



**User Manual**  
**Software Installation for the PC Cards cifX**

**Installing Drivers and Configuration Software**

**Hilscher Gesellschaft für Systemautomation mbH**

**[www.hilscher.com](http://www.hilscher.com)**

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# 1 Introduction

## 1.1 About the User Manual

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

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

for the operating systems:

- Windows XP
- Windows 7 (also valid for Windows VISTA)
- Windows 8
- Windows 10

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

- Windows XP
- Windows 7

as well as the required hardware settings

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

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

### 1.1.1 List of Revisions

Index	Date	Chapter	Revisions
37	15-08-10	5.1	Section <i>System Requirements</i> : .NET 4.0 for Topology Editor added.
	17-03-20	All	Windows 10 added, new Versions: SYCONnet netX V1.0400, netXConfigurationTool V1.0900, cifX Device Driver Version V1.3
	17-04-11	3, 4, 5, 6	Chapter <i>cifX Device Driver</i> , <i>USB Driver</i> , <i>SYCON.net</i> , <i>netX Configuration Tool</i> updated and descriptions for Windows 10 added.

Table 1: List of Revisions

## 1.1.2 Notes on Hardware, Firmware, Software and Driver Versions



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

Driver and Software		Version
<b>SYCON.net</b>	SYCONnet netX setup.exe	1.0400
<b>netX Configuration Tool-Setup</b>	netXConfigurationUtility_Setup.exe	1.0900
<b>cifX Device Driver</b>	cifX Device Driver Setup.exe	1.3
<b>Toolkit</b>		1.4
<b>cifX TCP/IP Server for SYCON.net</b>	cifX TCP Server.exe	2.3
<b>US Driver</b>	USB Driver of Windows®	5.1.2600.x

*Table 2: Reference on Driver and Software*



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

## 1.1.3 Conventions in this Manual

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

### Notes



---

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

---



---

**Note:** <general note>

---



---

<note, where to find further information>

---

### Operation Instructions

1. <instruction>

2. <instruction>

or

➤ <instruction>

### Results

↪ <result>

## 1.2 Contents of the Product DVD

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

You can download this product DVD as a ZIP file from the website <http://www.hilscher.com> (under **Products**, directly with the information on your product).

### 1.2.1 Installation Guide, Documentation Overview



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

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

### 1.2.2 What's New



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

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## 1.3 Legal Notes

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### 1.4.1 Obligation to read and understand the Manual



---

#### Important!

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

## 1.5 Licenses

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

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

- a firmware with master functionality\*.

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

## 2 System Overview

### 2.1 Configuration and Diagnosis

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

#### PC Card cifX with Master Protocol

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

The following software components are required:

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

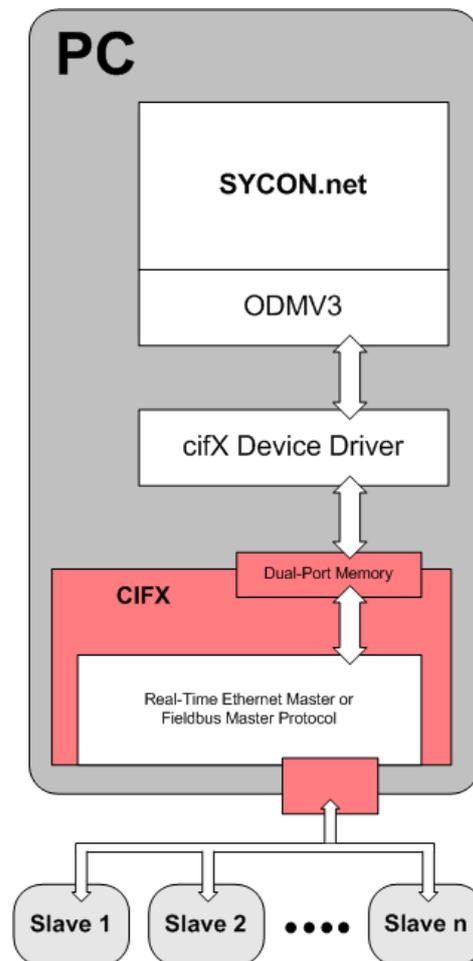


Figure 1: System Overview cifX and SYCON.net

### PC Card cifX with Slave Protocol

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

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

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

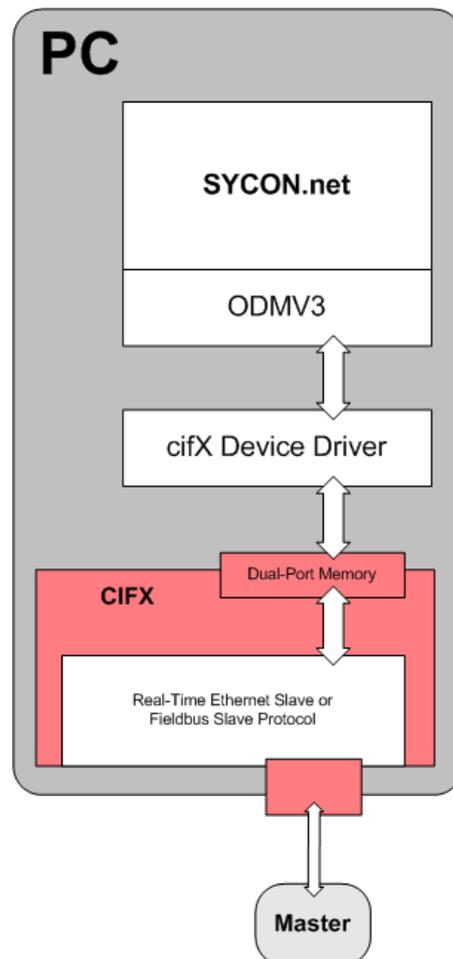


Figure 2: System Overview cifX and SYCON.net

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

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

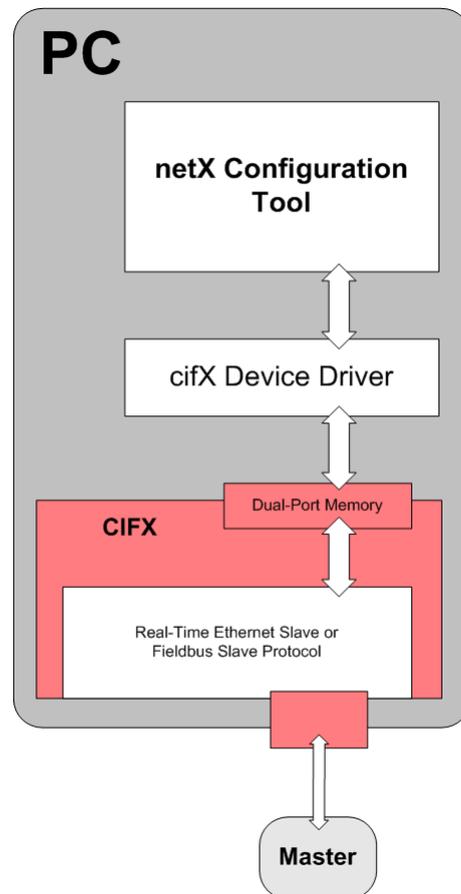


Figure 3: System Overview cifX and netX Configuration Tool

## 2.2 Remote Connection via Ethernet

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

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



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

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

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

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

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

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

Furthermore between PC 1 and PC 2

- Ethernet PC network

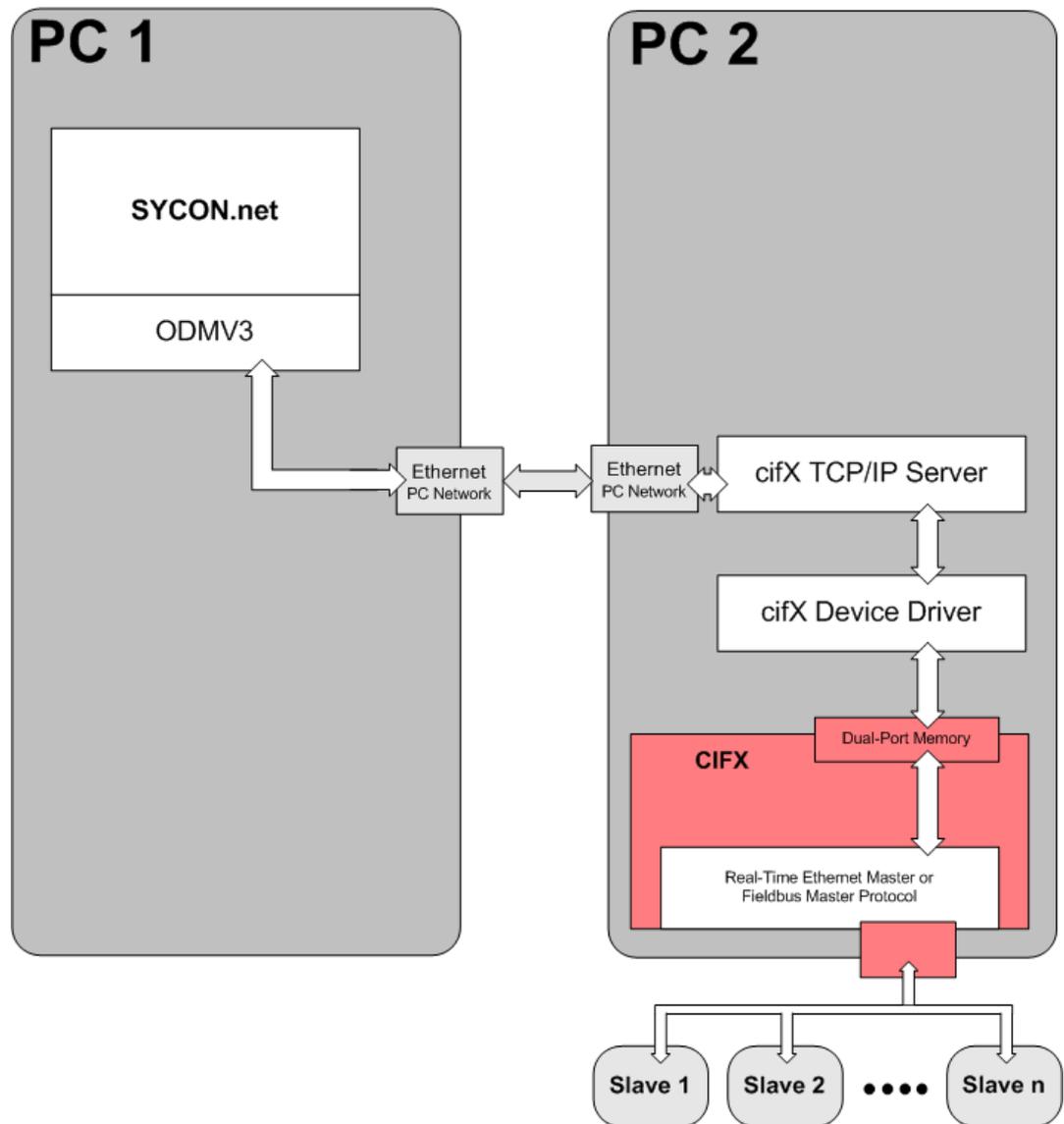


Figure 4: System Overview cifX (Master) and Remote Connection via Ethernet

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

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

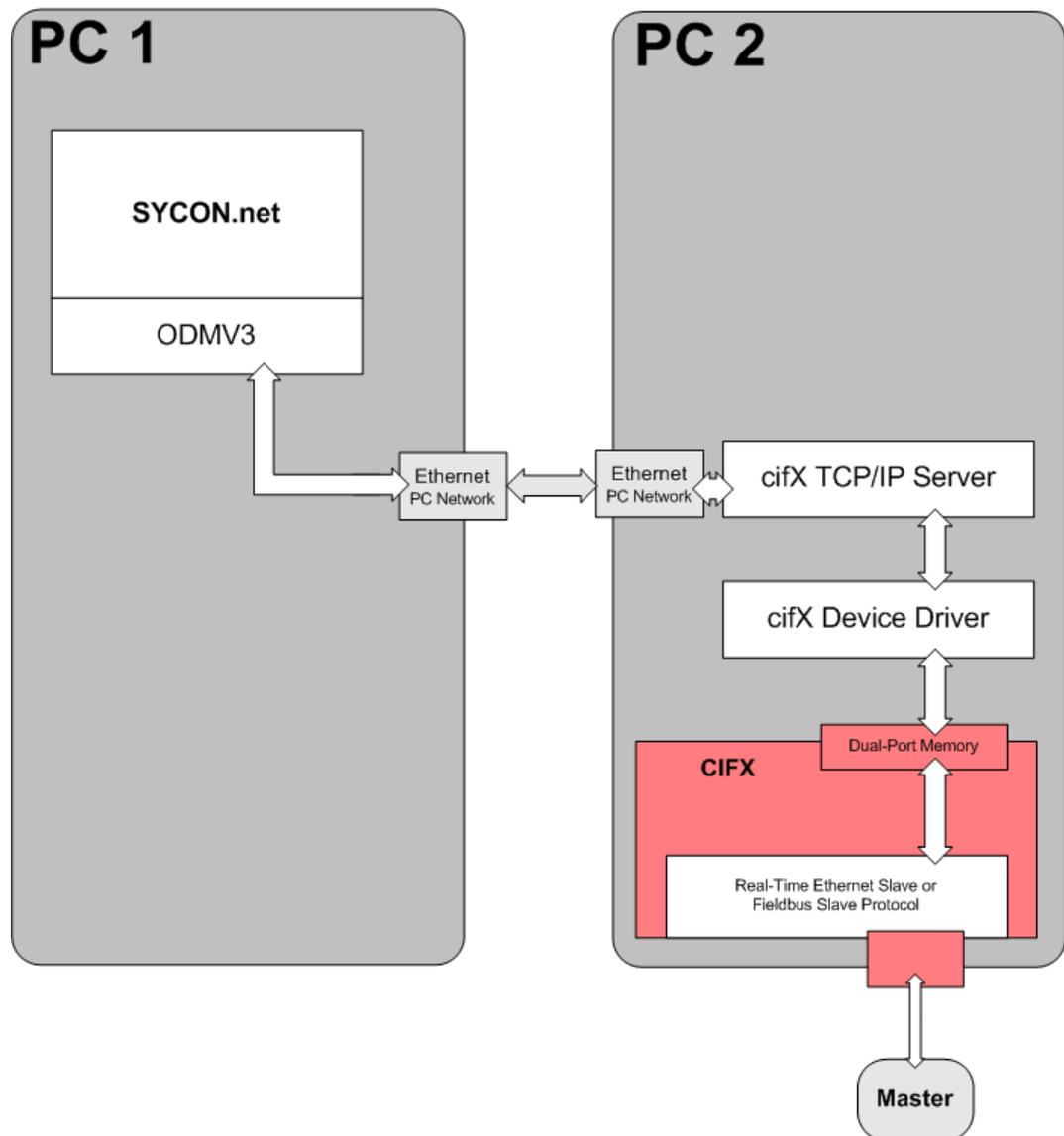


Figure 5: System Overview cifX (Slave) and Remote Connection via Ethernet

### Requirements for Use

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

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

## 3 cifX Device Driver

### 3.1 System Requirements

In order to download the product DVD, you need an Internet access.

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

- PC with 586-, Pentium® processor or higher
- Windows® XP, Windows® Vista (32-Bit) SP2, Windows® 7 (32- and 64-Bit) SP1, Windows® 8 (32- and 64-Bit), Windows® 10 (32- and 64-Bit)
- Administrator privilege is required for installation and to configure the driver
- Free disk space: min. 100 MByte
- USB (optional)
- PC card cifX

### 3.2 Installation Overview

#### 3.2.1 Installation Sequence

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



---

**Note: Uninstall a previous Version of the Driver**

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

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

---

**1. Install the Driver**

---

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

---

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

---

The cifX Device Driver Setup installation automatically detects your Windows operating system and installs the corresponding driver. Follow the installation instruction on the screen. A detailed description can be found in this manual in the sections *Installation under Windows XP (Software First) page 20*, *Installation under Windows 7 (Software First) page 26* and *Installation under Windows 8 (Software First) page 30*.

**2. Install the Hardware****3. Check the Installation**

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



---

**Note:** The device hardware still has to be configured.



For further details refer to the operating instruction manual **cifX Device Driver, Installation and Operation for Windows XP/Vista/7/8/10** on the **Communication Solutions DVD**.

### 3.2.2 Where the Driver Setup is to be found?

You can find the installation program *cifX Device Driver Setup.exe* on your product CD or DVD, which you can download from the website <http://www.hilscher.com> (under products, directly on the product information). Or you can download the installation program directly from the Hilscher website.

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

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

### 3.2.3 General Notes



**Note:** For Windows® XP/Vista/7/8/10 the cifX Device Driver setup detects if the 32 bit driver or the 64 bit driver are to be installed.

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

### 3.3 Installation under Windows XP (Software First)

#### Requirement

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

#### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 6: Start the Installation for the cifX Device Driver

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



Figure 7: cifX Device Driver-Setup - License Agreement

3. Check **I accept the terms in the License Agreement**.
- Click **Install**.
  - The cifX Device Driver installation is started.

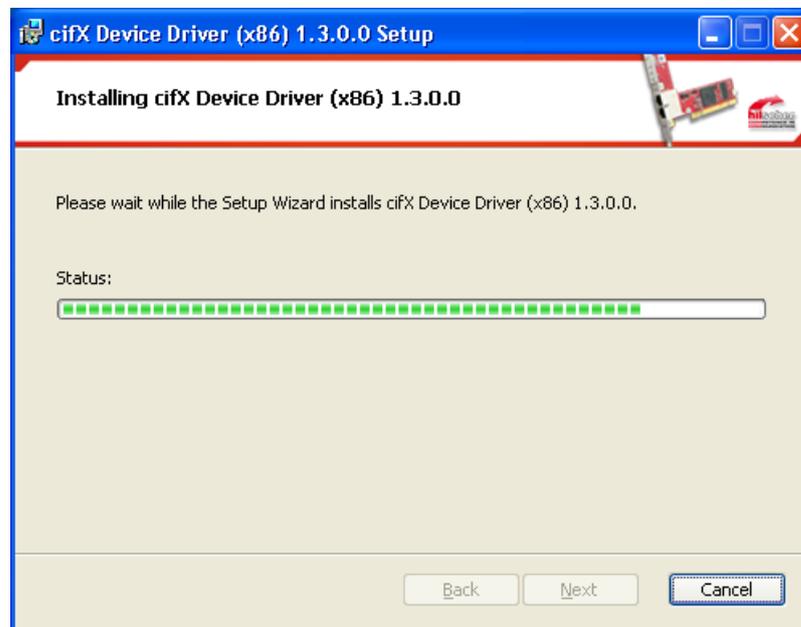


Figure 8: cifX Device Driver Installation is running

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



Figure 9: cifX Device Driver Installation is completed

➤ Click **Finish**.

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

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



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

5. Restart the PC.



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

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

#### How to run the Wizard for Windows XP manually:

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



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

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

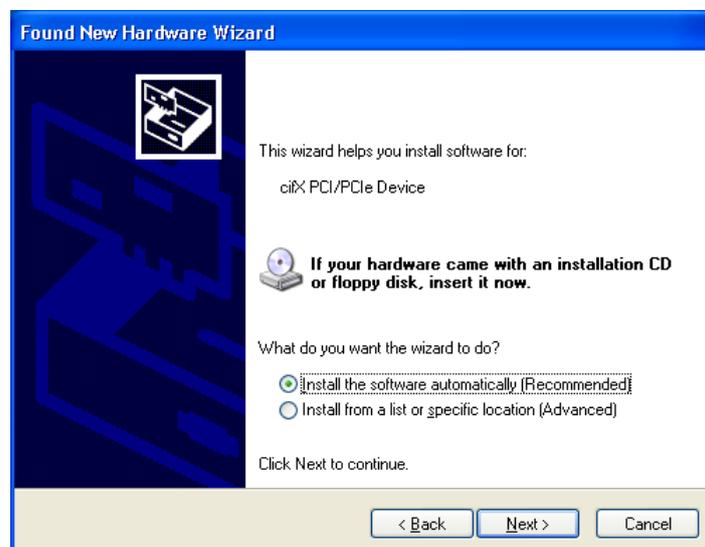


Figure 11: Found New Hardware Wizard: Select 'Install the software automatically'

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

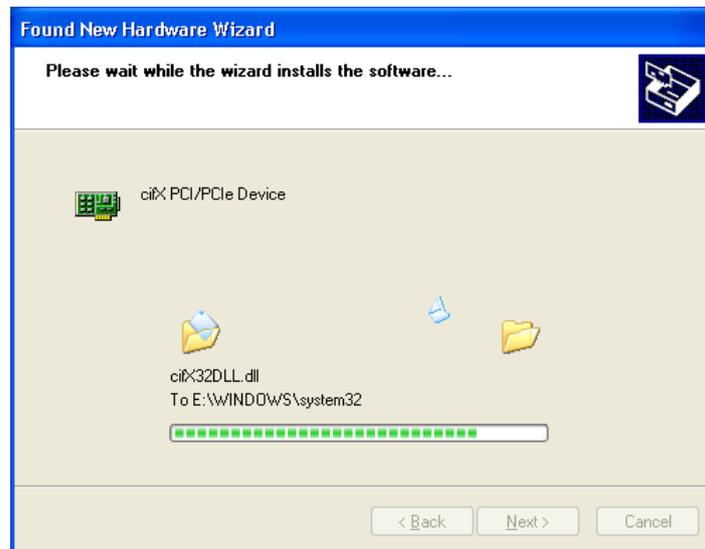


Figure 12: Found New Hardware Wizard: Software is installed

➤ Then the **Finish** pane appears:



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

➤ Click **Finish**.

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

## 3.4 Installation under Windows XP (Hardware First)

### Requirement

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



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

### Preparation

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



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

### Installation Steps

To install the cifX Device Driver proceed as described hereafter:

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



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

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



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

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

## 3.5 Installation under Windows 7 (Software First)

### Requirement

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

### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 15: Start the Installation for the cifX Device Driver

3. Start the driver setup.
  - On the Autostart menu, select **Drivers, Software and Tools > Install cifX / netJACK Device Driver**.
  - Or start the driver setup by double-clicking on the *cifX Device Driver Setup.exe* (in the directory ... \Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation) or alternatively by right-click and **Run as Administrator**.



**Note:** Reduce the number of Windows® security requests by running the driver setup as administrator. You also need administrator rights to uninstall the software.

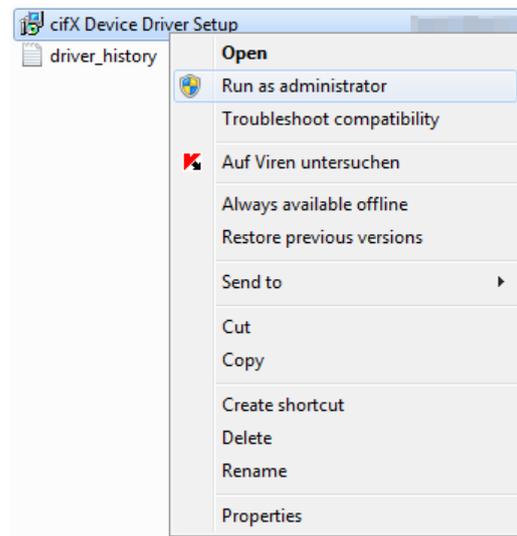


Figure 16: Running cifX Device Driver Setup.exe as administrator

- When you start the driver setups as an administrator, a Windows® security request appears. Click **Yes**.
- The **License Agreement** pane is displayed.



Figure 17: cifX Device Driver Setup - License Agreement

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

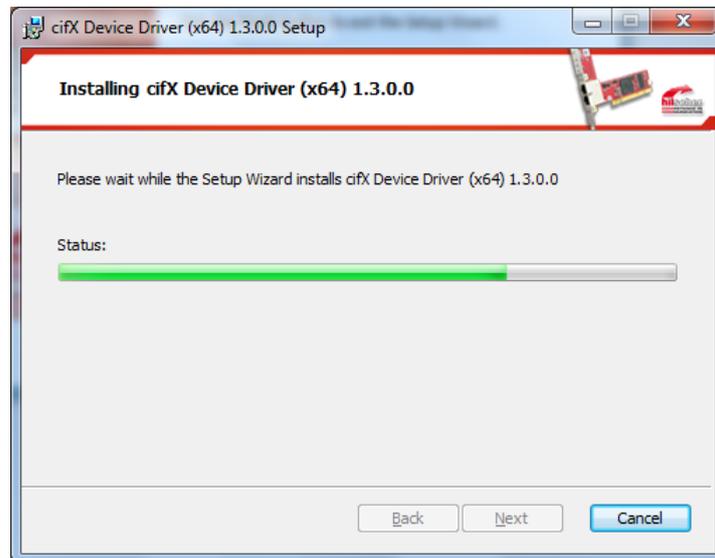


Figure 18: cifX Device Driver Installation is running

- The **Completed the cifX Device Driver Setup Wizard** pane is displayed.



Figure 19: cifX Device Driver Installation is completed

- Click **Finish**.
5. Shut down your PC and install your device hardware.

Perform the installation of the device hardware according to the specifications in the user manual of your device.



**Important:** Obey all safety and warning instructions for the hardware installation in the user manual!

6. Restart the PC.



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

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

## 3.6 Installation under Windows 7 (Hardware First)

### Requirement

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



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

### Preparation

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



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

### Installation Steps

To install the cifX Device Driver proceed as described hereafter:

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

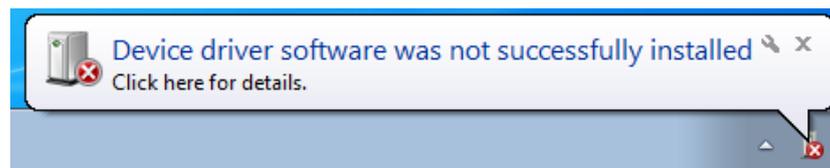


Figure 20: Device Driver Software was not successfully installed

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



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

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

## 3.7 Installation under Windows 8 (Software First)

### Requirement

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

### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 21: Start the Installation for the cifX Device Driver

3. Start the driver setup.
  - On the Autostart menu, select **Drivers, Software and Tools > Install cifX / netJACK Device Driver**.
  - Or start the driver setup by double-clicking on the *cifX Device Driver Setup.exe* (in the directory ... \Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation) or alternatively by right-click and **Run as Administrator**.



**Note:** Reduce the number of Windows® security requests by running the driver setup as administrator. You also need administrator rights to uninstall the software.

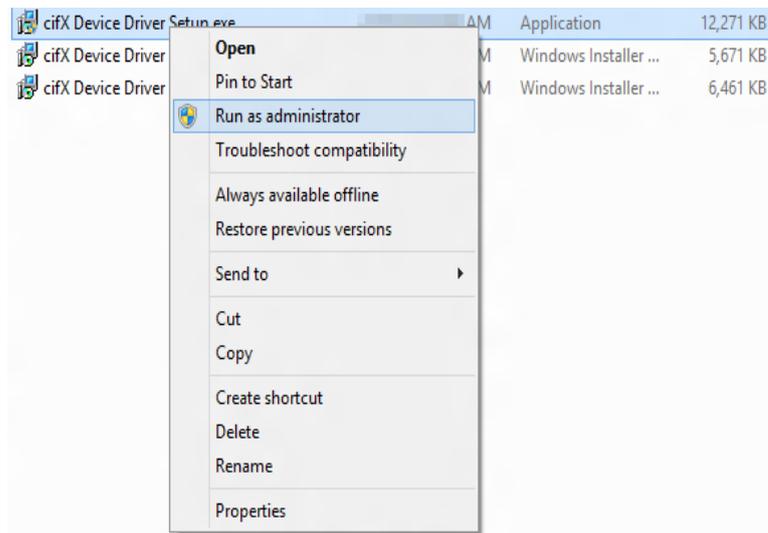


Figure 22: Running cifX Device Driver Setup.exe as administrator

- When you start the driver setups as an administrator, a Windows® security request appears. Click **Yes**.
- The **License Agreement** pane is displayed.



Figure 23: cifX Device Driver Setup - License Agreement

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

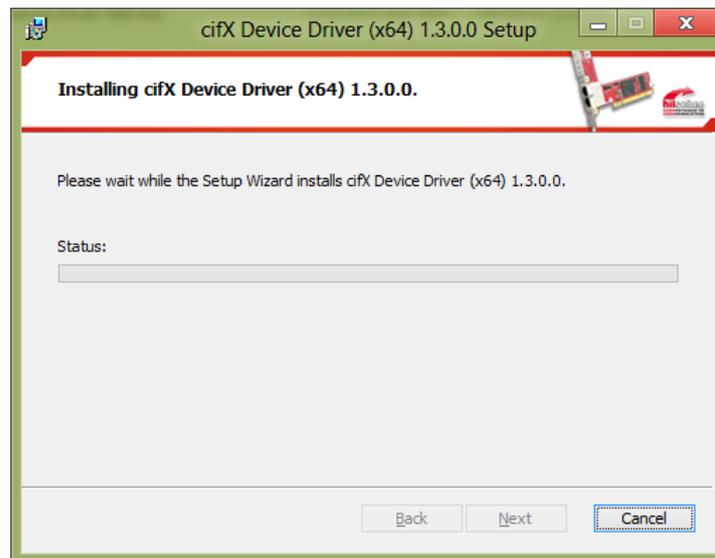


Figure 24: cifX Device Driver Installation is running

- The **Completed the cifX Device Driver Setup Wizard** pane is displayed.



