User Manual

Software Installation comX and netJACK

Installing Drivers and Configuration Software

Hilscher Gesellschaft für Systemautomation mbH
www.hilscher.com
DOC130405UM02EN | Revision 2 | English | 2017-04 | Released | Public

Table of Contents

1 INTRODUCTION 4
1.1 About the User Manual 4
1.1.1 List of Revisions 4
1.1.2 Conventions in this Document 5
1.1.3 Reference on Driver and Software Versions 5
1.2 Legal Notes 6
1.2.1 Registered Trademarks 9

2 CIFX DEVICE DRIVER 10
2.1 Overview 10
2.2 Installing cifX Device Driver 11
2.2.1 Installing cifX Device Driver under Windows XP 11
2.2.2 Installing cifX Device Driver under Windows 7 19
2.2.3 Installing cifX Device Driver under Windows 8 24
2.2.4 Installing cifX Device Driver under Windows 10 30
2.3 Uninstalling cifX Device Driver 35
2.3.1 Uninstalling cifX Device Driver under Windows XP 35
2.3.2 Uninstalling cifX Device Driver under Windows 7 37
2.3.3 Uninstalling cifX Device Driver under Windows 8 42
2.3.4 Uninstalling cifX Device Driver under Windows 10 48

3 USB DRIVER 50
3.1 Overview 50
3.2 Installing USB Driver 51
3.2.1 Installing USB Driver under Windows XP 51
3.2.2 Installing USB Driver under Windows 7 59
3.2.3 Installing USB Drivers under Windows 8 64
3.2.4 Installing USB Driver under Windows 10 70
3.3 Uninstalling USB Driver 74
3.3.1 Uninstalling USB Driver under Windows XP 74
3.3.2 Uninstalling USB Driver under Windows 7 76
3.3.3 Uninstalling USB Driver under Windows 8 78
3.3.4 Uninstalling USB Driver under Windows 10 81

4 SYCON.NET 83
4.1 Overview 83
4.2 System Requirements 84
4.3 Installing SYCON.net 85
4.3.1 Installing SYCON.net under Windows XP 85
4.3.2 Installing SYCON.net under Windows 7 91
4.3.3 Installing SYCON.net under Windows 8 97
4.3.4 Installing SYCON.net under Windows 10 103
4.4 Uninstalling SYCON.net 108
4.4.1 Uninstalling SYCON.net under Windows XP 108
4.4.2 Uninstalling SYCON.net under Windows 7 110
4.4.3 Uninstalling SYCON.net under Windows 8 112

© Hilscher 2013 - 2017

4.4.4 Uninstalling SYCON.net under Windows 10 115

5 NETX CONFIGURATION TOOL 117
5.1 Overview 117
5.2 Installing netX Configuration Tool 118
5.2.1 Installing netX Configuration Tool under Windows XP 118
5.2.2 Installing netX Configuration Tool under Windows 7 122
5.2.3 Installing netX Configuration Tool under Windows 8 126
5.2.4 Installing netX Configuration Tool under Windows 10 130
5.3 Uninstalling netX Configuration Tool 134
5.3.1 Uninstalling netX Configuration Tool under Windows XP 134
5.3.2 Uninstalling netX Configuration Tool under Windows 7 136
5.3.3 Uninstalling netX Configuration Tool under Windows 8 138
5.3.4 Uninstalling netX Configuration Tool under Windows 10 140

6 APPENDIX 142
6.1 List of Figures 142
6.2 List of Tables 146
6.3 Contacts 147

© Hilscher 2013 - 2017

1 Introduction

1.1 About the User Manual

This user manual provides step-by-step instructions on how to install the drivers and the software needed on a host system or configuration PC running under a Windows® operating system in order to configure and diagnose Hilscher **comX** and **netJACK** communication modules or to update the firmware of the modules.

This manual describes the installation of:

- the **cifX Device Driver**
- the **SYCON.net** configuration software
- the **netX Configuration Tool** (configuration tool for slave devices only)
- the **USB Drivers**

for the operating systems:

- **Windows XP**
- **Windows 7**
- **Windows 8**
- **Windows 10**

Note: Instructions for installation under **Windows 7** are also applicable for installation under **Windows VISTA**.

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

1.1.1 List of Revisions

Index	Date	Chapter	Revision
1	2013-10-16	all	created
2	2017-04-03	all	Software versions updated. Instructions for installation under Windows 10 added. Legal Notes updated.

Table 1: List of Revisions

© Hilscher 2013 - 2017

1.1.2 Conventions in this Document

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

Notes

Important: <important note>

Note: <note>

<note, where to find further information>

Operation Instructions

1. <operation step>
   - ➢ <instruction>
   - ➢ <instruction>
2. <operation step>
   - ➢ <instruction>
   - ➢ <instruction>

Results

<result>

1.1.3 Reference on Driver and Software Versions

This user manual refers to the following driver and software versions:

Name	Version	File name	Path on Communication Solution DVD
SYCON.net	1.0400.x.x	`SYCONnet netX setup.exe`	`Software\SYCON.net`
netX Configuration Tool	1.0900.x.x	`netXConfigurationUtility_Setup.exe`	`Software\Slave Configuration Tool`
cifX Device Driver	1.3.x.x	`cifX Device Driver Setup.exe`	`Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation`
USB diagnostic driver	-	`setup.exe`	`Driver and Toolkit\USB Diagnostic Driver`

Table 2: Reference on Drivers and Software

© Hilscher 2013 - 2017

1.2 Legal Notes

Copyright

© Hilscher Gesellschaft für Systemautomation mbH

All rights reserved.

The images, photographs and texts in the accompanying materials (in the form of a user's manual, operator's manual, Statement of Work document and all other document types, support texts, documentation, etc.) are protected by German and international copyright and by international trade and protective provisions. Without the prior written consent, you do not have permission to duplicate them either in full or in part using technical or mechanical methods (print, photocopy or any other method), to edit them using electronic systems or to transfer them. You are not permitted to make changes to copyright notices, markings, trademarks or ownership declarations. Illustrations are provided without taking the patent situation into account. Any company names and product designations provided in this document may be brands or trademarks by the corresponding owner and may be protected under trademark, brand or patent law. Any form of further use shall require the express consent from the relevant owner of the rights.

Important notes

Utmost care was/is given in the preparation of the documentation at hand consisting of a user's manual, operating manual and any other document type and accompanying texts. However, errors cannot be ruled out. Therefore, we cannot assume any guarantee or legal responsibility for erroneous information or liability of any kind. You are hereby made aware that descriptions found in the user's manual, the accompanying texts and the documentation neither represent a guarantee nor any indication on proper use as stipulated in the agreement or a promised attribute. It cannot be ruled out that the user's manual, the accompanying texts and the documentation do not completely match the described attributes, standards or any other data for the delivered product. A warranty or guarantee with respect to the correctness or accuracy of the information is not assumed.

We reserve the right to modify our products and the specifications for such as well as the corresponding documentation in the form of a user's manual, operating manual and/or any other document types and accompanying texts at any time and without notice without being required to notify of said modification. Changes shall be taken into account in future manuals and do not represent an obligation of any kind, in particular there shall be no right to have delivered documents revised. The manual delivered with the product shall apply.

Under no circumstances shall Hilscher Gesellschaft für Systemautomation mbH be liable for direct, indirect, ancillary or subsequent damage, or for any loss of income, which may arise after use of the information contained herein.

Liability disclaimer

The hardware and/or software was created and tested by Hilscher Gesellschaft für Systemautomation mbH with utmost care and is made available as is. No warranty can be assumed for the performance or flawlessness of the hardware and/or software under all application conditions and scenarios and the work results achieved by the user when using the hardware and/or software. Liability for any damage that may have

occurred as a result of using the hardware and/or software or the corresponding documents shall be limited to an event involving willful intent or a grossly negligent violation of a fundamental contractual obligation. However, the right to assert damages due to a violation of a fundamental contractual obligation shall be limited to contract-typical foreseeable damage.

It is hereby expressly agreed upon in particular that any use or utilization of the hardware and/or software in connection with

- Flight control systems in aviation and aerospace;
- Nuclear fusion processes in nuclear power plants;
- Medical devices used for life support and
- Vehicle control systems used in passenger transport

shall be excluded. Use of the hardware and/or software in any of the following areas is strictly prohibited:

- For military purposes or in weaponry;
- For designing, engineering, maintaining or operating nuclear systems;
- In flight safety systems, aviation and flight telecommunications systems;
- In life-support systems;
- In systems in which any malfunction in the hardware and/or software may result in physical injuries or fatalities.

You are hereby made aware that the hardware and/or software was not created for use in hazardous environments, which require fail-safe control mechanisms. Use of the hardware and/or software in this kind of environment shall be at your own risk; any liability for damage or loss due to impermissible use shall be excluded.

Warranty

Hilscher Gesellschaft für Systemautomation mbH hereby guarantees that the software shall run without errors in accordance with the requirements listed in the specifications and that there were no defects on the date of acceptance. The warranty period shall be 12 months commencing as of the date of acceptance or purchase (with express declaration or implied, by customer's conclusive behavior, e.g. putting into operation permanently).

The warranty obligation for equipment (hardware) we produce is 36 months, calculated as of the date of delivery ex works. The aforementioned provisions shall not apply if longer warranty periods are mandatory by law pursuant to Section 438 (1.2) BGB, Section 479 (1) BGB and Section 634a (1) BGB [Bürgerliches Gesetzbuch; German Civil Code] If, despite of all due care taken, the delivered product should have a defect, which already existed at the time of the transfer of risk, it shall be at our discretion to either repair the product or to deliver a replacement product, subject to timely notification of defect.

The warranty obligation shall not apply if the notification of defect is not asserted promptly, if the purchaser or third party has tampered with the products, if the defect is the result of natural wear, was caused by unfavorable operating conditions or is due to violations against our operating regulations or against rules of good electrical engineering practice, or if our request to return the defective object is not promptly complied with.

© Hilscher 2013 - 2017

Costs of support, maintenance, customization and product care

Please be advised that any subsequent improvement shall only be free of charge if a defect is found. Any form of technical support, maintenance and customization is not a warranty service, but instead shall be charged extra.

Additional guarantees

Although the hardware and software was developed and tested in-depth with greatest care, Hilscher Gesellschaft für Systemautomation mbH shall not assume any guarantee for the suitability thereof for any purpose that was not confirmed in writing. No guarantee can be granted whereby the hardware and software satisfies your requirements, or the use of the hardware and/or software is uninterruptable or the hardware and/or software is fault-free.

It cannot be guaranteed that patents and/or ownership privileges have not been infringed upon or violated or that the products are free from third-party influence. No additional guarantees or promises shall be made as to whether the product is market current, free from deficiency in title, or can be integrated or is usable for specific purposes, unless such guarantees or promises are required under existing law and cannot be restricted.

Confidentiality

The customer hereby expressly acknowledges that this document contains trade secrets, information protected by copyright and other patent and ownership privileges as well as any related rights of Hilscher Gesellschaft für Systemautomation mbH. The customer agrees to treat as confidential all of the information made available to customer by Hilscher Gesellschaft für Systemautomation mbH and rights, which were disclosed by Hilscher Gesellschaft für Systemautomation mbH and that were made accessible as well as the terms and conditions of this agreement itself.

The parties hereby agree to one another that the information that each party receives from the other party respectively is and shall remain the intellectual property of said other party, unless provided for otherwise in a contractual agreement.

The customer must not allow any third party to become knowledgeable of this expertise and shall only provide knowledge thereof to authorized users as appropriate and necessary. Companies associated with the customer shall not be deemed third parties. The customer must obligate authorized users to confidentiality. The customer should only use the confidential information in connection with the performances specified in this agreement.

The customer must not use this confidential information to his own advantage or for his own purposes or rather to the advantage or for the purpose of a third party, nor must it be used for commercial purposes and this confidential information must only be used to the extent provided for in this agreement or otherwise to the extent as expressly authorized by the disclosing party in written form. The customer has the right, subject to the obligation to confidentiality, to disclose the terms and conditions of this agreement directly to his legal and financial consultants as would be required for the customer's normal business operation.

Export provisions

The delivered product (including technical data) is subject to the legal export and/or import laws as well as any associated regulations of various countries, especially such laws applicable in Germany and in the United States. The products / hardware / software must not be exported into such

© Hilscher 2013 - 2017

countries for which export is prohibited under US American export control laws and its supplementary provisions. You hereby agree to strictly follow the regulations and to yourself be responsible for observing them. You are hereby made aware that you may be required to obtain governmental approval to export, reexport or import the product.

1.2.1 Registered Trademarks

Windows® XP, Windows® Vista, Windows® 7, Windows® 8 and Windows® 10 are registered trademarks of Microsoft Corporation.

© Hilscher 2013 - 2017

2 cifX Device Driver

2.1 Overview

If the host system of your communication module runs under a Windows operating system or if you want to connect your module via PCI Carrier Board (comX) or via Evaluation Board (netJACK) to a Windows PC for configuration, diagnosis or firmware download with SYCON.net or netX Configuration Tool, you need to install the cifX Device Driver.

The cifX Device Driver is delivered on the Communication Solutions DVD. You can start an installation program for the driver (the **cifX Device Driver Setup**) in the menu of the start screen of the DVD. Instructions for this are provided on the following pages. You can also start the installation program by double-clicking the *cifX Device Driver Setup.exe* file in the `Driver` and `Toolkit\Device Driver (NXDRV-WIN)\Installation` directory of the Communication Solutions DVD.
The installation program contains all components needed for the installation of the driver under Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10. It detects whether the 32 bit or the 64 bit driver needs to be installed.

Please note the following:

- You need administrator rights for installing or uninstalling the cifX Device Driver on your operating system.
- Always use the installation program, if possible, to install the cifX Device Driver, as described on the following pages.
- If an older version of the cifX Device Driver is installed on your system, uninstall it first before you install the new version.
- Install the cifX Device Driver *before* you connect your communication module to your host system or PC (“software first” principle).
- After installing the cifX Device Driver and connecting your communication module, check in the Device Manager of Windows if the driver has been correctly installed and if Windows recognizes the connected communication module.

© Hilscher 2013 - 2017

2.2 Installing cifX Device Driver

2.2.1 Installing cifX Device Driver under Windows XP

2.2.1.1 Installing cifX Device Driver by Installation Program

1. Start the cifX Device Driver installation program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 1: Start Screen Communication Solutions – Installing cifX Device Driver

➢ In the menu, select **Drivers, Software and Tools** > **Install cifX/netJACK Device Driver**.

Note: Alternatively, you can also start the installation program by double-clicking the *cifX Device Driver Setup.exe* file in the `Driver` and `Toolkit\Device Driver (NXDRV-WIN)\Installation` folder of the Communication Solutions DVD.

© Hilscher 2013 - 2017

➮ The **cifX Device Driver Setup** is started and the **License Agreement** window opens:

Figure 2: cifX Device Driver Setup – License Agreement

2. Start installation.

➢ Select **I accept the terms in the license agreement**.

➢ Click **Install**.

➮ The cifX Device Driver installation is started:

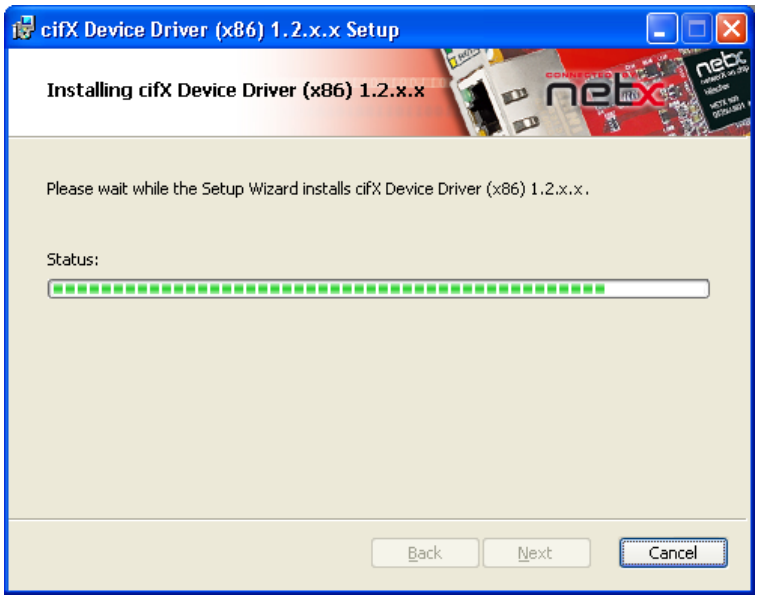

Figure 3: Installing cifX Device Driver

© Hilscher 2013 - 2017

After installation, the **Completed the cifX Device Driver Setup Wizard** window appears:

Figure 4: cifX Device Driver – Installation Completed

➢ Click **Finish**.

Note: Under Windows XP, the driver installation process is not yet finished after having executed the **cifX Device Driver Setup Wizard**.
The installation process has to be completed in the **Found New Hardware Wizard**, which automatically opens when you reboot Windows XP after having installed the communication module in your host system, respectively after having connected the module to your PC via PCI Carrier Board (comX) or via Evaluation Board (netJACK) to your Windows PC for the first time.

3. Install communication module in host system/PC.

Important: When installing the hardware, observe all safety messages in the user manual.

➢ Shut down Windows XP and disconnect your host system or PC from the voltage supply.
➢ Install the communication module in your host system, respectively connect the communication module to your PC according to the instructions provided in the user manual.

See user manual
- *comX – Communication Modules for Real-Time-Ethernet and Fieldbus*, DOC100903UMxxEN

or

- *netJACK Communication Module – Installation, Operation and Hardware Description*, DOC110504UMxxEN

© Hilscher 2013 - 2017

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

➢ Restart your host system/PC.

➢ The **Found New Hardware Wizard** starts:

Figure 5: Found New Hardware Wizard – cifX Device 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:

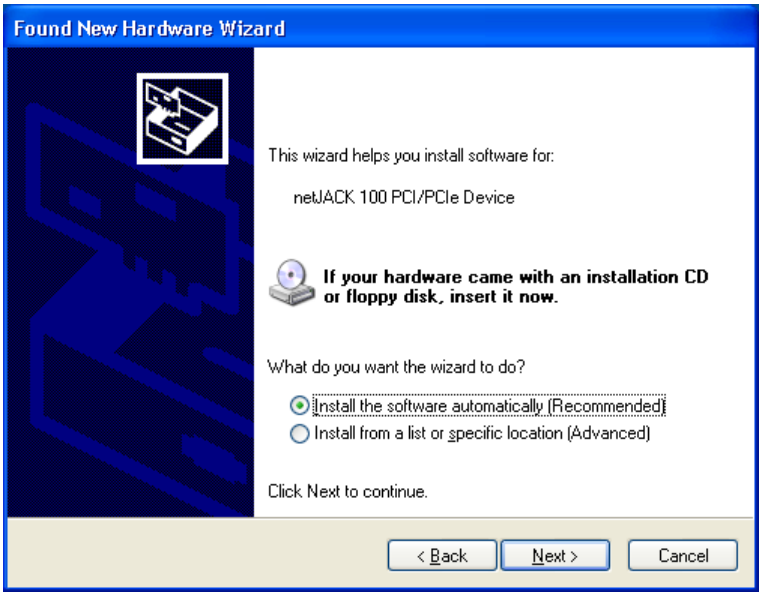

Figure 6: Found New Hardware Wizard – cifX Device Driver (2)

➢ If you have already executed the installation program for the cifX Device 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.

© Hilscher 2013 - 2017

➢ Click **Next**.

➱ Windows copies the driver files to the Windows directories.

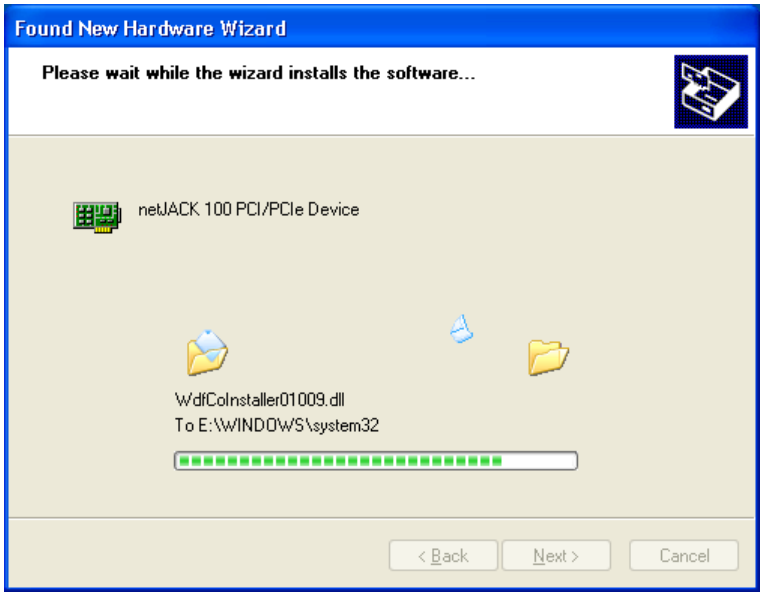

Figure 7: Found New Hardware Wizard – cifX Device Driver (3)

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

Figure 8: Found New Hardware Wizard – cifX Device Driver (4)

➢ Click **Finish**.

➱ The installation of the cifX Device Driver is now complete.

© Hilscher 2013 - 2017

2.2.1.2 Checking Installation

After having installed the cifX Device Driver and having installed/connected the communication module, you should check in the Windows **Device Manager** if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Device Manager**.

➢ In the **Start** menu of Windows, select **Control Panel**.

➢ The **Control Panel** opens:

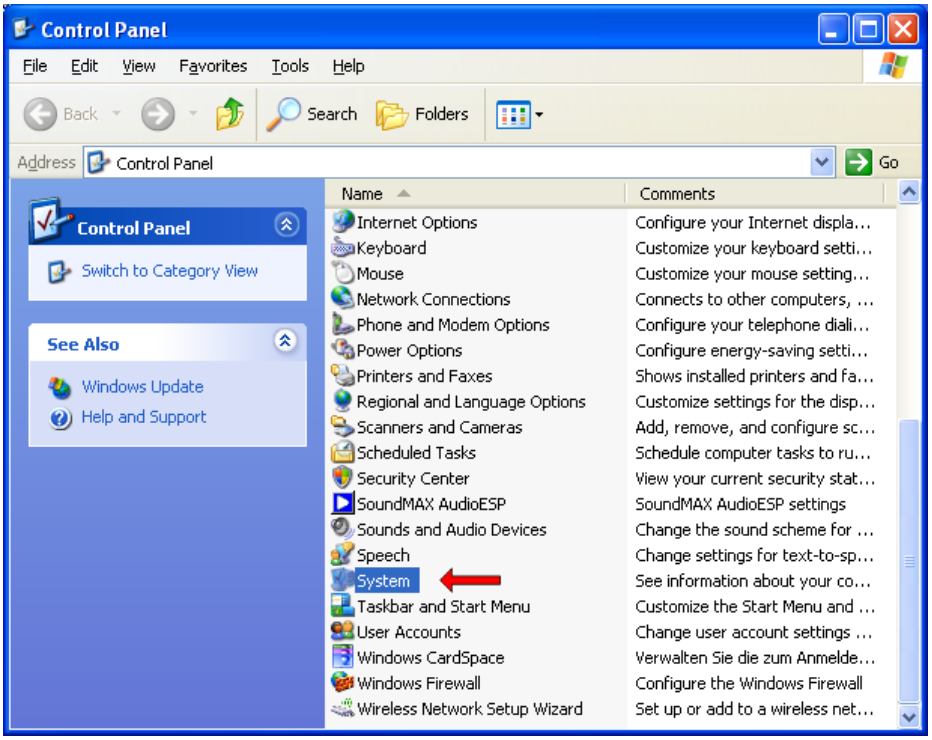

Figure 9: Control Panel

➢ In the **Control Panel**, double-click **System**.

© Hilscher 2013 - 2017

➮ The **System Properties** sheet opens:

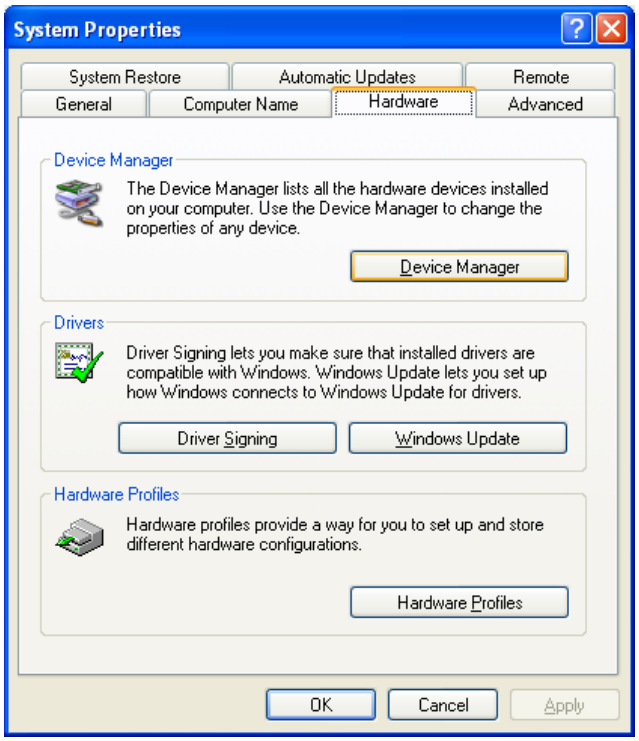

Figure 10: System Properties

➢ In the **System Properties** sheet, select **Hardware** tab.

➢ In the **Hardware** tab, click **Device Manager**.

➮ The **Device Manager** starts:

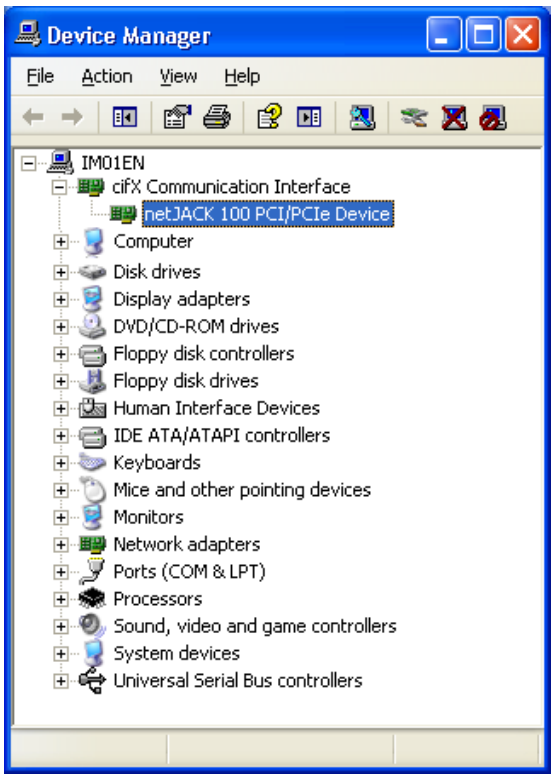

Figure 11: Display of Communication Module in Device Manager

© Hilscher 2013 - 2017

2. Check if the communication module is recognized.

➢ In the Device Manager, click on the plus symbol in front of the **cifX Communication Interface** entry.

➪ A netJACK NJ 100EN-RE communication module for instance, which is connected via NJEB-E Evaluation Board to the PCI Express interface of the PC, will be displayed as **netJACK 100 PCI/PCIe Device**.

© Hilscher 2013 - 2017

2.2.2 Installing cifX Device Driver under Windows 7

2.2.2.1 Installing cifX Device Driver by Installation Program

1. Start the cifX Device Driver installation program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 12: Start Screen Communication Solutions – Installing cifX Device Driver

➢ In the menu, select **Drivers, Software and Tools** > **Install cifX/netJACK Device Driver**.

Note: Alternatively, you can also start the installation program by double-clicking the *cifX Device Driver Setup.exe* file in the `Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation` folder of the Communication Solutions DVD.

You can reduce the number of Windows security questions by right-clicking on the *cifX Device Driver Setup.exe* file and choosing **Run as administrator** from the context menu.

© Hilscher 2013 - 2017

➮ The **cifX Device Driver Setup** is started and the **License Agreement** window opens:

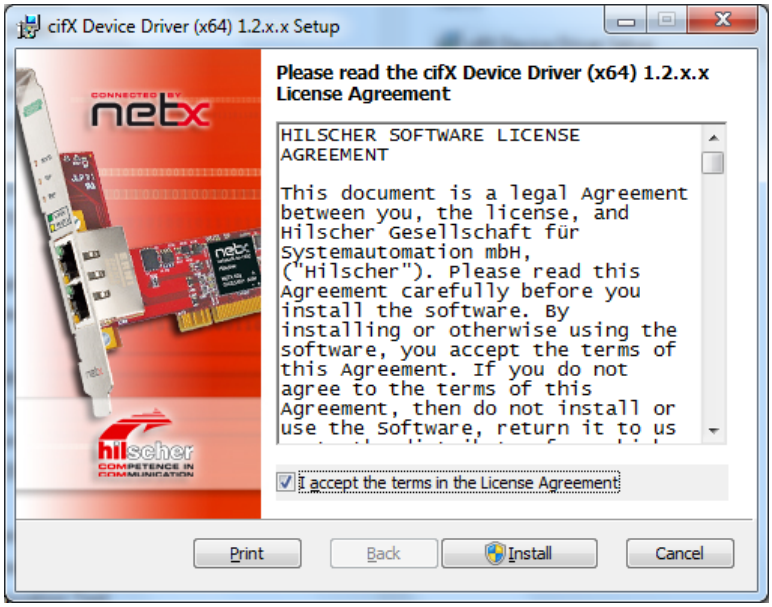

Figure 13: cifX Device Driver Setup – License Agreement

2. Start installation.

➢ Select **I accept the terms in the license agreement**.

➢ Click **Install**.

➮ The cifX Device Driver is started:

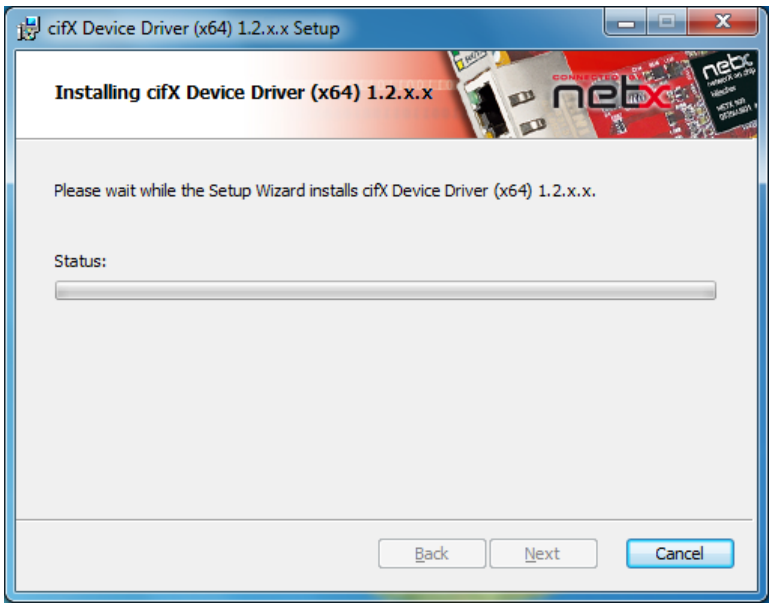

Figure 14: Installing cifX Device Driver

© Hilscher 2013 - 2017

➧ After installation, the **Completed the cifX Device Driver Setup Wizard** window appears:

Figure 15: cifX Device Driver – Installation Completed

➢ Click **Finish**.

➧ You can now proceed to connect your communication module to the host system/PC.

Note: Under Windows 7, the driver installation process is practically finished after having executed the installation program.
When you reboot Windows 7 after having installed the communication module hardware in your host system, respectively after having connected the module to your PC via PCI Carrier Board (comX) or via Evaluation Board (netJACK) 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.

3. Install communication module in host system/PC.

Important: When installing the hardware, observe all safety messages in the user manual.

➢ Shut down Windows 7 and disconnect your host system or PC from the voltage supply.

➢ Install the communication module in your host system, respectively connect the communication module to your PC according to the instructions provided in the user manual.

See user manual

- *comX – Communication Modules for Real-Time-Ethernet and Fieldbus*, DOC100903UMxxEN, respectively
- *netJACK Communication Module – Installation, Operation and Hardware Description*, DOC110504UMxxEN

© Hilscher 2013 - 2017

2.2.2.2 Checking Installation

After having installed the cifX Device Driver and having installed/connected the communication module, you should check in the Windows **Device Manager** if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Device Manager**.

➢ In the **Start** menu of Windows, select **Control Panel**.

➢ The **Control Panel** opens:

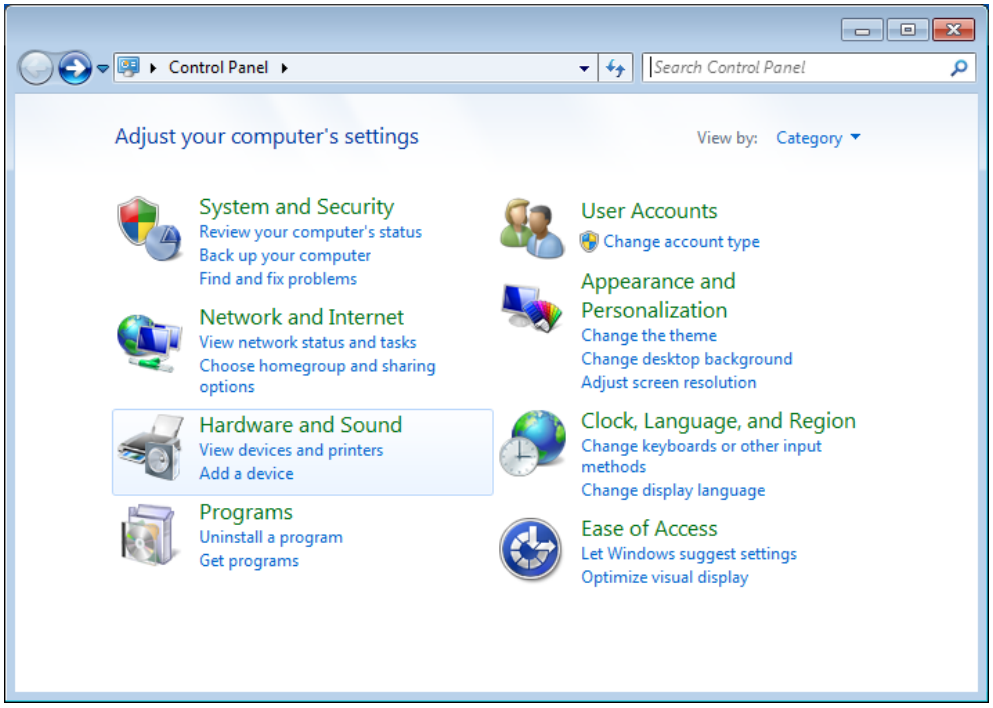

Figure 16: Adjust Your Computer's Settings Window

➢ In the **Control Panel**, click **Hardware and Sound**.

➢ The **Hardware and Sound** window opens:

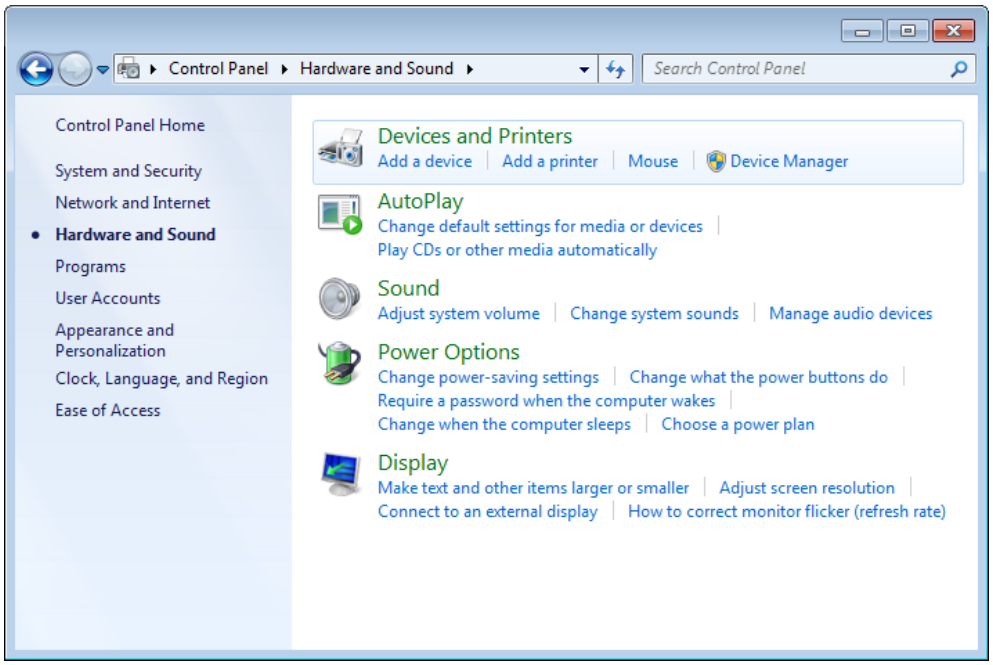

Figure 17: Hardware and Sound Window

© Hilscher 2013 - 2017

➢ In the **Devices and Printers** group of the **Hardware and Sound** window, click **Device Manager**.

➢ The **Device Manager** starts:

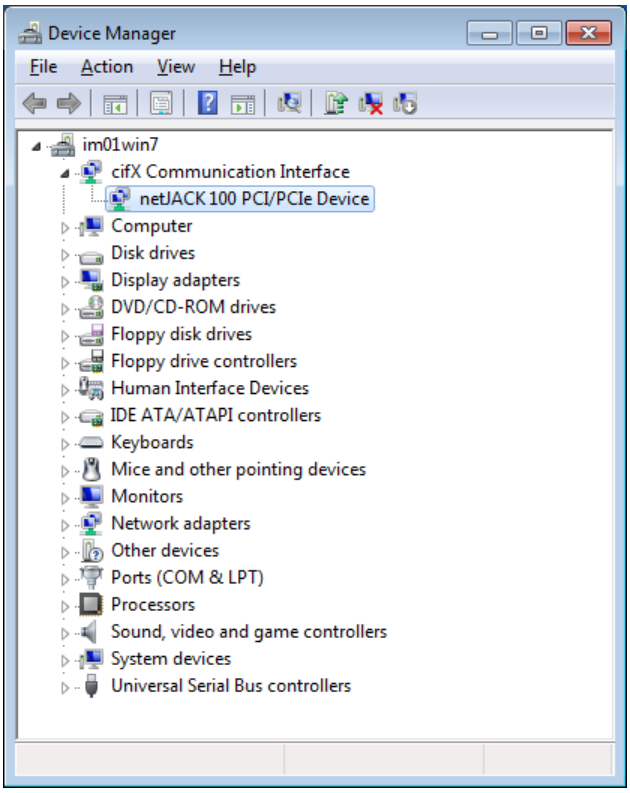

Figure 18: Display of Communication Module in Device Manager

2. Check if the communication module is recognized.

➢ In the Device Manager, click on the triangle in front of the **cifX Communication Interface** entry.

➢ A netJACK NJ 100EN-RE communication module for instance, which is connected via NJEB-E Evaluation Board to the PCI Express interface of the PC, will be displayed as **netJACK 100 PCI/PCIe Device**.

© Hilscher 2013 - 2017

2.2.3 Installing cifX Device Driver under Windows 8

2.2.3.1 Installing cifX Device Driver by Installation Program

1. Start the cifX Device Driver installation program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 19: Start Screen Communication Solutions – Installing cifX Device Driver

➢ In the menu, select **Drivers, Software and Tools** > **Install cifX/netJACK Device Driver**.

Note: Alternatively, you can also start the installation program by double-clicking the *cifX Device Driver Setup.exe* file in the `Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation` folder of the Communication Solutions DVD.

You can reduce the number of Windows security questions by right-clicking on the *cifX Device Driver Setup.exe* file and choosing **Run as administrator** from the context menu.

© Hilscher 2013 - 2017

➮ The **cifX Device Driver Setup** is started and the **License Agreement** window opens:

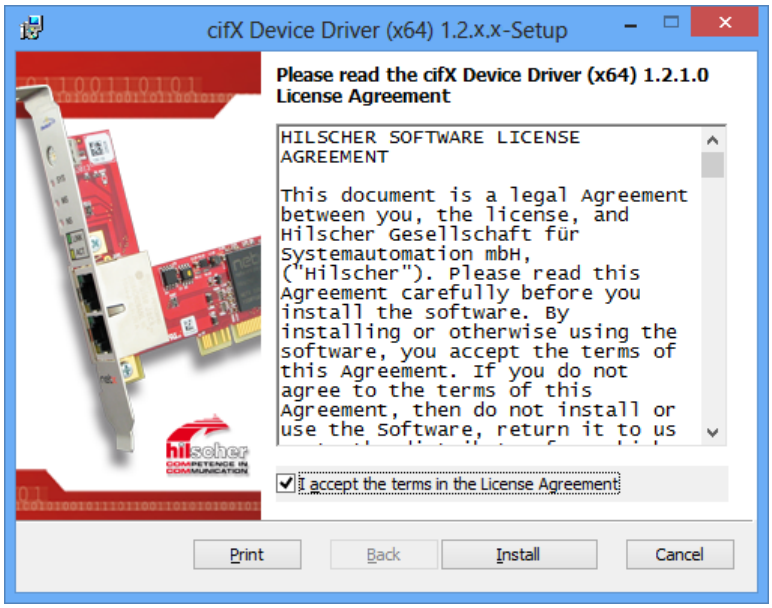

Figure 20: cifX Device Driver Setup – License Agreement

2. Start installation.

➢ Select **I accept the terms in the license agreement**.

➢ Click **Install**.

➮ The cifX Device Driver installation is started:

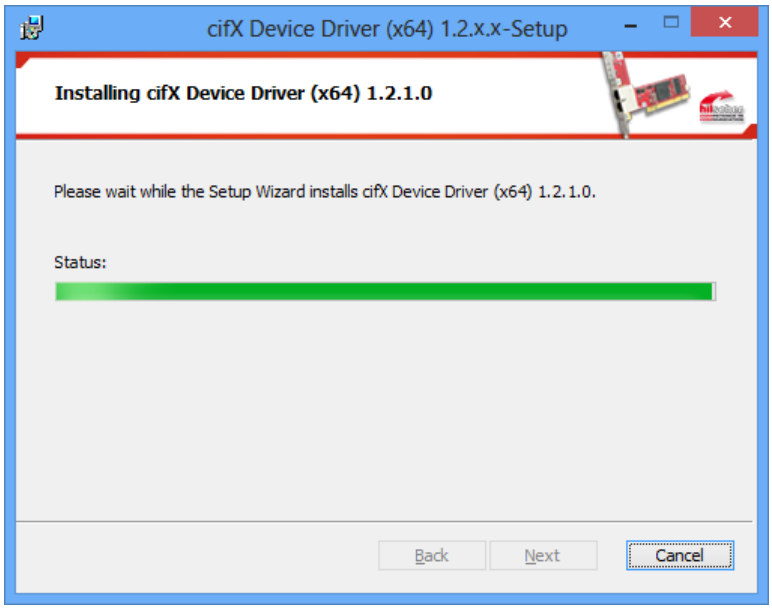

Figure 21: Installing cifX Device Driver

© Hilscher 2013 - 2017

➧ After installation, the **Completed the cifX Device Driver Setup Wizard** window appears:

Figure 22: cifX Device Driver – Installation Completed

➢ Click **Finish**.

