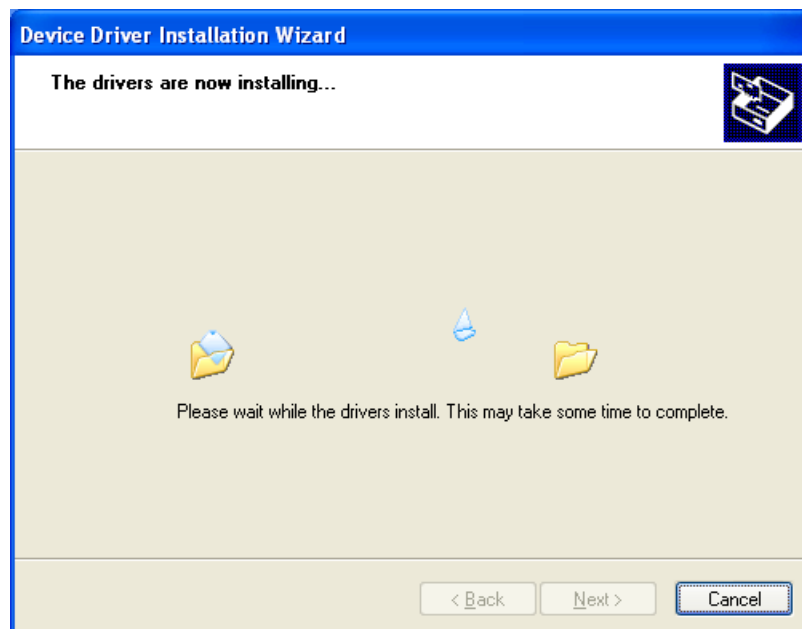


Figure 58: Device Driver Installation Wizard – Driver Are Installing

- After installation, the **Completing the Device Installation Wizard** window appears:



Figure 59: Device Driver Installation Wizard – Installation Completed

- Click **Finish**.



Note: Under Windows XP, the installation process is not yet finished after having executed the **Device Driver Installation Wizard**.

The installation process has to be completed in the **Found New Hardware Wizard**, which automatically opens when you connect the PC card cifX to a PC via USB cable for the first time.

- Install all further software components required.
- Install the PC card cifX as specified in the user manual and mount the USB cable to the PC card cifX and to an USB port on the PC.



Note: When you connect the PC card cifX to the PC via USB cable, Windows can identify the appropriate USB driver only if a firmware is running on the PC card cifX.

3. Complete the installation in the **Found New Hardware Wizard**.

- When you have installed the PC card cifX, mounted the USB cable and restarted the PC, the **Found New Hardware Wizard** starts:



Figure 60: Found New Hardware Wizard – USB Driver (1)

- Answer the question **Can Windows connect to Windows Update...?**, by selecting the **No, not this time** option.
- Click **Next**.
- The window with the installation options appears:

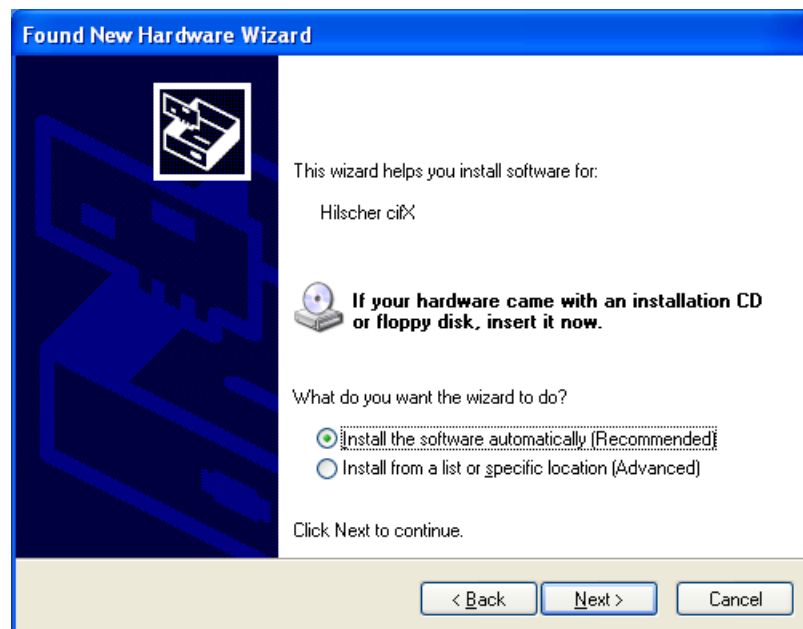


Figure 61: Found New Hardware Wizard – USB Driver (2)

- If you have already executed the installation program for the USB driver (as recommended), you can ignore the wizard's request to insert a CD or floppy disk. Answer the **What do you want the wizard to do?** question by selecting the **Install the software automatically** option.
- Click **Next**.
- Windows copies the driver files to the Windows directories.

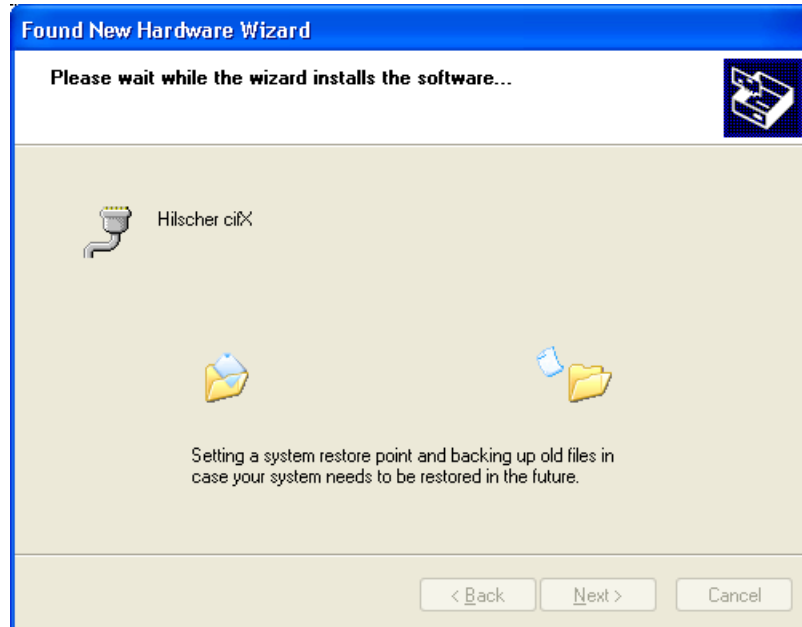


Figure 62: Found New Hardware Wizard – USB Driver (3)

- The **Completing the Found New Hardware Wizard** window appears:



Figure 63: Found New Hardware Wizard – USB Driver (4)

- Click **Finish**.
- The installation of the USB driver is now complete.

4. Check in the Device Manager if your PC card cifX is installed correctly.
 - Open the Windows Device Manager (Desktop symbol **My Computer**., right click **Properties**, window **System Properties**, tab **Hardware**, button **Device Manager**).
 - Check if the view of your Device Manager corresponds to the marked area in the view hereafter.

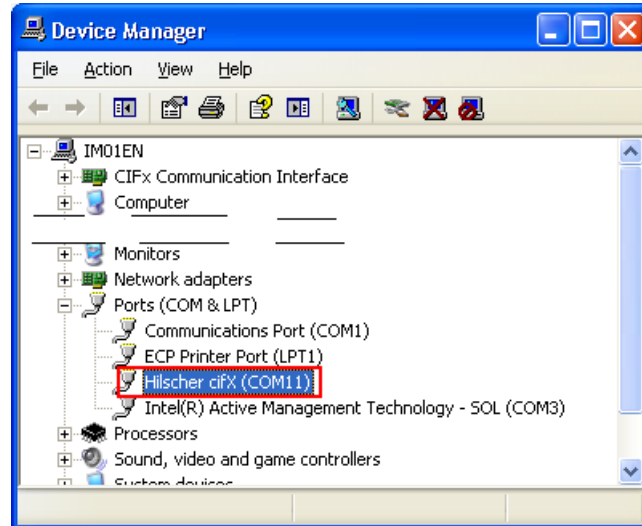


Figure 64: Display of USB Connection in Device Manager

4.4 Installation under Windows 7

Requirement

The following steps describe the installation of the USB driver under Windows® 7 if no USB driver for the PC card cifX is installed.

Installation Steps

1. Start the USB driver installation program.

➤ Insert the Communication Solutions DVD into your local DVD-ROM drive.

➤ The start screen of the **Communication Solutions DVD** is displayed:



Figure 65: Start Screen Communication Solutions – Install USB Driver

➤ In the menu, select **Drivers, Software and Tools > Install USB Driver**.



Note: Alternatively, you can also start the USB driver installation program (i. e. the **Device Driver Installation Wizard**) by double-clicking the *setup.exe* file in the *Driver and Toolkit\USB Driver* folder on the Communication Solutions DVD.

- The **Device Driver Installation Wizard** (i. e. the USB driver installation program) opens:



Figure 66: Device Driver Installation Wizard – Start Screen

2. Start the installation.

- Click **Next**.

- The installation of the USB drivers is started.

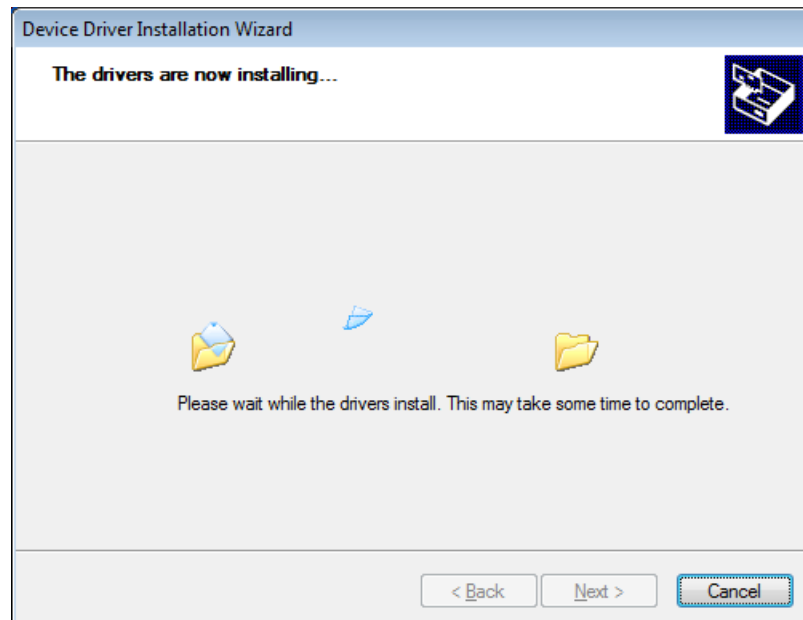


Figure 67: Device Driver Installation Wizard – Driver Are Installing

- After installation, the **Completing the Device Installation Wizard** window appears:



Figure 68: Device Driver Installation Wizard – Installation Completed

- Click **Finish**.
- The installation of the USB driver is completed.



Note: By completing the **Device Driver Installation Wizard**, the installation process under Windows 7 is practically finished. When you connect the PC card cifX to the PC via USB cable for the first time, the **Installing device driver software** message appears in the Windows task bar. Windows then copies the driver files to the appropriate Windows directories. This is an automated process, you do not need to take any action in this. Finally, the **Device driver software installed successfully** message appears in the task bar.

- Install all further software components required.
- Install the PC card cifX as specified in the user manual and mount the USB cable to the PC card cifX and to an USB port on the PC.



Note: When you connect the PC card cifX to the PC via USB cable, Windows can identify the appropriate USB driver only if a firmware is running on the PC card cifX.

4. Check in the Device Manager if your PC card cifX is installed correctly.
 - Open the Windows Device Manager (select **Start**, enter “Device Manager” to the search field, click on **Device Manager**).
 - Check if the view of your Device Manager corresponds to the marked area in the view hereafter.

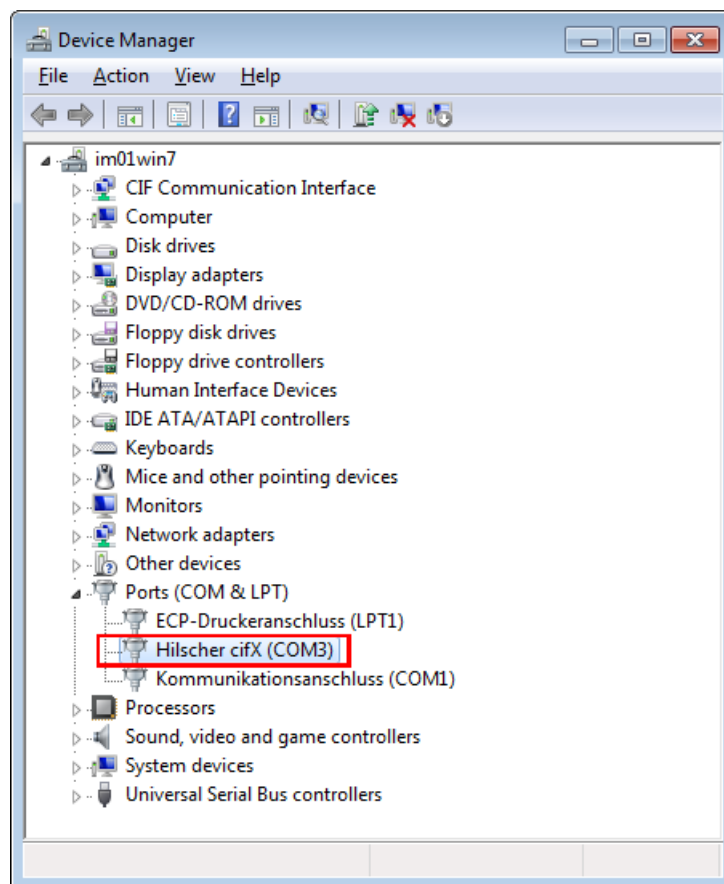


Figure 69: Display of USB Connection in Device Manager

4.5 Installation under Windows 8

Requirement

The following steps describe the installation of the USB driver under Windows® 8 if no USB driver for the PC card cifX is installed.

Installation Steps

1. Start the USB driver installation program.

➤ Insert the Communication Solutions DVD into your local DVD-ROM drive.

➤ The start screen of the **Communication Solutions DVD** is displayed:



Figure 70: Start Screen Communication Solutions – Install USB Driver

➤ In the menu, select **Drivers, Software and Tools > Install USB Driver**.



Note: Alternatively, you can also start the USB driver installation program (i. e. the **Device Driver Installation Wizard**) by double-clicking the *setup.exe* file in the *Driver and Toolkit\USB Driver* folder on the Communication Solutions DVD.

- The **Device Driver Installation Wizard** (i. e. the USB driver installation program) opens:



Figure 71: Device Driver Installation Wizard – Start Screen

2. Start the installation.

- Click **Next**.
- The installation of the USB drivers is started.

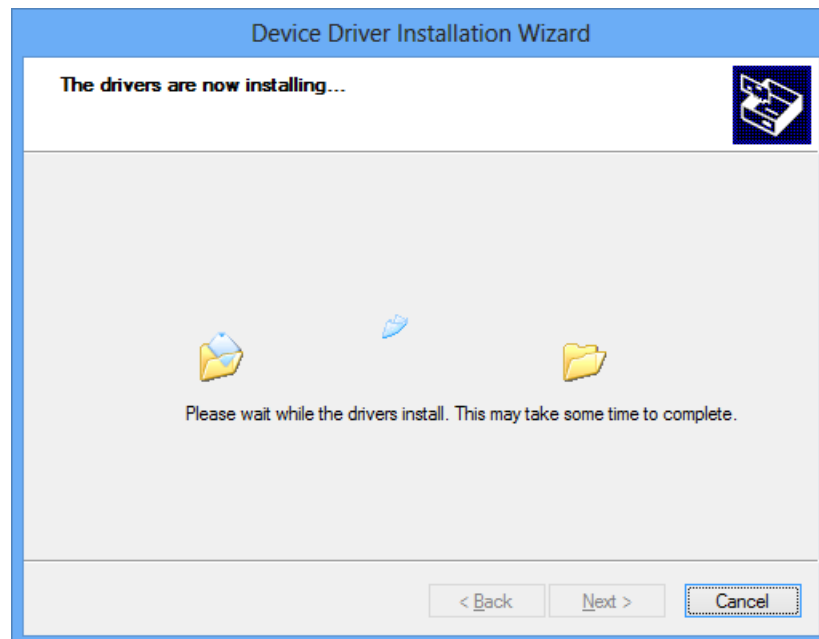


Figure 72: Device Driver Installation Wizard – Driver Are Installing

After installation, the **Completing the Device Installation Wizard** window appears:



Figure 73: Device Driver Installation Wizard – Installation Completed

➤ Click **Finish**.

➤ The installation of the USB driver is completed.



Note: By completing the **Device Driver Installation Wizard**, the installation process under Windows 8 is practically finished. When you connect the PC card cifX to your PC via USB cable for the first time, the following symbol appears in the task bar (visible only if you are in the “desktop mode” of Windows 8):



Windows then copies the driver files to the appropriate Windows directories. This is an automated process, you do not need to take any action in this.

- Install all further software components required.
- Install the PC card cifX as specified in the user manual and mount the USB cable to the PC card cifX and to an USB port on the PC.



Note: When you connect the PC card cifX to the PC via USB cable, Windows can identify the appropriate USB driver only if a firmware is running on the PC card cifX.

4. Check in the Device Manager if your PC card cifX is installed correctly.

- Open the Windows Device Manager (open Windows® 8 start screen, press the **[Win]** and **[F]** keys, select **Settings**, enter “Device Manager” to the search field, click on **Device Manager**).
- Check if the view of your Device Manager corresponds to the marked area in the view hereafter.

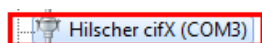


Figure 74: Display of USB Connection in Device Manager

4.6 Uninstalling under Windows XP

If you want to uninstall the USB drivers under Windows XP, proceed as follows:

1. Open **Add or Remove Programs** window.

- In the **Start** menu of Windows XP, select **Control Panel**.
- In the **Control Panel**, double-click **Add or Remove Programs**.
- The **Add or Remove Programs** window opens:

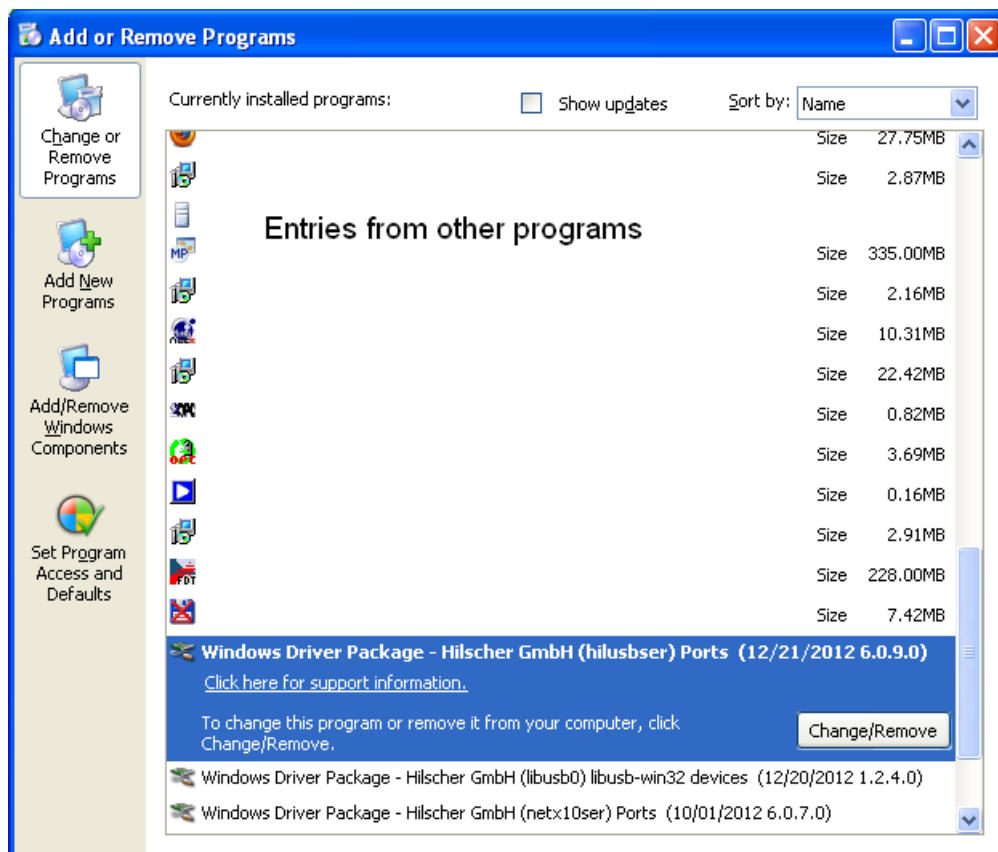


Figure 75: Add or Remove Programs

2. Uninstall driver packages.

- Select **Windows Driver Package – Hilscher GmbH (hilusbser) Ports** entry.
- Click **Change/Remove**.
- A security question appears:

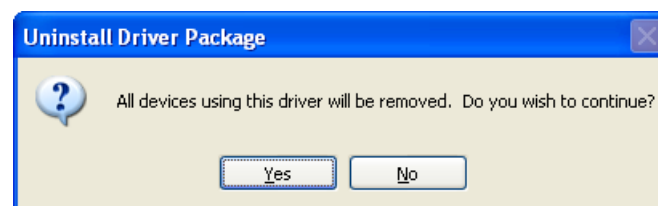


Figure 76: Acknowledge Uninstall

- Click **Yes**.
- The USB driver package is removed from your PC.

- Repeat this procedure for the remaining driver packages **Windows Driver Package – Hilscher GmbH (libusb0) [...] devices** and **Windows Driver Package – Hilscher GmbH (netx10ser) Ports**.

4.7 Uninstalling under Windows 7

If you want to uninstall the USB drivers under Windows 7, proceed as follows:

1. Open **Uninstall or change a program** window.
 - Select **Start**.
 - Enter “Uninstall a program” into the search field.
 - Click on **Uninstall or change a program**.
 - The **Uninstall or change a program** window opens:

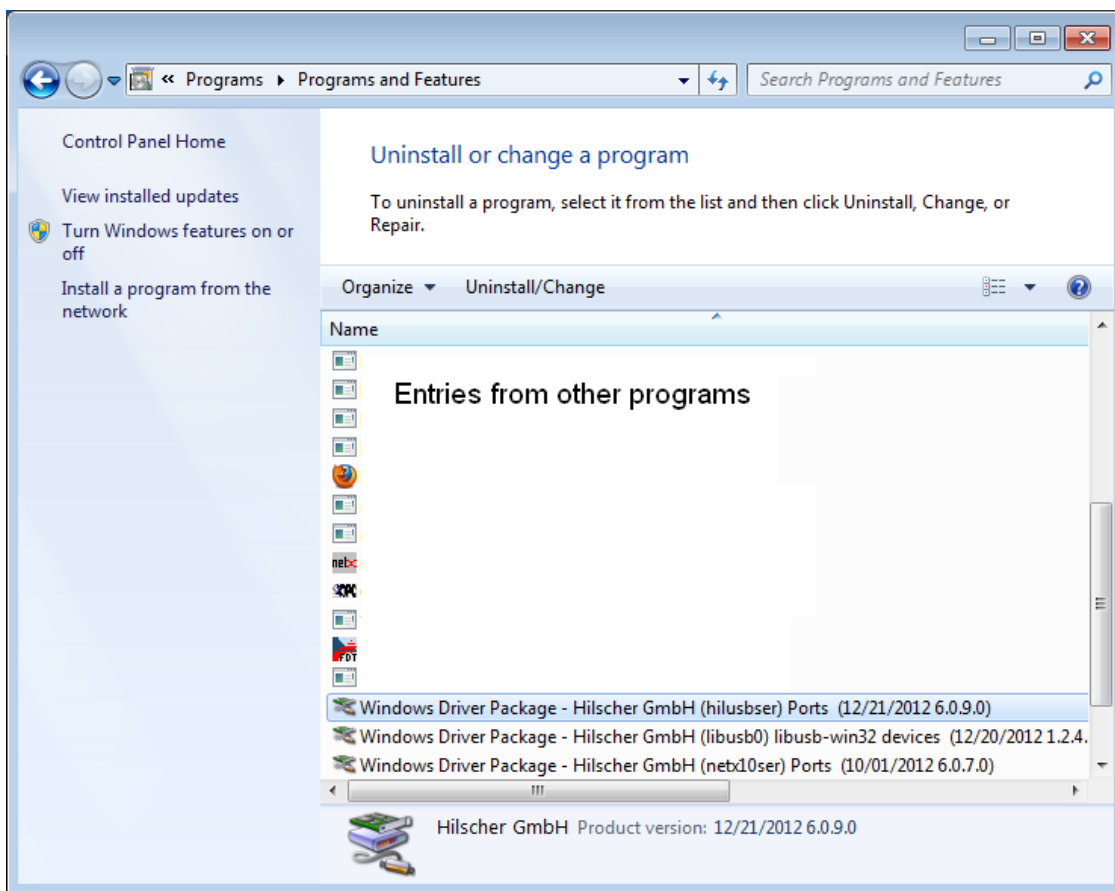


Figure 77: Uninstall or Change a Program

2. Uninstall driver packages.
 - Select **Windows Driver Package – Hilscher GmbH (hilusbser) Ports** entry.
 - Click **Uninstall/Change** button located above the list.
 - A security question appears:

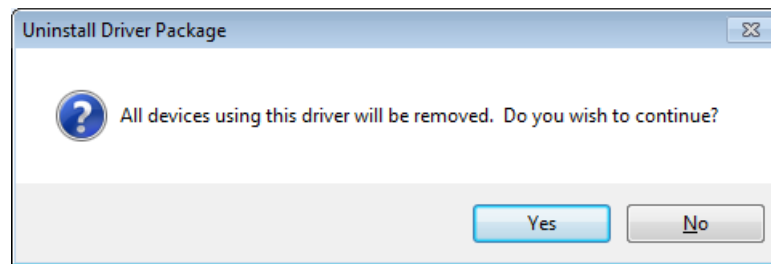


Figure 78: Acknowledge Uninstall

- Click **Yes**.
- The USB driver package is removed from your PC.
- Repeat this procedure for the remaining driver packages **Windows Driver Package – Hilscher GmbH (libusb0) [...]** devices and **Windows Driver Package – Hilscher GmbH (netx10ser) Ports**.

4.8 Uninstalling under Windows 8

If you want to uninstall the USB drivers under Windows 8, proceed as follows:

1. Open **Programs and Features** window.
 - Open the Windows® 8 start screen.
 - Press the **[Win]** and **[F]** keys
 - Select **Settings**.
 - Enter “Uninstall a program” into the search field.
 - Click on **Programs and Features**.
- The **Programs and Features** window opens:

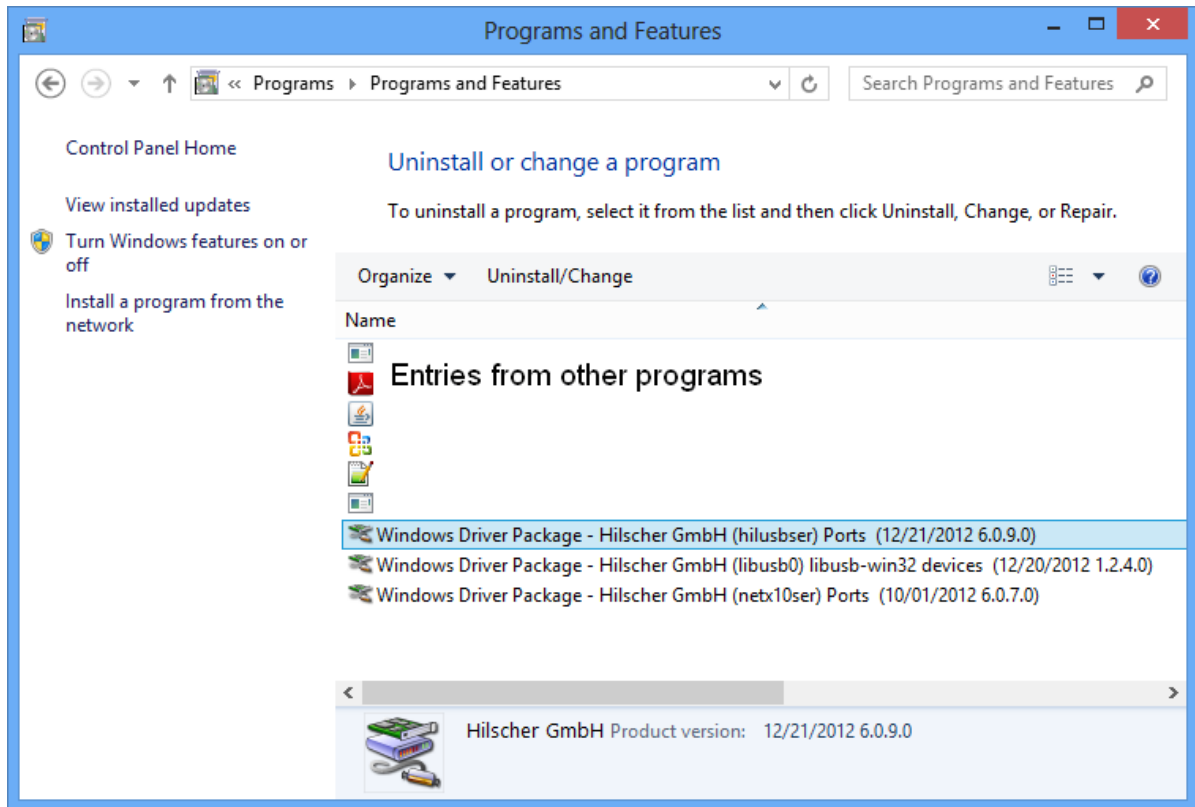


Figure 79: Uninstall or Change a Program

2. Uninstall driver packages.

- Select **Windows Driver Package – Hilscher GmbH (hilusbser) Ports** entry.
- Click **Uninstall/Change** button located above the list.
- A security question appears:

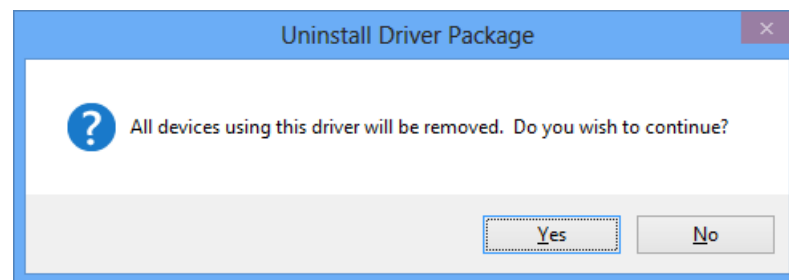


Figure 80: Acknowledge Uninstall

- Click **Yes**.
- The USB driver package is removed from your PC.
- Repeat this procedure for the remaining driver packages **Windows Driver Package – Hilscher GmbH (libusb0) [...] devices** and **Windows Driver Package – Hilscher GmbH (netx10ser) Ports**.

5 SYCON.net

5.1 System Requirements

The system requirements listed below are valid for the configuration software **SYCON.net for netX**:

- PC with 1 GHz processor or higher
- Windows® XP SP3, Windows® Vista (32 bit) SP2, Windows® 7 (32 bit) SP1, Windows® 7 (64 bit), Windows® 8 (32 bit) or Windows® 8 (64 bit)
- Administrator privilege required for installation
- Internet Explorer 5.5 or higher
- Free disk space: min. 400 MByte
- DVD ROM drive
- RAM: min. 512 MByte, recommended 1024 MByte
- Graphic resolution: min. 1024 x 768 pixel
- Keyboard and Mouse
- USB (optional)



Note: If the project file is saved and opened again or if it is used on another PC, the system requirements must match. Particularly the DTM must be installed on the used PC.

Restriction

Touch screen is not supported.

5.2 Installation under Windows XP

Requirement



Note: You need administrator privileges under Windows® XP to install the configuration software SYCON.net on your PCdevice.



Note: If an older version of SYCON.net is already installed on your system, uninstall it first before you install the new version.

Preparation

To start the installation for the configuration software SYCON.net:

- Close all application programs on the system and insert the Communication Solutions DVD into the local DVD-ROM drive.
- The startup screen **Communication Solutions** is displayed.
- Click on **Install SYCON.net Configuration Software**.



Figure 81: Start the Installation for the SYCON.net Configuration Software

Or:

- Open on the Communication Solutions DVD the directory *[drive letter]:\Software\SYCONnet* and start the *SYCONnet netX setup.exe* file by a double-click.
- The SYCON.net installation setup is started.

Installation Steps

To install the configuration software SYCON.net:

1. Choose language for the setup



Figure 82: SYCON.net Setup Language

- Select the language for the setup.
 - Click on **OK**.
2. Continue installation
- Click on **Next >** to continue the installation.

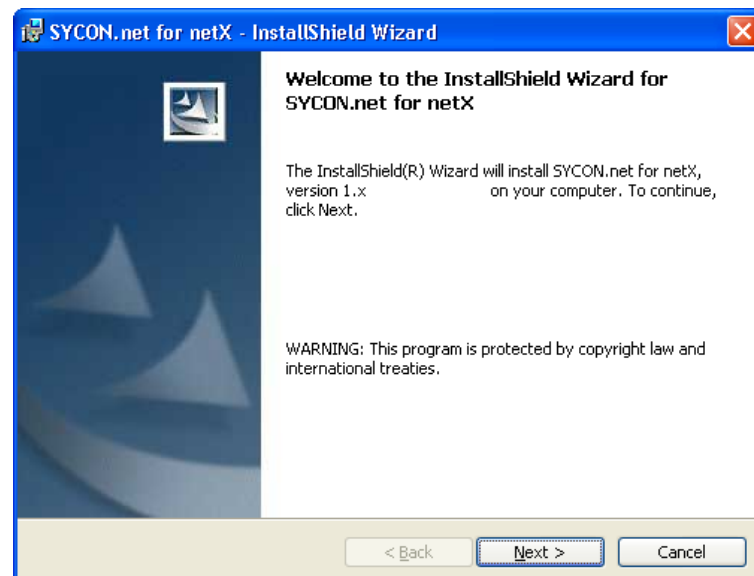


Figure 83: SYCON.net Installation Information

3. Read the notes about major changes in SYCON.net

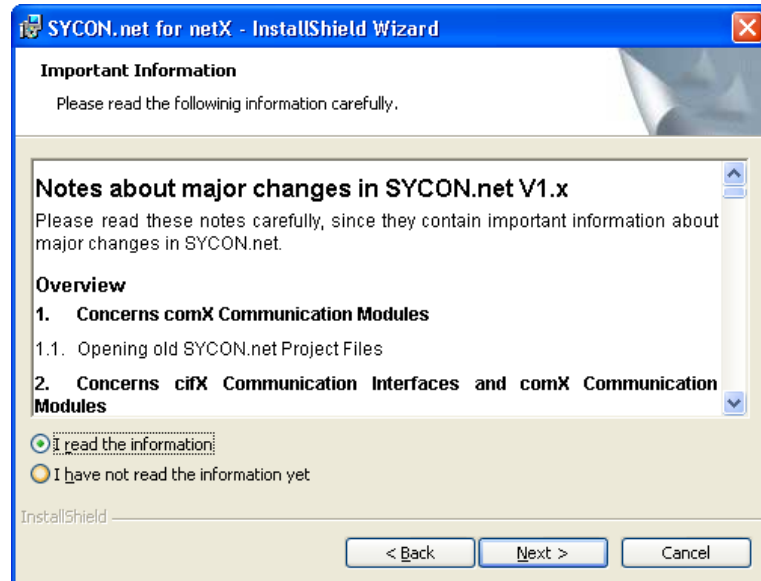


Figure 84: Notes about major Changes in SYCON.net

- Read the note about major changes in SYCON.net carefully.
- Select **I read the information**, when you have read them.
- Click on **Next >** to continue the installation.