Figure 25: Installation for cifX Device Driver completed

- Click **Finish**.
6. Shut down your PC and install your device hardware.

Perform the installation of the device hardware according to the specifications in the user manual of your device.



**Important:** Obey all safety and warning instructions for the hardware installation in the user manual!

7. Restart the PC.



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

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

## 3.8 Installation under Windows 8 (Hardware First)

### Requirement

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



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

### Preparation

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



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

### Installation Steps

To install the cifX Device Driver proceed as described hereafter:

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



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

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

## 3.9 Installation under Windows 10 (Software First)

### Requirement

The following steps describe the installation of the **cifX Device Driver** for Windows® 10 via the cifX Device Driver Setup if the device hardware is not yet installed.

### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 26: Start the Installation for the cifX Device Driver

3. Start the driver setup.
  - On the Autostart menu, select **Drivers, Software and Tools > Install cifX / netJACK Device Driver**.
  - Or start the driver setup by double-clicking on the *cifX Device Driver Setup.exe* (in the directory ... \Driver and Toolkit\Device Driver (NXDRV-WIN)\Installation) or alternatively by right-click and **Run as Administrator**.



**Note:** Reduce the number of Windows® security requests by running the driver setup as administrator. You also need administrator rights to uninstall the software.

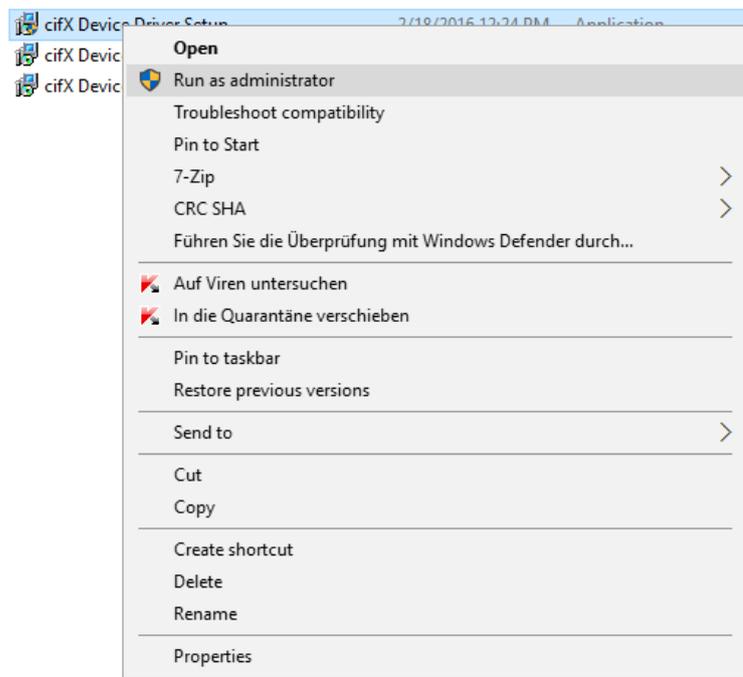


Figure 27: Running cifX Device Driver Setup.exe as administrator

- When you start the driver setups as an administrator, a Windows® security request appears. Click **Yes**.
- The **License Agreement** pane is displayed.



Figure 28: cifX Device Driver Setup - License Agreement

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

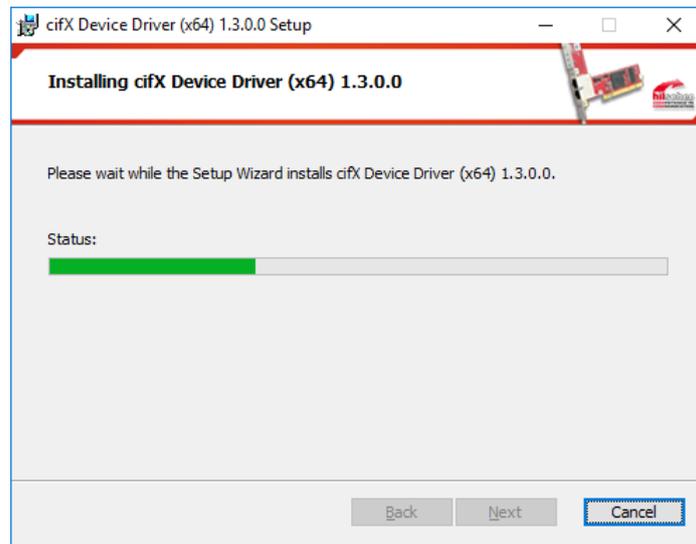


Figure 29: cifX Device Driver Installation is running

- The **Completed the cifX Device Driver Setup Wizard** pane is displayed.



Figure 30: cifX Device Driver Installation is completed

- Click **Finish**.

5. Shut down your PC and install your device hardware.

Perform the installation of the device hardware according to the specifications in the user manual of your device.



**Important:** Obey all safety and warning instructions for the hardware installation in the user manual!

6. Restart the PC.



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

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

## 3.10 Installation under Windows 10 (Hardware First)

### Requirement

The following steps describe the installation of the cifX Device Driver for Windows® 10, when the hardware installation is already complete.



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

### Preparation

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



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

### Installation Steps

To install the cifX Device Driver proceed as described hereafter:

1. After the installation of the device hardware restart your PC.
  - ↗ Windows® 10 recognizes the PCI based device hardware automatically.
2. Now install the cifX Device Driver via the *cifX Device Driver Setup.exe* file.



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

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

### 3.11 Checking the Driver Installation under Windows XP

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

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

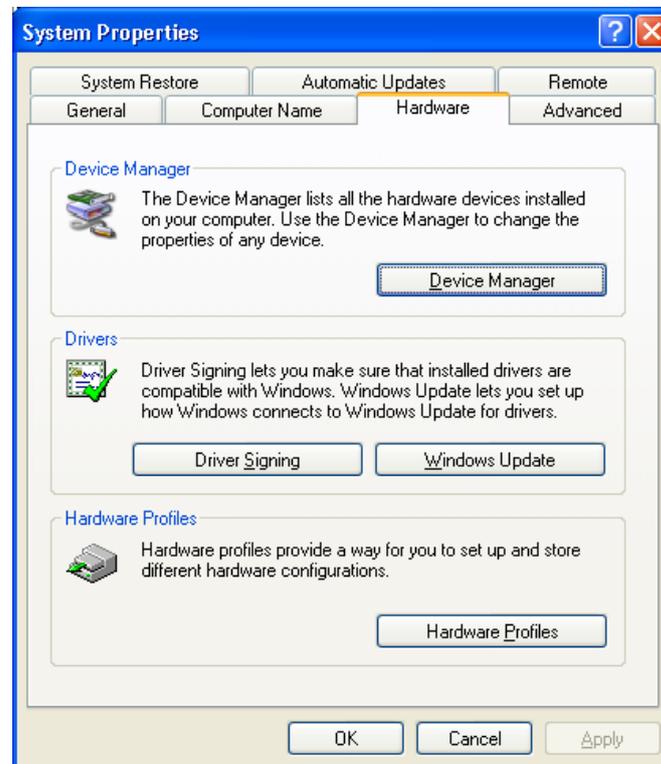


Figure 31: System Properties

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

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



**Note:** The device hardware still has to be configured.

## 3.12 Checking the Driver Installation under Windows 7

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

1. Open Start

➤ Click on **Start** .

2. Search and start the Device Manager

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

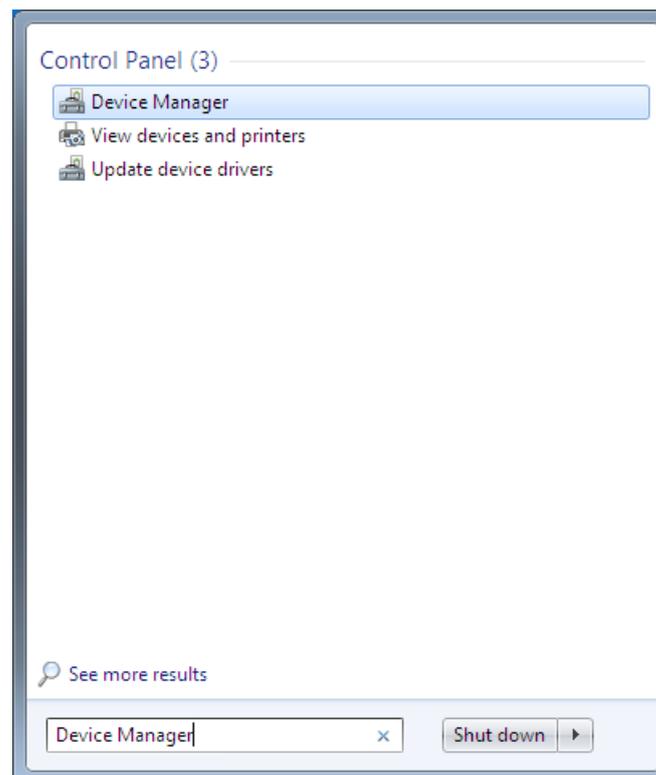


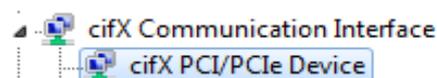
Figure 32: Control Panel

➤ Click on **Device Manager**.

➤ The Device Manager starts.

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

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



**Note:** The device hardware still has to be configured.

### 3.13 Checking the Driver Installation under Windows 8

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

1. Open Windows® 8 Start Screen.



Figure 33: Startbildschirm Windows 8

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

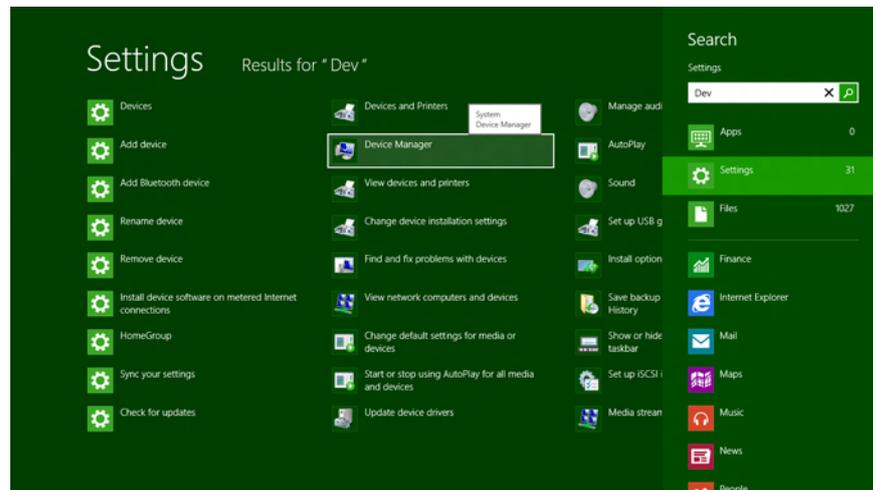
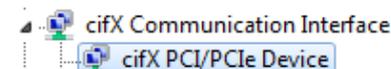


Figure 34: Search and start the Device Manager

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

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



**Note:** The device hardware still has to be configured.

## 3.14 Checking the Driver Installation under Windows 10

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

1. Open Windows® 10 Start Screen.

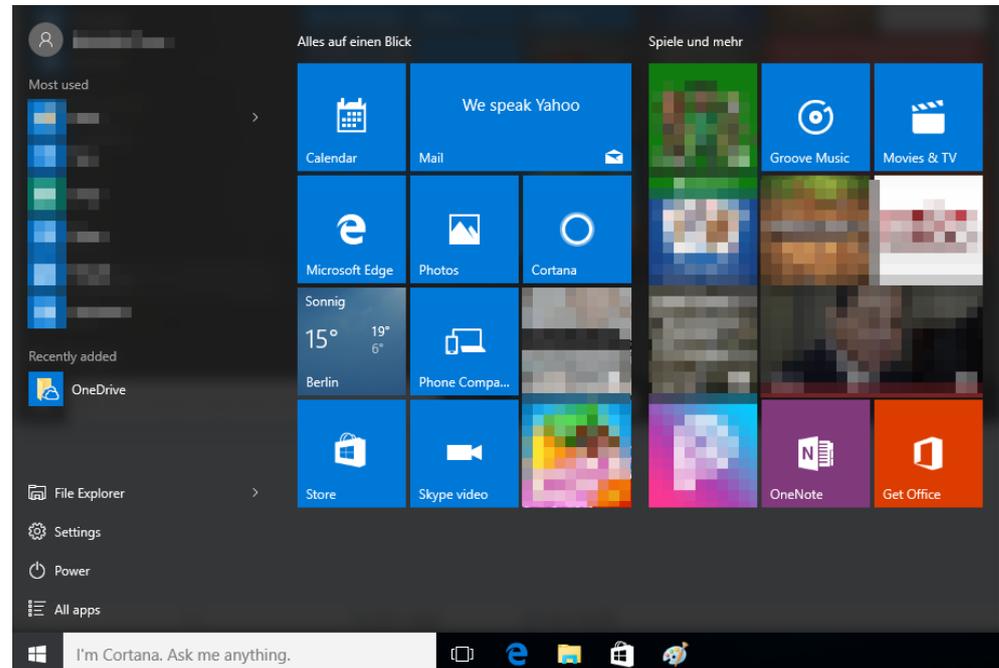


Figure 35: Startbildschirm Windows 10

2. Search and start the Device Manager.
  - Select **Settings**.
  - Enter **Device Manager** into the search field.

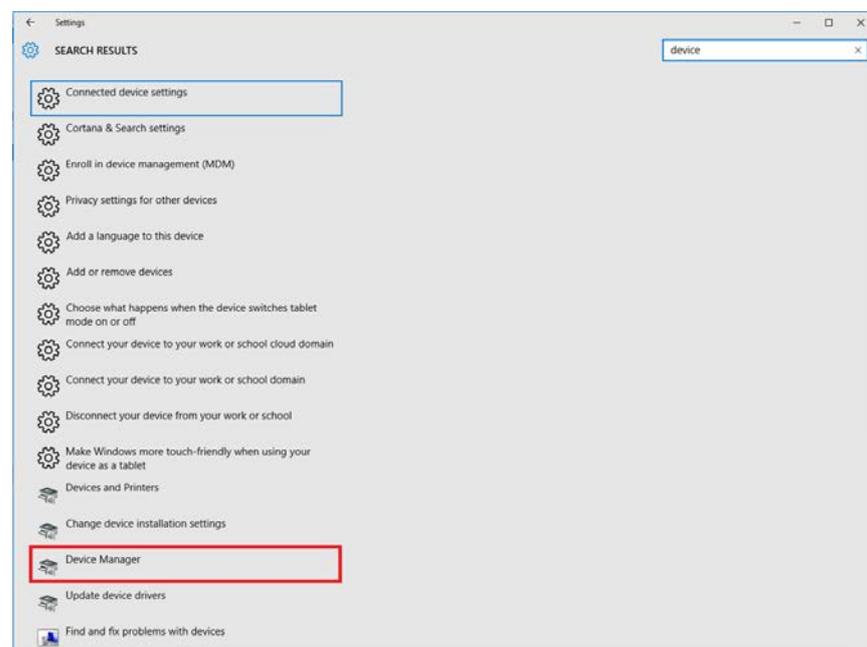


Figure 36: Search and start the Device Manager

- Click on **Device Manager**.

↗ The Device Manager starts.

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

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

▼  cifX Communication Interface  
     cifX PCI/PCIe Device



**Note:** The device hardware still has to be configured.

## 3.15 Uninstalling under Windows XP

### Requirement



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

### Steps for Uninstalling

To uninstall the cifX Device Driver proceed as follows:

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

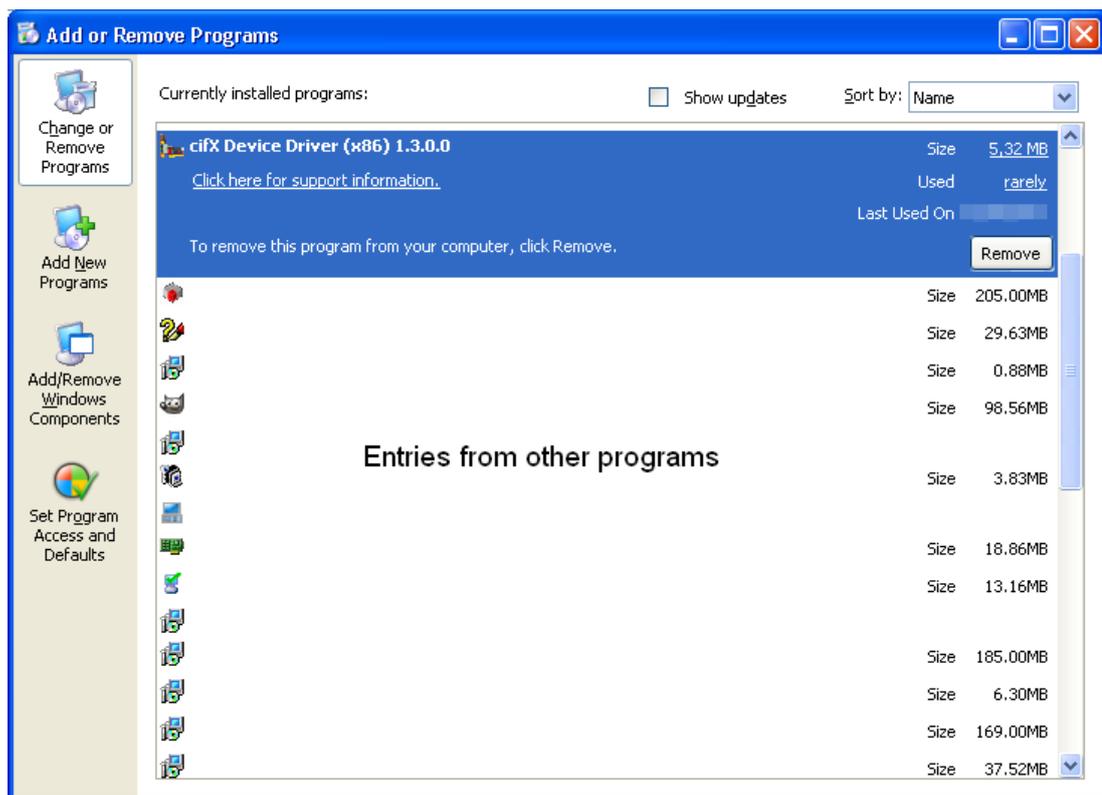


Figure 37: „Software“ Pane

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

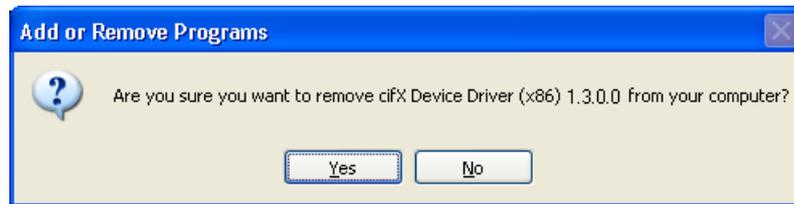


Figure 38: Message „Software“

➤ Click on **Yes**.

➤ The cifX Device Driver is uninstalled from your PC.

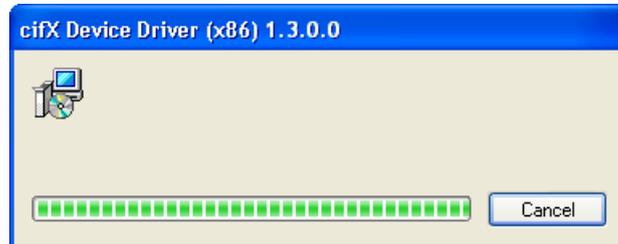


Figure 39: cifX Device Driver is uninstalled

3. Restart your PC.

## 3.16 Uninstalling under Windows 7

### Requirements



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

### Steps for Uninstalling

To uninstall the cifX Device Driver, proceed as follows:

1. Open Start

➤ Click on **Start** .

2. Search and start the Device Manager.

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

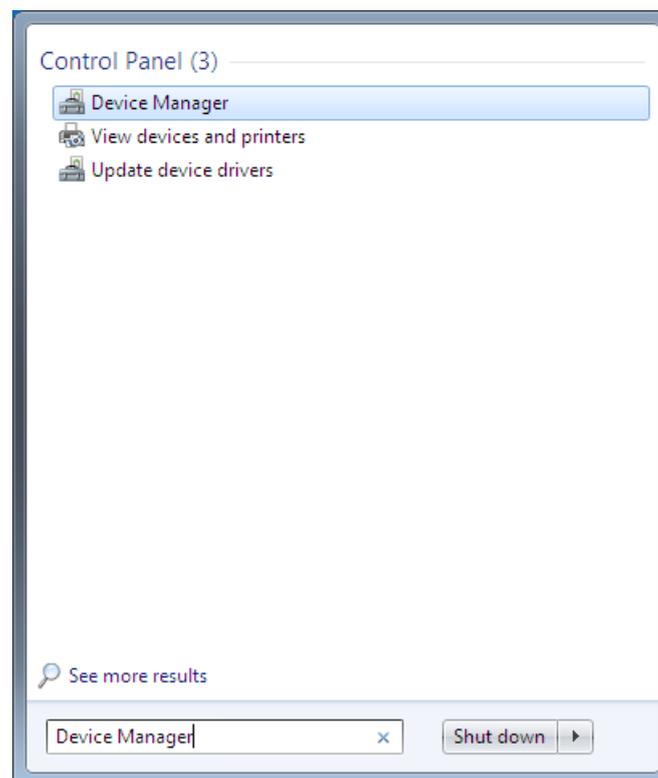


Figure 40: Control Panel

➤ Click on **Device Manager**.

↻ The Device Manager starts.

3. Uninstall the cifX Device Driver.

➤ Right click in the **Device Manager** on the entry of your device.

➤ Click on **Properties**.

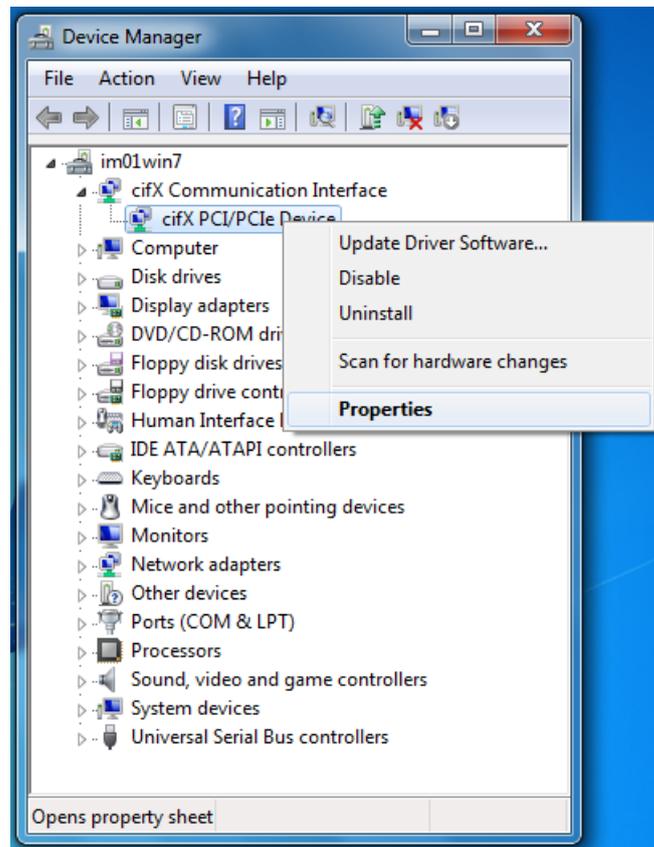


Figure 41: Device Manager (Example for PC card cifX)

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

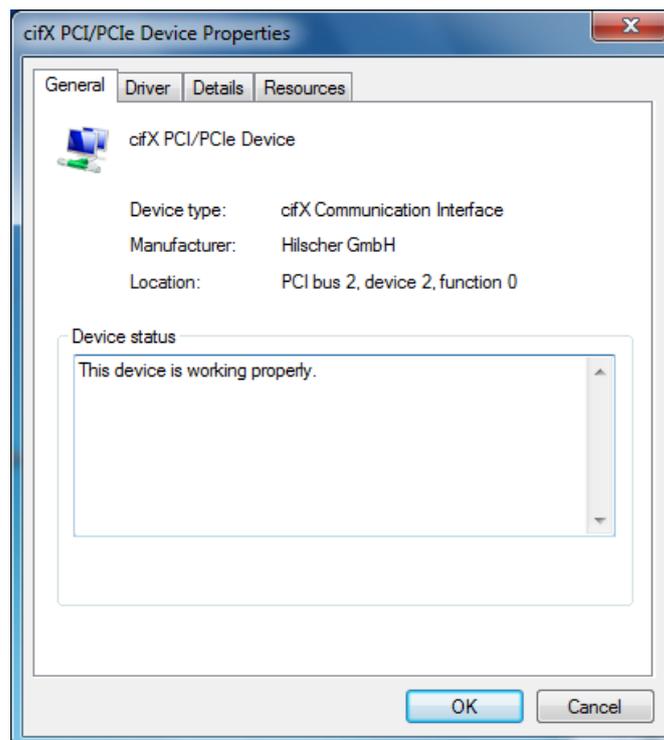


Figure 42: Device Properties > General (Example for PC card cifX)

➤ Select the **Driver** tab.

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

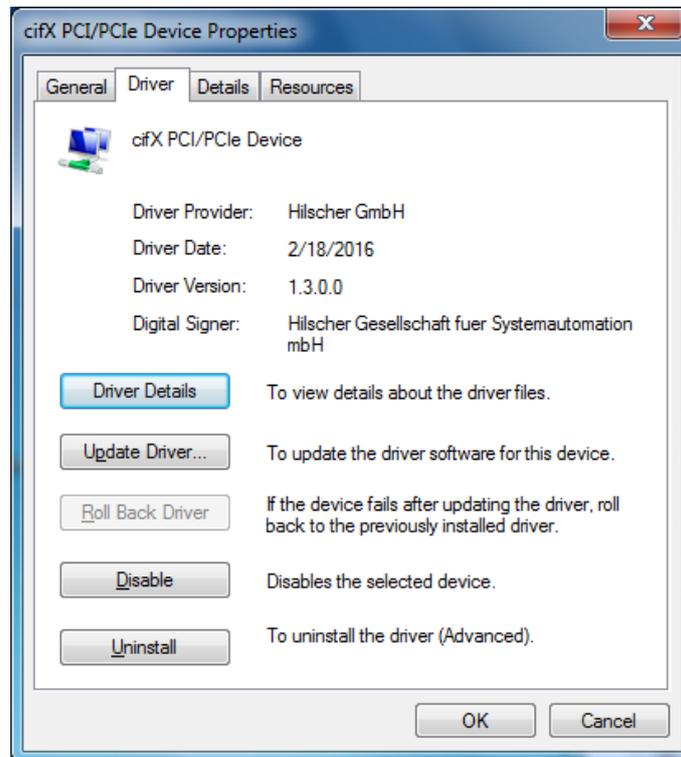


Figure 43: Device Properties > Driver (Example for PC card cifX)

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



Figure 44: Confirm Device Uninstall (Example for PC card cifX)

- Check **Delete the driver software for this device**.
  - Click **OK**.
  - The cifX Device Driver for this device gets uninstalled.
4. Repeat step 1 to 3 for other devices if necessary.

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

5. Open **Start**

- Click on **Start** .