➧ You can now proceed to connect your communication module to the host system/PC.

Note: Under Windows 8, the driver installation process is practically finished after having executed the installation program.
When you reboot Windows 8 after having installed the communication module hardware in your host system, respectively after having connected the module to your PC via PCI Carrier Board (comX) or via Evaluation Board (netJACK) for the first time, Windows copies the driver files to the appropriate Windows directories. This is an automated process, you do not need to take any action in this.

3. Install communication module in host system/PC.

Important: When installing the hardware, observe all safety messages in the user manual.

➢ Shut down Windows 8 and disconnect your host system or PC from the voltage supply.

➢ Install the communication module in your host system, respectively connect the communication module to your PC according to the instructions provided in the user manual.

See user manual

- *comX – Communication Modules for Real-Time-Ethernet and Fieldbus*, DOC100903UMxxEN, respectively
- *netJACK Communication Module – Installation, Operation and Hardware Description*, DOC110504UMxxEN

© Hilscher 2013 - 2017

2.2.3.2 Checking Installation

After having installed the cifX Device Driver and having installed/connected the communication module, you should check in the Windows **Device Manager** if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Control Panel**.

➢ In the **Start** screen of Windows 8, right-click on an empty space.

➮ The **All apps** button appears in the lower part of the screen:

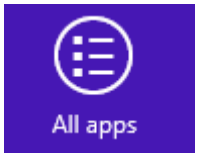

Figure 23: All Apps Button

➢ Click **All apps**.

➮ A list featuring all available programs (Apps) appears:

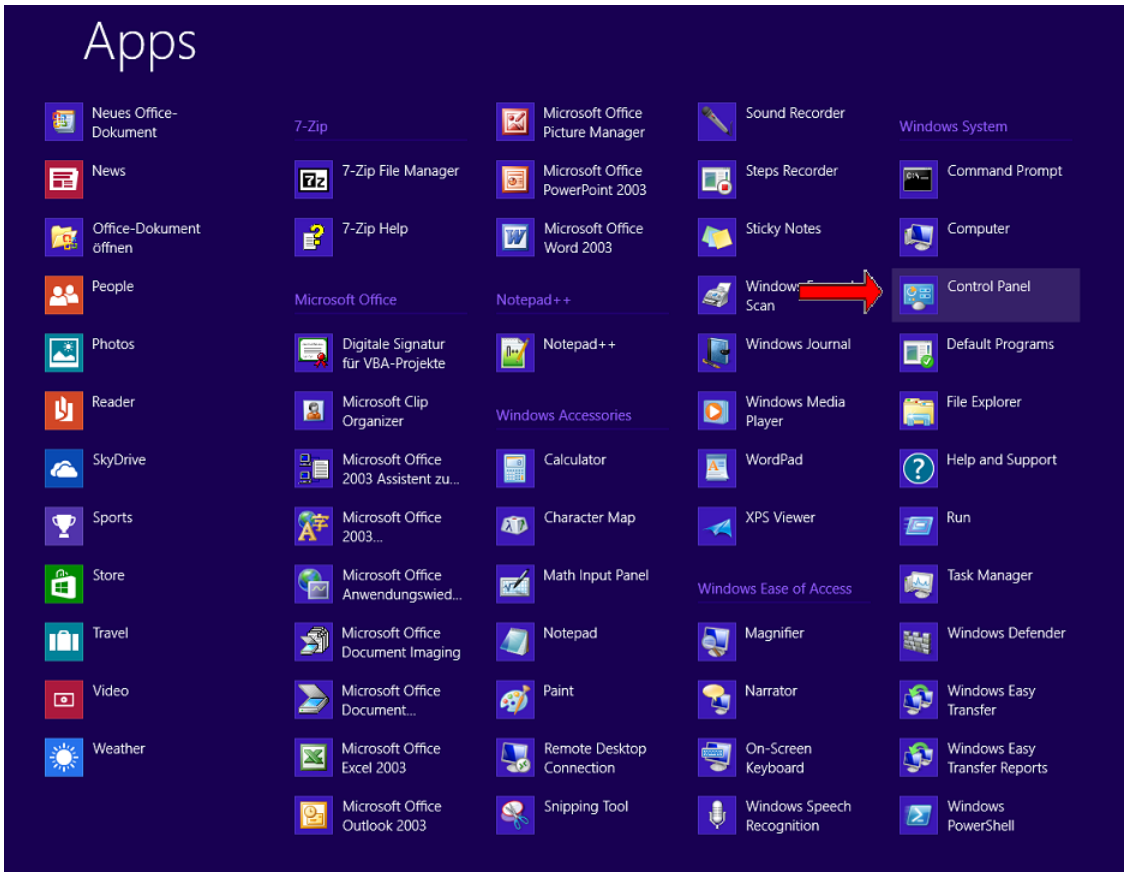

Figure 24: List of Installed Apps in Windows 8

➢ In the **Apps** list, click **Control Panel**.

© Hilscher 2013 - 2017

➧ Windows 8 changes into “desktop mode” and opens the **Control Panel**:

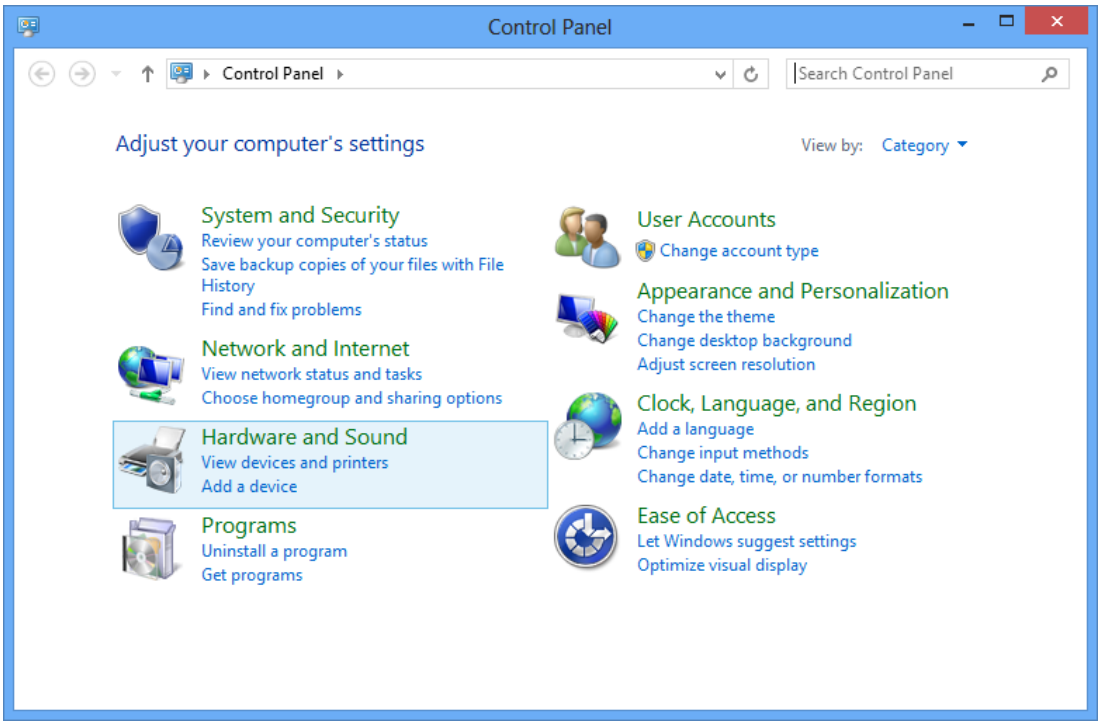

Figure 25: Control Panel

2. Open **Device Manager**.

➢ In the **Control Panel**, click **Hardware and Sound**.

➧ The **Hardware and Sound** window opens:

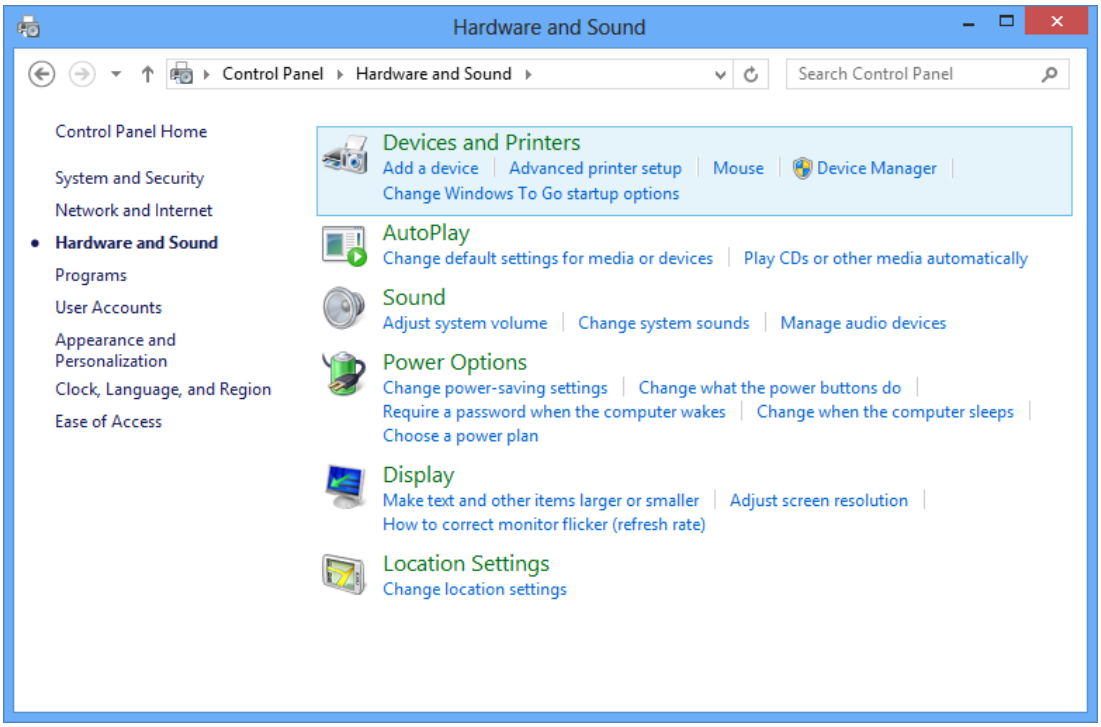

Figure 26: Hardware and Sound

© Hilscher 2013 - 2017

➢ In the **Devices and Printers** group, click **Device Manager**.

➢ The **Device Manager** starts:

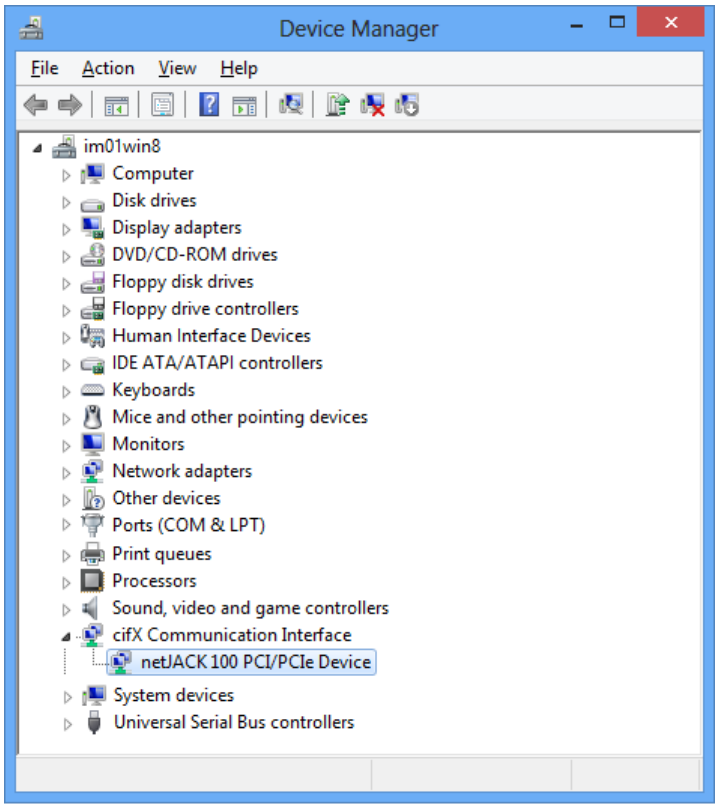

Figure 27: Display of Communication Module in Device Manager

3. Check if the communication module is recognized.

➢ In the **Device Manager**, click on the triangle in front of the **cifX Communication Interface** entry.

➢ A netJACK NJ 100EN-RE communication module for instance, which is connected via NJEB-E Evaluation Board to the PCI Express interface of the PC, will be displayed as **netJACK 100 PCI/PCIe Device**.

© Hilscher 2013 - 2017

2.2.4 Installing cifX Device Driver under Windows 10

2.2.4.1 Installing cifX Device Driver by Installation Program

1. Start the cifX Device Driver installation program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 28: Start Screen Communication Solutions – Installing cifX Device Driver

➢ In the menu, select **Drivers, Software and Tools** > **Install cifX/netJACK Device Driver**.

Note: Alternatively, you can also start the installation program by double-clicking the *cifX Device Driver Setup.exe* file in the `Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation` folder of the Communication Solutions DVD.

© Hilscher 2013 - 2017

➮ The **cifX Device Driver Setup** is started and the **License Agreement** window opens:

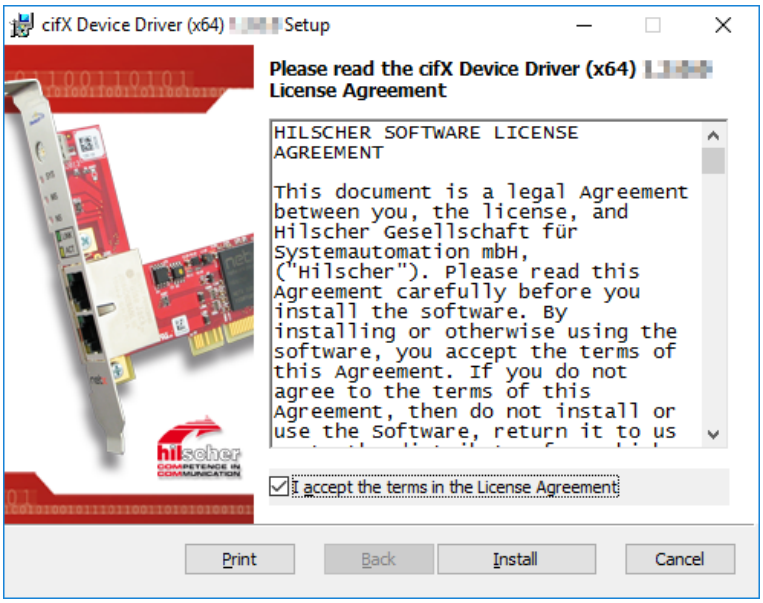

Figure 29: cifX Device Driver Setup – License Agreement

2. Start installation.

➢ Select **I accept the terms in the license agreement**.

➢ Click **Install**.

➮ The cifX Device Driver installation is started:

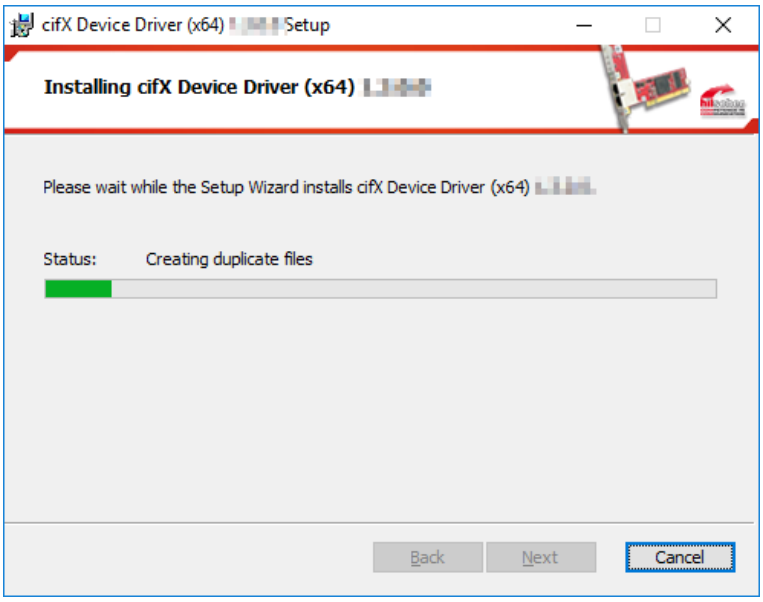

Figure 30: Installing cifX Device Driver

© Hilscher 2013 - 2017

➢ After installation, the **Completed the cifX Device Driver Setup Wizard** window appears:

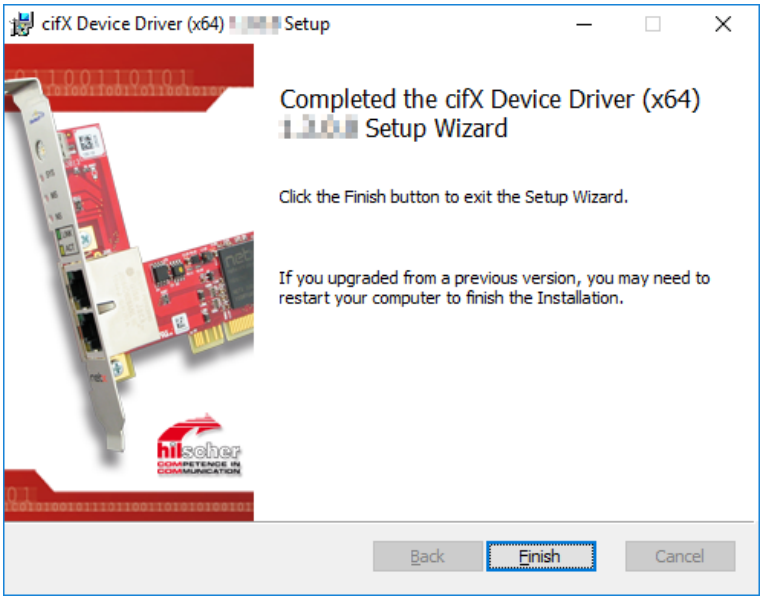

Figure 31: cifX Device Driver – Installation Completed

➢ Click **Finish**.

➢ You can now proceed to connect your communication module to the host system/PC.

Note: Under Windows 10, the driver installation process is practically finished after having executed the installation program.
When you reboot Windows 10 after having installed the communication module hardware in your host system, respectively after having connected the module to your PC via PCI Carrier Board (comX) or via Evaluation Board (netJACK) for the first time, Windows copies the driver files to the appropriate Windows directories. This is an automated process, you do not need to take any action in this.

3. Install communication module in host system/PC.

Important: When installing the hardware, observe all safety messages in the user manual.

➢ Shut down Windows 10 and disconnect your host system or PC from the voltage supply.

➢ Install the communication module in your host system, respectively connect the communication module to your PC according to the instructions provided in the user manual.

See user manual

- *comX – Communication Modules for Real-Time-Ethernet and Fieldbus*, DOC100903UMxxEN, respectively
- *netJACK Communication Module – Installation, Operation and Hardware Description*, DOC110504UMxxEN

© Hilscher 2013 - 2017

2.2.4.2 Checking Installation

After having installed the cifX Device Driver and having installed/connected the communication module, you should check in the Windows **Device Manager** if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Device Manager**.

➢ Right-click on the Windows **Start** symbol, then choose **Device Manager** entry:

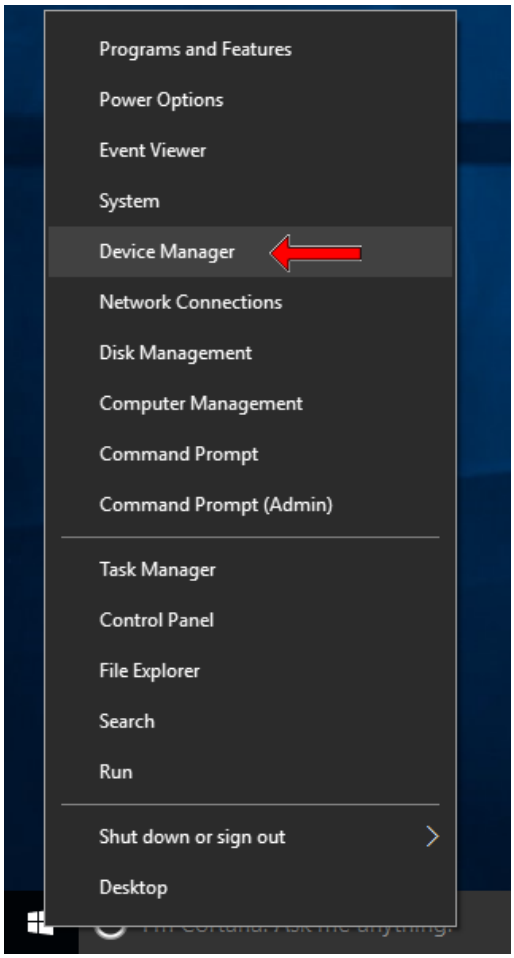

Figure 32: Open Device Manager in Windows 10

© Hilscher 2013 - 2017

➢ The **Device Manager** starts:

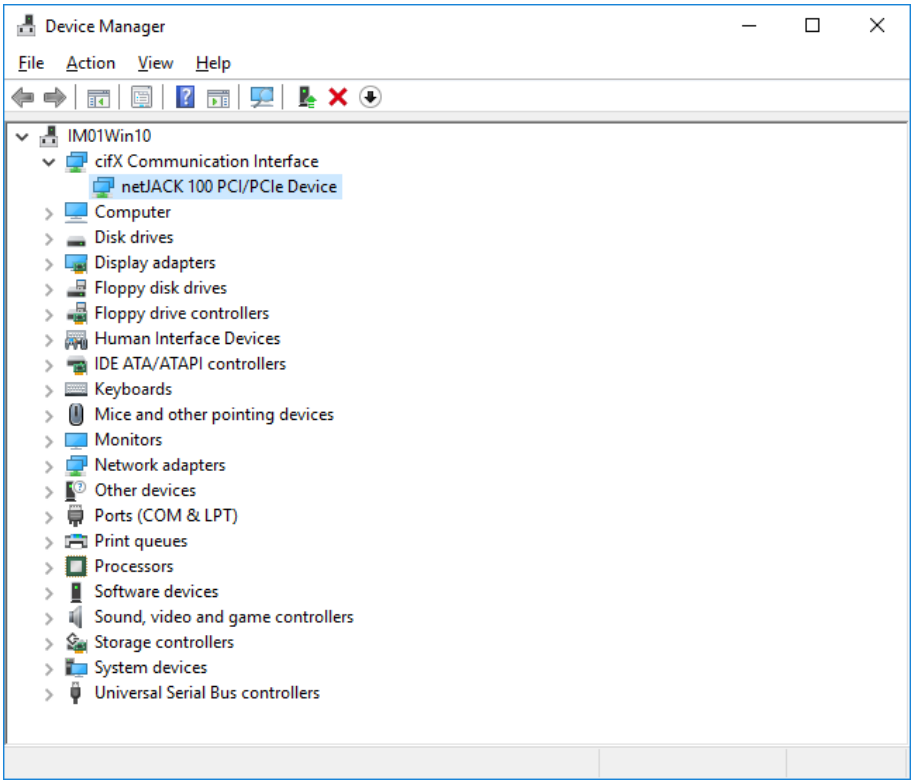

Figure 33: Display of Communication Module in Device Manager

2. Check if the communication module is recognized.

➢ In the Device Manager, click on the triangle in front of the **cifX Communication Interface** entry.

➢ A netJACK NJ 100EN-RE communication module for instance, which is connected via NJEB-E Evaluation Board to the PCI Express interface of the PC, will be displayed as **netJACK 100 PCI/PCIe Device**.

© Hilscher 2013 - 2017

2.3 Uninstalling cifX Device Driver

2.3.1 Uninstalling cifX Device Driver under Windows XP

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

➢ In the **Start** menu of Windows XP, select **Control Panel**.

➢ The **Control Panel** opens:

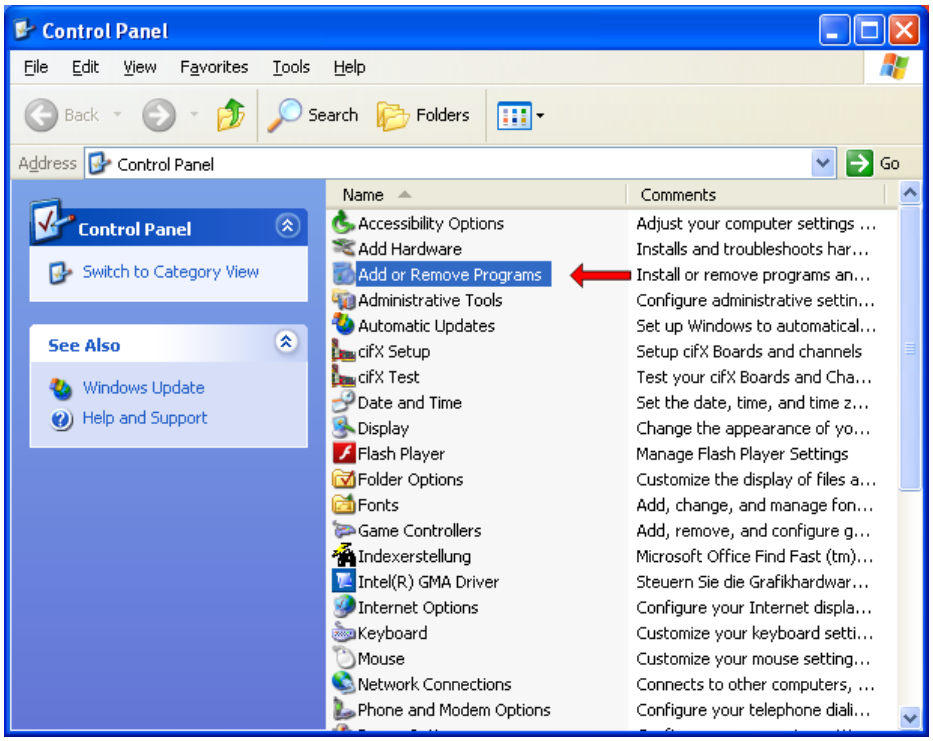

Figure 34: Control Panel

➢ In the **Control Panel**, double-click **Add or Remove Programs** entry.

© Hilscher 2013 - 2017

➢ The **Add or Remove Programs** window opens:

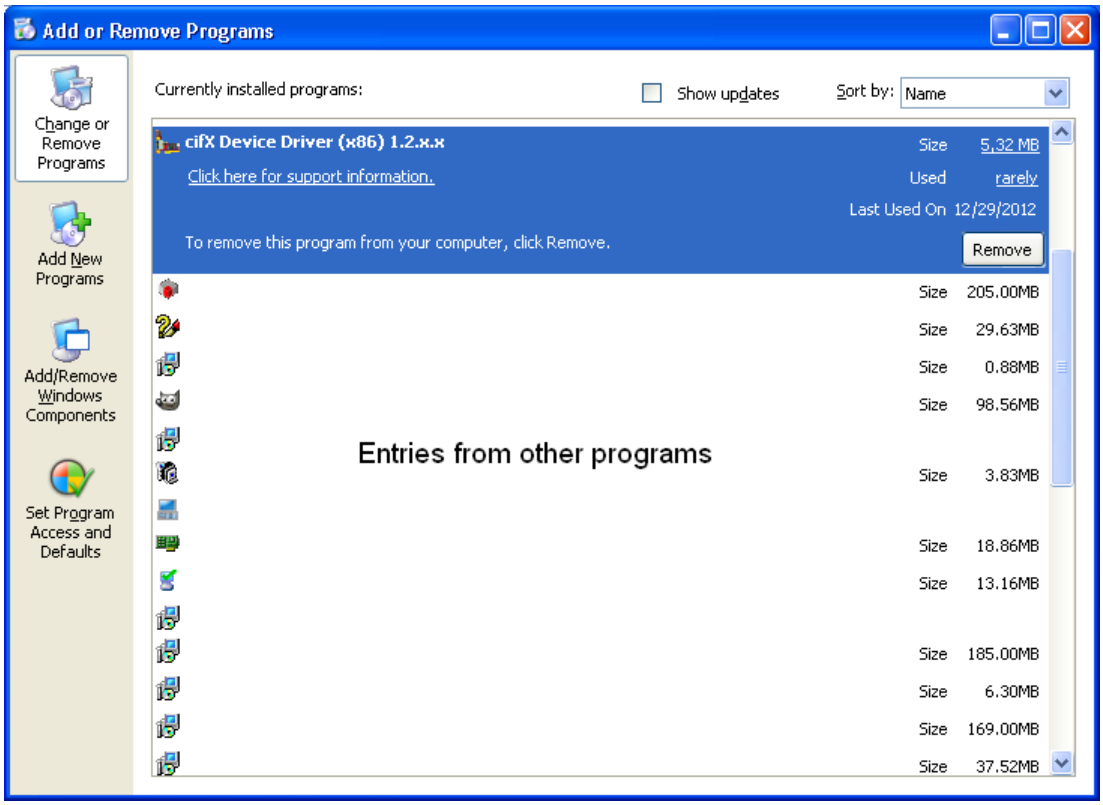

Figure 35: Add or Remove Programs

➢ Select **cifX Device Driver** entry.
➢ Click **Remove**.
➢ A security question appears:

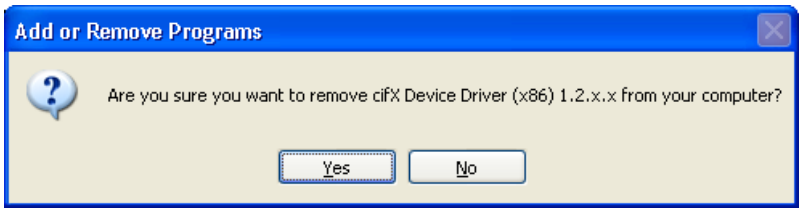

Figure 36: Acknowledge Uninstall

➢ Click **Yes**.
➢ The cifX Device Driver is removed from your host system/PC.

© Hilscher 2013 - 2017

2.3.2 Uninstalling cifX Device Driver under Windows 7

For a complete removal of the cifX Device Driver under Windows 7, it is recommended to delete the driver first in the **Device Manage**r, and then to uninstall the driver in the **Uninstall or change a program** window.

1. Open the **Device Manager**.

➢ In the Windows **Start** menu, select **Control Panel**.

➧ The **Control Panel** opens:

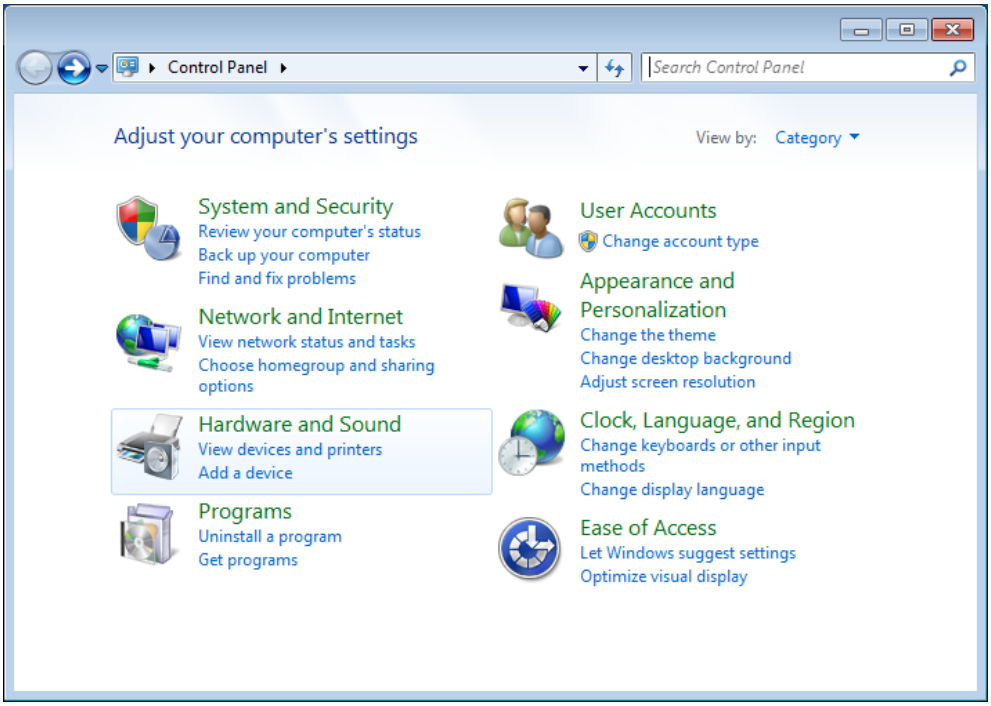

Figure 37: Adjust Your Computer's Settings Window

➢ In the **Control Panel**, click **Hardware and Sound**.

➧ The **Hardware and Sound** window opens:

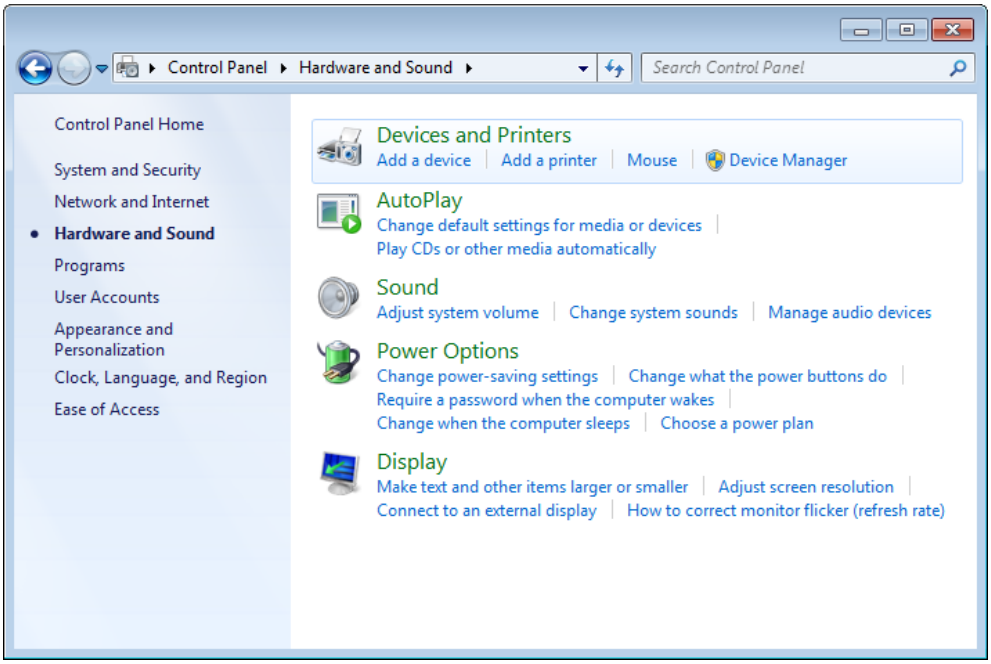

Figure 38: Hardware and Sound Window

➢ In the **Devices and Printers** group, click **Device Manager**.

© Hilscher 2013 - 2017

➮ The **Device Manager** starts.

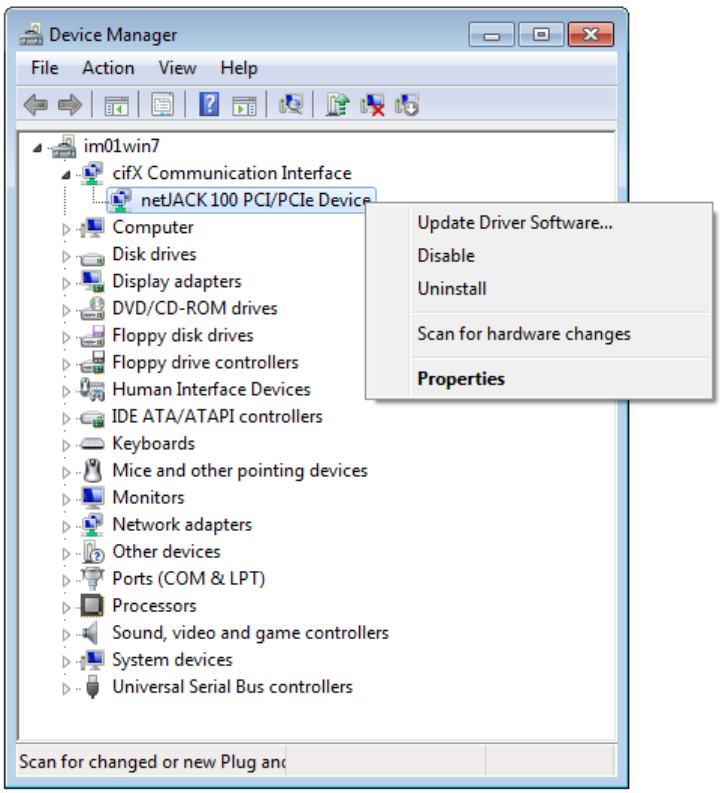

Figure 39: Display of Communication Module in Device Manager

2. Delete cifX Device Driver in the **Device Manager**.

➢ In the **Device Manager**, below the **cifX Communication Interface** entry, right-click on the communication module (in this case it is displayed as **netJACK 100 PCI/PCIe Device**) and choose **Properties** from the context menu.

➮ The **Properties** sheet opens.

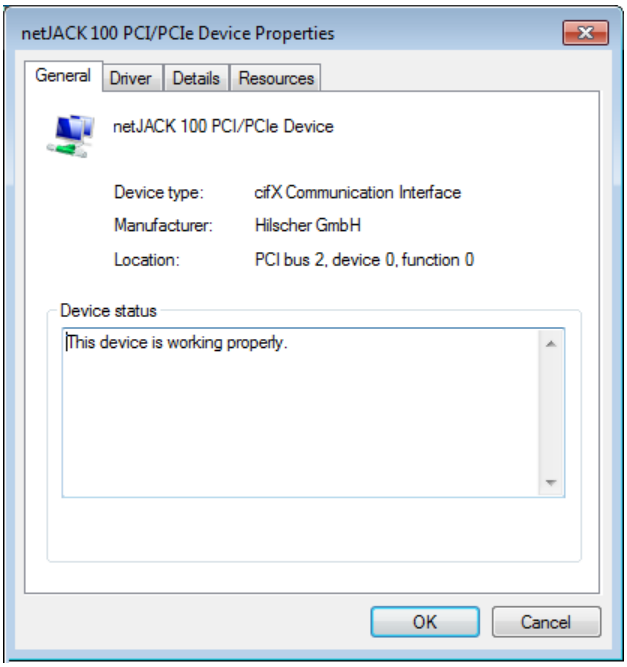

Figure 40: Properties of Communication Module in Device Manager

© Hilscher 2013 - 2017

➢ Choose **Driver** tab.

➮ The **Driver** tab opens.

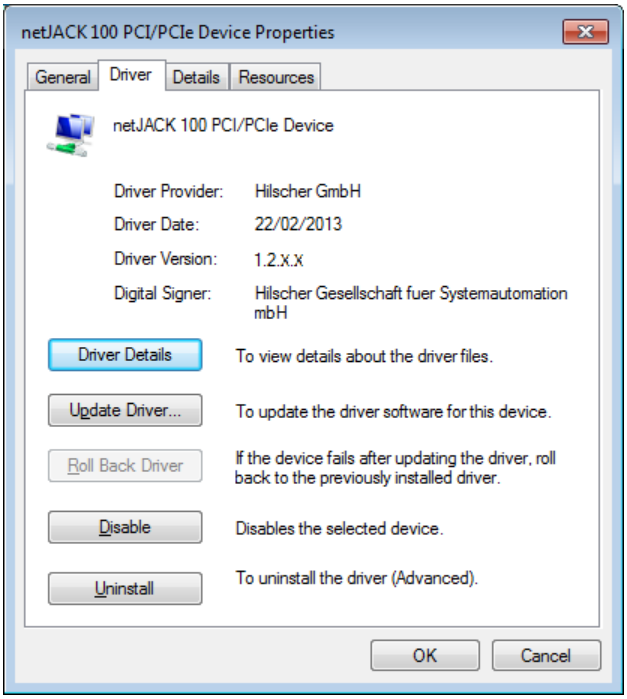

Figure 41: Driver of Communication Module in Device Manager

➢ Click **Uninstall**.

➮ The **Confirm Device Uninstall** dialog opens:

Figure 42: Delete Driver Software

➢ Select **Delete the driver software for this device** option.

➢ Click **OK**.

➮ The cifX Device Driver is being deleted.

© Hilscher 2013 - 2017

3. Uninstall cifX Device Driver in the **Uninstall or change a program** window.

➢ In the **Start** menu of Windows, select **Control Panel**.

➢ The **Adjust your computer's settings** window opens:

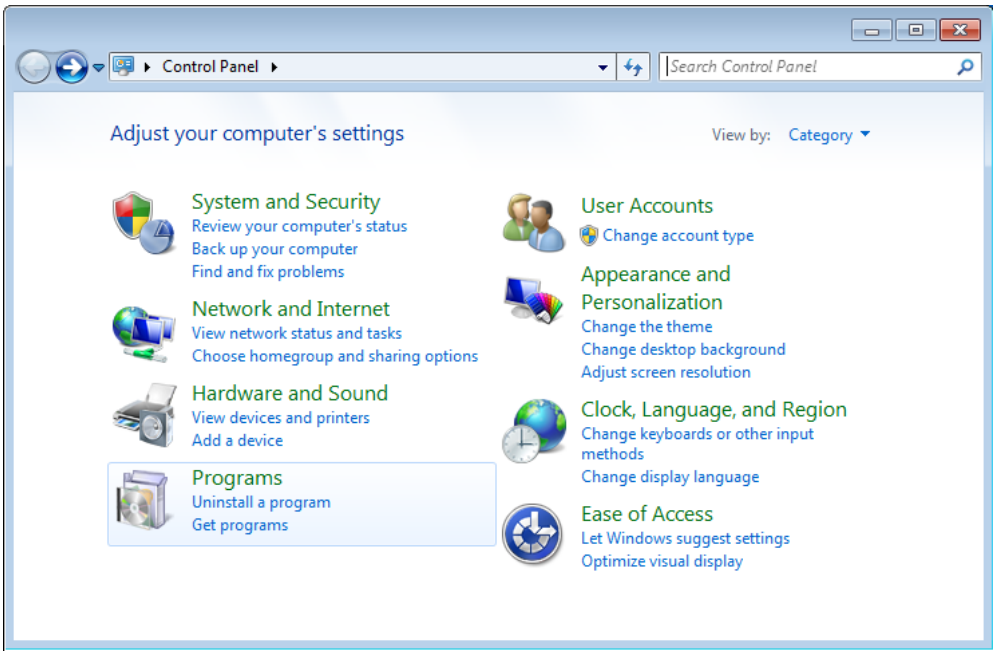

Figure 43: Adjust Your Computer's Settings Window

➢ In the **Programs** group, click **Uninstall a program**.