4. Accept license agreement

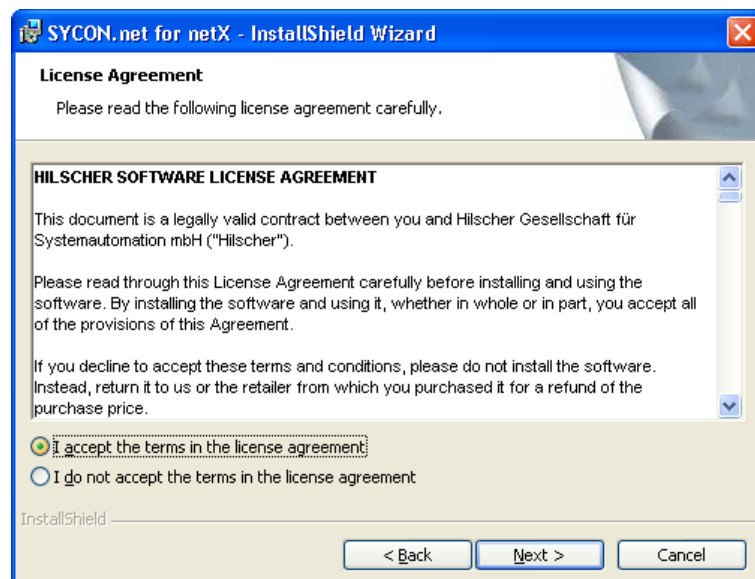
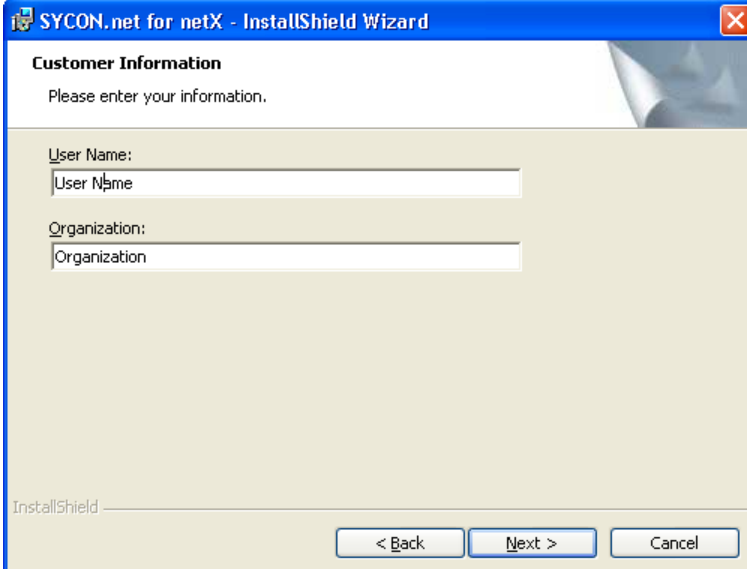


Figure 85: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, when you agree to it.
- Click on **Next >** to continue the installation.

5. Enter user information

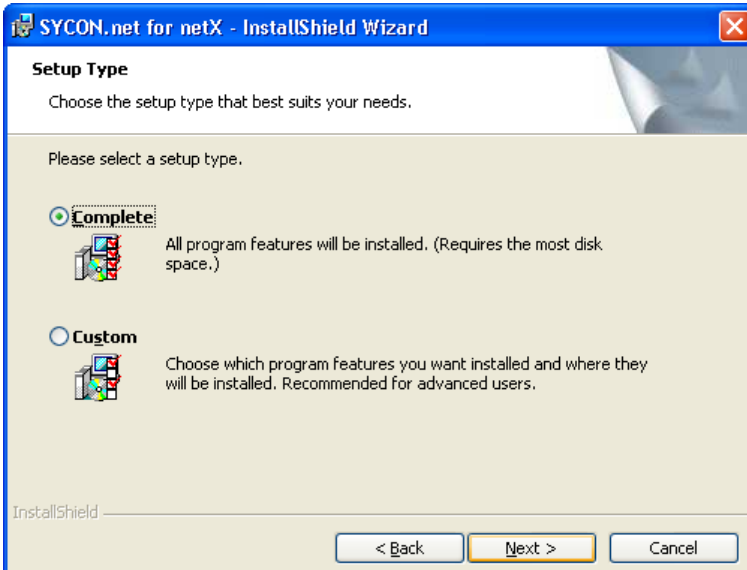


The screenshot shows the 'Customer Information' window of the SYCON.net for netX - InstallShield Wizard. The window has a blue title bar with the text 'SYCON.net for netX - InstallShield Wizard' and a close button. Below the title bar, the text 'Customer Information' is displayed, followed by the instruction 'Please enter your information.' There are two text input fields: 'User Name:' with the placeholder text 'User Name' and 'Organization:' with the placeholder text 'Organization'. At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a yellow border. The 'InstallShield' logo is visible in the bottom left corner.

Figure 86: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click on **Next >** to continue the installation.

6. Select setup type



The screenshot shows the 'Setup Type' window of the SYCON.net for netX - InstallShield Wizard. The window has a blue title bar with the text 'SYCON.net for netX - InstallShield Wizard' and a close button. Below the title bar, the text 'Setup Type' is displayed, followed by the instruction 'Choose the setup type that best suits your needs.' There are two radio button options: 'Complete' and 'Custom'. The 'Complete' option is selected, indicated by a filled radio button. Below each option is a small icon of a computer and a description. For 'Complete', the description is 'All program features will be installed. (Requires the most disk space.)'. For 'Custom', the description is 'Choose which program features you want installed and where they will be installed. Recommended for advanced users.' At the bottom of the window, there are three buttons: '< Back', 'Next >', and 'Cancel'. The 'Next >' button is highlighted with a yellow border. The 'InstallShield' logo is visible in the bottom left corner.

Figure 87: SYCON.net Setup Type

- Select **Complete** when you want to install the complete software.
- Click on **Next >** to continue the installation.

7. Installation

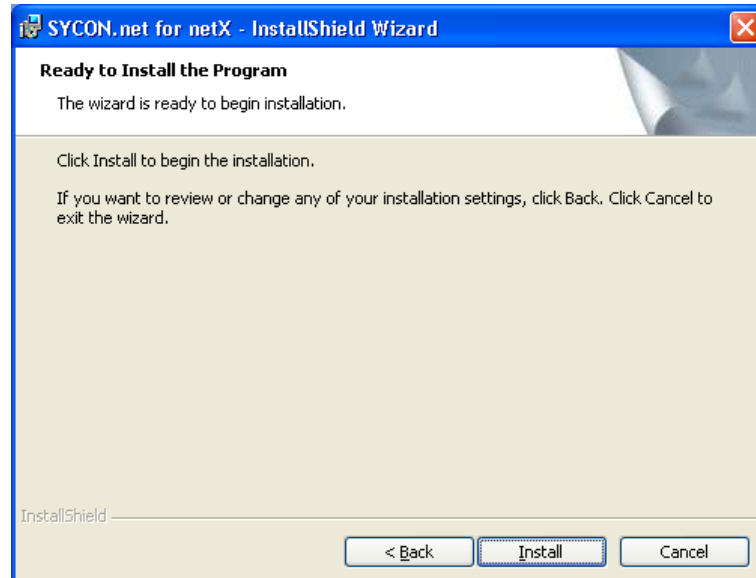


Figure 88: SYCON.net Start Installation

- Click on **Install** to do the installation now.
- The components are installed. This will take several minutes.

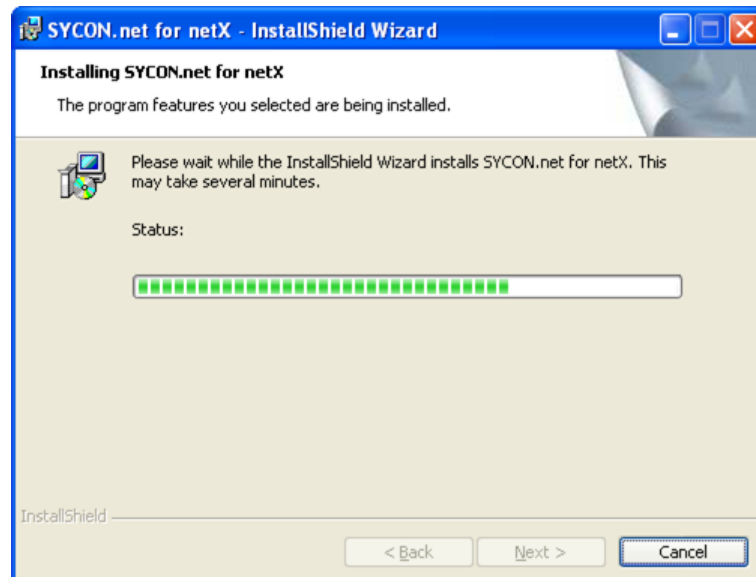


Figure 89: SYCON.net Installation Status

8. Finish installation

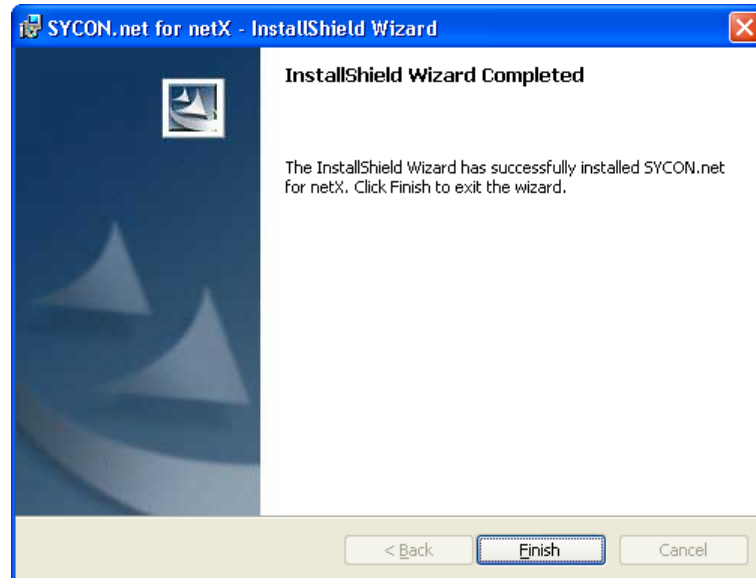


Figure 90: SYCON.net Installation Finish

- Click on **Finish**
- SYCON.net is installed and can be started via **Start > System Configurator SYCON.net > SYCON.net**.

5.3 Installation under Windows 7

Requirement



Note: You need administrator privileges under Windows® 7 to install the configuration software **SYCON.net** on your PCdevice.



Note: If an older version of SYCON.net is already installed on your system, uninstall it first before you install the new version.

Preparation

To start the installation for the configuration software SYCON.net:

- Close all application programs on the system and insert the Communication Solutions DVD into the local DVD-ROM drive.
- The startup screen **Communication Solutions** is displayed.
- Click on **Install SYCON.net Configuration Software**.



Figure 91: Start the Installation for the SYCON.net Configuration Software

Or:

- Open on the Communication Solutions DVD the directory *[drive letter]:\Software\SYCONnet* and start the *SYCONnet netX setup.exe* file by a double-click.
- The SYCON.net installation setup is started.
- Answer the Windows® security question with **Yes**.

Or



Note: Reduce the number of Windows® safety questions by running the setup via **Run as Administrator**. You also need administrator rights to uninstall the software.

- Right click on the *SYCONnet netX setup.exe* file and then click **Run as Administrator**.

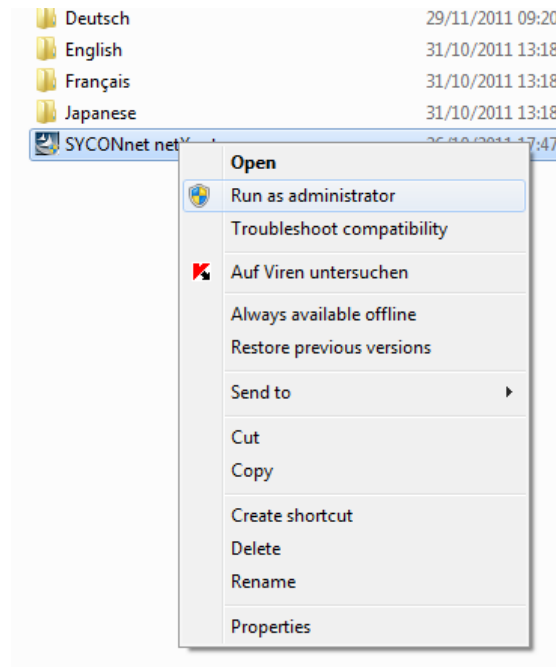


Figure 92: *SYCONnet netX setup.exe* - Run as Administrator

- Answer the Windows® security question with **Yes**.

Installation Steps

To install the configuration software SYCON.net:

1. Choose Language for the setup

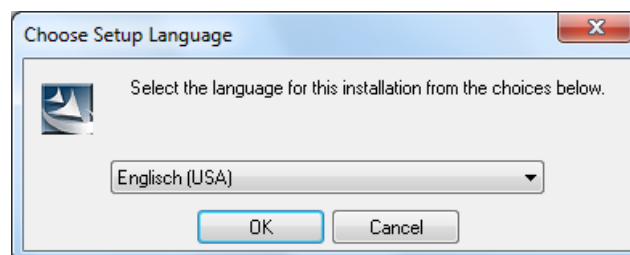


Figure 93: *SYCON.net Setup Language*

- Select the language for the setup.
- Click on **OK**.

➤ **Preparing to install** screen opens.

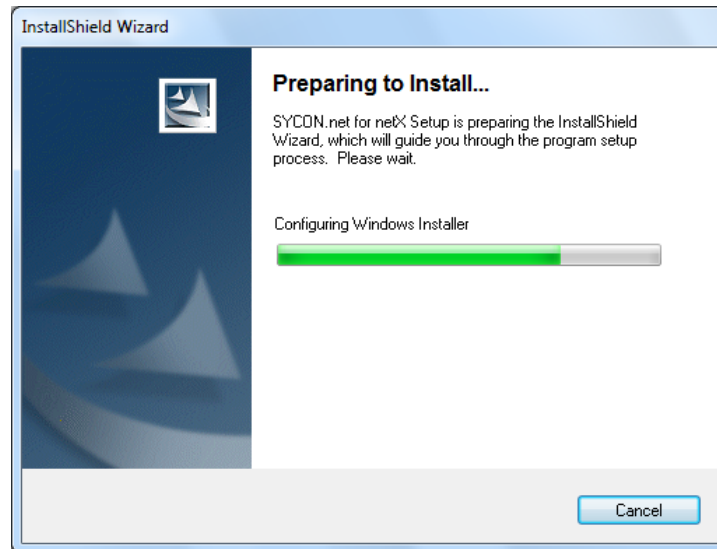


Figure 94: Preparing to Install SYCON.net

2. Continue installation

➤ Click on **Next >** to continue the installation.

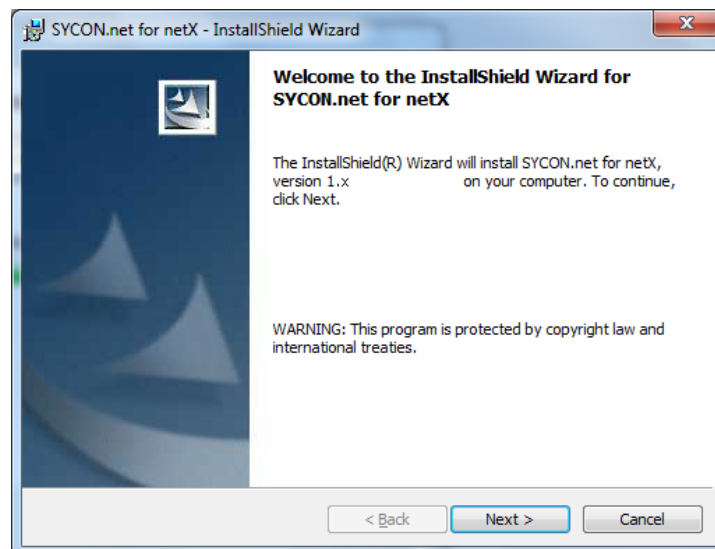


Figure 95: SYCON.net Installation Information

3. Read the notes about major changes in SYCON.net

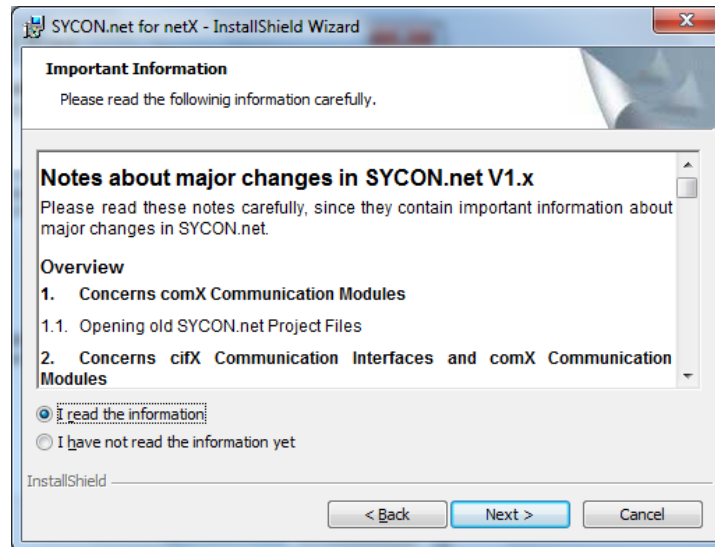


Figure 96: Notes About Major Changes in SYCON.net

- Read the note about major changes in SYCON.net carefully.
- Select **I read the information**, when you have read them.
- Click on **Next >** to continue the installation.

4. Accept license agreement

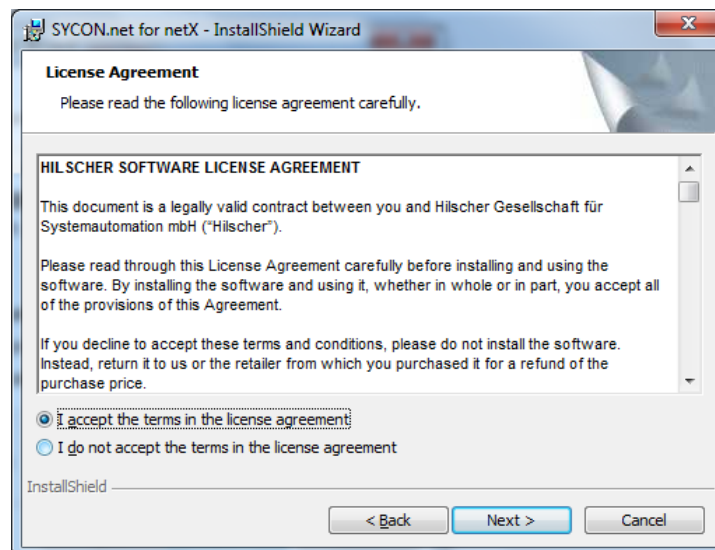


Figure 97: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, when you agree to it.
- Click on **Next >** to continue the installation.

5. Enter user information

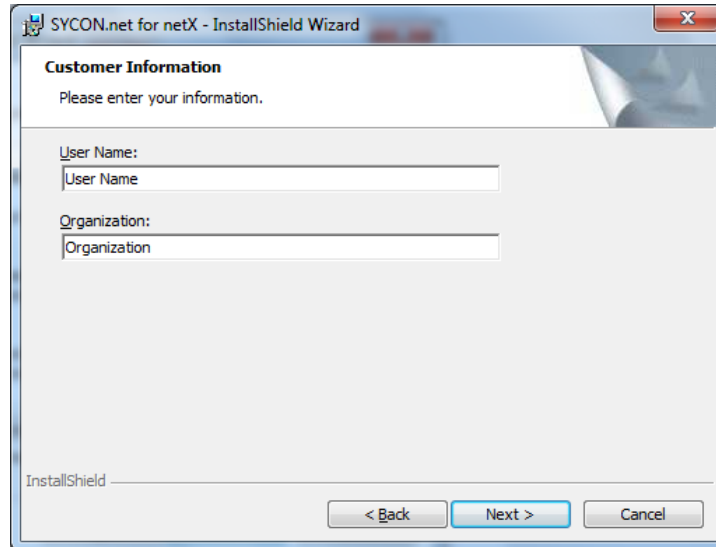
The image shows a Windows-style dialog box titled "SYCON.net for netX - InstallShield Wizard". The main heading is "Customer Information" with the instruction "Please enter your information." Below this, there are two text input fields: "User Name:" and "Organization:". At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted in blue.

Figure 98: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click on **Next >** to continue the installation.

6. Select setup type

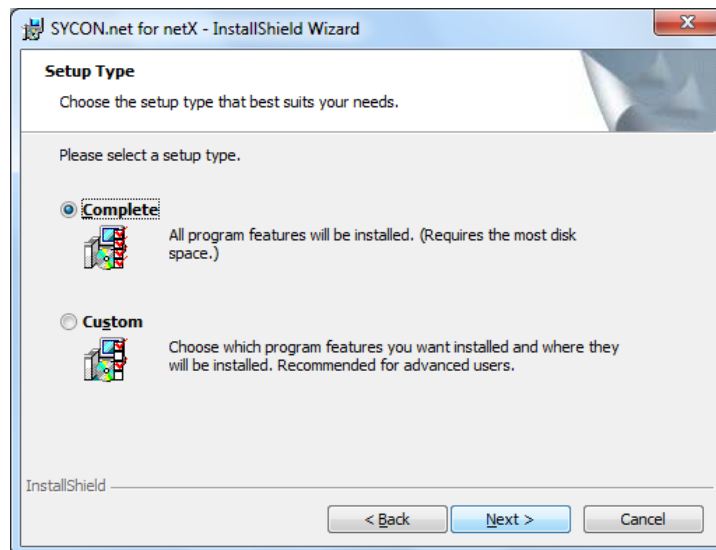
The image shows a Windows-style dialog box titled "SYCON.net for netX - InstallShield Wizard". The main heading is "Setup Type" with the instruction "Choose the setup type that best suits your needs." Below this, there is a text input field with the label "Please select a setup type." There are two radio button options: "Complete" (selected) and "Custom". Each option has a small icon of a computer and a description. The "Complete" option says "All program features will be installed. (Requires the most disk space.)". The "Custom" option says "Choose which program features you want installed and where they will be installed. Recommended for advanced users." At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted in blue.

Figure 99: SYCON.net Setup Type

- Select **Complete** when you want to install the complete software.
- Click on **Next >** to continue the installation.

7. Installation

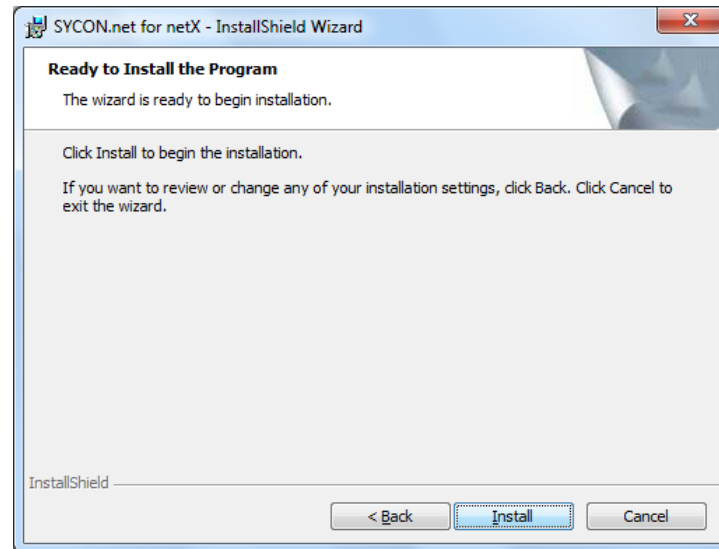


Figure 100: SYCON.net Start Installation

- Click on **Install** to do the installation now.
- The components are installed. This will take several minutes.

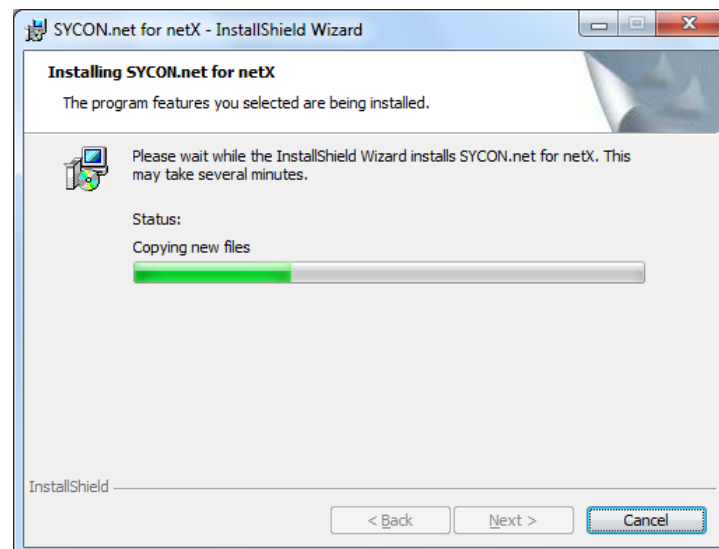


Figure 101: SYCON.net Installation Status

8. Finish installation

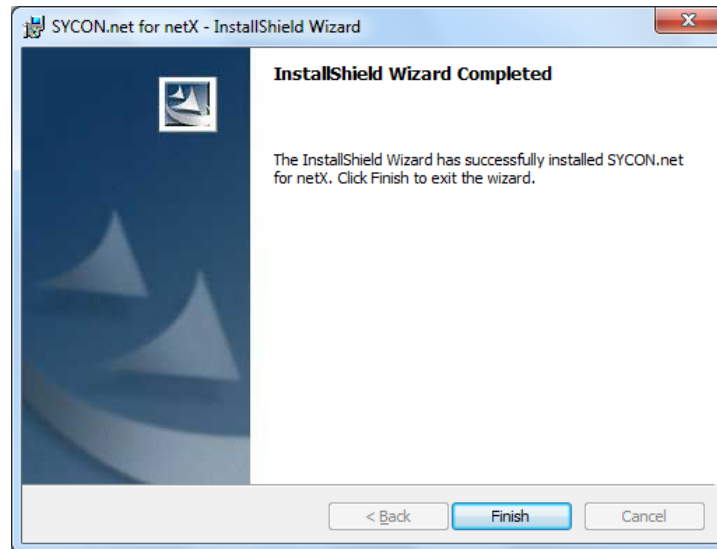


Figure 102: SYCON.net Installation Finish

- Click on **Finish**
- SYCON.net is installed and can be started via **Start > All Programs > SYCON.net System Configurator > SYCON.net**.

5.4 Installation under Windows 8

Requirement



Note: You need administrator privileges under Windows® 8 to install the configuration software SYCON.net on your PCdevice.



Note: If an older version of SYCON.net is already installed on your system, uninstall it first before you install the new version.

Preparation

To start the installation for the configuration software SYCON.net:

- Close all application programs on the system and insert the Communication Solutions DVD into the local DVD-ROM drive.
- The startup screen **Communication Solutions** is displayed.
- Click on **Install SYCON.net Configuration Software**.



Figure 103: Start the Installation for the SYCON.net Configuration Software

Or:

- Open on the Communication Solutions DVD the directory *[drive letter]:\Software\SYCONnet* and start the *SYCONnet netX setup.exe* file by a double-click.
- The SYCON.net installation setup is started.
- Answer the Windows® security question with **Yes**.

Or



Note: Reduce the number of Windows® safety questions by running the setup via **Run as Administrator**. You also need administrator rights to uninstall the software.

- Right click on the *SYCONnet netX setup.exe* file and then click **Run as Administrator**.

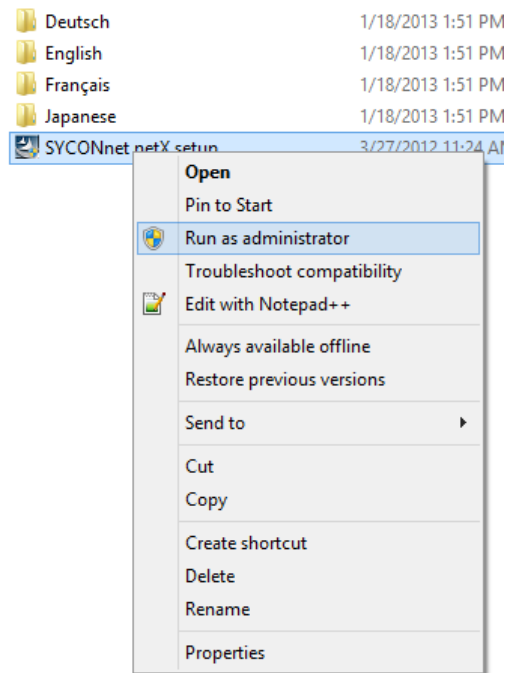


Figure 104: SYCONnet netX setup.exe - Run as Administrator

- Answer the Windows® security question with **Yes**.

Installation Steps

To install the configuration software SYCON.net:

1. Choose Language for the setup

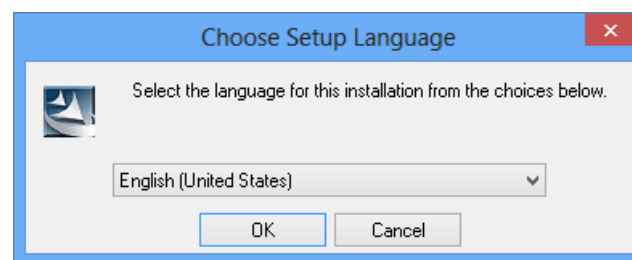


Figure 105: SYCON.net Setup Language

- Select the language for the setup.
- Click on **OK**.

➤ **Preparing to install** screen opens.

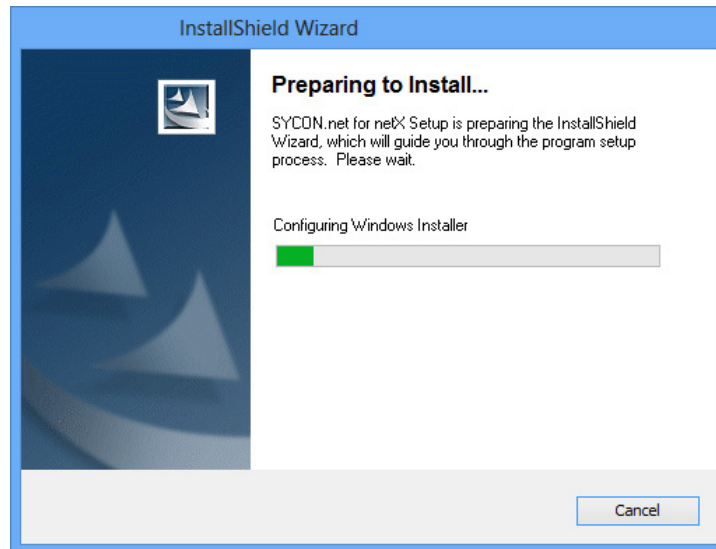


Figure 106: Preparing to Install SYCON.net

2. Continue installation

➤ Click on **Next >** to continue the installation.

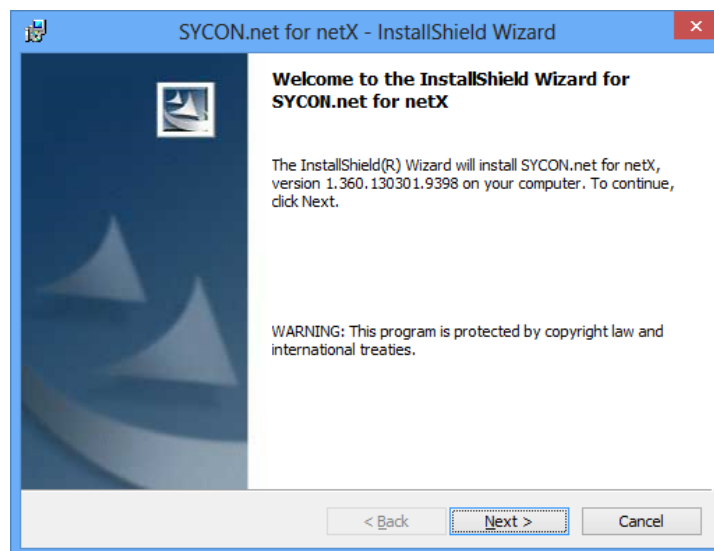


Figure 107: SYCON.net Installation Information

3. Read the notes about major changes in SYCON.net

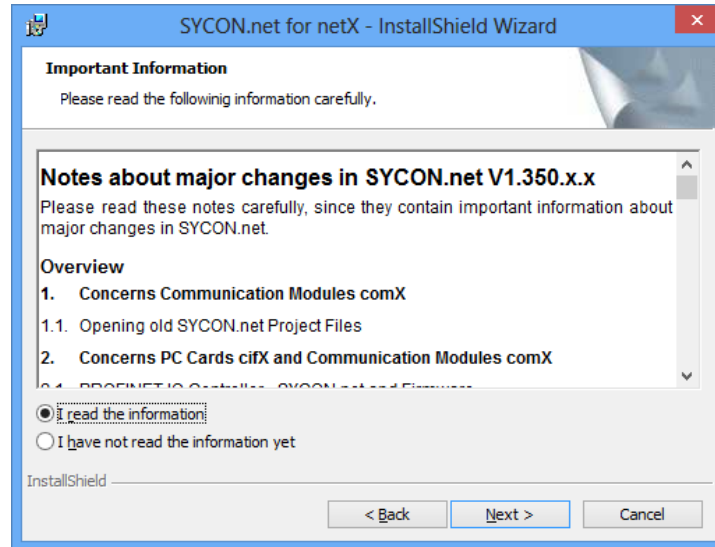


Figure 108: Notes About Major Changes in SYCON.net

- Read the note about major changes in SYCON.net carefully.
- Select **I read the information**, when you have read them.
- Click on **Next >** to continue the installation.