6. Uninstall program.

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

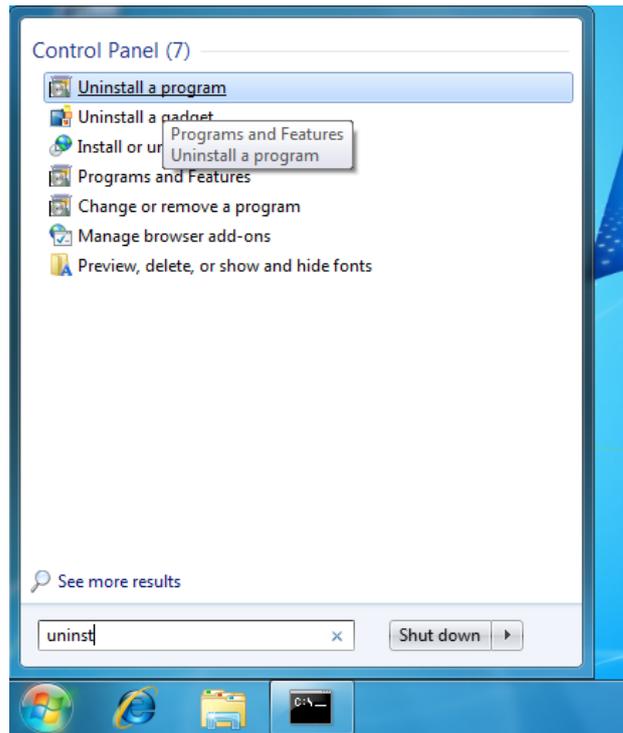


Figure 45: Control Panel > Uninstall a program

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

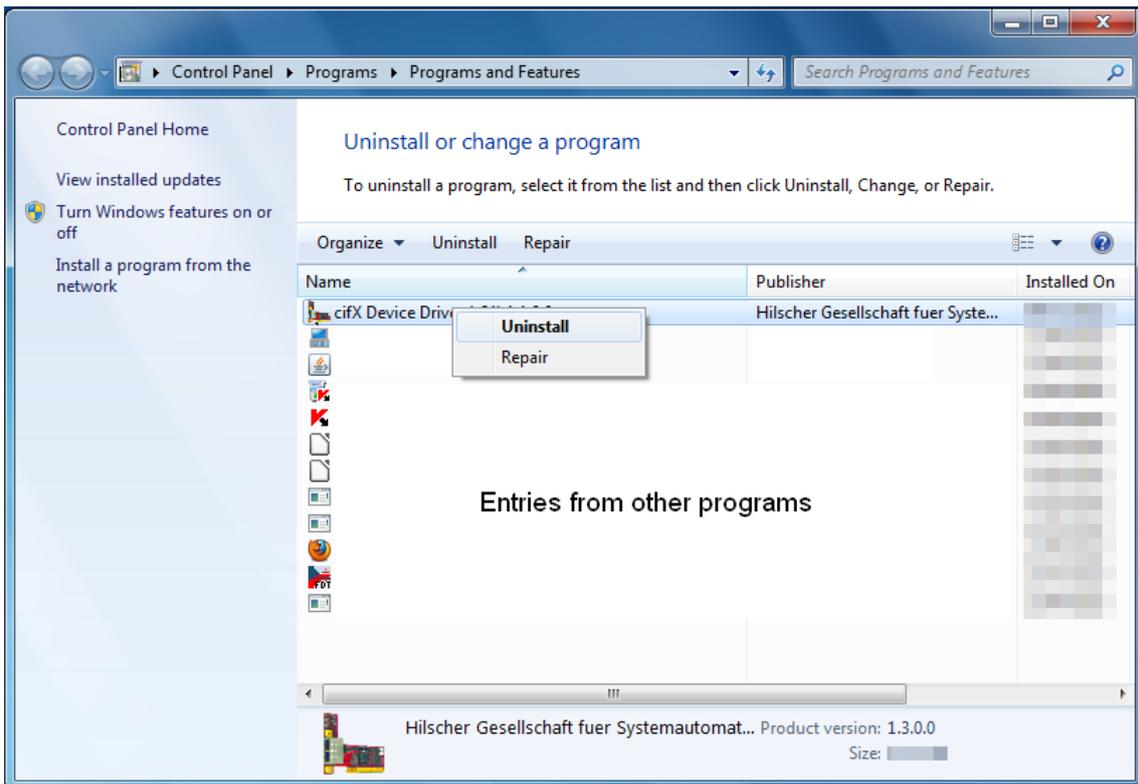


Figure 46: Uninstall or change a program > Uninstall

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

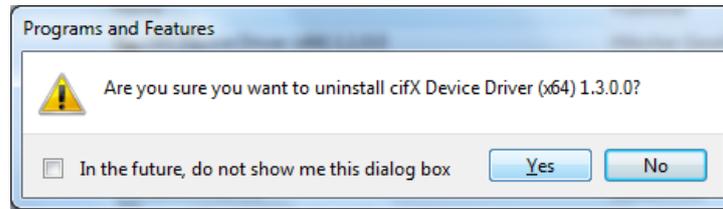


Figure 47: Programs and Features

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

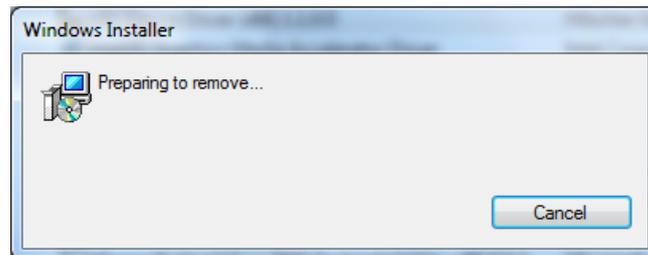


Figure 48: Windows Installer

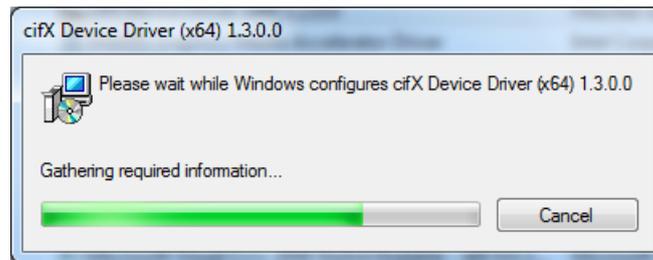


Figure 49: Uninstalling cifX Device Driver

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

## 3.17 Uninstalling under Windows 8

### Requirements



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

### Steps for Uninstalling

To uninstall the cifX Device Driver, proceed as follows:

1. Open Windows® 8 Start Screen.



Figure 50: Start Screen Windows 8

2. Search and start the Device Manager.

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

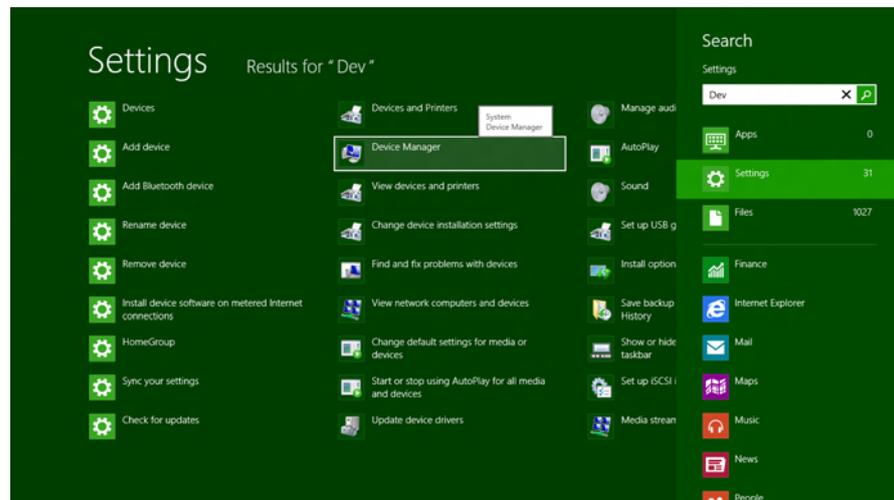


Figure 51: Search and start the Device Manager

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

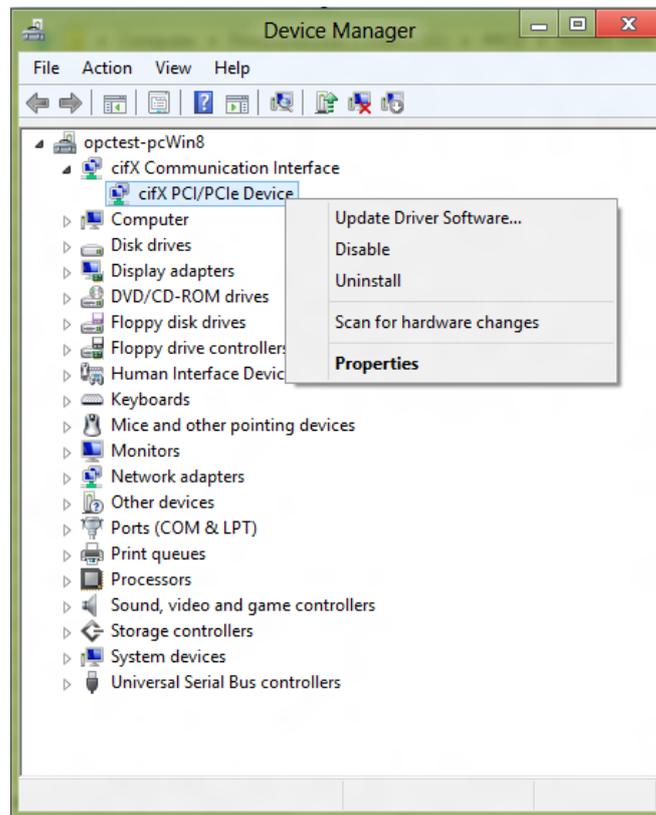


Figure 52: Device Manager (Example for PC card cifX)

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

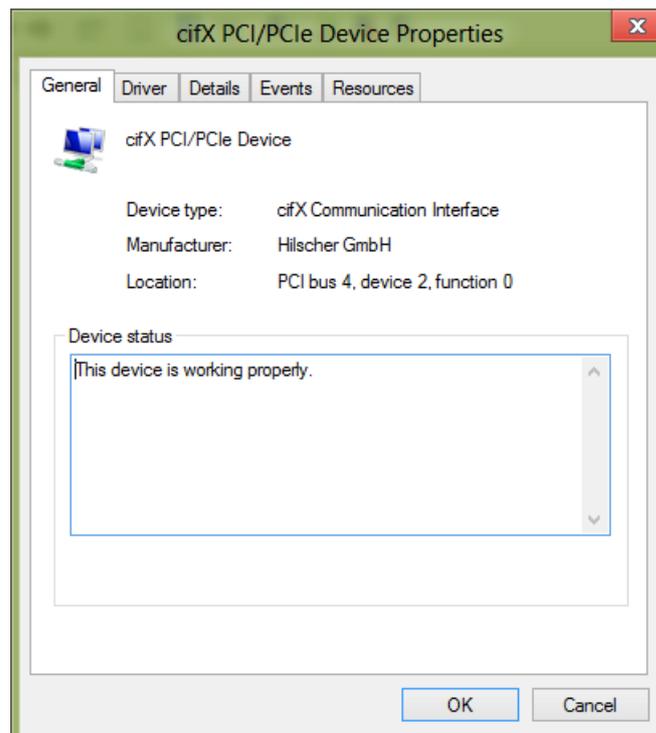


Figure 53: Device Properties > General (Example for PC card cifX)

➤ Select the **Driver** tab.

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

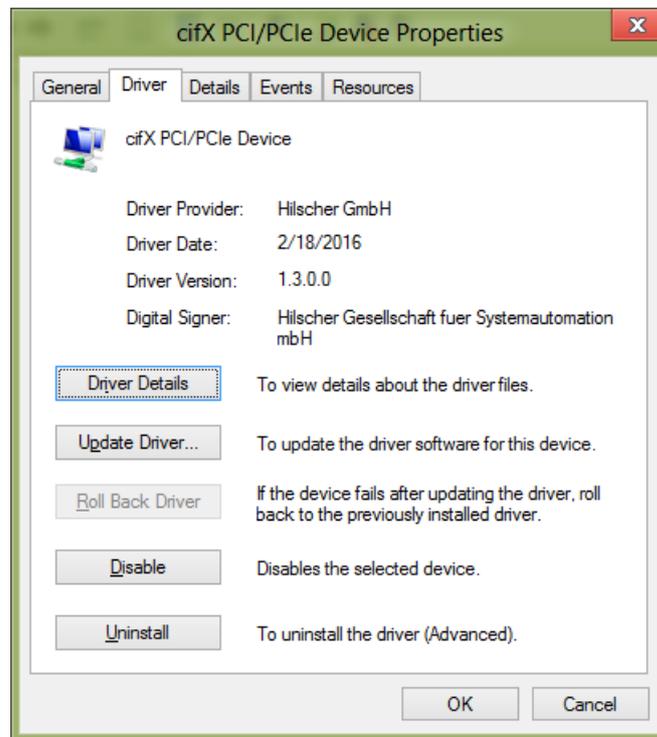


Figure 54: Device Properties > Driver (Example for PC card cifX)

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



Figure 55: Confirm Device Uninstall (Example for PC card cifX)

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

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

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

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

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

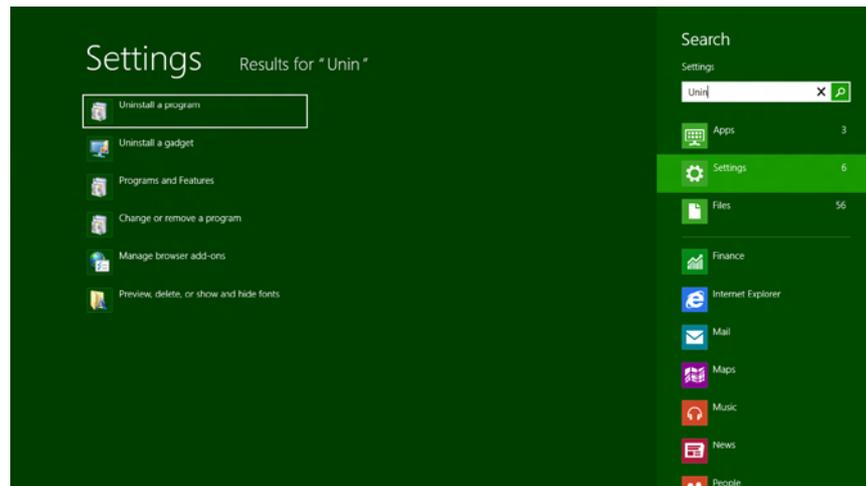


Figure 56: Uninstall a program

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

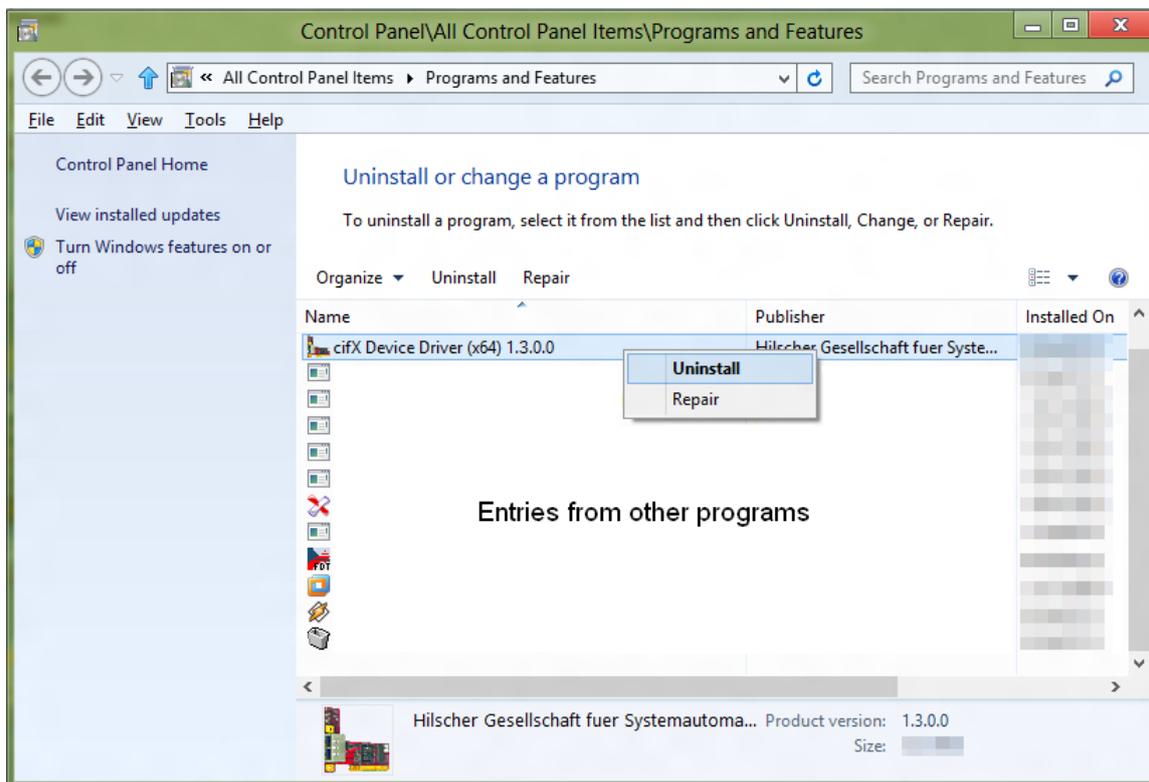


Figure 57: Uninstall or change a program > Uninstall

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

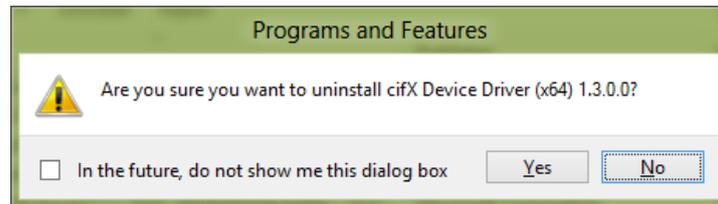


Figure 58: Programs and Features

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

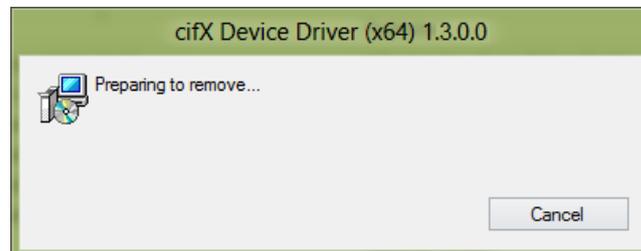


Figure 59: Windows Installer

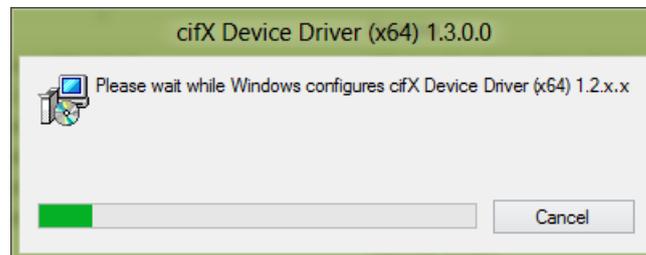


Figure 60: Uninstalling cifX Device Driver

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

## 3.18 Uninstalling under Windows 10

### Requirements



**Note:** You need administrator privileges under Windows® 10 to uninstall the cifX Device Driver software from your PC.

### Steps for Uninstalling

To uninstall the cifX Device Driver, proceed as follows:

1. Open Windows® 10 Start Screen.

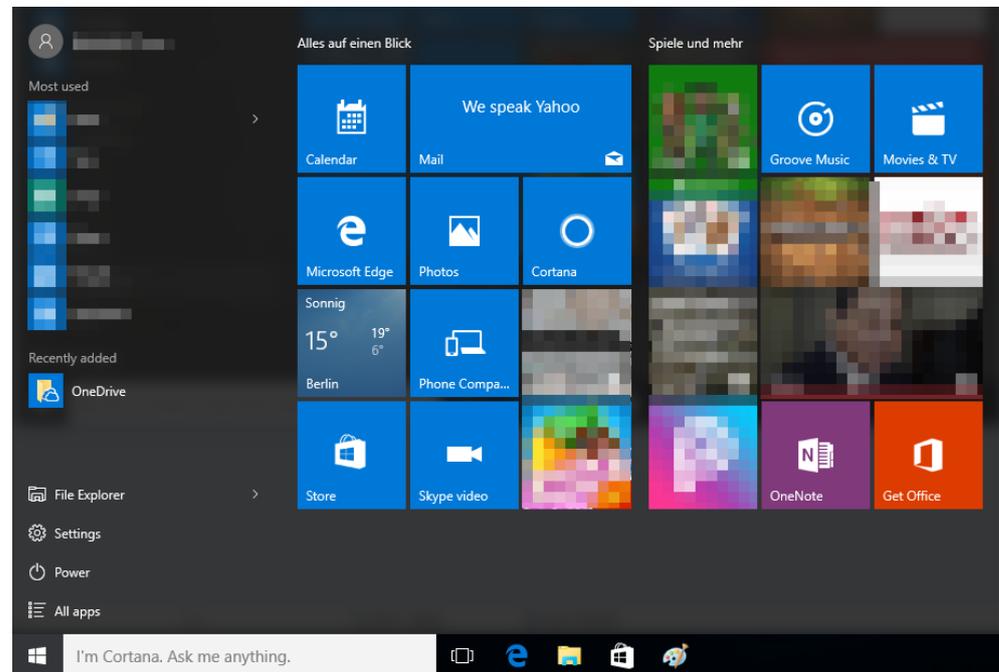


Figure 61: Start Screen Windows 8

2. Search and start the Device Manager.
  - Select **Settings**.
  - Enter **Device Manager** into the search field.

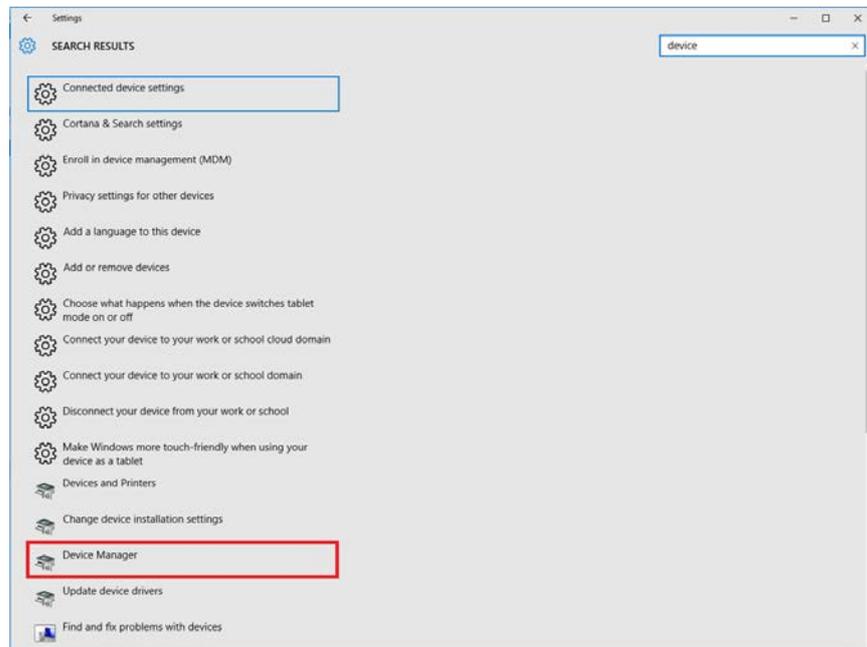


Figure 62: Search and start the Device Manager

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

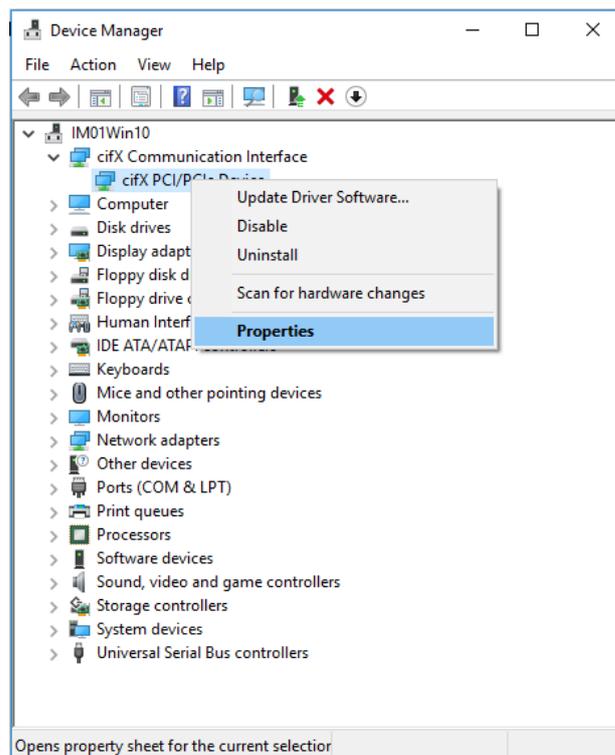


Figure 63: Device Manager (Example for PC card cifX)

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

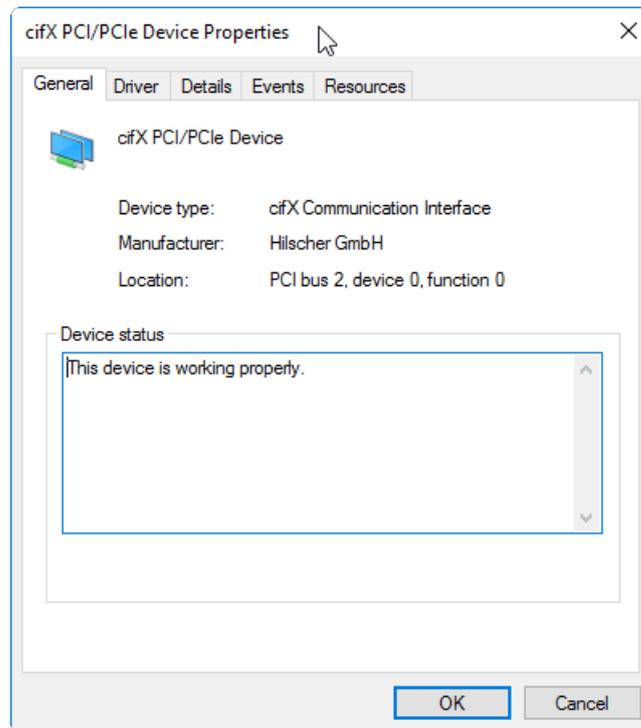


Figure 64: Device Properties > General (Example for PC card cifX)

➤ Select the **Driver** tab.

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

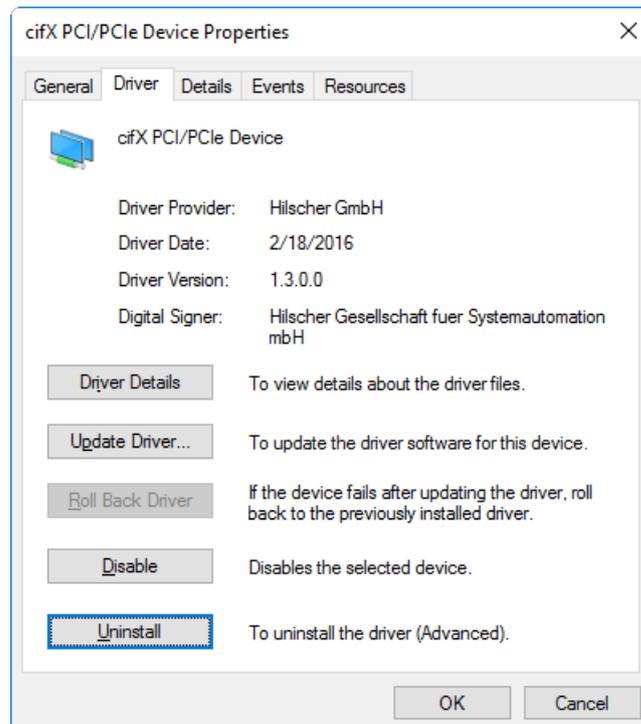


Figure 65: Device Properties > Driver (Example for PC card cifX)

➤ Select **Uninstall**.

➤ **Confirm Device Uninstall** is displayed.

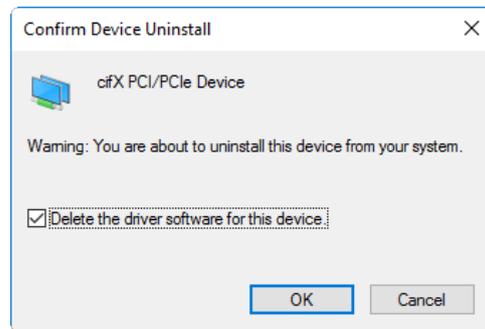


Figure 66: Confirm Device Uninstall (Example for PC card cifX)

- Check **Delete the driver software for this device**.
  - Click **OK**.
  - The cifX Device Driver for this device gets uninstalled.
4. Uninstall the cifX Device Driver entry from the **Uninstall or change programs** list.
- Select **Settings**.
  - Enter **Uninstall a program** into the search field.