➢ The **Uninstall or change a program** window opens:

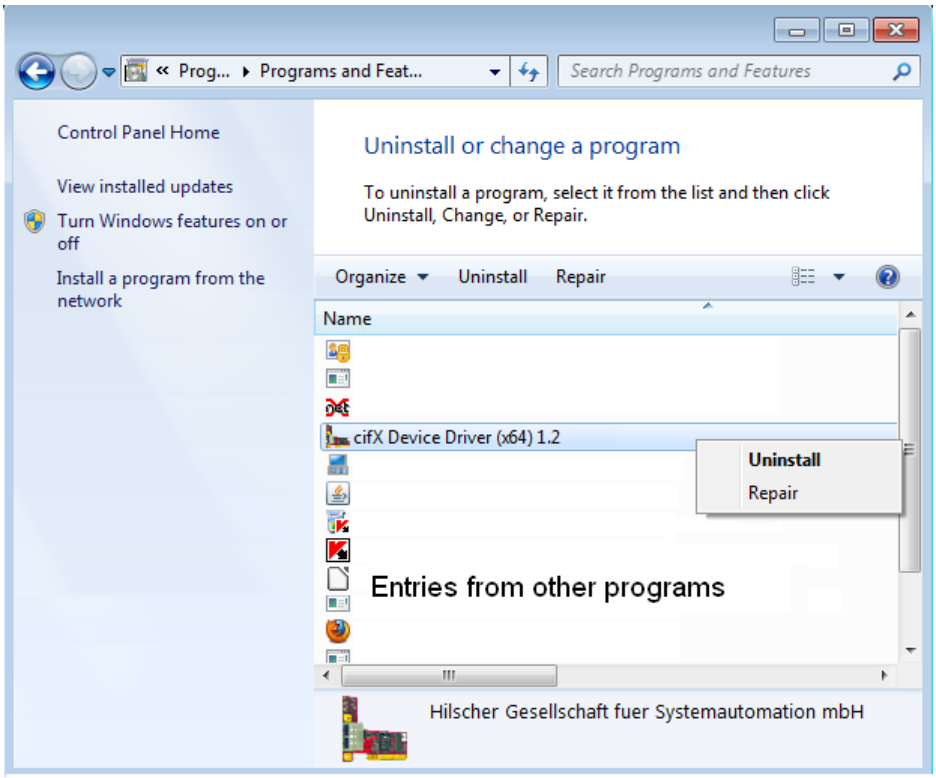

Figure 44: Uninstall or Change a Program Window

➢ Right-click on the **cifX Device Driver** entry and choose **Uninstall** from the context menu.

© Hilscher 2013 - 2017

A confirmation request appears:

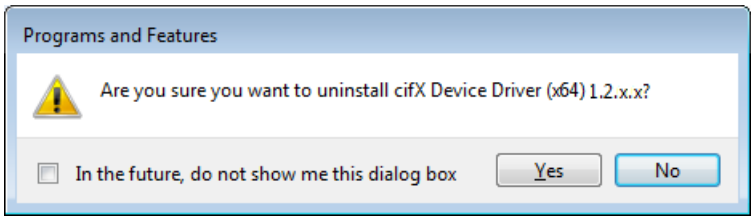

Figure 45: Confirmation Dialog

➢ Click **Yes**.

The cifX Device Driver is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

2.3.3 Uninstalling cifX Device Driver under Windows 8

For a complete removal of the cifX Device Driver under Windows 8, it is recommended to delete the driver first in the **Device Manage**r, and then to uninstall the driver in the **Uninstall or change a program** window.

1. Open the **Control Panel**.

➢ In the **Start** screen of Windows 8, right-click on an empty space.

➮ The **All apps** button appears in the lower part of the screen:

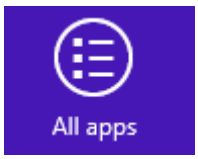

Figure 46: All Apps Button

➢ Click **All apps**.

➮ A list featuring all available programs (Apps) appears:

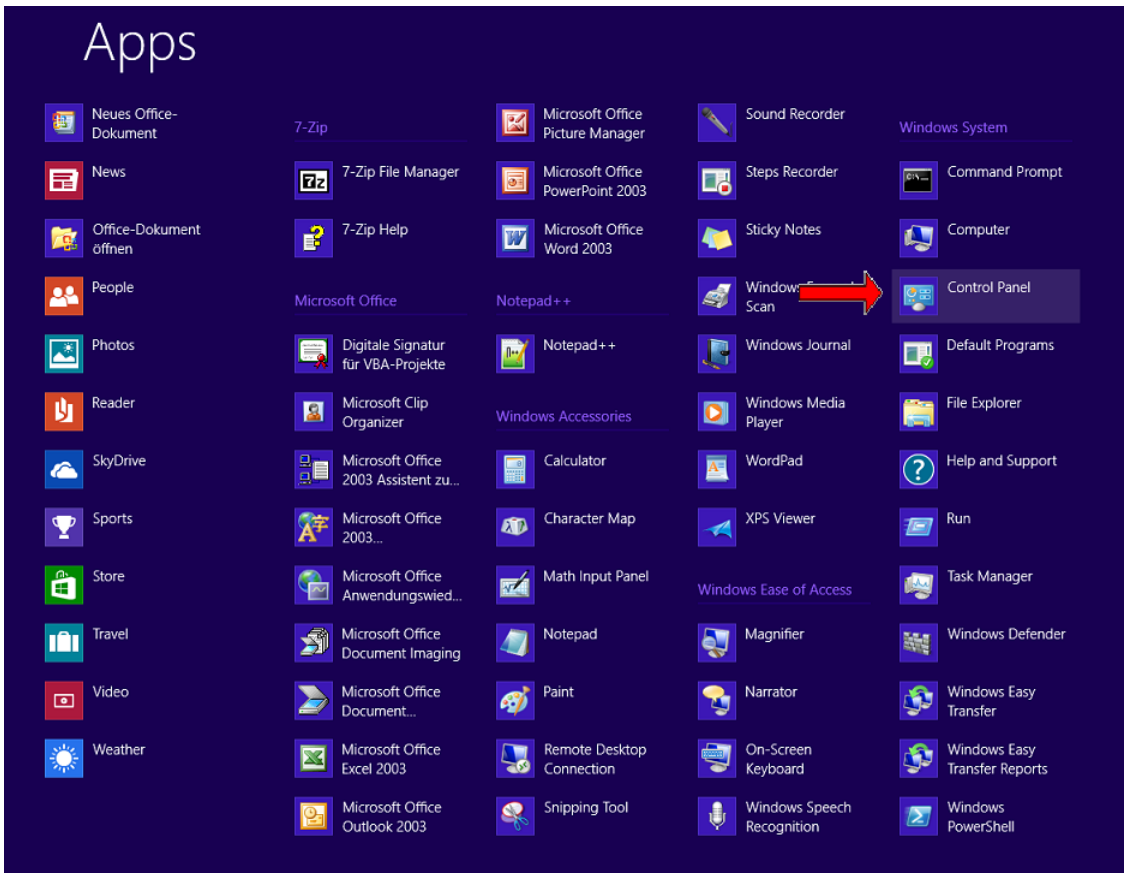

Figure 47: List of Installed Apps in Windows 8

➢ In the **Apps** list, click **Control Panel**.

© Hilscher 2013 - 2017

➧ Windows 8 changes into “desktop mode” and opens the **Control Panel**:

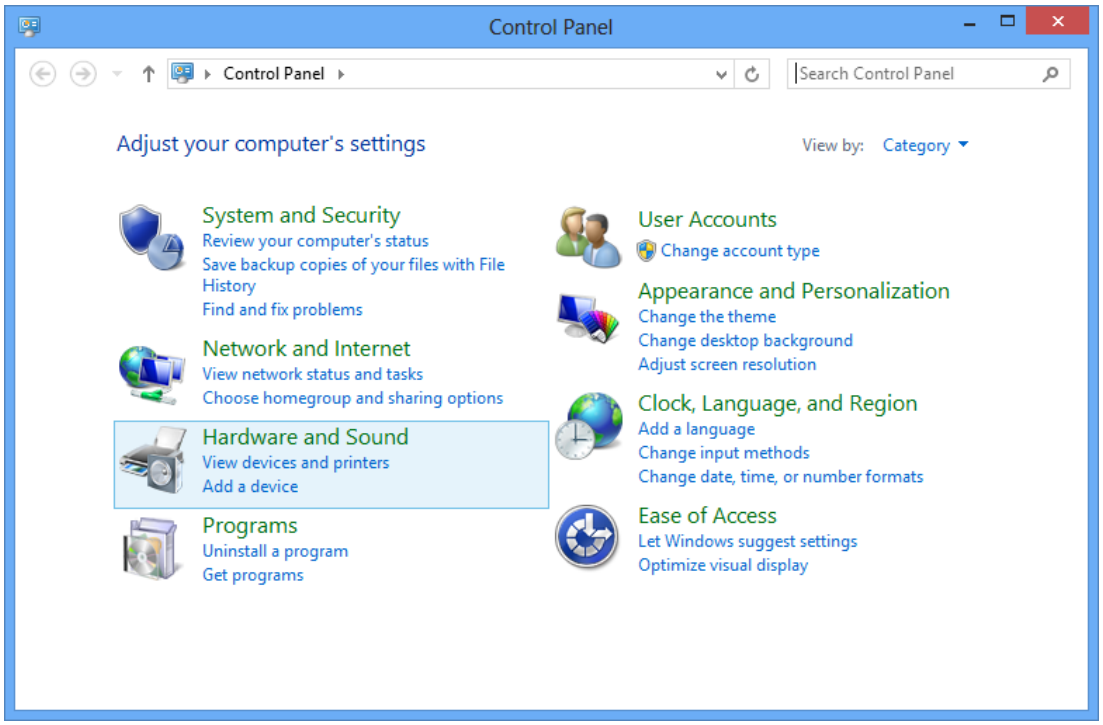

Figure 48: Control Panel

2. Open **Device Manager**.

➢ In the **Control Panel**, click **Hardware and Sound**.

➧ The **Hardware and Sound** window opens:

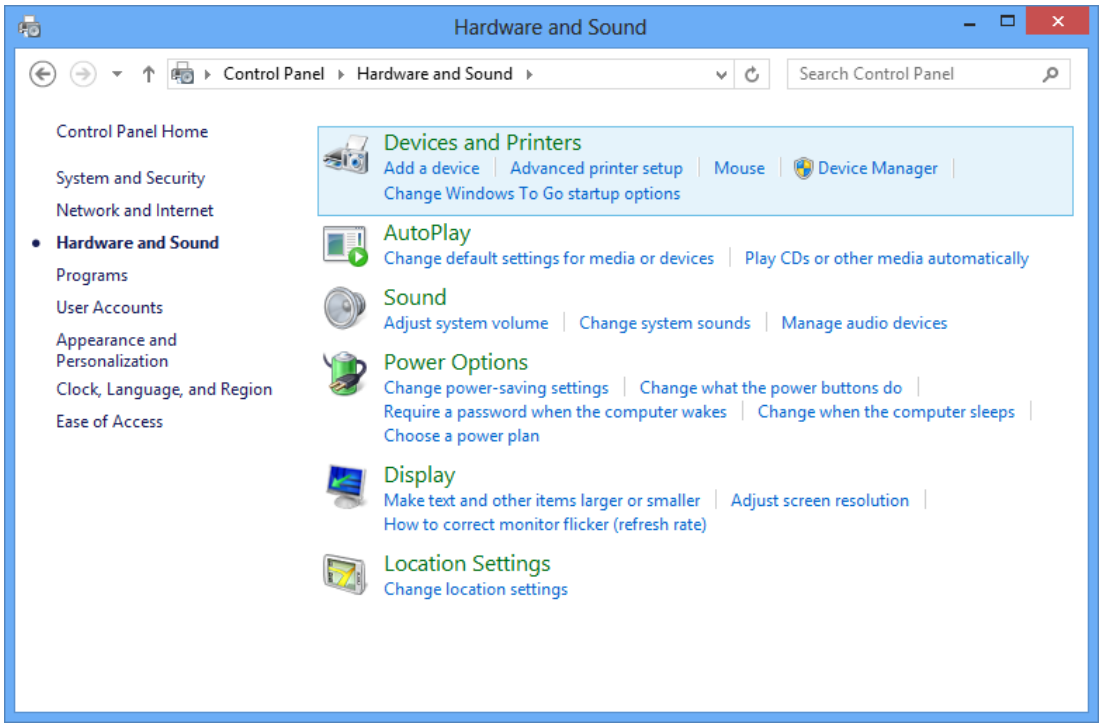

Figure 49: Hardware and Sound

© Hilscher 2013 - 2017

➢ In the **Devices and Printers** group, click **Device Manager**.

➮ The **Device Manager** starts.

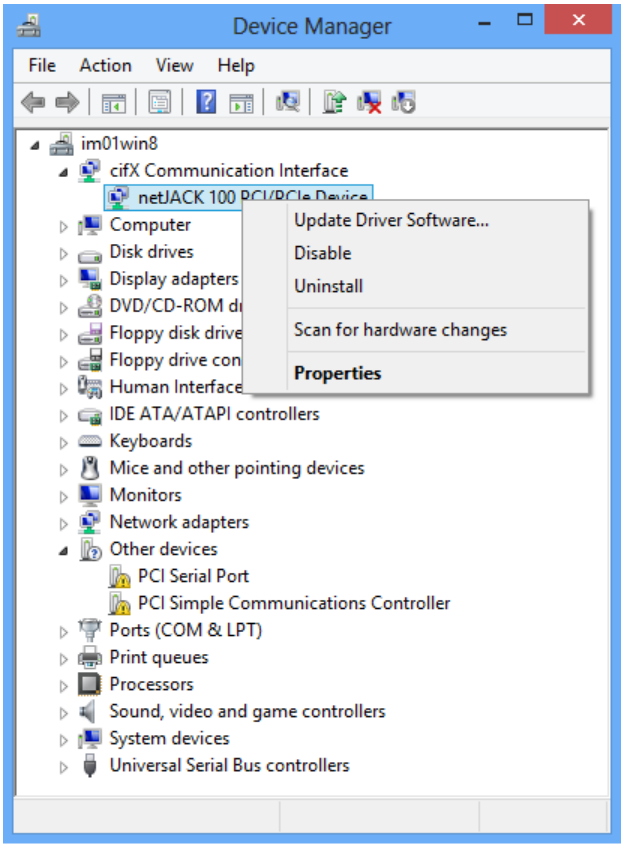

Figure 50: Display of Communication Module in Device Manager

2. Delete cifX Device Driver in the **Device Manager**.

➢ In the **Device Manager**, below the **cifX Communication Interface** entry, right-click on the communication module (in this case it is displayed as **netJACK 100 PCI/PCIe Device**) and choose **Properties** from the context menu.

➮ The **Device Properties** sheet opens:

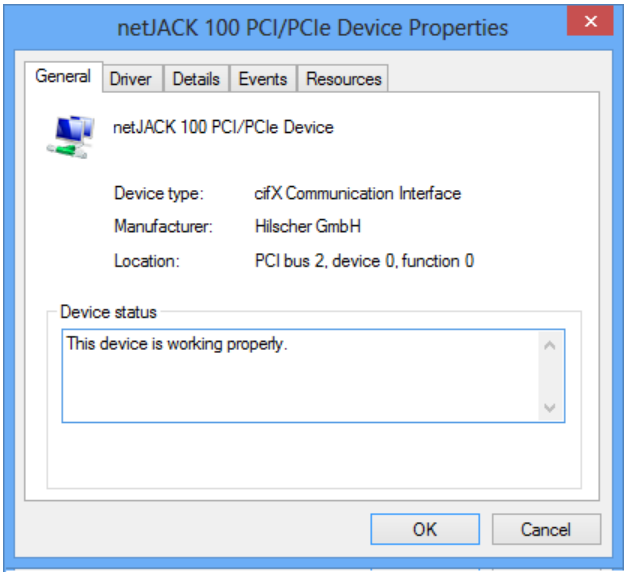

Figure 51: Properties of Communication Module in Device Manager

© Hilscher 2013 - 2017

➢ Choose **Driver** tab.

➮ The **Driver** tab opens.

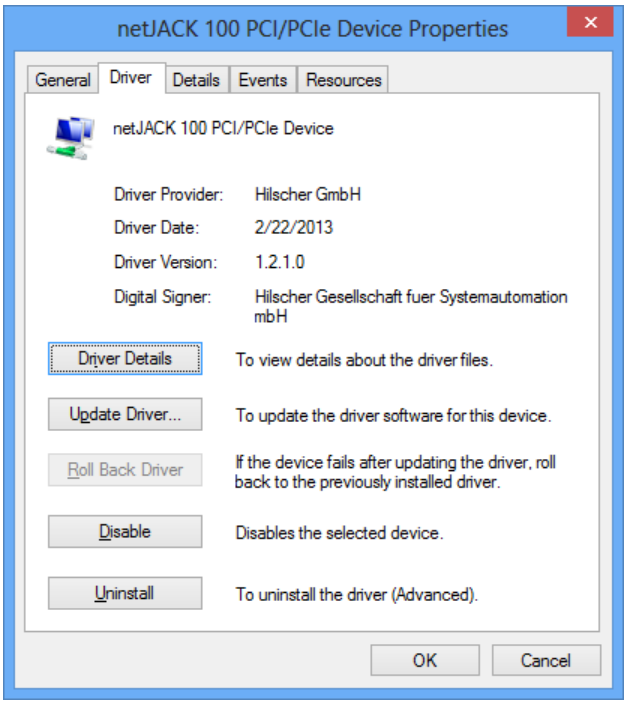

Figure 52: Driver of Communication Module in Device Manager

➢ Click **Uninstall**.

➮ The **Confirm Device Uninstall** dialog opens:

Figure 53: Delete Driver Software

➢ Select **Delete the driver software for this device** option.

➢ Click **OK**.

➮ The cifX Device Driver is being deleted.

© Hilscher 2013 - 2017

3. Uninstall cifX Device Driver in the **Uninstall or change a Program** window.

➢ Open **Control Panel**.

➢ The **Control Panel** opens:

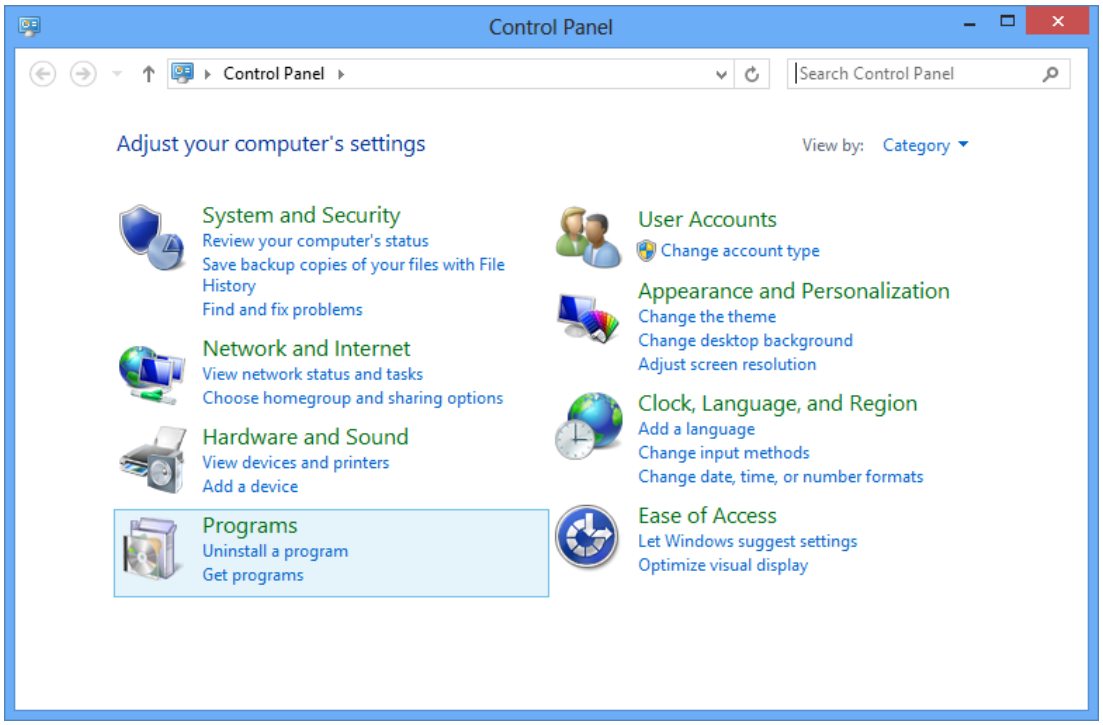

Figure 54: Control Panel

➢ In the **Programs** group of the **Control Panel**, click **Uninstall a program**.

➢ The **Programs and Features** window opens:

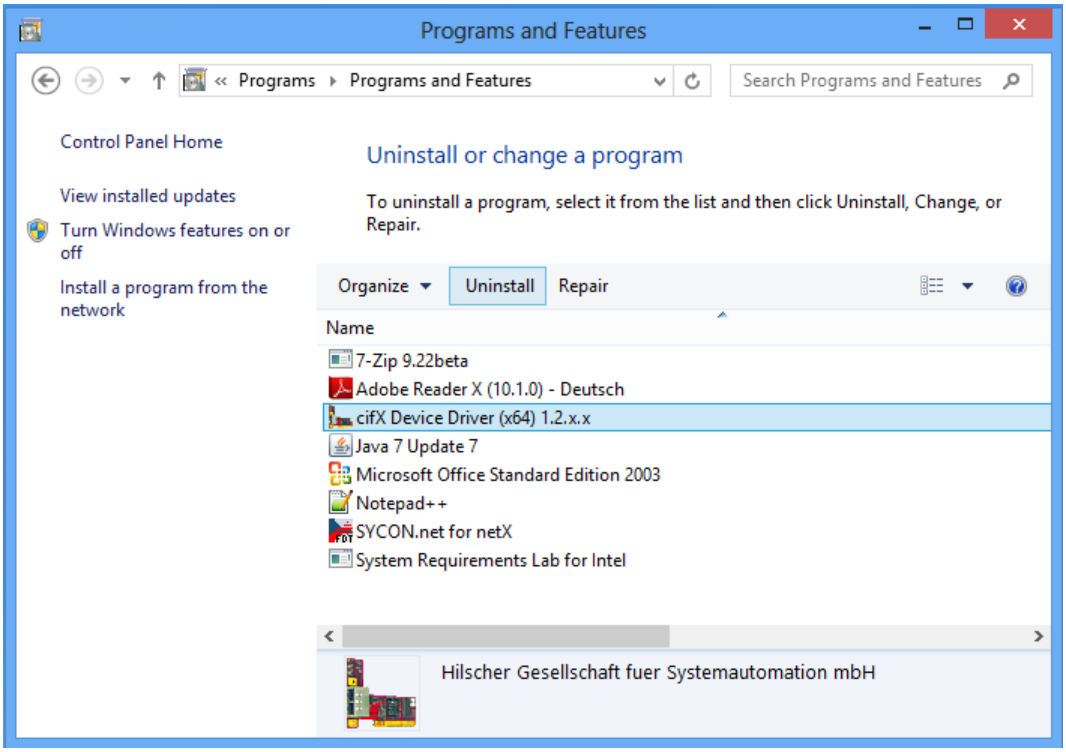

Figure 55: Uninstall or Change a Program Window

© Hilscher 2013 - 2017

- Select **cifX Device Driver** entry.
- Above the list, click **Uninstall**.
- A security question appears:

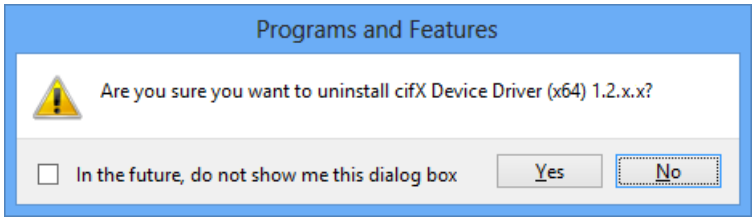

Figure 56: Acknowledge Uninstall

- Click **Yes**.
- The cifX Device Driver is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

2.3.4 Uninstalling cifX Device Driver under Windows 10

1. Open the **Programs and Features** dialog window.

➢ Right-click on the Windows **Start** symbol, then choose **Programs and Features** entry:

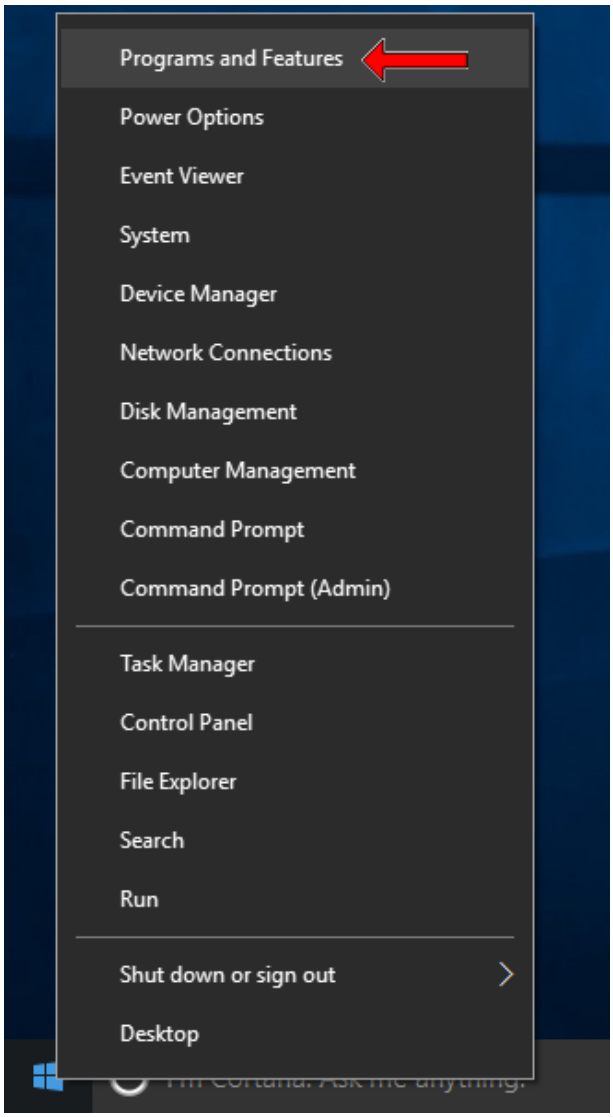

Figure 57: Open program manager in Windows 10

© Hilscher 2013 - 2017

➧ The **Uninstall or change a program** window opens:

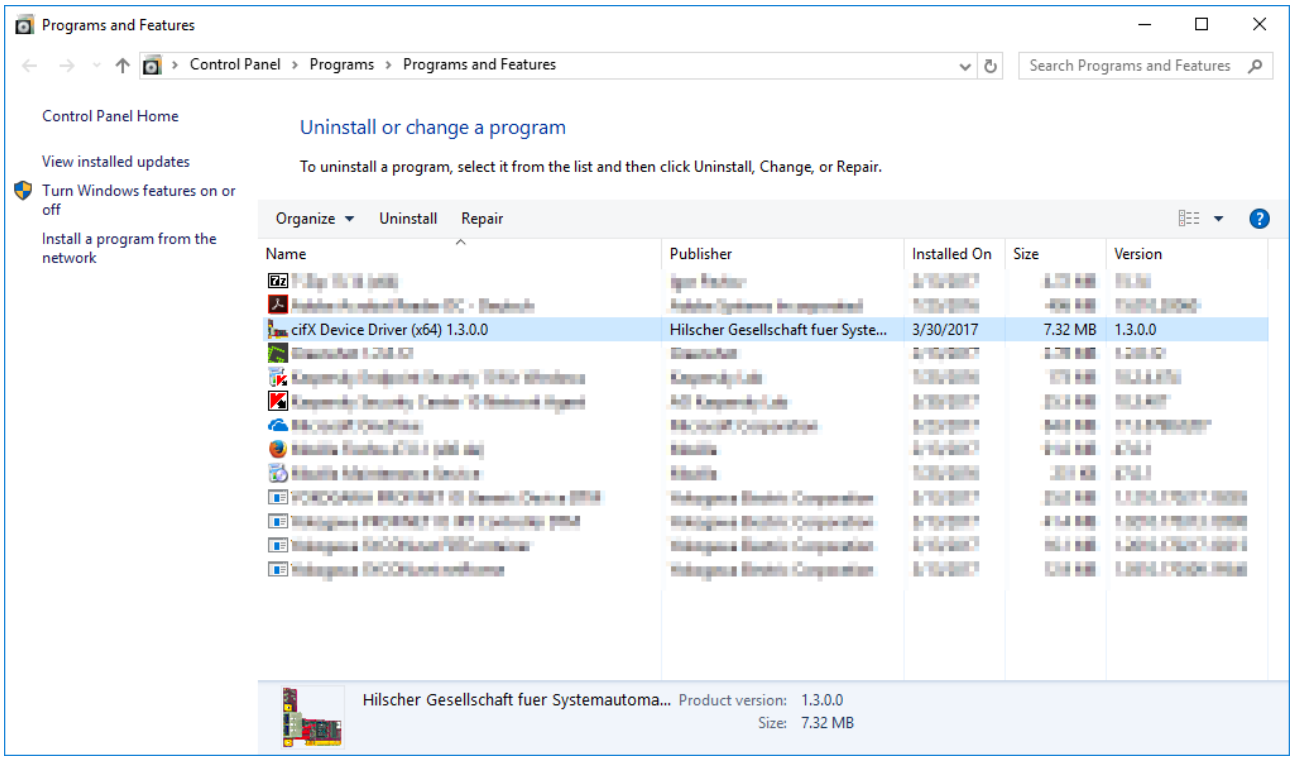

Figure 58: Uninstall or change a program window

➢ Select **cifX Device Driver** entry.
➢ Above the list, click **Uninstall**.
➧ A security question appears:

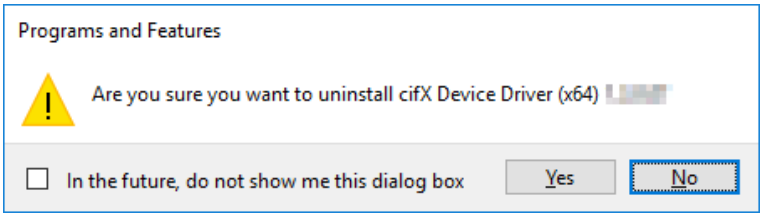

Figure 59: Acknowledge Uninstall

➢ Click **Yes**.
➧ The cifX Device Driver is being uninstalled from your PC.

© Hilscher 2013 - 2017

3 USB Driver

3.1 Overview

If a USB interface has been implemented on the carrier board of the host system of your communication module and if you want to use this USB interface to configure or diagnose your module or to update its firmware from a Windows PC, you need to install the USB drivers on your Windows PC. If you are operating a netJACK communication module with an Evaluation Board, and if you want to access its USB interface from a Windows PC, you also need to install the USB driver on your Windows PC.

The USB drivers are delivered on the Communication Solutions DVD. You can start an installation program for the USB drivers in the menu of the start screen of the DVD. Instructions for this are provided on the following pages. You can also start the installation program by double-clicking the *Setup.exe* file in the `Driver and Toolkit\USB Diagnostic Driver` directory of the Communication Solutions DVD.
The installation program contains all components needed for the installation of the drivers under Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10. It detects, whether the 32 bit or the 64 bit driver needs to be installed.

Please note the following:

- 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 communication module to your Windows PC via USB cable (“software first” principle).
- After installing the USB driver and connecting your communication module via USB cable, check in the Windows Device Manager if the driver has been correctly installed and if Windows recognizes the connected communication module.

Note: Before you can use the USB interface of your communication module, you not only need to install the USB drivers, you also need to install the module in its host system, PC or Evaluation Board, connect it to a voltage supply and make sure that it is loaded with its firmware.
When you connect the module to the PC via USB cable, Windows can identify the appropriate USB driver only if a firmware is running on the module. Usually, Hilscher communication modules are shipped with their firmware already loaded. However, you will find information on how to load or update the firmware of your communication module in the user manual

- *comX – Communication Modules for Real-Time-Ethernet and Fieldbus*, DOC100903UMxxEN

or

- *netJACK Communication Module – Installation, Operation and Hardware Description*, DOC110504UMxxEN.

© Hilscher 2013 - 2017

3.2 Installing USB Driver

3.2.1 Installing USB Driver under Windows XP

3.2.1.1 Installing USB Driver by Installation Program

1. Start the USB driver installation program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 60: Start Screen Communication Solutions – Install USB Driver

➢ In the menu, select **Drivers, Software and Tools** > **Install USB Diagnosis 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 Diagnostic Driver` folder of the Communication Solutions DVD.

© Hilscher 2013 - 2017

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

Figure 61: Device Driver Installation Wizard – Start Screen

2. Start the installation.

➢ Click **Next**.

➧ The installation of the USB drivers is started.

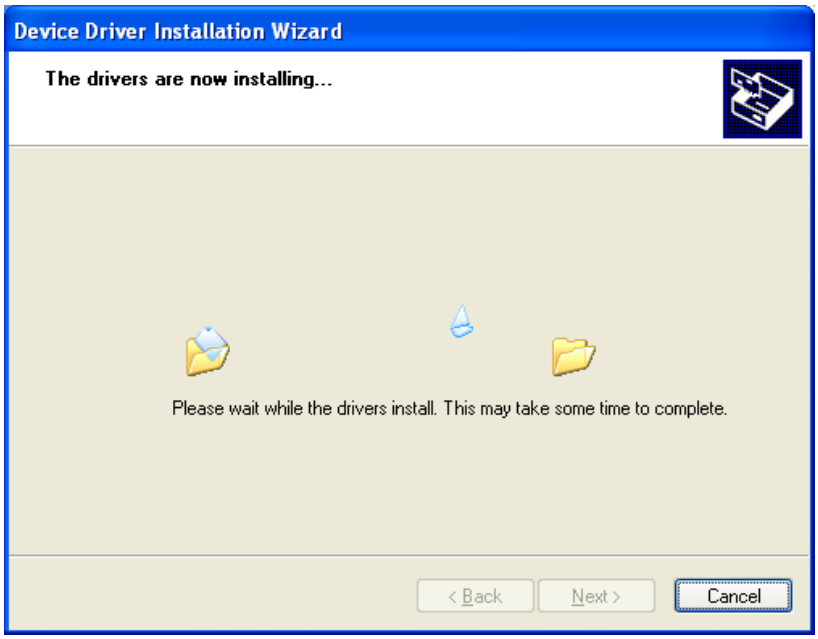

Figure 62: Device Driver Installation Wizard – Driver Are Installing

© Hilscher 2013 - 2017

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

Figure 63: 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 communication module to a PC via USB cable for the first time.

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

➢ Connect your communication module via USB cable to your Windows PC.

The **Found New Hardware Wizard** starts:

Figure 64: Found New Hardware Wizard – USB Driver (1)

© Hilscher 2013 - 2017

- 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:

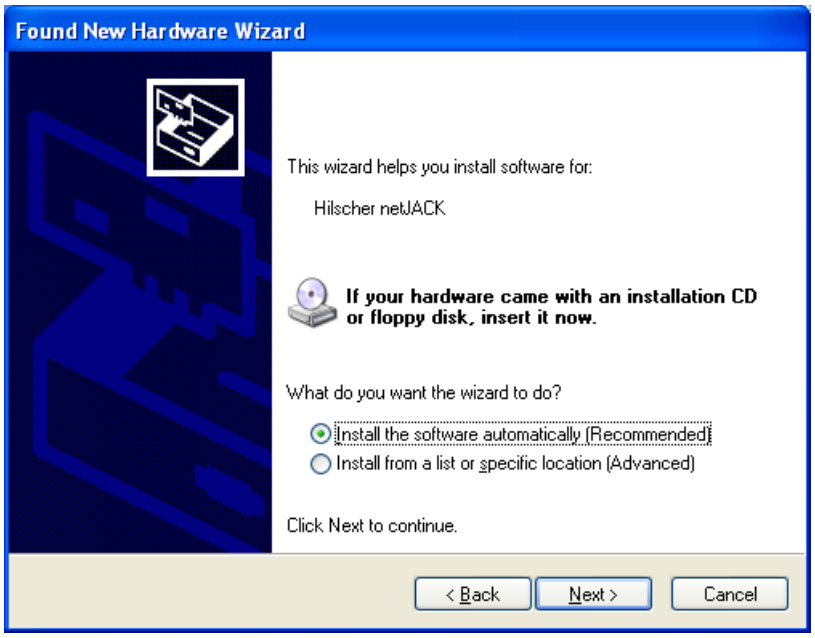

Figure 65: Found New Hardware Wizard – USB Driver (2)

- 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.

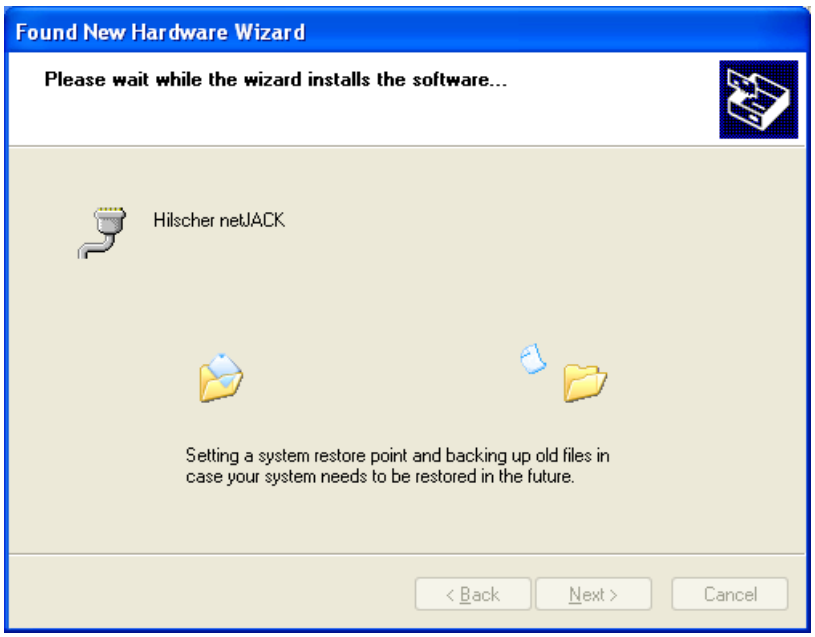

Figure 66: Found New Hardware Wizard – USB Driver (3)

© Hilscher 2013 - 2017

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

Figure 67: Found New Hardware Wizard – USB Driver (4)

➢ Click **Finish**.

➮ The installation of the USB driver is now complete.

© Hilscher 2013 - 2017

3.2.1.2 Checking Installation

After having installed the USB driver and having connected the communication module via USB cable, you should check in the Windows Device Manager if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Device Manager**.

➢ In the **Start** menu of Windows, select **Control Panel**.

➢ The **Control Panel** opens:

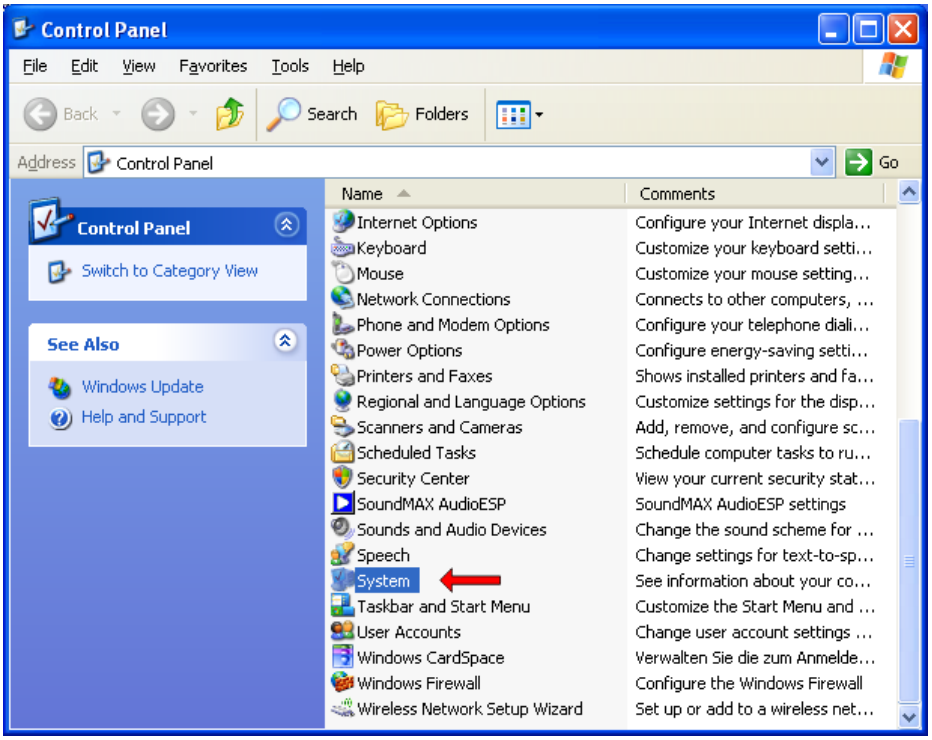

Figure 68: Control Panel

➢ In the **Control Panel**, double-click **System**.

© Hilscher 2013 - 2017

➮ The **System Properties** sheet opens:

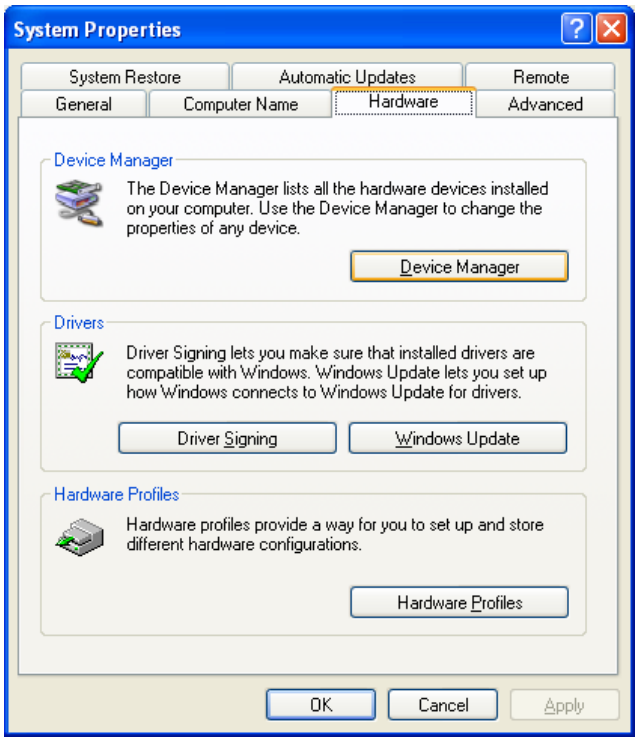

Figure 69: System Properties

➢ In the **System Properties** sheet, select **Hardware** tab.