4. Accept license agreement

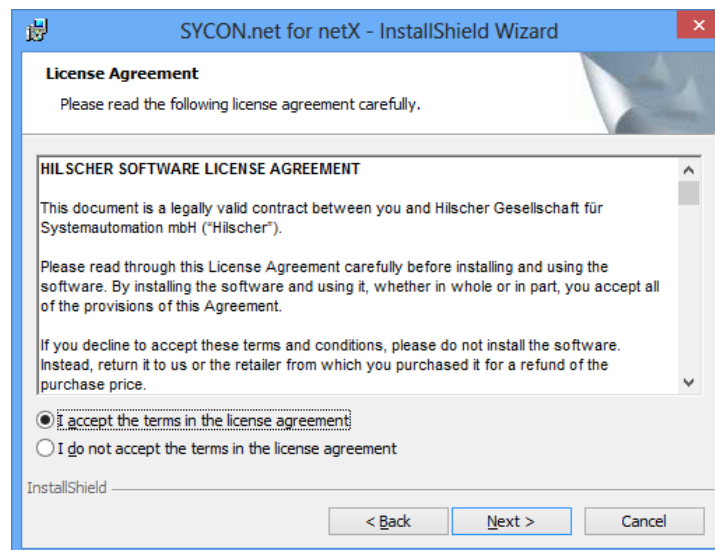


Figure 109: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, when you agree to it.
- Click on **Next >** to continue the installation.

5. Enter user information

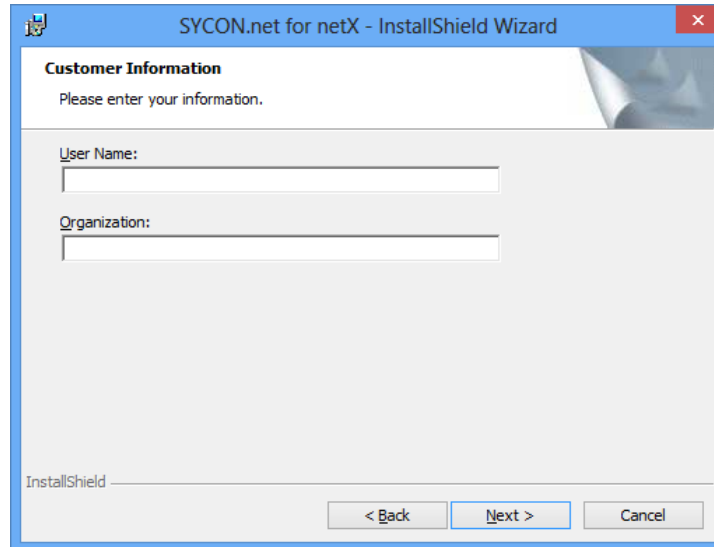
The screenshot shows the 'Customer Information' window of the SYCON.net for netX - InstallShield Wizard. The window has a blue title bar with the SYCON.net logo and a close button. The main area is white with a blue header bar containing the title 'Customer Information' and a subtitle 'Please enter your information.' Below this, there are two text input fields: 'User Name:' and 'Organization:'. At the bottom, there is a status bar with the text 'InstallShield' and three buttons: '< Back', 'Next >', and 'Cancel'.

Figure 110: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click on **Next >** to continue the installation.

6. Select setup type

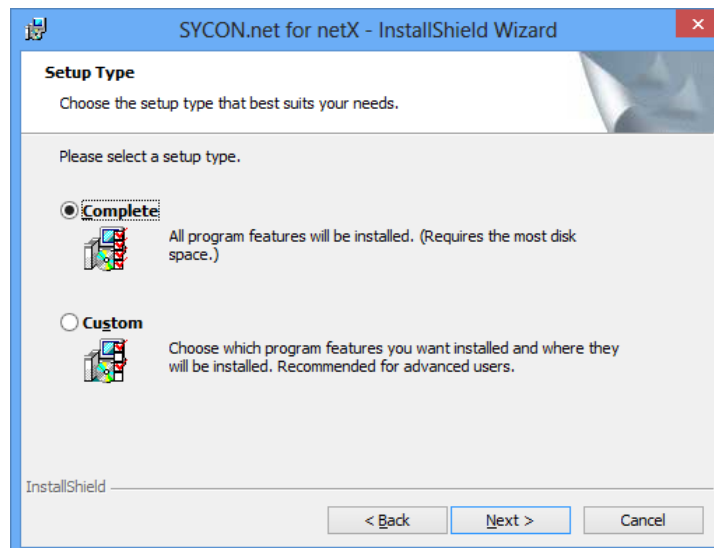
The screenshot shows the 'Setup Type' window of the SYCON.net for netX - InstallShield Wizard. The window has a blue title bar with the SYCON.net logo and a close button. The main area is white with a blue header bar containing the title 'Setup Type' and a subtitle 'Choose the setup type that best suits your needs.' Below this, there is a text input field with the text 'Please select a setup type.' There are two radio button options: 'Complete' (selected) and 'Custom'. The 'Complete' option has a description: 'All program features will be installed. (Requires the most disk space.)'. The 'Custom' option has a description: 'Choose which program features you want installed and where they will be installed. Recommended for advanced users.' At the bottom, there is a status bar with the text 'InstallShield' and three buttons: '< Back', 'Next >', and 'Cancel'.

Figure 111: SYCON.net Setup Type

- Select **Complete** when you want to install the complete software.
- Click on **Next >** to continue the installation.

7. Installation

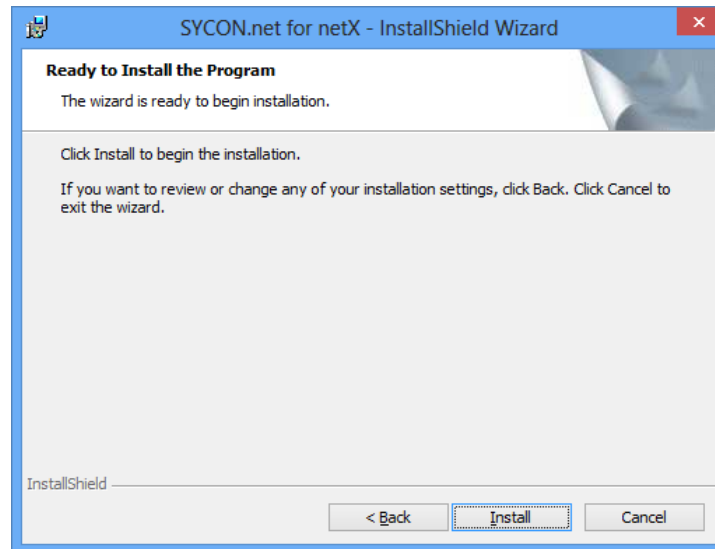


Figure 112: SYCON.net Start Installation

- Click on **Install** to do the installation now.
- The components are installed. This will take several minutes.

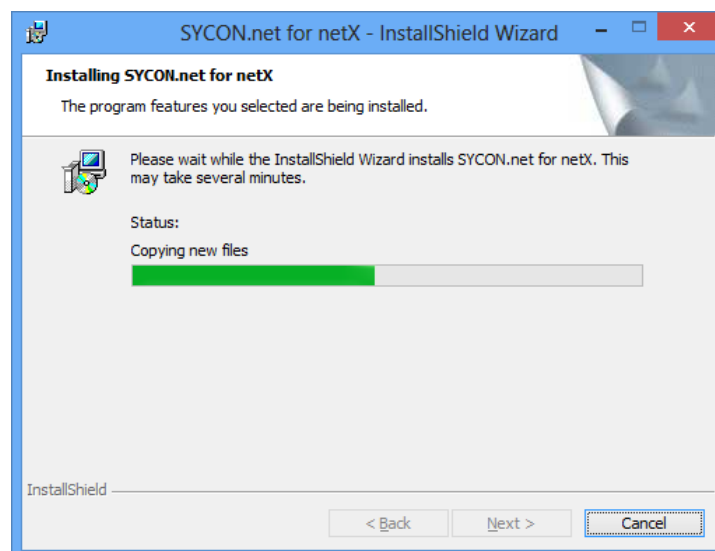


Figure 113: SYCON.net Installation Status

8. Finish installation

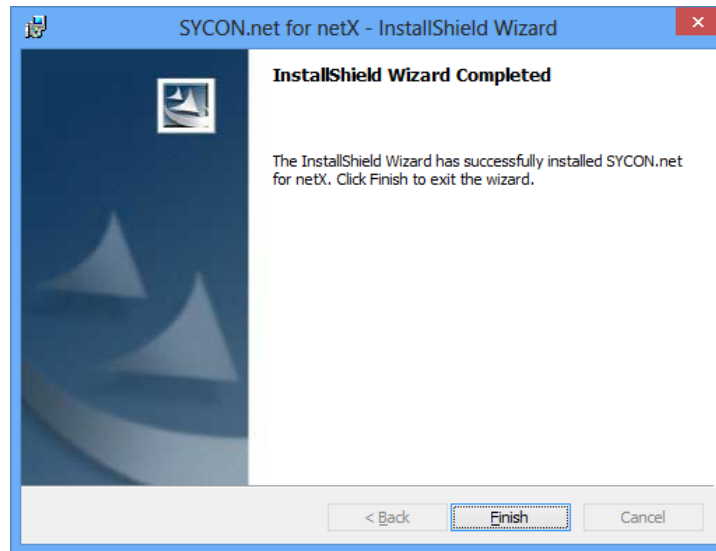


Figure 114: SYCON.net Installation Finish

- Click on **Finish**
- SYCON.net is installed and can be started via **Start > All Programs > SYCON.net System Configurator > SYCON.net**.

5.5 Uninstalling under Windows XP

Requirements



Note: You need administrator privileges under Windows® XP to uninstall the configuration software SYCON.net from your PCdevice.

Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



Note: Files and folders added by the user will not be deleted by SYCON.net uninstall procedure.

Steps for Uninstalling

1. First start the control panel of Microsoft Windows XP®.

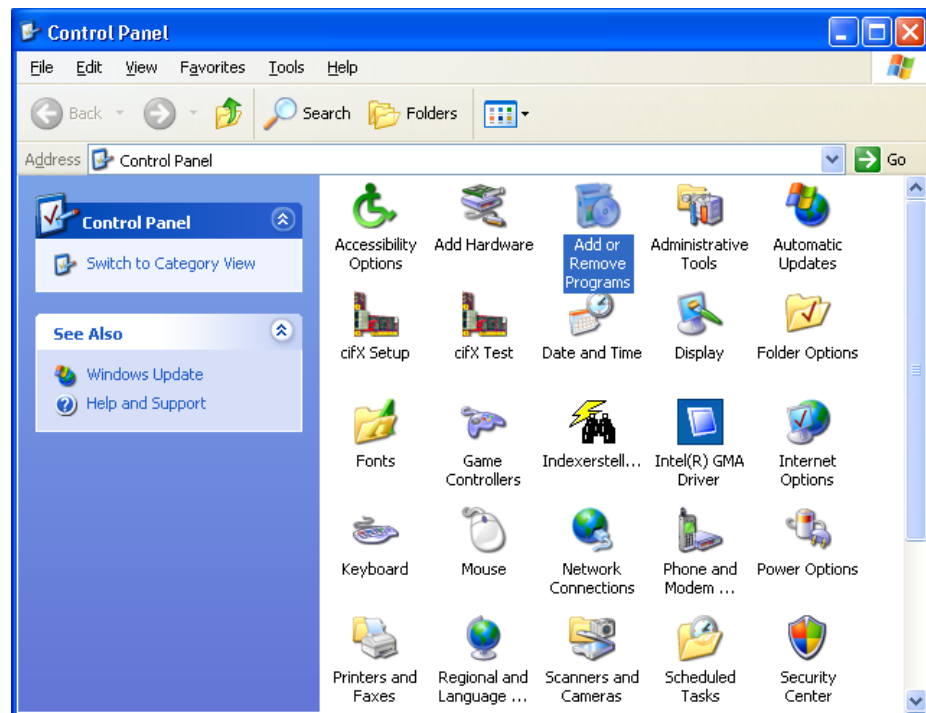


Figure 115: Windows Control Panel - Add or Remove Programs

- Double click on **Add or Remove Programs** in order to open the list.
- The window **Add or Remove Programs** for changing and removing Windows programs opens.

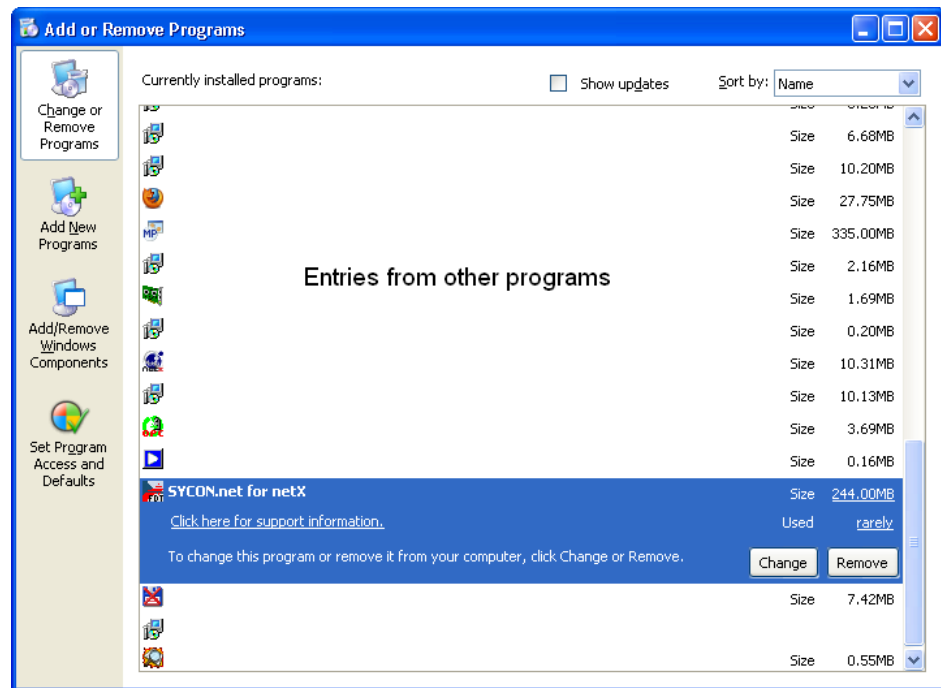


Figure 116: Windows – Add or Remove Programs

- Now search for the entry for **SYCON.net**.
- Click on **Remove** > to start the uninstalling.
- At first, a confirmation dialog appears:

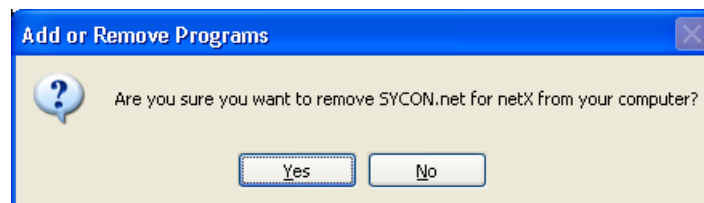


Figure 117: SYCON.net Confirmation Dialog

- Click on **Yes** in order to perform the uninstalling.
- Now SYCON.net is being uninstalled. This may take some minutes.

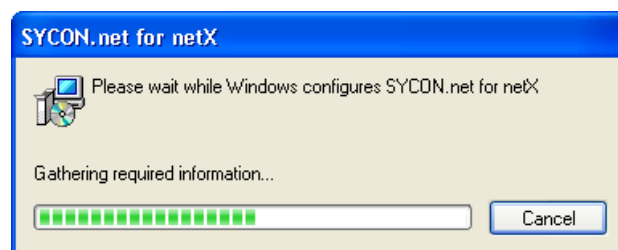


Figure 118: SYCON.net Uninstalling Progress

- Wait until SYCON.net has been uninstalled and thus been removed from the PCdevice.

5.6 Uninstalling under Windows 7

Requirements



Note: You need administrator privileges under Windows® 7 to uninstall the configuration software SYCON.net from your PCdevice.

Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



Note: Files and folders added by the user will not be deleted by SYCON.net uninstall procedure.

Steps for Uninstalling

1. Open **Start**

- Click on **Start**

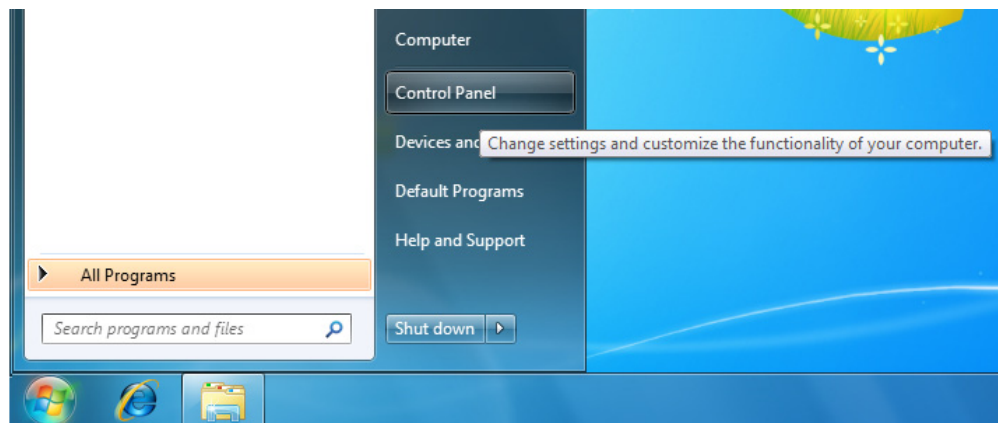


Figure 119: Start > Control Panel

- Click on **Control Panel**.

➤ The window **Adjust your computer's settings** is displayed.

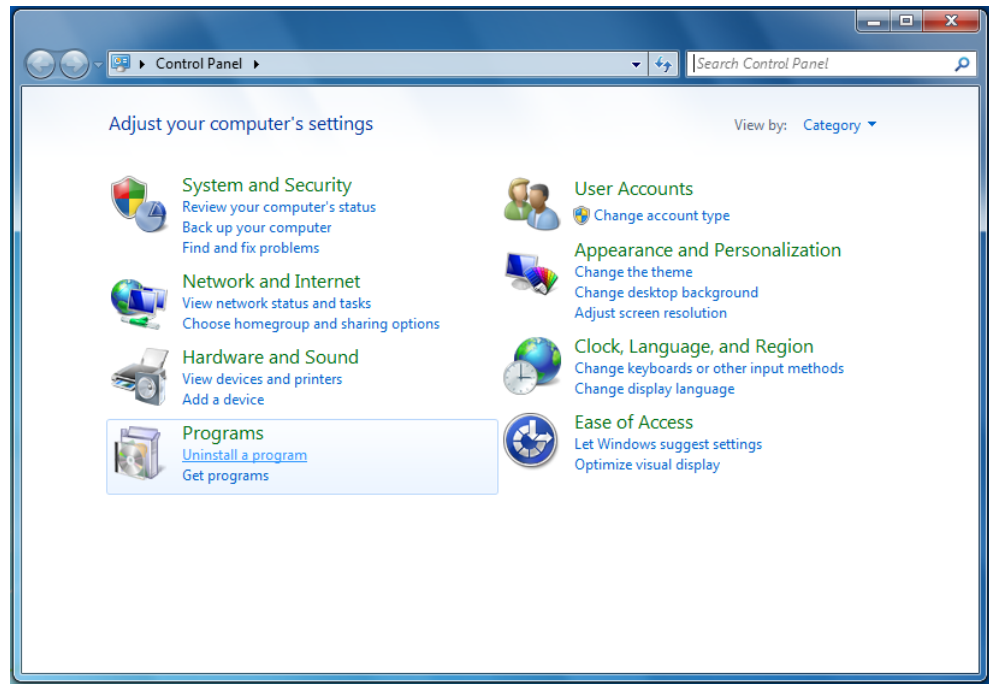


Figure 120: Window Adjust your Computer's Settings

2. Click on **Uninstall program**.

➤ The window **Uninstall or change programs** is displayed.

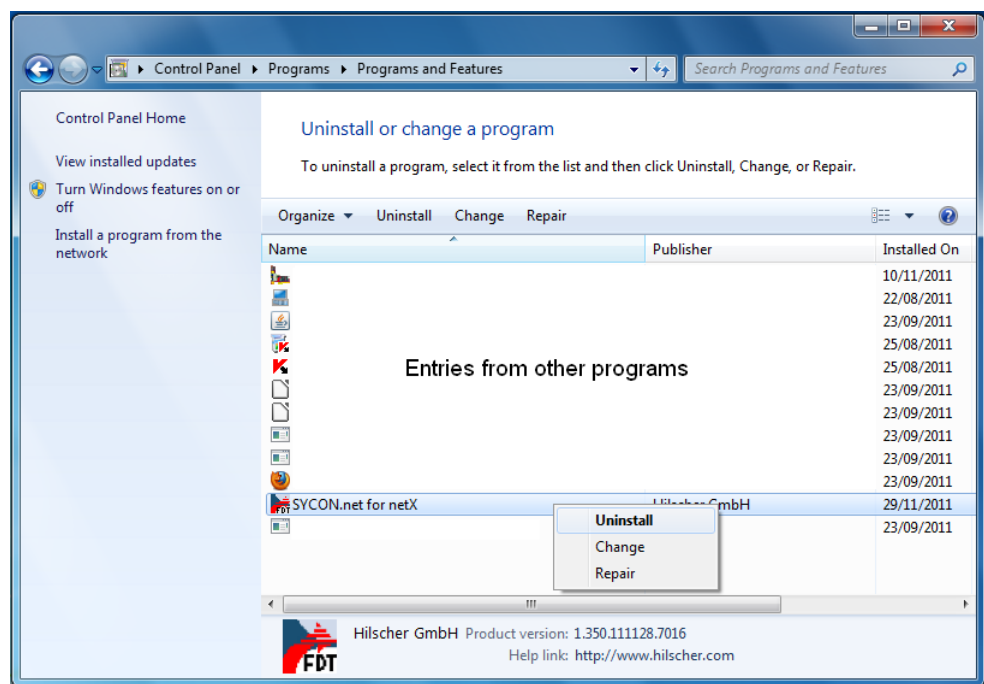


Figure 121: Control Panel - Uninstall or Change Programs

3. Uninstalling SYCON.net.

- Now search for the entry for **SYCON.net**.
- Right click on *SYCON.net for netX*.
- In the context menu click on **Uninstall** to start the uninstalling.
- At first, a confirmation dialog appears:

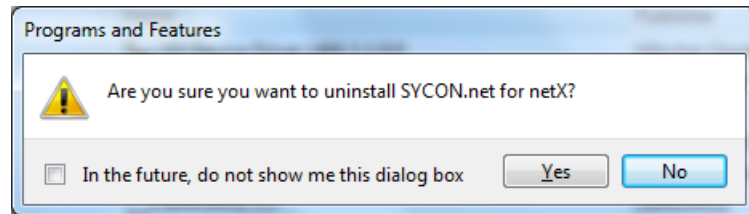


Figure 122: Programs and Features

- Click on **Yes** in order to perform the uninstalling.
- Preparing to remove:

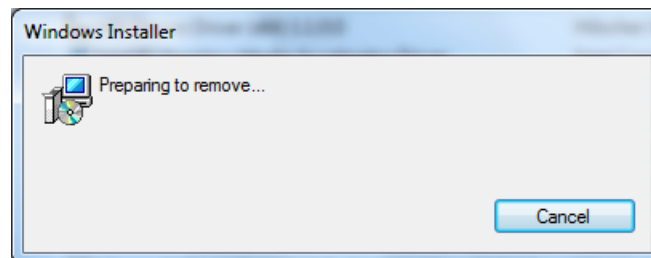


Figure 123: Windows Installer - Preparing to Remove

- A Windows® safety questions appears.
- Answer the Windows® security question with **Yes**.
- Now SYCON.net is being uninstalled. This may take some minutes.

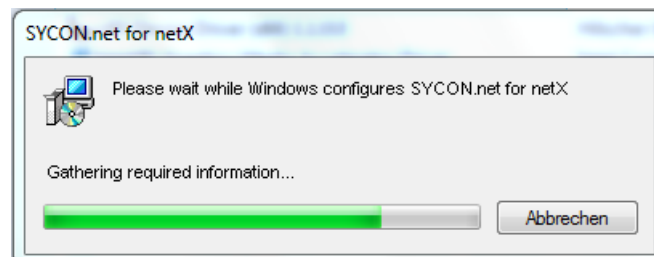


Figure 124: SYCON.net Uninstalling Progress

- Wait until SYCON.net has been uninstalled and thus been removed from the PCdevice.

5.7 Uninstalling under Windows 8

Requirements



Note: You need administrator privileges under Windows® 7 to uninstall the configuration software SYCON.net from your PC device.

Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



Note: Files and folders added by the user will not be deleted by SYCON.net uninstall procedure.

Steps for Uninstalling

1. Open Windows® 8 Start Screen.

- Press the keys **[Ctrl]** and **[ESC]**.

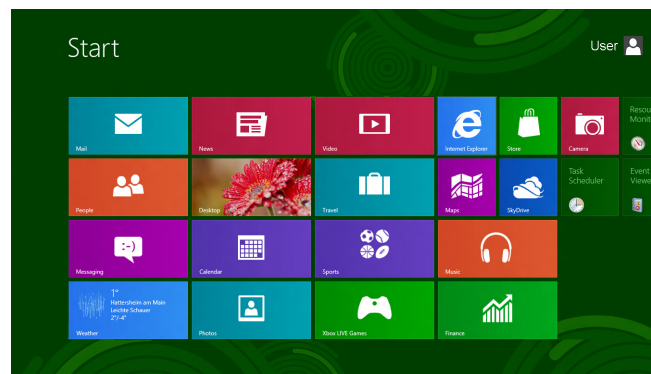


Figure 125: Start Screen Windows 8

- Press the keys **[Win]** and **[F]**.
- Select **Settings**.
- Enter **Uninstall a program** into the search field.

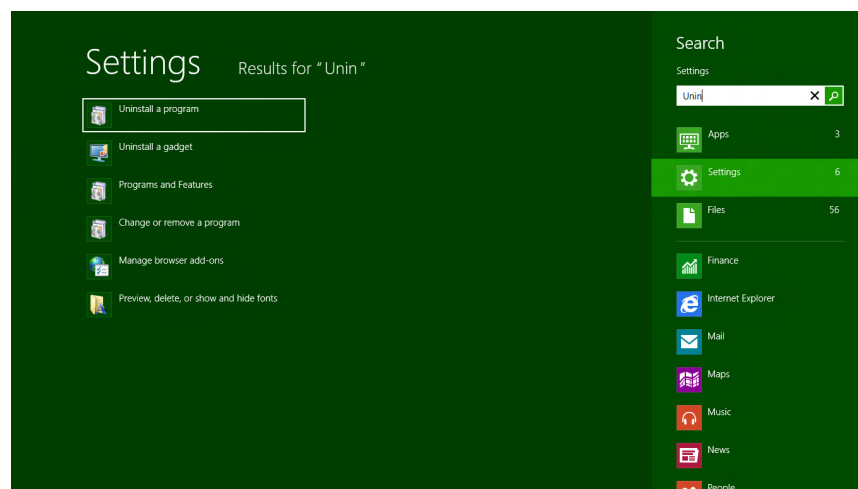


Figure 126: Uninstall a program

2. Click on **Uninstall program**.

➤ The window **Uninstall or change programs** is displayed.

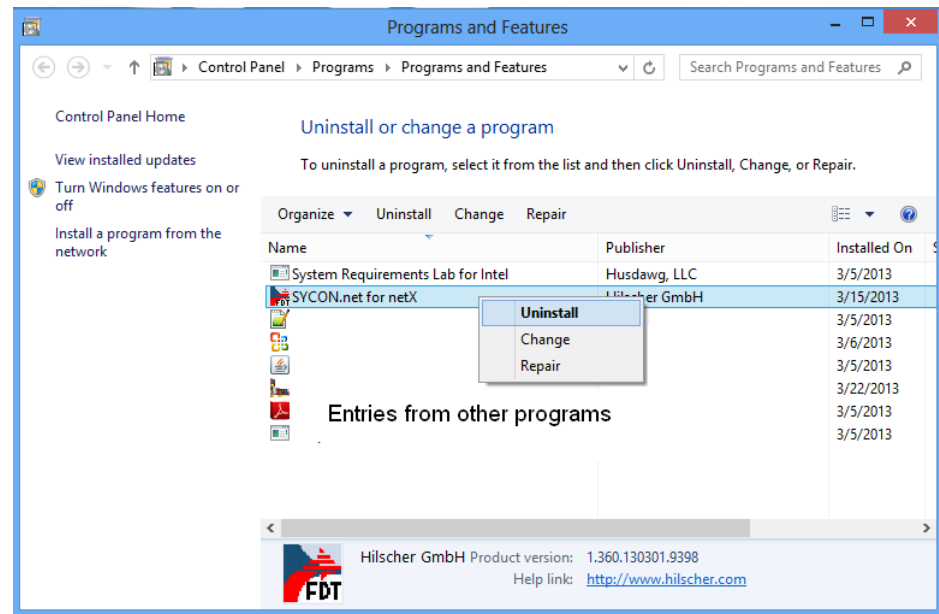


Figure 127: Control Panel - Uninstall or Change Programs

3. Uninstalling SYCON.net.

- Now search for the entry for **SYCON.net**.
- Right click on *SYCON.net for netX*.
- In the context menu click on **Uninstall** to start the uninstalling.
- At first, a confirmation dialog appears:

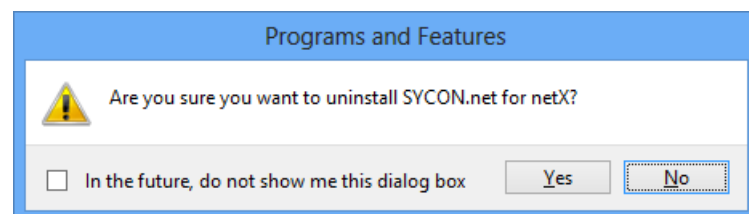


Figure 128: Programs and Features

- Click on **Yes** in order to perform the uninstalling.
- Preparing to remove:

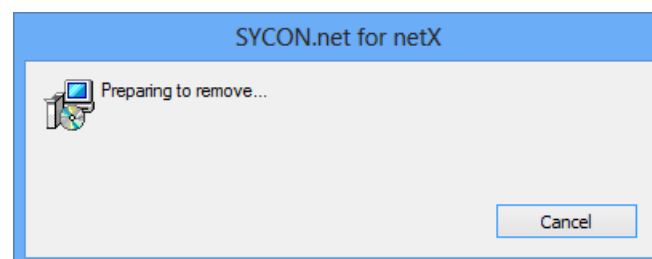


Figure 129: Windows Installer - Preparing to Remove

- A Windows® safety questions appears.
- Answer the Windows® security question with **Yes**.

- Now SYCON.net is being uninstalled. This may take some minutes.

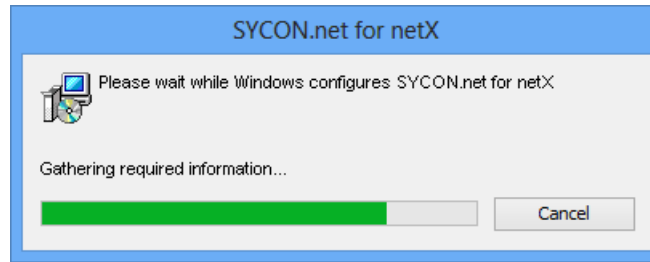


Figure 130: SYCON.net Uninstalling Progress

- Wait until SYCON.net has been uninstalled and thus been removed from the PCdevice.

6 netX Configuration Tool

6.1 System Requirements

The system requirements listed below are valid for the Slave configuration tool **netX Configuration Tool**:

- PC with 586-, Pentium® processor or higher
- Operating system: Windows® XP SP3, Windows® Vista (32 bit) SP2, Windows® 7 (32 bit) or Windows® 7 (64 bit), Windows® 8 (32-Bit) or Windows® 8 (64-Bit)
- Administrator privilege required for installation
- Free space on hard disk: 50 MByte
- DVD ROM drive
- RAM: min. 256 MByte
- Graphics resolution: min 1024 x 768 pixels
- Keyboard and mouse

6.2 Installation under Windows XP

Requirement

First install the cifX Device Driver and then start the netX Configuration Tool setup program.



Note: You need administrator privileges under Windows® XP to install the Slave configuration tool netX Configuration Tool on your PC.



Note: If an older version of netX Configuration Tool is already installed on your system, uninstall it first before you install the new version.

Preparation

- Close all application programs on the system and insert the Communication Solutions DVD into the local DVD-ROM drive.
- The startup screen **Communication Solutions** is displayed.
- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.



Figure 131: Start the Installation for the Slave Configuration Tool netX Configuration Tool

Or:

- Open on the Communication Solutions DVD the directory *[drive letter]:\Software\Slave Configuration Tool* and start the *netXConfigurationUtility_Setup.exe* file by a double click.
- The netX Configuration Tool installation setup is started.

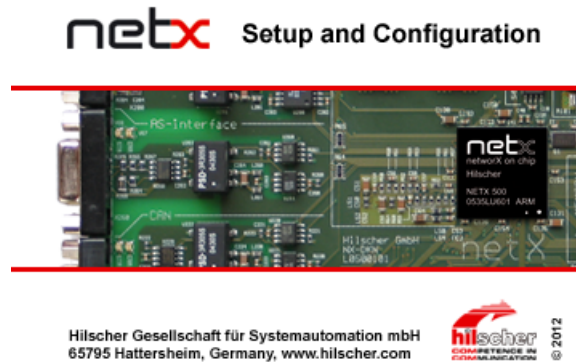


Figure 132: netX Setup and Configuration

Installation Steps

1. netX Configuration Tool Setup Wizard

- The **netX Configuration Tool Setup Wizard** is displayed.

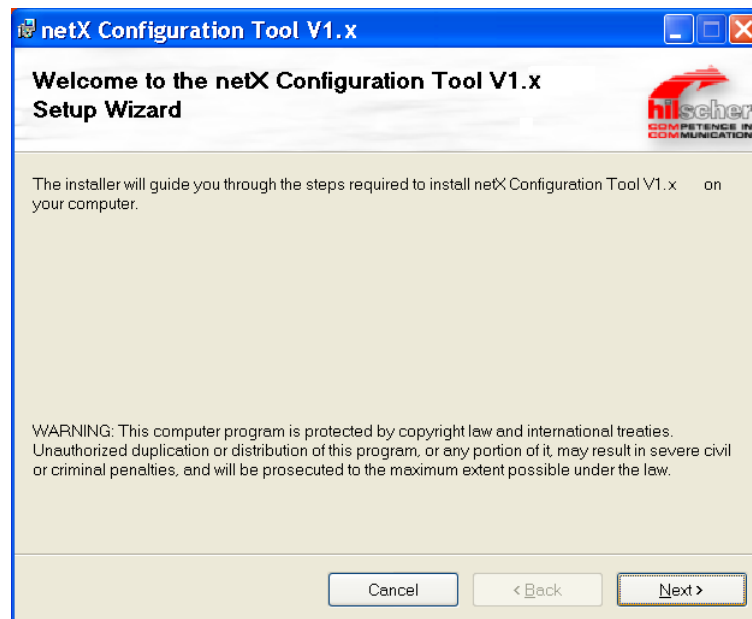


Figure 133: netX Configuration Tool Setup Wizard

- Click on **Next**.