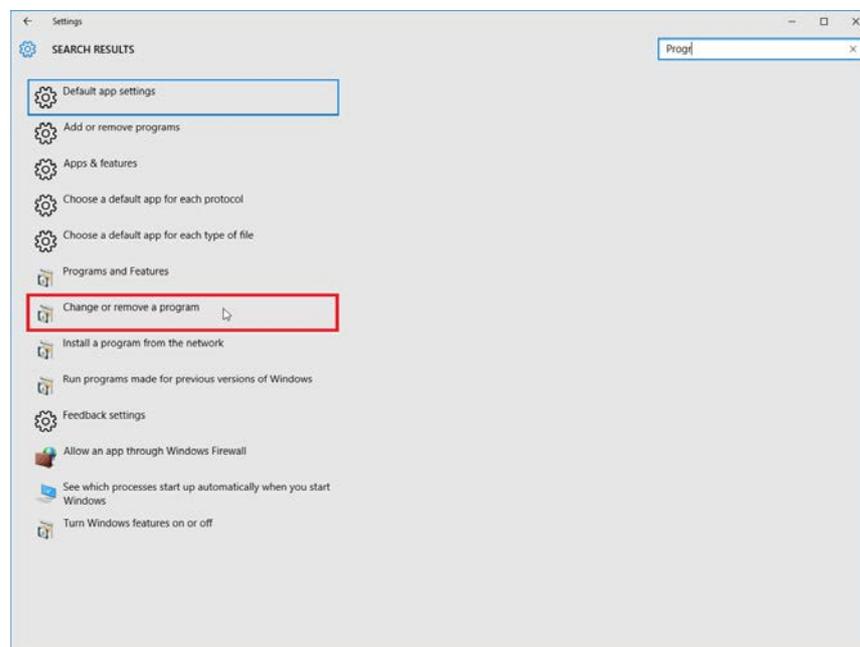


Figure 67: Uninstall a program

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

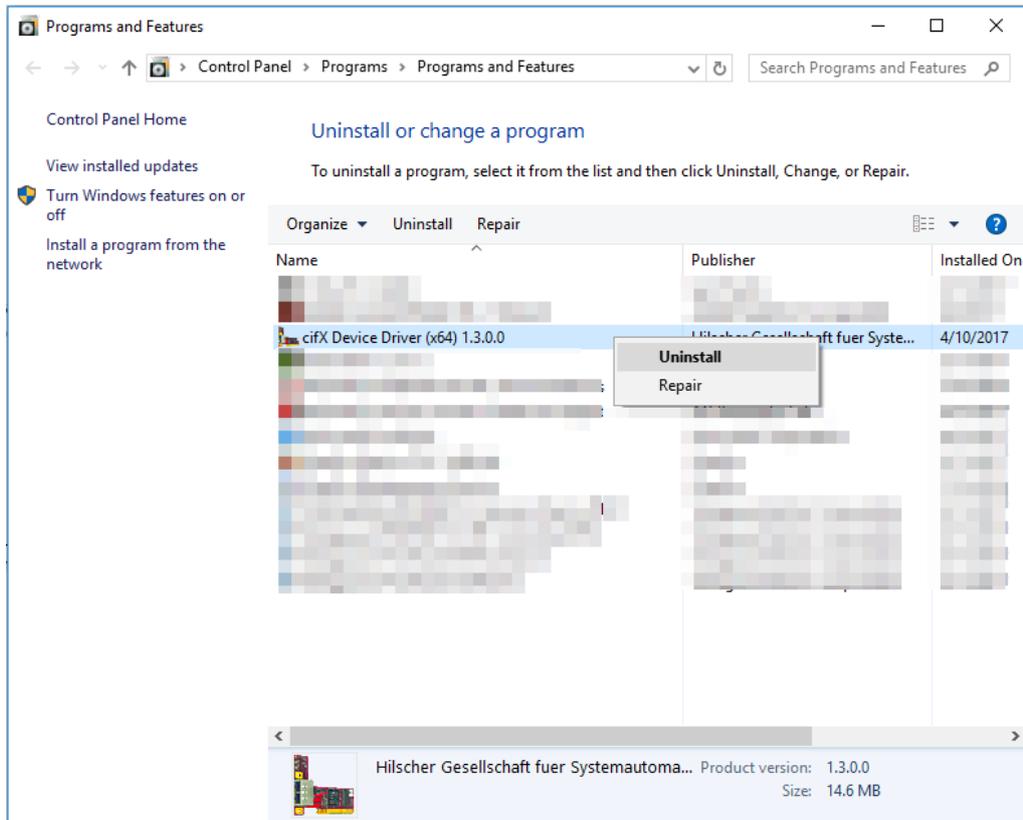


Figure 68: Uninstall or change a program > Uninstall cifX Device Driver entry

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

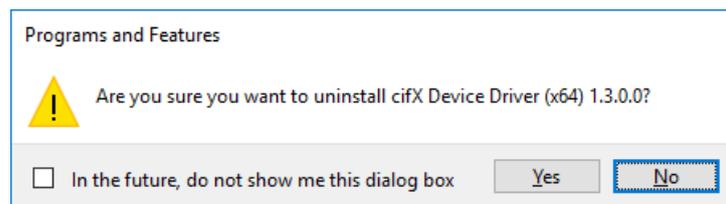


Figure 69: Programs and Features

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

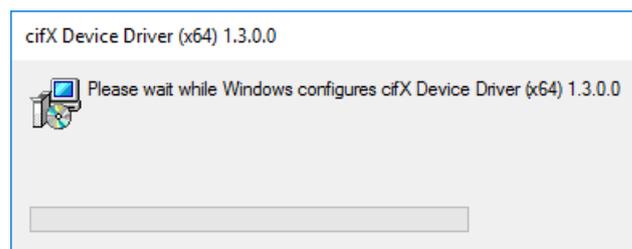


Figure 70: Uninstalling cifX Device Driver

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

## 4 USB Driver

### 4.1 System Requirements

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

- PC with 586-, Pentium® processor or higher
- Windows® XP, Windows® Vista (32-Bit) SP2, Windows® 7 (32- and 64-Bit) SP1, Windows® 8 (32- and 64-Bit), Windows® 10 (32- and 64-Bit)
- Administrator privilege is required during installation
- USB (optional)
- In order to download the product DVD, you need an Internet access.

## 4.2 Installation Overview

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

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

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

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

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

Note:

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



---

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

---

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

## 4.3 Installation under Windows XP

### Requirement

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

### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 71: Start Screen Communication Solutions – Install USB Driver

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



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

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



Figure 72: Device Driver Installation Wizard – Start Screen

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



Figure 73: Device Driver Installation Wizard – Driver Are Installing

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



Figure 74: Device Driver Installation Wizard – Installation Completed

- Click **Finish**.



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

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

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



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

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



Figure 75: Found New Hardware Wizard – USB Driver (1)

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



Figure 76: 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 77: Found New Hardware Wizard – USB Driver (3)

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



Figure 78: Found New Hardware Wizard – USB Driver (4)

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

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

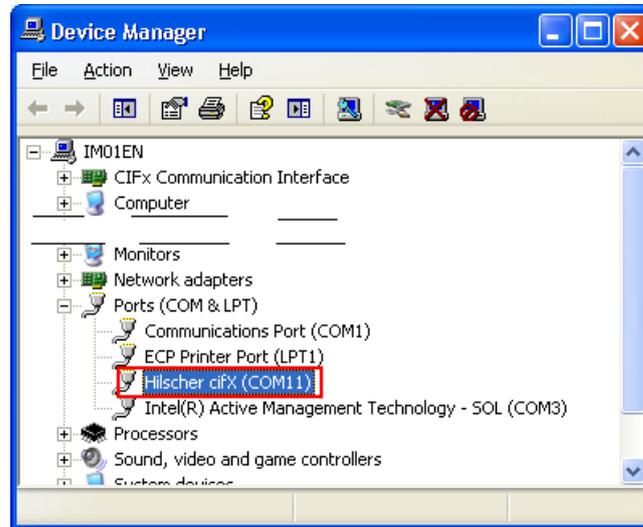


Figure 79: Display of USB Connection in Device Manager

## 4.4 Installation under Windows 7

### Requirement

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

### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 80: Start Screen Communication Solutions – Install USB Driver

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



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

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



Figure 81: Device Driver Installation Wizard – Start Screen

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

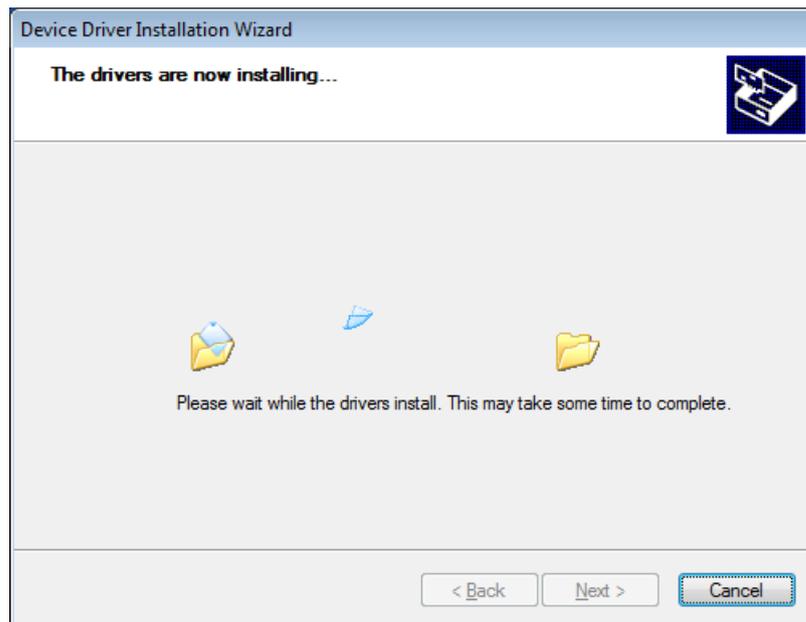


Figure 82: Device Driver Installation Wizard – Driver Are Installing

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



Figure 83: Device Driver Installation Wizard – Installation Completed

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



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

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



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

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

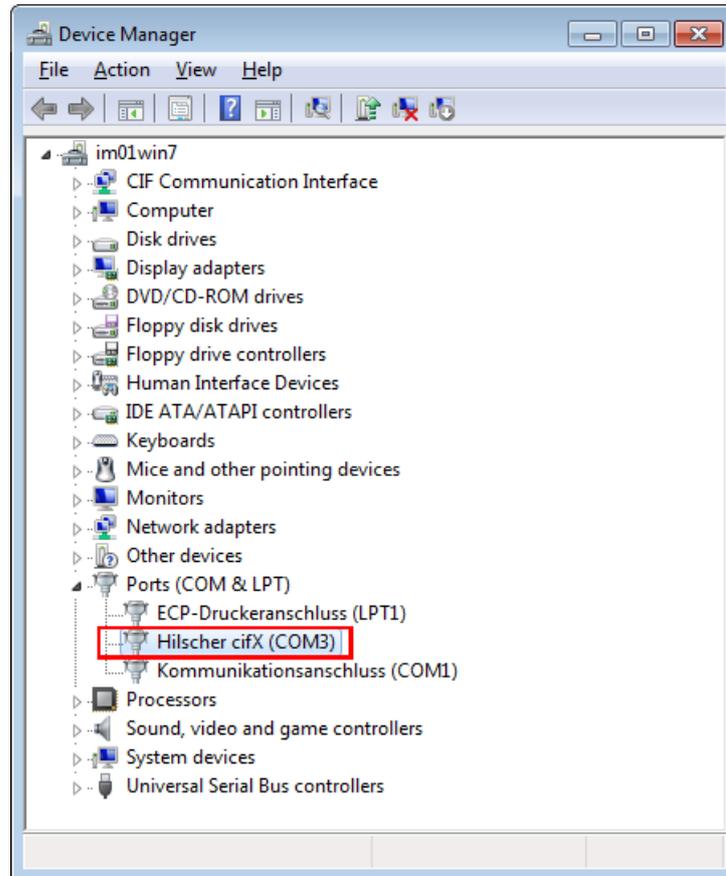


Figure 84: Display of USB Connection in Device Manager



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



Figure 86: Device Driver Installation Wizard – Start Screen

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

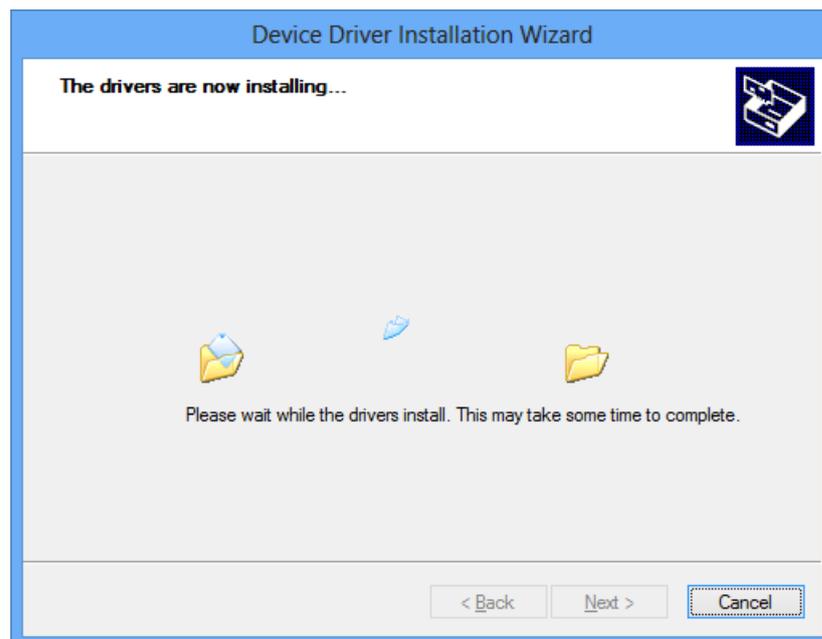


Figure 87: Device Driver Installation Wizard – Driver Are Installing

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



Figure 88: Device Driver Installation Wizard – Installation Completed

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



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



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

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



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

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

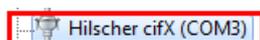


Figure 89: Display of USB Connection in Device Manager

## 4.6 Installation under Windows 10

### Requirement

The following steps describe the installation of the USB driver under Windows® 10 if no USB driver for the PC card cifX is installed.

### Installation Steps

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 90: Start Screen Communication Solutions – Install USB Driver

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



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

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



Figure 91: Device Driver Installation Wizard – Start Screen

### 3. Start the installation.

- Click **Next**.
- If Windows® displays during installation a security request, answer it with **Install**.
- The installation of the USB drivers is started.
- After installation, the **Completing the Device Installation Wizard** window appears:



Figure 92: 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 10 is practically finished. When you connect the PC card cifX to your PC via USB cable for the first time, the following symbol appears in the task bar (visible only if you are in the “desktop mode” of Windows 10):



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

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



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

4. Check in the Device Manager if your PC card cifX is installed correctly.
  - Open the Windows Device Manager (open Windows® 10 start screen, select **Settings**, enter “Device Manager” to the search field, click on **Device Manager**).
  - Check if the view of your Device Manager corresponds to the marked area in the view hereafter.

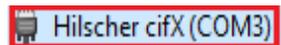


Figure 93: Display of USB Connection in Device Manager

## 4.7 Uninstalling under Windows XP

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

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

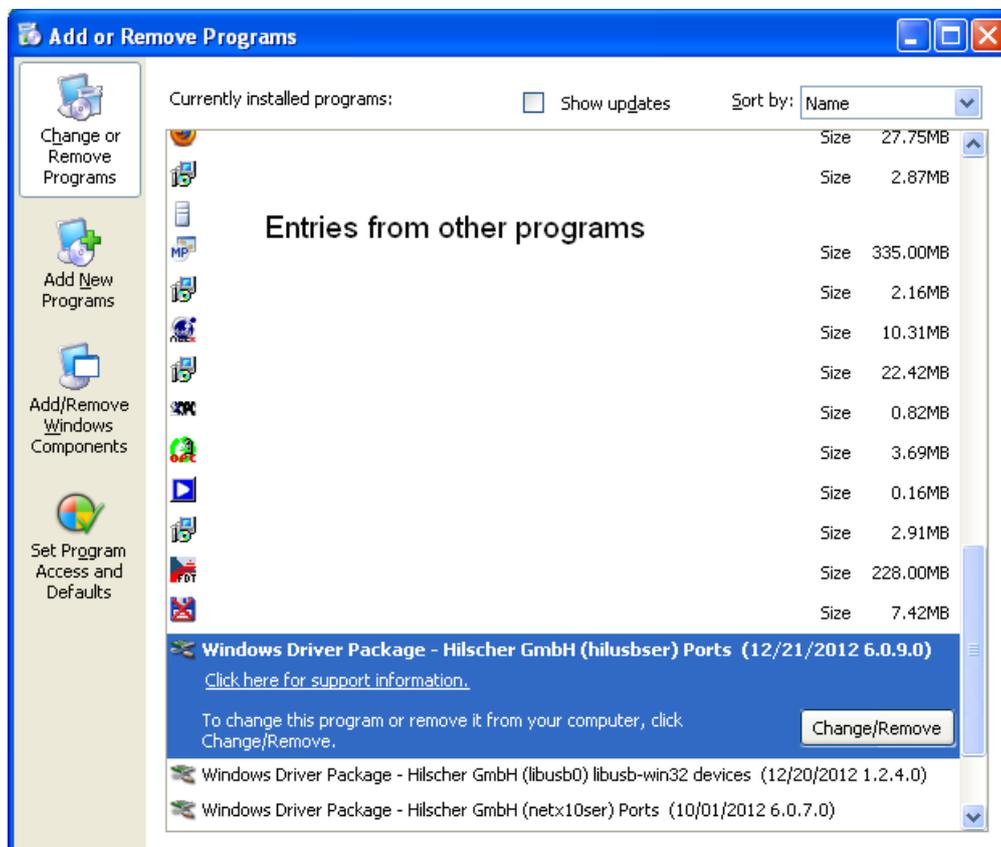


Figure 94: Add or Remove Programs

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



Figure 95: Acknowledge Uninstall

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

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

## 4.8 Uninstalling under Windows 7

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

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

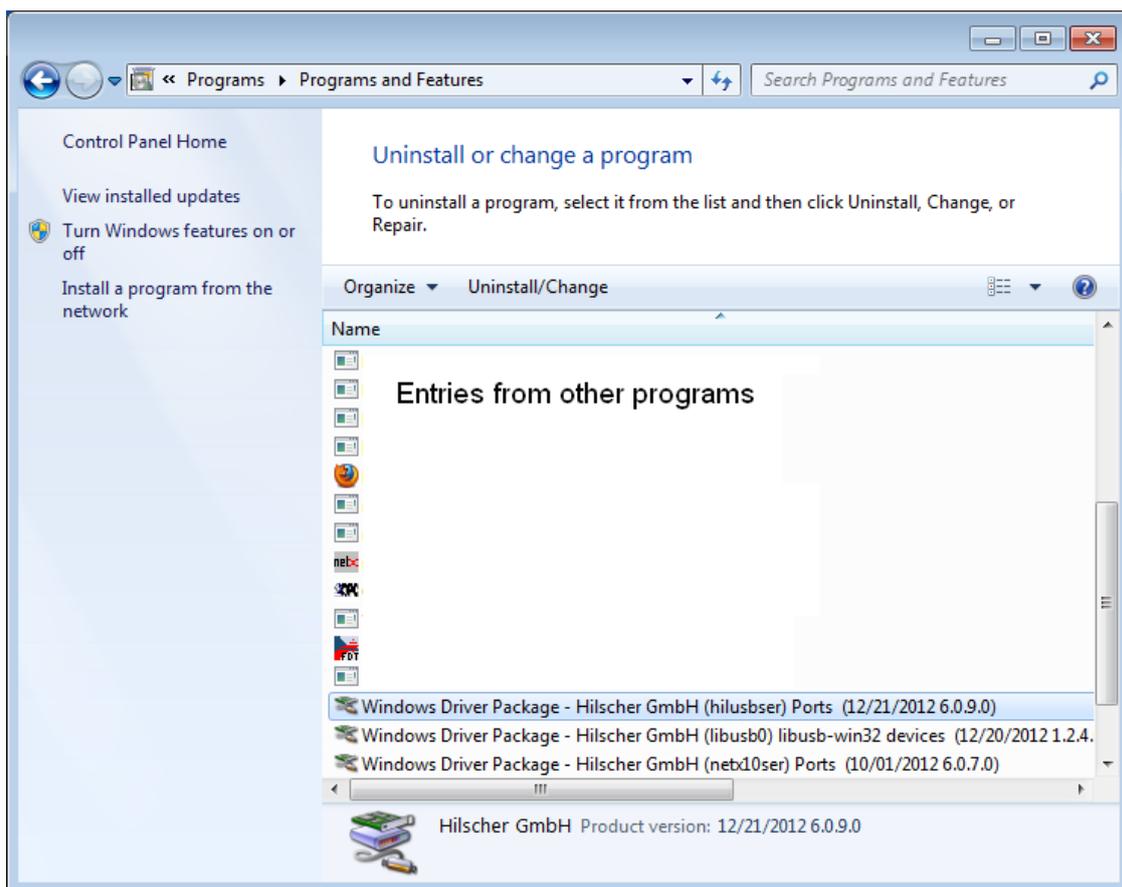


Figure 96: Uninstall or Change a Program

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

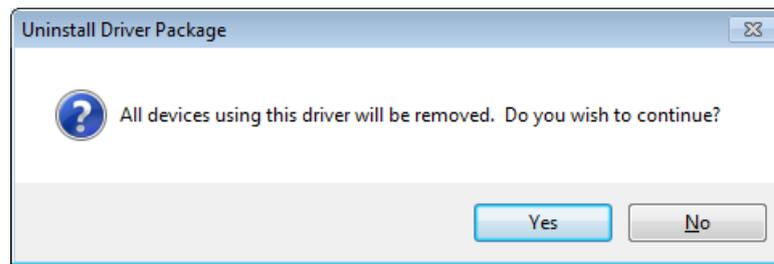


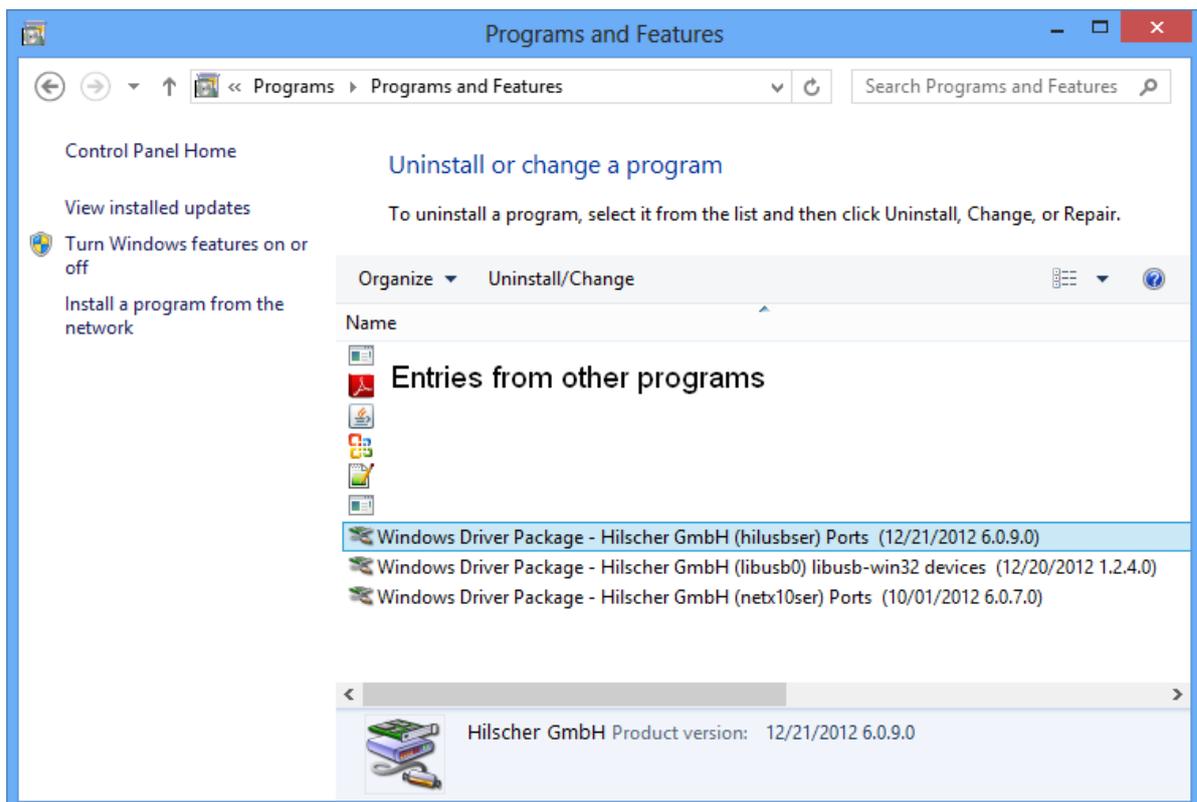
Figure 97: Acknowledge Uninstall

- 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**.

## 4.9 Uninstalling under Windows 8

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

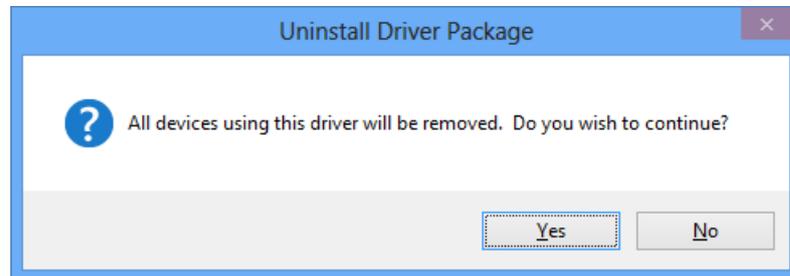
1. Open **Programs and Features** window.
  - Open the Windows® 8 start screen.
  - Press the **[Win]** and **[F]** keys
  - Select **Settings**.
  - Enter “Uninstall a program” into the search field.
  - Click on **Programs and Features**.
  - The **Programs and Features** window opens:



*Figure 98: Uninstall or Change a Program*

## 2. Uninstall driver packages.

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

*Figure 99: Acknowledge Uninstall*

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

## 4.10 Uninstalling under Windows 10

If you want to uninstall the USB drivers under Windows 10, proceed as follows:

### 1. Open **Programs and Features** window.

- Open the Windows® 10 start screen.
- Select **Settings**.
- Enter “Uninstall a program” into the search field.
- Click on **Programs and Features**.
- The **Uninstall or Change a Program** window opens:

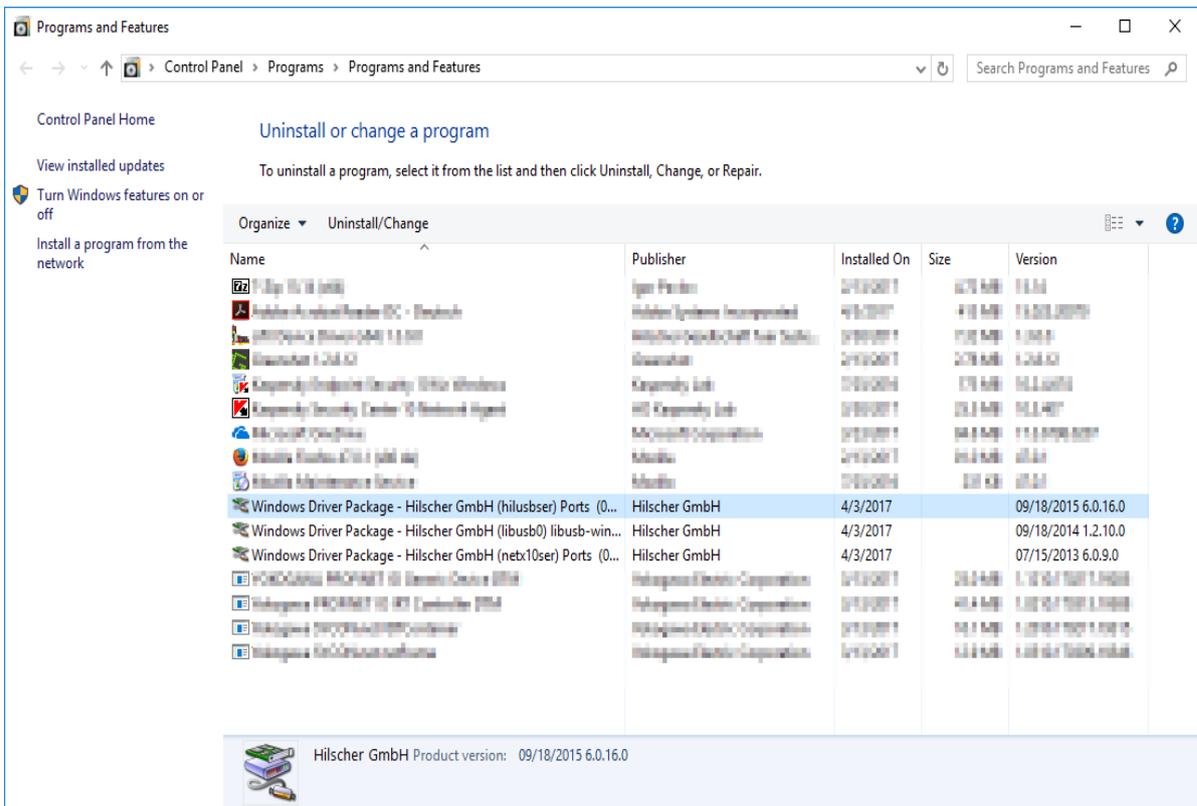


Figure 100: Uninstall or Change a Program

2. Uninstall driver packages.

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

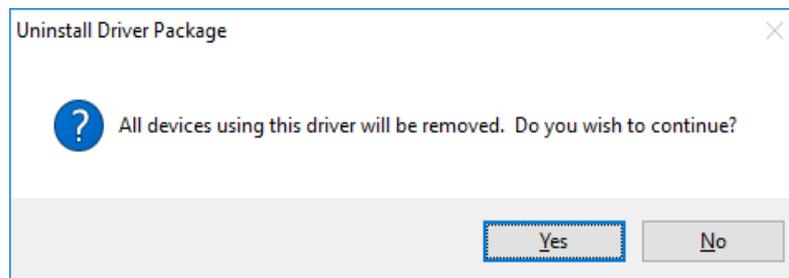


Figure 101: Acknowledge Uninstall

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

## 5 SYCON.net

### 5.1 System Requirements

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

In order to download the product DVD, you need an Internet access.