➢ In the **Hardware** tab, click **Device Manager**.

➮ The **Device Manager** starts:

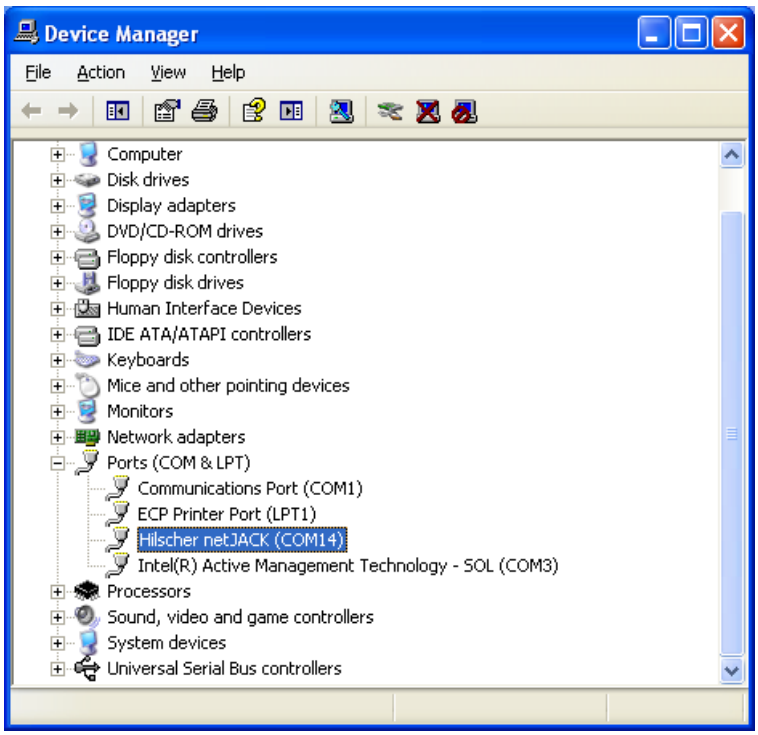

Figure 70: Display of USB Connection in Device Manager

© Hilscher 2013 - 2017

2. Check if the communication module is recognized.

➢ Click on the plus symbol in front of the **Ports (COM & LPT)** entry.

➪ A netJACK NJ 100EN-RE communication module for instance will be displayed as **Hilscher netJACK**, with the currently used COM port indicated in brackets.

© Hilscher 2013 - 2017

3.2.2 Installing USB Driver under Windows 7

3.2.2.1 Installing USB Driver by Installation Program

1. Start the USB Driver setup program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 71: Start Screen Communication Solutions – Install USB Driver

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

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

© Hilscher 2013 - 2017

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

Figure 72: Device Driver Installation Wizard – Start Screen

2. Start the installation.

➢ Click **Next**.

➧ The installation of the USB drivers is started.

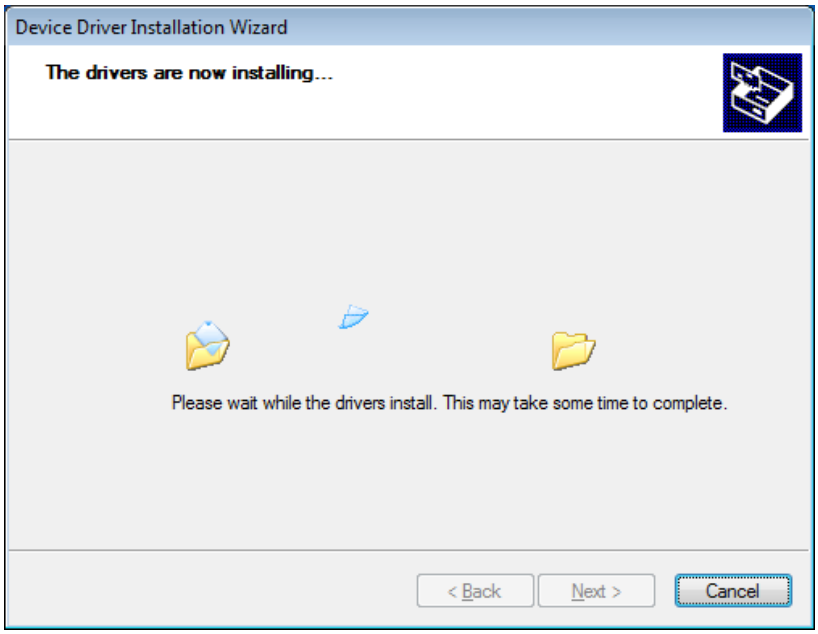

Figure 73: Device Driver Installation Wizard – Drivers Are Installing

© Hilscher 2013 - 2017

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

Figure 74: 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 communication module 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.

© Hilscher 2013 - 2017

3.2.2.2 Checking Installation

After having installed the USB driver and having connected the communication module via USB cable, you should check in the Device Manager of Windows 7 if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Device Manager**.

➢ In the Windows **Start** menu, select **Control Panel**.

➮ The **Control Panel** opens:

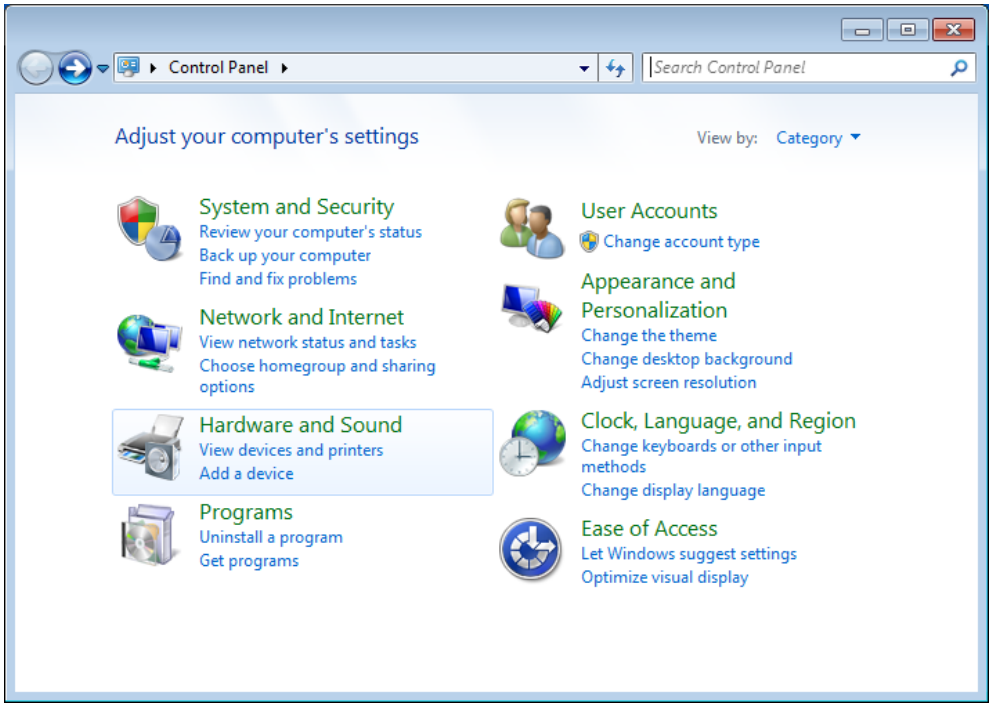

Figure 75: Adjust Your Computer's Settings Window

➢ In the **Control Panel**, click **Hardware and Sound**.

➮ The **Hardware and Sound** window opens:

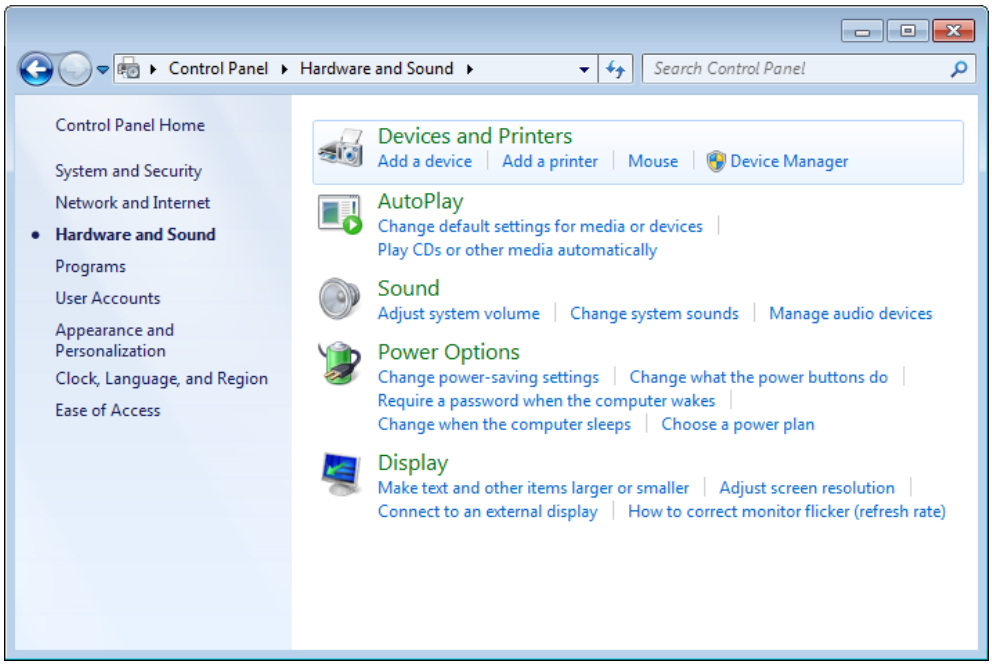

Figure 76: Hardware and Sound Window

© Hilscher 2013 - 2017

➢ In the **Devices and Printers** group, click **Device Manager**.

➢ The **Device Manager** starts:

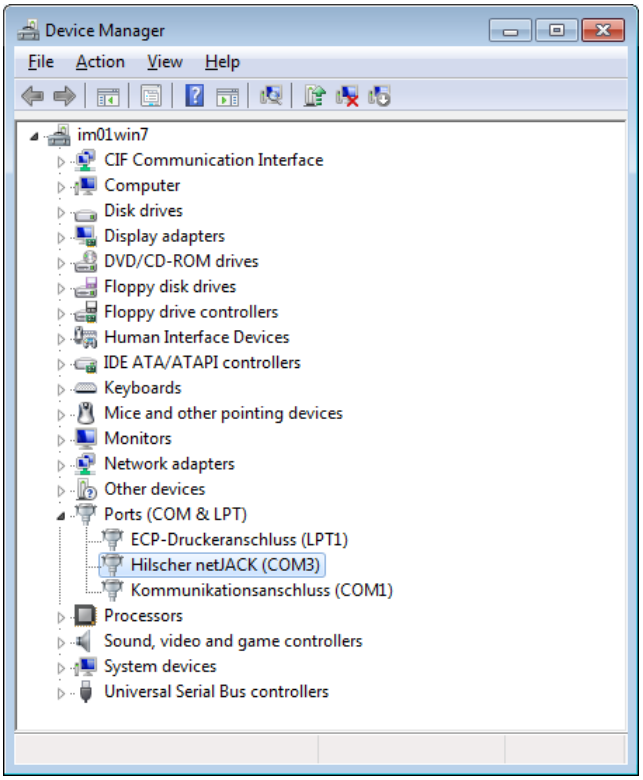

Figure 77: Display of USB Connection in Device Manager

2. Check if the communication module is recognized.

➢ Click on the triangle in front of the **Ports (COM & LPT)** entry.

➢ A netJACK NJ 100EN-RE communication module for instance will be displayed as **Hilscher netJACK**, with the currently used COM port indicated in brackets.

© Hilscher 2013 - 2017

3.2.3 Installing USB Drivers under Windows 8

3.2.3.1 Installing USB Driver by Installation Program

1. Start the USB Driver setup program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 78: Start Screen Communication Solutions – Install USB Driver

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

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

© Hilscher 2013 - 2017

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

Figure 79: Device Driver Installation Wizard – Start Screen

2. Start the installation.

➢ Click **Next**.

➧ The installation of the USB drivers is started.

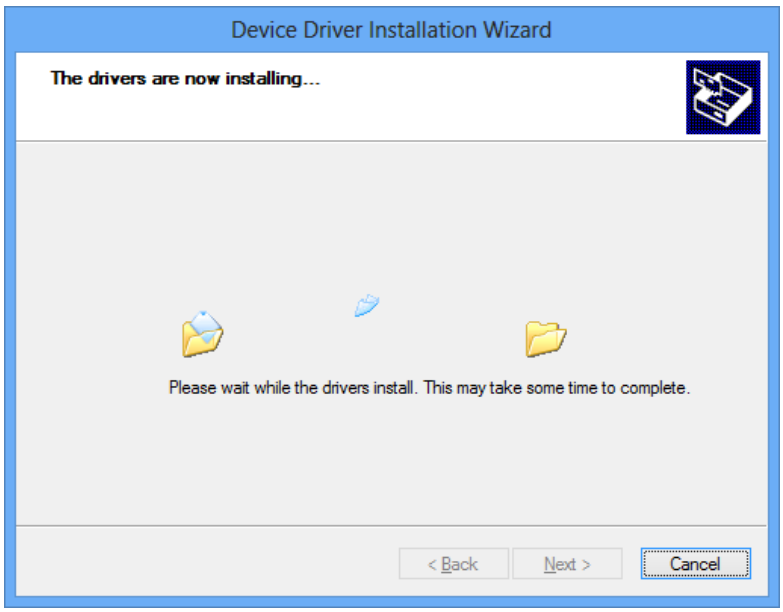

Figure 80: Device Driver Installation Wizard – Drivers Are Installing

© Hilscher 2013 - 2017

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

Figure 81: Device Driver Installation Wizard – Installation Completed

➢ Click **Finish**.

The installation of the USB drivers is completed.

Note: By completing the **Device Driver Installation Wizard**, the installation process under Windows 8 is practically finished. When you connect the communication module 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.

© Hilscher 2013 - 2017

3.2.3.2 Checking Installation

After having installed the USB driver and having connected the communication module via USB cable, you should check in the Device Manager of Windows 8 if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Control Panel**.

➢ In the **Start** screen of Windows 8, right-click on an empty space.

➧ The **All apps** button appears in the lower part of the screen:

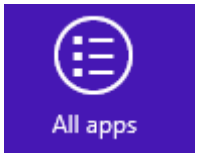

Figure 82: All Apps Button

➢ Click **All apps**.

➧ A list featuring all available programs (Apps) appears:

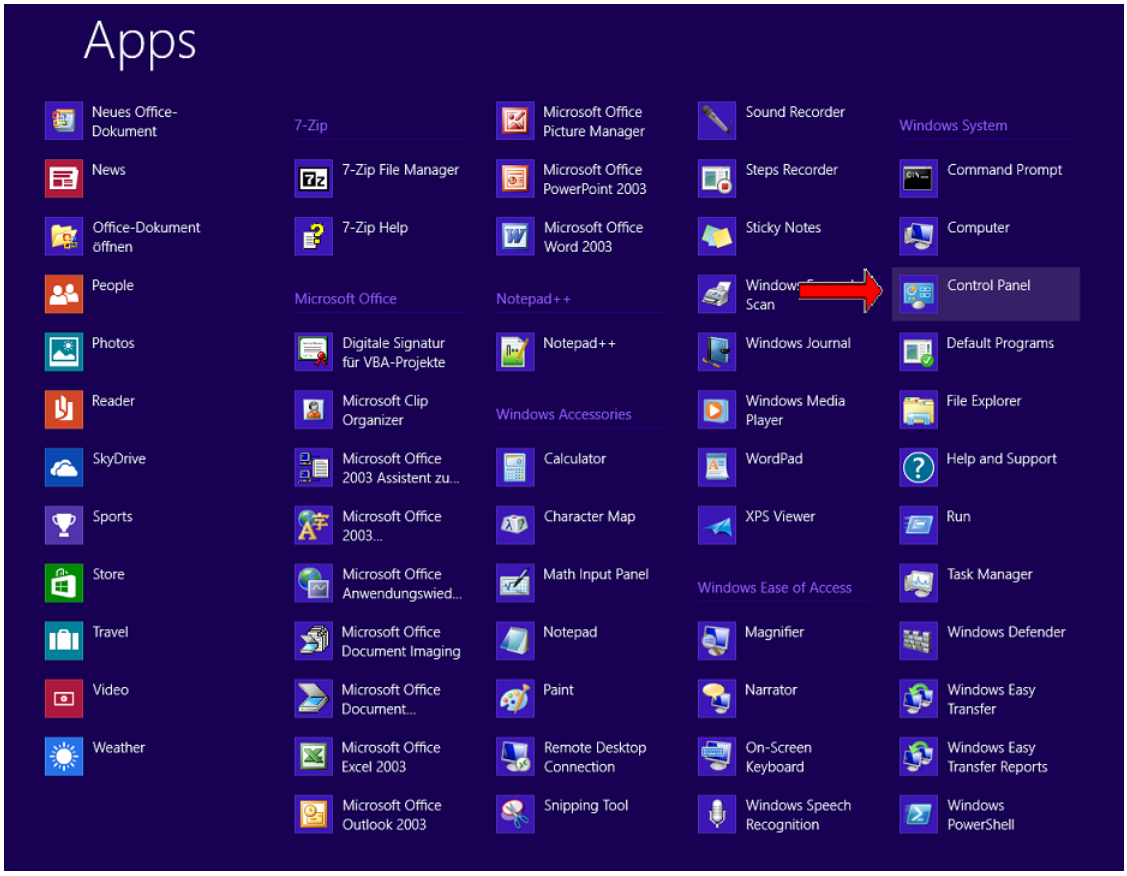

Figure 83: List of Installed Apps in Windows 8

➢ In the **Apps** list, click **Control Panel**.

© Hilscher 2013 - 2017

➾ Windows 8 changes into “desktop mode” and opens the **Control Panel**:

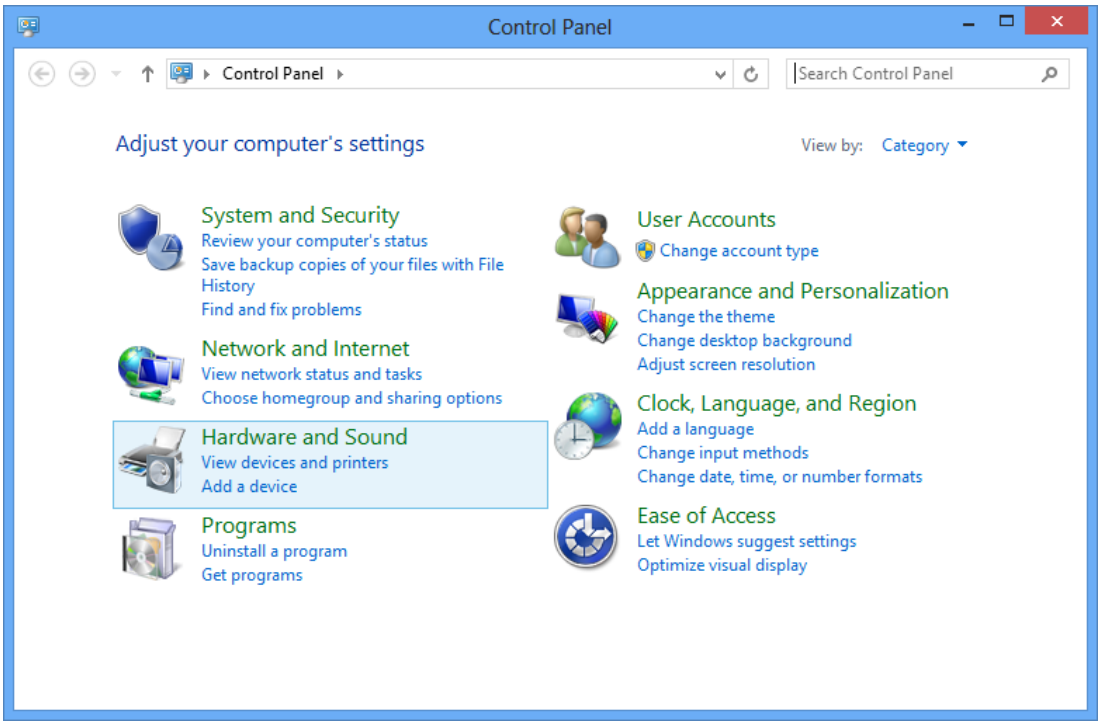

Figure 84: Control Panel

2. Open **Device Manager**.

➢ In the **Control Panel**, click **Hardware and Sound**.

➾ The **Hardware and Sound** window opens:

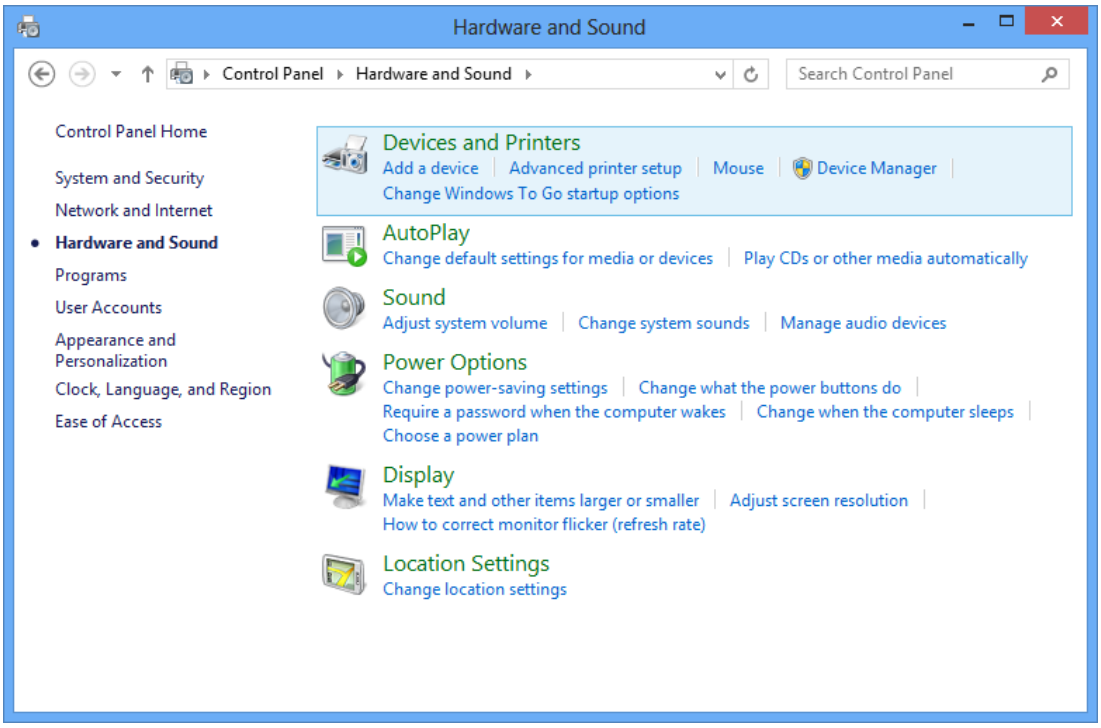

Figure 85: Hardware and Sound

© Hilscher 2013 - 2017

➢ In the **Devices and Printers** group, click **Device Manager**.

➢ The **Device Manager** starts:

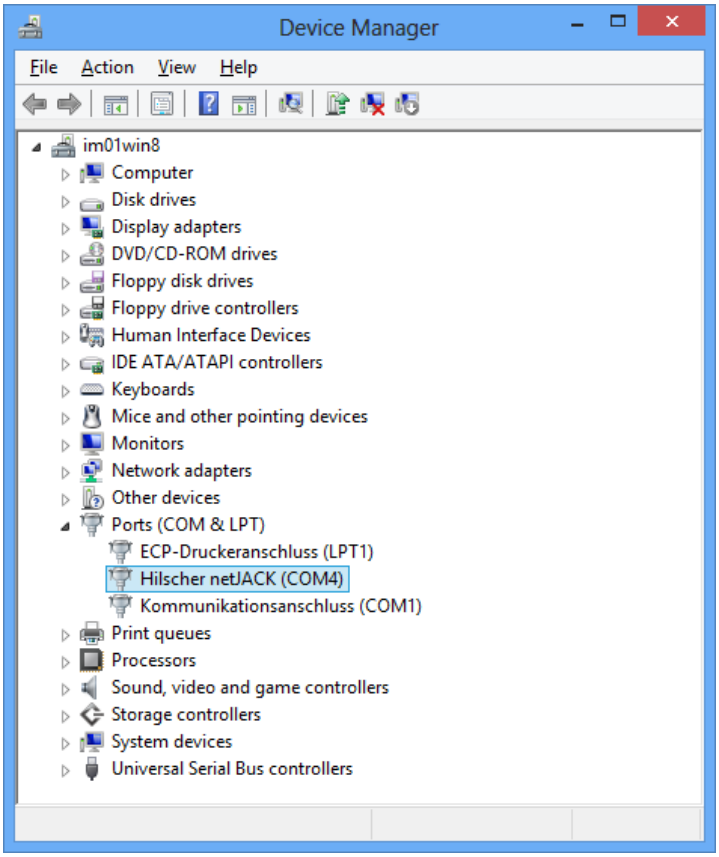

Figure 86: Display of USB Connection in Device Manager

3. Check if the communication module is recognized.

➢ Click on the triangle in front of the **Ports (COM & LPT)** entry.

➢ A netJACK NJ 100EN-RE communication module for instance will be displayed as **Hilscher netJACK**, the currently used COM port is indicated in brackets.

© Hilscher 2013 - 2017

3.2.4 Installing USB Driver under Windows 10

3.2.4.1 Installing USB Driver by Installation Program

1. Start the USB Driver setup program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➮ The Flash start screen **Communication Solutions** is displayed:

Figure 87: Start Screen Communication Solutions – Install USB Driver

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

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

© Hilscher 2013 - 2017

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

Figure 88: Device Driver Installation Wizard – Start Screen

2. Start the installation.

➢ Click **Next**.

➧ The installation of the USB drivers is started.

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

Figure 89: Device Driver Installation Wizard – Installation Completed

➢ Click **Finish**.

➧ The installation of the USB driver is completed.

© Hilscher 2013 - 2017

Note: By completing the **Device Driver Installation Wizard**, the installation process under Windows 10 is practically finished.
When you connect the communication module to the PC via USB cable for the first time, the following icon 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.

3.2.4.2 Checking Installation

After having installed the USB driver and having connected the communication module via USB cable, you should check in the Device Manager of Windows 10 if the driver has been correctly installed and if Windows recognizes the communication module.

1. Open the **Device Manager**.

➢ Right-click on the Windows **Start** symbol, then choose **Device Manager** entry:

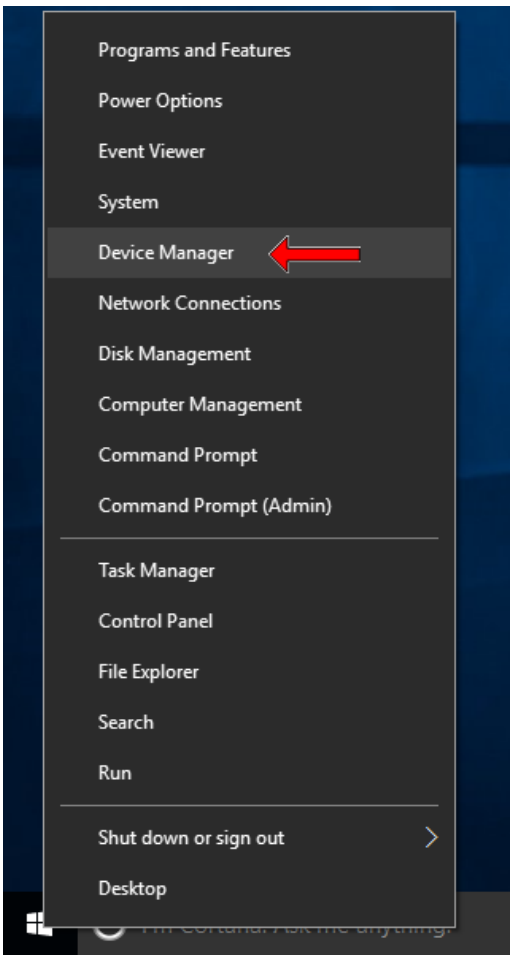

Figure 90: Open Device Manager in Windows 10

© Hilscher 2013 - 2017

➧ The **Device Manager** starts:

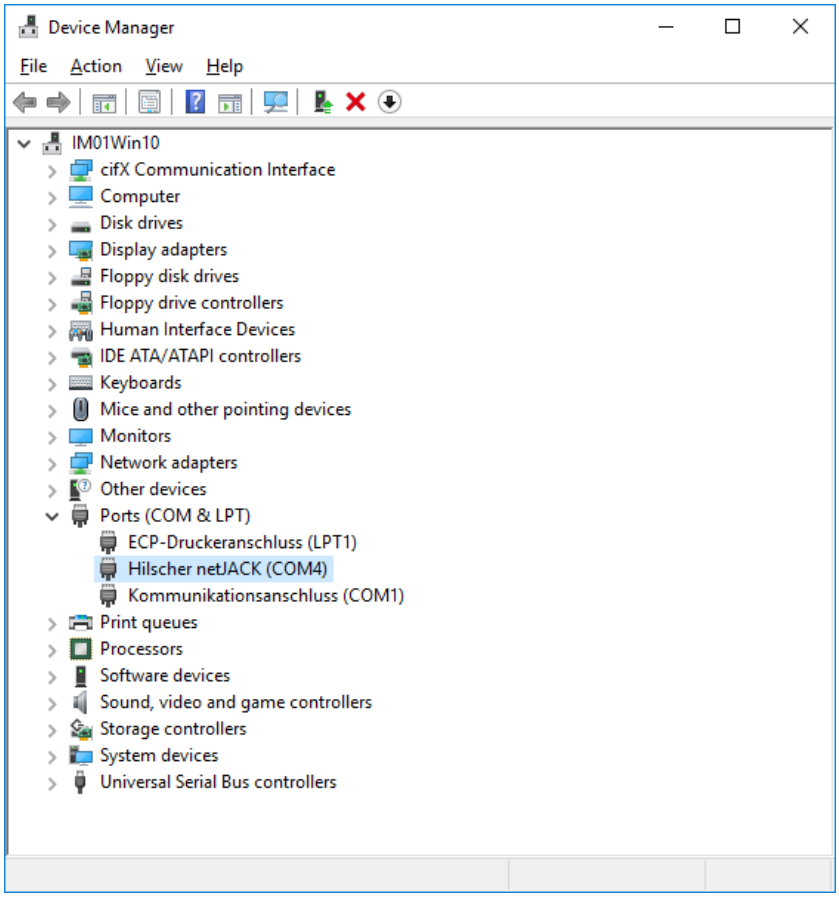

Figure 91: Display of Communication Module in Device Manager

2. Check if the communication module is recognized.

➢ Click on the triangle in front of the **Ports (COM & LPT)** entry.

➧ A netJACK NJ 100EN-RE communication module for instance will be displayed as **Hilscher netJACK**, with the currently used COM port indicated in brackets.

© Hilscher 2013 - 2017

3.3 Uninstalling USB Driver

3.3.1 Uninstalling USB Driver under Windows XP

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

➢ In the **Start** menu of Windows XP, select **Control Panel**.

➢ The **Control Panel** opens:

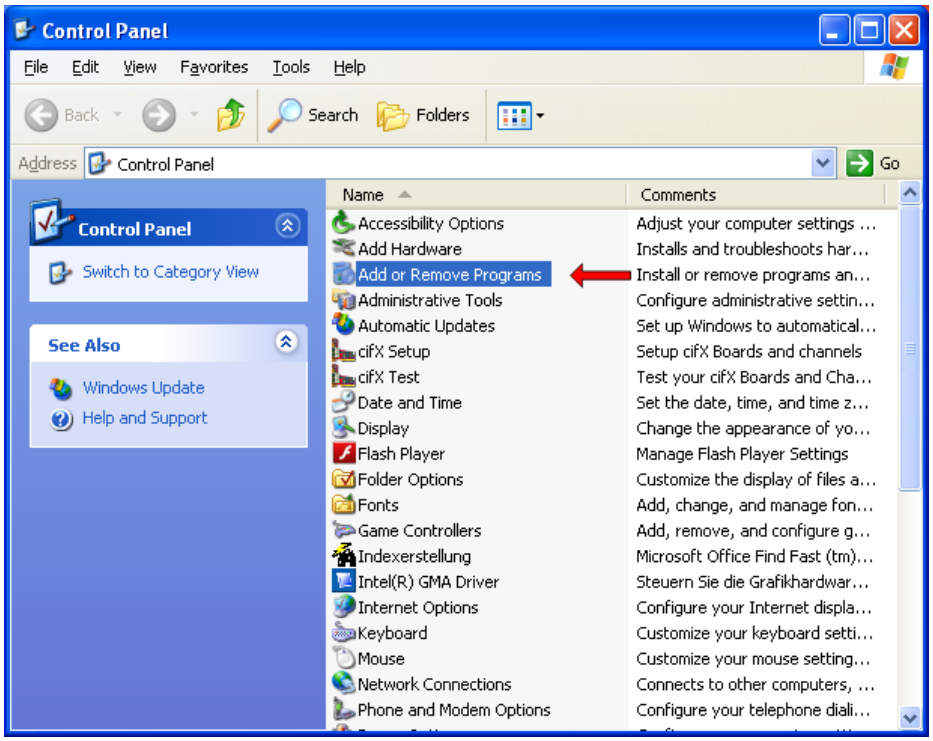

Figure 92: Control Panel

➢ In the **Control Panel**, double-click **Add or Remove Programs** entry.

© Hilscher 2013 - 2017

➧ The **Add or Remove Programs** window opens:

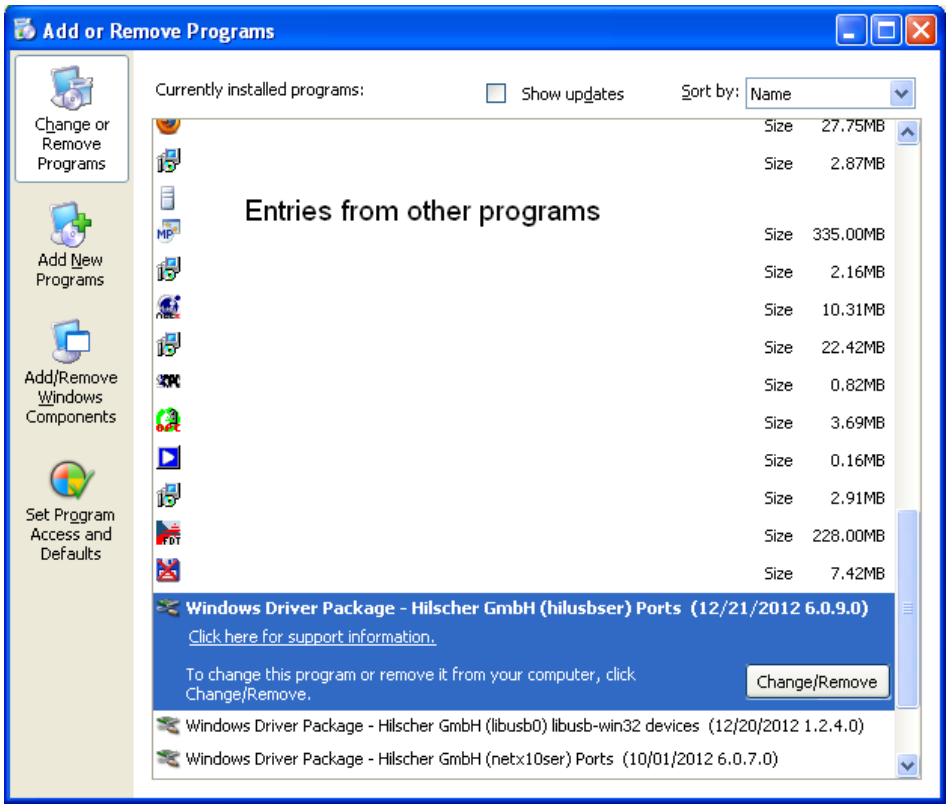

Figure 93: Add or Remove Programs

➢ Select **Windows Driver Package – Hilscher GmbH (hilusbser) Ports** entry.

➢ Click **Change/Remove**.

➧ A security question appears:

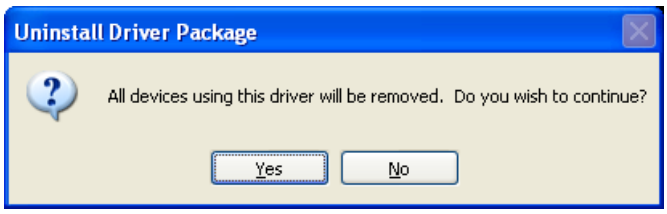

Figure 94: Acknowledge Uninstall

➢ 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**.

© Hilscher 2013 - 2017

3.3.2 Uninstalling USB Driver under Windows 7

➢ In the **Start** menu of Windows 7, select **Control Panel**.

➮ The **Control Panel** opens:

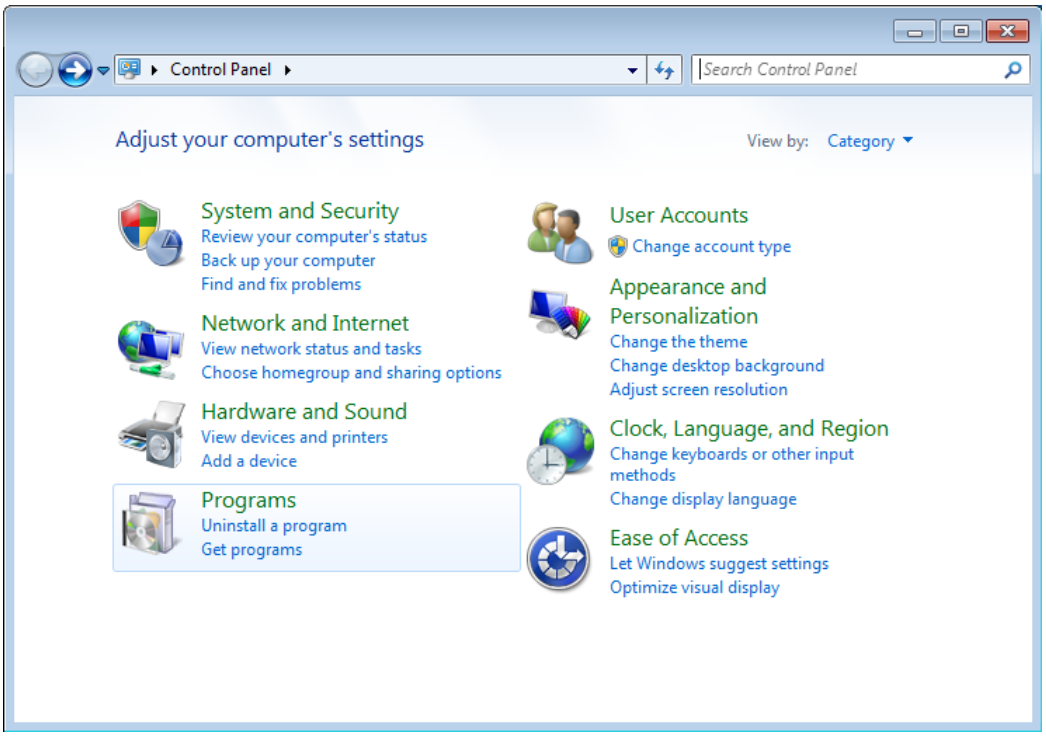

Figure 95: Adjust Your Computer's Settings Window

➢ In the **Programs** group, click **Uninstall a program**.

➮ The **Uninstall or change a program** window opens:

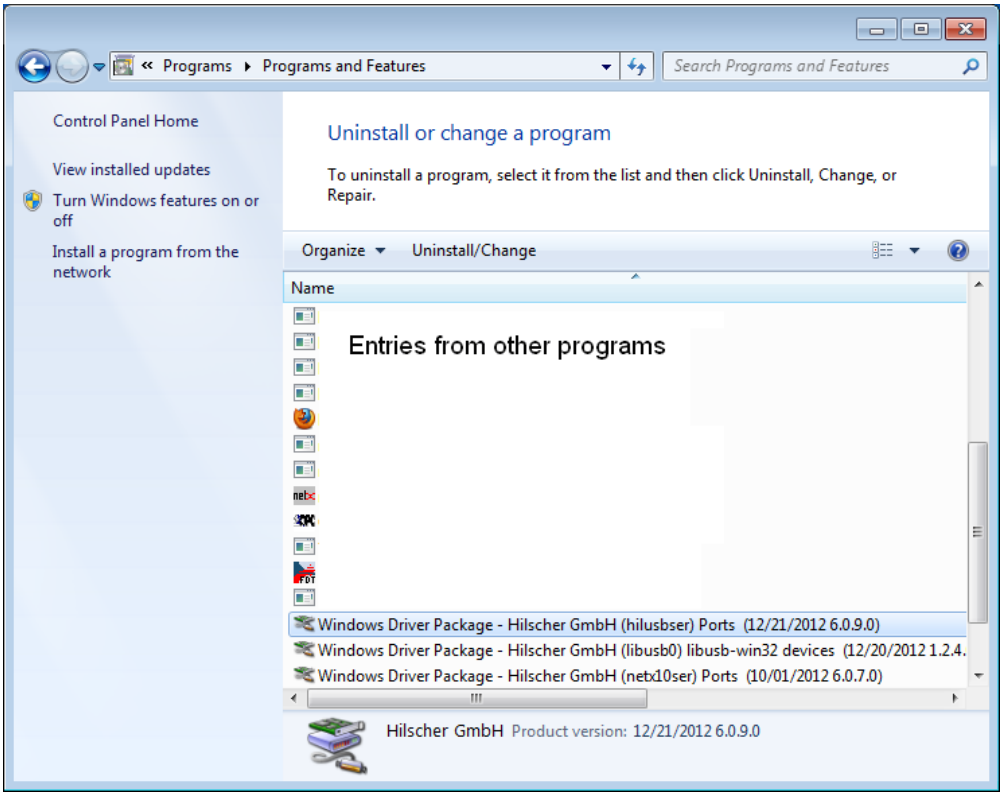

Figure 96: Uninstall or Change a Program

© Hilscher 2013 - 2017

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

A security question appears:

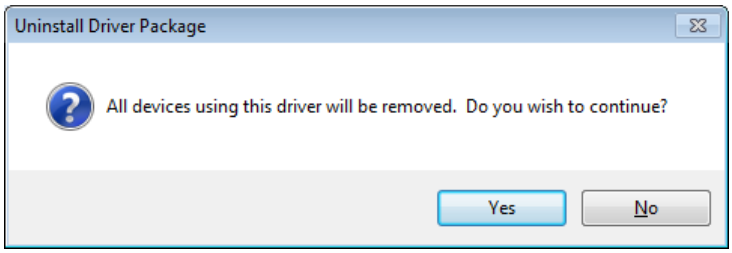

Figure 97: Acknowledge Uninstall

- 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**.

© Hilscher 2013 - 2017

3.3.3 Uninstalling USB Driver under Windows 8

1. Open the **Control Panel**.

➢ In the **Start** screen of Windows 8, right-click on an empty space.