2. Select Installation Folder

➤ **Select Installation Folder** is displayed.

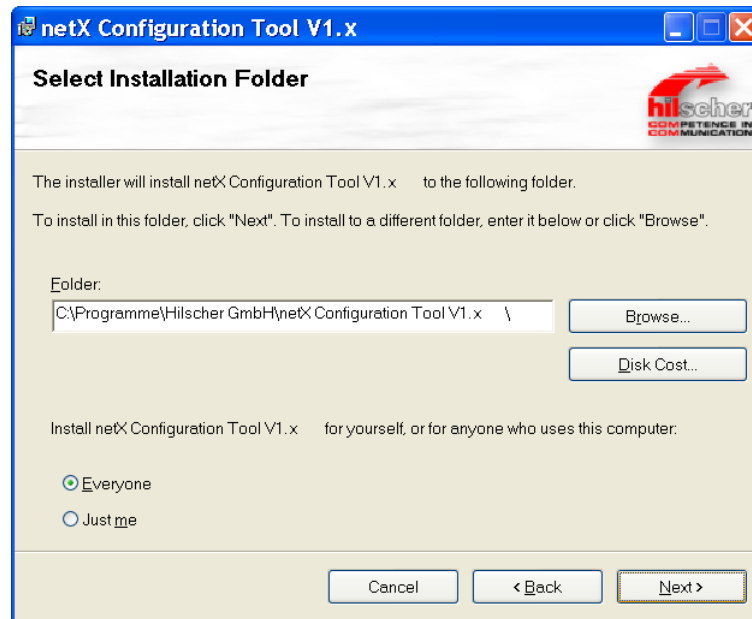


Figure 134: netX Configuration Tool Setup Wizard

➤ Click on **Next**, to install the folder indicated under **Folder**.

Or:

➤ To install a different folder, enter under **Folder** a different folder and click on **Next**.

Or:

➤ To install a different folder, click on **Browse**.

➤ **Browse for Folder** is displayed.

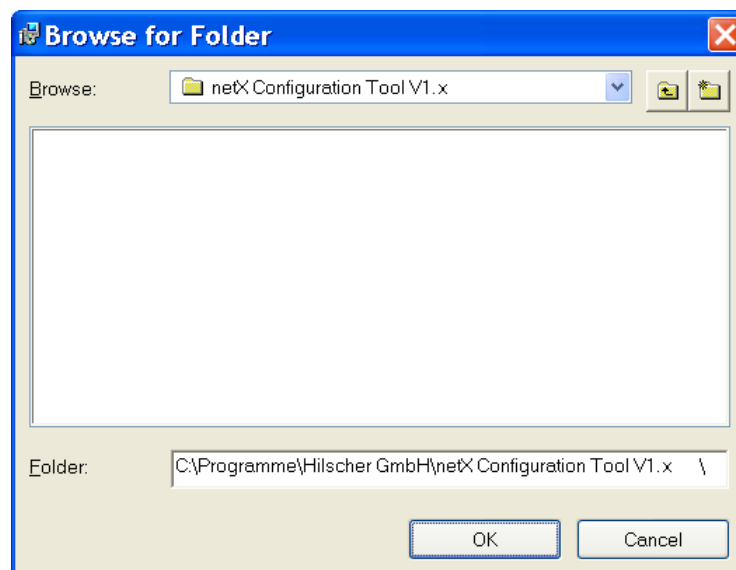


Figure 135: Browse for Folder

➤ Select a folder and click on **OK**.

3. Check Disk Space

- Click on **Disk Cost**, to check which drive provides the required space for the installation.

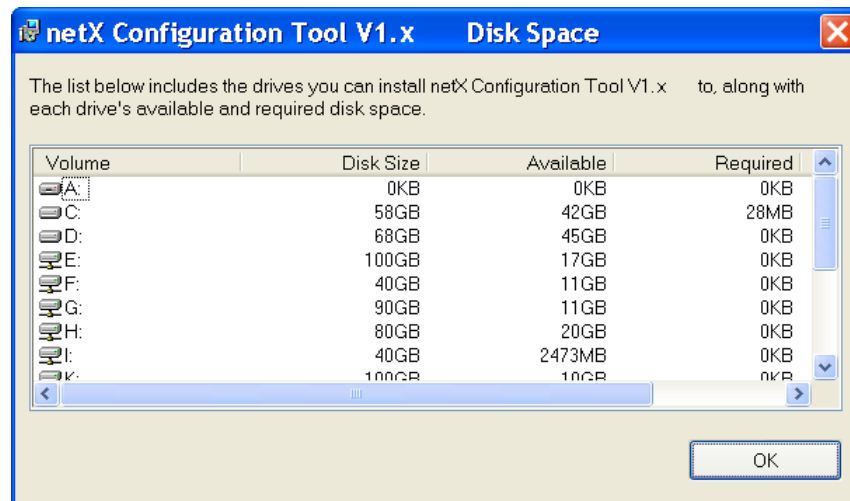


Figure 136: Disk Space

- Check the disk space of the drives and close the **Disk Space** window via **OK**.

4. Starting Installation

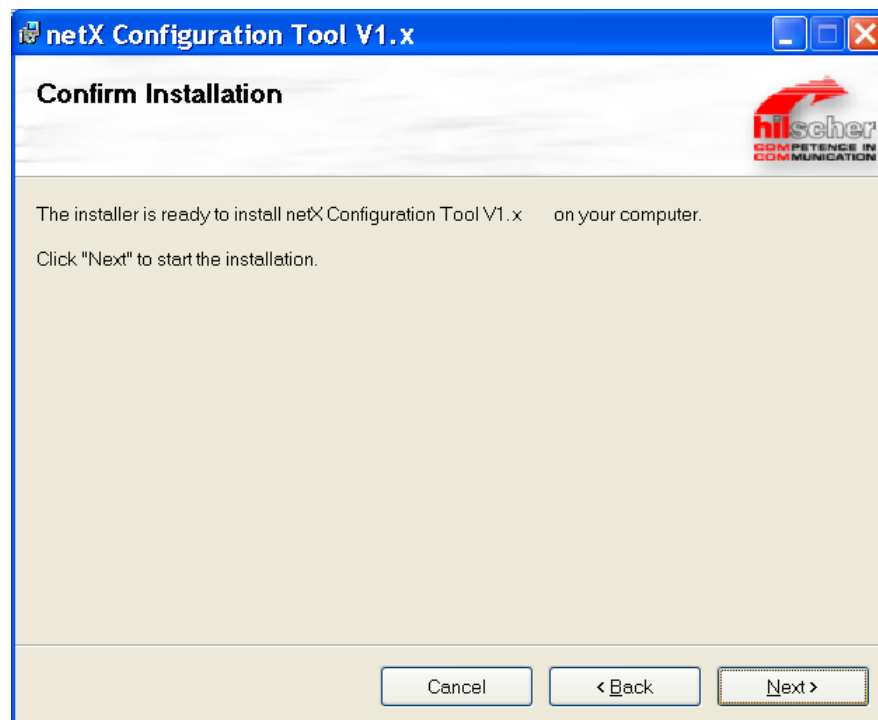


Figure 137: Confirm Installation

- Click on **Next**, to start the installation.

5. Installation Progress

- netX Configuration Tool is being installed.

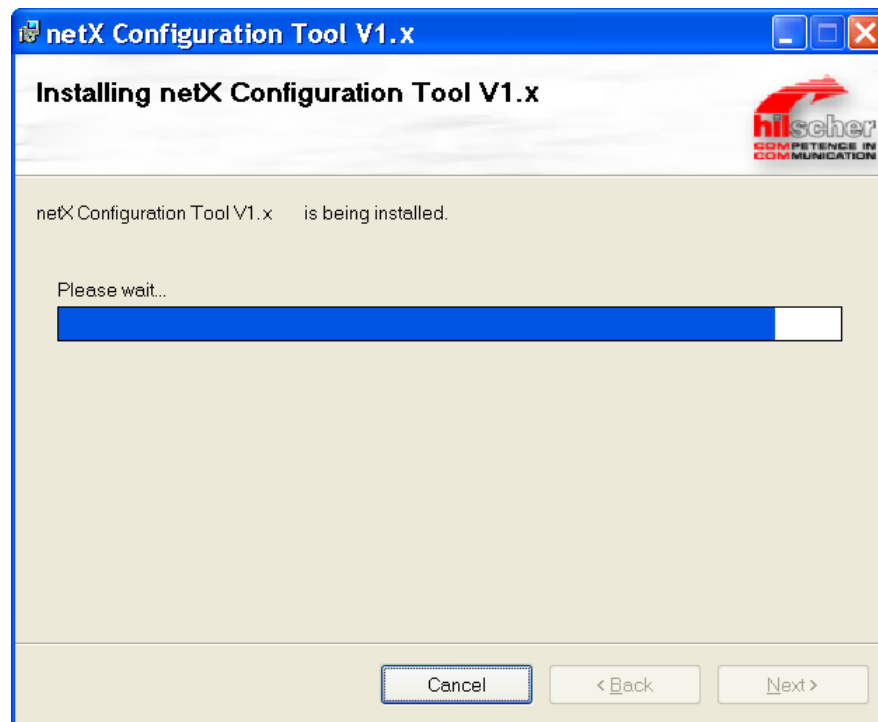


Figure 138: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.

6. Installation Complete

- The netX Configuration Tool installation is complete.

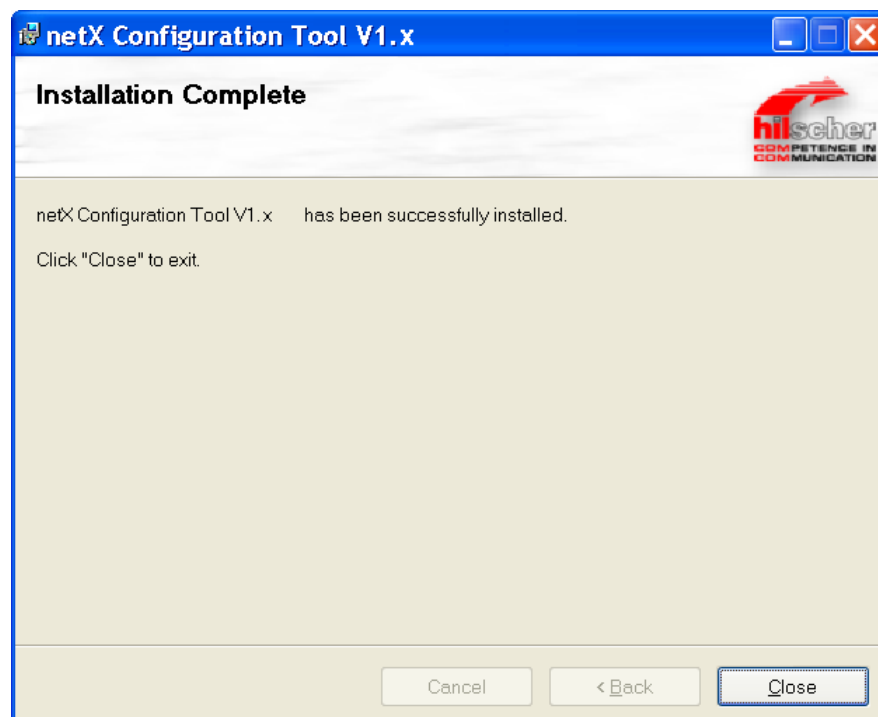


Figure 139: netX Configuration Tool - Installation complete

- Click on **Close**, to finish the installation.
- netX Configuration Tool is installed and can be started via **Start > Programs > Hilscher GmbH > netX Configuration Tool**.

Operating Instruction Manual and Online Help



A description of the user interface of the configuration program netX Configuration Tool and for configuration and diagnosis of Slave devices cifX using this tool, see the Operating Instruction Manual netX Configuration Tool for cifX, comX and netJACK, Configuration of Real-Time Ethernet and fieldbus devices (cifX comX netJACK Configuration by netX Configuration Tool OI XX EN.pdf) on the Communication Solutions DVD to your device or on www.hilscher.com.

The netX Configuration Tool contains an integrated online help facility.

- To open the online help in netX Configuration Tool, click on **Help** or press the **F1** key.

6.3 Installation under Windows 7

Requirement

First install the cifX Device Driver and then start the netX Configuration Tool setup program.



Note: You need administrator privileges under Windows® 7 to install the Slave configuration tool netX Configuration Tool on your PC.



Note: If an older version of netX Configuration Tool is already installed on your system, uninstall it first before you install the new version.

Preparation

- Close all application programs on the system and insert the Communication Solutions DVD into the local DVD-ROM drive.
- The startup screen **Communication Solutions** is displayed.
- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.

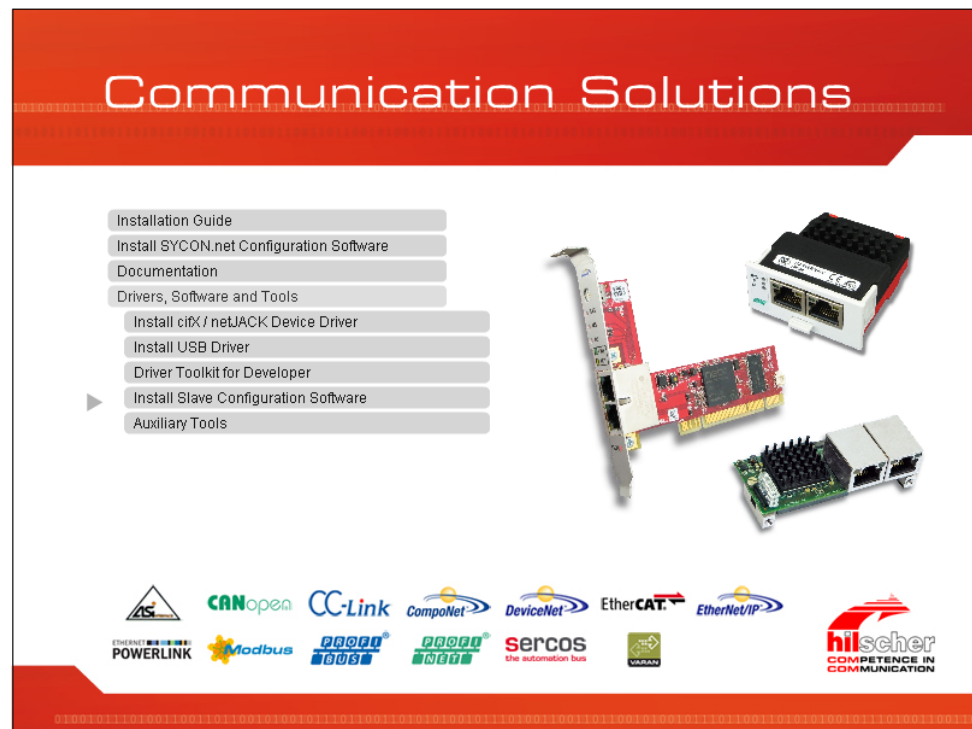


Figure 140: Start the Installation for the Slave Configuration Tool netX Configuration Tool

Or:

- Open on the Communication Solutions DVD the directory `[drive letter]:\Software\Slave Configuration Tool\` and start the `netXConfigurationUtility_Setup.exe` file by a double-click.

Or



Note: Reduce the number of Windows® safety questions by running the setup via **Run as Administrator**. You also need administrator rights to uninstall the software.

- Right click on the SYCONnet netX setup.exe file and then click on **Run as Administrator**.

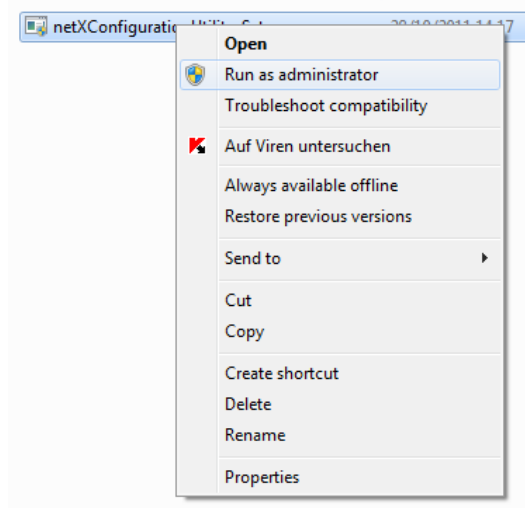


Figure 141: SYCONnet netX setup.exe - Run as Administrator

- Answer the Windows® security question with **Yes**.
- The netX Configuration Tool installation setup is started.

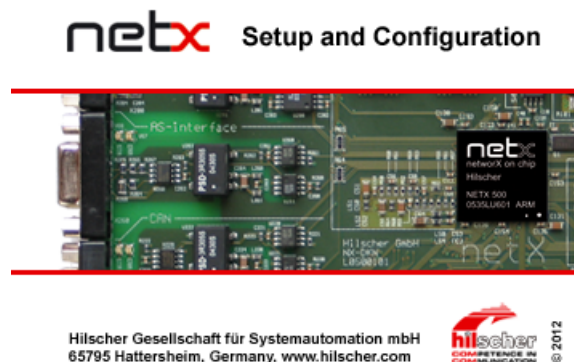


Figure 142: netX Setup and Configuration

Installation Steps

1. netX Configuration Tool Setup Wizard

➤ The **netX Configuration Tool Setup Wizard** is displayed.

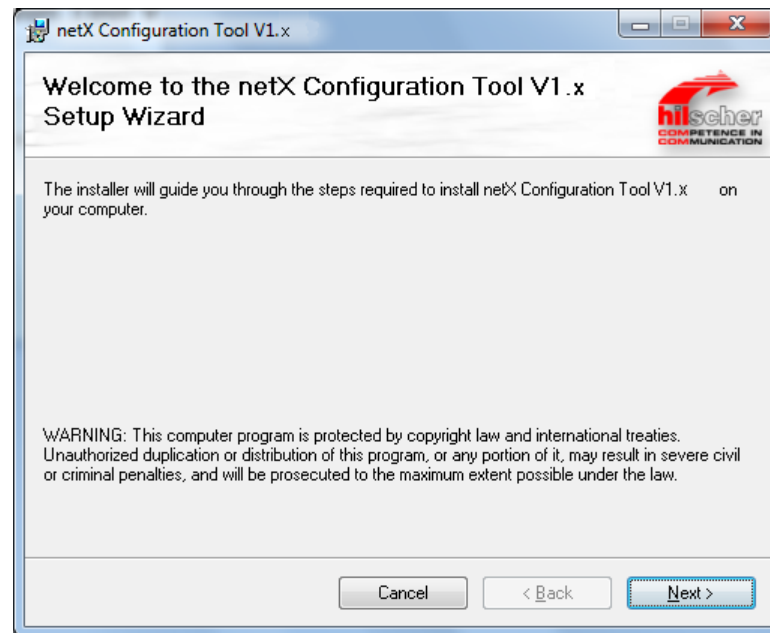


Figure 143: netX Configuration Tool Setup Wizard

➤ Click on **Next**.

2. Select Installation Folder

➤ **Select Installation Folder** is displayed.

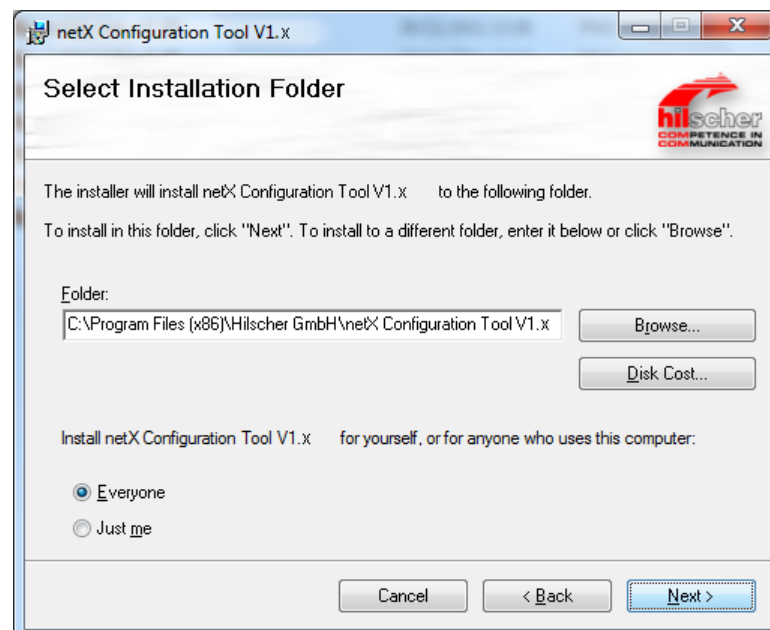


Figure 144: netX Configuration Tool Setup Wizard

➤ Click on **Next**, to install the folder indicated under **Folder**.

Or:

- To install a different folder, enter under **Folder** a different folder and click on **Next**.

Or:

- To install a different folder, click on **Browse**.

➤ **Browse for Folder** is displayed.

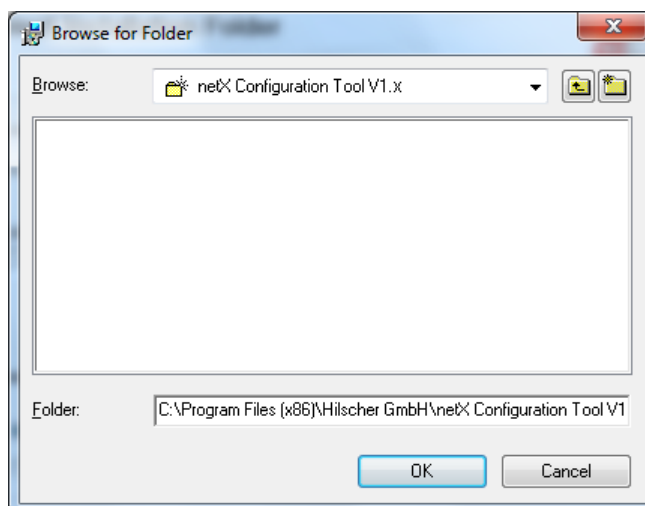


Figure 145: Browse for Folder

- Select a folder and click on **OK**.
- Answer the Windows® security question with **Yes**.

3. Check Disk Space

- Click on **Disk Cost**, to check which drive provides the required space for the installation.

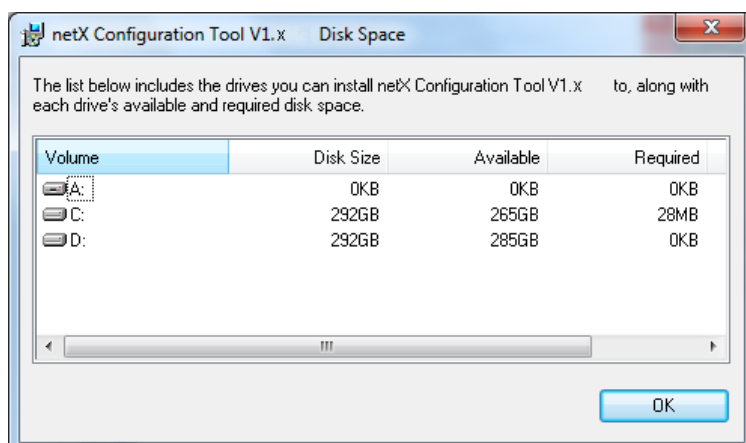


Figure 146: Disk Space

- Check the disk space of the drives and close the **Disk Space** window via **OK**.

4. Starting Installation

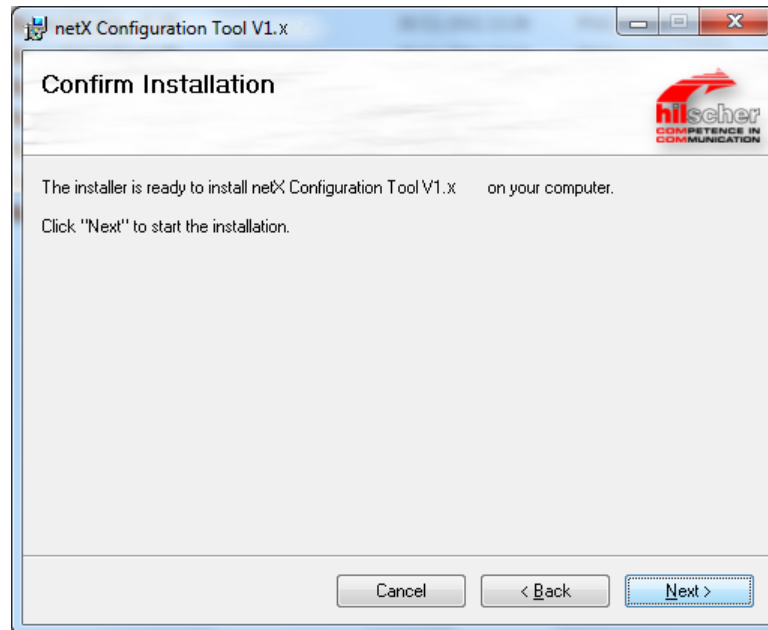


Figure 147: Confirm Installation

- Click on **Next**, to start the installation.

5. Installation Progress

- netX Configuration Tool is being installed.

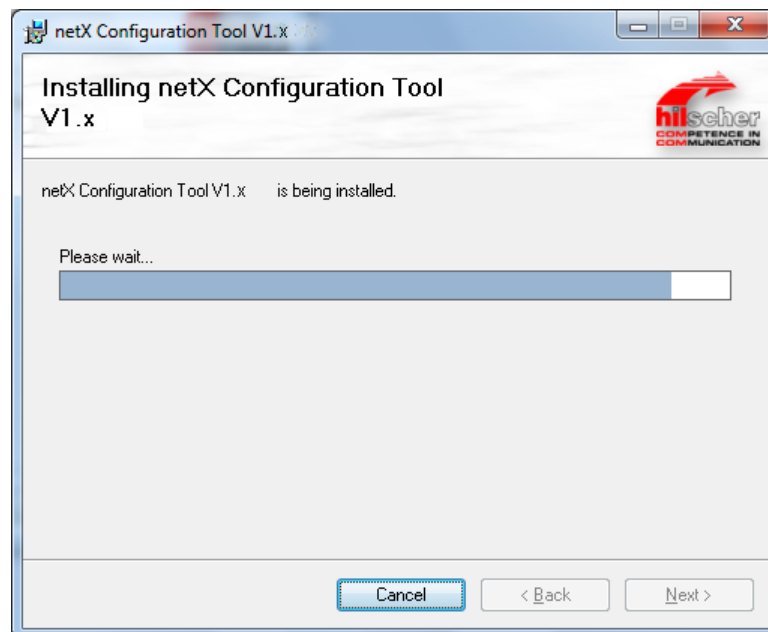


Figure 148: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.

5. Installation Complete

- The netX Configuration Tool installation is complete.

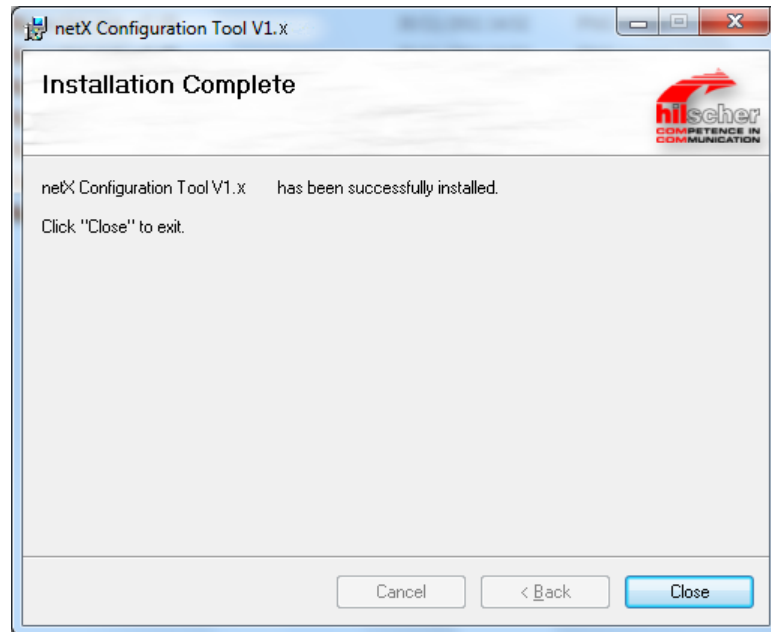


Figure 149: netX Configuration Tool - Installation complete

- Click on **Close**, to finish the installation.
- netX Configuration Tool is installed and can be started via **Start > All Programs > Hilscher GmbH > netX Configuration Tool**.

Operating Instruction Manual and Online Help



A description of the user interface of the configuration program netX Configuration Tool and for configuration and diagnosis of Slave devices cifX using this tool, see the Operating Instruction Manual netX Configuration Tool for cifX, comX and netJACK, Configuration of Real-Time Ethernet and fieldbus devices (cifX comX netJACK Configuration by netX Configuration Tool OI XX EN.pdf) on the Communication Solutions DVD to your device or on www.hilscher.com.

The netX Configuration Tool contains an integrated online help facility.

- To open the online help in netX Configuration Tool, click on **Help** or press the **F1** key.

6.4 Installation under Windows 8

Requirement

First install the cifX Device Driver and then start the netX Configuration Tool setup program.



Note: You need administrator privileges under Windows® 8 to install the Slave configuration tool netX Configuration Tool on your PC.



Note: If an older version of netX Configuration Tool is already installed on your system, uninstall it first before you install the new version.

Preparation

- Close all application programs on the system and insert the Communication Solutions DVD into the local DVD-ROM drive.
- The startup screen **Communication Solutions** is displayed.
- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.

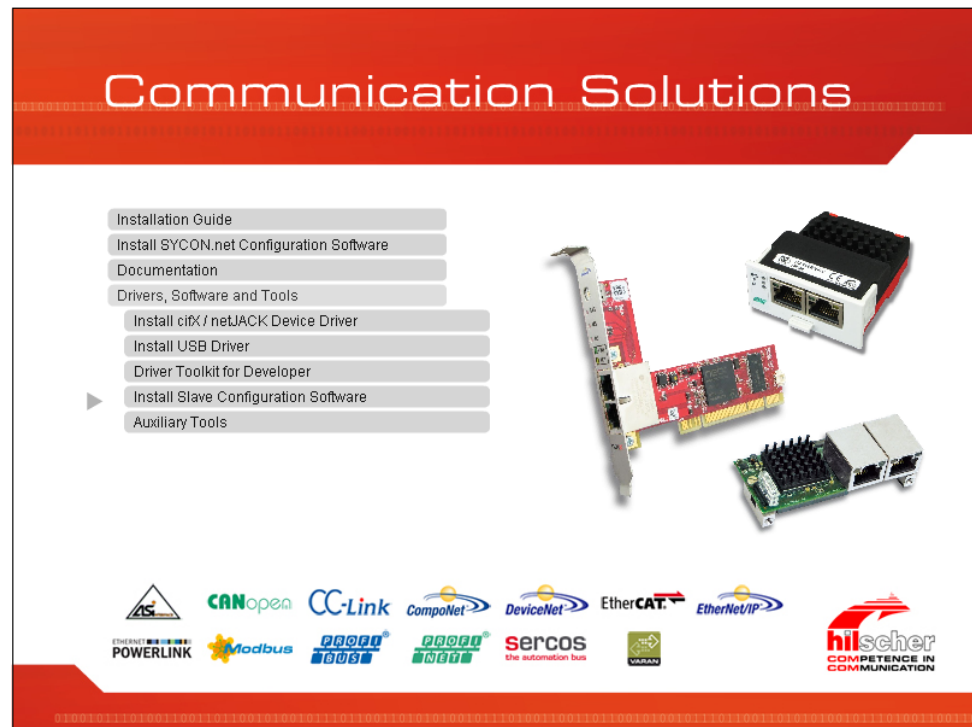


Figure 150: Start the Installation for the Slave Configuration Tool netX Configuration Tool

Or:

- Open on the Communication Solutions DVD the directory `[drive letter]:\Software\Slave Configuration Tool\` and start the `netXConfigurationUtility_Setup.exe` file by a double-click.

Or



Note: Reduce the number of Windows® safety questions by running the setup via **Run as Administrator**. You also need administrator rights to uninstall the software.

- Right click on the SYCONnet netX setup.exe file and then click on **Run as Administrator**.

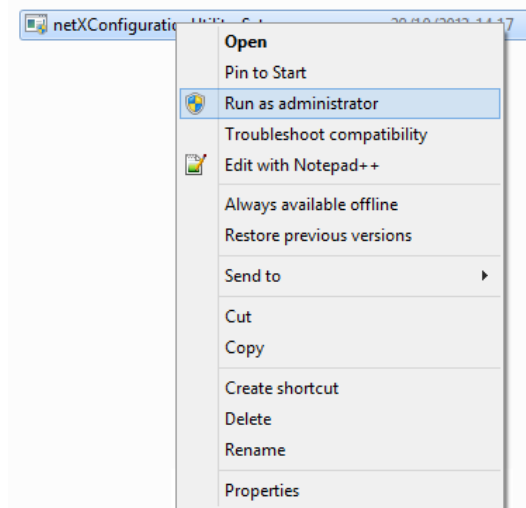


Figure 151: SYCONnet netX setup.exe - Run as Administrator

- Answer the Windows® security question with **Yes**.
- The netX Configuration Tool installation setup is started.

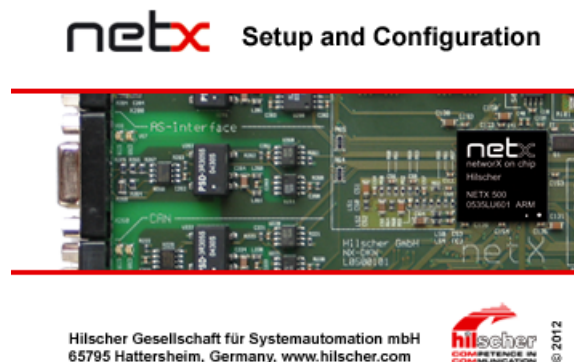


Figure 152: netX Setup and Configuration

Installation Steps

1. netX Configuration Tool Setup Wizard

➤ The **netX Configuration Tool Setup Wizard** is displayed.