- 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 (optional)
- 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.
-

## 5.2 Installation under Windows XP

### Requirement



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



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

### Preparation

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

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- ⇒ The startup screen **Communication Solutions** is displayed.



Figure 102: Start the Installation for the SYCON.net Configuration Software

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

Or:

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

## Installation Steps

To install the configuration software SYCON.net:

### 3. Choose language for the setup



Figure 103: SYCON.net Setup Language

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

### 4. Continue installation

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

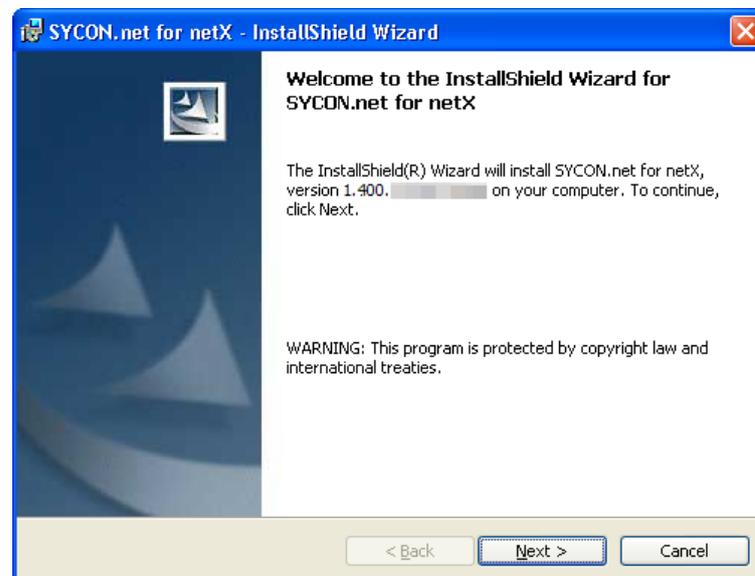


Figure 104: SYCON.net Installation Information

## 5. Read the notes about major changes in SYCON.net

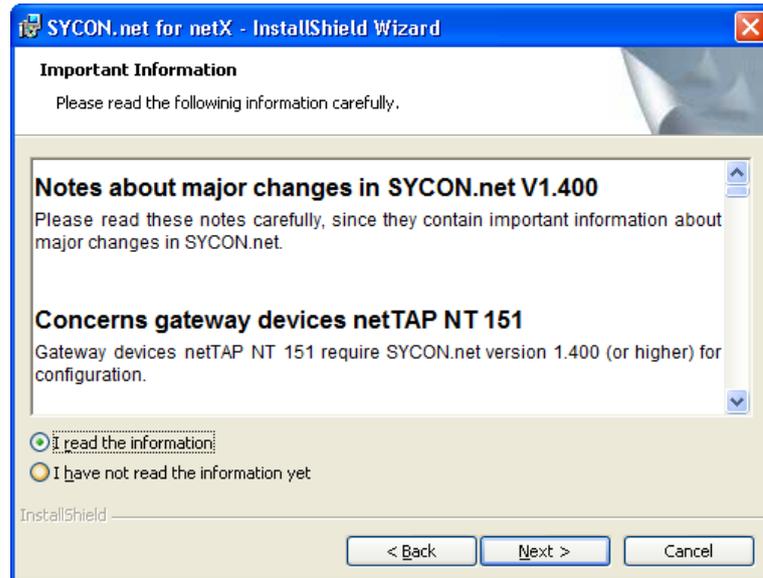


Figure 105: Notes about major Changes in SYCON.net

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

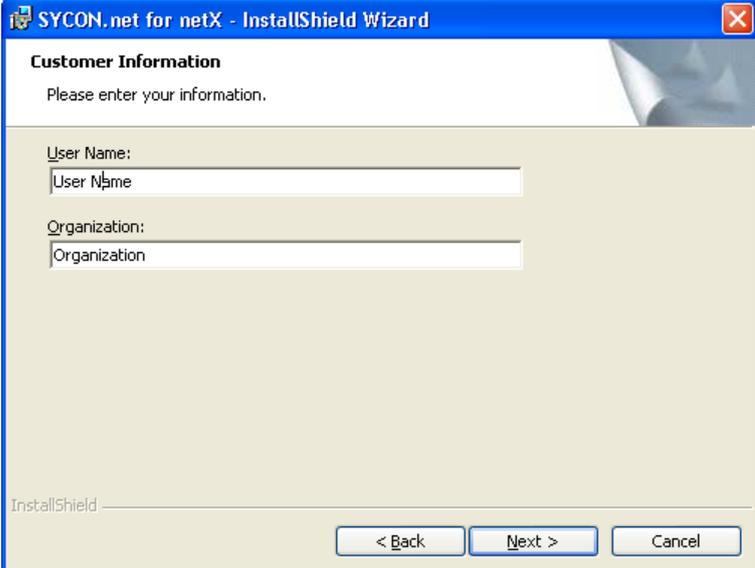
## 6. Accept license agreement



Figure 106: SYCON.net License Agreement

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

## 7. Enter user information



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

Figure 107: SYCON.net Customer Information

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

## 8. Select setup type



The screenshot shows a dialog box titled "SYCON.net for netX - InstallShield Wizard". The main heading is "Setup Type" with the instruction "Choose the setup type that best suits your needs." Below this, there is the text "Please select a setup type." and two radio button options. The first option is "Complete", which is selected (radio button is filled), and its description is "All program features will be installed. (Requires the most disk space.)". The second option is "Custom", which is not selected (radio button is empty), and its description is "Choose which program features you want installed and where they will be installed. Recommended for advanced users." At the bottom of the dialog, there are three buttons: "< Back", "Next >", and "Cancel". The "Next >" button is highlighted in yellow.

Figure 108: SYCON.net Setup Type

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

## 9. Installation

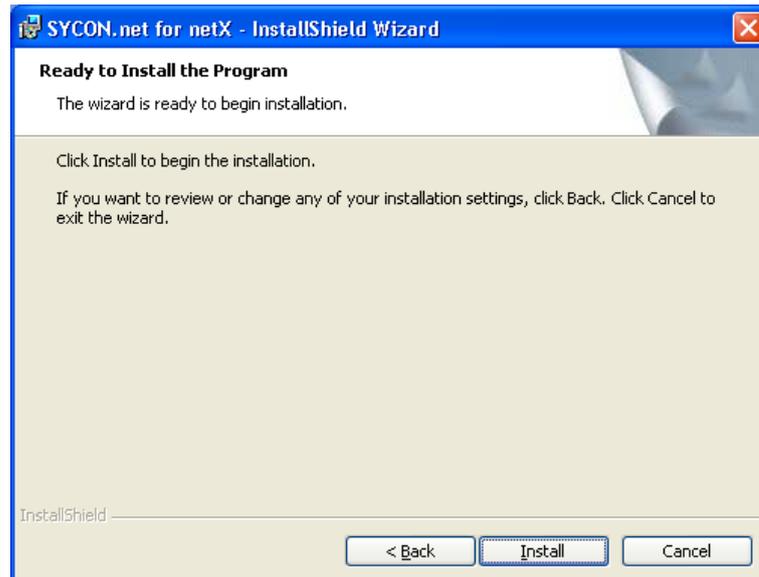


Figure 109: SYCON.net Start Installation

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

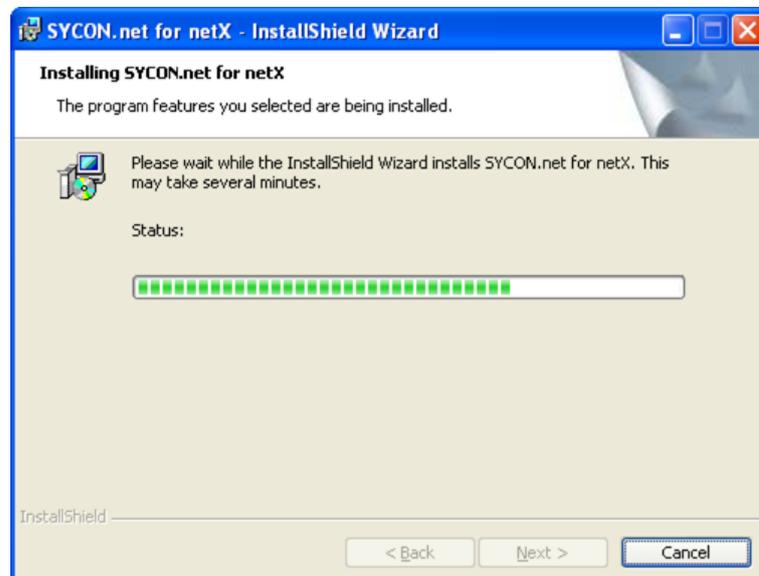


Figure 110: SYCON.net Installation Status

## 10. Finish installation

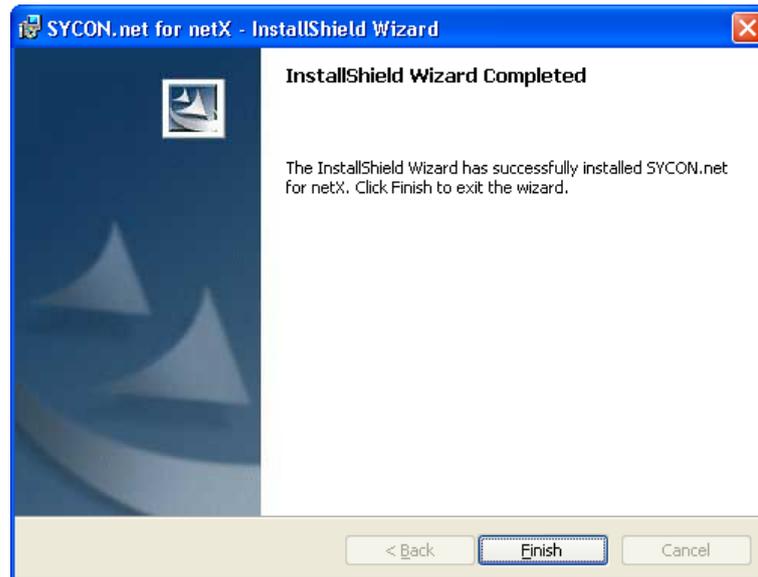


Figure 111: SYCON.net Installation Finish

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

## 5.3 Installation under Windows 7

### Requirement



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



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

### Preparation

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

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 112: Start the Installation for the SYCON.net Configuration Software

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

Or:

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

Or



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

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

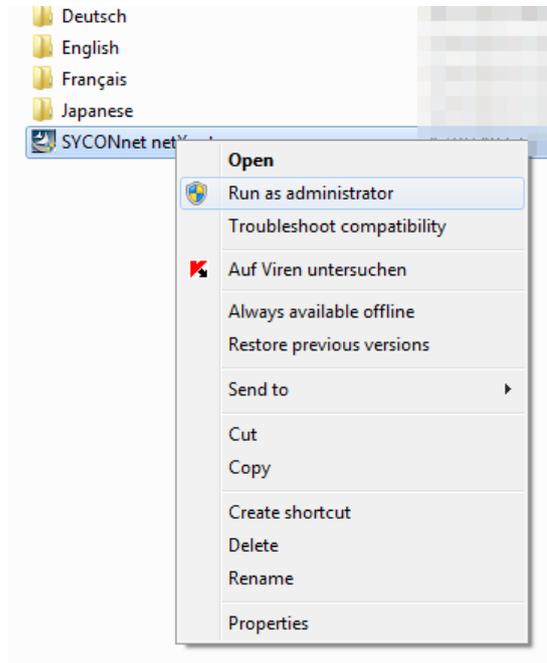


Figure 113: SYCONnet netX setup.exe - Run as Administrator

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

### Installation Steps

To install the configuration software SYCON.net:

#### 3. Choose Language for the setup



Figure 114: SYCON.net Setup Language

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

➤ **Preparing to install** screen opens.

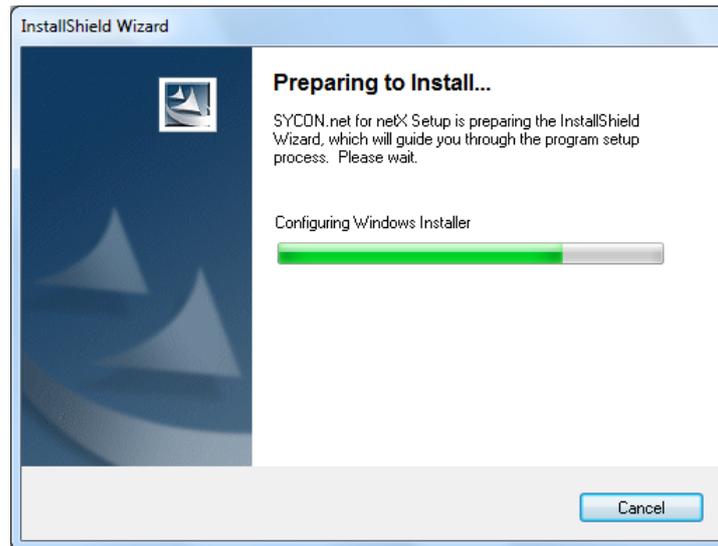


Figure 115: Preparing to Install SYCON.net

#### 4. Continue installation

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

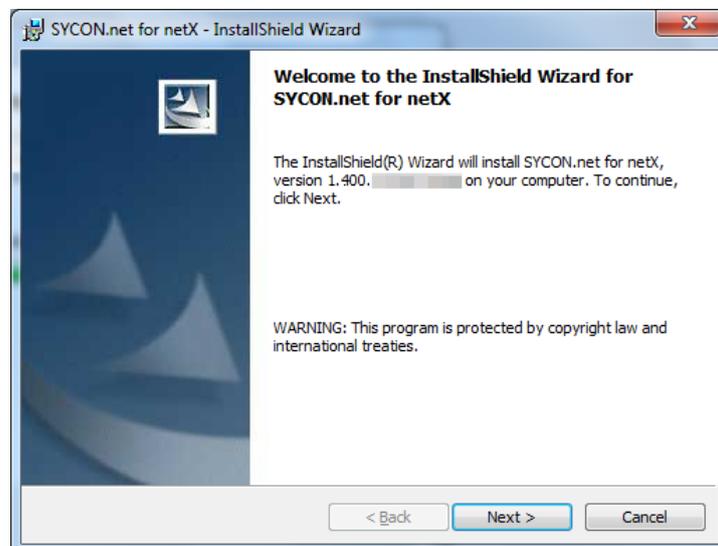


Figure 116: SYCON.net Installation Information

## 5. Read the notes about major changes in SYCON.net

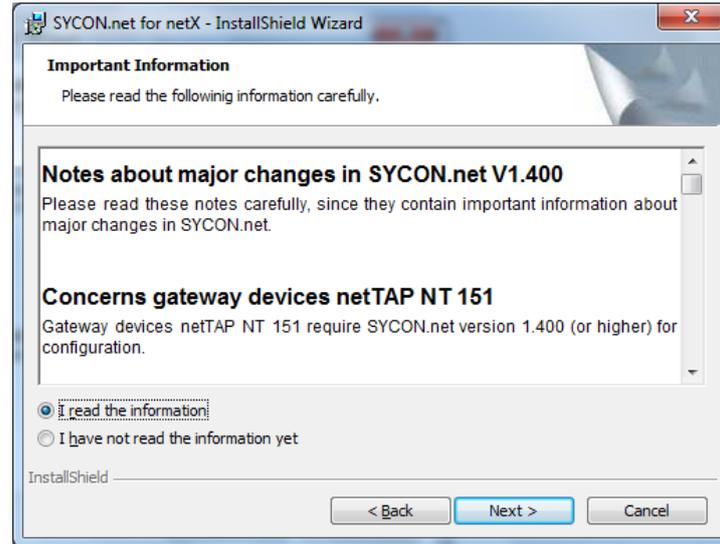


Figure 117: Notes About Major Changes in SYCON.net

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

## 6. Accept license agreement

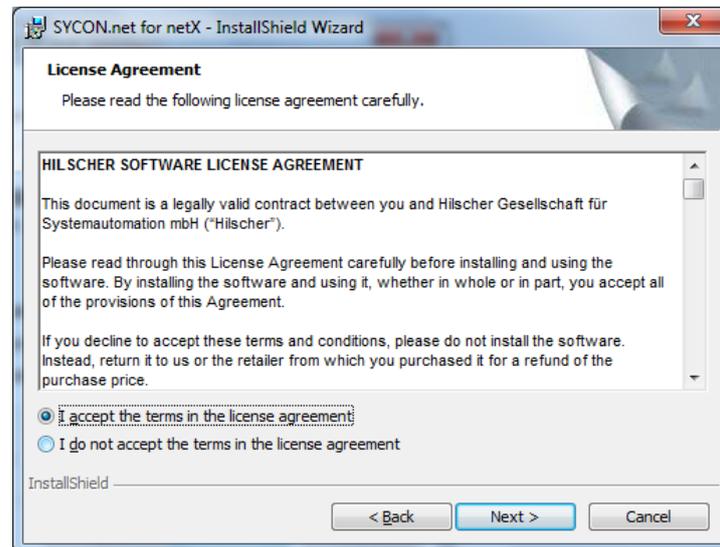
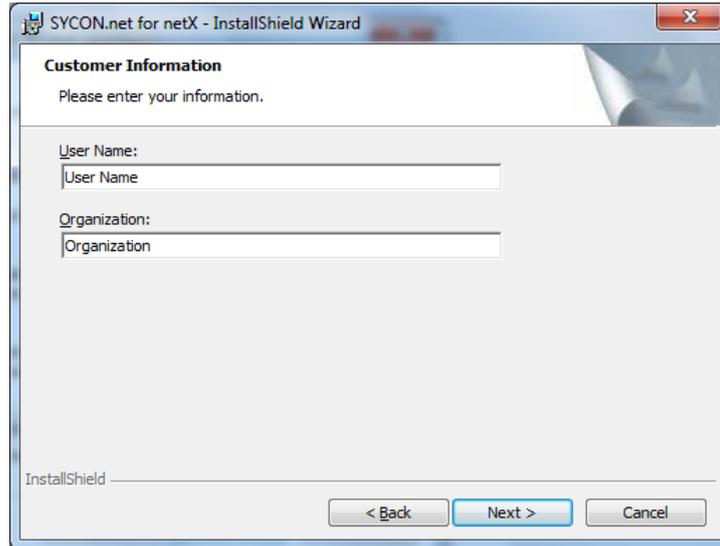


Figure 118: SYCON.net License Agreement

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

## 7. Enter user information

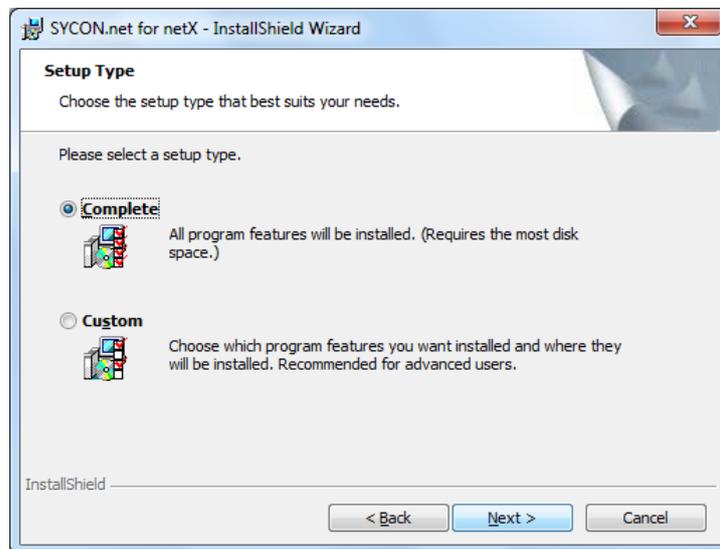


The screenshot shows a Windows-style dialog box titled "SYCON.net for netX - InstallShield Wizard". The main heading is "Customer Information" with the instruction "Please enter your information." Below this are two text input fields: "User Name:" and "Organization:". At the bottom of the dialog are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

Figure 119: SYCON.net Customer Information

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

## 8. Select setup type



The screenshot shows a Windows-style dialog box titled "SYCON.net for netX - InstallShield Wizard". The main heading is "Setup Type" with the instruction "Choose the setup type that best suits your needs." Below this is the text "Please select a setup type." There are two radio button options: "Complete" (selected) and "Custom". Each option has a small icon and a description. At the bottom of the dialog are three buttons: "< Back", "Next >", and "Cancel".

Figure 120: SYCON.net Setup Type

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

## 9. Installation

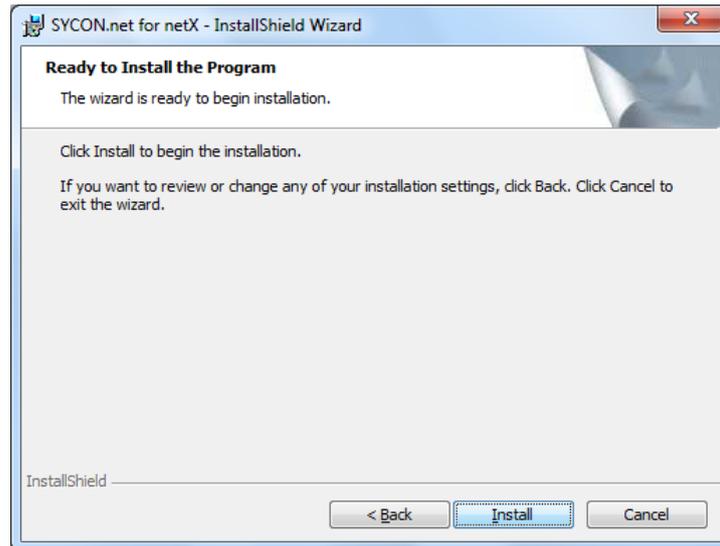


Figure 121: SYCON.net Start Installation

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

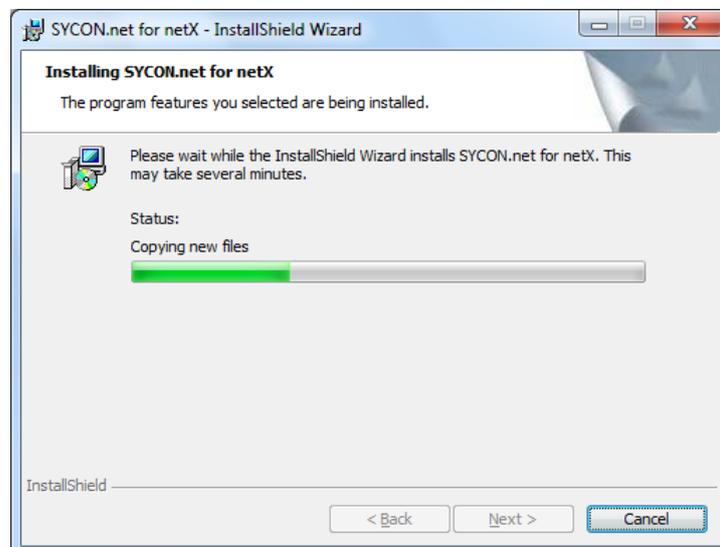


Figure 122: SYCON.net Installation Status

## 10. Finish installation

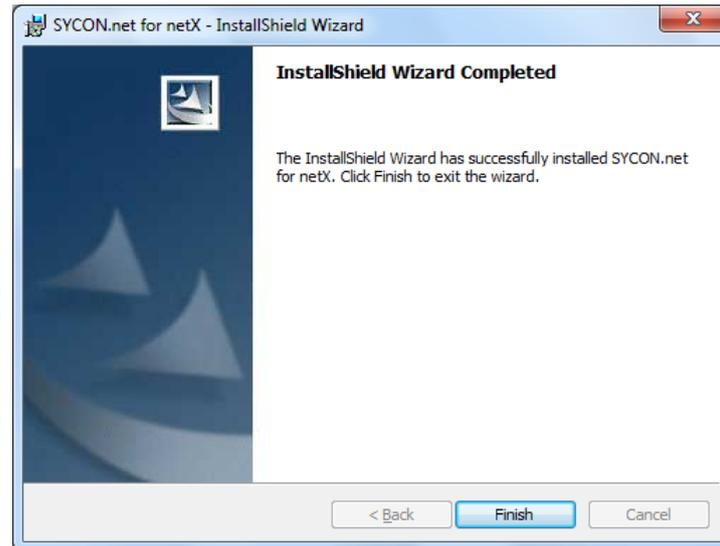


Figure 123: SYCON.net Installation Finish

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

## 5.4 Installation under Windows 8

### Requirement



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



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

### Preparation

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

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 124: Start the Installation for the SYCON.net Configuration Software

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

Or:

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

Or



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

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

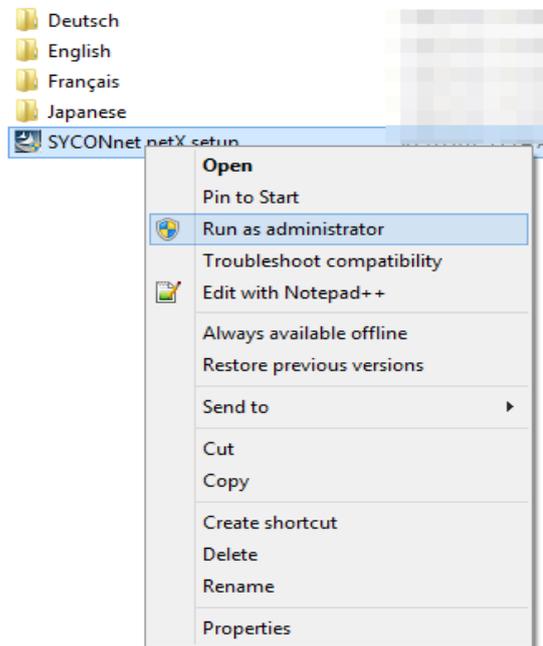


Figure 125: *SYCONnet netX setup.exe* - Run as Administrator

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

### Installation Steps

To install the configuration software SYCON.net:

#### 3. Choose Language for the setup

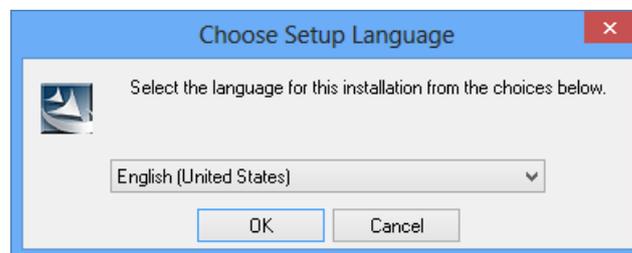


Figure 126: *SYCON.net Setup Language*

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

➤ **Preparing to install** screen opens.