➮ The **All apps** button appears in the lower part of the screen:

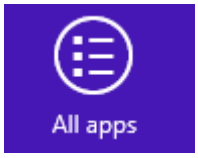

Figure 98: All Apps Button

➢ Click **All apps**.

➮ A list featuring all available programs (**Apps**) appears:

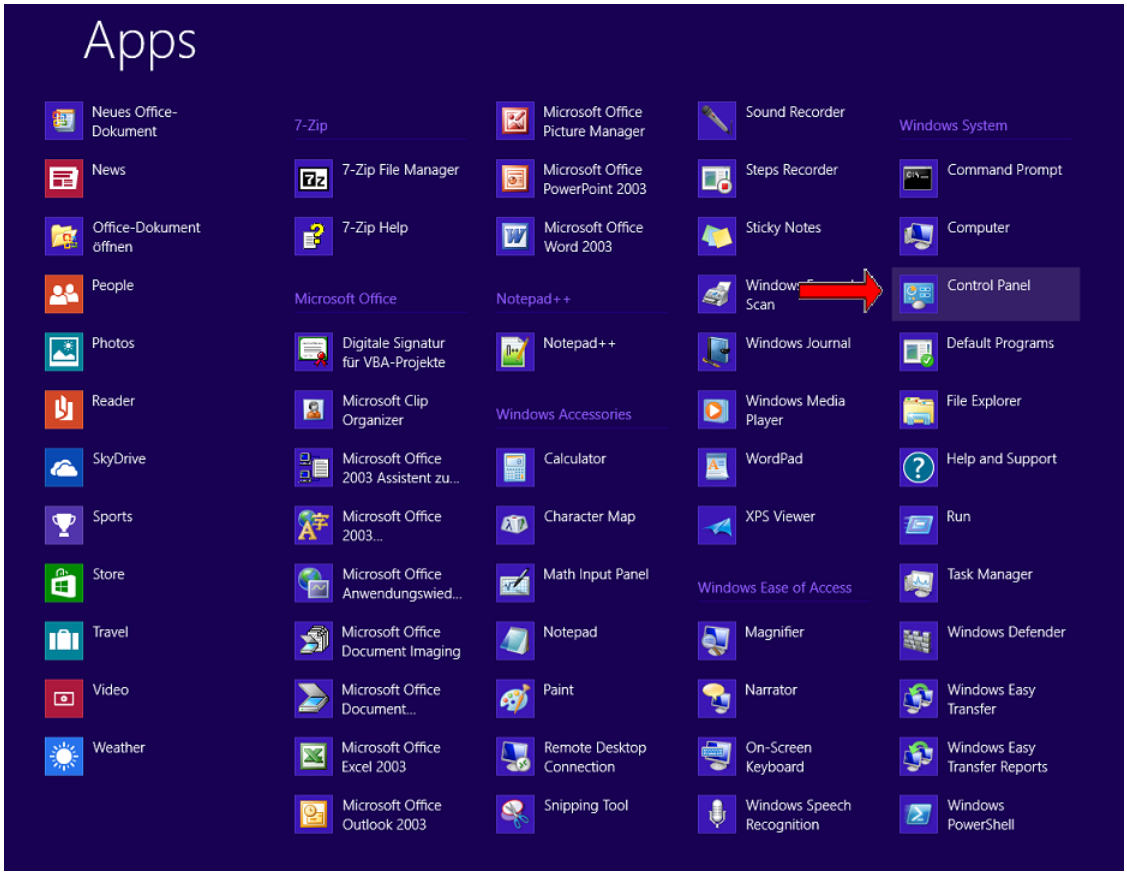

Figure 99: List of Installed Apps in Windows 8

➢ In the **Apps** list, click **Control Panel**.

© Hilscher 2013 - 2017

Windows 8 changes into “desktop mode” and opens the **Control Panel**:

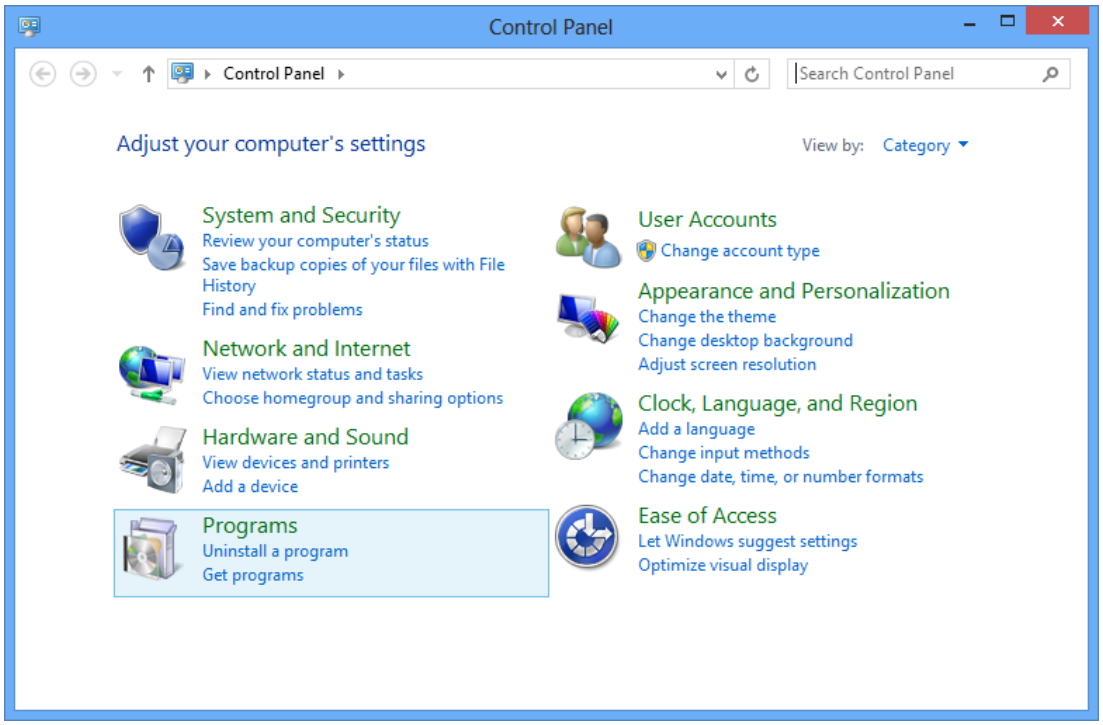

Figure 100: Control Panel

2. Open **Programs and Features** window.

➢ In the **Programs** group of the **Control Panel**, click **Uninstall a program**.

The **Programs and Features** window opens:

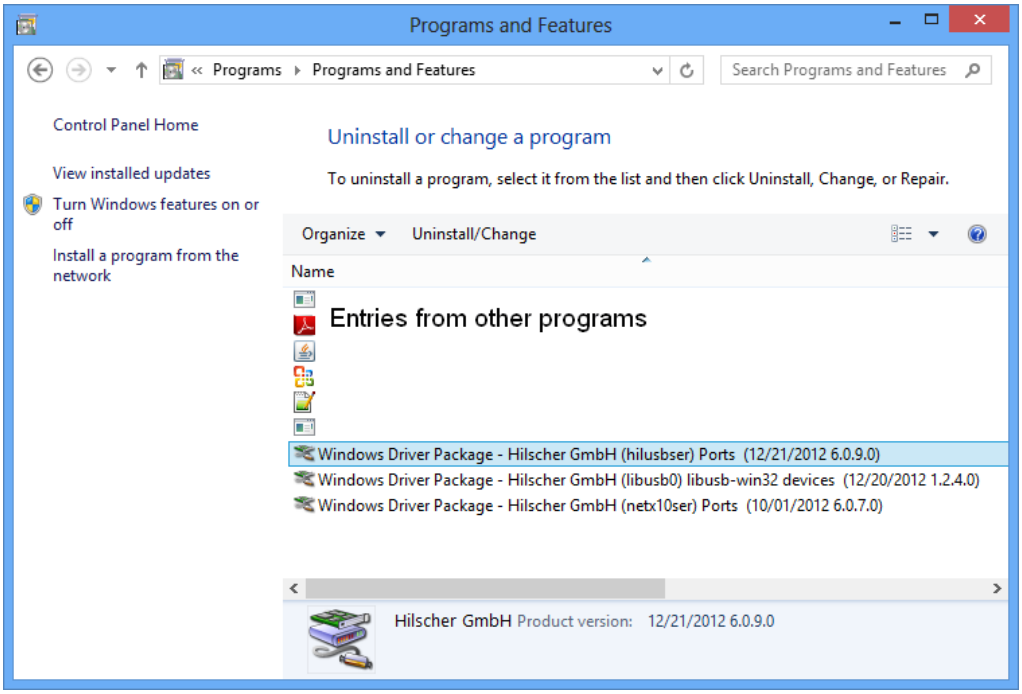

Figure 101: Uninstall or Change a Program

© Hilscher 2013 - 2017

3. Uninstall driver packages.

➢ Select **Windows Driver Package – Hilscher GmbH (hilusbser) Ports** entry.

➢ Click **Uninstall/Change** button located above the list.

➧ A security question appears:

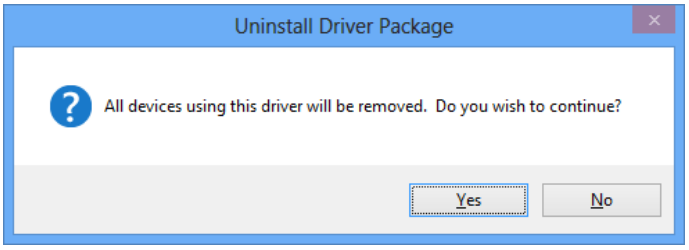

Figure 102: Acknowledge Uninstall

➢ 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**.

© Hilscher 2013 - 2017

3.3.4 Uninstalling USB Driver under Windows 10

1. Open the **Programs and Features** dialog window.

➢ Right-click on the Windows **Start** symbol, then choose **Programs and Features** entry:

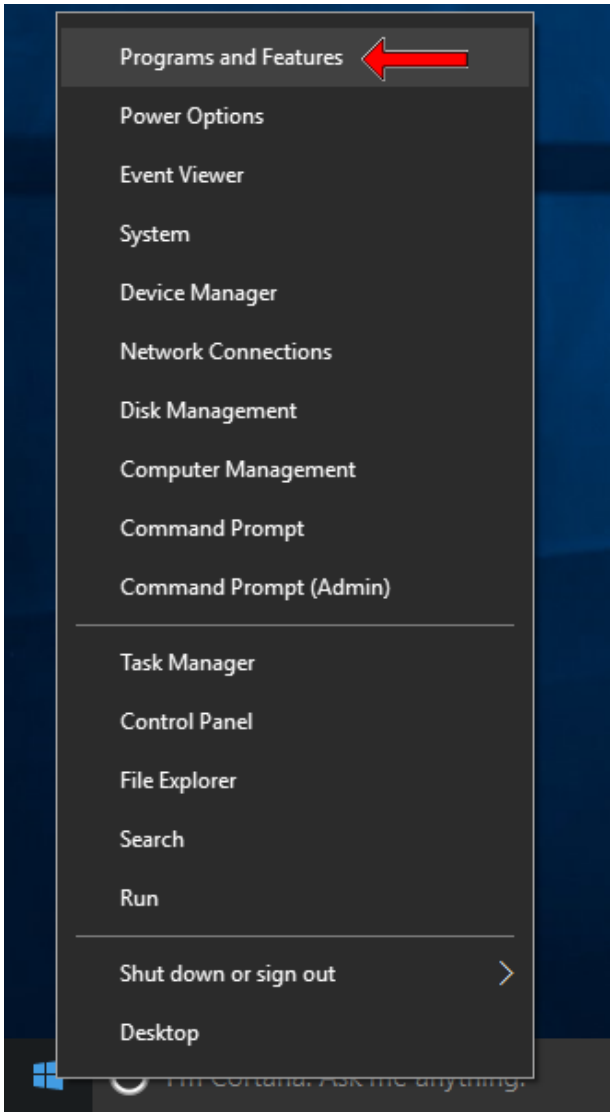

Figure 103: Open program manager in Windows 10

© Hilscher 2013 - 2017

➧ The **Uninstall or change a program** window opens:

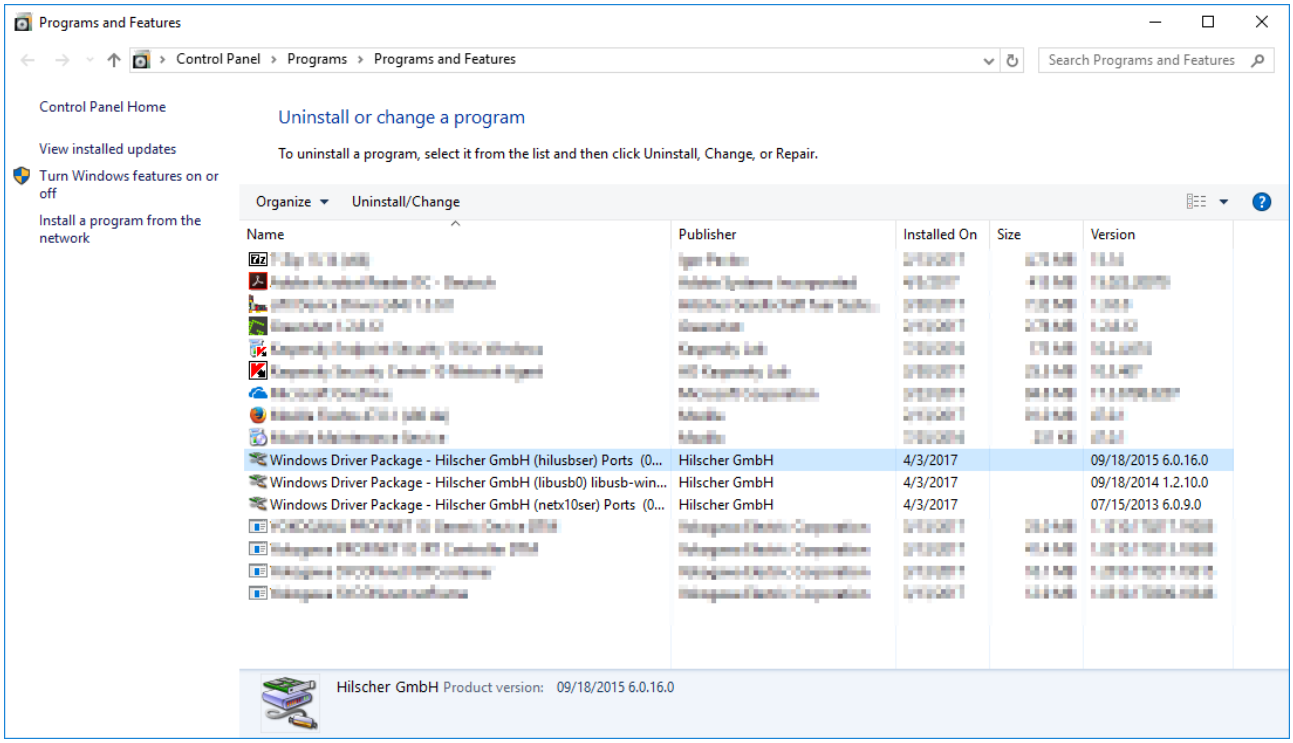

Figure 104: Uninstall or change a program window

➢ Select **Windows Driver Package – Hilscher GmbH (hilusbser) Ports** entry.

➢ Click **Uninstall/Change** button located above the list.

➧ A security question appears:

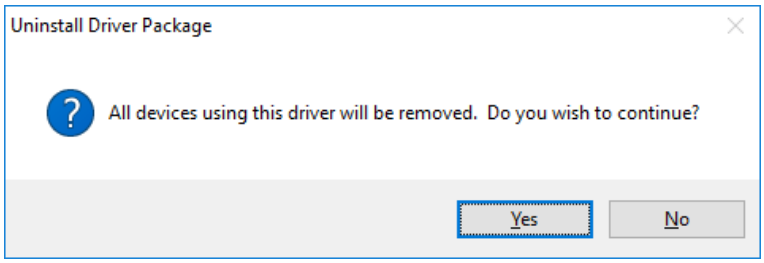

Figure 105: Acknowledge Uninstall

➢ 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**.

© Hilscher 2013 - 2017

4 SYCON.net

4.1 Overview

With the SYCON.net configuration software, you can configure and diagnose your communication module. You can also use it to download or update the firmware of your module.
If the host system of your communication module runs under a Windows operating system, you can install SYCON.net directly on your host system for the above mentioned purposes. You can also install SYCON.net on a separate configuration PC under Windows, and then connect your communication module via PCI Carrier Board (comX), Evaluation Board (netJACK), USB or serial interface to the configuration PC and SYCON.net.

SYCON.net is delivered on the Communication Solutions DVD. You can start the installation program for SYCON.net (the **SYCON.net for netX InstallShield Wizard**) in the menu of the start screen of the DVD. Instructions for this are provided on the following pages. You can also start the installation by double-clicking the *SYCONnet netX setup.exe* file in the `Software\SYCON.net` directory of the Communication Solutions DVD.
The installation program contains all components needed for the installation under Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10.

Please note the following:

- If SYCON.net shall access the communication module via host interface or PC bus, you need to install the cifX Device Driver on your host system or configuration PC. See *cifX Device Driver* chapter on page 10.
- If SYCON.net shall access the communication module via USB, you need to install the USB Driver on your host system or configuration PC. See *USB Driver* chapter on page 50.
- You need administrator rights for installing or uninstalling SYCON.net on your operating system.
- If an older version of SYCON.net is already installed on your system, uninstall it first, before you install the new version. See *Uninstalling SYCON.net* section on page 108.

© Hilscher 2013 - 2017

4.2 System Requirements

To install and use SYCON.net, the following requirements must be met:

- PC with 1 GHz processor or higher
- Windows® XP SP3,
  Windows® Vista (32 bit) SP2,
  Windows® 7 (32 bit and 64-Bit) SP1,
  Windows® 8 (32-Bit and 64-Bit),
  Windows® 8.1 (32-Bit and 64-Bit),
  Windows® 10 (32-Bit and 64-Bit)
- Administrator privilege required for installation
- Microsoft .NET Framework 4.0
- Internet Explorer 5.5 or higher
- Free disk space: min. 400 MByte
- RAM: min. 512 MByte, recommended 1024 MByte
- Graphic resolution: min. 1024 x 768 pixel
- Keyboard and Mouse
- USB, serial or Ethernet interface
- Restriction: Touch screen is not supported.

Note: If the project file is used on another PC,

- the other PC must also comply to these system requirements,
- the device description files of the devices used in the project must be imported to the configuration software SYCON.net on the other PC,
- respectively the DTMs of the devices used in the project must be installed on the other PC.

© Hilscher 2013 - 2017

4.3 Installing SYCON.net

4.3.1 Installing SYCON.net under Windows XP

1. Start the SYCON.net installation program.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

↬ The Flash start screen **Communication Solutions** is displayed:

Figure 106: Start Screen Communication Solutions – Install SYCON.net

➢ Click on **Install SYCON.net Configuration Software**.

Note: As an alternative, you can also start the SYCON.net installation program (i. e. the **SYCON.net for netX InstallShield Wizard**) by double-clicking the *SYCONnet netX setup.exe* file in the `Software\SYCON.net` directory of the Communication Solutions DVD.

↬ The SYCON.net installation program is started.

© Hilscher 2013 - 2017

2. Choose language for the setup.

Figure 107: SYCON.net Setup Language

➢ Select the language for the setup.

➢ Click **OK**.

↬ The **SYCON.net for netX InstallShield Wizard** opens:

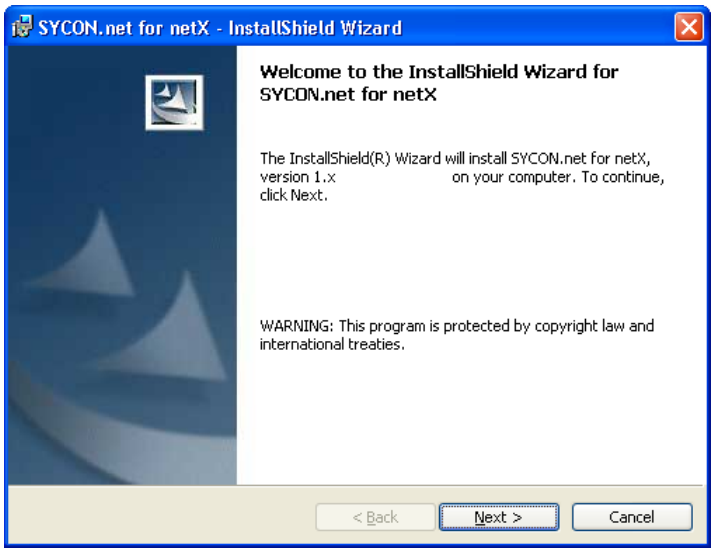

Figure 108: SYCON.net Installation Program

➢ Click **Next**.

© Hilscher 2013 - 2017

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

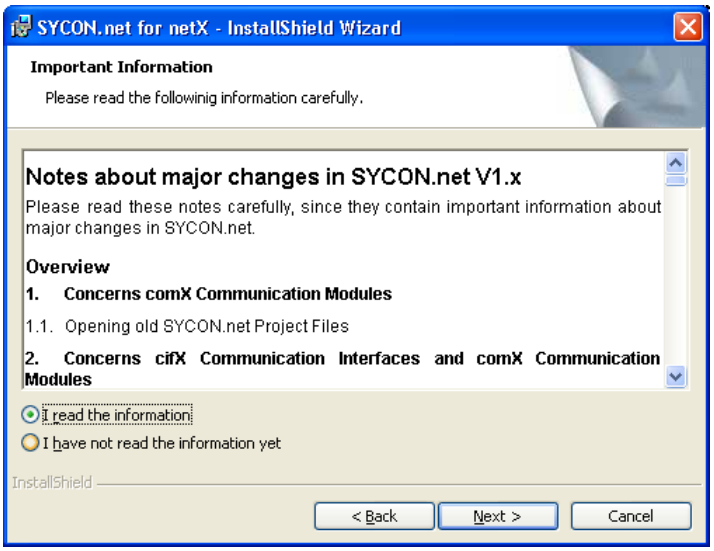

Figure 109: Notes About Major Changes in SYCON.net

- Read the notes about major changes in SYCON.net carefully.
- Select **I read the information** after you have read them.
- Click **Next**.

4. Accept license agreement.

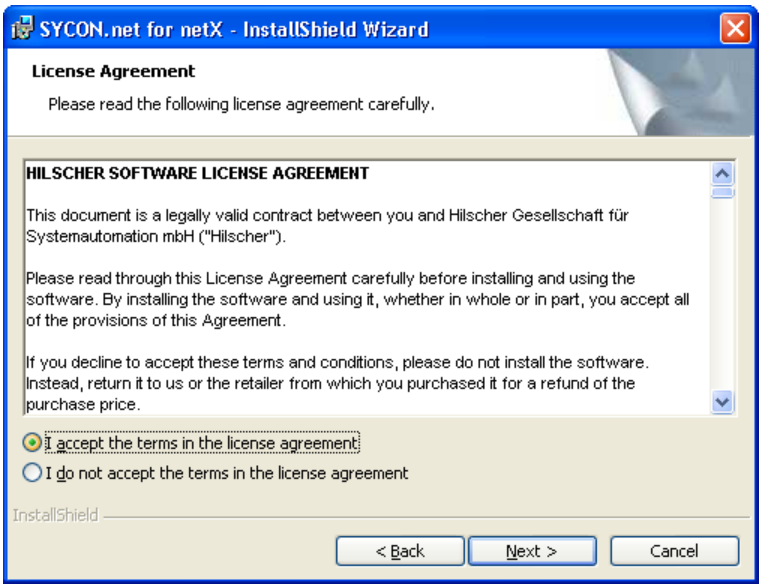

Figure 110: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, if you agree to it.
- Click **Next**.

© Hilscher 2013 - 2017

5. Enter user information.

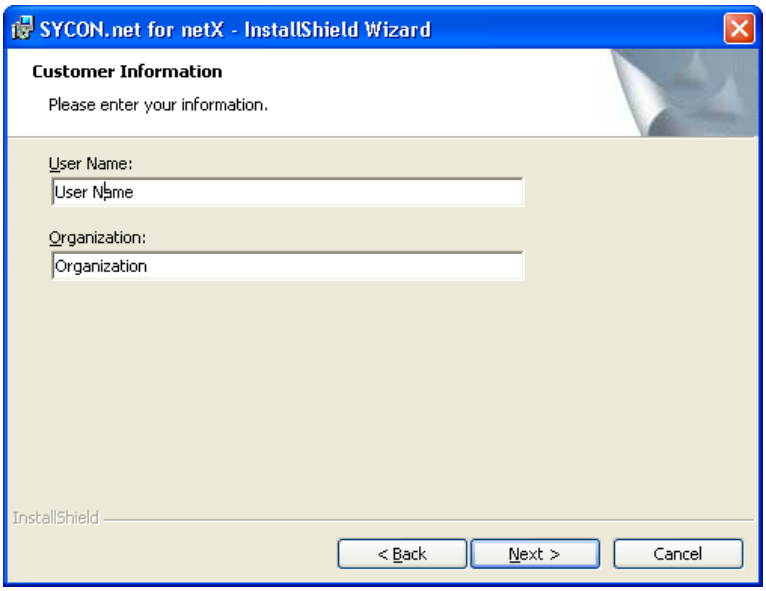

Figure 111: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click **Next**.

6. Select setup type.

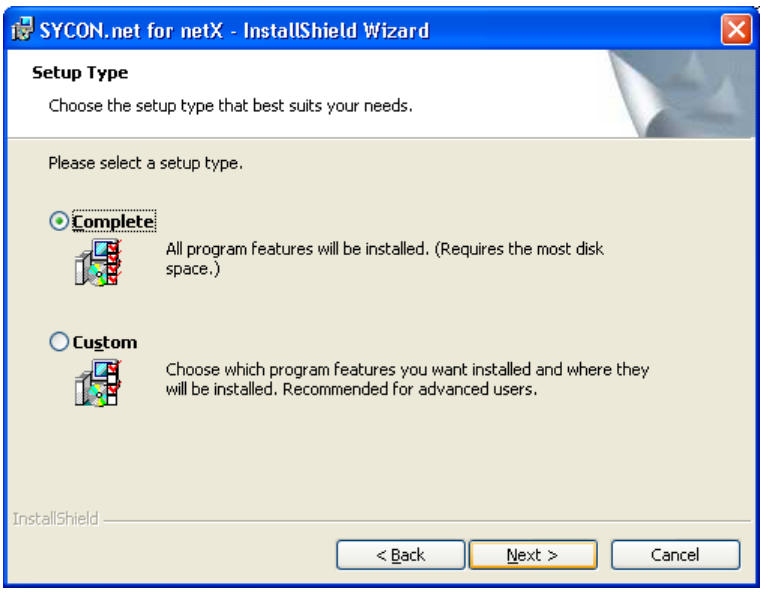

Figure 112: SYCON.net Setup Type

- Select **Complete** if you want to install the complete software.
- Click **Next**.

© Hilscher 2013 - 2017

7. Install SYCON.net.

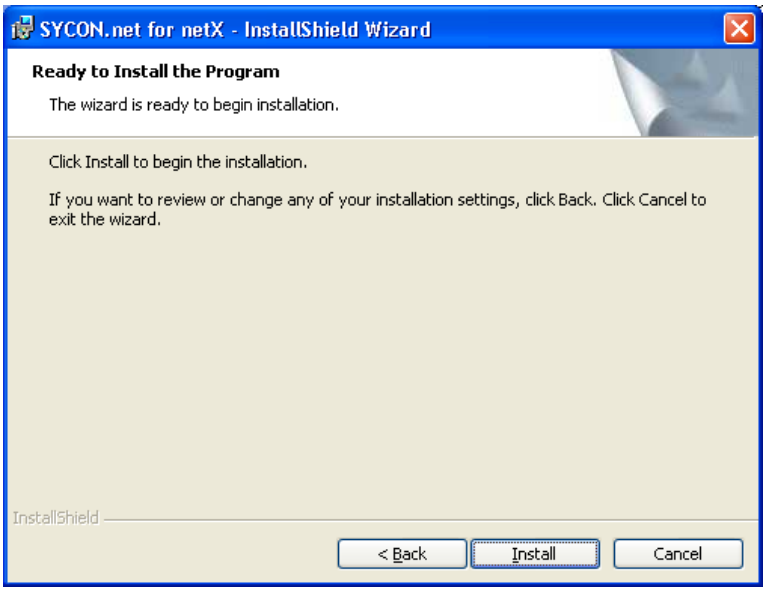

Figure 113: Start SYCON.net Installation

➢ Click **Install** to start the installation.

➮ The components are being installed. This may take several minutes.

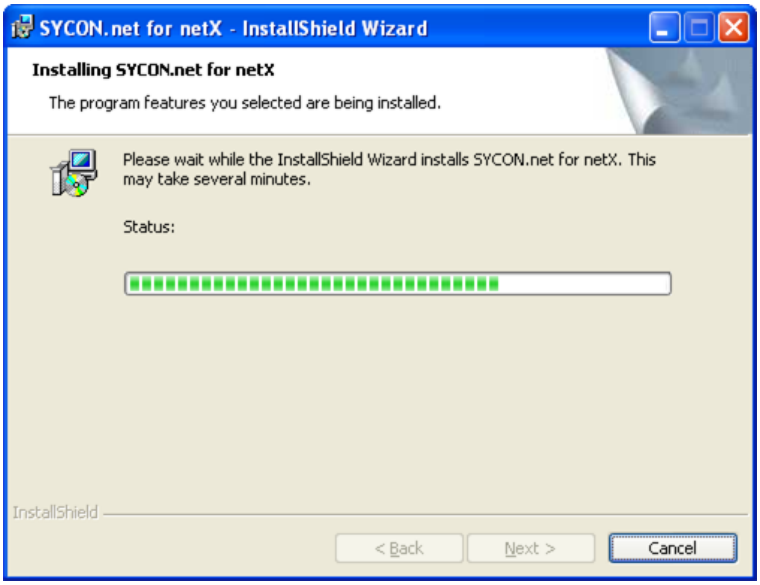

Figure 114: SYCON.net Installation Status

© Hilscher 2013 - 2017

8. Finish Installation.

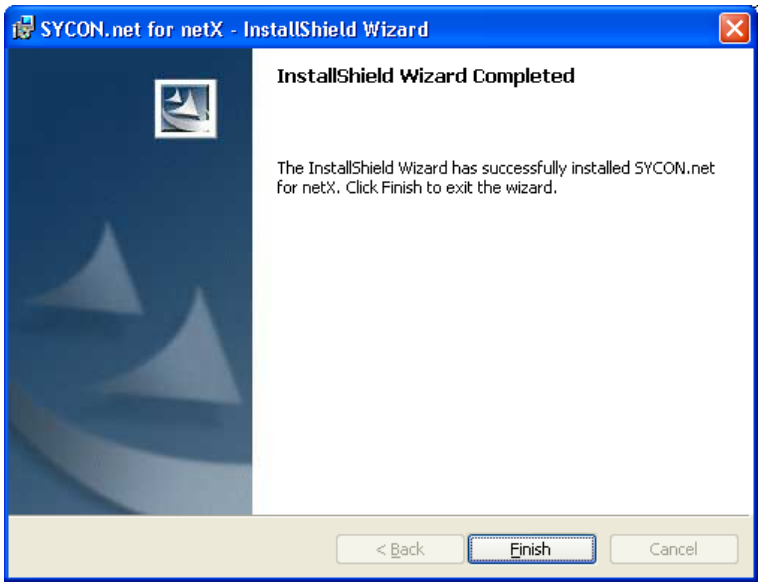

Figure 115: Finish SYCON.net Installation

➢ Click **Finish** to complete the installation.

➢ SYCON.net is installed and can be started in the **Start** menu of Windows by choosing **All Programs** > **SYCON.net System Configurator** > **SYCON.net**.

© Hilscher 2013 - 2017

4.3.2 Installing SYCON.net under Windows 7

1. Start the SYCON.net installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 116: Start Screen Communication Solutions – Install SYCON.net

➢ Click on **Install SYCON.net Configuration Software**.

Note: As an alternative, you can also start the SYCON.net installation program (i. e. the **SYCON.net for netX InstallShield Wizard**) by double-clicking the *SYCONnet netX setup.exe* file in the `Software\SYCON.net` directory of the Communication Solutions DVD.
You can reduce the number of Windows security questions by right-clicking on the *SYCONnet netX setup.exe* file and choosing **Run as administrator** from the context menu.

➢ The SYCON.net installation program is started.

© Hilscher 2013 - 2017

2. Choose language for the setup.

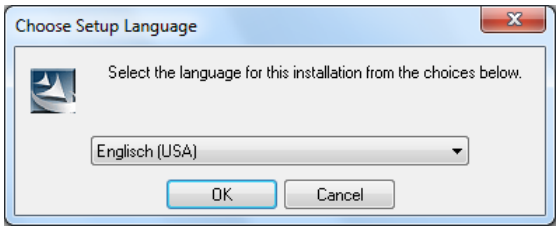

Figure 117: SYCON.net Setup Language

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

→ The **SYCON.net for netX InstallShield Wizard** opens:

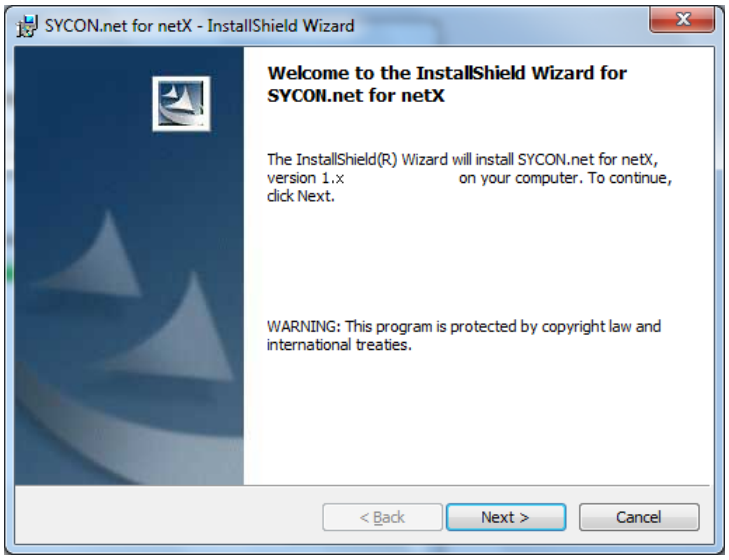

Figure 118: SYCON.net Installation Information

- Click **Next**.

© Hilscher 2013 - 2017

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

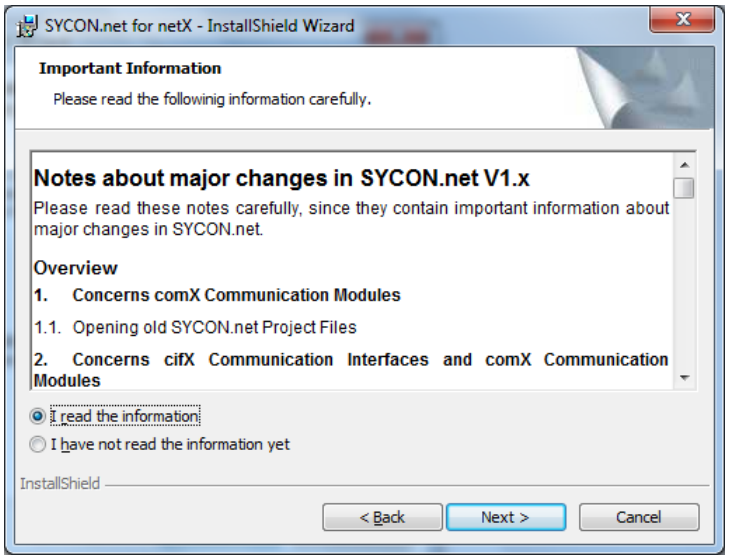

Figure 119: Notes about Major Changes in SYCON.net

- Read the notes about major changes in SYCON.net carefully.
- Select **I read the information**, after you have read them.
- Click **Next**.

4. Accept license agreement.

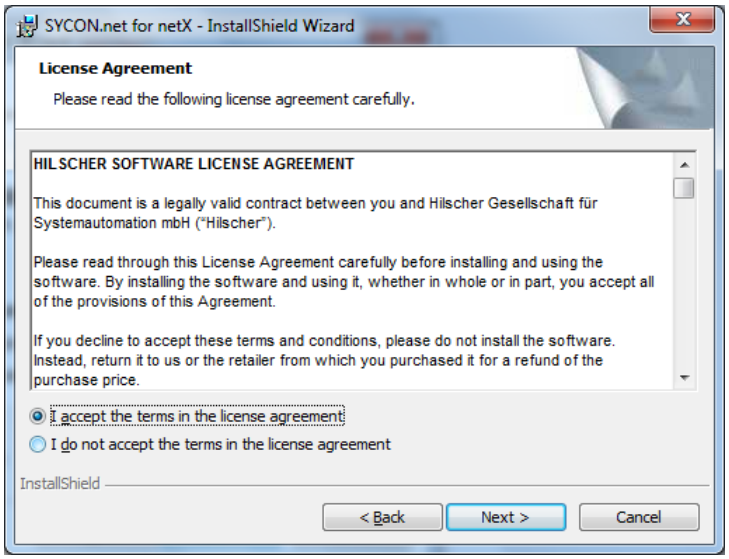

Figure 120: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, if you agree to it.
- Click **Next**.

© Hilscher 2013 - 2017

5. Enter user information.

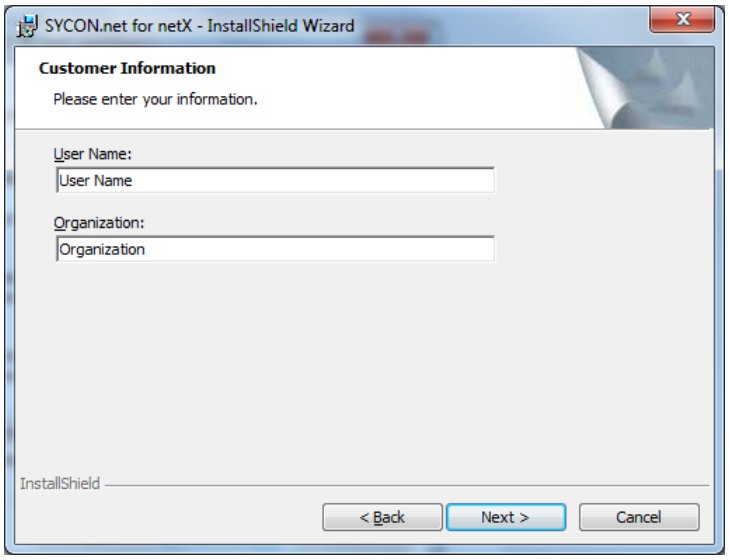

Figure 121: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click **Next**.

6. Select setup type.

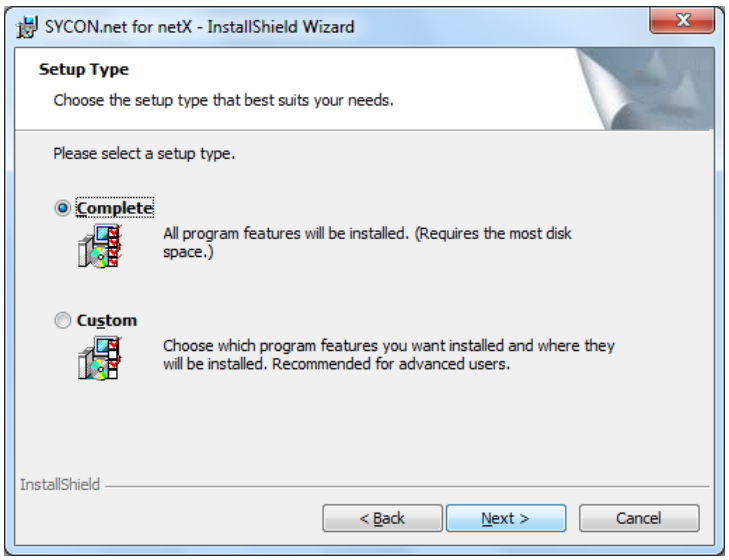

Figure 122: SYCON.net Setup Type

- Select **Complete** if you want to install the complete software.
- Click **Next**.

© Hilscher 2013 - 2017

7. Install SYCON.net.

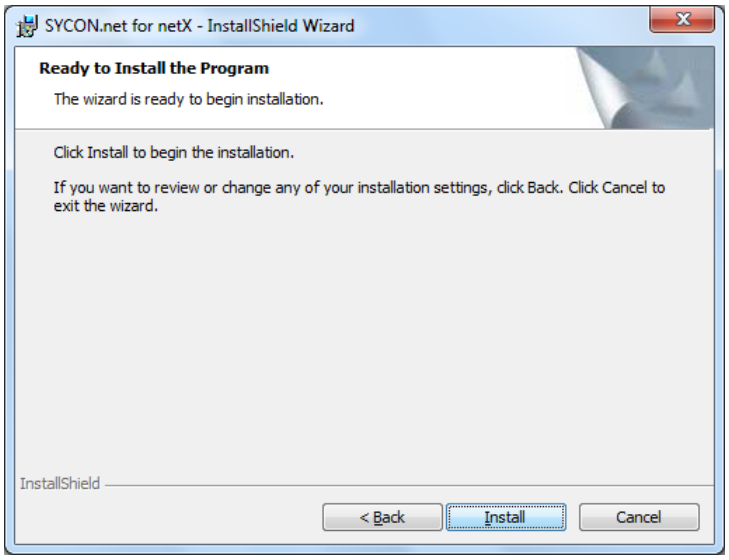

Figure 123: Start SYCON.net Installation

➢ Click **Install** to start the installation.

➢ The components are being installed. This may take several minutes.