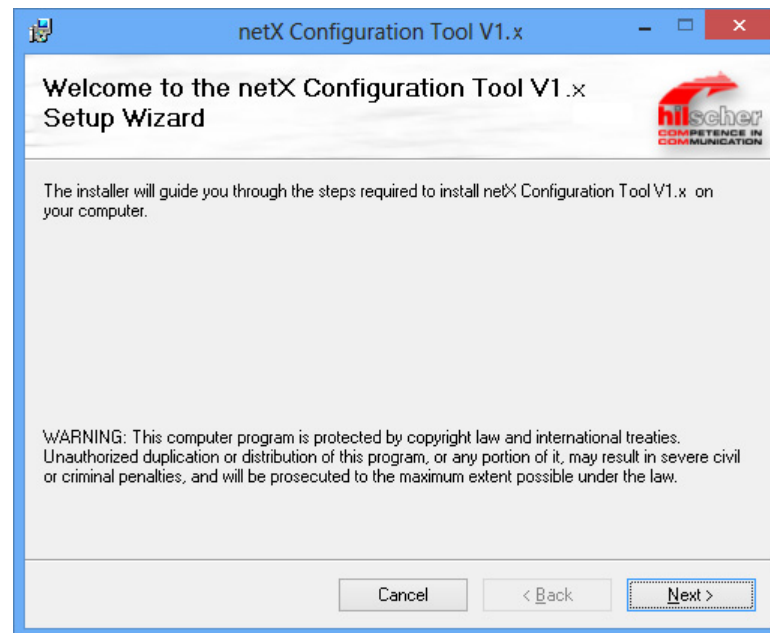


Figure 153: netX Configuration Tool Setup Wizard

➤ Click on **Next**.

2. Select Installation Folder

➤ **Select Installation Folder** is displayed.

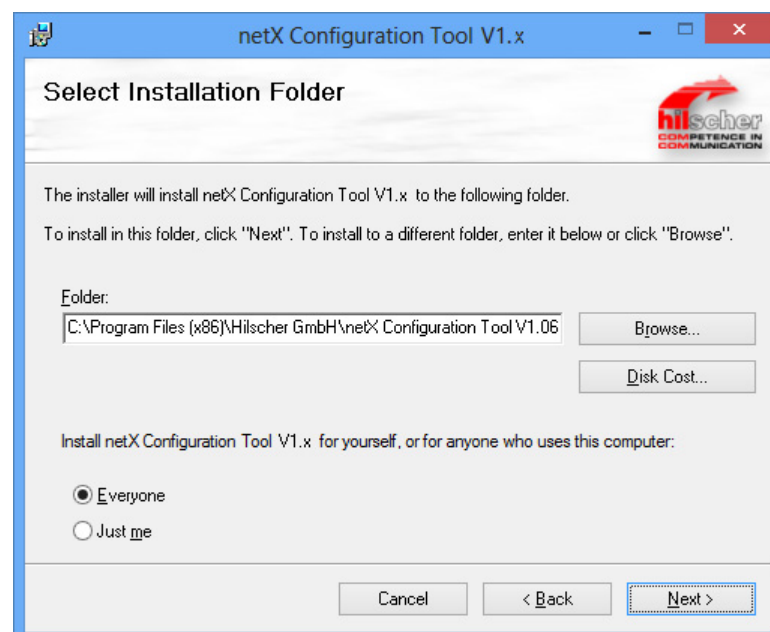


Figure 154: netX Configuration Tool Setup Wizard

➤ Click on **Next**, to install the folder indicated under **Folder**.

Or:

- To install a different folder, enter under **Folder** a different folder and click on **Next**.

Or:

- To install a different folder, click on **Browse**.

➤ **Browse for Folder** is displayed.

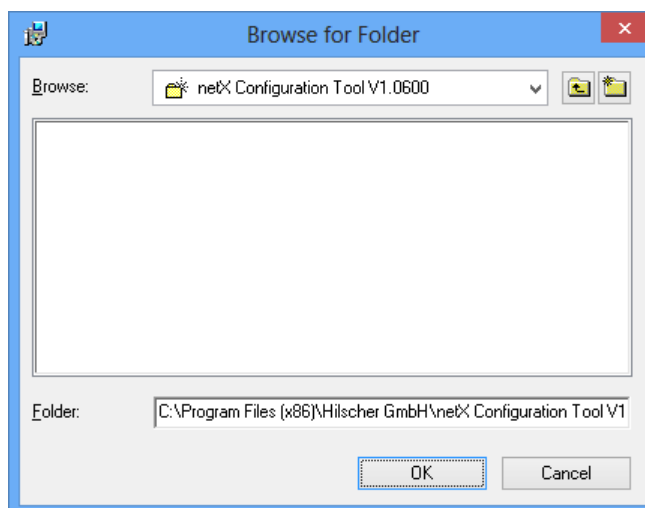


Figure 155: Browse for Folder

- Select a folder and click on **OK**.
- Answer the Windows® security question with **Yes**.

3. Check Disk Space

- Click on **Disk Cost**, to check which drive provides the required space for the installation.

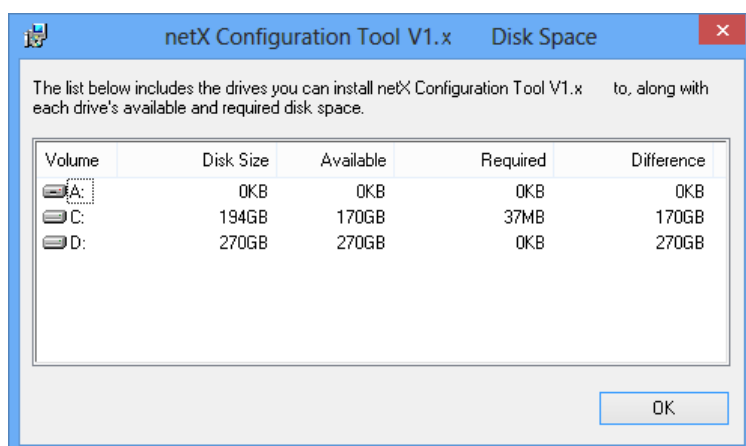


Figure 156: Disk Space

- Check the disk space of the drives and close the **Disk Space** window via **OK**.

4. Starting Installation

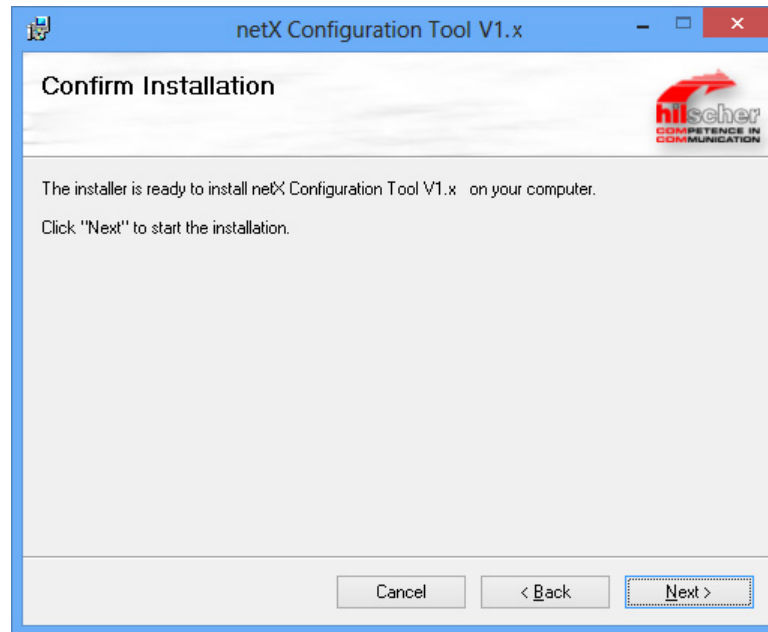


Figure 157: Confirm Installation

- Click on **Next**, to start the installation.

5. Installation Progress

- netX Configuration Tool is being installed.

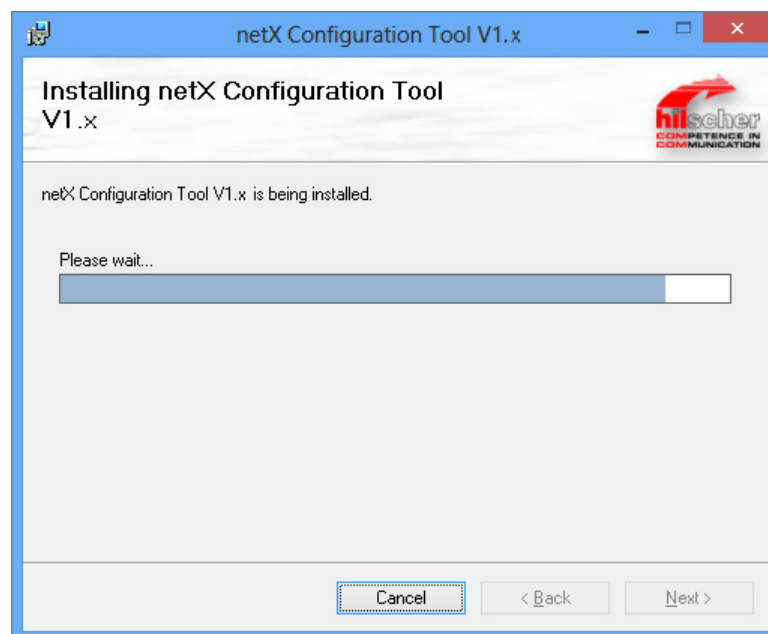


Figure 158: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.

5. Installation Complete

- The netX Configuration Tool installation is complete.

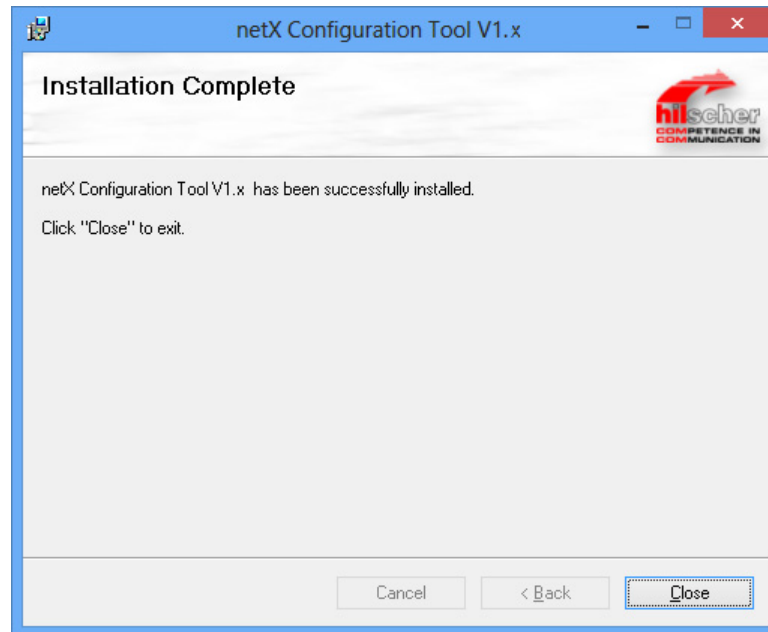


Figure 159: netX Configuration Tool - Installation complete

- Click on **Close**, to finish the installation.
- netX Configuration Tool is installed and can be started via **Start > All Programs > Hilscher GmbH > netX Configuration Tool**.

Operating Instruction Manual and Online Help



A description of the user interface of the configuration program netX Configuration Tool and for configuration and diagnosis of Slave devices cifX using this tool, see the Operating Instruction Manual netX Configuration Tool for cifX, comX and netJACK, Configuration of Real-Time Ethernet and fieldbus devices (cifX comX netJACK Configuration by netX Configuration Tool OI XX EN.pdf) on the Communication Solutions DVD to your device or on www.hilscher.com.

The netX Configuration Tool contains an integrated online help facility.

- To open the online help in netX Configuration Tool, click on **Help** or press the **F1** key.

6.5 Uninstalling under Windows XP

Requirements



Note: You need administrator privileges under Windows® XP to uninstall the Slave configuration tool netX Configuration Tool from your PC.

Preparation

In order to uninstall the Slave configuration tool netX Configuration Tool:

- Close all application programs.

Steps for Uninstalling

1. First start the control panel of Microsoft Windows XP®.

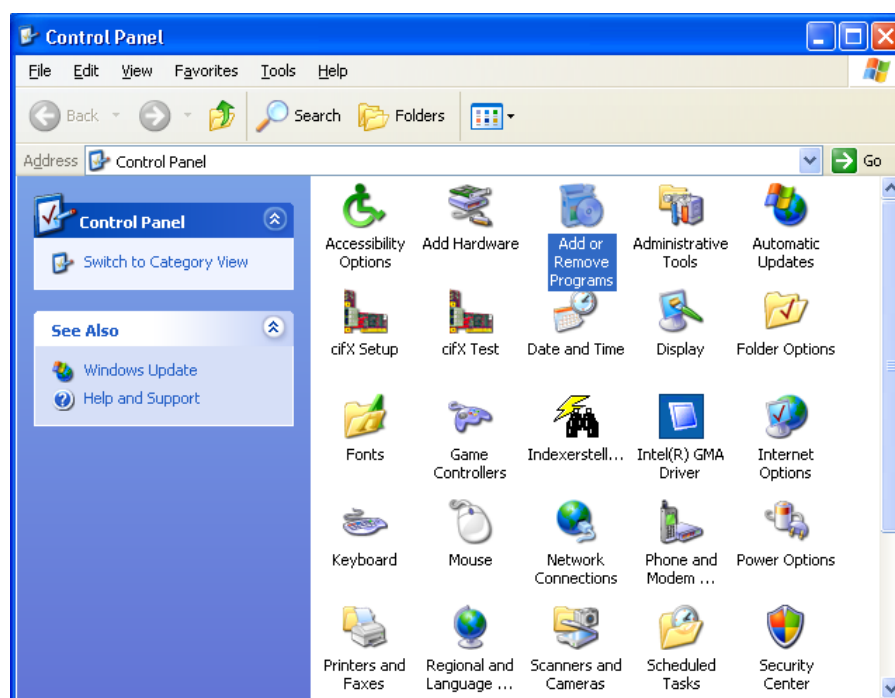


Figure 160: Windows Control Panel - Add or Remove Programs

- Double click on **Add or Remove Programs** in order to open the list.

- The window **Add or Remove Programs** for changing and removing Windows programs opens.

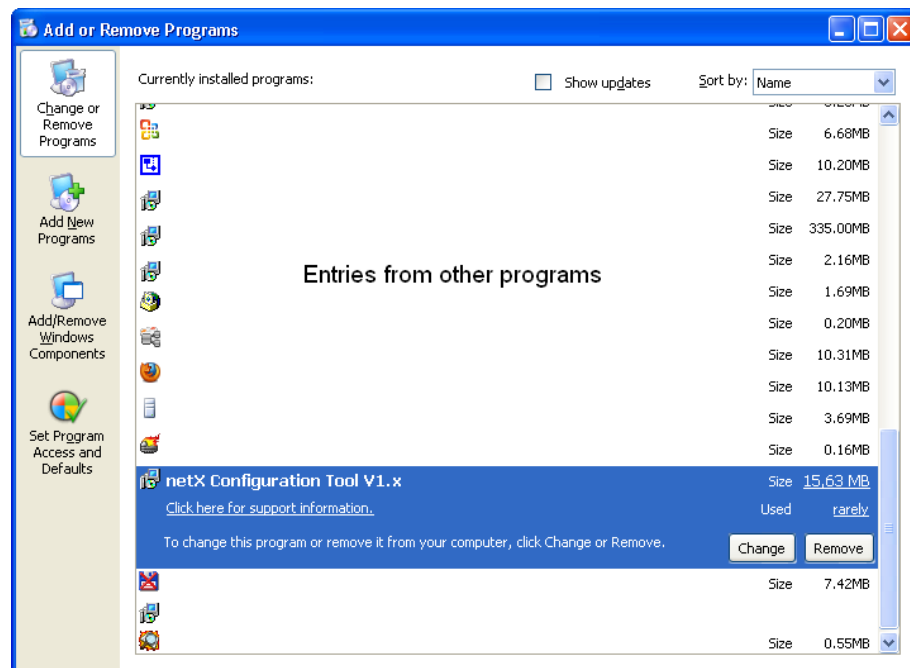


Figure 161: Windows – Add or Remove Programs

- Now search for the entry for netX Configuration Tool.
- Click on **Remove** > to start the uninstalling.
- At first, a confirmation box for safety purposes appears:

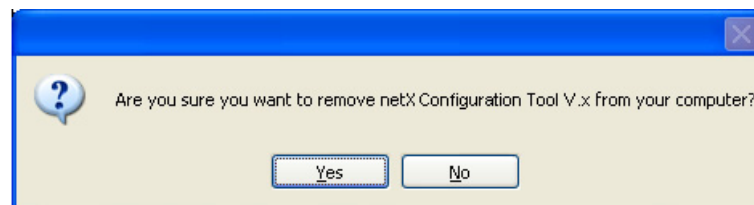


Figure 162: netX Configuration Tool Confirmation Box

- Click on **Yes** in order to perform the uninstalling.
- Now netX Configuration Tool is being uninstalled. This may take some minutes.

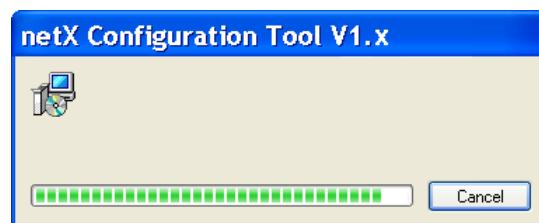


Figure 163: netX Configuration Tool Uninstalling Progress

- Wait until netX Configuration Tool has been uninstalled and thus been removed from the PC.

6.6 Uninstalling under Windows 7

Requirements



Note: You need administrator privileges under Windows® 7 to uninstall the Slave configuration tool netX Configuration Tool from your PC.

Preparation

In order to uninstall the Slave configuration tool netX Configuration Tool:

- Close all application programs.

Steps for Uninstalling

1. Open **Start**

- Click on **Start**

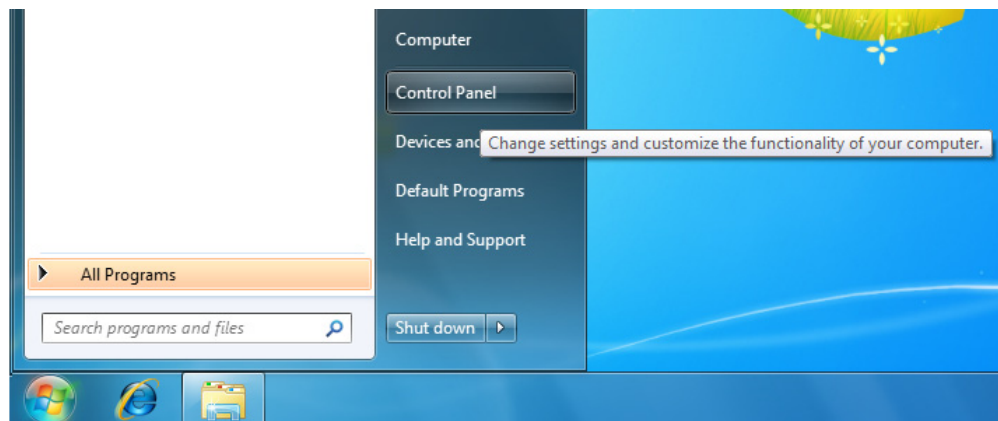


Figure 164: Start > Control Panel

- Click on **Control Panel**.

➤ The window **Adjust your computer's settings** is displayed.

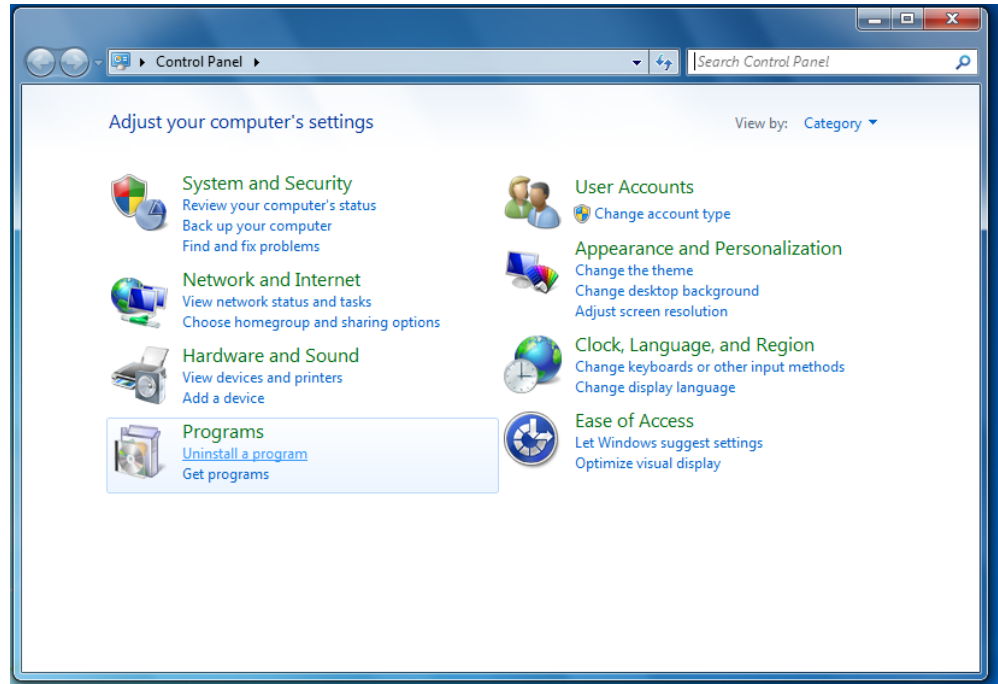


Figure 165: Window Adjust your Computer's Settings

2. Click on **Uninstall program**.

➤ The window **Uninstall or change programs** is displayed.

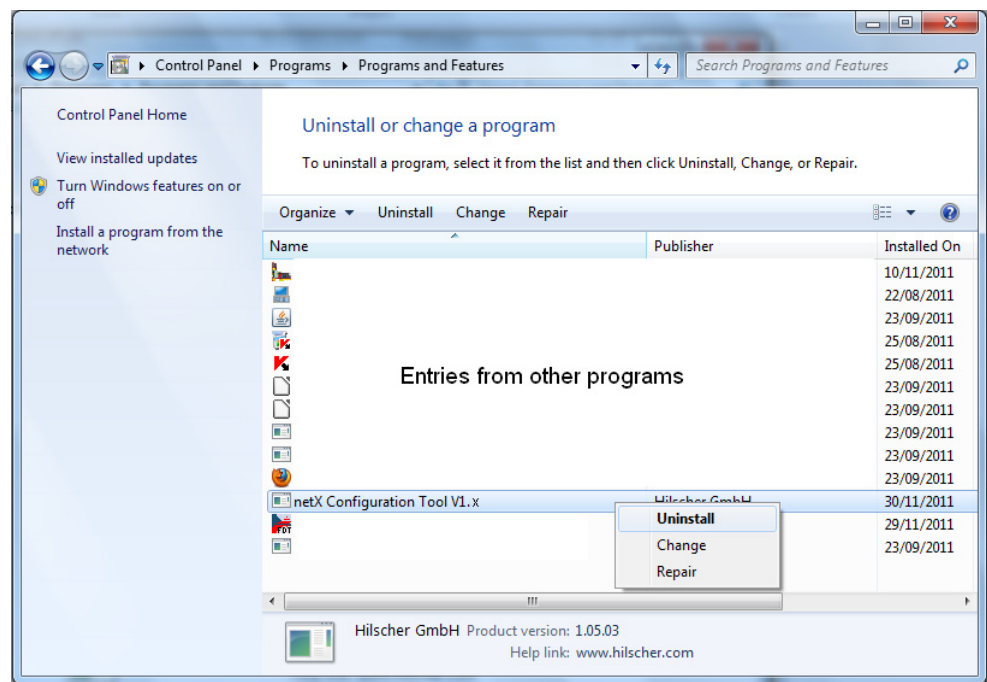


Figure 166: Control Panel - Uninstall or Change Programs

3. Uninstalling netX Configuration Tool.

- Now search for the entry for netX Configuration Tool.
- Right click on *netX Configuration Tool*.
- In the context menu click on **Uninstall** to start the uninstalling.

➤ At first, a confirmation dialog appears:

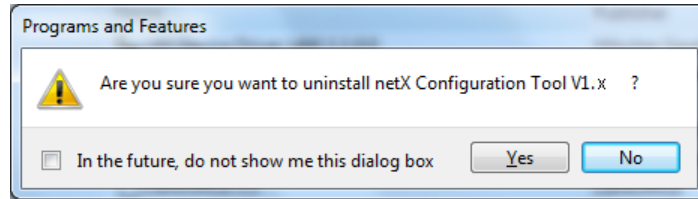


Figure 167: Programs and Features

➤ Click on **Yes** in order to perform the uninstalling.

➤ Preparing to remove:

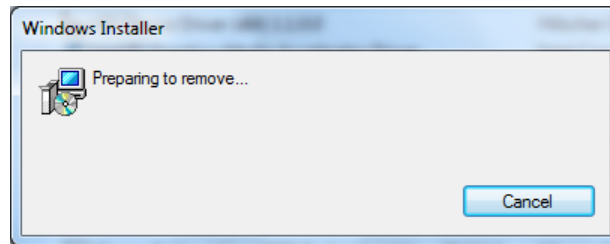


Figure 168: Windows Installer - Preparing to remove

➤ A Windows® safety questions appears.

➤ Click in the Windows® security question on **Yes**.

➤ Now netX Configuration Tool is being uninstalled. This may take some minutes.

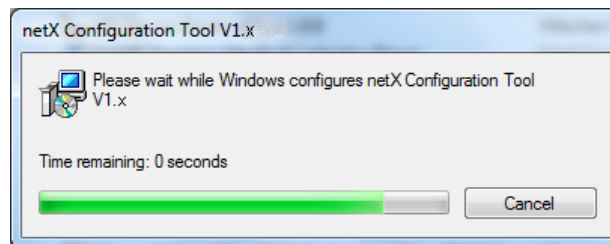


Figure 169: netX Configuration Tool Uninstalling Progress

➤ Wait until netX Configuration Tool has been uninstalled and thus been removed from the PC.

6.7 Uninstalling under Windows 8

Requirements



Note: You need administrator privileges under Windows® XP to uninstall the Slave configuration tool netX Configuration Tool from your PC.

Preparation

In order to uninstall the Slave configuration tool netX Configuration Tool:

- Close all application programs.

Steps for Uninstalling

1. Open Windows® 8 Start Screen.
 - Press the keys **[Ctrl]** and **[ESC]**.

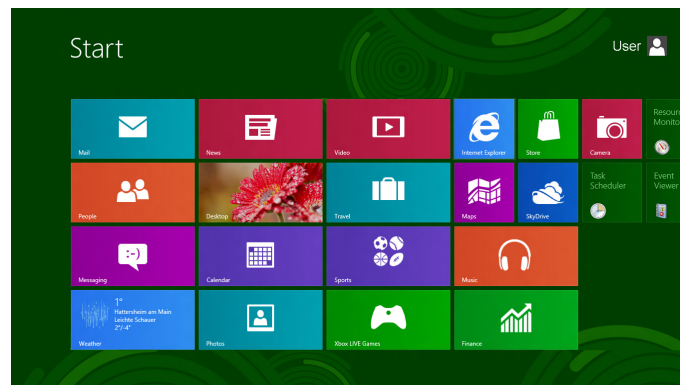


Figure 170: Start Screen Windows 8

- Press the keys **[Win]** and **[F]**.
- Select **Settings**.
- Enter **Uninstall a program** into the search field.

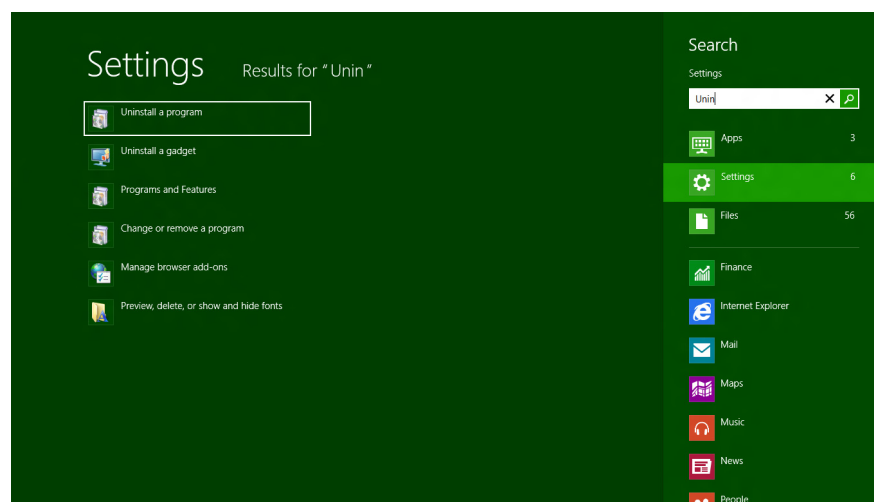


Figure 171: Uninstall a program

2. Click on **Uninstall program**.
 - The window **Uninstall or change programs** is displayed.

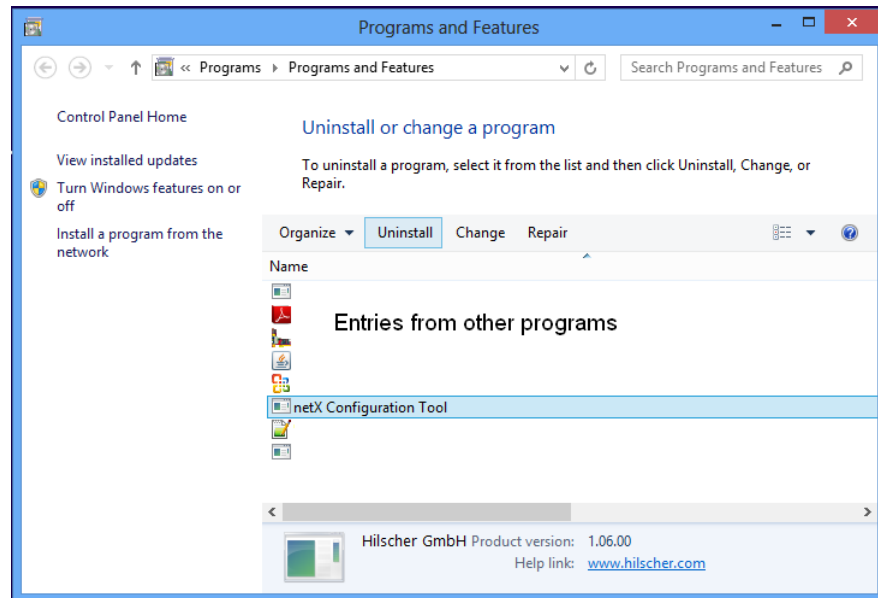


Figure 172: Control Panel - Uninstall or Change Programs

3. Uninstalling netX Configuration Tool.

- Now search for the entry for netX Configuration Tool.
- Right click on *netX Configuration Tool*.
- In the context menu click on **Uninstall** to start the uninstalling.

➤ At first, a confirmation dialog appears:

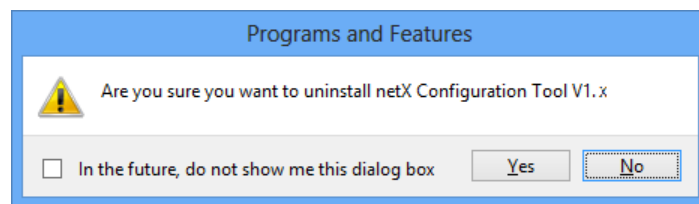


Figure 173: Programs and Features

- Click on **Yes** in order to perform the uninstalling.

➤ Preparing to remove:

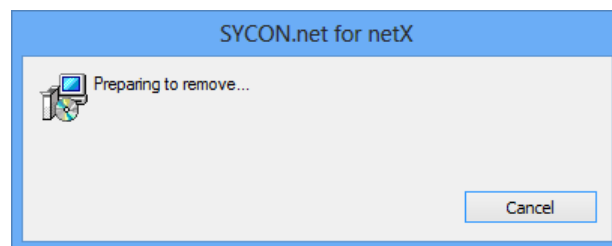


Figure 174: Windows Installer - Preparing to remove

- A Windows® safety questions appears.
- Click in the Windows® security question on **Yes**.
- Now netX Configuration Tool is being uninstalled. This may take some minutes.

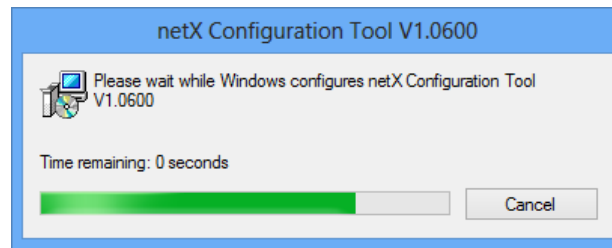


Figure 175: netX Configuration Tool Uninstalling Progress

- Wait until netX Configuration Tool has been uninstalled and thus been removed from the PC.

7 PC Cards cifX PC/104 (ISA)

7.1 System Requirements



Note: To operate a **PC Card cifX PC/104 (ISA)** in a PC, the PC has to provide a free ISA memory area of 16 Kbyte in the memory range C0000 to FBFFF. If the PC card cifX should be operated with interrupt, then the PC must provide additionally a free ISA interrupt.

7.2 Installation under Windows XP

Requirements

The cifX Device Driver was already installed on the used PC. If this is not the case yet, then run the setup program cifX Device Driver Setup.exe. This setup program installs the driver and the required INF files.



Note: To operate a PC Card cifX PC/104 (ISA) in a PC, the PC has to provide a free ISA memory area of 16 Kbyte in the memory range C0000 to FBFFF. If the PC card cifX should be operated with interrupt, then the PC has to provide additionally a free ISA interrupt.

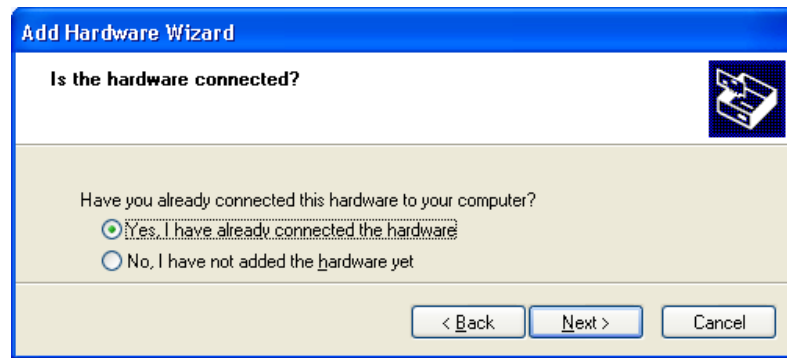
Installation steps

Do the following steps to install a PC Card cifX PC/104 (ISA), e. g. to reserve the memory range and if necessary one interrupt at the operating system for the PC card cifX:

1. Start the Hardware Wizard
 - Click **Start > Settings > Control Panel**.
 - Then click **Add Hardware**.

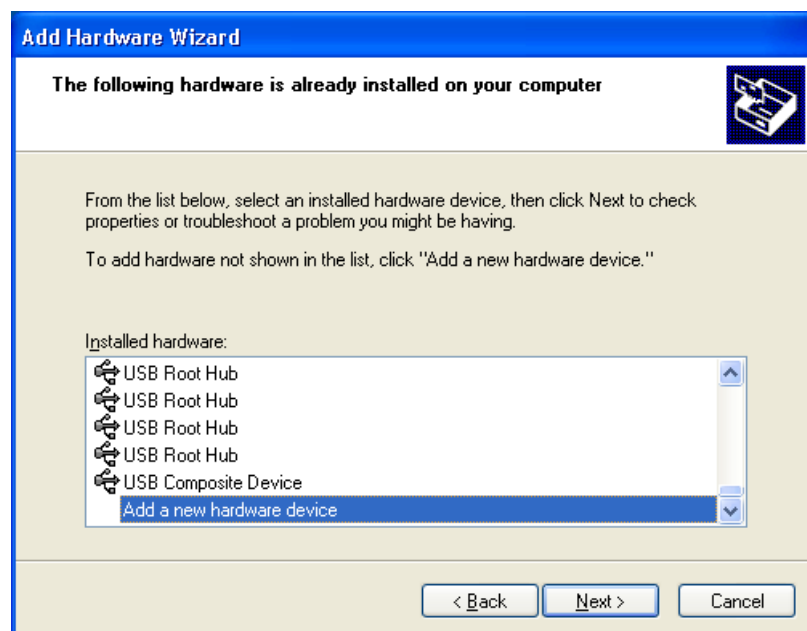


- Click **Next >**.