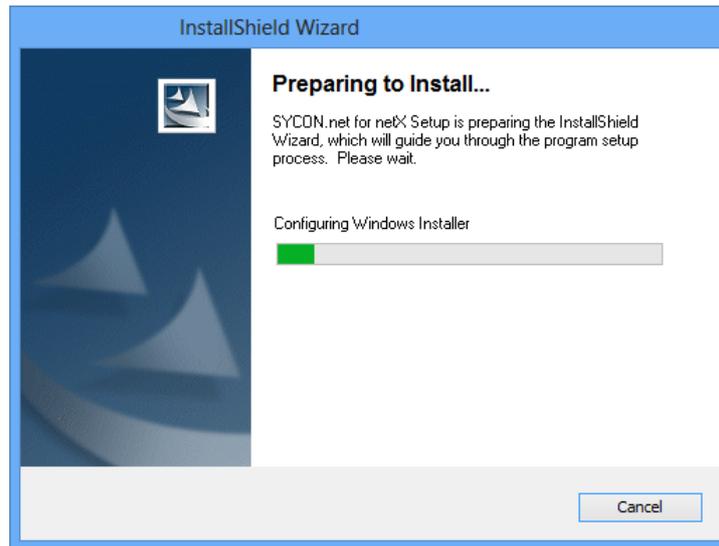


Figure 127: Preparing to Install SYCON.net

#### 4. Continue installation

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

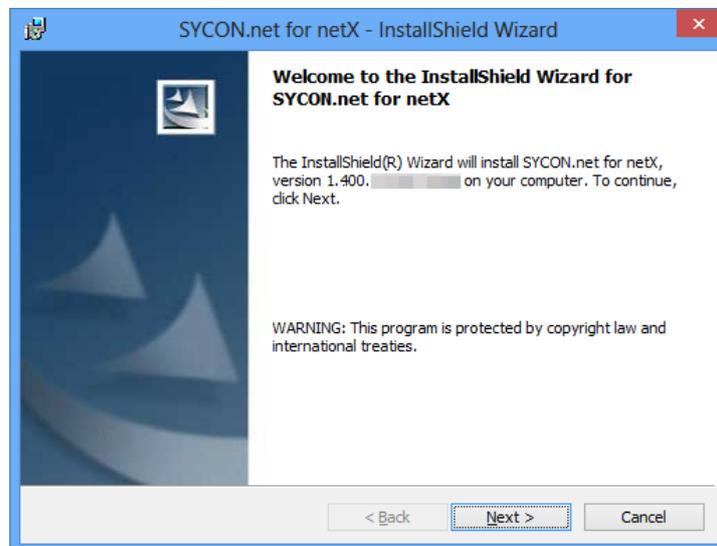


Figure 128: SYCON.net Installation Information

## 5. Read the notes about major changes in SYCON.net

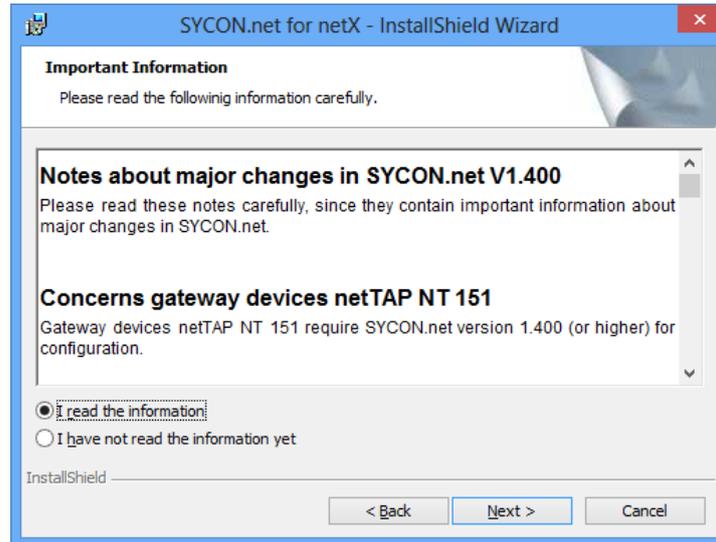


Figure 129: Notes About Major Changes in SYCON.net

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

## 6. Accept license agreement

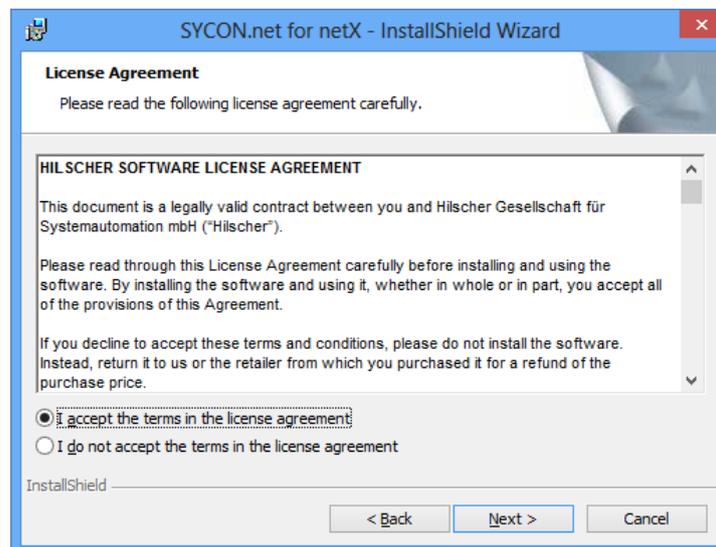


Figure 130: SYCON.net License Agreement

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

## 7. Enter user information

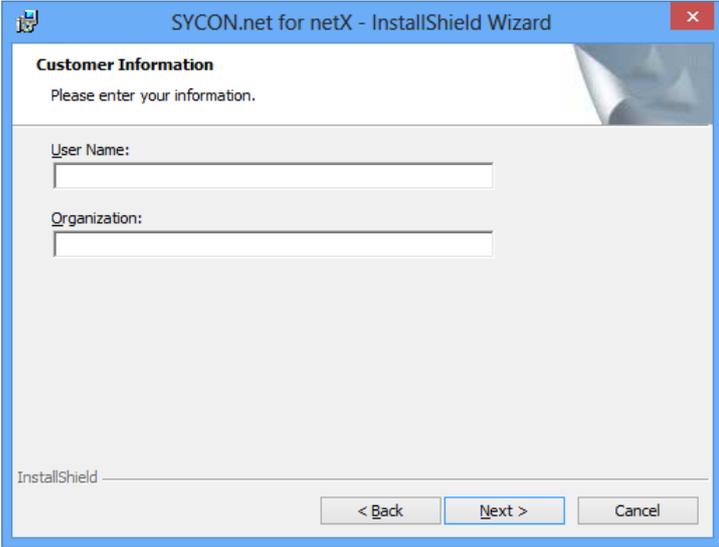


Figure 131: SYCON.net Customer Information

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

## 8. Select setup type

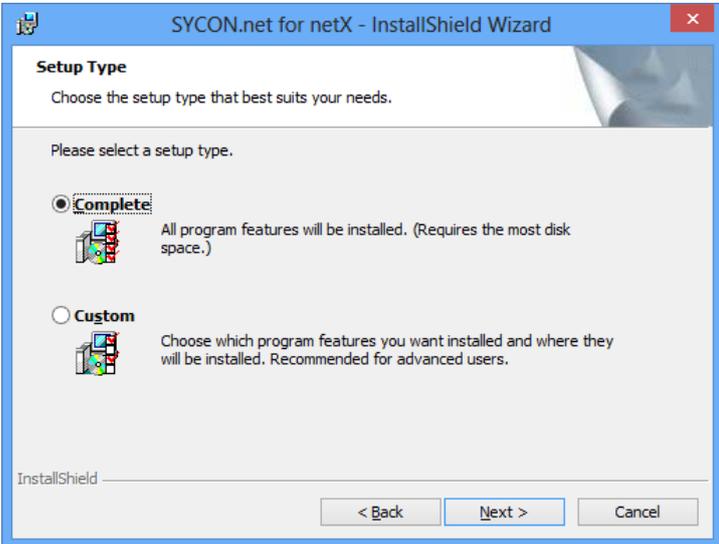


Figure 132: SYCON.net Setup Type

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

## 9. Installation

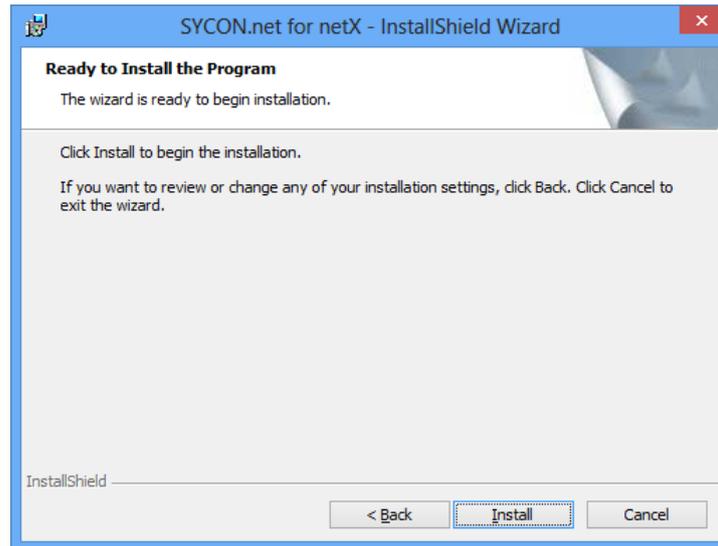


Figure 133: SYCON.net Start Installation

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

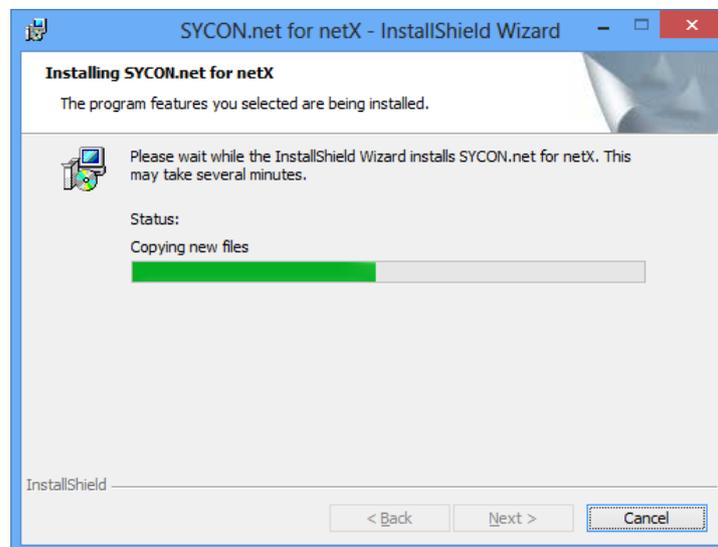


Figure 134: SYCON.net Installation Status

## 10. Finish installation

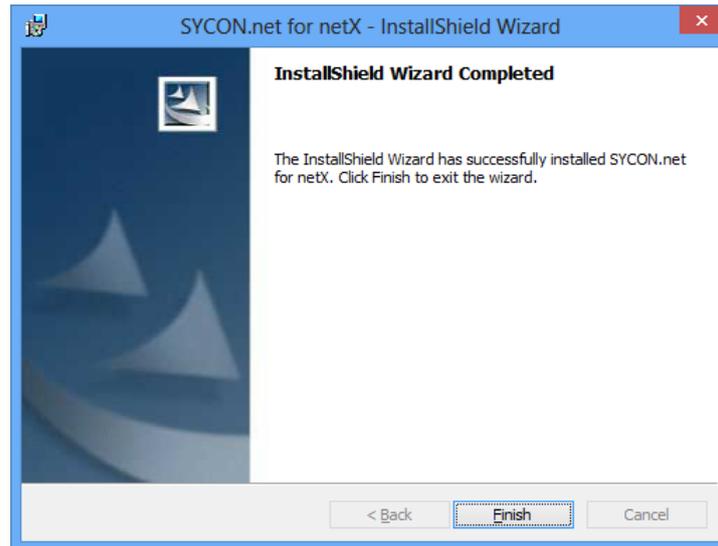


Figure 135: SYCON.net Installation Finish

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

## 5.5 Installation under Windows 10

### Requirement



**Note:** You need administrator privileges under Windows® 10 to install the configuration software SYCON.net on your PCdevice.



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

### Preparation

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

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- ⇒ The startup screen **Communication Solutions** is displayed.



Figure 136: Start the Installation for the SYCON.net Configuration Software

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

Or:

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

Or



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

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

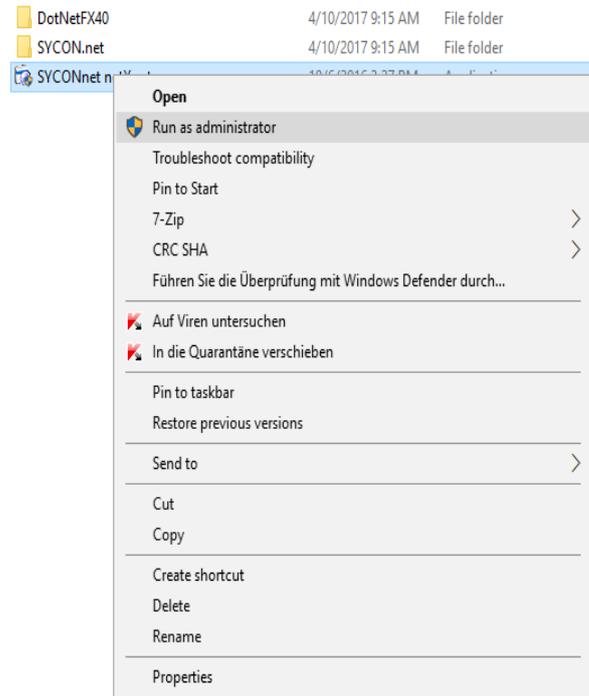


Figure 137: *SYCONnet netX setup.exe* - Run as Administrator

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

### Installation Steps

To install the configuration software SYCON.net:

#### 3. Choose Language for the setup

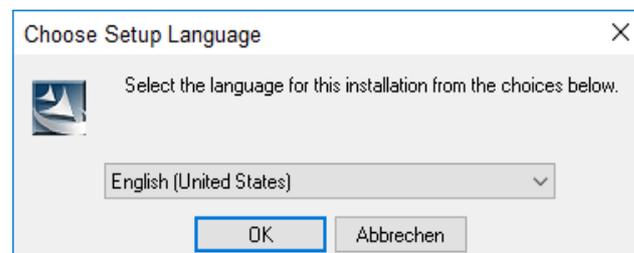


Figure 138: *SYCON.net Setup Language*

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

➤ **Preparing to install** screen opens.

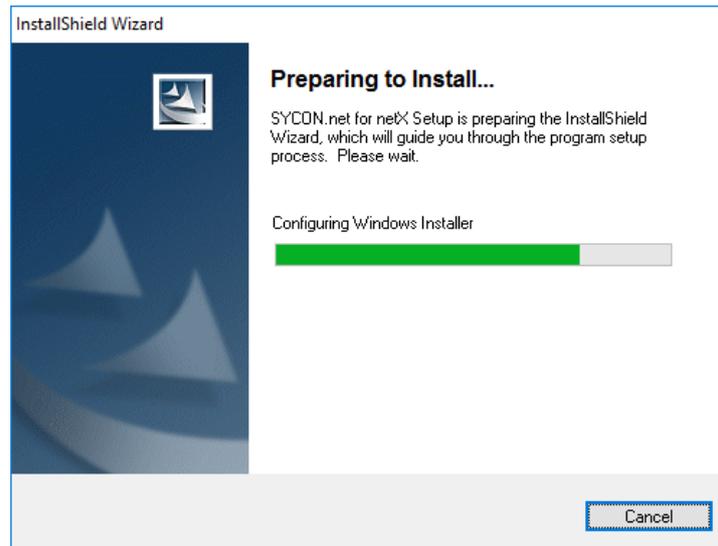


Figure 139: Preparing to Install SYCON.net

#### 4. Continue installation

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

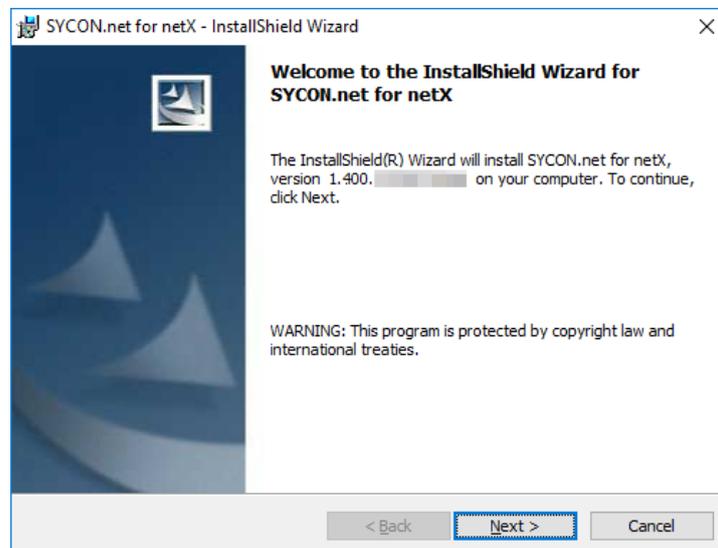


Figure 140: SYCON.net Installation Information

## 5. Read the notes about major changes in SYCON.net

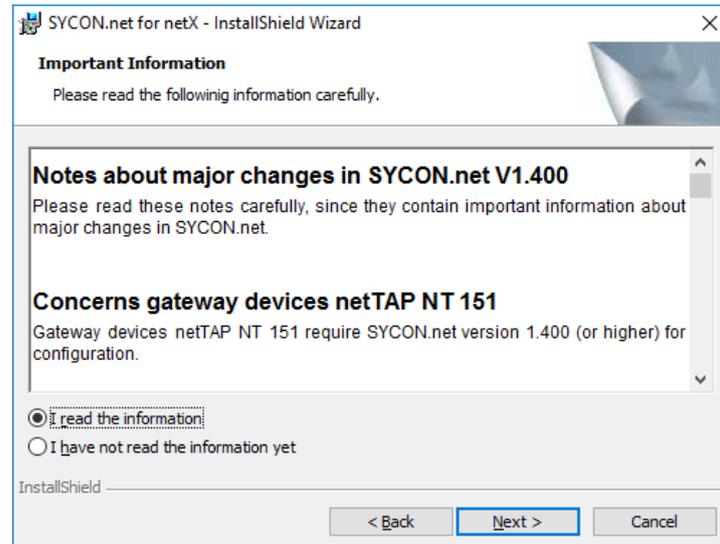


Figure 141: Notes About Major Changes in SYCON.net

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

## 6. Accept license agreement

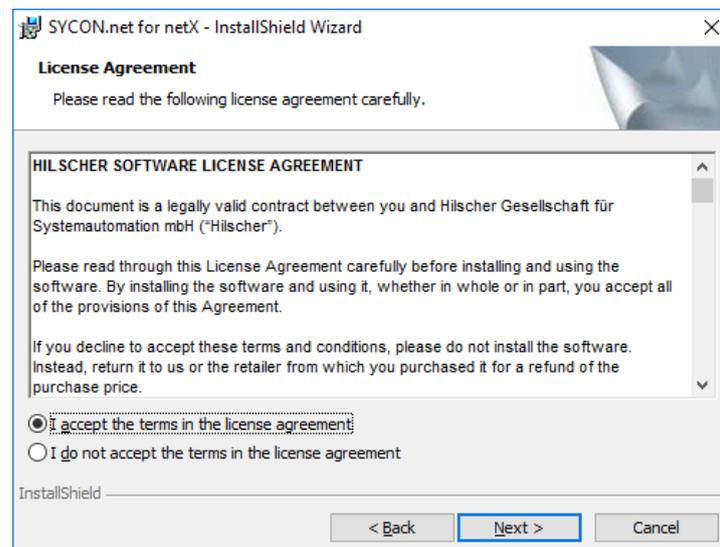
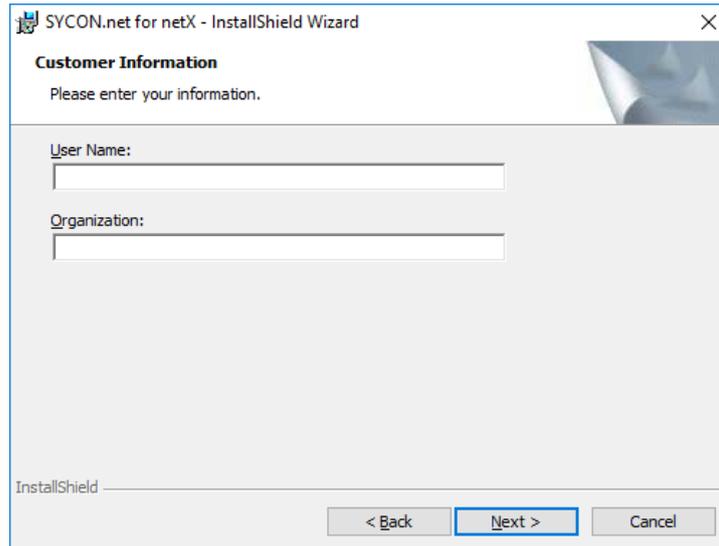


Figure 142: SYCON.net License Agreement

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

## 7. Enter user information

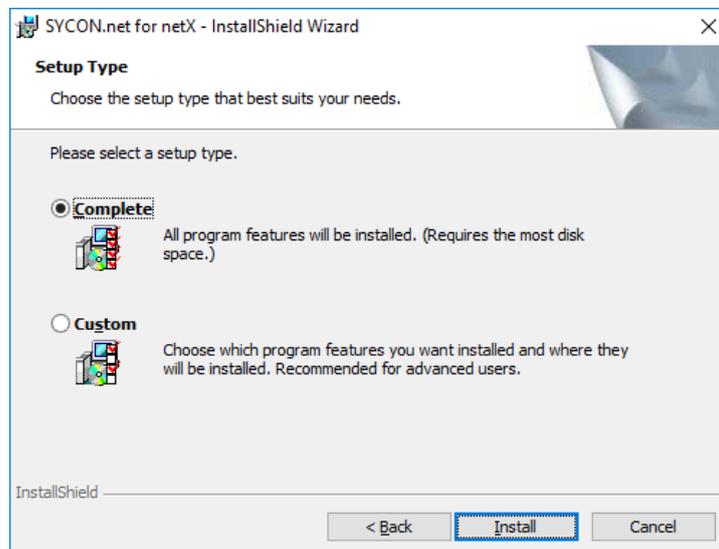


The screenshot shows a dialog box titled "SYCON.net for netX - InstallShield Wizard". The main heading is "Customer Information" with the instruction "Please enter your information." Below this are two text input fields: "User Name:" and "Organization:". At the bottom of the dialog, there are three buttons: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

Figure 143: SYCON.net Customer Information

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

## 8. Select setup type



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

Figure 144: SYCON.net Setup Type

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

## 9. Installation

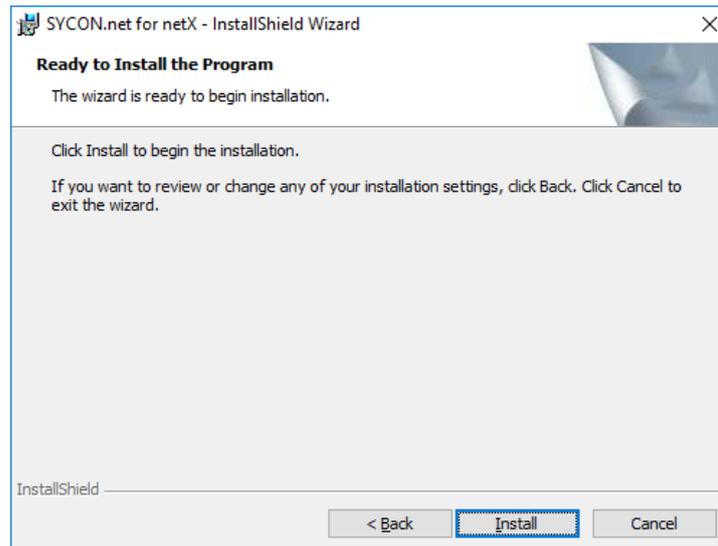


Figure 145: SYCON.net Start Installation

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

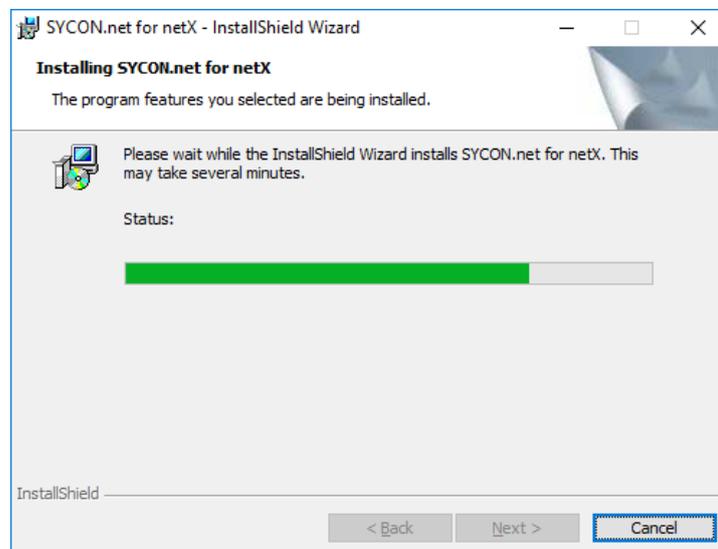


Figure 146: SYCON.net Installation Status

## 10. Finish installation

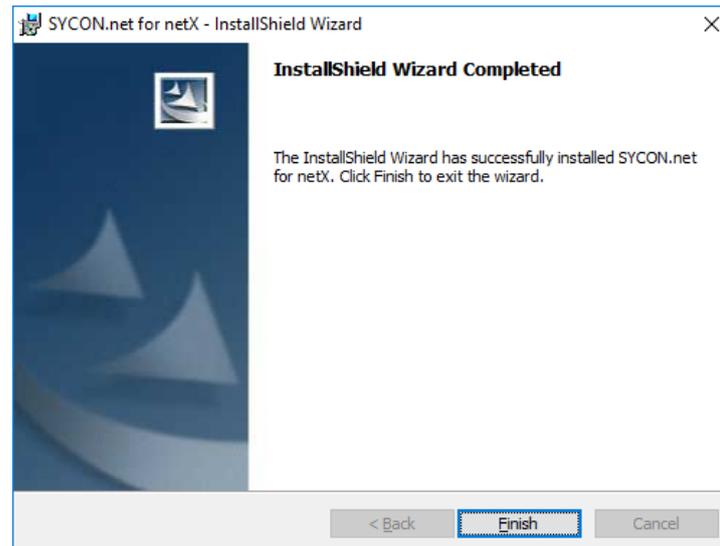


Figure 147: SYCON.net Installation Finish

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

## 5.6 Uninstalling under Windows XP

### Requirements



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

### Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



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

### Steps for Uninstalling

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

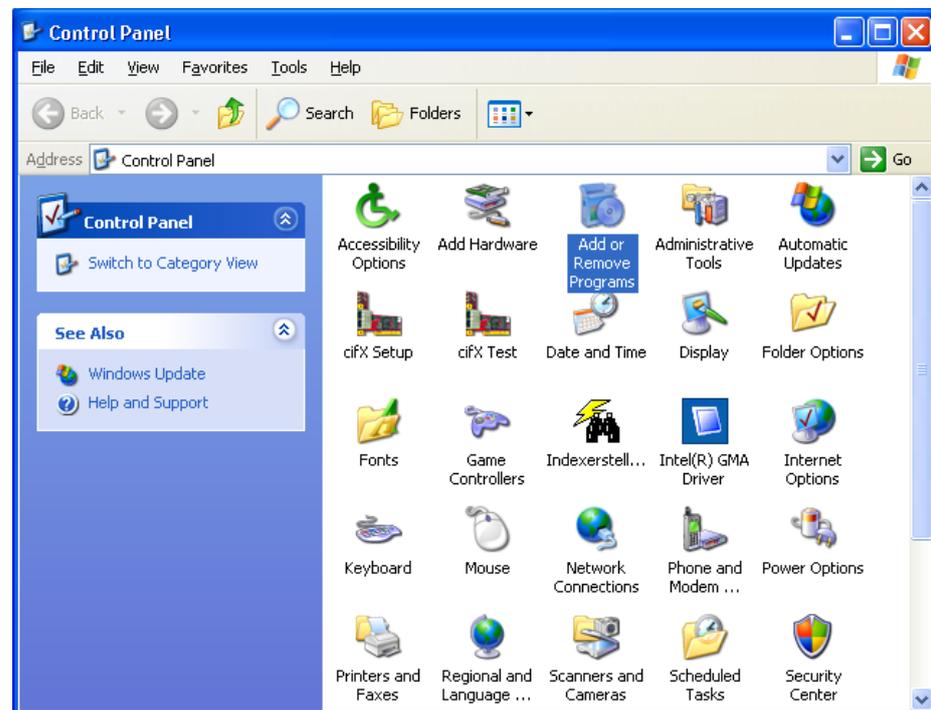


Figure 148: Windows Control Panel - Add or Remove Programs

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

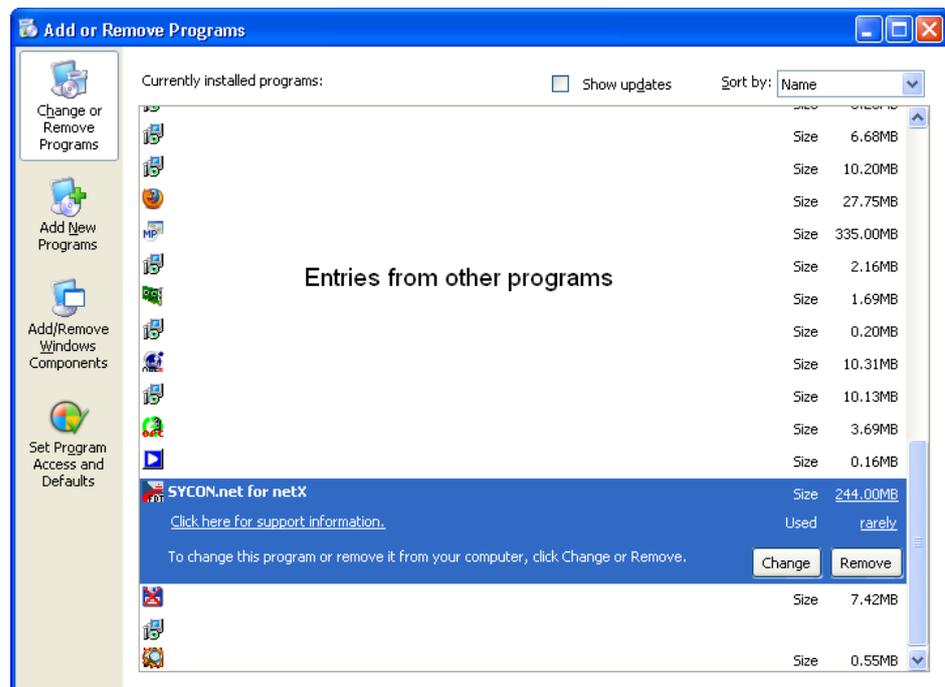


Figure 149: Windows – Add or Remove Programs

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

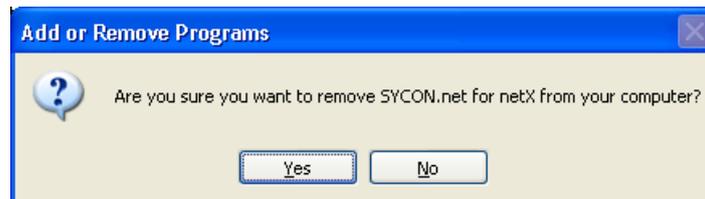


Figure 150: SYCON.net Confirmation Dialog

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

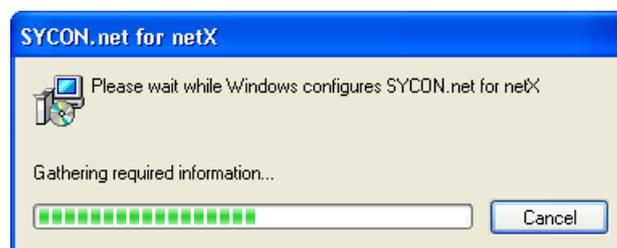


Figure 151: SYCON.net Uninstalling Progress

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

## 5.7 Uninstalling under Windows 7

### Requirements



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

### Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



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

### Steps for Uninstalling

1. Open **Start**

- Click on **Start**



Figure 152: Start > Control Panel

- Click on **Control Panel**.