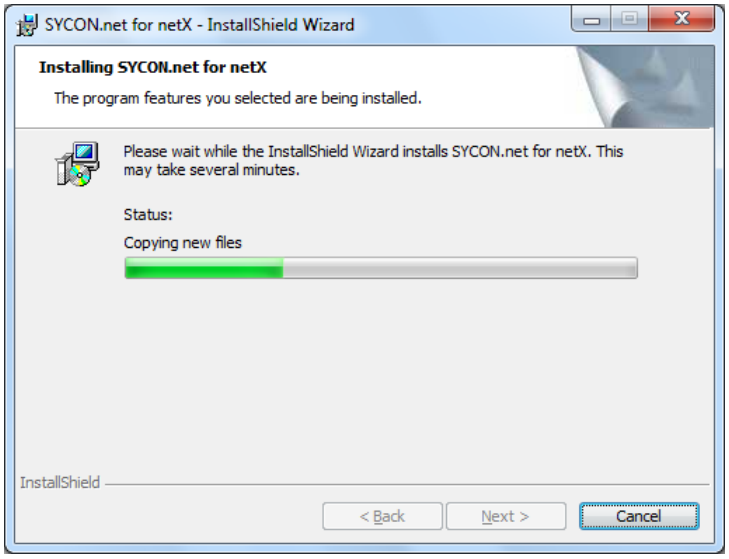

Figure 124: SYCON.net Installation Status

© Hilscher 2013 - 2017

8. Finish Installation.

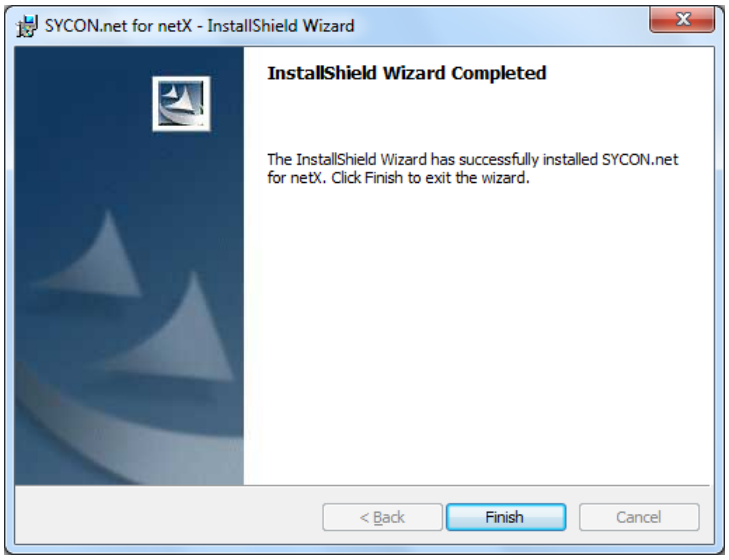

Figure 125: Finish SYCON.net Installation

➢ Click **Finish** to complete the installation.

➢ SYCON.net is installed and can be started in the **Start** menu of Windows by choosing **All Programs** > **SYCON.net System Configurator** > **SYCON.net**.

© Hilscher 2013 - 2017

4.3.3 Installing SYCON.net under Windows 8

1. Start the SYCON.net installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 126: Start Screen Communication Solutions – Install SYCON.net

➢ Click on **Install SYCON.net Configuration Software**.

Note: As an alternative, you can also start the SYCON.net installation program (i. e. the **SYCON.net for netX InstallShield Wizard**) by double-clicking the *SYCONnet netX setup.exe* file in the `Software\SYCON.net` directory of the Communication Solutions DVD.
You can reduce the number of Windows security questions by right-clicking on the *SYCONnet netX setup.exe* file and choosing **Run as administrator** from the context menu.

➢ The SYCON.net installation program is started.

© Hilscher 2013 - 2017

2. Choose language for the setup.

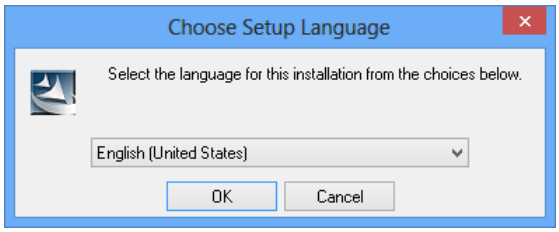

Figure 127: SYCON.net Setup Language

- ➢ Select the language for the setup.
- ➢ Click **OK**.
- ➢ The **SYCON.net for netX InstallShield Wizard** opens:

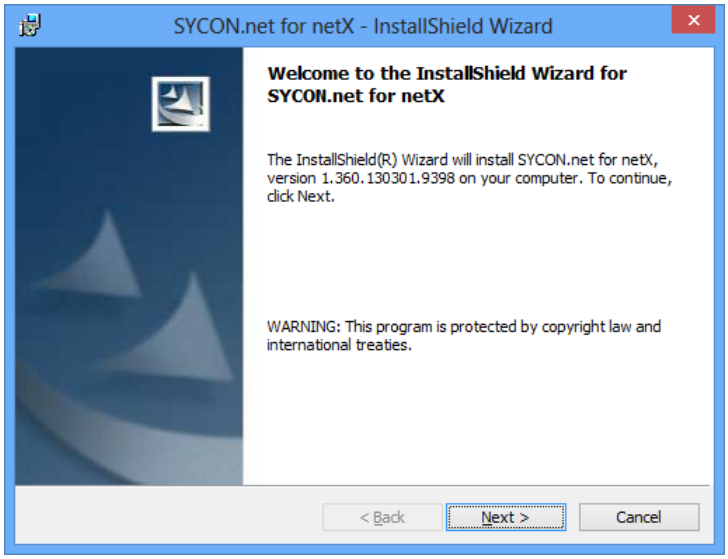

Figure 128: SYCON.net Installation Information

- ➢ Click **Next**.

© Hilscher 2013 - 2017

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

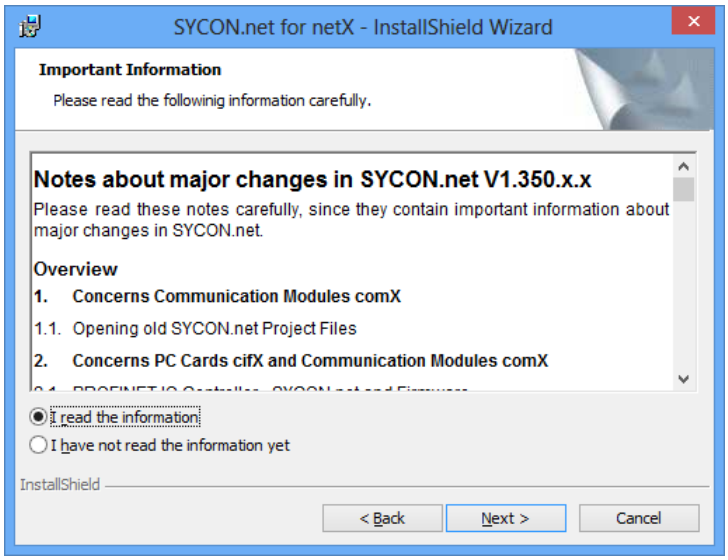

Figure 129: Notes about Major Changes in SYCON.net

- Read the notes about major changes in SYCON.net carefully.
- Select **I read the information**, after you have read them.
- Click **Next**.

4. Accept license agreement.

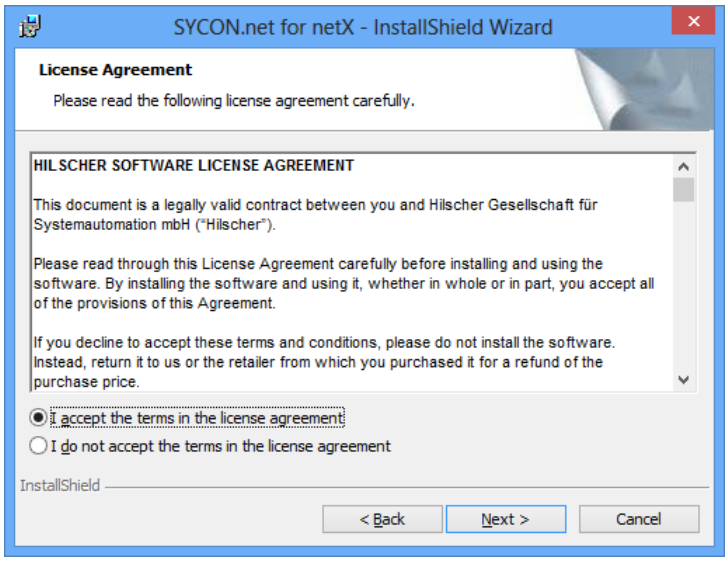

Figure 130: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, if you agree to it.
- Click **Next**.

© Hilscher 2013 - 2017

5. Enter user information.

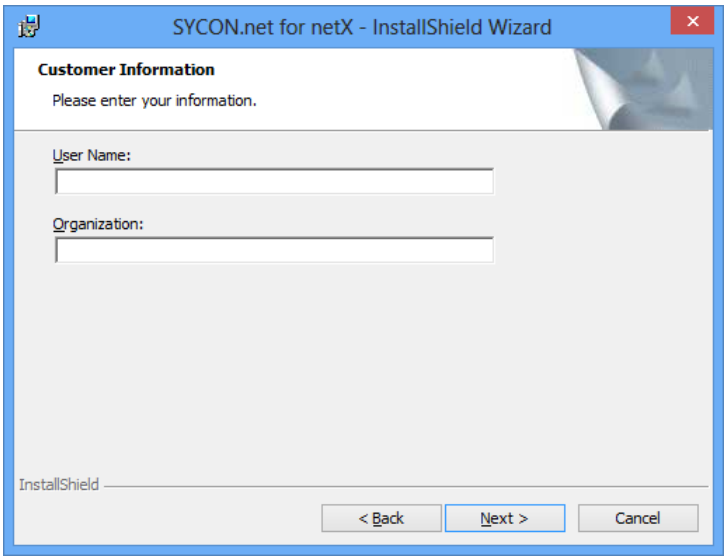

Figure 131: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click **Next**.

6. Select setup type.

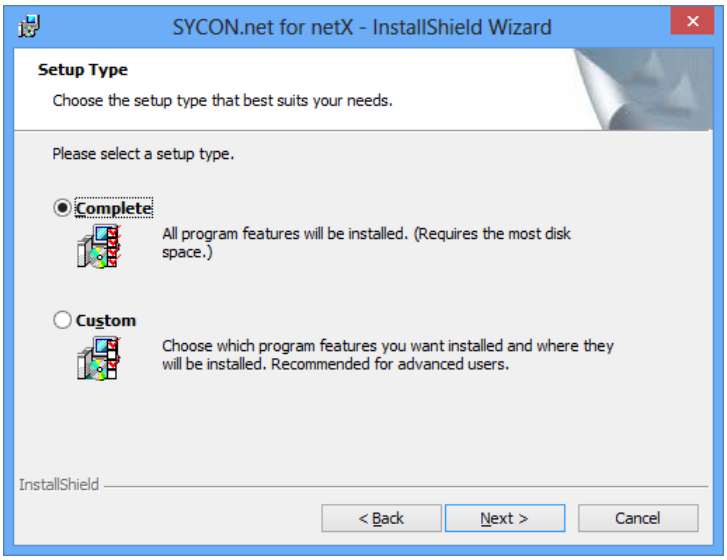

Figure 132: SYCON.net Setup Type

- Select **Complete** if you want to install the complete software.
- Click **Next**.

© Hilscher 2013 - 2017

7. Install SYCON.net.

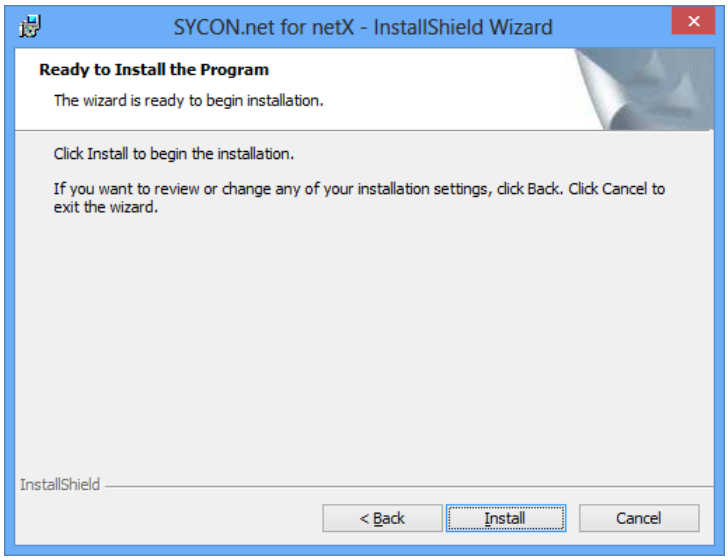

Figure 133: Start SYCON.net Installation

➢ Click **Install** to start the installation.

➢ The components are being installed. This may take several minutes.

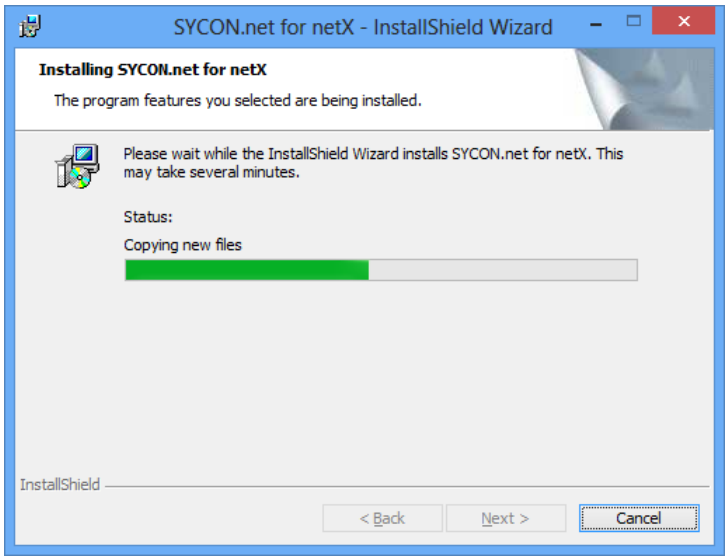

Figure 134: SYCON.net Installation Status

© Hilscher 2013 - 2017

8. Finish Installation.

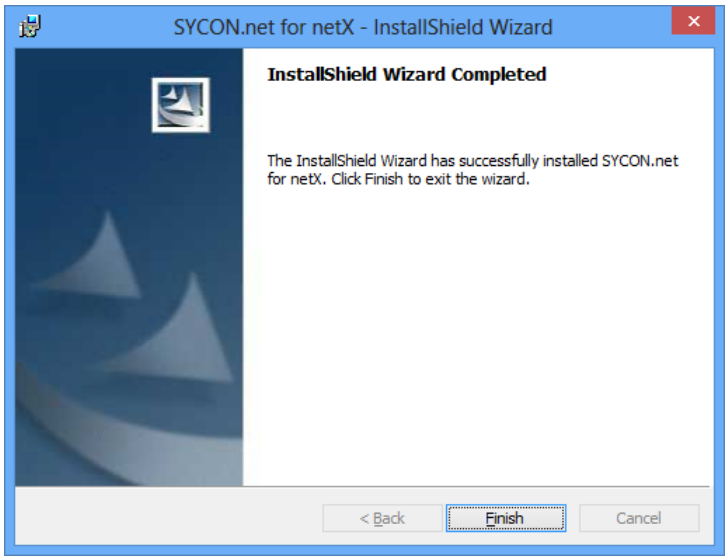

Figure 135: Finish SYCON.net Installation

- Click **Finish**, to complete the installation.
- SYCON.net has been installed.

Note: To start SYCON.net, use the Windows key to change from the desktop mode to the start screen of Windows 8. In the start screen, click on the **SYCON.net** tile. If the tile is not displayed, right-click on an empty space, then click on the **All Apps** button appearing in the lower part of the start screen. A list featuring all available programs (**Apps**) opens. In this list, **SYCON.net** is shown below **SYCON.net System Configurator** and can be started by double-click.

© Hilscher 2013 - 2017

4.3.4 Installing SYCON.net under Windows 10

1. Start the SYCON.net installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 136: Start Screen Communication Solutions – Install SYCON.net

➢ Click on **Install SYCON.net Configuration Software**.

Note: As an alternative, you can also start the SYCON.net installation program (i. e. the **SYCON.net for netX InstallShield Wizard**) by double-clicking the *SYCONnet netX setup.exe* file in the `Software\SYCON.net` directory of the Communication Solutions DVD.

➢ The SYCON.net installation program is started.

2. Choose language for the setup.

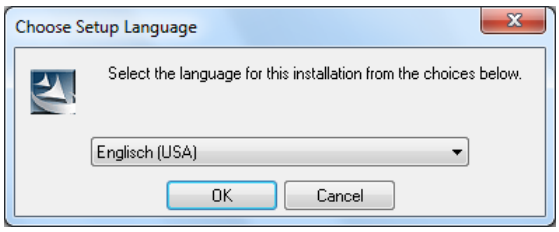

Figure 137: SYCON.net Setup Language

© Hilscher 2013 - 2017

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

The **SYCON.net for netX InstallShield Wizard** opens:

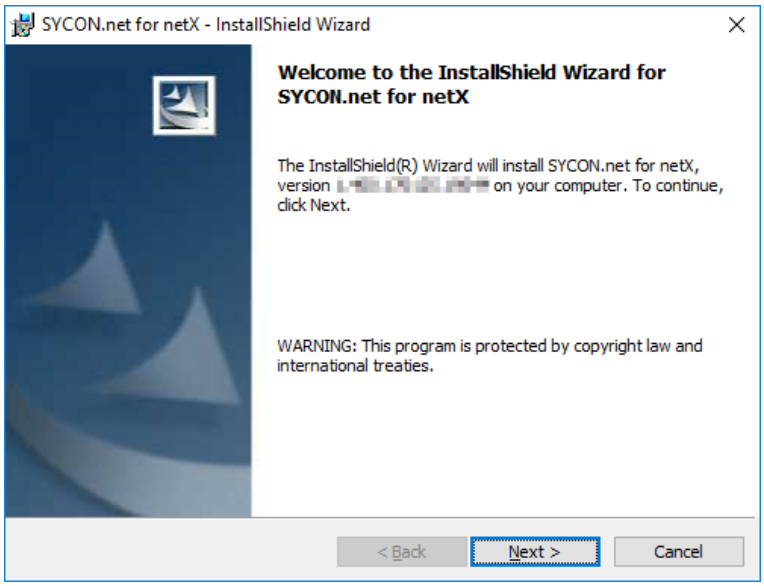

Figure 138: SYCON.net Installation Information

- Click **Next**.

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

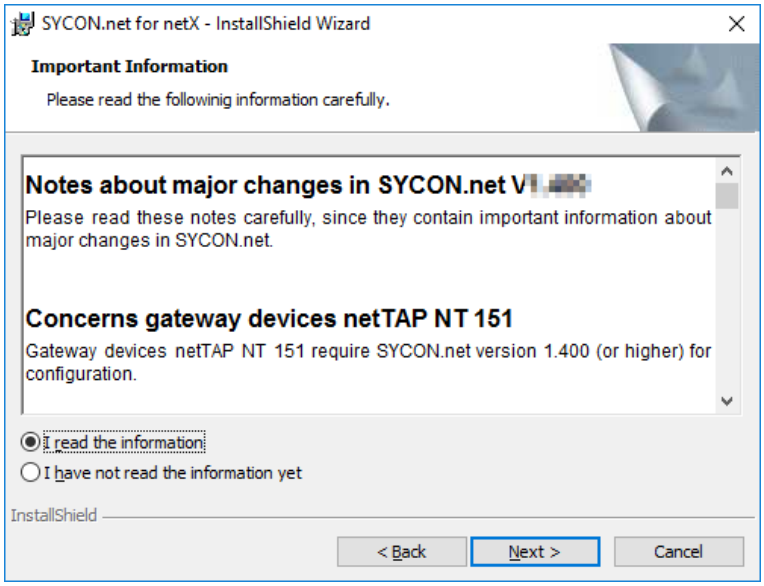

Figure 139: Notes about Major Changes in SYCON.net

- Read the notes about major changes in SYCON.net carefully.
- Select **I read the information**, after you have read them.
- Click **Next**.

© Hilscher 2013 - 2017

4. Accept license agreement.

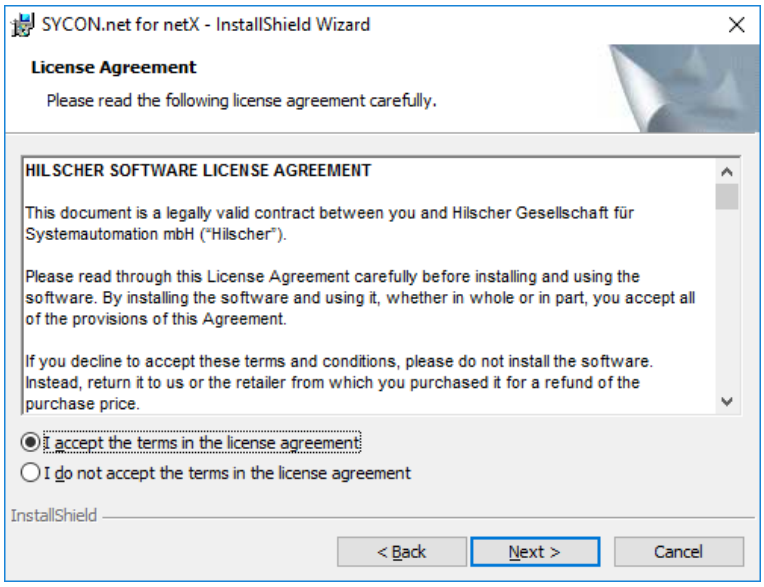

Figure 140: SYCON.net License Agreement

- Select **I accept the terms in the license agreement**, if you agree to it.
- Click **Next**.

5. Enter user information.

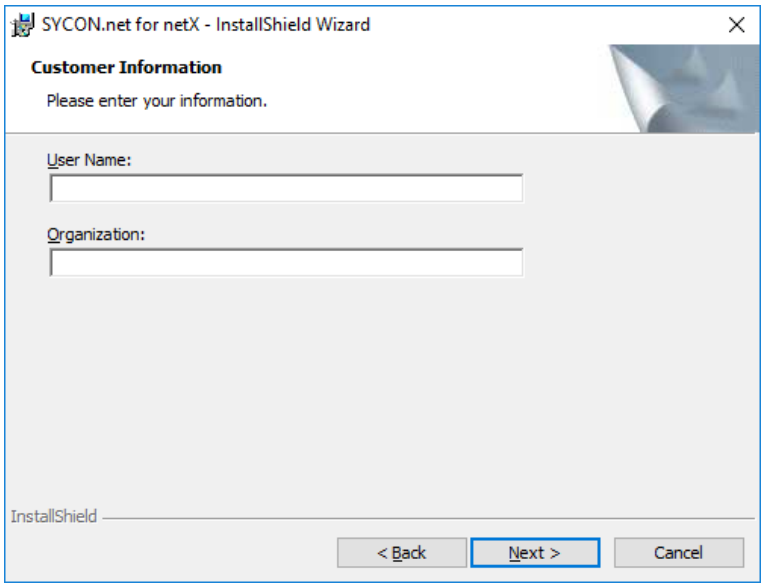

Figure 141: SYCON.net Customer Information

- Enter the user name and the name of the organization.
- Click **Next**.

© Hilscher 2013 - 2017

6. Install SYCON.net.

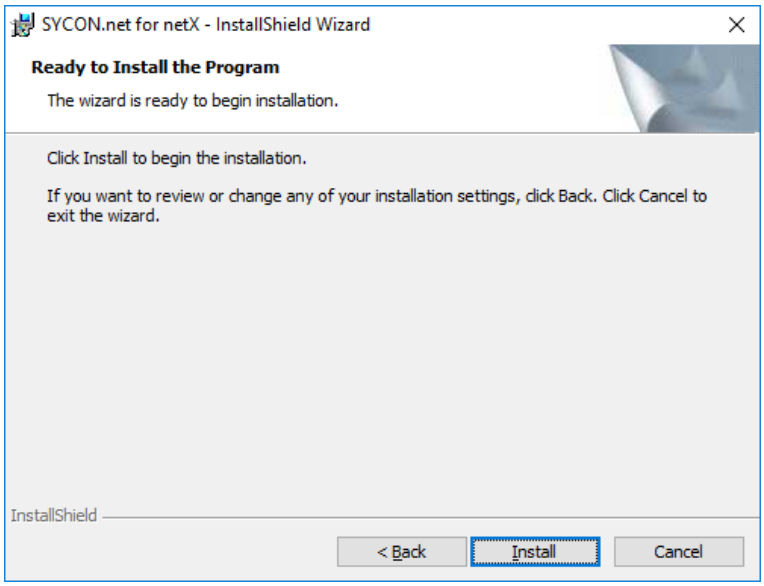

Figure 142: Start SYCON.net Installation

➢ Click **Install** to start the installation.

↬ The components are being installed. This may take several minutes.

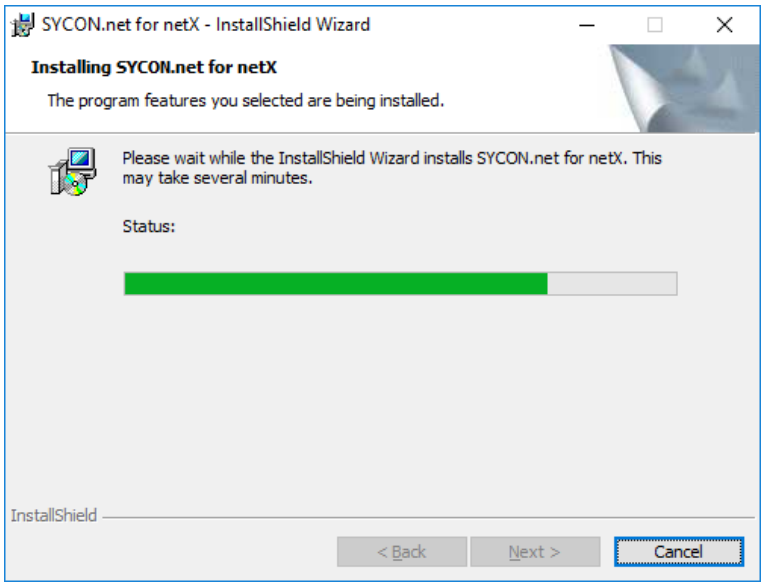

Figure 143: SYCON.net Installation Status

© Hilscher 2013 - 2017

7. Finish Installation.

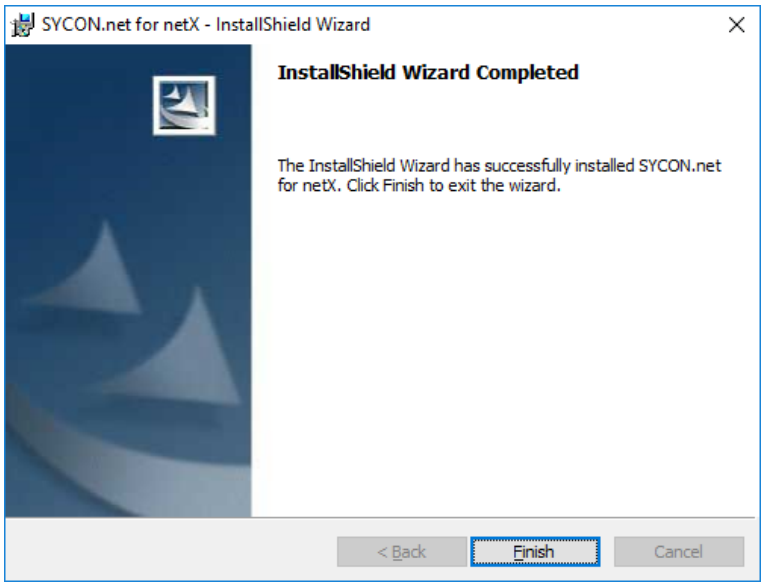

Figure 144: Finish SYCON.net Installation

➢ Click **Finish** to complete the installation.

➢ SYCON.net has been installed and can be started in the **Start** menu of Windows by choosing **All Apps** > **SYCON.net**.

© Hilscher 2013 - 2017

4.4 Uninstalling SYCON.net

4.4.1 Uninstalling SYCON.net under Windows XP

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

- Close all application programs.
- In the **Start** menu of Windows, choose **Control Panel**.
- The **Control Panel** opens:

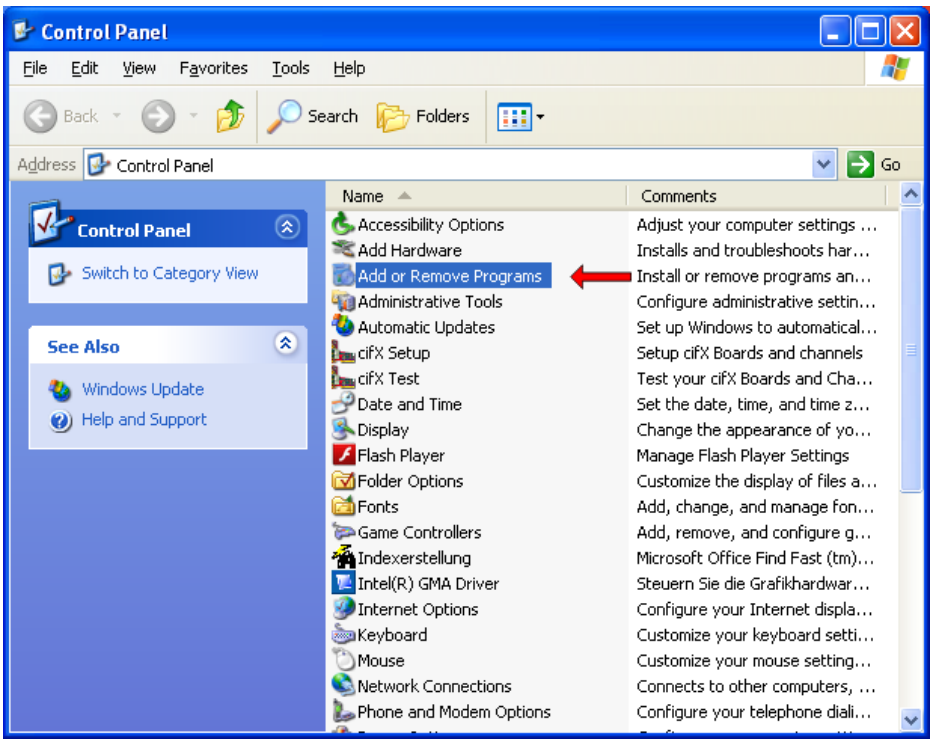

Figure 145: Control Panel

- In the **Control Panel**, double-click **Add or Remove Programs**.

© Hilscher 2013 - 2017

➮ The **Add or Remove Programs** window opens:

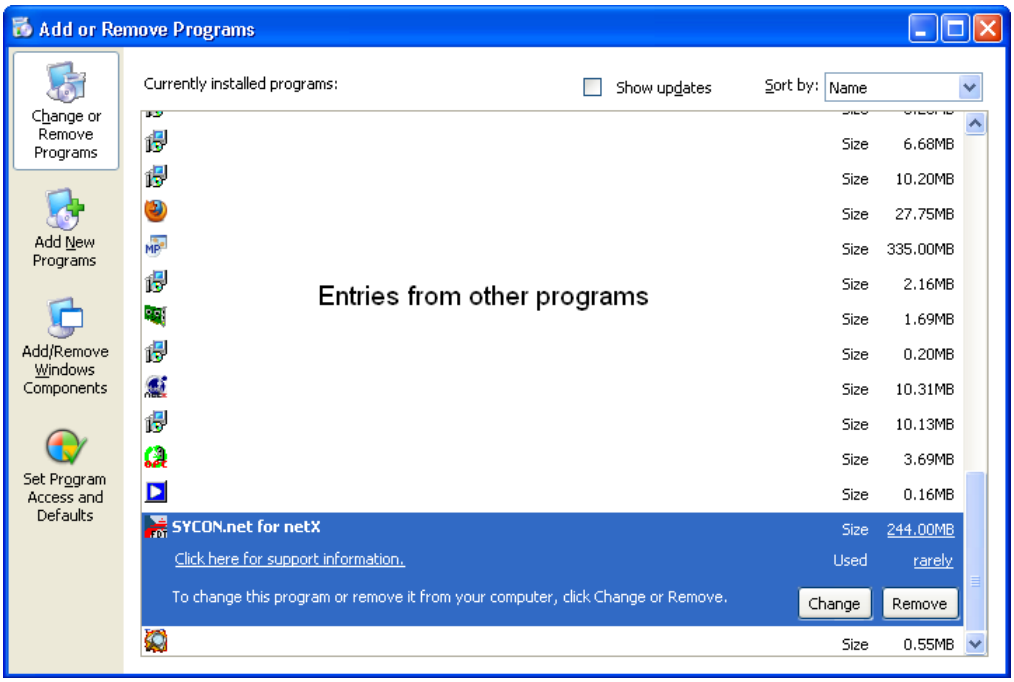

Figure 146: Add or Remove Programs

➢ Select **SYCON.net for netX** entry.
➢ Click **Remove**.
➮ A confirmation request appears:

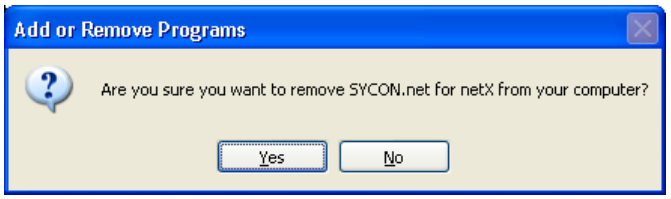

Figure 147: Confirmation Dialog

➢ Click **Yes**.
➮ SYCON.net is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

4.4.2 Uninstalling SYCON.net under Windows 7

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

- Close all application programs.
- In the **Start** menu of Windows 7, select **Control Panel**.
- The **Adjust your computer's settings** window opens:

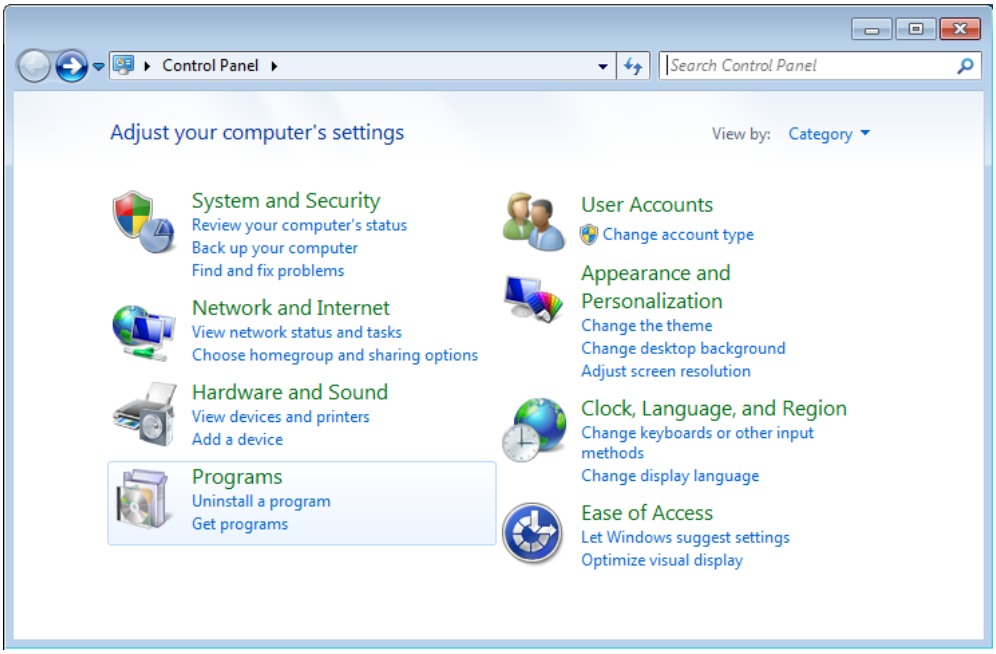

Figure 148: Adjust Your Computer's Settings Window

- In the **Programs** group, click **Uninstall a program**.

© Hilscher 2013 - 2017

➧ The **Uninstall or change a program** window opens:

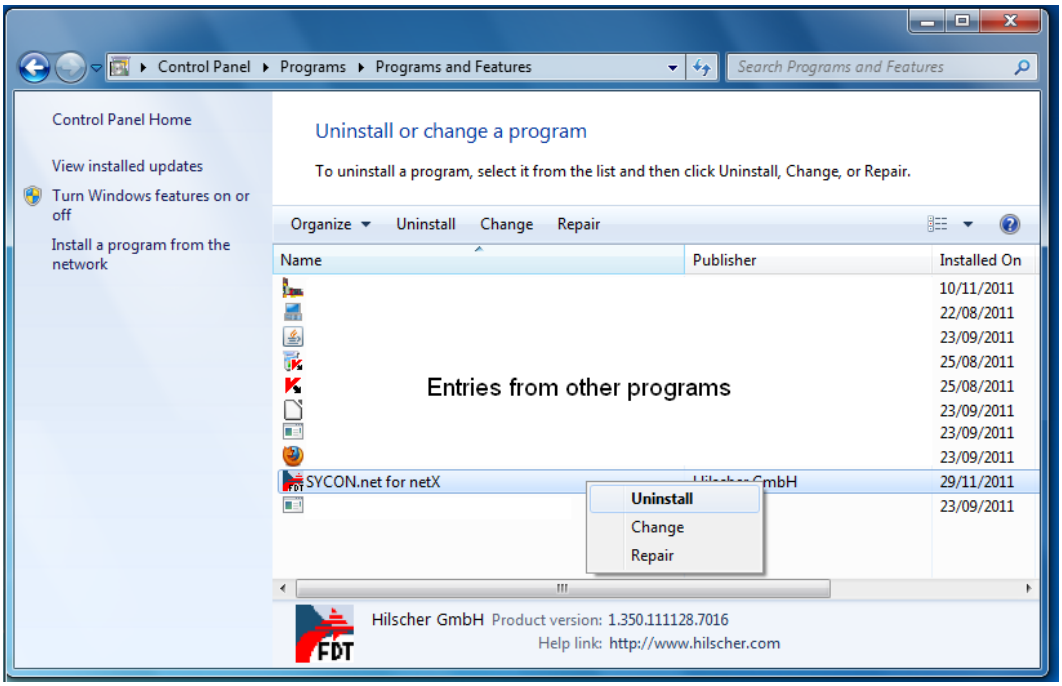

Figure 149: Uninstall or Change a Program Window

➢ Right-click on the **SYCON.net for netX** entry and choose **Uninstall** from the context menu.

➧ A confirmation request appears:

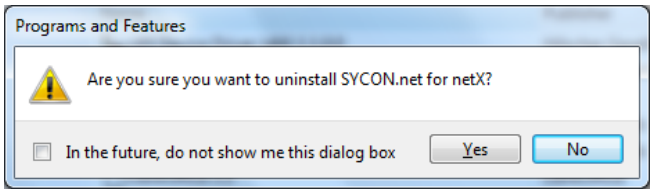

Figure 150: Confirmation Dialog

➢ Click **Yes**.

➧ SYCON.net is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

4.4.3 Uninstalling SYCON.net under Windows 8

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

➢ In the **Start** screen of Windows 8, right-click on an empty space.
➢ The **All apps** button appears in the lower part of the screen:

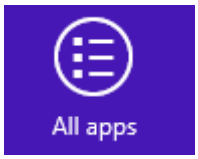

Figure 151: All Apps Button

➢ Click **All apps**.
➢ A list featuring all available programs (**Apps**) appears:

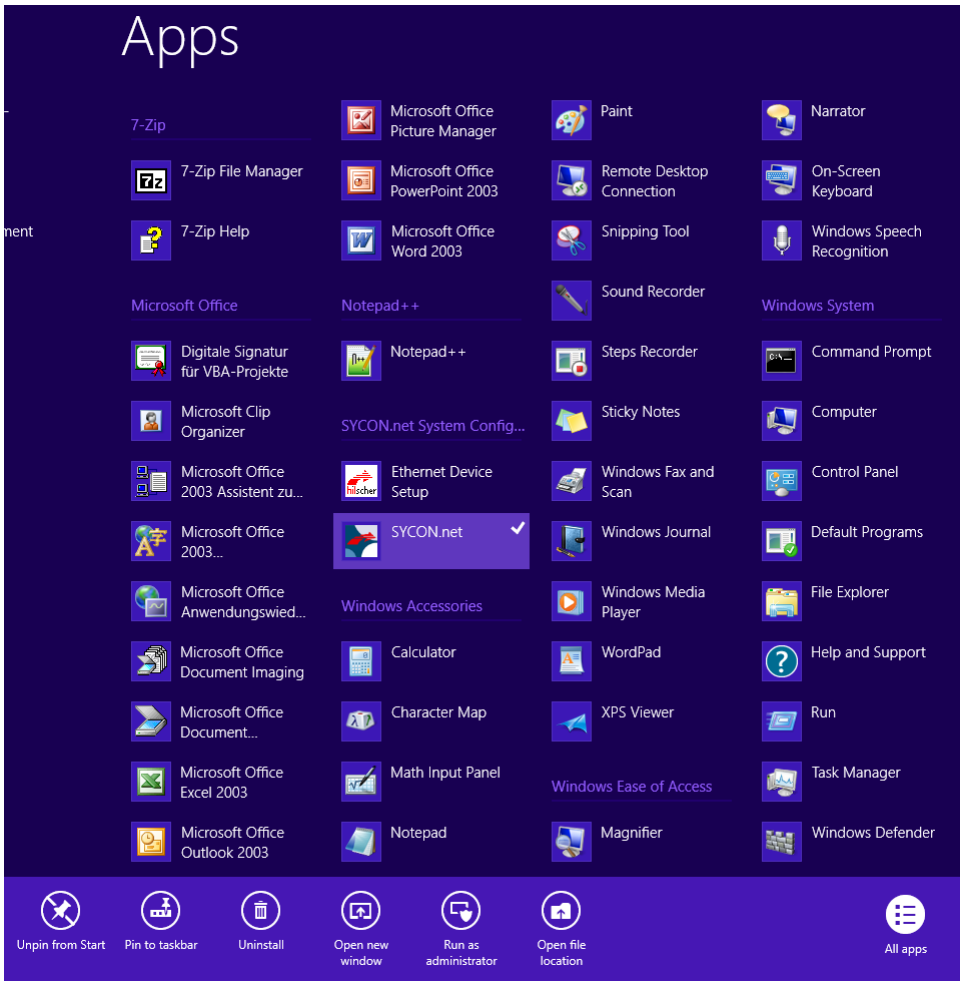

Figure 152: List of Installed Apps in Windows 8

➢ In the **Apps** list, right-click the **SYCON.net** entry.
➢ The context menu opens in the lower part of the screen.
➢ In the context menu, click **Uninstall**.

© Hilscher 2013 - 2017

Windows 8 changes into “desktop mode” and opens the **Programs and Features** window:

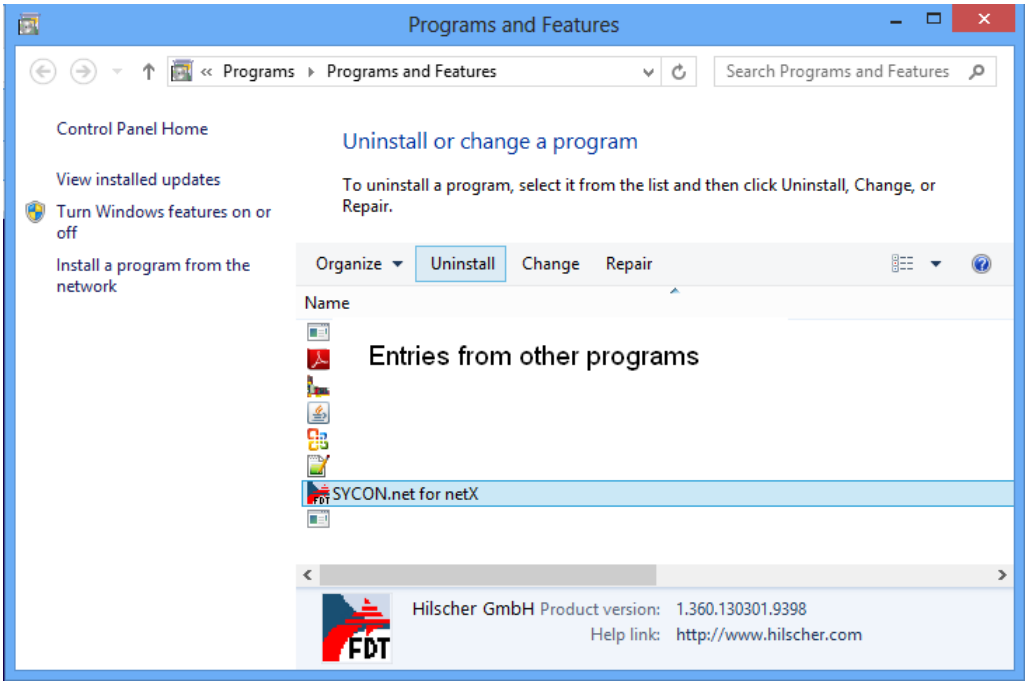

Figure 153: Uninstall or Change a Program Window

- Select **SYCON.net for netX** entry.
- Above the list, click **Uninstall**.