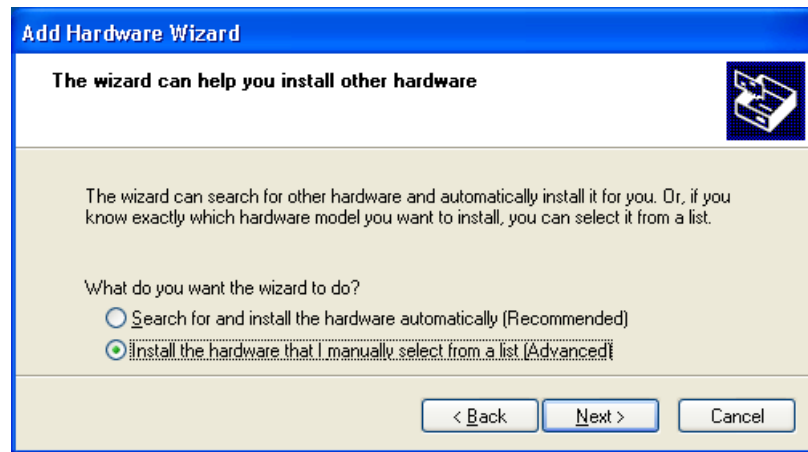


2. Hardware Wizard

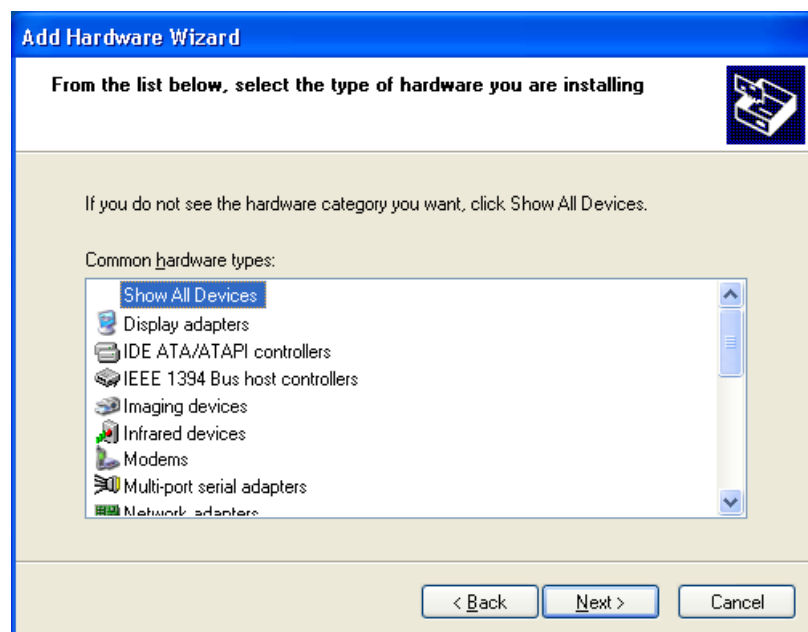
- Select **Yes, I have already connected the hardware.**
- Click **Next >.**
- Move the scroll bar to the bottom to display the end of the list **Installed Hardware.**
- Select **Add a new hardware device.**



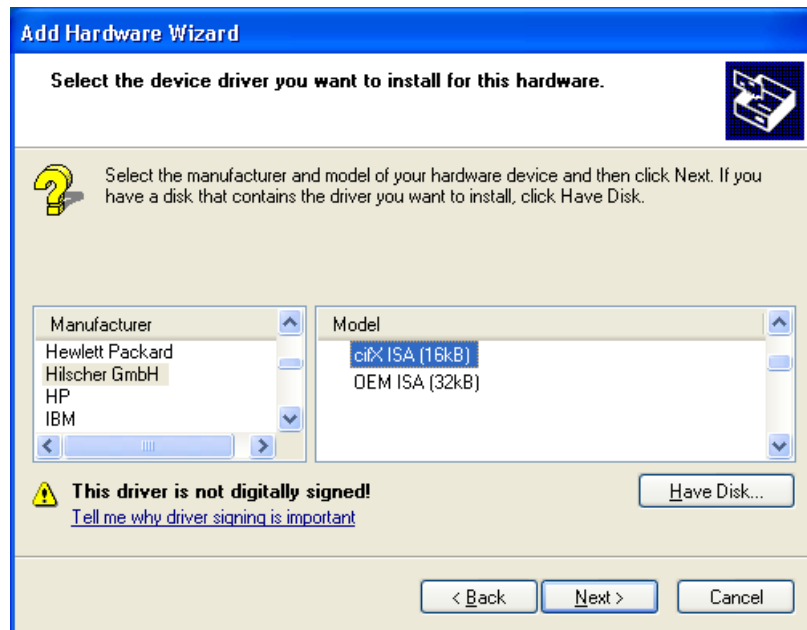
- Click **Next >.**
- Select **Install the hardware that I manually select from a list (Advanced).**



- Click **Next >**.
- Select **Show All Devices**.



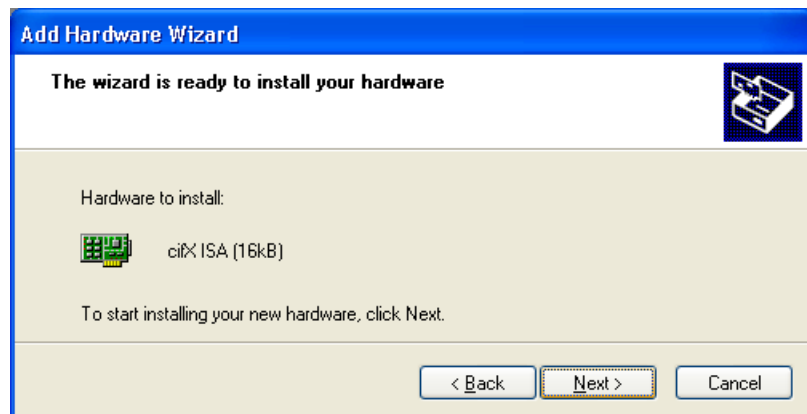
- Click **Next >**.
- Select from the list of **Manufacturer > Hilscher GmbH**.
- Then select from the list of **Model > cifX ISA (16kB)**.



➤ Click **Next >**.

3. Install

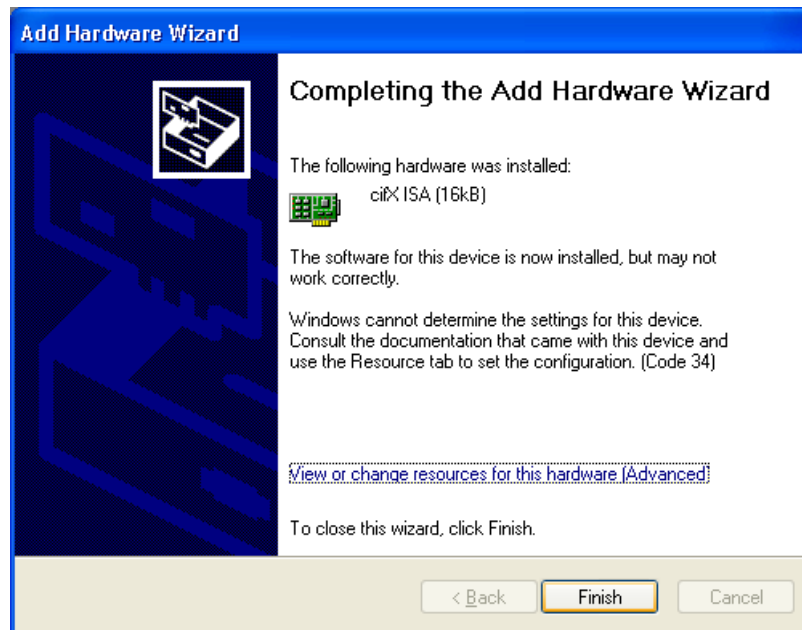
➤ Click **Next >**.



➤ The cifX Device Driver is installed.

4. Finish or change resources

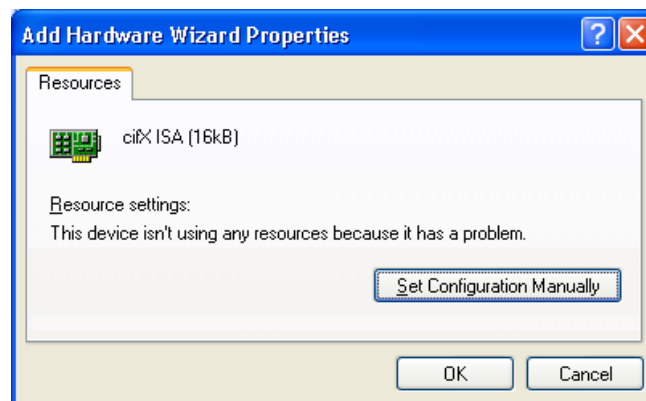
➤ If the PC Card cifX PC/104 is jumpered for memory address D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **Finish**.



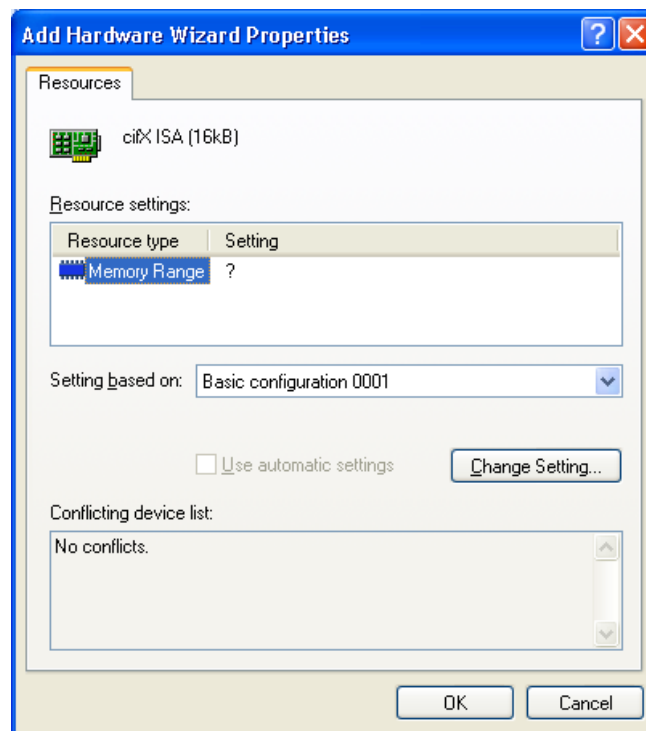
- If you have clicked on Finish, then restart the PC.
- If the PC Card cifX PC/104 is jumpered for a memory address other than D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address for polling (Basic Configuration 0001)* on page 128.
- If the PC card cifX is to be used with interrupt, then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 131.

Select Memory Address for polling (Basic Configuration 0001)

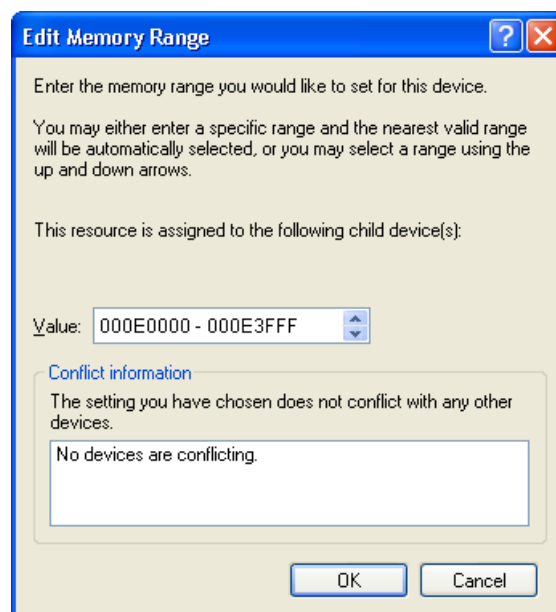
- Click **Set Configuration Manually**.



- At **Settings based on select Basic configuration 0001**.
- Select **Memory Range**.

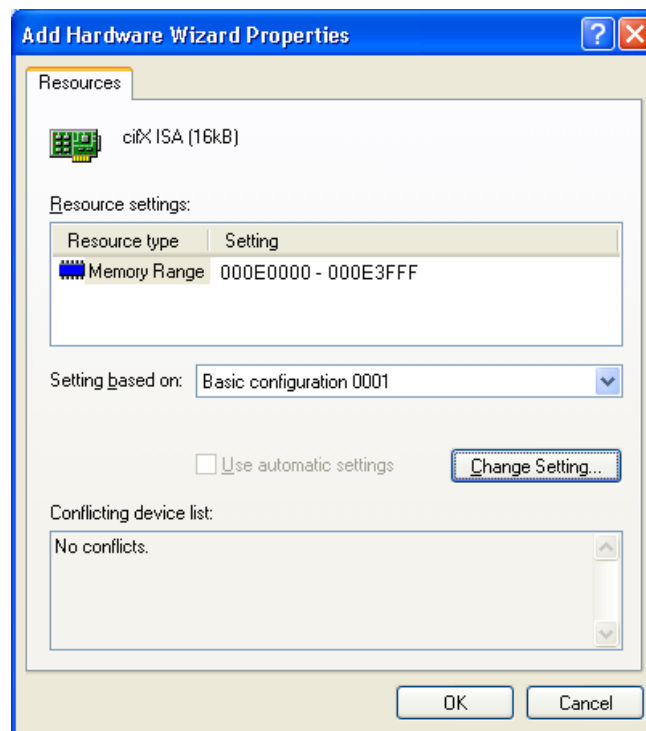


- Click **Change Settings**.
- Set the memory address: e. g. address E0000.

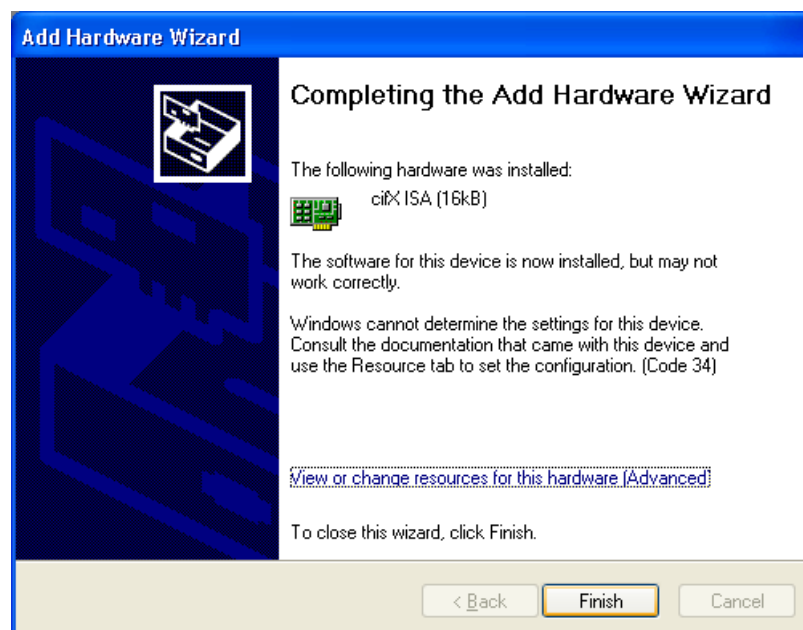


- Click **OK**.





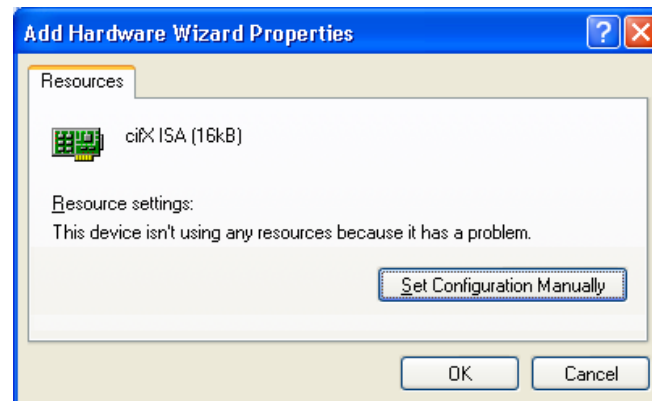
- Click **OK**.
- Click **Finish**.



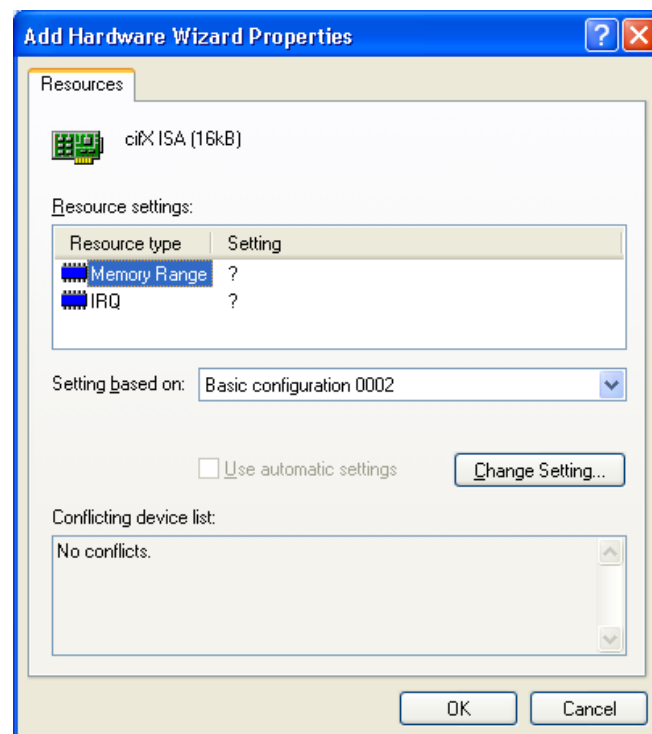
- Restart the PC.

Select Memory Address and interrupt (Basic Configuration 0002)

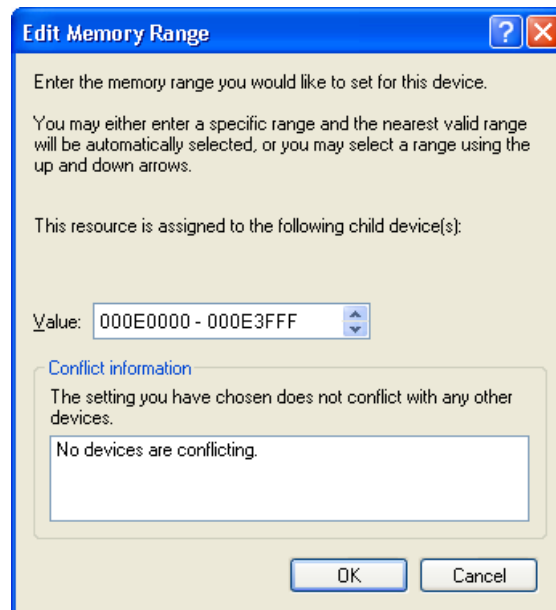
- Click **Set Configuration Manually**.



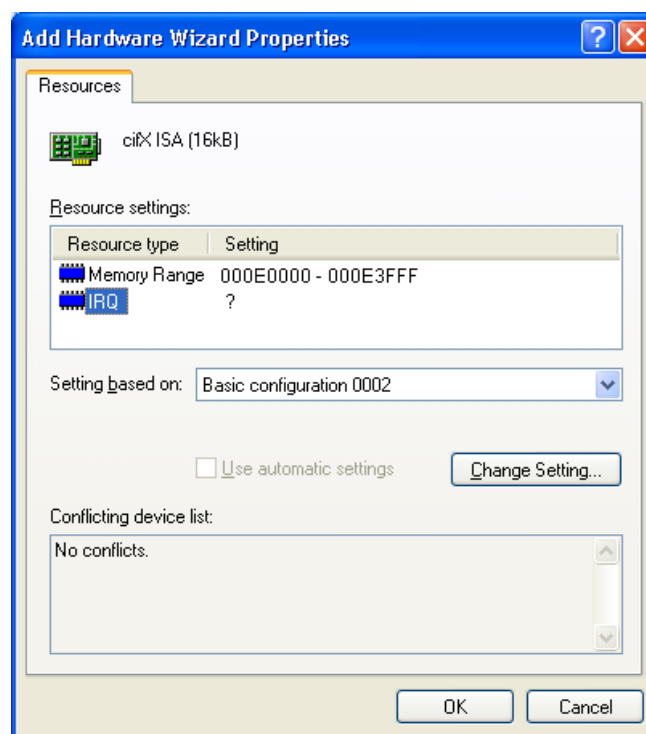
- At **Settings based on** select **Basic configuration 0002**.
- Select **Memory Range**.



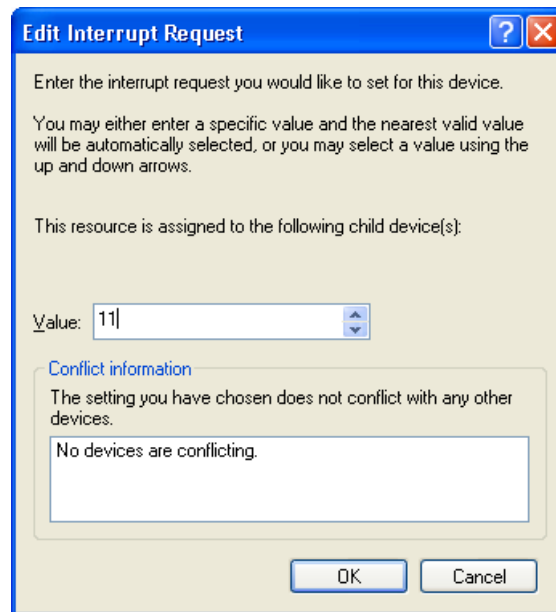
- Click **Change Settings**.
- Set the memory address: e. g. address E0000.



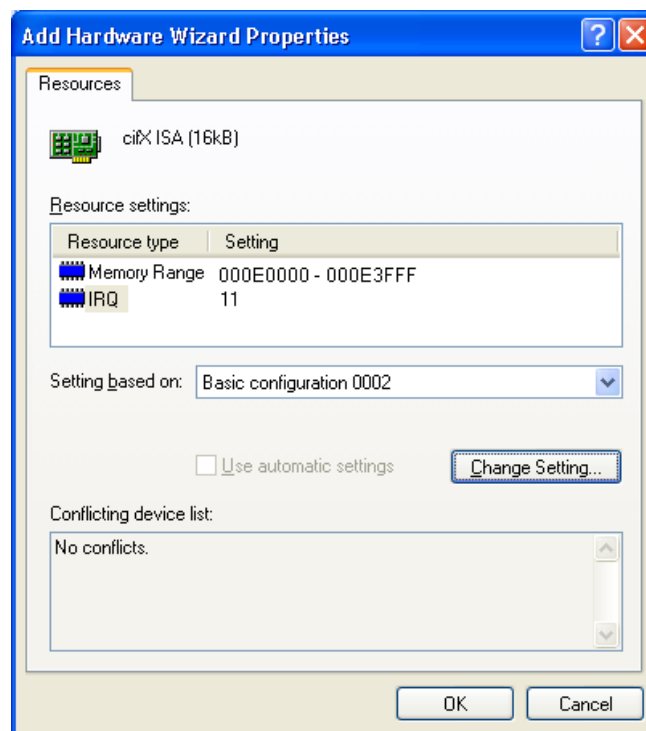
- Click **OK**.
- Select **IRQ**.



- Click **Change Settings**.
- Set the interrupt number: e. g. interrupt 11.



➤ Click **OK**.



➤ Click **OK**.

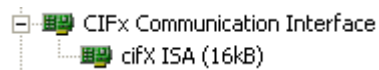
➤ Click **Finish**.



- Restart the PC.

Check in the Device Manager if the PC Card cifX PC/104 (ISA) is installed properly

- Open the **Device Manager**: Desktop symbol **My Computer** > right mouse button **Properties** > Tab **Hardware** > button **Device Manager**.
- Check if the display in the **Device Manager** shows **cifX ISA (16kB)**.



If an exclamation mark is shown with **cifX ISA (16kB)**.

- If an exclamation mark is shown with **cifX ISA (16kB)**, then either a resource conflict exists or the requested resources are not available.
- Select from the context menu on **cifX ISA (16kB)** > **Properties**.
- Select the tab **Resources**.
- Change the setting for the memory range respectively the interrupt with **Set Configuration Manually**, as described in section *Select Memory Address for polling (Basic Configuration 0001)* on page 128 or in section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 131.

7.3 Installation under Windows 7

Requirements

The cifX Device Driver was already installed on the used PC. If this is not the case yet, then run the setup program cifX Device Driver Setup.exe. This setup program installs the driver and the required INF files.



Note: To operate a PC Card cifX PC/104 (ISA) in a PC, the PC has to provide a free ISA memory area of 16 Kbyte in the memory range C0000 to FBFFF. If the PC card cifX should be operated with interrupt, then the PC has to provide additionally a free ISA interrupt.

Installation steps

Do the following steps to install a PC Card cifX PC/104 (ISA), e. g. to reserve the memory range and if necessary one interrupt at the operating system for the card:

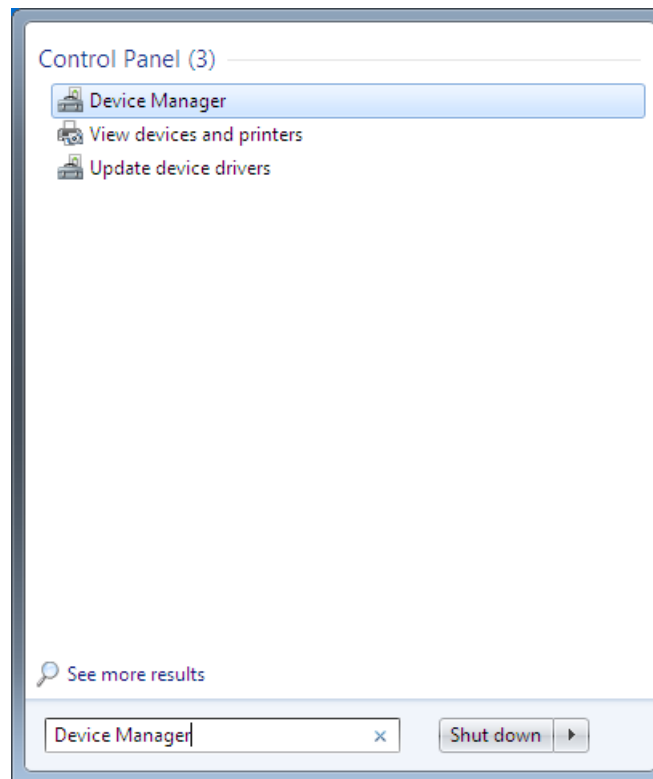
1. Open Start

- Click on Start



2. Search and start the Device Manager.

- Enter **Device Manager** into the search field.

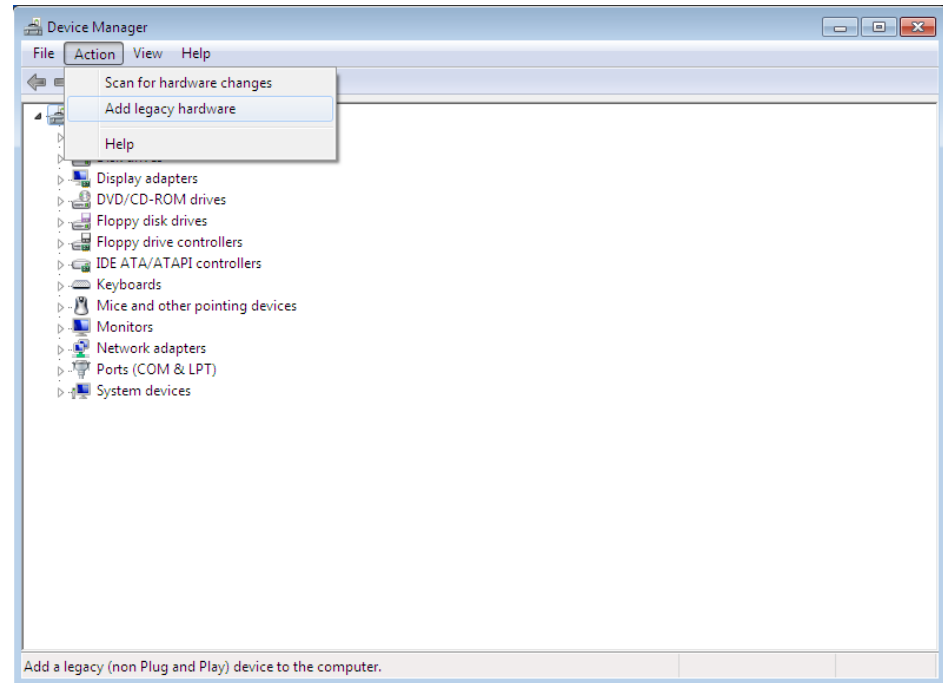


- Click on Device Manager.

- The Device Manager starts.

3. Add legacy hardware

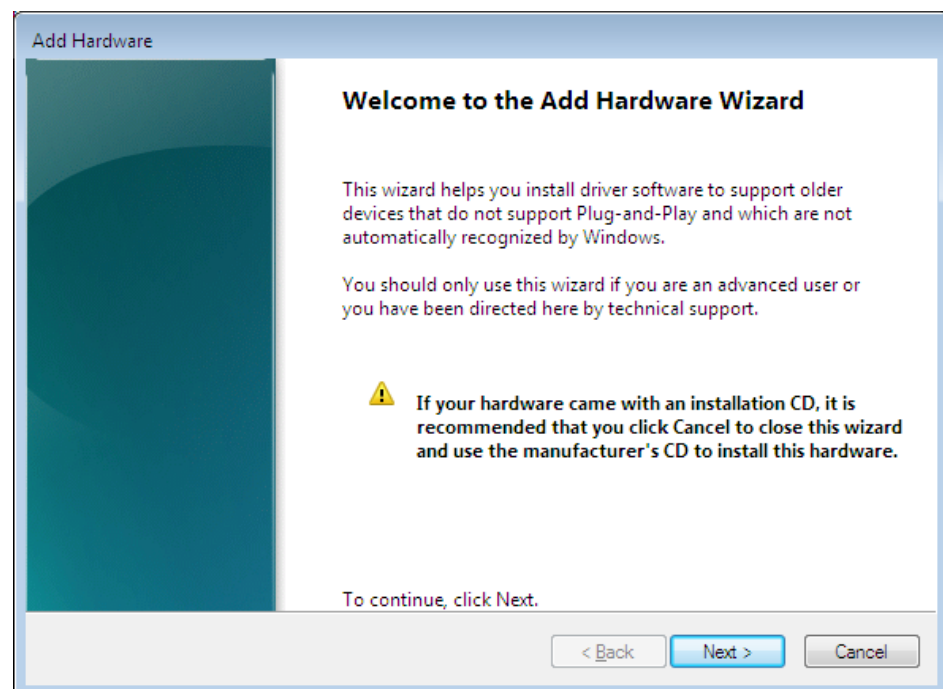
- In the Device manager click on the any element of the tree, e. g. select the top element of the tree.
- Select from the menu **Action > Add legacy hardware**.



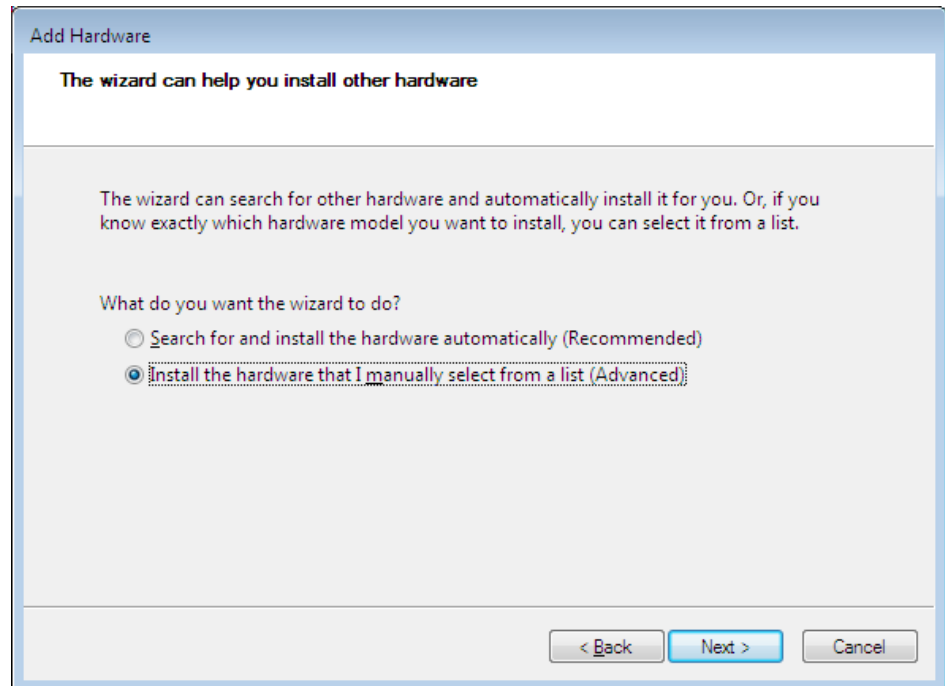
➤ The Hardware Wizard starts.