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

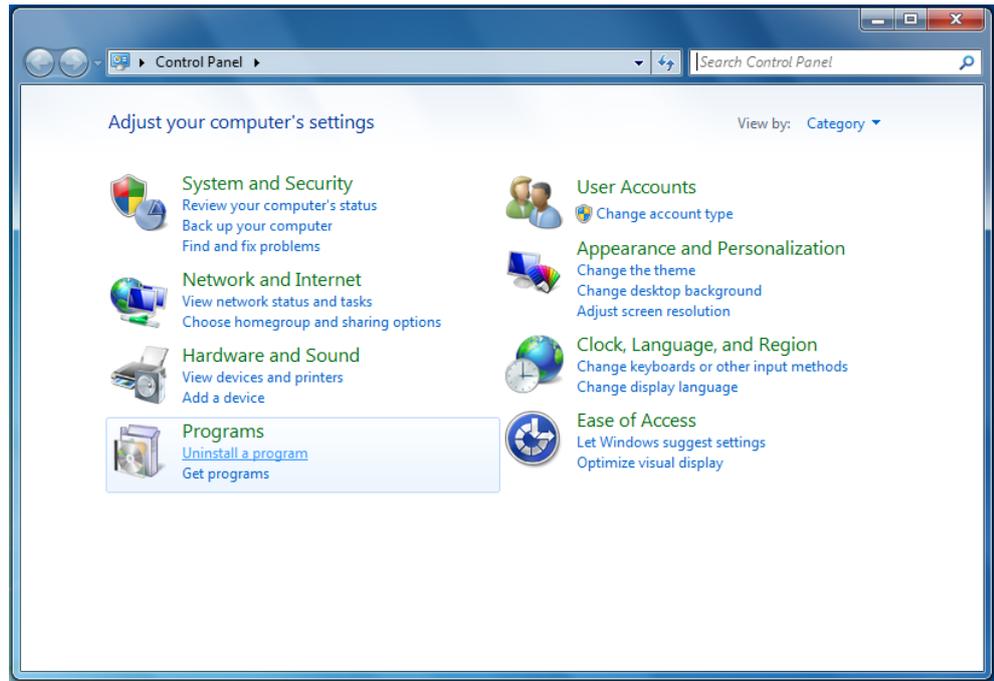


Figure 153: Window Adjust your Computer's Settings

2. Click on **Uninstall program**.

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

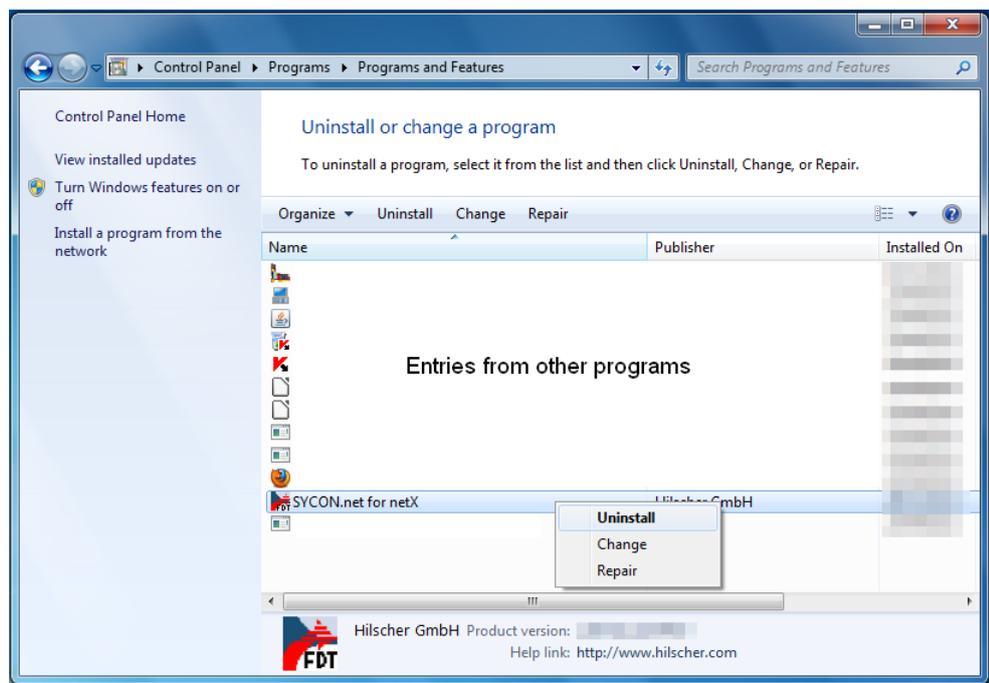


Figure 154: Control Panel - Uninstall or Change Programs

### 3. Uninstalling SYCON.net.

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

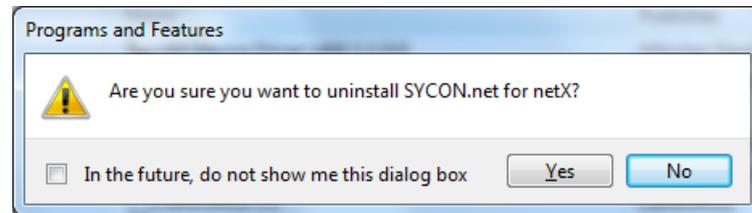


Figure 155: Programs and Features

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

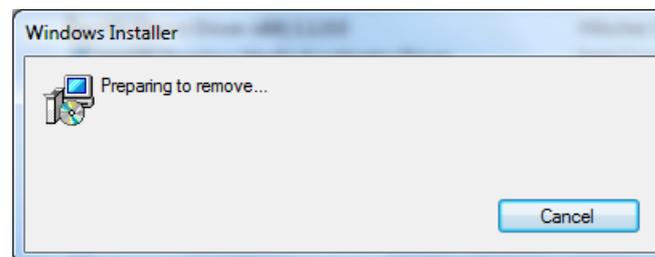


Figure 156: Windows Installer - Preparing to Remove

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

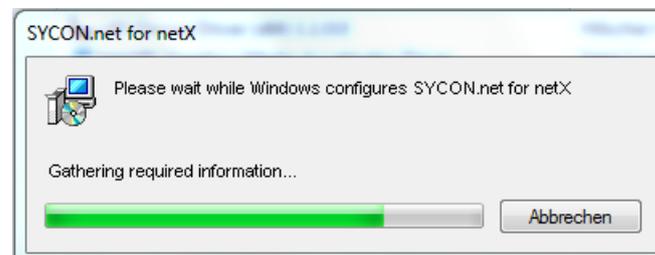


Figure 157: SYCON.net Uninstalling Progress

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

## 5.8 Uninstalling under Windows 8

### Requirements



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

### Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



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

### Steps for Uninstalling

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



Figure 158: Start Screen Windows 8

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

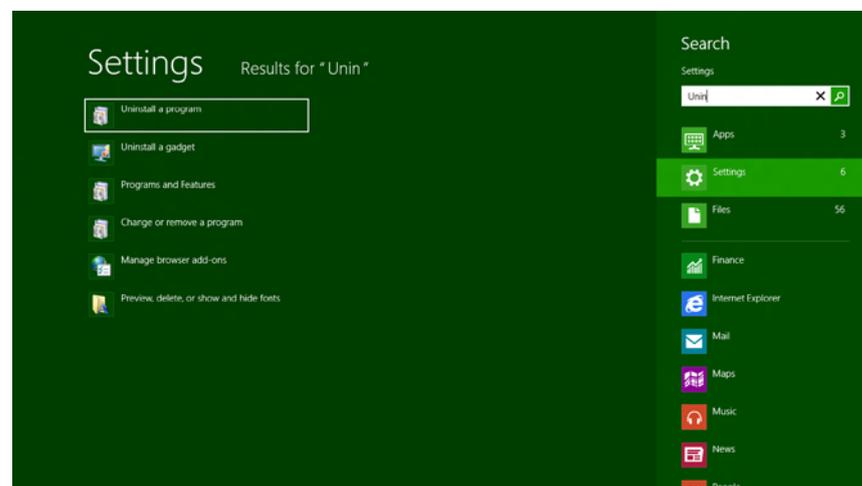


Figure 159: Uninstall a program

## 2. Click on **Uninstall program**.

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

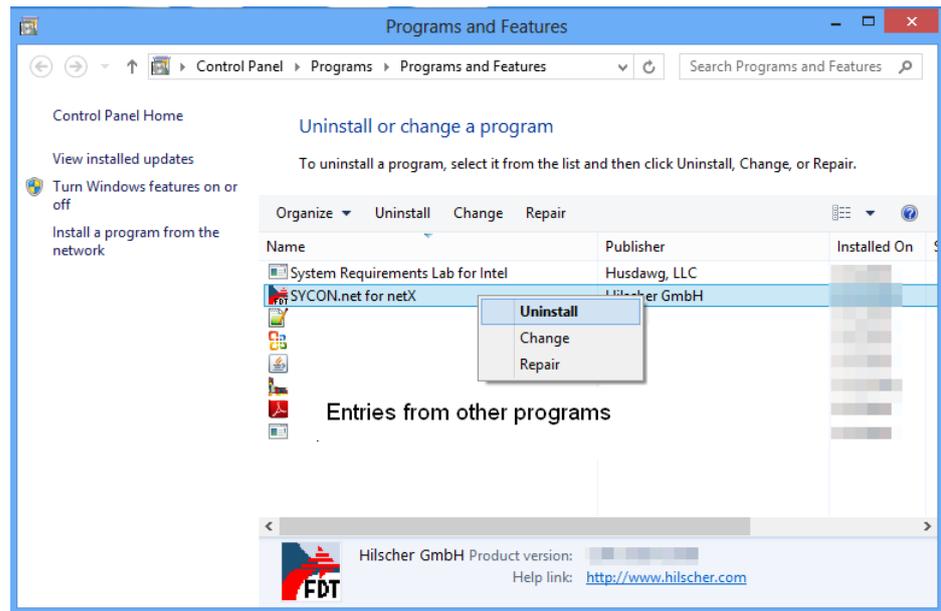


Figure 160: Control Panel - Uninstall or Change Programs

## 3. Uninstalling SYCON.net.

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

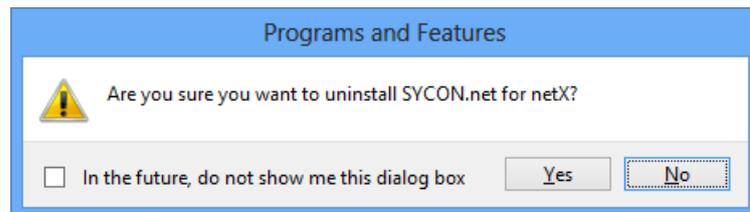


Figure 161: Programs and Features

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

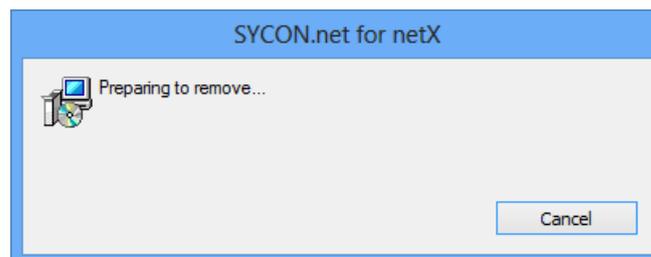


Figure 162: Windows Installer - Preparing to Remove

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

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

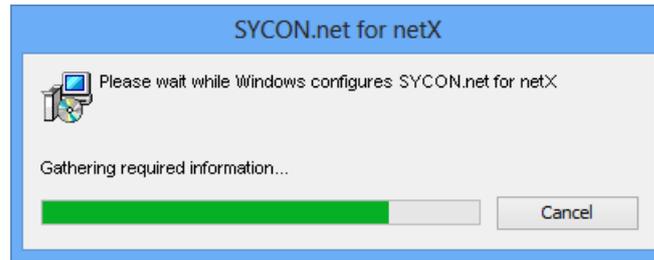


Figure 163: SYCON.net Uninstalling Progress

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

## 5.9 Uninstalling under Windows 10

### Requirements



**Note:** You need administrator privileges under Windows® 10 to uninstall the configuration software SYCON.net from your PC device.

### Preparation

In order to uninstall the configuration software SYCON.net:

- Close all application programs.



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

### Steps for Uninstalling

1. Open Windows® 10 Start Screen.

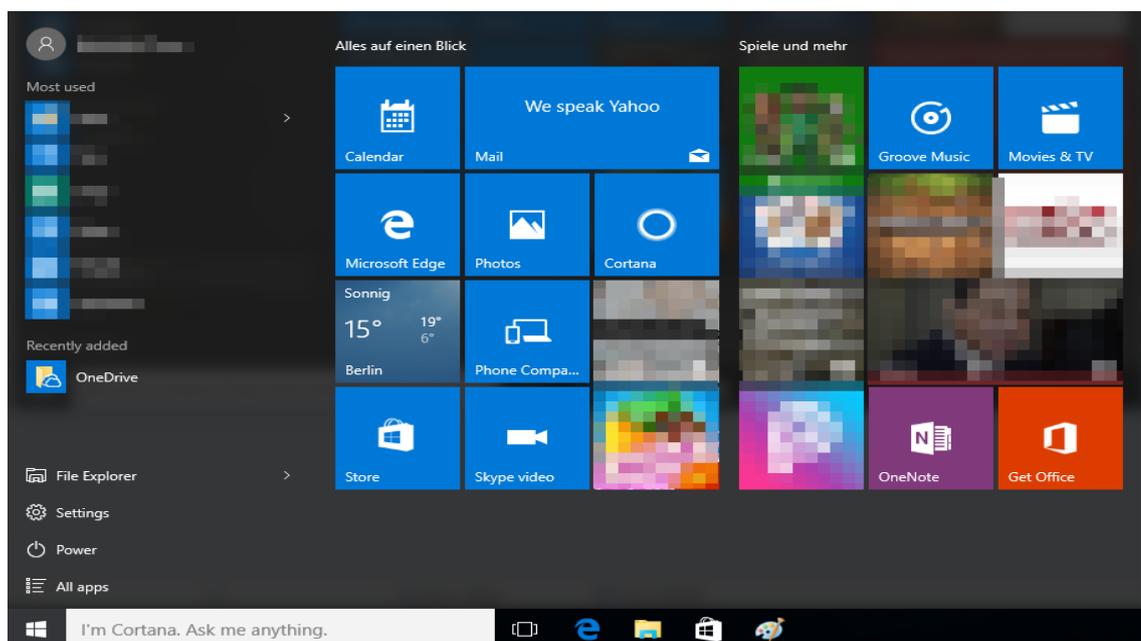


Figure 164: Start Screen Windows 10

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

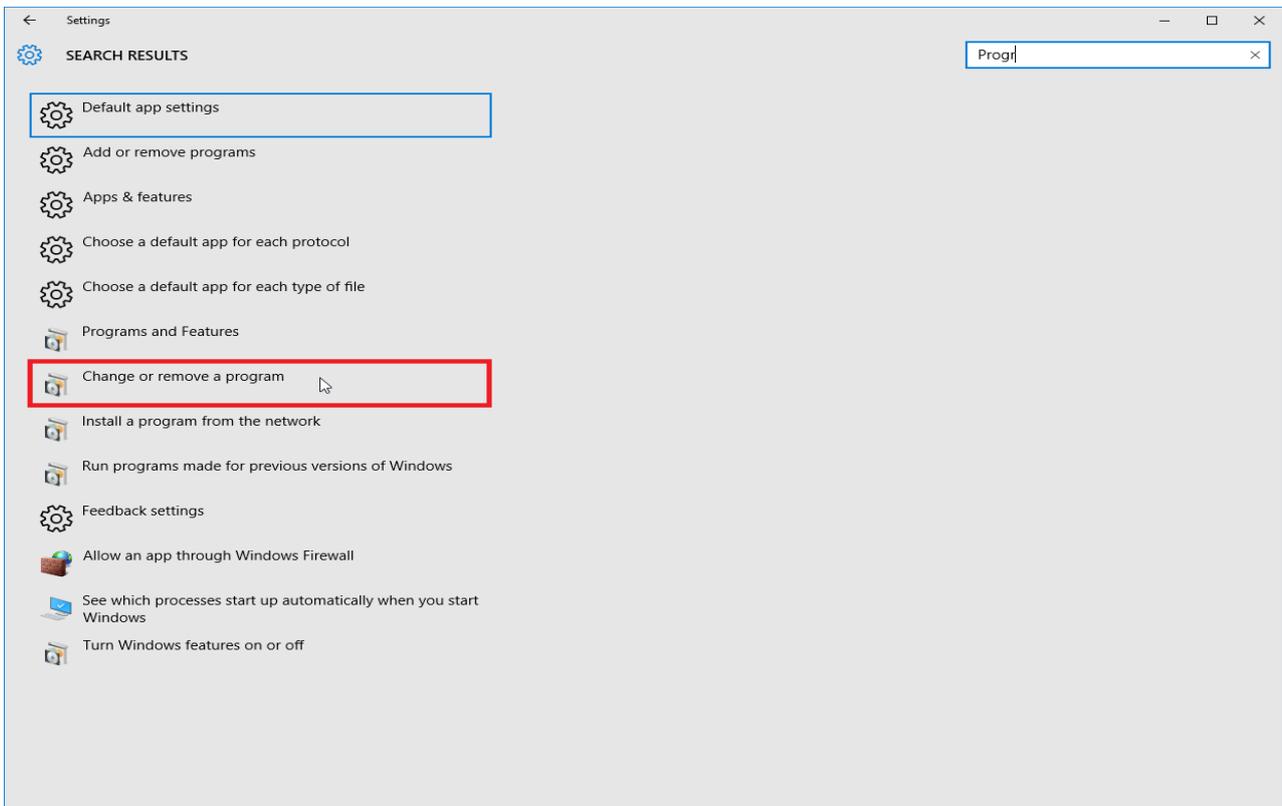


Figure 165: Uninstall a program

2. Click on **Uninstall program**.

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

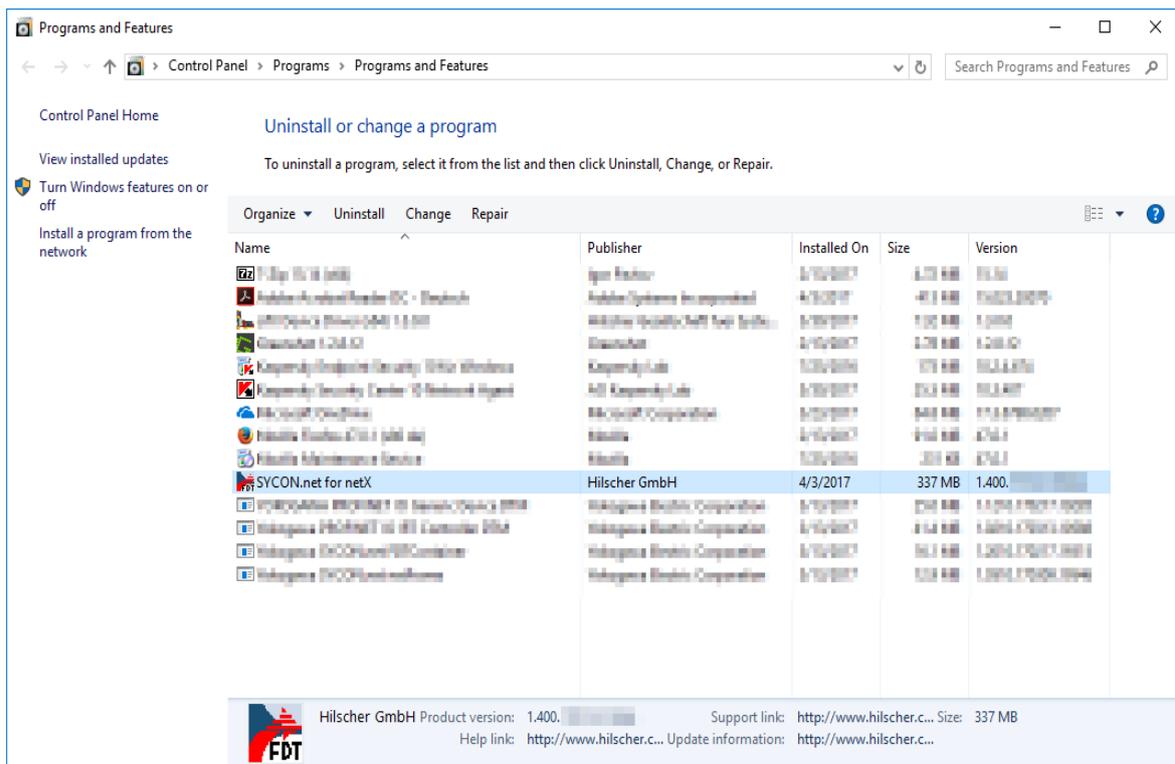


Figure 166: Control Panel - Uninstall or Change Programs

### 3. Uninstalling SYCON.net.

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

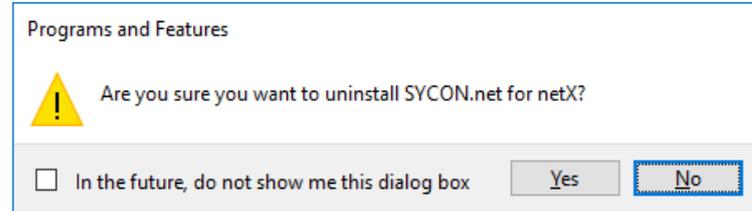


Figure 167: Programs and Features

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

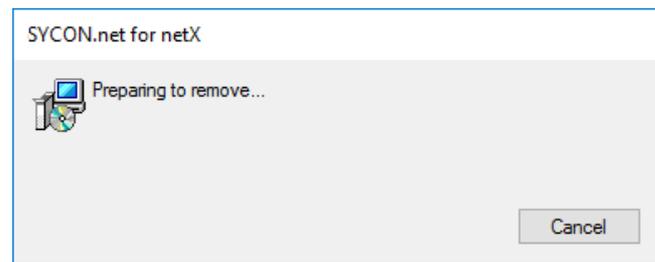


Figure 168: Windows Installer - Preparing to Remove

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

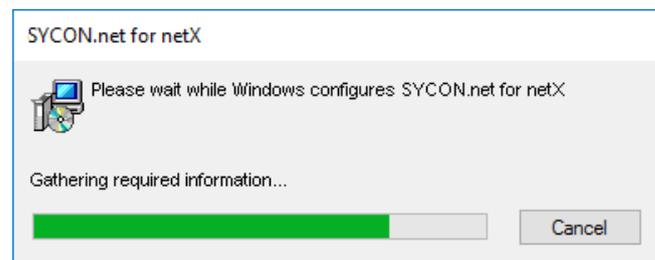


Figure 169: SYCON.net Uninstalling Progress

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

## 6 netX Configuration Tool

### 6.1 System Requirements

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

- PC with 586-, Pentium® processor or higher
- Windows® XP, Windows® Vista (32-Bit) SP2, Windows® 7 (32- and 64-Bit) SP1, Windows® 8 (32- and 64-Bit), Windows® 10 (32- and 64-Bit)
- Administrator privilege required for installation
- Free space on hard disk: 50 MByte
- USB (optional)
- RAM: min. 256 MByte
- Graphics resolution: min 1024 x 768 pixels
- Keyboard and mouse
- In order to download the product DVD, you need an Internet access.

### 6.2 Online Help

The netX Configuration Tool contains an integrated online help facility.



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A description of the user interface of the configuration program netX Configuration Tool and for configuration and diagnosis of Slave devices cifX, comX and netJACK using this tool, see the Operating Instruction Manual netX Configuration Tool, Configuration of Hilscher netX based Slave Devices (available as online help in netX Configuration Tool)

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

## 6.3 Installation under Windows XP

### Requirement

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



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



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

### Preparation

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 170: Start the Installation for the Slave Configuration Tool netX Configuration Tool

- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.

Or:

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

➤ The netX Configuration Tool installation setup is started.



Figure 171: netX Setup and Configuration

### Installation Steps

#### 3. netX Configuration Tool Setup Wizard

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

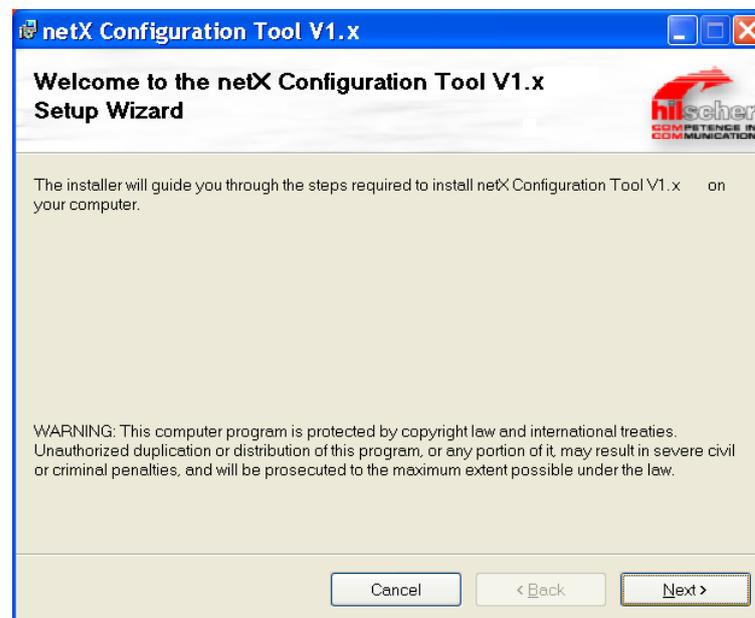


Figure 172: netX Configuration Tool Setup Wizard

➤ Click on **Next**.

## 4. Select Installation Folder

➤ **Select Installation Folder** is displayed.

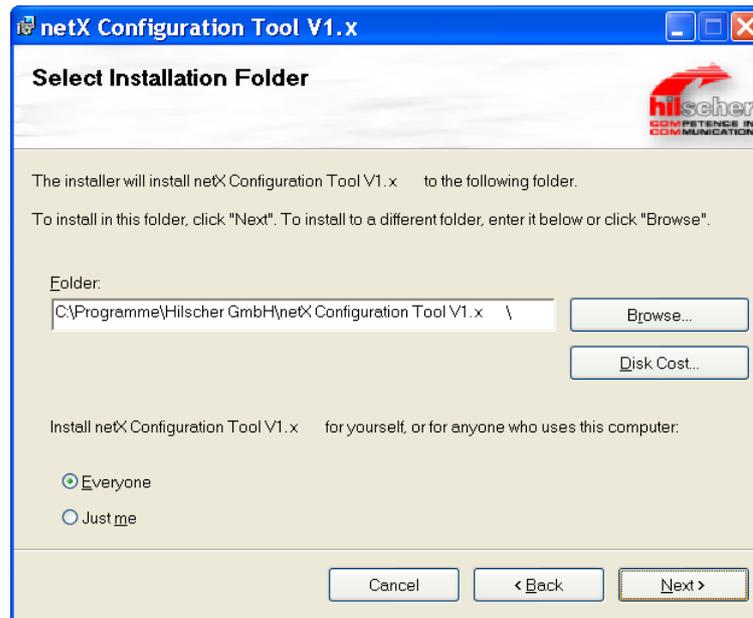


Figure 173: netX Configuration Tool Setup Wizard

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

Or:

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

Or:

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

➤ **Browse for Folder** is displayed.