A security question appears:

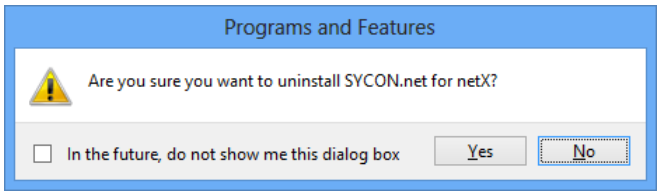

Figure 154: Acknowledge Uninstall

- Click **Yes**.

© Hilscher 2013 - 2017

If the **ODM Tray** (which is a feature of the SYCON.net installation) is still active, the following window opens:

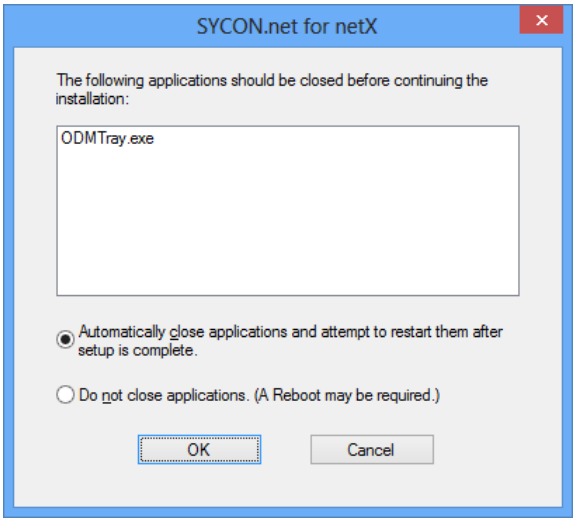

Figure 155: Close ODMTray Dialog

- Choose **Automatically close applications and attempt to restart them after setup is complete** option, then click **OK**.
- SYCON.net is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

4.4.4 Uninstalling SYCON.net under Windows 10

1. Open the **Programs and Features** dialog window.

➢ Right-click on the Windows **Start** symbol, then choose **Programs and Features** entry:

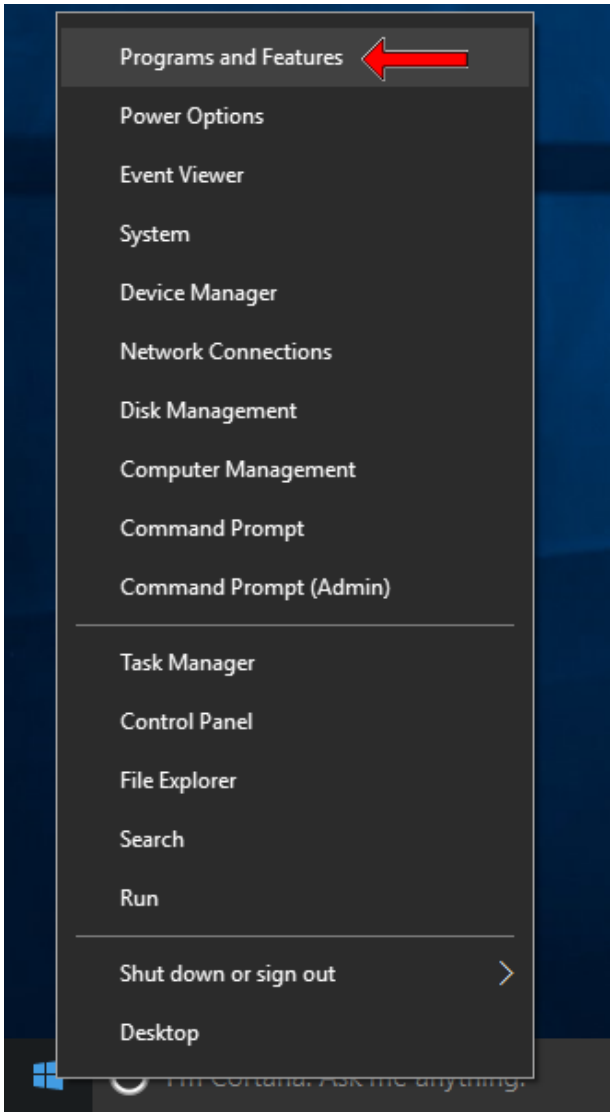

Figure 156: Open program manager in Windows 10

© Hilscher 2013 - 2017

➧ The **Uninstall or change a program** window opens:

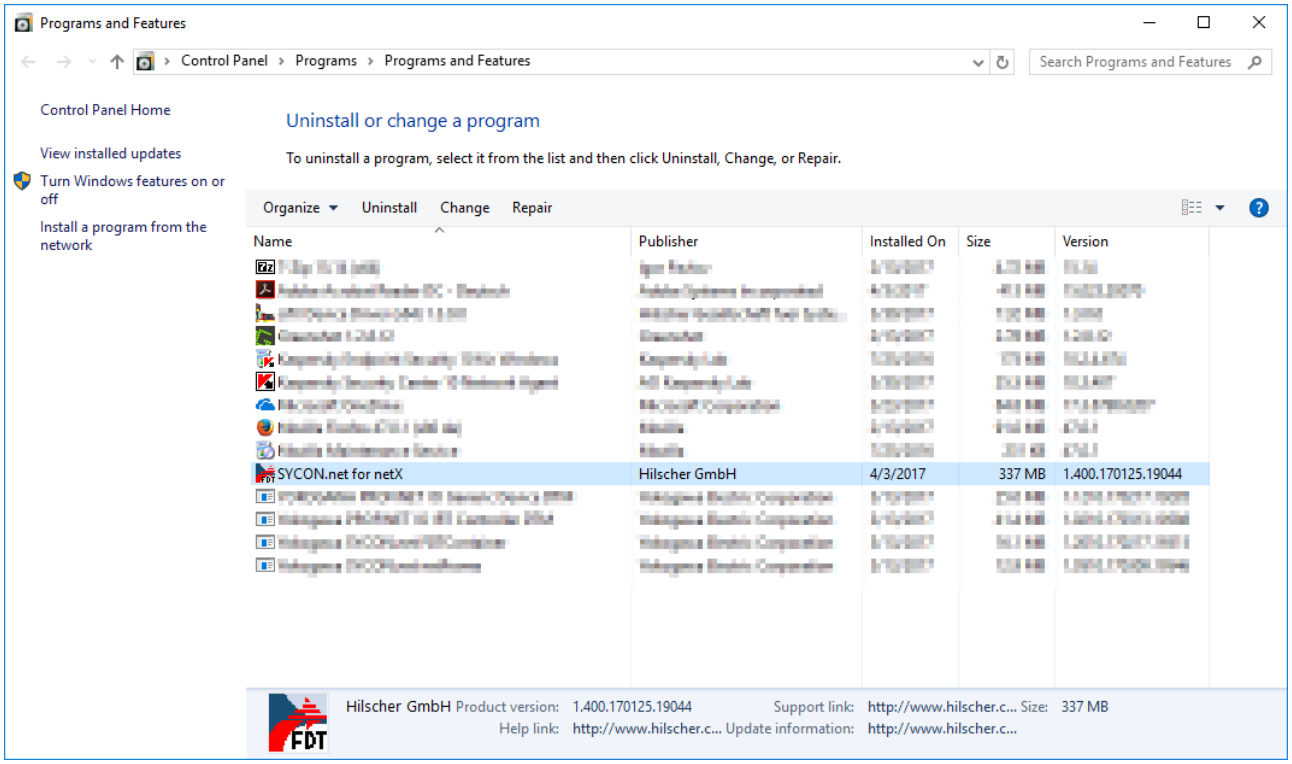

Figure 157: Uninstall or change a program window

➢ Select **SYCON.net for netX** entry.
➢ Click **Uninstall** button located above the list.
➧ A confirmation request appears:

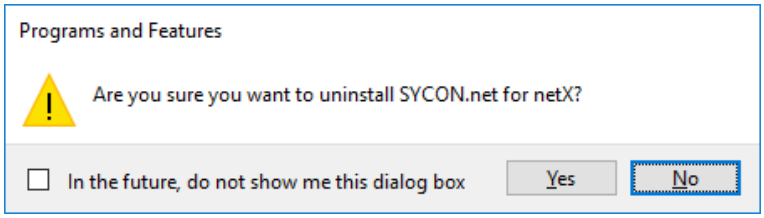

Figure 158: Confirmation Dialog

➢ Click **Yes**.
➧ SYCON.net is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

5 netX Configuration Tool

5.1 Overview

With the netX Configuration Tool, you can configure or diagnose your communication module. You can also use it to download or update the firmware of your module. Note, however, that the tool can be used only for slave devices, for master devices you have to use SYCON.net.
If the host system of your communication module runs under a Windows operating system, you can install the netX Configuration Tool on your host system for the above mentioned purposes. You can also install the tool on a separate configuration PC under Windows, and then connect your communication module via PCI Carrier Board (comX), Evaluation Board (netJACK), USB or serial interface to the configuration PC and the netX Configuration Tool.

The netX Configuration Tool is delivered on the Communication Solutions DVD. You can start the installation program for the tool (the **netX Configuration Tool Setup Wizard**) in the menu of the start screen of the DVD. Instructions for this are provided on the following pages. You can also start the installation program by double-clicking the *netXConfigurationUtility_Setup.exe* file in the `Tools\Slave Configuration Tool` directory of the Communication Solutions DVD.
The setup program contains all components needed for the installation under Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10.

Please note the following:

- If the netX Configuration Tool shall access the communication module via host interface or PC bus, you need to install the cifX Device Driver on your host system or configuration PC. See chapter *cifX Device Driver* on page 10.
- If the netX Configuration Tool shall access the communication module via USB, you need to install the USB Driver on your host system or configuration PC. See chapter *USB Driver* on page 50.
- You need administrator rights for installing or uninstalling the netX Configuration Tool on your operating system.
- If an older version of the netX Configuration Tool is already installed on your system, uninstall it first before you install the new version.
- A description of the user interface of the netX Configuration Tool and information on how to use this tool to configure or diagnose slave devices is provided in the operating instruction manual *netX Configuration Tool for cifX, comX and netJACK – Configuration of Real Time Ethernet and Fieldbus Devices*, DOC110205OIxxEN, stored on the Communication Solutions DVD.
  The netX Configuration Tool is equipped with an online help, which can be started by clicking the **Help** button or pressing the **F1** key.

© Hilscher 2013 - 2017

5.2 Installing netX Configuration Tool

5.2.1 Installing netX Configuration Tool under Windows XP

1. Start the netX Configuration Tool installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➪ The Flash start screen **Communication Solutions** is displayed:

Figure 159: Start Screen Communication Solutions – Install netX Configuration Tool

➢ In the menu, choose **Drivers, Software and Tools** > **Install Slave Configuration Software**.

Note: As an alternative, you can also start the installation program (i. e. the **netX Configuration Tool Setup Wizard**) by double-clicking the *netXConfigurationUtility_Setup.exe* file in the `Tools\Slave Configuration Tool` directory of the Communication Solutions DVD.

© Hilscher 2013 - 2017

➧ The **netX Configuration Tool Setup Wizard** is started:

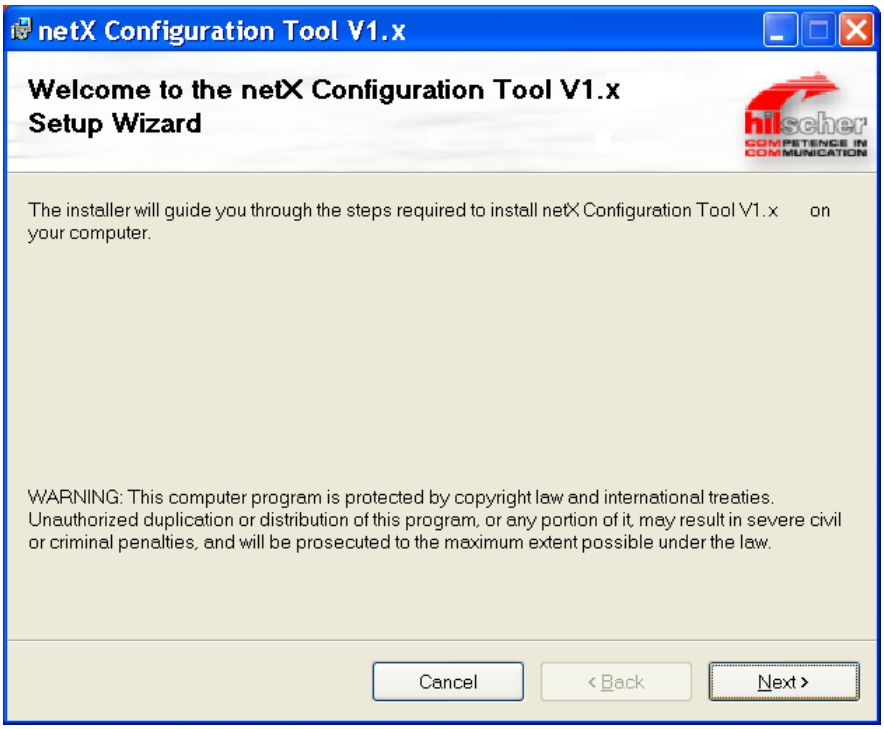

Figure 160: netX Configuration Tool Setup Wizard

➢ Click **Next**.

2. Choose Installation options.

➧ The **Select Installation Folder** window is displayed:

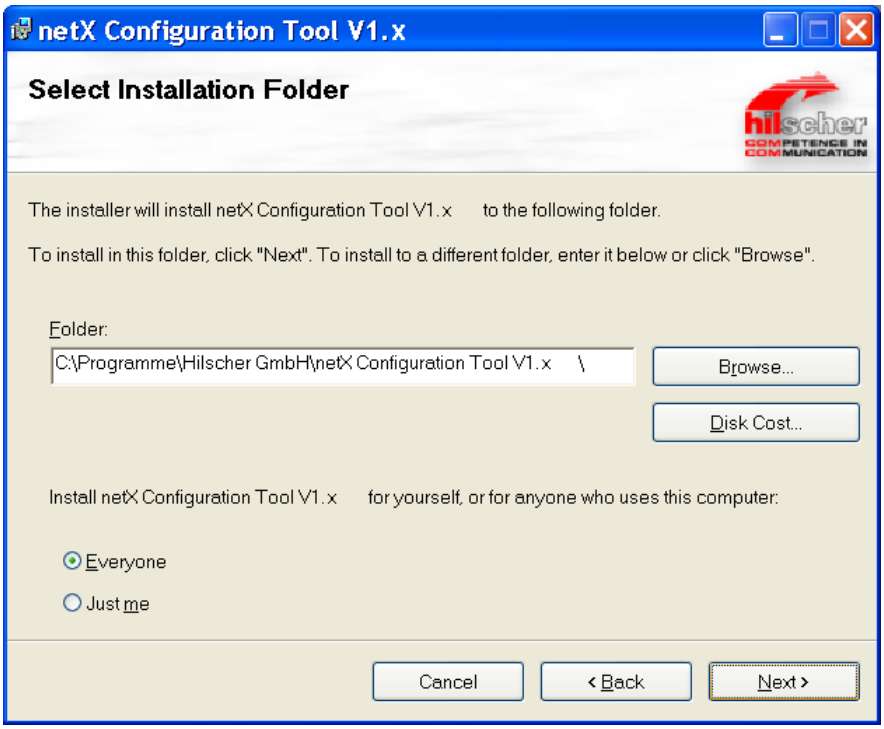

Figure 161: netX Configuration Tool Setup Wizard – Installation Options

© Hilscher 2013 - 2017

- If you accept the suggested standard installation directory, click **Next**. If you prefer a different directory, enter the path directly in the **Folder** field or click **Browse** to open the **Browse for Folder** dialog, in which you can select a different directory.
- If you want to check which drive provides the required space for the installation, click **Disk Cost…**
- If you want to restrict access to the netX Configuration Tool to your login, click **Just me** option.
- Click **Next**.

3. Start the installation.

The **Confirm Installation** window is displayed:

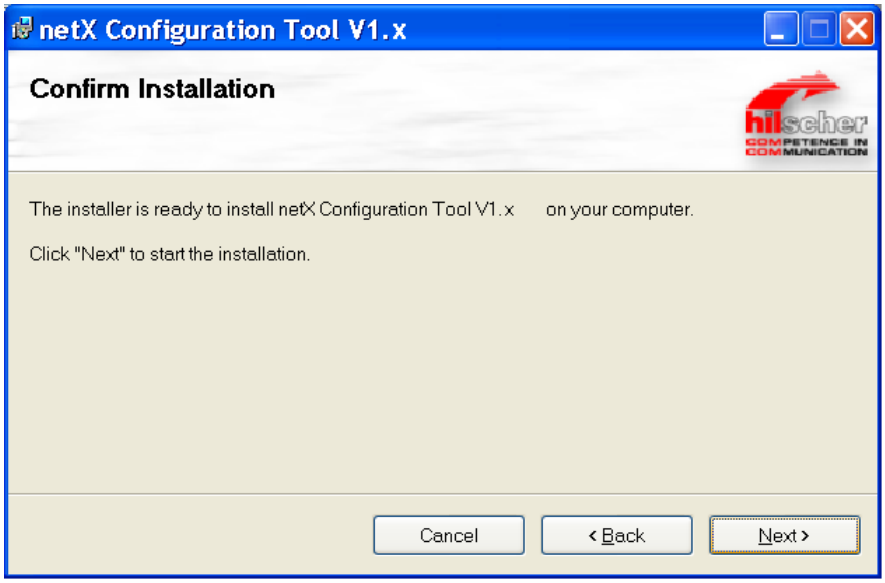

Figure 162: netX Configuration Tool Setup Wizard – Confirm Installation

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

netX Configuration Tool is being installed.

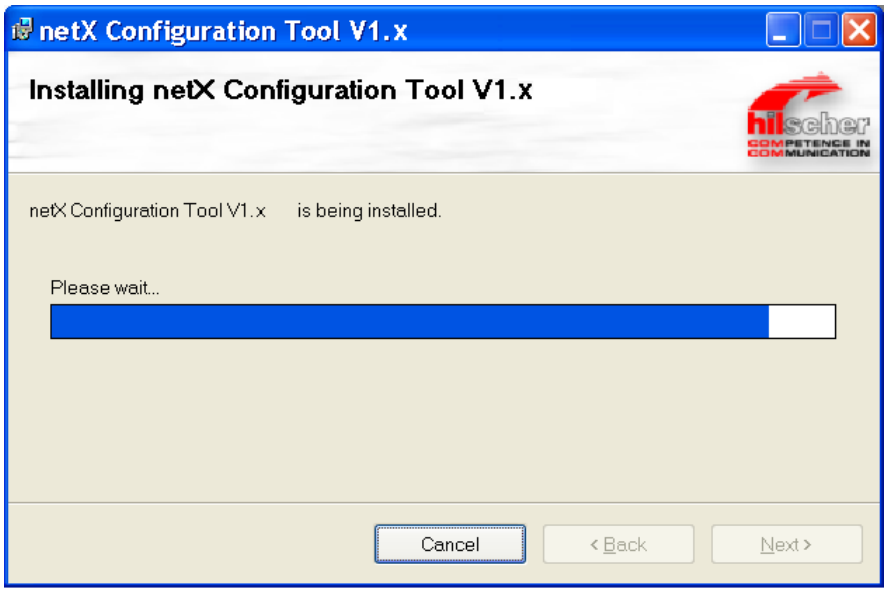

Figure 163: netX Configuration Tool Setup Wizard – Installation in Progress

© Hilscher 2013 - 2017

4. Finish installation.

➧ The **Installation Complete** window appears:

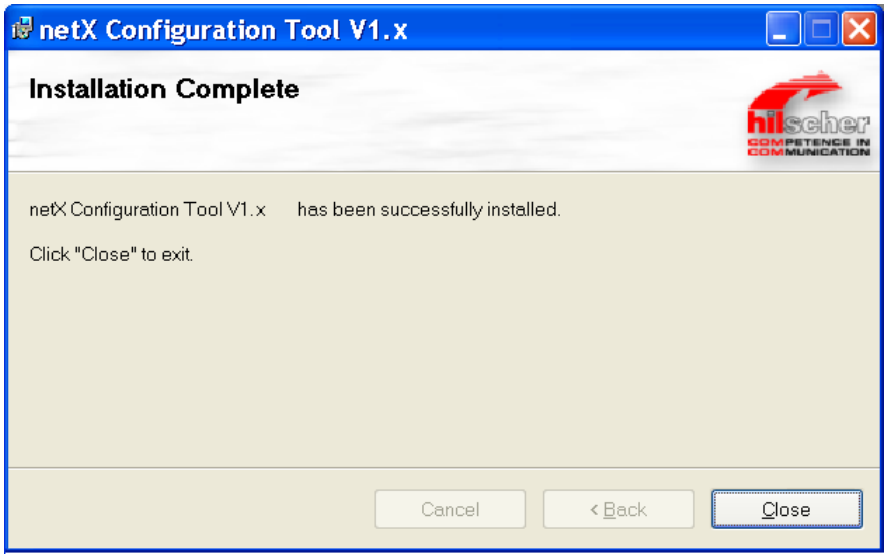

Figure 164: netX Configuration Tool Setup Wizard – Installation Complete

➢ Click **Close** to finish the Installation.

➧ netX Configuration Tool has been installed and can be started in the **Start** menu of Windows via **All Programs** > **Hilscher GmbH** > **netX Configuration Tool**.

© Hilscher 2013 - 2017

5.2.2 Installing netX Configuration Tool under Windows 7

1. Start the netX Configuration Tool installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 165: Start Screen Communication Solutions – Install netX Configuration Tool

➢ In the menu, choose **Drivers, Software and Tools** > **Install Slave Configuration Software**.

Note: As an alternative, you can also start the installation program (i. e. the **netX Configuration Tool Setup Wizard**) by double-clicking the *netXConfigurationUtility_Setup.exe* file in the `Tools\Slave Configuration Tool` directory of the Communication Solutions DVD. You can reduce the number of Windows security questions by right-clicking on the *netXConfigurationUtility_Setup.exe* file and choosing **Run as administrator** from the context menu.

© Hilscher 2013 - 2017

➧ The **netX Configuration Tool Setup Wizard** is started:

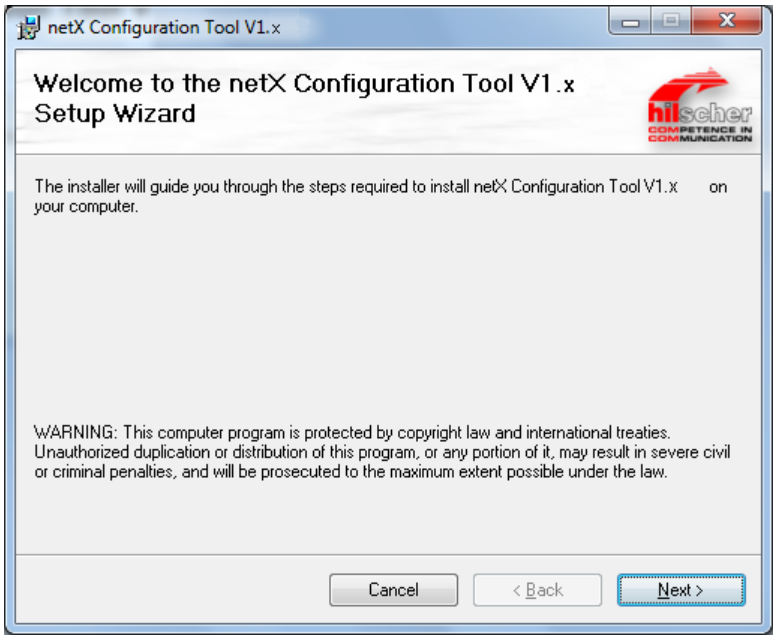

Figure 166: netX Configuration Tool Setup Wizard

➢ Click **Next**.

2. Choose Installation options.

➧ The **Select Installation Folder** window is displayed:

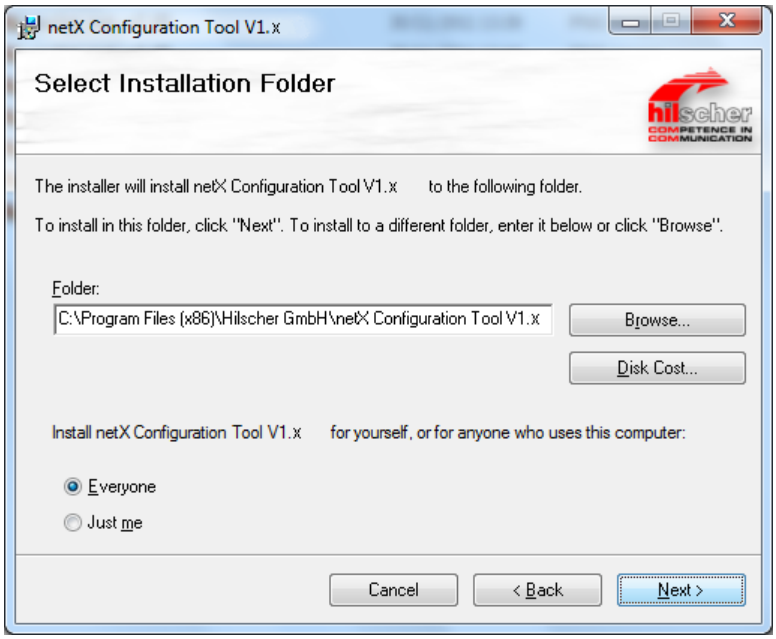

Figure 167: netX Configuration Tool Setup Wizard – Installation Options

➢ If you accept the suggested standard installation directory, click **Next**. If you prefer a different directory, enter the path directly in the **Folder** field or click **Browse** to open the **Browse for Folder** dialog, in which you can select a different directory.

© Hilscher 2013 - 2017

- If you want to check which drive provides the required space for the installation, click **Disk Cost…**
- If you want to restrict access to the netX Configuration Tool to your login, click **Just me** option.
- Click **Next**.

3. Start the installation.

The **Confirm Installation** window is displayed:

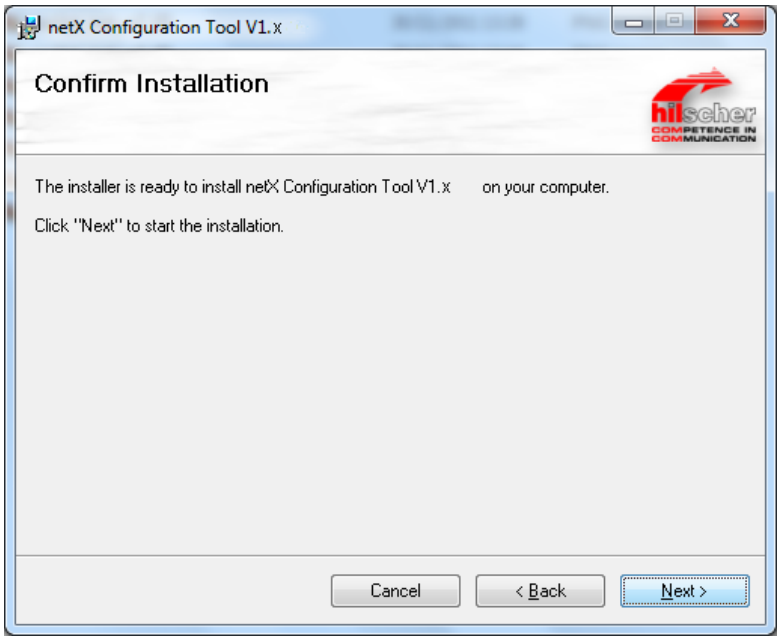

Figure 168: netX Configuration Tool Setup Wizard – Confirm Installation

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

netX Configuration Tool is being installed.

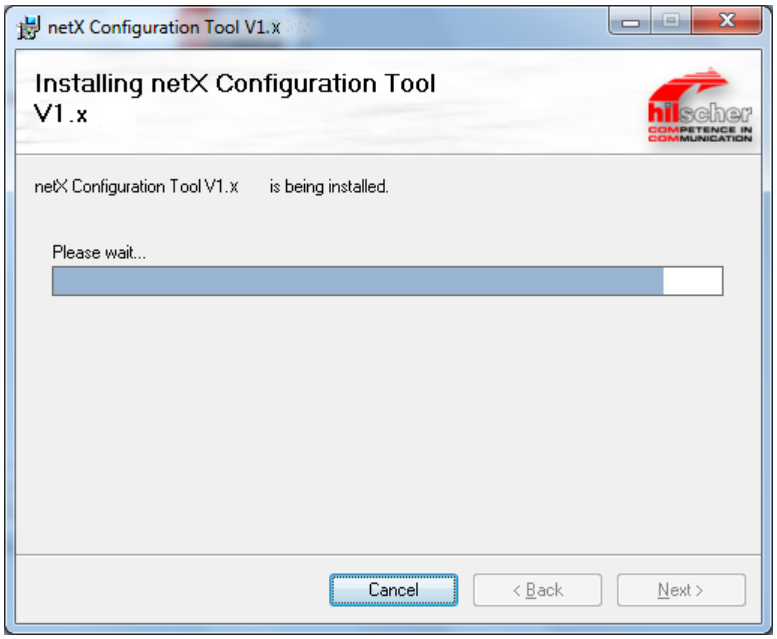

Figure 169: netX Configuration Tool Setup Wizard – Installation in Progress

© Hilscher 2013 - 2017

4. Finish installation.

➮ The **Installation Complete** window appears:

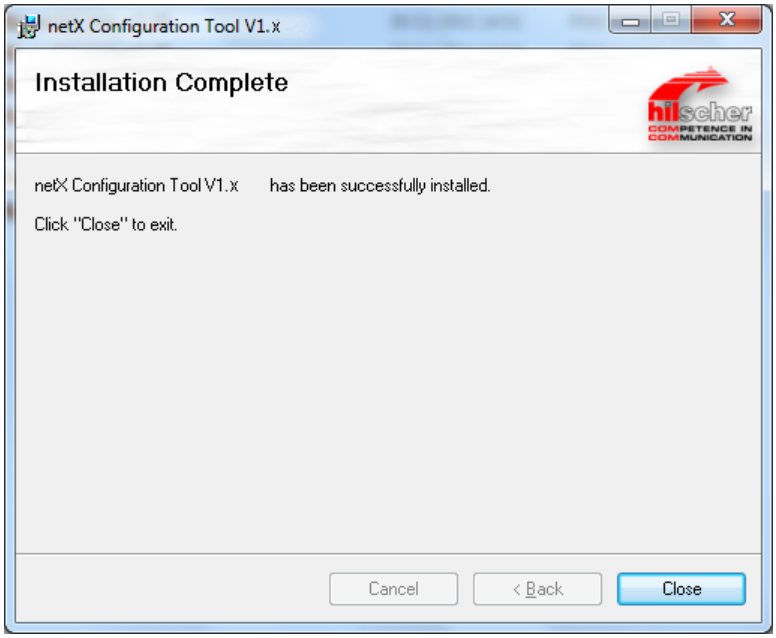

Figure 170: netX Configuration Tool Setup Wizard – Installation Complete

➢ Click **Close** to finish the Installation.

➮ netX Configuration Tool has been installed and can be started in the **Start** menu of Windows via **All Programs** > **Hilscher GmbH** > **netX Configuration Tool**.

© Hilscher 2013 - 2017

5.2.3 Installing netX Configuration Tool under Windows 8

1. Start the netX Configuration Tool installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 171: Start Screen Communication Solutions – Install netX Configuration Tool

➢ In the menu, choose **Drivers, Software and Tools** > **Install Slave Configuration Software**.

Note: As an alternative, you can also start the installation program (i. e. the **netX Configuration Tool Setup Wizard**) by double-clicking the *netXConfigurationUtility_Setup.exe* file in the `Tools\Slave Configuration Tool` directory of the Communication Solutions DVD. You can reduce the number of Windows security questions by right-clicking on the *netXConfigurationUtility_Setup.exe* file and choosing **Run as administrator** from the context menu.

© Hilscher 2013 - 2017

➪ The **netX Configuration Tool Setup Wizard** is started:

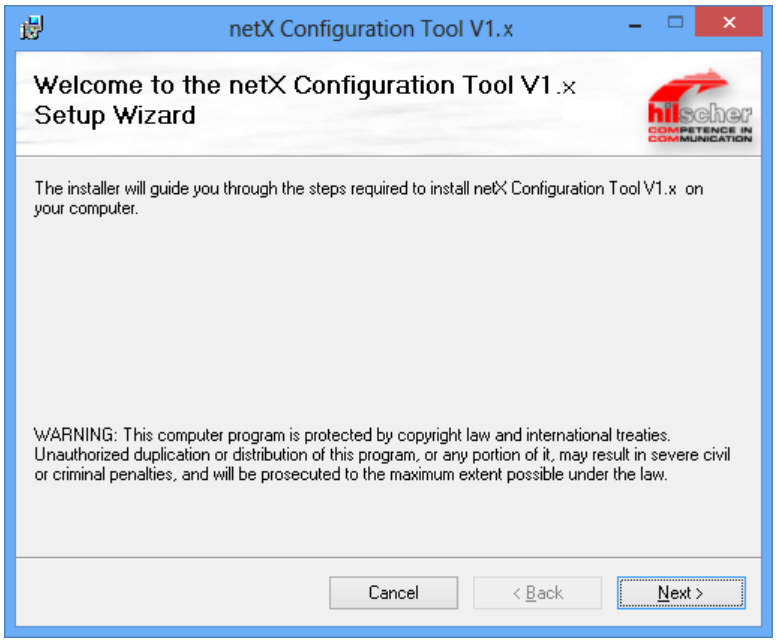

Figure 172: netX Configuration Tool Setup Wizard

➢ Click **Next**.

2. Choose Installation options.

➪ The **Select Installation Folder** window is displayed:

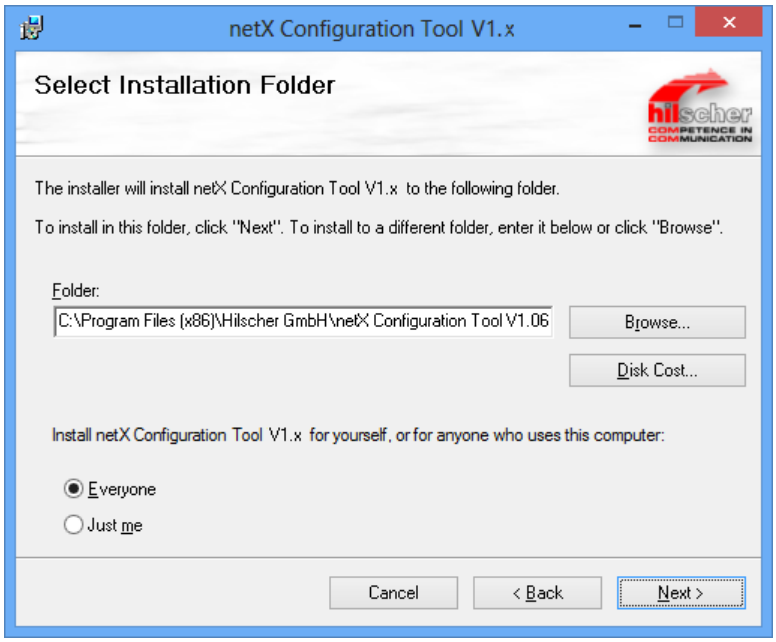

Figure 173: netX Configuration Tool Setup Wizard – Installation Options

➢ If you accept the suggested standard installation directory, click **Next**. If you prefer a different directory, enter the path directly in the **Folder** field or click **Browse** to open the **Browse for Folder** dialog, in which you can select a different directory.

© Hilscher 2013 - 2017

- If you want to check which drive provides the required space for the installation, click **Disk Cost…**
- If you want to restrict access to the netX Configuration Tool to your login, click **Just me** option.
- Click **Next**.

3. Start the installation.

The **Confirm Installation** window is displayed:

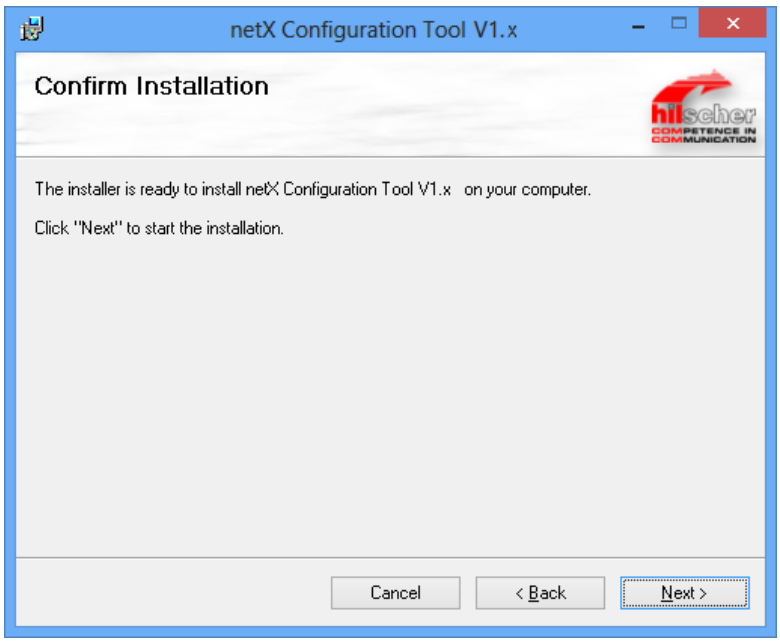

Figure 174: netX Configuration Tool Setup Wizard – Confirm Installation

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

netX Configuration Tool is being installed.

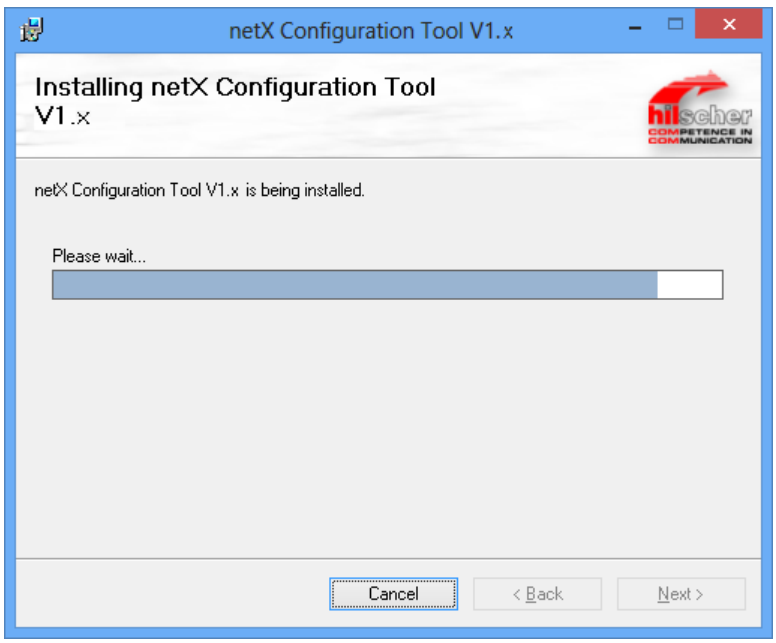

Figure 175: netX Configuration Tool Setup Wizard – Installation in Progress

© Hilscher 2013 - 2017

4. Finish installation.

➧ The **Installation Complete** window appears:

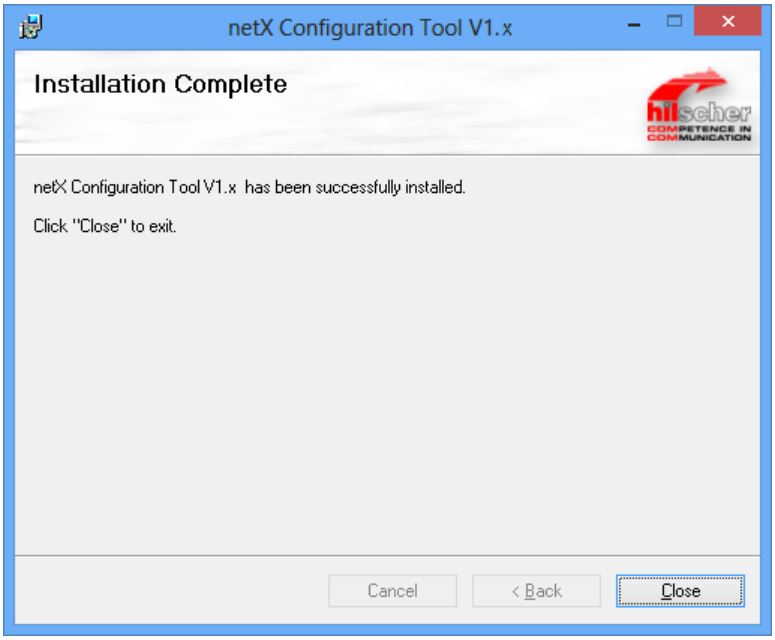

Figure 176: netX Configuration Tool Setup Wizard – Installation Complete

➢ Click **Close**, to finish the Installation.

➧ netX Configuration Tool has been installed.

Note: To start the netX Configuration Tool, use the Windows key to change from the desktop mode to the start screen of Windows 8. In the start screen, click on the **netX Configuration Tool** tile. If the tile is not displayed, right-click on an empty space, then click on the **All Apps** button appearing in the lower part of the start screen. A list featuring all available programs (**Apps**) opens. In this list, **netX Configuration Tool** is shown below **Hilscher GmbH** and can be started by double-click.

© Hilscher 2013 - 2017

5.2.4 Installing netX Configuration Tool under Windows 10

1. Start the netX Configuration Tool installation program.

➢ Close all application programs.

➢ Double-click the `Communication-Solutions.exe` file in the root directory of the un-zipped Communication SolutionsDVD.

➢ The Flash start screen **Communication Solutions** is displayed:

Figure 177: Start Screen Communication Solutions – Install netX Configuration Tool

➢ In the menu, choose **Drivers, Software and Tools** > **Install Slave Configuration Software**.

Note: As an alternative, you can also start the installation program (i. e. the **netX Configuration Tool Setup Wizard**) by double-clicking the *netXConfigurationUtility_Setup.exe* file in the `Tools\Slave Configuration Tool` directory of the Communication Solutions DVD.