4. Hardware Wizard

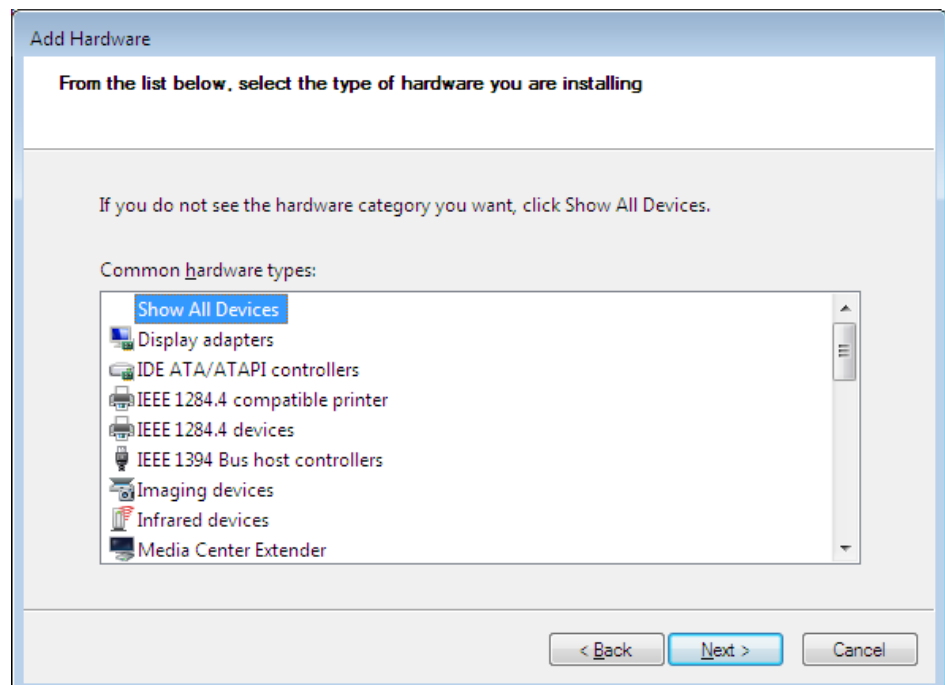
- Click **Next >**.



- Select **Install the hardware that I manually select from a list (Advanced)**.

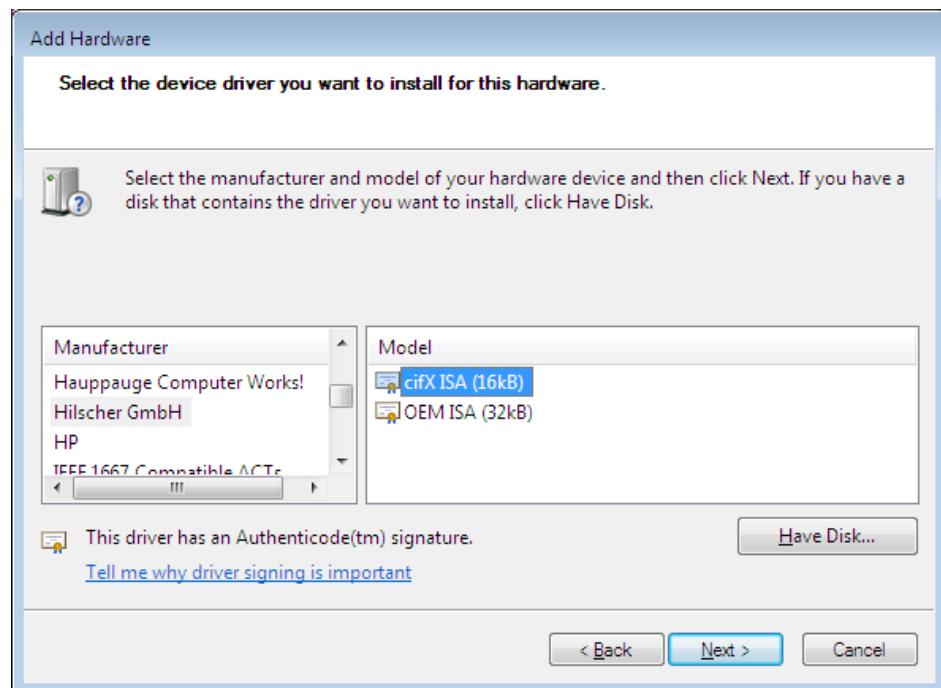


- Click **Next >**.
- Select **Show All Devices**.



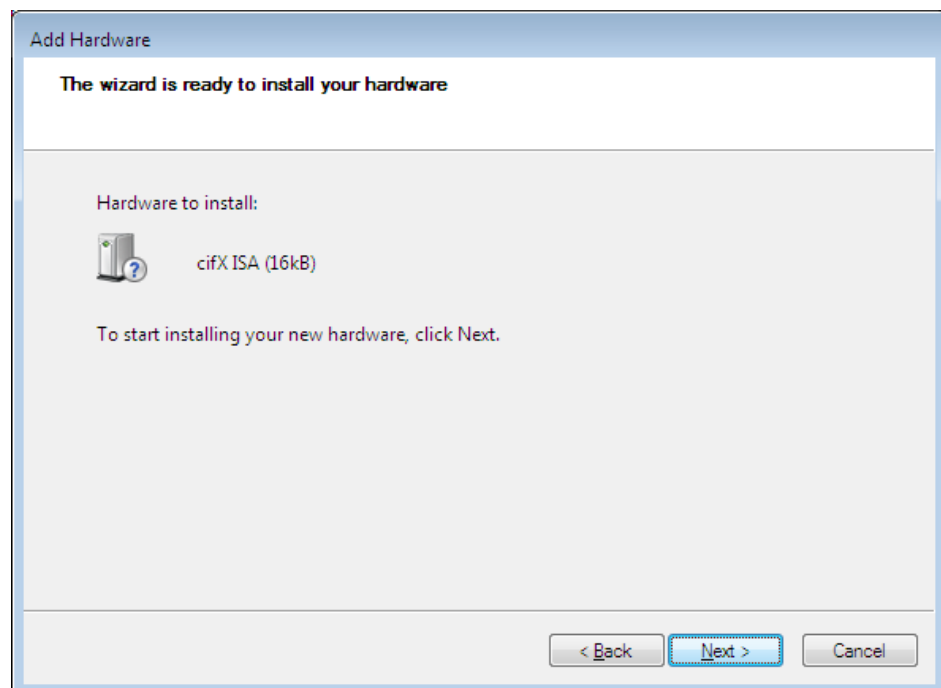
- Click **Next >**.

- Wait until Windows® has created the device list. This can take a while.
- Select from the list of **Manufacturer** > **Hilscher GmbH**.
- Then select from the list of **Model** > **cifX ISA (16kB)**.



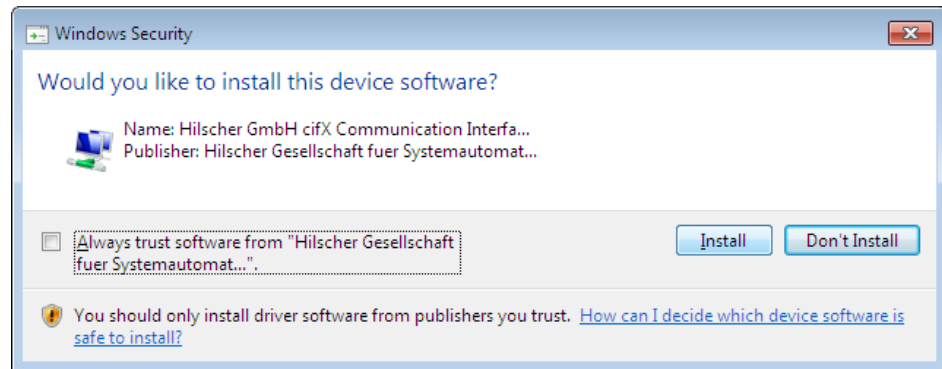
- Click **Next** >.

- Click **Next** >.



5. Install

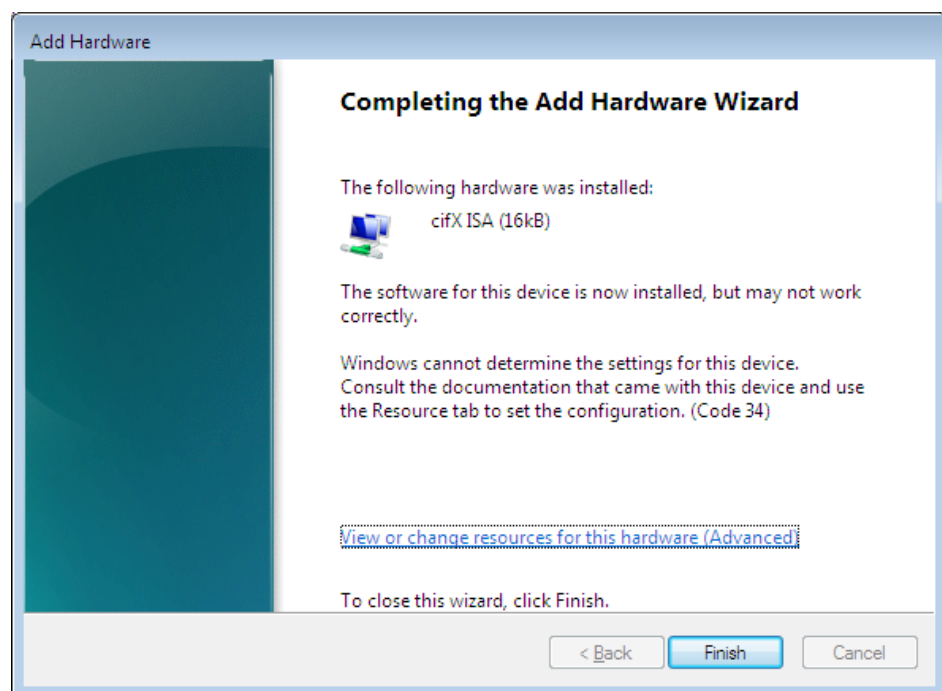
- If the Windows® Security asks, then click **Install**.



- The cifX Device Driver is installed.

6. Finish or change resources.

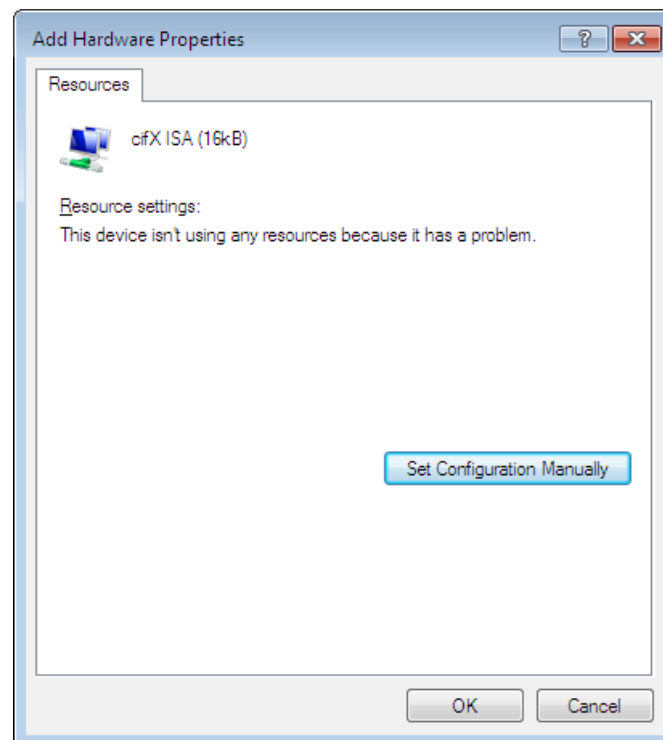
- If the PC Card cifX PC/104 is jumpered for memory address D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **Finish**.



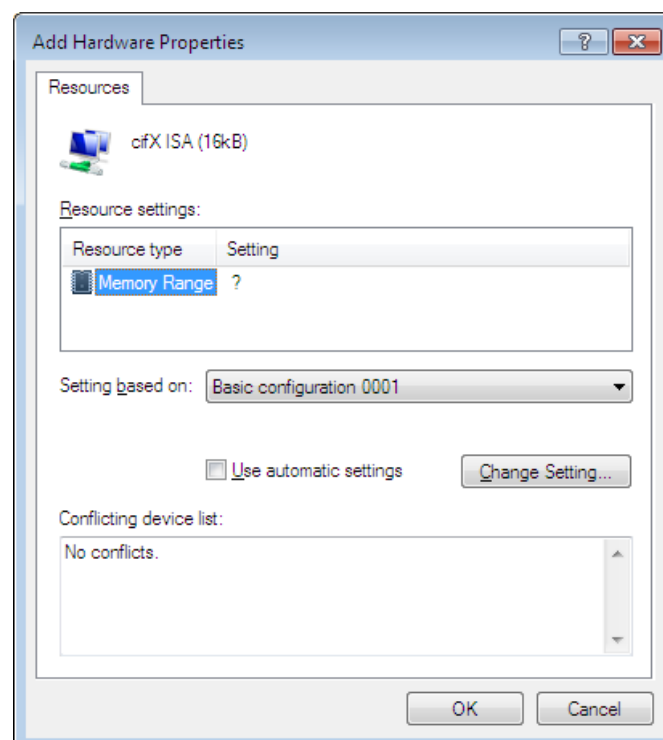
- If you have clicked on Finish, then restart the PC.
- If the PC Card cifX PC/104 is jumpered for a memory address other than D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address for polling (Basic Configuration 0001)* on page 140.
- If the PC Card cifX PC/104 is to be used with interrupt, then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 142.

Select Memory Address for polling (Basic Configuration 0001)

- Click **Set Configuration Manually**.

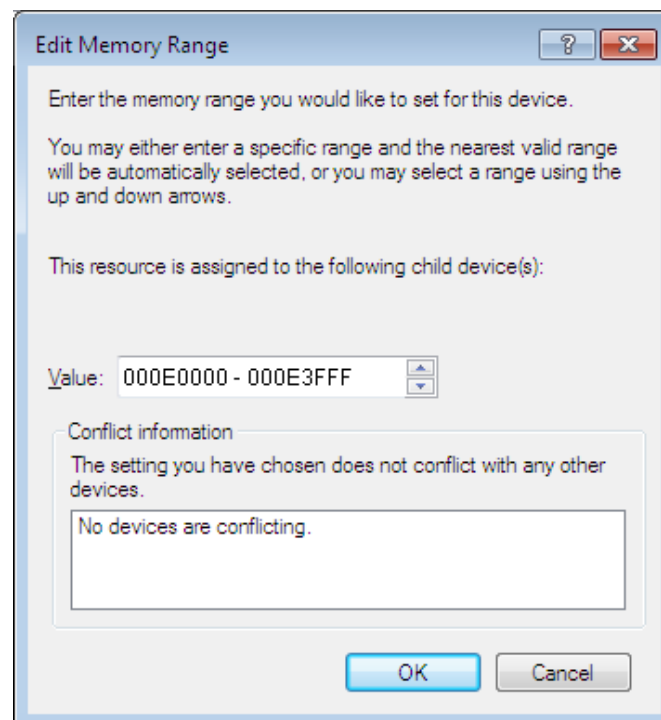


- Uncheck **Use automatic settings**.
- At **Settings based on** select **Basic configuration 0001**.
- Select **Memory Range**.

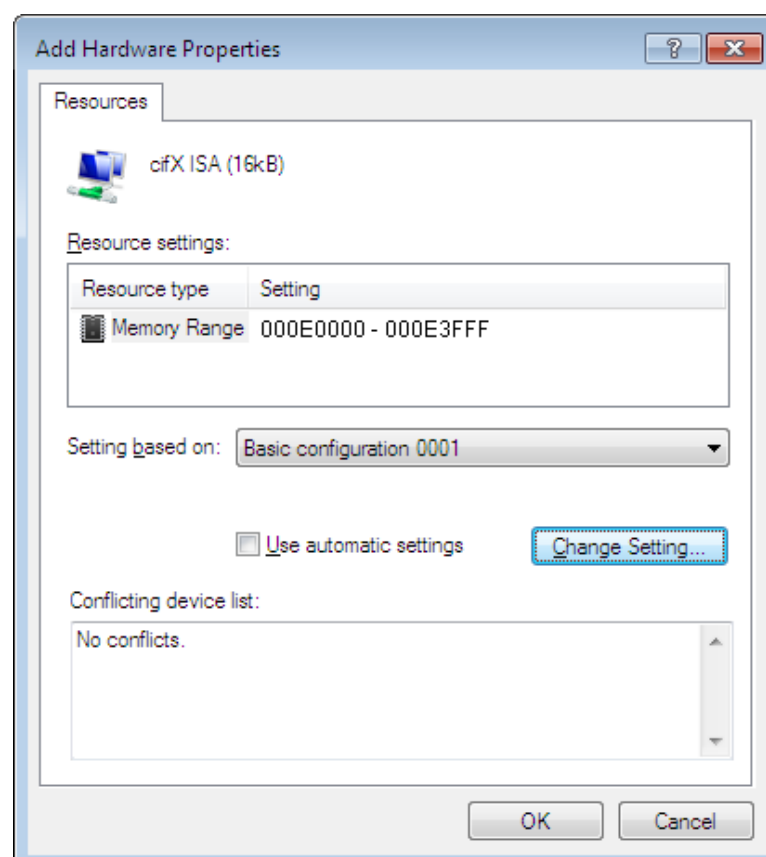


- Click **Change Settings**.

- Set the memory address: e. g. address E0000.

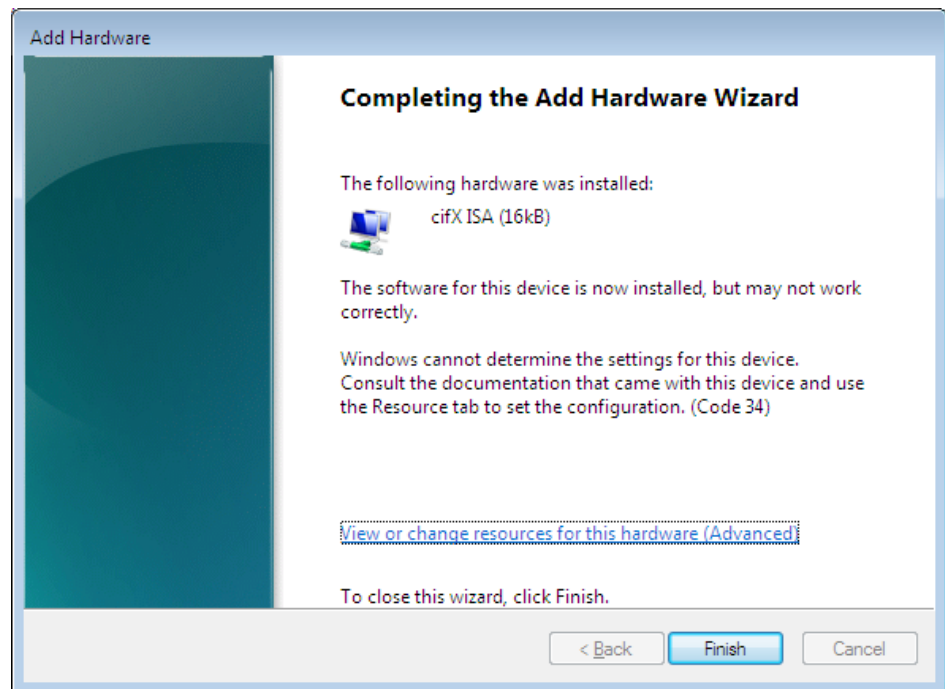


- Click **OK**.



- Click **OK**.

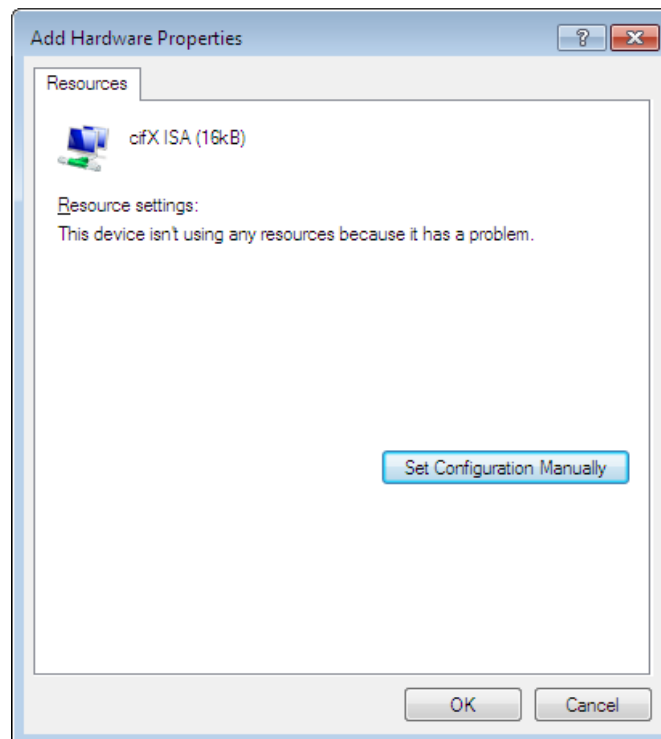
- Click **Finish**.



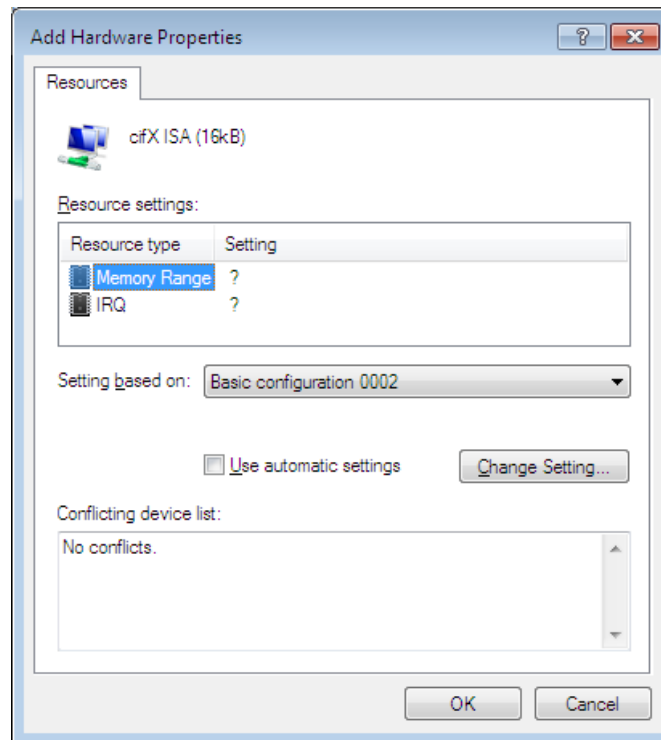
- Restart the PC.

Select Memory Address and interrupt (Basic Configuration 0002)

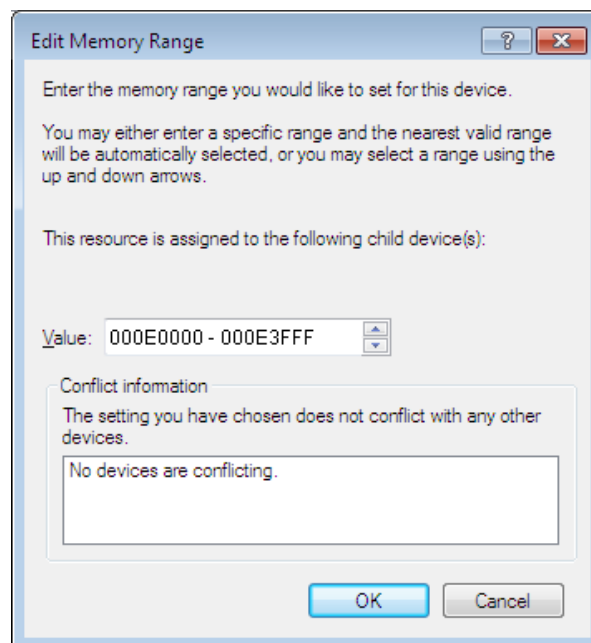
- Click **Set Configuration Manually**.



- Uncheck **Use automatic settings**.
- At **Settings based on** select **Basic configuration 0002**.
- Select **Memory Range**.

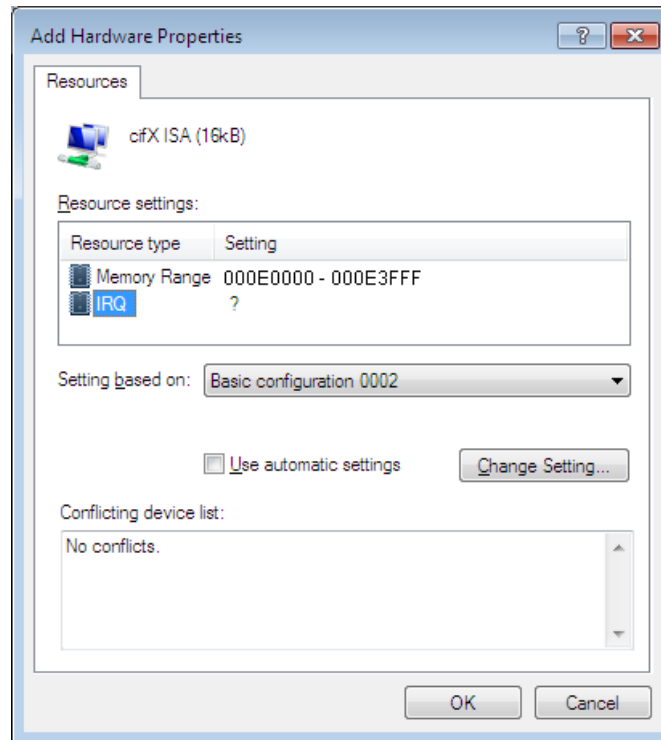


- Click **Change Settings**.
- Set the memory address: e. g. address E0000.

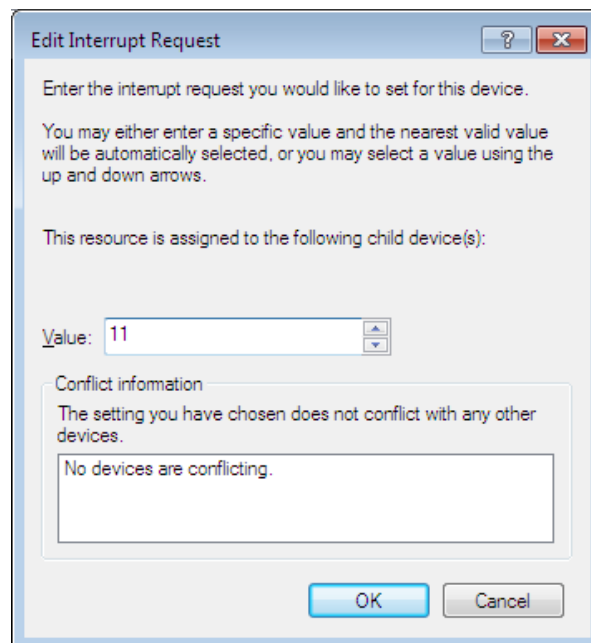


- Click **OK**.

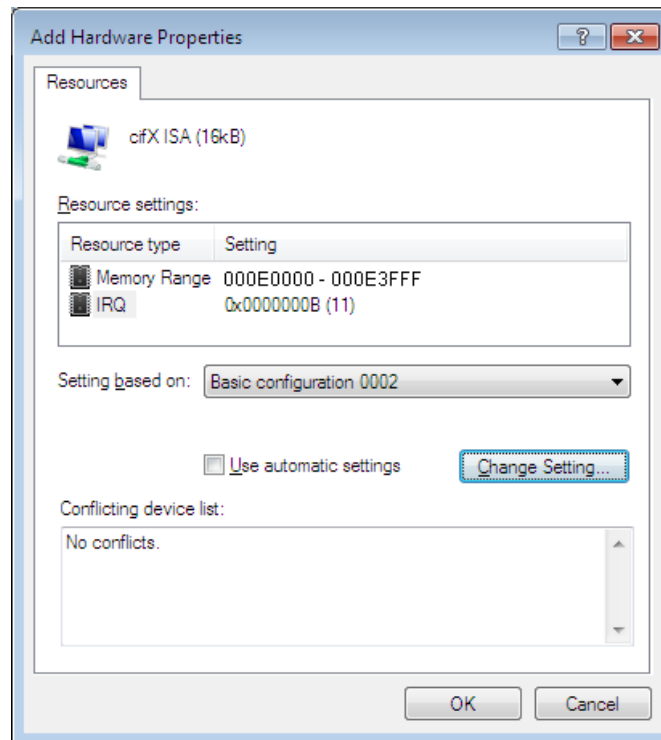
- Select **IRQ**.



- Click **Change Settings**.
- Set the interrupt number: e. g. interrupt 11.

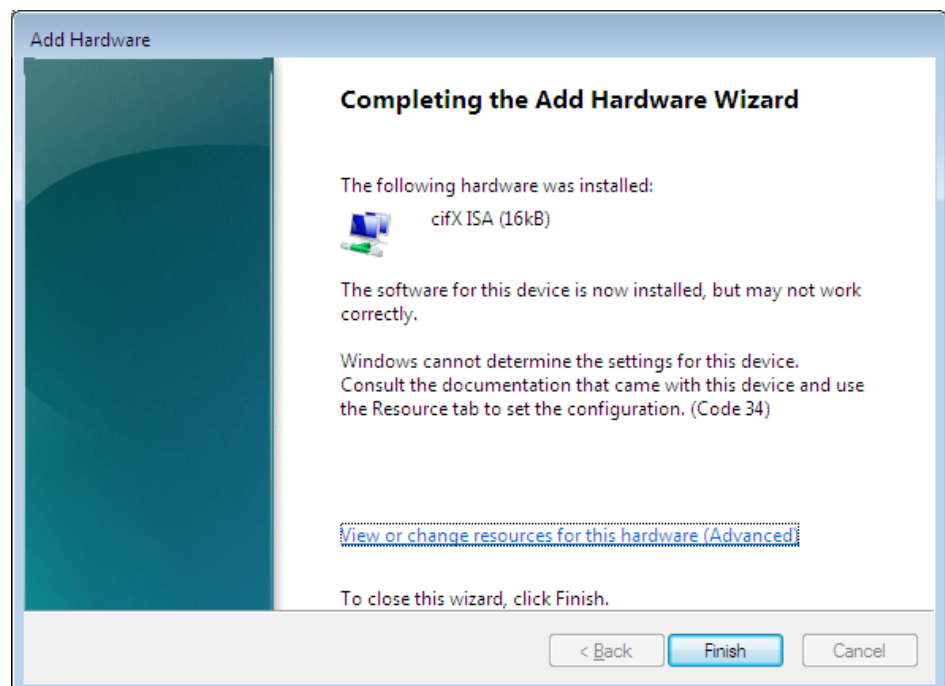


- Click **OK**.



➤ Click **OK**.

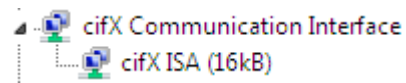
➤ Click **Finish**.



➤ Restart the PC.

Check in the Device Manager if the PC Card cifX PC/104 (ISA) is installed properly

- Open the **Device Manager**.
- Check if the display in the **Device Manager** shows **cifX ISA (16kB)**.



If an exclamation mark is shown with **cifX ISA (16kB)**.

- If an exclamation mark is shown with **cifX ISA (16kB)**, then either a resource conflict exists or the requested resources are not available.
- Select from the context menu on **cifX ISA (16kB)** > **Properties**.
- Select the tab **Resources**.
- Change the setting for the memory range respectively the interrupt with **Set Configuration Manually**, as described in section *Select Memory Address for polling (Basic Configuration 0001)* on page 140 or in section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 142.

8 Hardware Settings

8.1 Slot Number (Card ID)

Only for: CIFX 50-DP, CIFX 50-CO, CIFX 50-DN, CIFX 50-CC, CIFX 50-CP, CIFX 50E-DP, CIFX 50E-CO, CIFX 50E-DN, CIFX 50E-CC, CIFX 50E-CP and CIFX 50-2ASM.

This section describes how the **Slot Number (Card ID)** is displayed in the cifX Device Driver setup program and in the configuration software SYCON.net.

8.1.1 cifX Device Driver Setup

Precondition: Previously a **Slot Number (Card ID)** between 1 and 9 has been set at the PC Card cifX (refer to User Manual *PC Cards cifX PCI, PCIe, Low Profile PCIe / PCI (CIFX 50), PCI Express (CIFX 50E), Low Profile PCI Express (CIFX 70E, CIFX 100EH)* section *Rotary Switch for Slot Number (Card ID)*).

The description below uses for **Slot Number (Card ID)** the value „1“.

1. Open the **cifX Setup** program in the control panel.
 - Select **Start > Control Panel**.
 - Double click on the **cifX Setup** symbol.
 - The cifX Driver setup program starts.
2. Select **cifX**.
 - Select under **Device List > Active Devices** the entry **cifX0** or **cifX1**.
 - The field **Slot Number** shows the **Slot Number (Card ID)** for the PC Card cifX. Here the **Slot Number (Card ID)** has the value „1“.

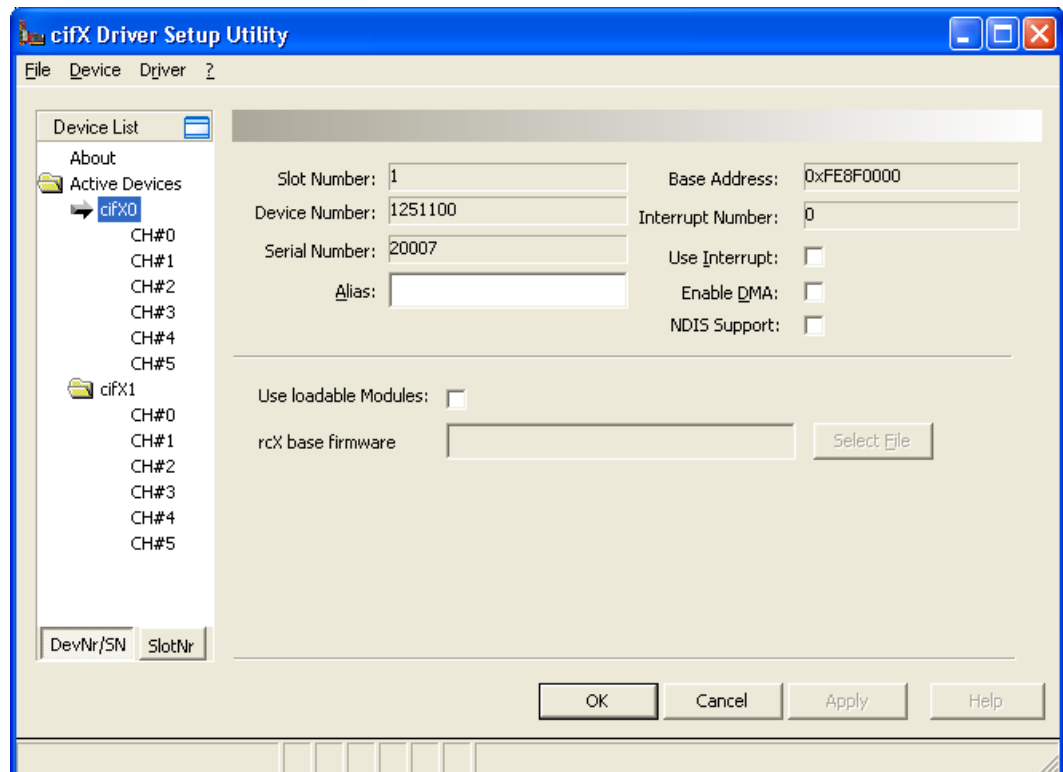


Figure 176: Slot Number (Card ID) in the cifX Device Driver Setup

Oder:

3. Switch to **SlotNr** presentation.

➤ Click under **Device List** on **SlotNr**.