© Hilscher 2013 - 2017

➧ The **netX Configuration Tool Setup Wizard** is started:

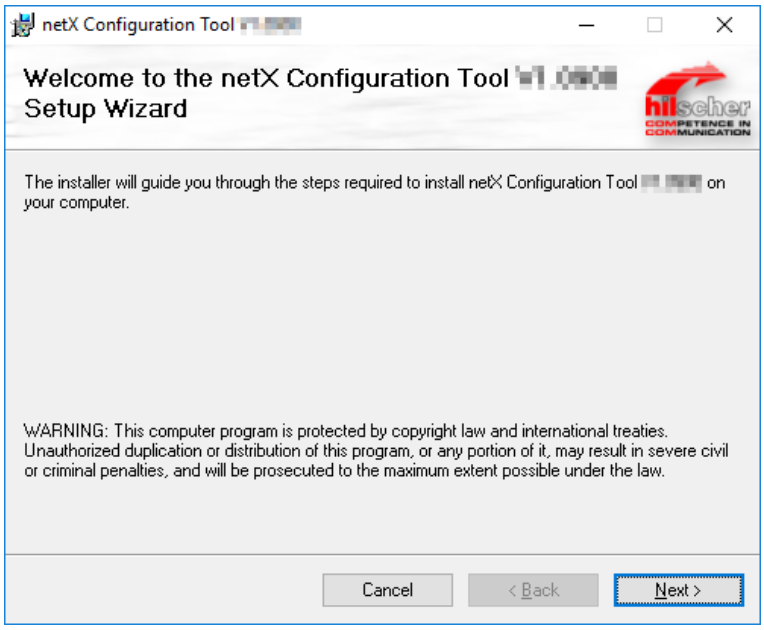

Figure 178: netX Configuration Tool Setup Wizard

➢ Click **Next**.

2. Choose Installation options.

➧ The **Select Installation Folder** window is displayed:

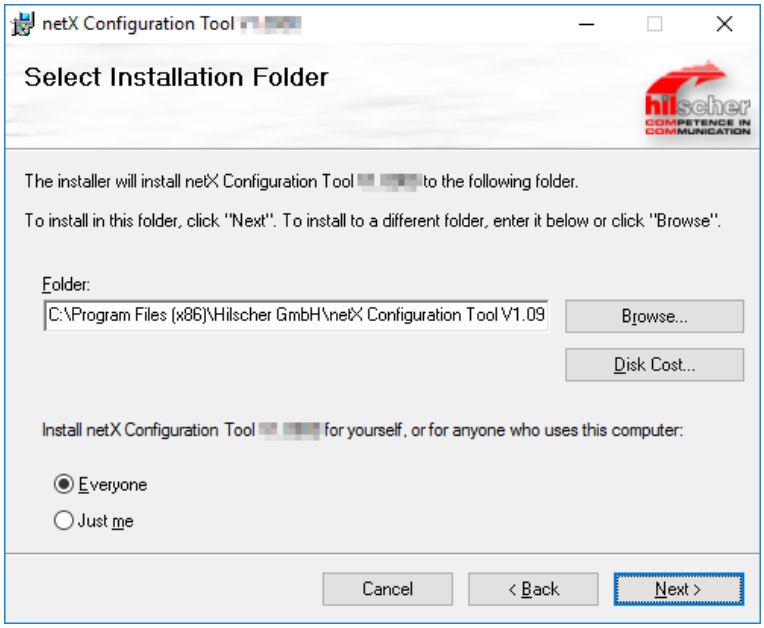

Figure 179: netX Configuration Tool Setup Wizard – Installation Options

➢ If you accept the suggested standard installation directory, click **Next**. If you prefer a different directory, enter the path directly in the **Folder** field or click **Browse** to open the **Browse for Folder** dialog, in which you can select a different directory.

© Hilscher 2013 - 2017

- If you want to check which drive provides the required space for the installation, click **Disk Cost…**
- If you want to restrict access to the netX Configuration Tool to your login, click **Just me** option.
- Click **Next**.

3. Start the installation.

The **Confirm Installation** window is displayed:

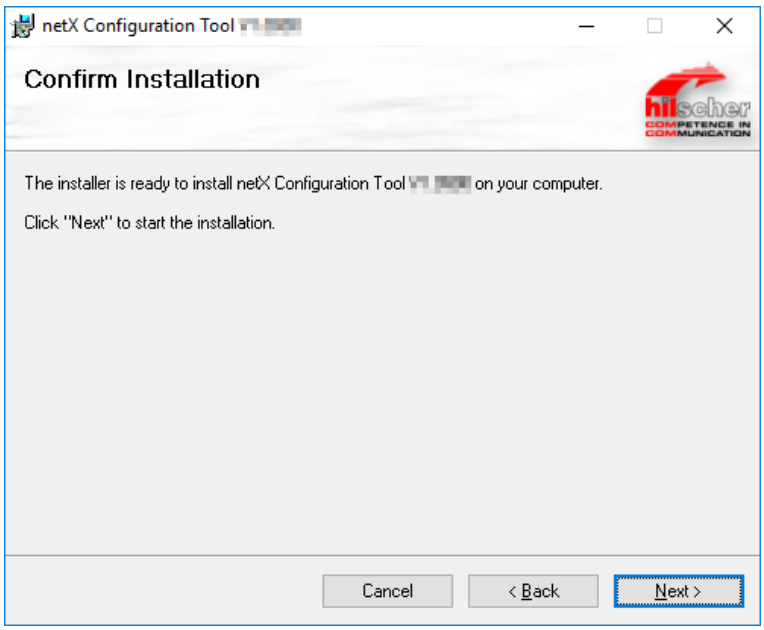

Figure 180: netX Configuration Tool Setup Wizard – Confirm Installation

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

netX Configuration Tool is being installed.

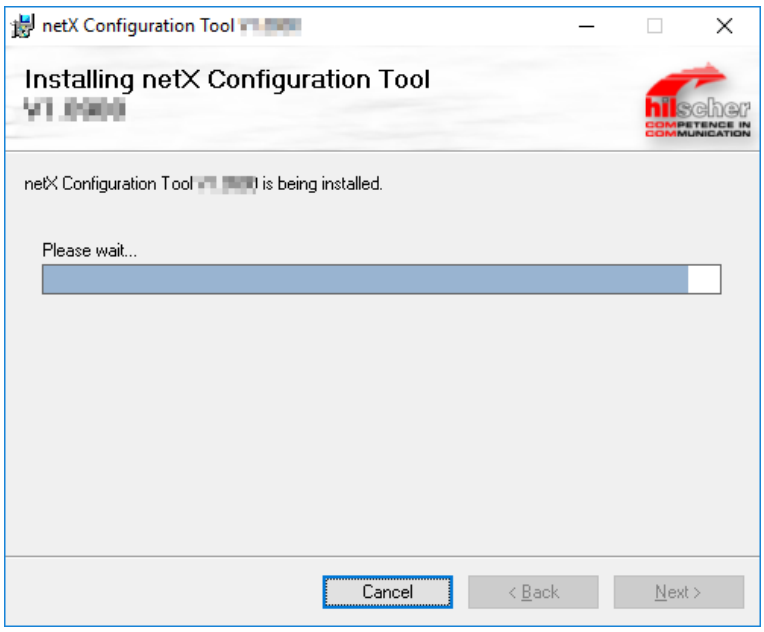

Figure 181: netX Configuration Tool Setup Wizard – Installation in Progress

© Hilscher 2013 - 2017

4. Finish installation.

➧ The **Installation Complete** window appears:

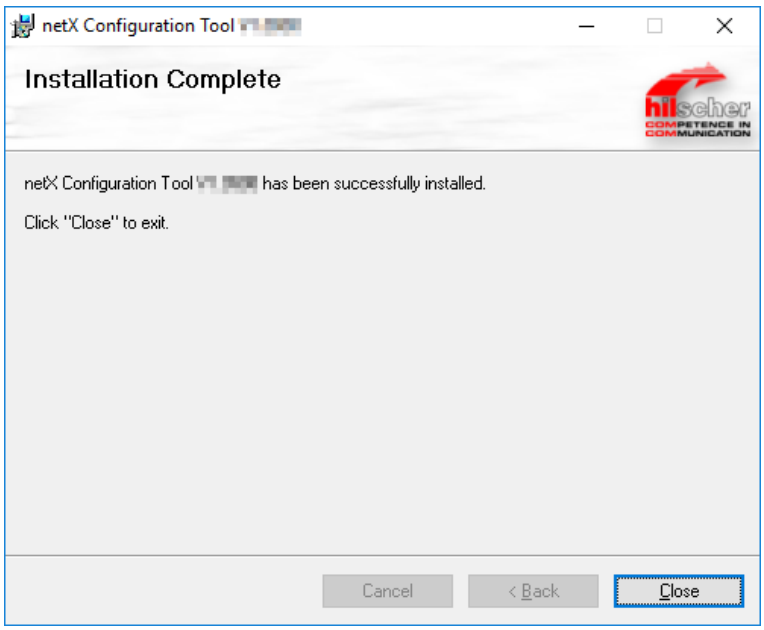

Figure 182: netX Configuration Tool Setup Wizard – Installation Complete

➢ Click **Close** to finish the Installation.

➧ netX Configuration Tool has been installed and can be started in the **Start** menu of Windows via **All Programs** > **netX Configuration Tool**.

© Hilscher 2013 - 2017

5.3 Uninstalling netX Configuration Tool

5.3.1 Uninstalling netX Configuration Tool under Windows XP

- Close all application programs.
- In the **Start** menu of Windows, choose **Control Panel**.

The **Control Panel** opens:

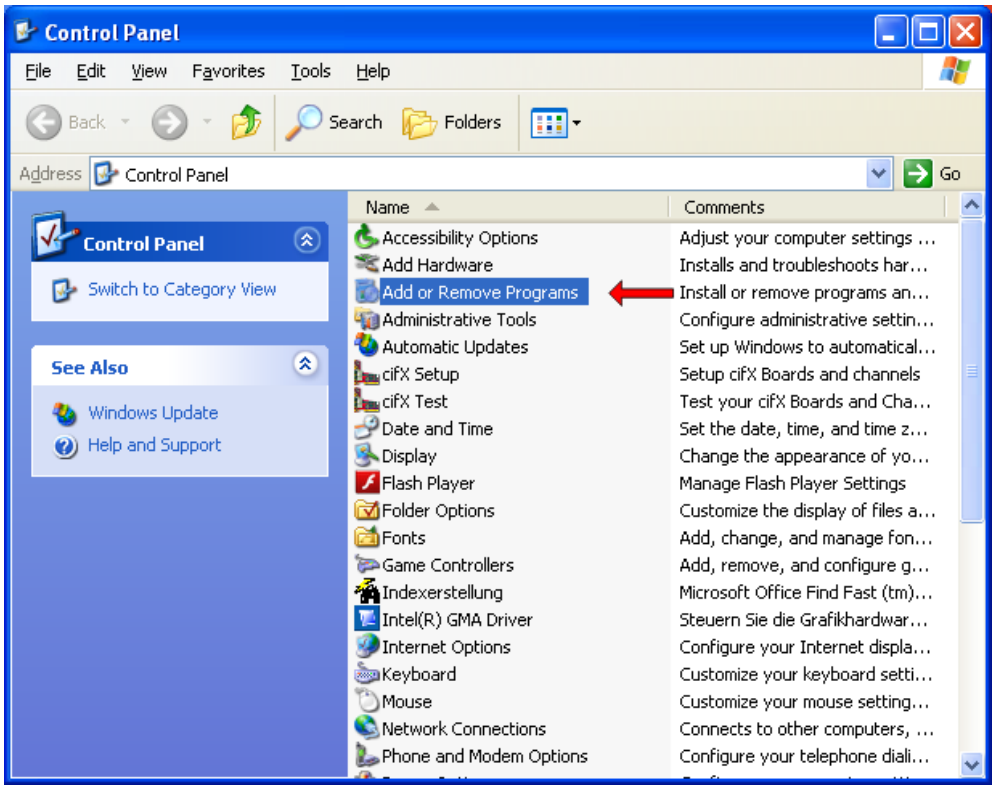

Figure 183: Control Panel

- In the **Control Panel**, double-click **Add or Remove Programs**.

The **Add or Remove Programs** window opens:

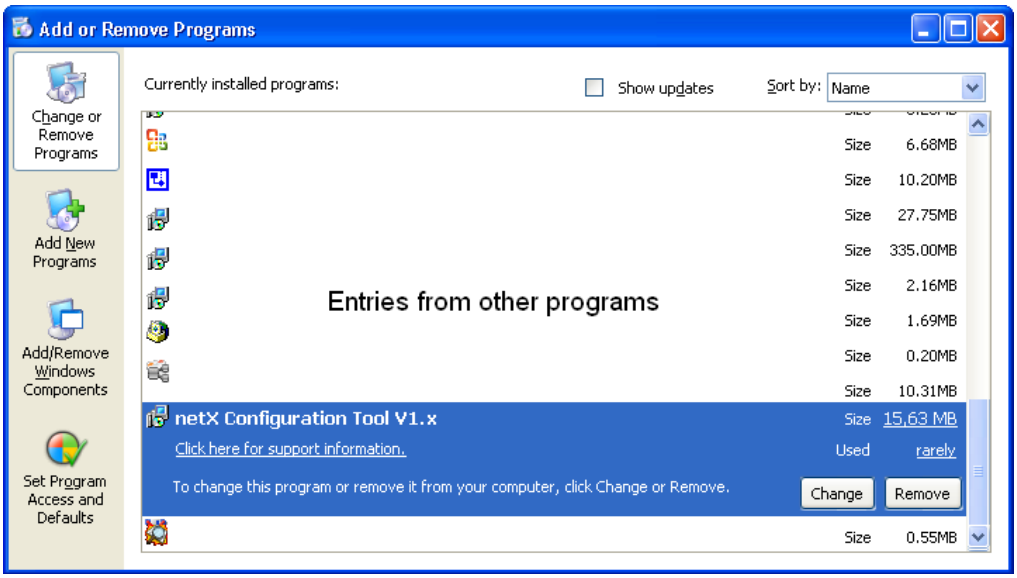

Figure 184: Add or Remove Programs

© Hilscher 2013 - 2017

- Select **netX Configuration Tool** entry.
- Click **Remove**.

A confirmation request appears:

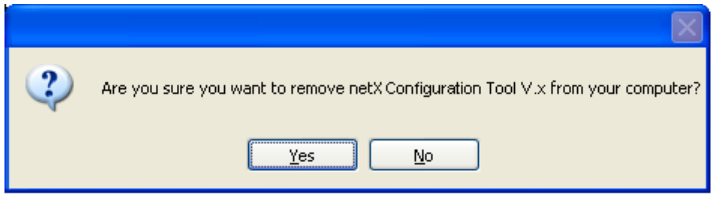

Figure 185: Confirmation Dialog

- Click **Yes**.

netX Configuration Tool is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

5.3.2 Uninstalling netX Configuration Tool under Windows 7

- Close all application programs.
- In the **Start** menu of Windows 7, select **Control Panel**.
- The **Adjust your computer's settings** window opens:

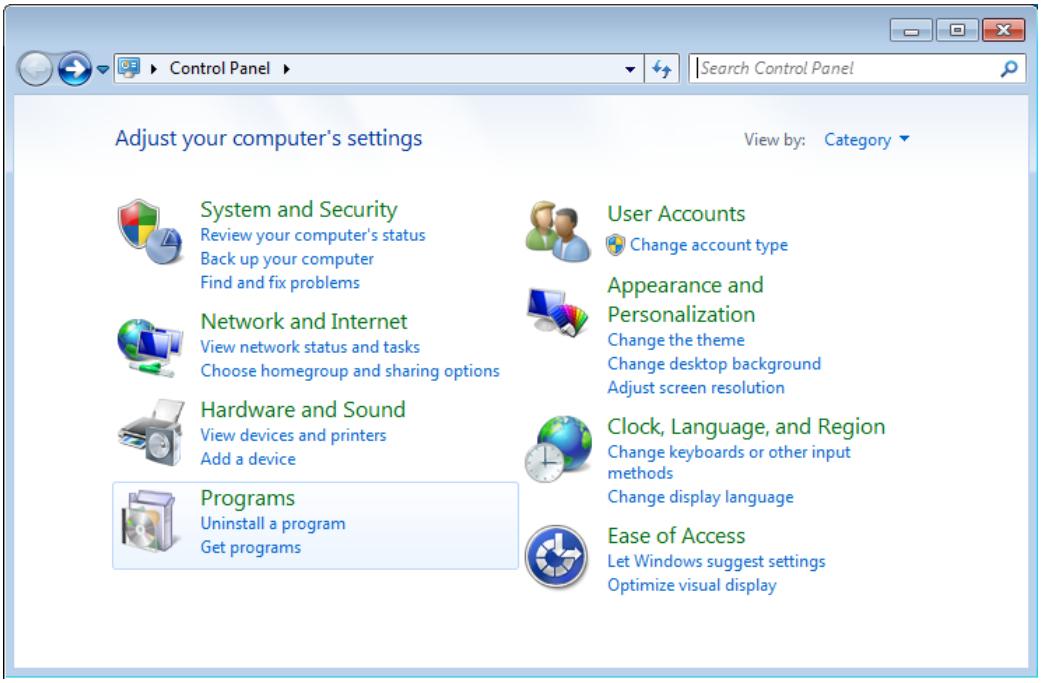

Figure 186: Adjust Your Computer's Settings Window

- In the **Programs** group, click **Uninstall a program**.
- The **Uninstall or change a program** window opens:

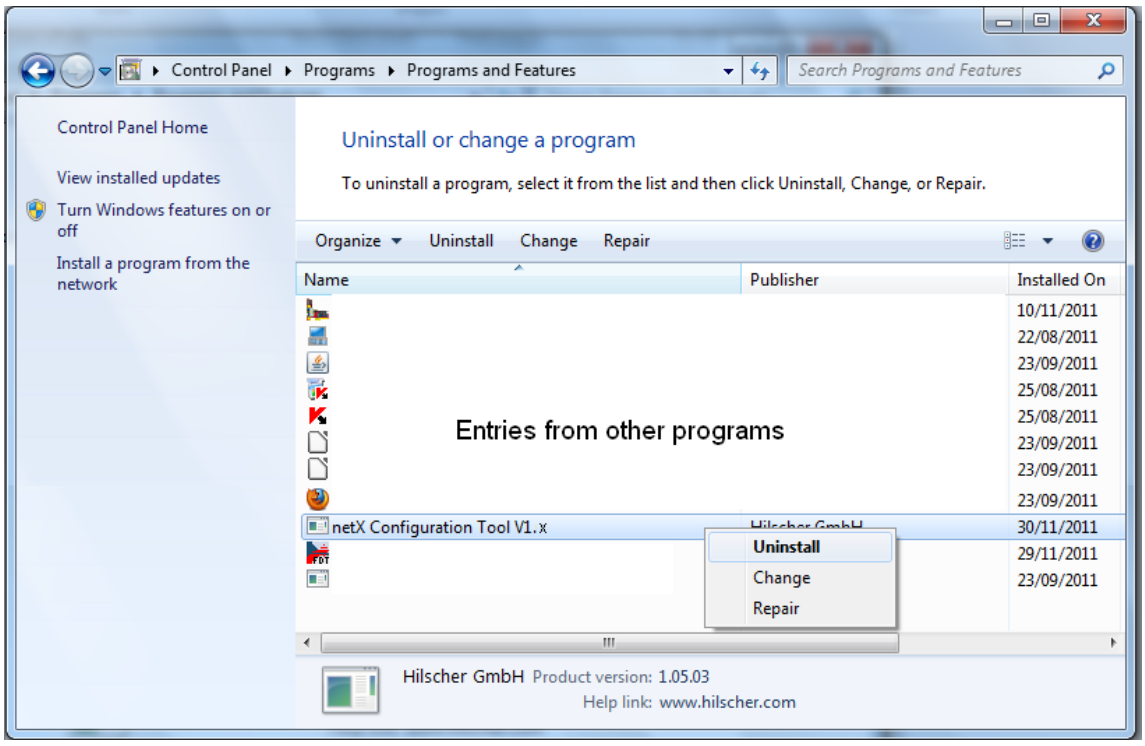

Figure 187: Uninstall or Change a Program

© Hilscher 2013 - 2017

➢ Right-click on the **netX Configuration Tool** entry and choose **Uninstall** from the context menu.

➧ A confirmation request appears:

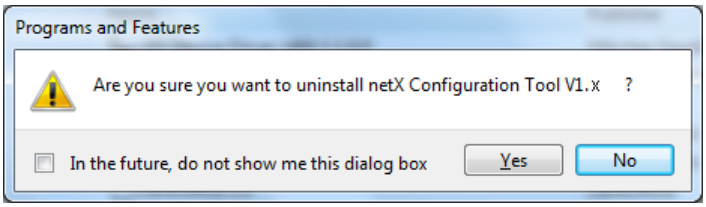

Figure 188: Confirmation Dialog

➢ Click **Yes**.

➧ netX Configuration Tool is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

5.3.3 Uninstalling netX Configuration Tool under Windows 8

➢ In the **Start** screen of Windows 8, right-click on an empty space.
➢ The **All apps** button appears in the lower part of the screen:

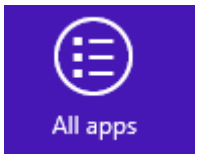

Figure 189: All Apps Button

➢ Click **All apps**.
➢ A list featuring all available programs (**Apps**) appears:

Figure 190: List of Installed Apps in Windows 8 – Uninstall netX Configuration Tool

➢ In the **Apps** list, right-click the **netX Configuration Tool** entry.
➢ The context menu opens in the lower part of the screen.
➢ In the context menu, click **Uninstall**.

© Hilscher 2013 - 2017

Windows 8 changes into “desktop mode” and opens the **Programs and Features** window:

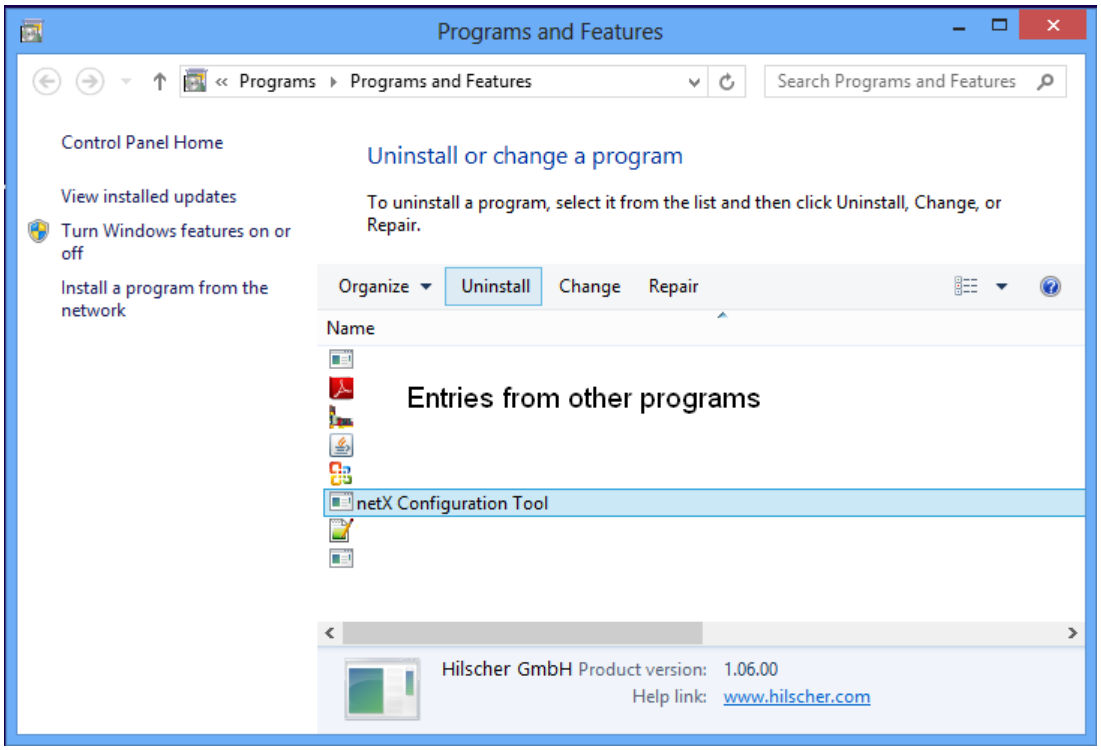

Figure 191: Programs and Features Window

- Select **netX Configuration Tool** entry.
- Above the list, click **Uninstall**.

A security question appears:

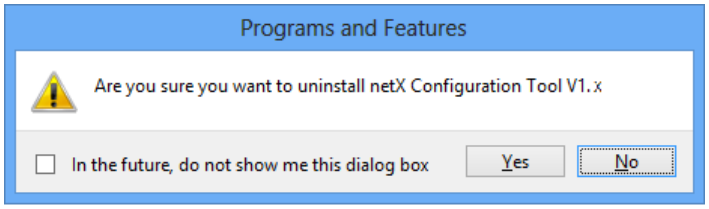

Figure 192: Acknowledge Uninstall

- Click **Yes**.
- netX Configuration Tool is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

5.3.4 Uninstalling netX Configuration Tool under Windows 10

1. Open the **Programs and Features** dialog window.

➢ Right-click on the Windows **Start** symbol, then choose **Programs and Features** entry:

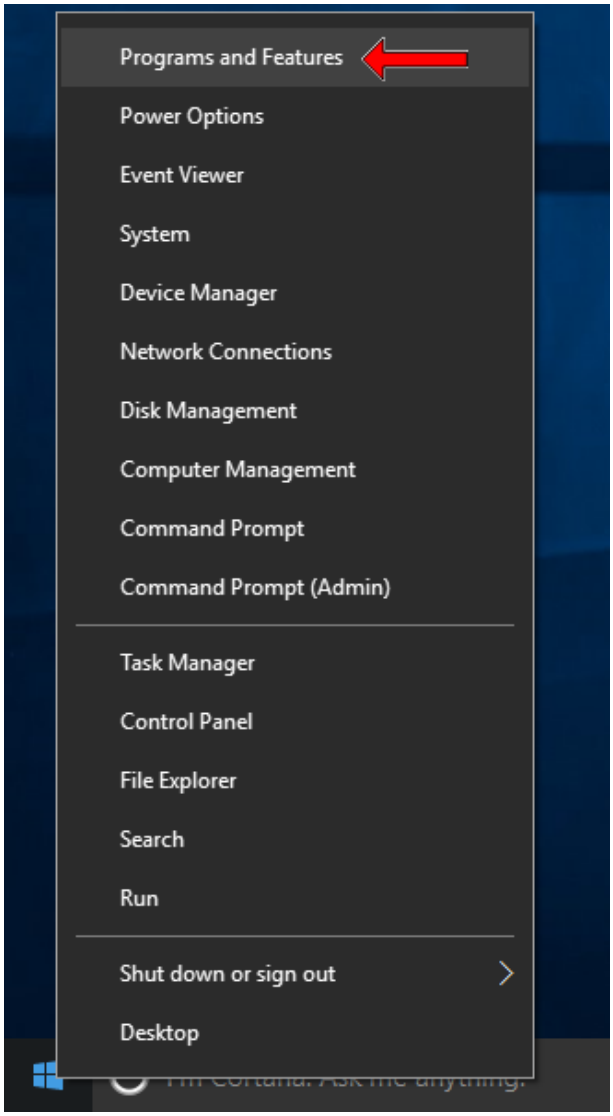

Figure 193: Open program manager in Windows 10

© Hilscher 2013 - 2017

➧ The **Uninstall or change a program** window opens:

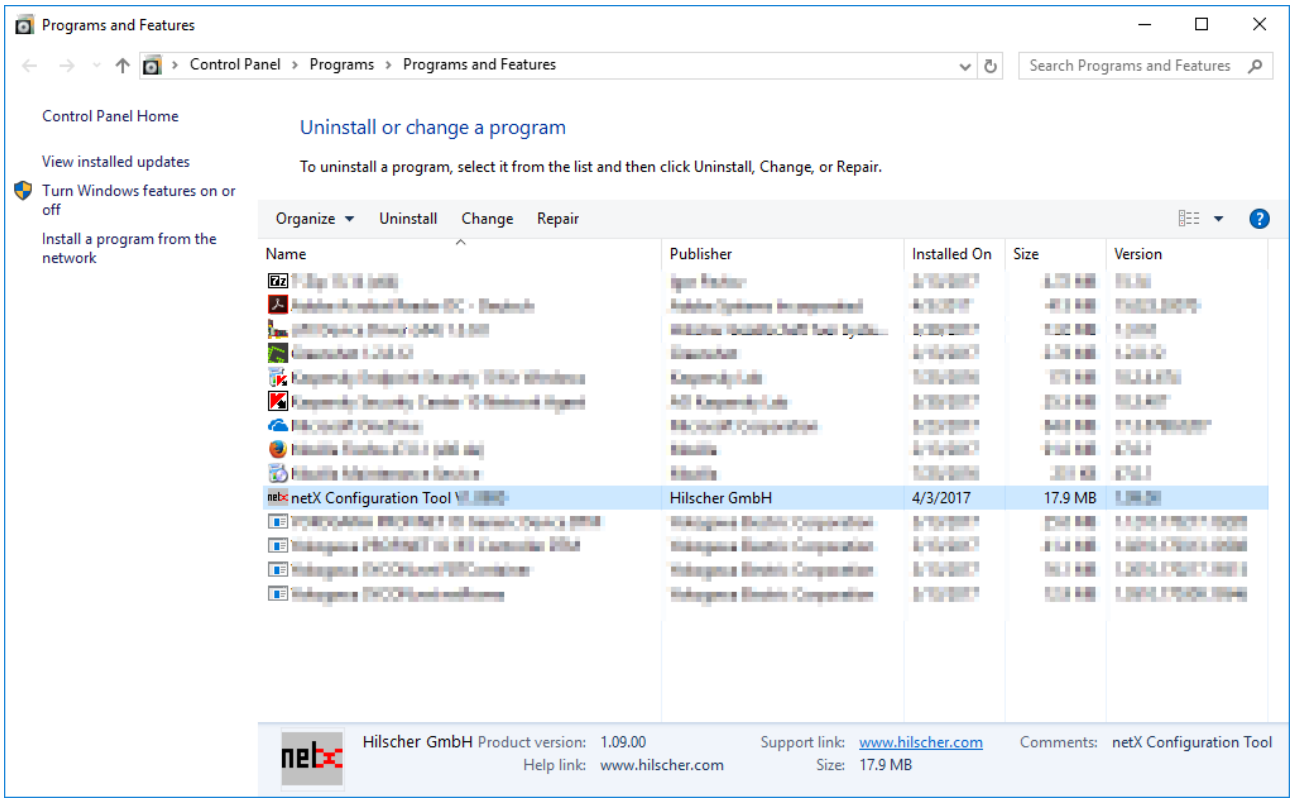

Figure 194: Uninstall or change a program window

➢ Select **netX Configuration Tool** entry.
➢ Above the list, click **Uninstall**.
➧ A security question appears:

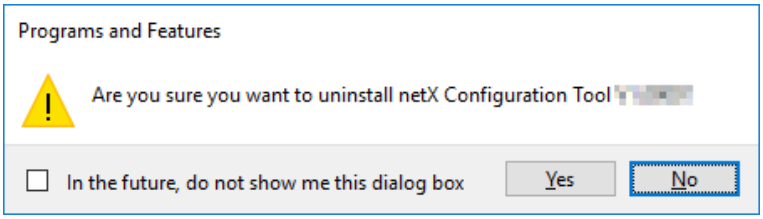

Figure 195: Acknowledge Uninstall

➢ Click **Yes**.
➢ netX Configuration Tool is being uninstalled from your host system or PC.

© Hilscher 2013 - 2017

6 Appendix

6.1 List of Figures

Figure 1: Start Screen Communication Solutions – Installing cifX Device Driver 11
Figure 2: cifX Device Driver Setup – License Agreement 12
Figure 3: Installing cifX Device Driver 12
Figure 4: cifX Device Driver – Installation Completed 13
Figure 5: Found New Hardware Wizard – cifX Device Driver (1) 14
Figure 6: Found New Hardware Wizard – cifX Device Driver (2) 14
Figure 7: Found New Hardware Wizard – cifX Device Driver (3) 15
Figure 8: Found New Hardware Wizard – cifX Device Driver (4) 15
Figure 9: Control Panel 16
Figure 10: System Properties 17
Figure 11: Display of Communication Module in Device Manager 17
Figure 12: Start Screen Communication Solutions – Installing cifX Device Driver 19
Figure 13: cifX Device Driver Setup – License Agreement 20
Figure 14: Installing cifX Device Driver 20
Figure 15: cifX Device Driver – Installation Completed 21
Figure 16: Adjust Your Computer's Settings Window 22
Figure 17: Hardware and Sound Window 22
Figure 18: Display of Communication Module in Device Manager 23
Figure 19: Start Screen Communication Solutions – Installing cifX Device Driver 24
Figure 20: cifX Device Driver Setup – License Agreement 25
Figure 21: Installing cifX Device Driver 25
Figure 22: cifX Device Driver – Installation Completed 26
Figure 23: All Apps Button 27
Figure 24: List of Installed Apps in Windows 8 27
Figure 25: Control Panel 28
Figure 26: Hardware and Sound 28
Figure 27: Display of Communication Module in Device Manager 29
Figure 28: Start Screen Communication Solutions – Installing cifX Device Driver 30
Figure 29: cifX Device Driver Setup – License Agreement 31
Figure 30: Installing cifX Device Driver 31
Figure 31: cifX Device Driver – Installation Completed 32
Figure 32: Open Device Manager in Windows 10 33
Figure 33: Display of Communication Module in Device Manager 34
Figure 34: Control Panel 35
Figure 35: Add or Remove Programs 36
Figure 36: Acknowledge Uninstall 36
Figure 37: Adjust Your Computer's Settings Window 37
Figure 38: Hardware and Sound Window 37
Figure 39: Display of Communication Module in Device Manager 38
Figure 40: Properties of Communication Module in Device Manager 38
Figure 41: Driver of Communication Module in Device Manager 39
Figure 42: Delete Driver Software 39
Figure 43: Adjust Your Computer's Settings Window 40
Figure 44: Uninstall or Change a Program Window 40
Figure 45: Confirmation Dialog 41
Figure 46: All Apps Button 42
Figure 47: List of Installed Apps in Windows 8 42
Figure 48: Control Panel 43
Figure 49: Hardware and Sound 43
Figure 50: Display of Communication Module in Device Manager 44
Figure 51: Properties of Communication Module in Device Manager 44
Figure 52: Driver of Communication Module in Device Manager 45
Figure 53: Delete Driver Software 45

© Hilscher 2013 - 2017

Figure 54: Control Panel 46
Figure 55: Uninstall or Change a Program Window 46
Figure 56: Acknowledge Uninstall 47
Figure 57: Open program manager in Windows 10 48
Figure 58: Uninstall or change a program window 49
Figure 59: Acknowledge Uninstall 49
Figure 60: Start Screen Communication Solutions – Install USB Driver 51
Figure 61: Device Driver Installation Wizard – Start Screen 52
Figure 62: Device Driver Installation Wizard – Driver Are Installing 52
Figure 63: Device Driver Installation Wizard – Installation Completed 53
Figure 64: Found New Hardware Wizard – USB Driver (1) 53
Figure 65: Found New Hardware Wizard – USB Driver (2) 54
Figure 66: Found New Hardware Wizard – USB Driver (3) 54
Figure 67: Found New Hardware Wizard – USB Driver (4) 55
Figure 68: Control Panel 56
Figure 69: System Properties 57
Figure 70: Display of USB Connection in Device Manager 57
Figure 71: Start Screen Communication Solutions – Install USB Driver 59
Figure 72: Device Driver Installation Wizard – Start Screen 60
Figure 73: Device Driver Installation Wizard – Drivers Are Installing 60
Figure 74: Device Driver Installation Wizard – Installation Completed 61
Figure 75: Adjust Your Computer’s Settings Window 62
Figure 76: Hardware and Sound Window 62
Figure 77: Display of USB Connection in Device Manager 63
Figure 78: Start Screen Communication Solutions – Install USB Driver 64
Figure 79: Device Driver Installation Wizard – Start Screen 65
Figure 80: Device Driver Installation Wizard – Drivers Are Installing 65
Figure 81: Device Driver Installation Wizard – Installation Completed 66
Figure 82: All Apps Button 67
Figure 83: List of Installed Apps in Windows 8 67
Figure 84: Control Panel 68
Figure 85: Hardware and Sound 68
Figure 86: Display of USB Connection in Device Manager 69
Figure 87: Start Screen Communication Solutions – Install USB Driver 70
Figure 88: Device Driver Installation Wizard – Start Screen 71
Figure 89: Device Driver Installation Wizard – Installation Completed 71
Figure 90: Open Device Manager in Windows 10 72
Figure 91: Display of Communication Module in Device Manager 73
Figure 92: Control Panel 74
Figure 93: Add or Remove Programs 75
Figure 94: Acknowledge Uninstall 75
Figure 95: Adjust Your Computer’s Settings Window 76
Figure 96: Uninstall or Change a Program 76
Figure 97: Acknowledge Uninstall 77
Figure 98: All Apps Button 78
Figure 99: List of Installed Apps in Windows 8 78
Figure 100: Control Panel 79
Figure 101: Uninstall or Change a Program 79
Figure 102: Acknowledge Uninstall 80
Figure 103: Open program manager in Windows 10 81
Figure 104: Uninstall or change a program window 82
Figure 105: Acknowledge Uninstall 82
Figure 106: Start Screen Communication Solutions – Install SYCON.net 85
Figure 107: SYCON.net Setup Language 86
Figure 108: SYCON.net Installation Program 86
Figure 109: Notes About Major Changes in SYCON.net 87
Figure 110: SYCON.net License Agreement 87

© Hilscher 2013 - 2017

Figure 111: SYCON.net Customer Information 88
Figure 112: SYCON.net Setup Type 88
Figure 113: Start SYCON.net Installation 89
Figure 114: SYCON.net Installation Status 89
Figure 115: Finish SYCON.net Installation 90
Figure 116: Start Screen Communication Solutions – Install SYCON.net 91
Figure 117: SYCON.net Setup Language 92
Figure 118: SYCON.net Installation Information 92
Figure 119: Notes about Major Changes in SYCON.net 93
Figure 120: SYCON.net License Agreement 93
Figure 121: SYCON.net Customer Information 94
Figure 122: SYCON.net Setup Type 94
Figure 123: Start SYCON.net Installation 95
Figure 124: SYCON.net Installation Status 95
Figure 125: Finish SYCON.net Installation 96
Figure 126: Start Screen Communication Solutions – Install SYCON.net 97
Figure 127: SYCON.net Setup Language 98
Figure 128: SYCON.net Installation Information 98
Figure 129: Notes about Major Changes in SYCON.net 99
Figure 130: SYCON.net License Agreement 99
Figure 131: SYCON.net Customer Information 100
Figure 132: SYCON.net Setup Type 100
Figure 133: Start SYCON.net Installation 101
Figure 134: SYCON.net Installation Status 101
Figure 135: Finish SYCON.net Installation 102
Figure 136: Start Screen Communication Solutions – Install SYCON.net 103
Figure 137: SYCON.net Setup Language 103
Figure 138: SYCON.net Installation Information 104
Figure 139: Notes about Major Changes in SYCON.net 104
Figure 140: SYCON.net License Agreement 105
Figure 141: SYCON.net Customer Information 105
Figure 142: Start SYCON.net Installation 106
Figure 143: SYCON.net Installation Status 106
Figure 144: Finish SYCON.net Installation 107
Figure 145: Control Panel 108
Figure 146: Add or Remove Programs 109
Figure 147: Confirmation Dialog 109
Figure 148: Adjust Your Computer’s Settings Window 110
Figure 149: Uninstall or Change a Program Window 111
Figure 150: Confirmation Dialog 111
Figure 151: All Apps Button 112
Figure 152: List of Installed Apps in Windows 8 112
Figure 153: Uninstall or Change a Program Window 113
Figure 154: Acknowledge Uninstall 113
Figure 155: Close ODMTray Dialog 114
Figure 156: Open program manager in Windows 10 115
Figure 157: Uninstall or change a program window 116
Figure 158: Confirmation Dialog 116
Figure 159: Start Screen Communication Solutions – Install netX Configuration Tool 118
Figure 160: netX Configuration Tool Setup Wizard 119
Figure 161: netX Configuration Tool Setup Wizard – Installation Options 119
Figure 162: netX Configuration Tool Setup Wizard – Confirm Installation 120
Figure 163: netX Configuration Tool Setup Wizard – Installation in Progress 120
Figure 164: netX Configuration Tool Setup Wizard – Installation Complete 121
Figure 165: Start Screen Communication Solutions – Install netX Configuration Tool 122
Figure 166: netX Configuration Tool Setup Wizard 123
Figure 167: netX Configuration Tool Setup Wizard – Installation Options 123

© Hilscher 2013 - 2017

Figure 168: netX Configuration Tool Setup Wizard – Confirm Installation 124
Figure 169: netX Configuration Tool Setup Wizard – Installation in Progress 124
Figure 170: netX Configuration Tool Setup Wizard – Installation Complete 125
Figure 171: Start Screen Communication Solutions – Install netX Configuration Tool 126
Figure 172: netX Configuration Tool Setup Wizard 127
Figure 173: netX Configuration Tool Setup Wizard – Installation Options 127
Figure 174: netX Configuration Tool Setup Wizard – Confirm Installation 128
Figure 175: netX Configuration Tool Setup Wizard – Installation in Progress 128
Figure 176: netX Configuration Tool Setup Wizard – Installation Complete 129
Figure 177: Start Screen Communication Solutions – Install netX Configuration Tool 130
Figure 178: netX Configuration Tool Setup Wizard 131
Figure 179: netX Configuration Tool Setup Wizard – Installation Options 131
Figure 180: netX Configuration Tool Setup Wizard – Confirm Installation 132
Figure 181: netX Configuration Tool Setup Wizard – Installation in Progress 132
Figure 182: netX Configuration Tool Setup Wizard – Installation Complete 133
Figure 183: Control Panel 134
Figure 184: Add or Remove Programs 134
Figure 185: Confirmation Dialog 135
Figure 186: Adjust Your Computer's Settings Window 136
Figure 187: Uninstall or Change a Program 136
Figure 188: Confirmation Dialog 137
Figure 189: All Apps Button 138
Figure 190: List of Installed Apps in Windows 8 – Uninstall netX Configuration Tool 138
Figure 191: Programs and Features Window 139
Figure 192: Acknowledge Uninstall 139
Figure 193: Open program manager in Windows 10 140
Figure 194: Uninstall or change a program window 141
Figure 195: Acknowledge Uninstall 141

© Hilscher 2013 - 2017

6.2 List of Tables

Table 1: List of Revisions 4
Table 2: Reference on Drivers and Software 5

© Hilscher 2013 - 2017

6.3 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.
Pune, Delhi, Mumbai
Phone: +91 8888 750 777
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

© Hilscher 2013 - 2017