➤ Click under **Device List** on **Slot 1**.

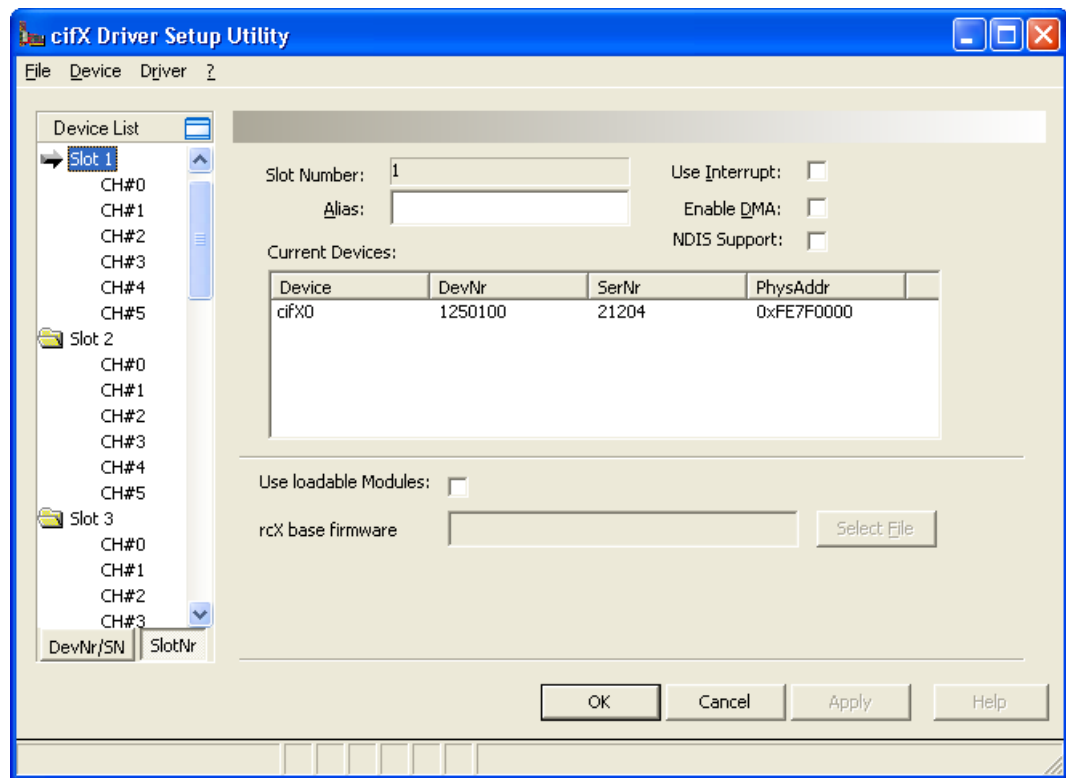


Figure 177: Slot Number (Card ID) in the cifX Device Driver Setup, „SlotNr“ selected

8.1.2 SYCON.net

In the **Device Assignment** in the column **Slot number** the **Slot-Nummer (Card ID)** is displayed preset at the PC Card cifX via the Rotary Switch Slot Number (Card ID).

The indication **n/a** means that no **Slot-Nummer (Card ID)** exists. This occurs if the PC Card cifX is not equipped with a **Rotary Switch Slot Number (Card ID)** or for PC Cards cifX equipped with a **Rotary Switch Slot Number (Card ID)** if the rotary switch is set to the value 0 (zero).

	Device	Hardware Port 0/1/2/3	Slot number	Serial number	Driver	Channel Protocol	Access path
<input type="checkbox"/>	CIFX 50-DP	-/-/PROFIBUS/-	n/a	20031	CIFX Device Driver	PROFIBUS-DP Master	...\cifx3_Ch0
<input checked="" type="checkbox"/>	CIFX 50-DP	-/-/PROFIBUS/-	1	20148	CIFX Device Driver	PROFIBUS-DP Master	...\cifx0_Ch0

Figure 178: Slot Number (Card ID) in the Configuration Software SYCON.net.

Parameter	Meaning	Range of Value / Value
Slot number	Shows the Slot Number (Card ID) preset at the PC Card cifX via the Rotary Switch Slot Number (Card ID) . The indication n/a means that no Slot-Nummer (Card ID) exists. This occurs if the PC Card cifX is not equipped with a Rotary Switch Slot Number (Card ID) or for PC Cards cifX equipped with a Rotary Switch Slot Number (Card ID) if the rotary switch is set to the value 0 (zero).	1 to 9, n/a

Table 4: Slot Number (Card ID) in the Configuration Software SYCON.net.

8.2 “DMA Mode”

This section describes how to activate the **DMA Mode** in the cifX Device Driver setup program.

Case 1: Previously a **Slot Number (Card ID)** between 1 and 9 has been set at the PC Card cifX (refer to User Manual *PC Cards cifX*, section *Rotary Switch for Slot Number (Card ID)*).

Case 2: Previously the **Slot Number (Card ID)** value 0 has been set at the PC Card cifX or the PC Card cifX is not equipped with a **Rotary Switch Slot Number (Card ID)**.

The description below refers to case 1 and uses for **Slot Number (Card ID)** the value „1“.

1. Switch to **SlotNr** presentation.
 - Click under **Device List** on **SlotNr**.
 - Click under **Device List** on **Slot 1**.
2. Activate **DMA Mode**.
 - Check **Enable DMA**.

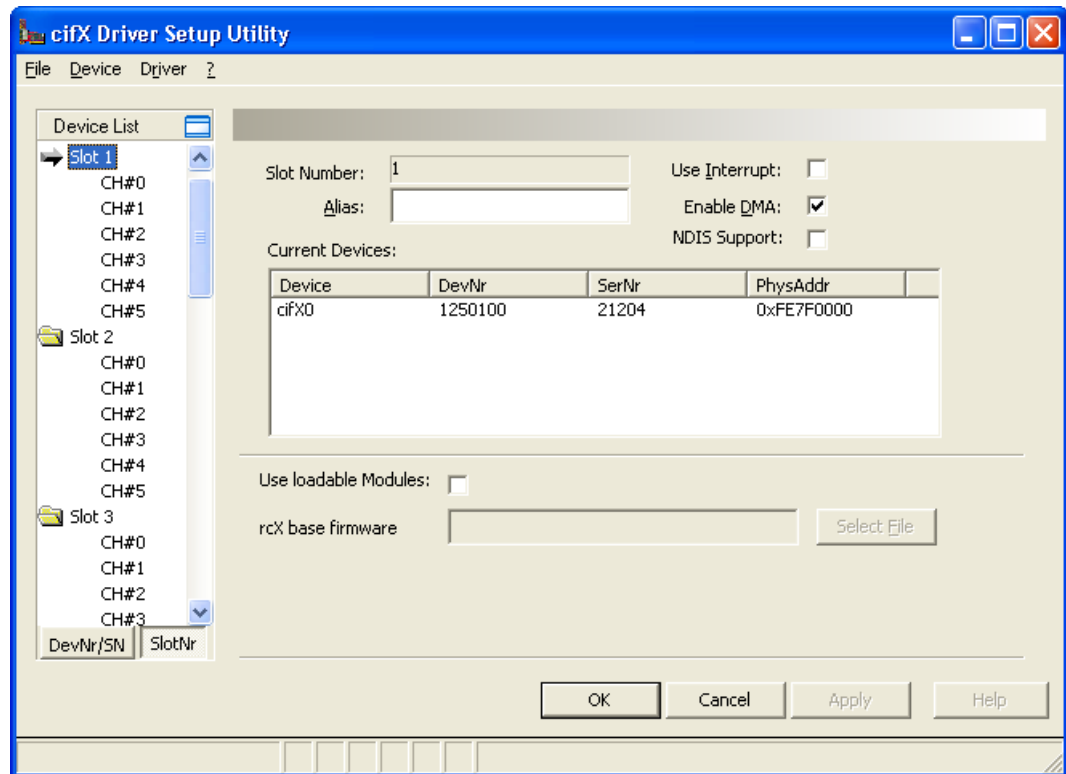


Figure 179: Activating DMA Mode in the cifX Device Driver Setup

3. Apply Settings
 - Click **Apply**
 - The **DMA Mode** is activated.

9 PC Settings

9.1 Windows Power Management PC Cards cifX PCI Express

Settings to the Microsoft Windows power management only affect the PC cards cifX PCI Express, as listed in the following table:

PC Card cifX	Part No.	PC Card cifX	Part No.
CIFX 50E-RE	1251.100	CIFX 90E-DP\F	1291.410
CIFX 50E-RE\ET	1251.105	CIFX 90E-DP\MR\F	1291.412
CIFX 50E-DP	1251.410	CIFX 90E-DP\ET\F	1291.414
CIFX 50E-CO	1251.500	CIFX 90E-DP\MR\ET\F	1291.416
CIFX 50E-DN	1251.510	CIFX 90E-CO\F	1291.500
CIFX 50E-2ASM	1253.630	CIFX 90E-CO\MR\F	1291.502
CIFX 50E-CC	1251.740	CIFX 90E-CO\ET\F	1291.504
CIFX 70E-RE	1.259.100	CIFX 90E-CO\MR\ET\F	1291.506
CIFX 70E-RE\MR	1.259.103	CIFX 90E-DN\F	1291.510
CIFX 100EH-RE\CUBE	9016.090	CIFX 90E-DN\MR\F	1291.512
CIFX 70E-DP	1.259.410	CIFX 90E-DN\ET\F	1291.514
CIFX 70E-DP\MR	1.259.413	CIFX 90E-DN\MR\ET\F	1291.516
CIFX 70E-CO	1.259.500		
CIFX 70E-CO\MR	1.259.503		
CIFX 70E-DN	1.259.510		
CIFX 70E-DN\MR	1.259.513		

Table 5: PC Cards cifX PCI Express



Important: If you install a PC card cifX PCI Express (see *Table 5: PC Cards cifX PCI Express*), you always must disable the Microsoft Windows "Link State Power Management". Otherwise, it cannot be excluded that your PC freezes during the PC card cifX PCI Express is in operation.

Shut off Windows Power Management

1. Select **Start > Control Panel**.

➤ The window **Adjust your computer's settings** appears:

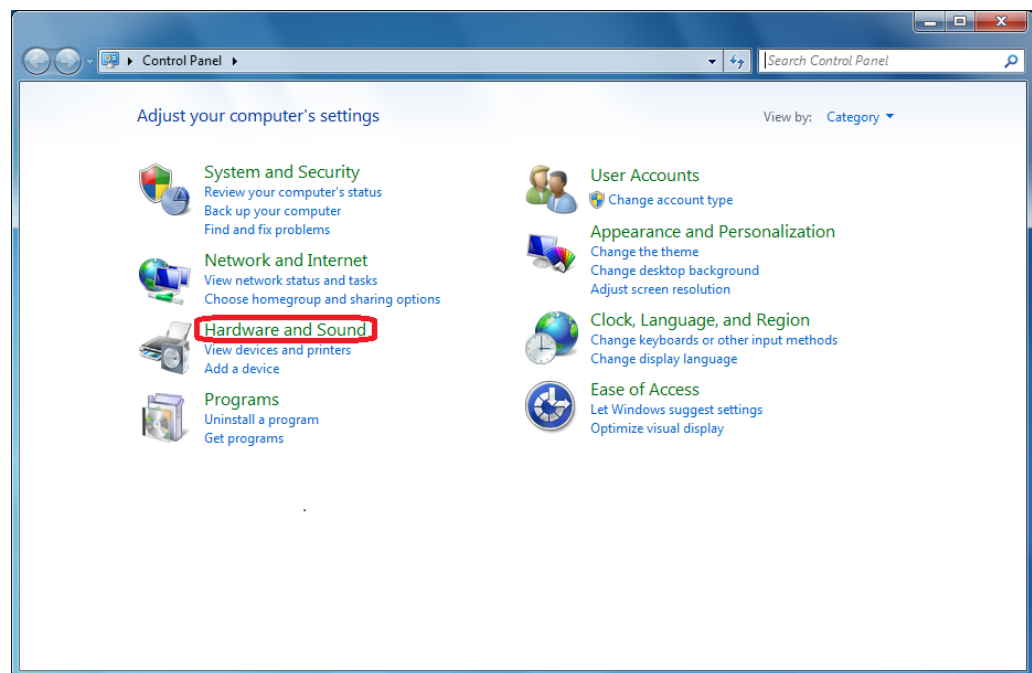


Figure 180: Click 'Hardware and Sound'

2. Click **Hardware and Sound**.

➤ The window **Hardware and Sound** appears:

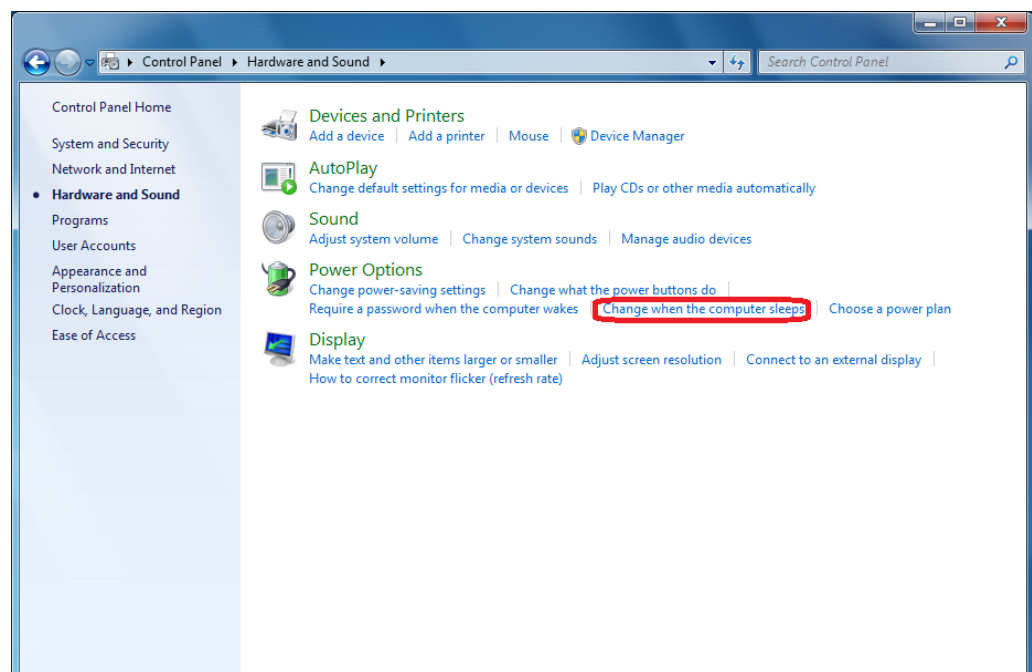


Figure 181: Click 'Change when the computer sleeps'

3. Under **Power Options** click **Change when the computer sleeps**.

➤ The window **Change when the computer sleeps** appears:

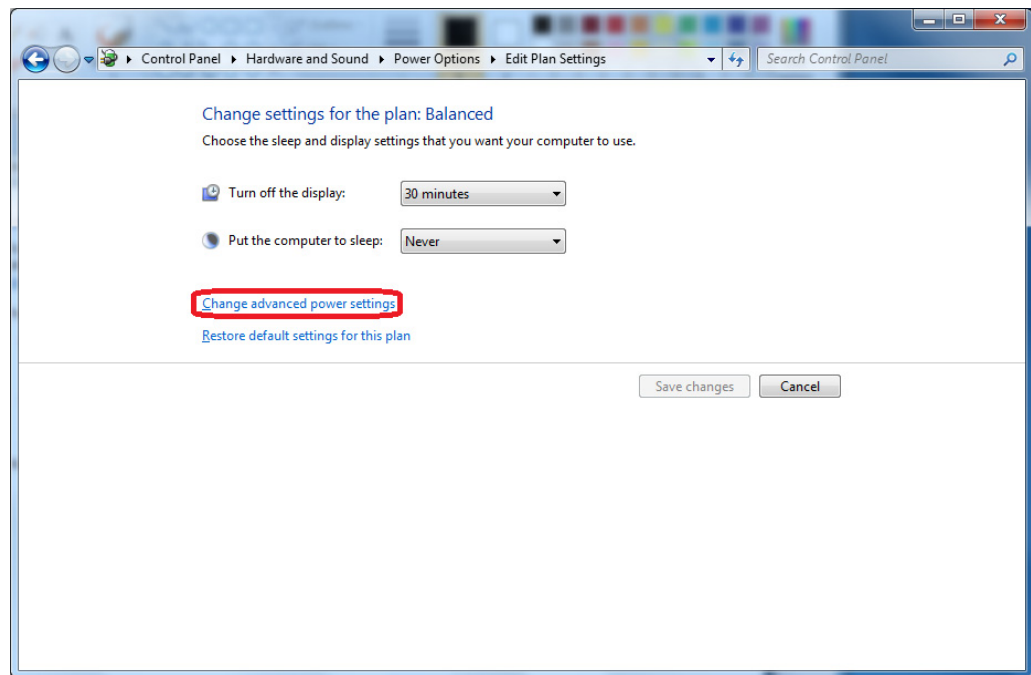


Figure 182: Click 'Change advanced power settings'

4. Click **Change advanced power settings**.

➤ The window **Power Options > Advances settings**:

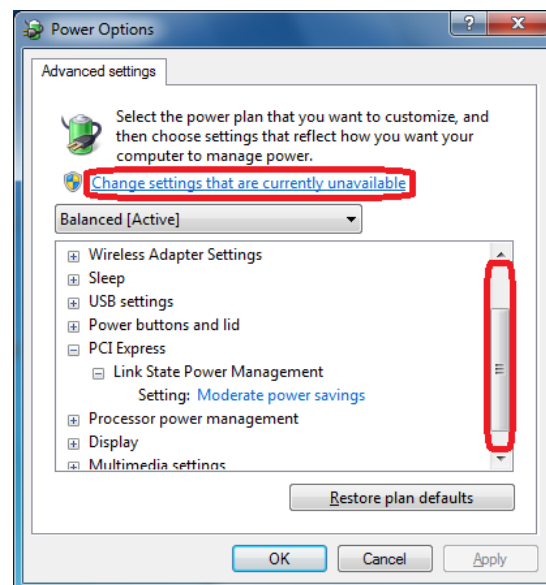


Figure 183: Click 'Change settings that are currently unavailable'

5. Click **Change settings that are currently unavailable**.

6. Scroll down until **PCI Express > Link State Power Management** appears.

7. For **Link State Power Management** select the setting **,Off'**.

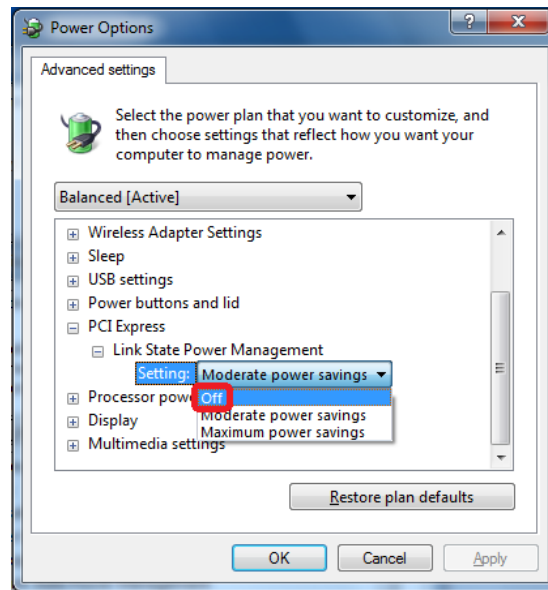


Figure 184: Set 'Link State Power Management' to 'Off'

8. Apply the changed settings by **OK**.

10 Appendix

10.1 List of Figures

Figure 1: System Overview cifX and SYCON.net	12
Figure 2: System Overview cifX and SYCON.net	13
Figure 3: System Overview cifX and netX Configuration Tool	14
Figure 4: System Overview cifX (Master) and Remote Connection via Ethernet	15
Figure 5: System Overview cifX (Slave) and Remote Connection via Ethernet	16
Figure 6: Start the Installation for the cifX Device Driver	19
Figure 7: cifX Device Driver-Setup - License Agreement	20
Figure 8: Installing cifX Device Driver	20
Figure 9: Finish Installation for cifX Device Driver	21
Figure 10: Found New Hardware Wizard: Select 'No, not this time'	22
Figure 11: Found New Hardware Wizard: Select 'Install the software automatically'	22
Figure 12: Found New Hardware Wizard: Software is installed	23
Figure 13: Found New Hardware Wizard: Click 'Finish'	23
Figure 14: Found New Hardware (Example for PC card cifX)	24
Figure 15: Start the Installation for the cifX Device Driver	25
Figure 16: cifX Device Driver Setup.exe - Run as Administrator	26
Figure 17: cifX Device Driver Setup - License Agreement	26
Figure 18: Installing cifX Device Driver is installed	27
Figure 19: Installation for cifX Device Driver – Installation is continued	27
Figure 20: Installation for cifX Device Driver completed	28
Figure 21: Start the Installation for the cifX Device Driver	30
Figure 22: cifX Device Driver Setup.exe - Run as Administrator	31
Figure 23: cifX Device Driver Setup - License Agreement	31
Figure 24: Installing cifX Device Driver is installed	32
Figure 25: Installation for cifX Device Driver – Installation is continued	32
Figure 26: Installation for cifX Device Driver completed	33
Figure 27: Device Driver Software was not successfully installed	34
Figure 28: System Properties	35
Figure 29: Control Panel	36
Figure 30: Startbildschirm Windows 8	37
Figure 31: Search and start the Device Manager	37
Figure 32: „Software“ Pane	38
Figure 33: Message „Software“	39
Figure 34: cifX Device Driver is uninstalled	39
Figure 35: Control Panel	40
Figure 36: Device Manager (Example for PC card cifX)	41
Figure 37: Device Properties > General (Example for PC card cifX)	41
Figure 38: Device Properties > Driver (Example for PC card cifX)	42
Figure 39: Confirm Device Uninstall (Example for PC card cifX)	42
Figure 40: Control Panel > Uninstall a program	43
Figure 41: Uninstall or change a program > Uninstall	43
Figure 42: Programs and Features	44
Figure 43: Windows Installer	44
Figure 44: Uninstalling cifX Device Driver	44
Figure 45: Start Screen Windows 8	45
Figure 46: Search and start the Device Manager	45
Figure 47: Device Manager (Example for PC card cifX)	46
Figure 48: Device Properties > General (Example for PC card cifX)	46

Figure 49: Device Properties > Driver (Example for PC card cifX)	47
Figure 50: Confirm Device Uninstall (Example for PC card cifX)	47
Figure 51: Uninstall a program	48
Figure 52: Uninstall or change a program > Uninstall	48
Figure 53: Programs and Features	49
Figure 54: Windows Installer	49
Figure 55: Uninstalling cifX Device Driver	49
Figure 56: Start Screen Communication Solutions – Install USB Driver	51
Figure 57: Device Driver Installation Wizard – Start Screen	52
Figure 58: Device Driver Installation Wizard – Driver Are Installing	52
Figure 59: Device Driver Installation Wizard – Installation Completed	53
Figure 60: Found New Hardware Wizard – USB Driver (1)	54
Figure 61: Found New Hardware Wizard – USB Driver (2)	54
Figure 62: Found New Hardware Wizard – USB Driver (3)	55
Figure 63: Found New Hardware Wizard – USB Driver (4)	55
Figure 64: Display of USB Connection in Device Manager	56
Figure 65: Start Screen Communication Solutions – Install USB Driver	57
Figure 66: Device Driver Installation Wizard – Start Screen	58
Figure 67: Device Driver Installation Wizard – Driver Are Installing	58
Figure 68: Device Driver Installation Wizard – Installation Completed	59
Figure 69: Display of USB Connection in Device Manager	60
Figure 70: Start Screen Communication Solutions – Install USB Driver	61
Figure 71: Device Driver Installation Wizard – Start Screen	62
Figure 72: Device Driver Installation Wizard – Driver Are Installing	62
Figure 73: Device Driver Installation Wizard – Installation Completed	63
Figure 74: Display of USB Connection in Device Manager	63
Figure 75: Add or Remove Programs	64
Figure 76: Acknowledge Uninstall	64
Figure 77: Uninstall or Change a Program	65
Figure 78: Acknowledge Uninstall	66
Figure 79: Uninstall or Change a Program	67
Figure 80: Acknowledge Uninstall	67
Figure 81: Start the Installation for the SYCON.net Configuration Software	69
Figure 82: SYCON.net Setup Language	70
Figure 83: SYCON.net Installation Information	70
Figure 84: Notes about major Changes in SYCON.net	71
Figure 85: SYCON.net License Agreement	71
Figure 86: SYCON.net Customer Information	72
Figure 87: SYCON.net Setup Type	72
Figure 88: SYCON.net Start Installation	73
Figure 89: SYCON.net Installation Status	73
Figure 90: SYCON.net Installation Finish	74
Figure 91: Start the Installation for the SYCON.net Configuration Software	75
Figure 92: SYCONnet netX setup.exe - Run as Administrator	76
Figure 93: SYCON.net Setup Language	76
Figure 94: Preparing to Install SYCON.net	77
Figure 95: SYCON.net Installation Information	77
Figure 96: Notes About Major Changes in SYCON.net	78
Figure 97: SYCON.net License Agreement	78
Figure 98: SYCON.net Customer Information	79
Figure 99: SYCON.net Setup Type	79
Figure 100: SYCON.net Start Installation	80
Figure 101: SYCON.net Installation Status	80

Figure 102: SYCON.net Installation Finish	81
Figure 103: Start the Installation for the SYCON.net Configuration Software	82
Figure 104: SYCONnet netX setup.exe - Run as Administrator	83
Figure 105: SYCON.net Setup Language	83
Figure 106: Preparing to Install SYCON.net	84
Figure 107: SYCON.net Installation Information	84
Figure 108: Notes About Major Changes in SYCON.net	85
Figure 109: SYCON.net License Agreement	85
Figure 110: SYCON.net Customer Information	86
Figure 111: SYCON.net Setup Type	86
Figure 112: SYCON.net Start Installation	87
Figure 113: SYCON.net Installation Status	87
Figure 114: SYCON.net Installation Finish	88
Figure 115: Windows Control Panel - Add or Remove Programs	89
Figure 116: Windows – Add or Remove Programs	90
Figure 117: SYCON.net Confirmation Dialog	90
Figure 118: SYCON.net Uninstalling Progress	90
Figure 119: Start > Control Panel	91
Figure 120: Window Adjust your Computer's Settings	92
Figure 121: Control Panel - Uninstall or Change Programs	92
Figure 122: Programs and Features	93
Figure 123: Windows Installer - Preparing to Remove	93
Figure 124: SYCON.net Uninstalling Progress	93
Figure 125: Start Screen Windows 8	94
Figure 126: Uninstall a program	94
Figure 127: Control Panel - Uninstall or Change Programs	95
Figure 128: Programs and Features	95
Figure 129: Windows Installer - Preparing to Remove	95
Figure 130: SYCON.net Uninstalling Progress	96
Figure 131: Start the Installation for the Slave Configuration Tool netX Configuration Tool	98
Figure 132: netX Setup and Configuration	99
Figure 133: netX Configuration Tool Setup Wizard	99
Figure 134: netX Configuration Tool Setup Wizard	100
Figure 135: Browse for Folder	100
Figure 136: Disk Space	101
Figure 137: Confirm Installation	101
Figure 138: netX Configuration Tool - Installation Progress	102
Figure 139: netX Configuration Tool - Installation complete	102
Figure 140: Start the Installation for the Slave Configuration Tool netX Configuration Tool	104
Figure 141: SYCONnet netX setup.exe - Run as Administrator	105
Figure 142: netX Setup and Configuration	105
Figure 143: netX Configuration Tool Setup Wizard	106
Figure 144: netX Configuration Tool Setup Wizard	106
Figure 145: Browse for Folder	107
Figure 146: Disk Space	107
Figure 147: Confirm Installation	108
Figure 148: netX Configuration Tool - Installation Progress	108
Figure 149: netX Configuration Tool - Installation complete	109
Figure 150: Start the Installation for the Slave Configuration Tool netX Configuration Tool	110
Figure 151: SYCONnet netX setup.exe - Run as Administrator	111
Figure 152: netX Setup and Configuration	111
Figure 153: netX Configuration Tool Setup Wizard	112
Figure 154: netX Configuration Tool Setup Wizard	112

Figure 155: Browse for Folder	113
Figure 156: Disk Space	113
Figure 157: Confirm Installation	114
Figure 158: netX Configuration Tool - Installation Progress	114
Figure 159: netX Configuration Tool - Installation complete	115
Figure 160: Windows Control Panel - Add or Remove Programs	116
Figure 161: Windows – Add or Remove Programs	117
Figure 162: netX Configuration Tool Confirmation Box	117
Figure 163: netX Configuration Tool Uninstalling Progress	117
Figure 164: Start > Control Panel	118
Figure 165: Window Adjust your Computer's Settings	119
Figure 166: Control Panel - Uninstall or Change Programs	119
Figure 167: Programs and Features	120
Figure 168: Windows Installer - Preparing to remove	120
Figure 169: netX Configuration Tool Uninstalling Progress	120
Figure 170: Start Screen Windows 8	121
Figure 171: Uninstall a program	121
Figure 172: Control Panel - Uninstall or Change Programs	122
Figure 173: Programs and Features	122
Figure 174: Windows Installer - Preparing to remove	122
Figure 175: netX Configuration Tool Uninstalling Progress	123
Figure 176: Slot Number (Card ID) in the cifX Device Driver Setup	147
Figure 177: Slot Number (Card ID) in the cifX Device Driver Setup, „SlotNr“ selected	148
Figure 178: Slot Number (Card ID) in the Configuration Software SYCON.net.	148
Figure 179: Activating DMA Mode in the cifX Device Driver Setup	149
Figure 180: Click 'Hardware and Sound'	151
Figure 181: Click 'Change when the computer sleeps'	151
Figure 182: Click 'Change advanced power settings'	152
Figure 183: Click 'Change settings that are currently unavailable'	152
Figure 184: Set 'Link State Power Management' to 'Off'	153

10.2 List of Tables

Table 1: List of Revisions	5
Table 2: Reference on Driver and Software	6
Table 3: Where the Driver Setup is to be found?	18
Table 4: Slot Number (Card ID) in the Configuration Software SYCON.net.	148
Table 5: PC Cards cifX PCI Express	150

10.3 Glossary

cifX

Communication InterFace based on netX

cifX TCP/IP Server

cifX TCP Server.exe

Program for the remote diagnostics via Ethernet.

Name: **cifX TCP/IP Server for SYCON.net**

User Interface: **TCP/IP Server for cifX**

netX

networX on chip, Hilscher network communication controllers

netX Configuration Tool

The netX Configuration Tool allows users to operate cifX or netX based devices in different networks. Its graphical user interface serves as a configuration tool for the installation, configuration and diagnosis of the devices.

PC Card cifX

Communication Interfaces of the cifX product family of Hilscher on the basis of the communication controller netX 100:

for the Real-Time Ethernet systems

- EtherCAT
- EtherNet/IP
- Open-Modbus/TCP
- POWERLINK
- PROFINET IO
- sercos
- VARAN

and for the fieldbus systems

- PROFIBUS DP
- PROFIBUS MPI
- CANopen
- DeviceNet
- AS-Interface
- CompoNet
- CC-Link

as Communication Interface netX with PCI Bus

- PCI (CIFX50),
- PCI Express (CIFX 50E),
- Low Profile PCI Express (CIFX 70E, CIFX 100EH-RE\CUBE*),
- Compact PCI (CIFX80),
- Mini PCI (CIFX90),
- Mini PCI Express (CIFX 90E),
- PCI-104 (CIFX 104C)

and as Communication Interface netX with ISA Bus

- PC/104 (CIFX 104).

*only Real-Time Ethernet

Real-Time Ethernet

Real-Time Ethernet (Industrial Ethernet) is an extension of the Ethernet networking technology for industrial purposes with very good real-time features and performance. There is a variety of different Real-Time Ethernet systems on the market which are incompatible with each other. The most important systems of these are

- EtherCAT
- EtherNet/IP
- Ethernet POWERLINK
- Open Modbus/TCP
- PROFINET
- sercos
- VARAN

TCP/IP

Transport Control Protocol/Internet Protocol connection-orientated, secure transfer protocol as basis for the Internet-protocols

10.4 Contacts

Headquarters

Germany

Hilscher Gesellschaft für
Systemautomation mbH
Rheinstrasse 15
65795 Hattersheim
Phone: +49 (0) 6190 9907-0
Fax: +49 (0) 6190 9907-50
E-Mail: info@hilscher.com

Support

Phone: +49 (0) 6190 9907-99
E-Mail: de.support@hilscher.com

Subsidiaries

China

Hilscher Systemautomation (Shanghai) Co. Ltd.
200010 Shanghai
Phone: +86 (0) 21-6355-5161
E-Mail: info@hilscher.cn

Support

Phone: +86 (0) 21-6355-5161
E-Mail: cn.support@hilscher.com

France

Hilscher France S.a.r.l.
69500 Bron
Phone: +33 (0) 4 72 37 98 40
E-Mail: info@hilscher.fr

Support

Phone: +33 (0) 4 72 37 98 40
E-Mail: fr.support@hilscher.com

India

Hilscher India Pvt. Ltd.
New Delhi - 110 065
Phone: +91 11 26915430
E-Mail: info@hilscher.in

Italy

Hilscher Italia S.r.l.
20090 Vimodrone (MI)
Phone: +39 02 25007068
E-Mail: info@hilscher.it

Support

Phone: +39 02 25007068
E-Mail: it.support@hilscher.com

Japan

Hilscher Japan KK
Tokyo, 160-0022
Phone: +81 (0) 3-5362-0521
E-Mail: info@hilscher.jp

Support

Phone: +81 (0) 3-5362-0521
E-Mail: jp.support@hilscher.com

Korea

Hilscher Korea Inc.
Seongnam, Gyeonggi, 463-400
Phone: +82 (0) 31-789-3715
E-Mail: info@hilscher.kr

Switzerland

Hilscher Swiss GmbH
4500 Solothurn
Phone: +41 (0) 32 623 6633
E-Mail: info@hilscher.ch

Support

Phone: +49 (0) 6190 9907-99
E-Mail: ch.support@hilscher.com

USA

Hilscher North America, Inc.
Lisle, IL 60532
Phone: +1 630-505-5301
E-Mail: info@hilscher.us

Support

Phone: +1 630-505-5301
E-Mail: us.support@hilscher.com