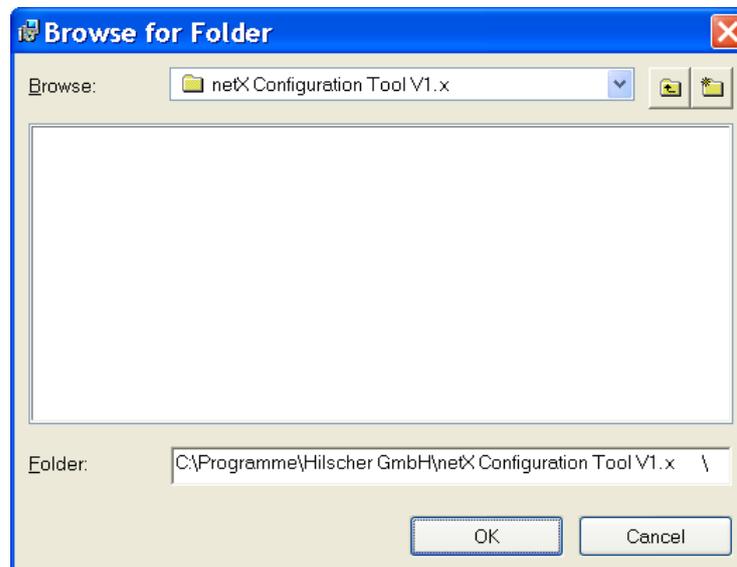


Figure 174: Browse for Folder

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

## 5. Check Disk Space

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

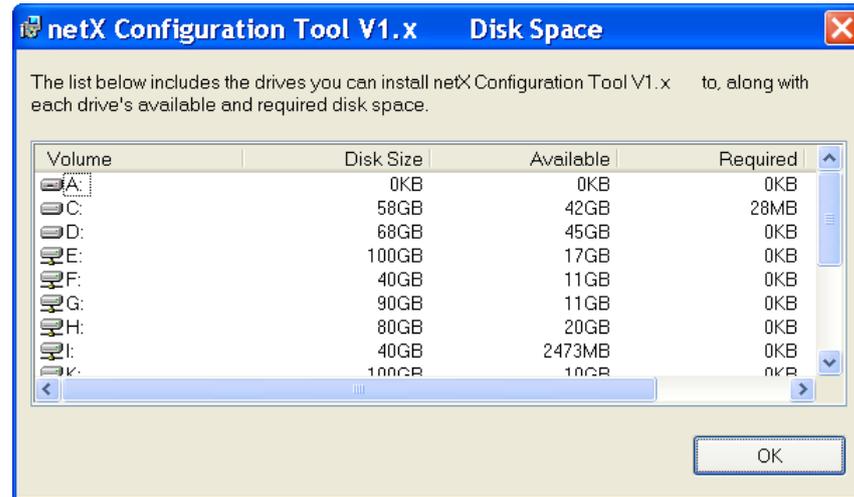


Figure 175: Disk Space

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

## 6. Starting Installation

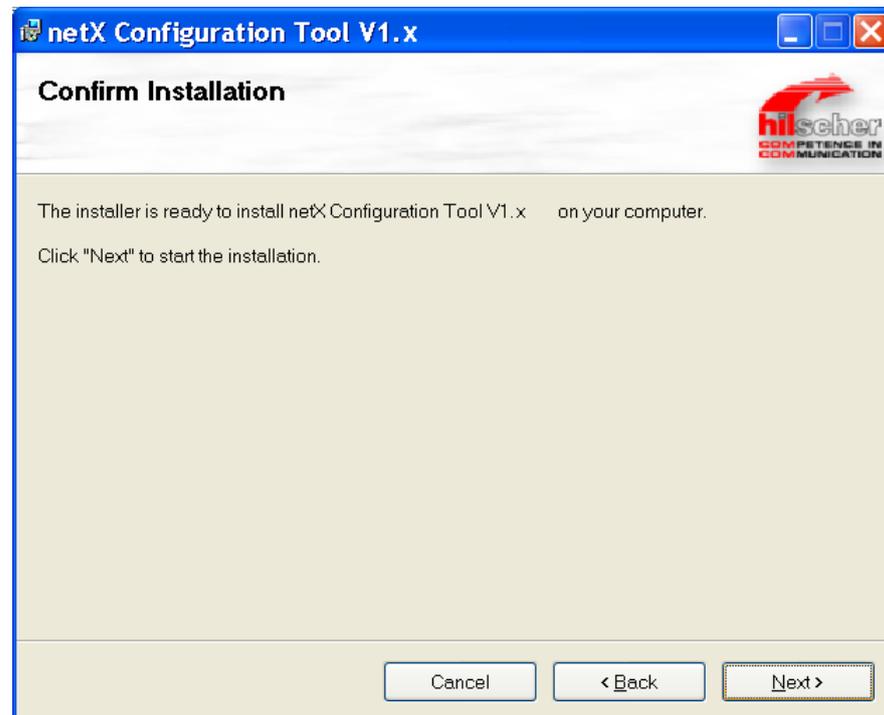


Figure 176: Confirm Installation

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

## 7. Installation Progress

- netX Configuration Tool is being installed.

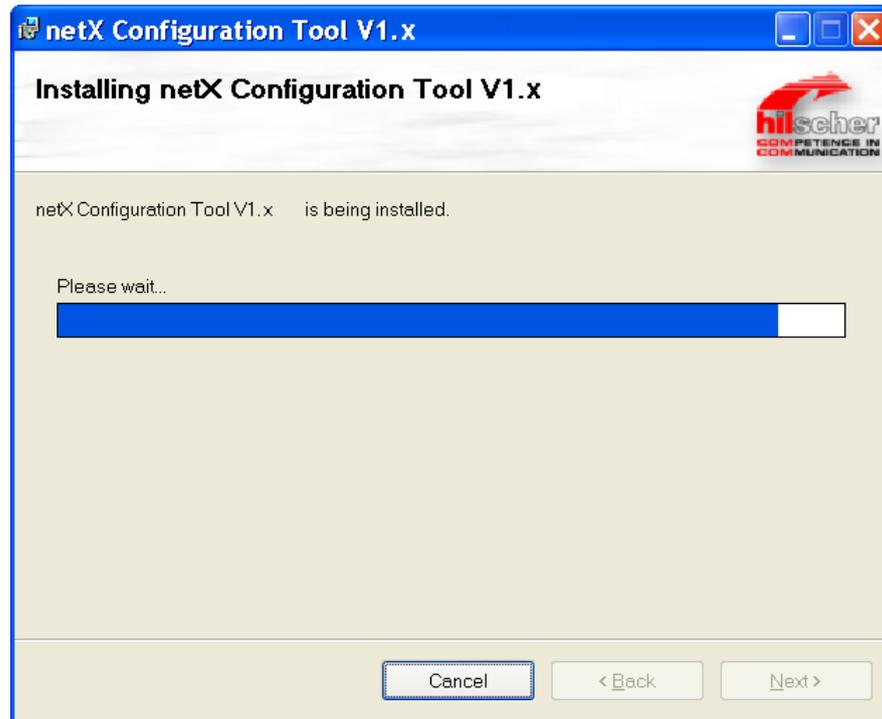


Figure 177: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.
8. Installation Complete
- The netX Configuration Tool installation is complete.

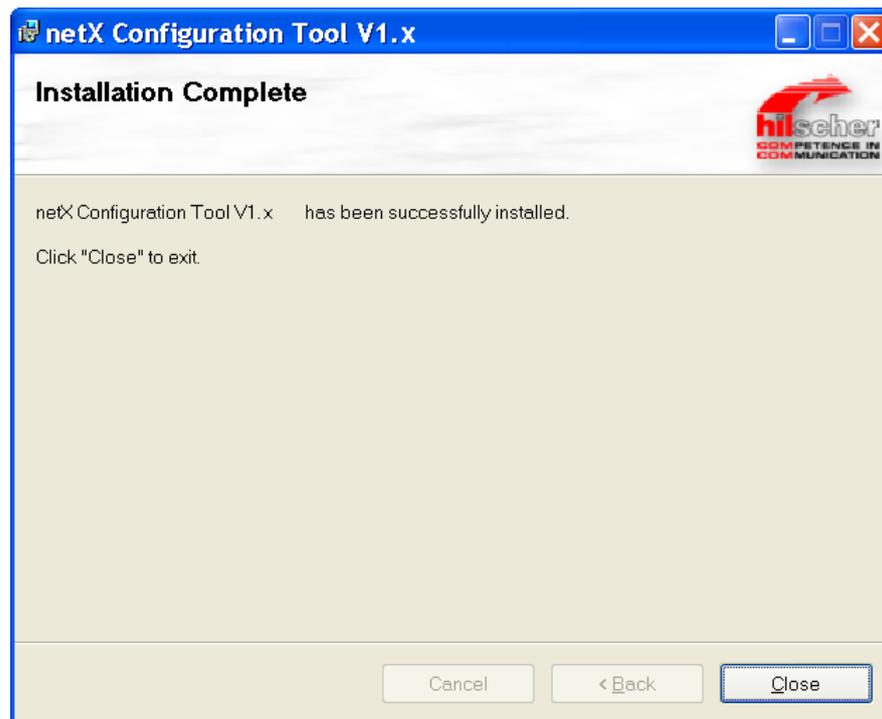


Figure 178: netX Configuration Tool - Installation complete

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

## 6.4 Installation under Windows 7

### Requirement

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



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



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

### Preparation

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 179: Start the Installation for the Slave Configuration Tool netX Configuration Tool

- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.

Or:

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



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

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

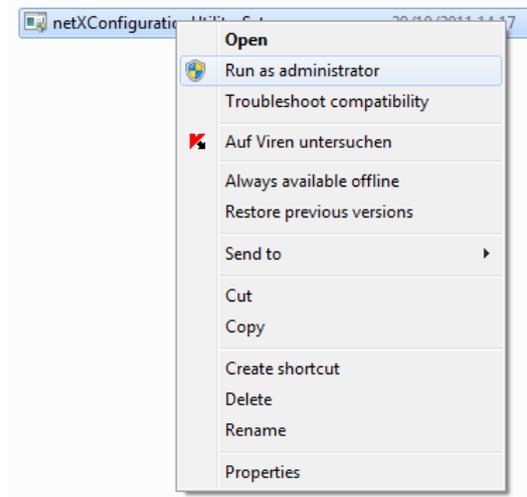


Figure 180: SYCONnet netX setup.exe - Run as Administrator

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



Figure 181: netX Setup and Configuration

## Installation Steps

### 3. netX Configuration Tool Setup Wizard

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

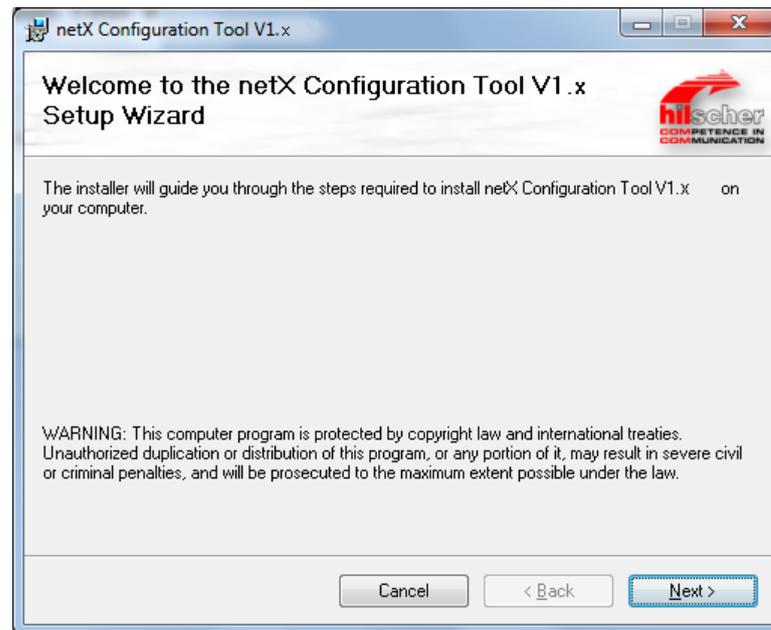


Figure 182: netX Configuration Tool Setup Wizard

➤ Click on **Next**.

### 4. Select Installation Folder

➤ **Select Installation Folder** is displayed.

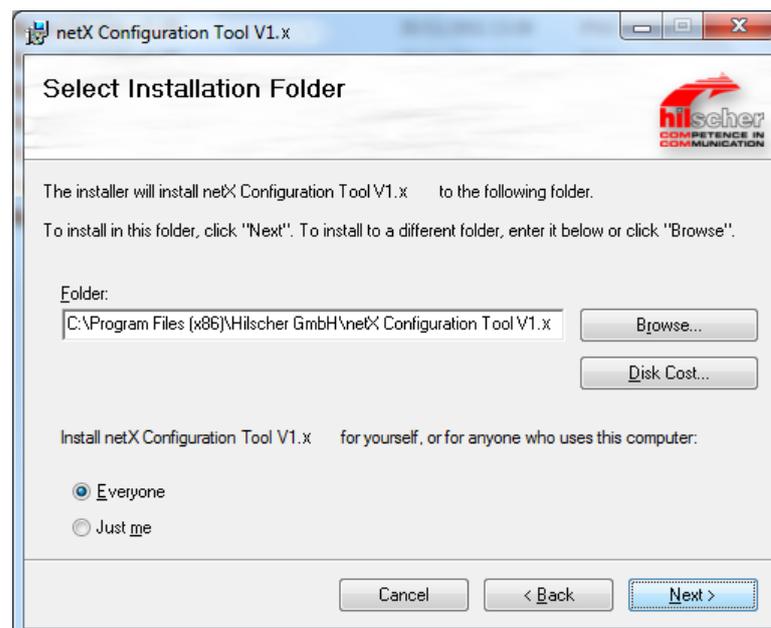


Figure 183: netX Configuration Tool Setup Wizard

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

Or:

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

Or:

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

➤ **Browse for Folder** is displayed.

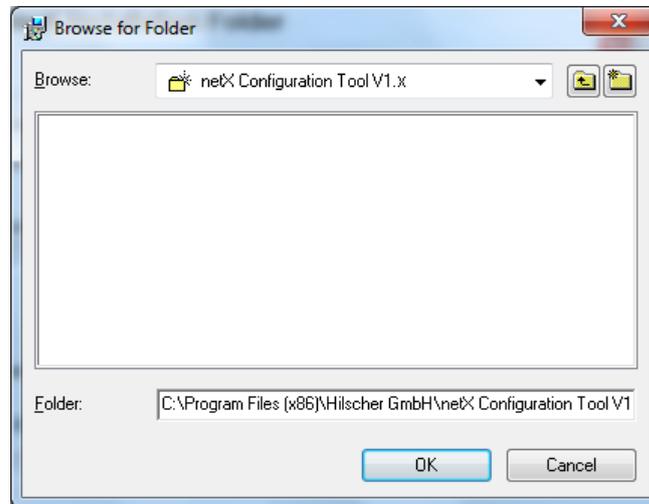


Figure 184: Browse for Folder

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

#### 5. Check Disk Space

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

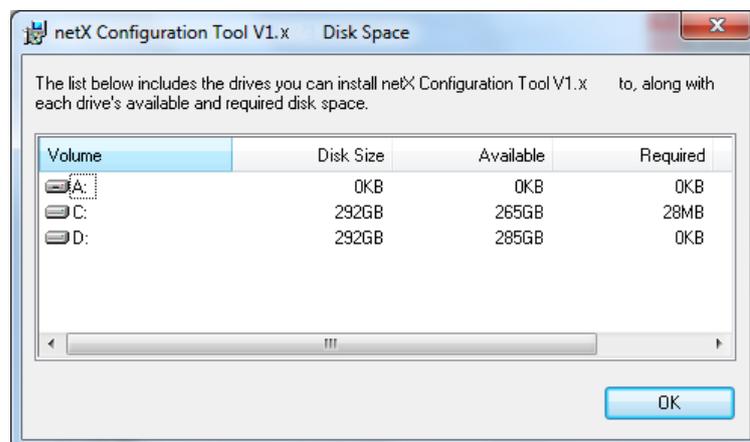


Figure 185: Disk Space

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

## 6. Starting Installation

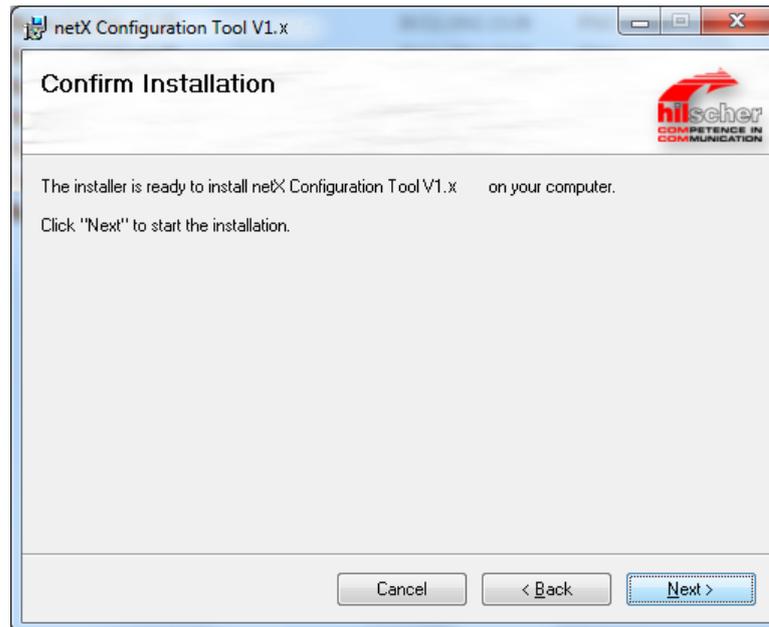


Figure 186: Confirm Installation

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

## 7. Installation Progress

- netX Configuration Tool is being installed.

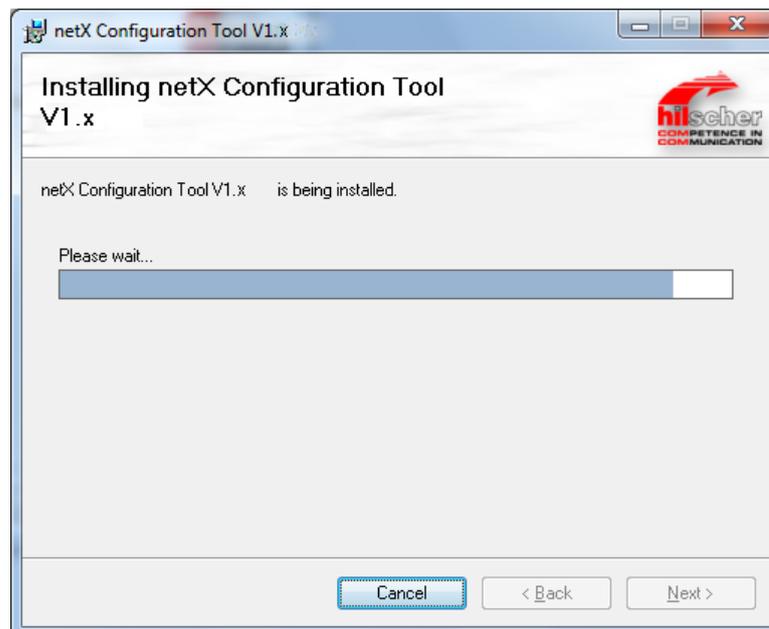


Figure 187: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.

## 8. Installation Complete

- The netX Configuration Tool installation is complete.

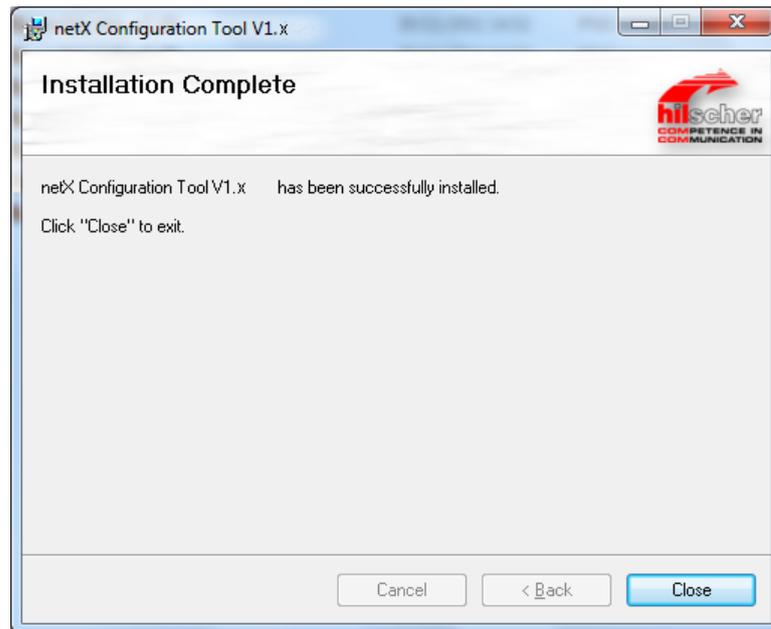


Figure 188: netX Configuration Tool - Installation complete

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

## 6.5 Installation under Windows 8

### Requirement

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



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



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

### Preparation

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.

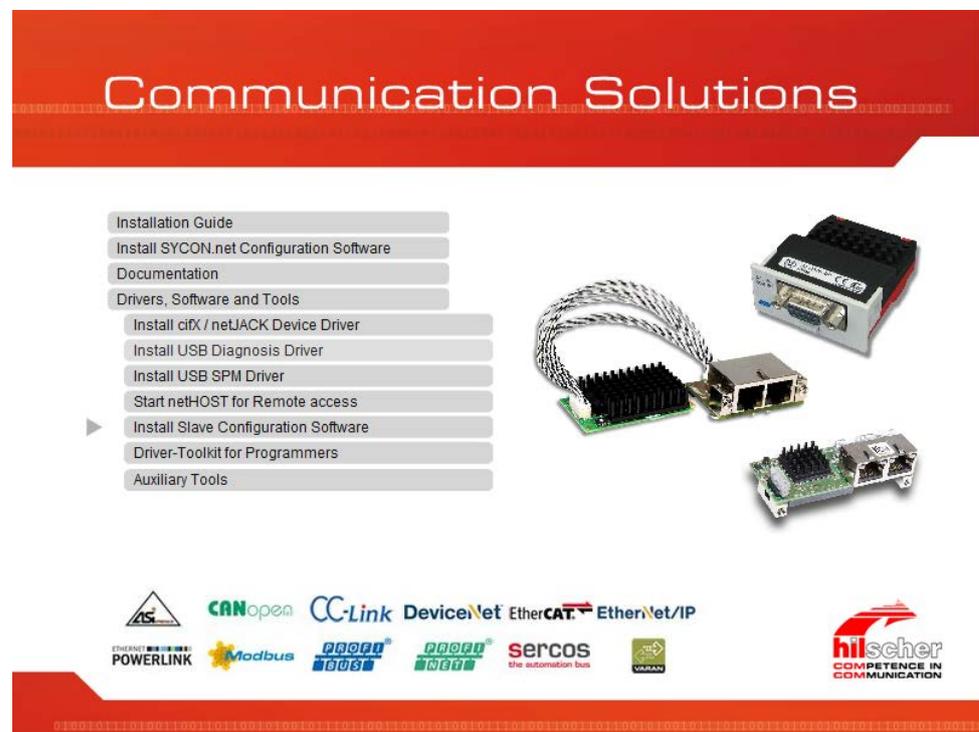


Figure 189: Start the Installation for the Slave Configuration Tool netX Configuration Tool

- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.

Or:

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



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

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

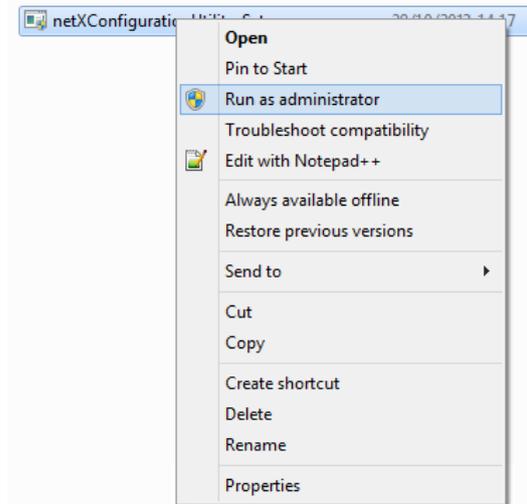


Figure 190: SYCONnet netX setup.exe - Run as Administrator

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



Figure 191: netX Setup and Configuration

## Installation Steps

### 3. netX Configuration Tool Setup Wizard

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



Figure 192: netX Configuration Tool Setup Wizard

➤ Click on **Next**.

### 4. Select Installation Folder

➤ **Select Installation Folder** is displayed.

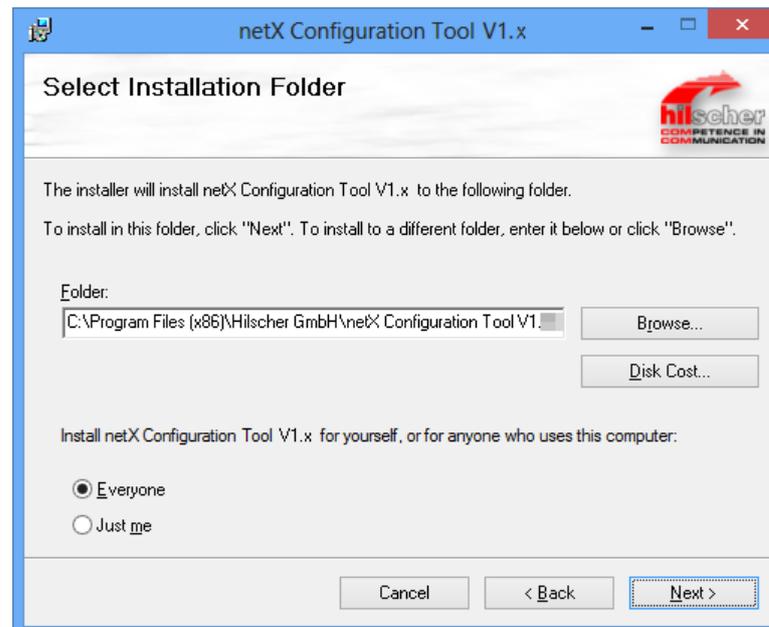


Figure 193: netX Configuration Tool Setup Wizard

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

Or:

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

Or:

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

➤ **Browse for Folder** is displayed.

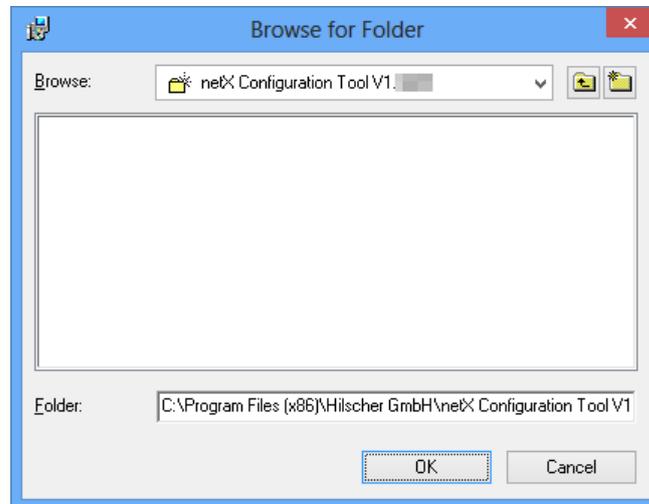


Figure 194: Browse for Folder

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

## 5. Check Disk Space

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

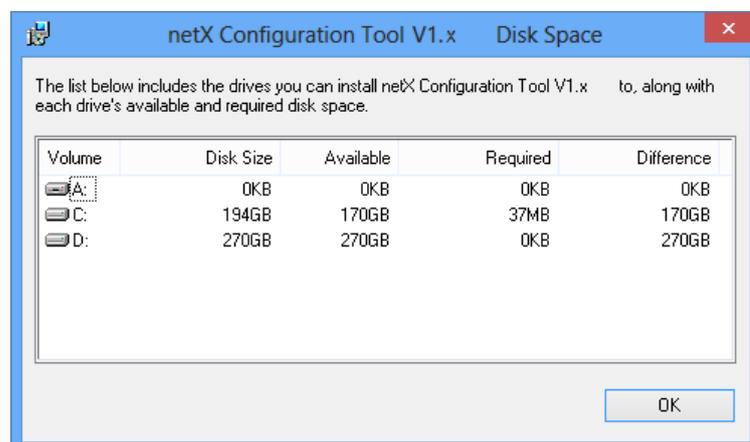


Figure 195: Disk Space

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

## 6. Starting Installation

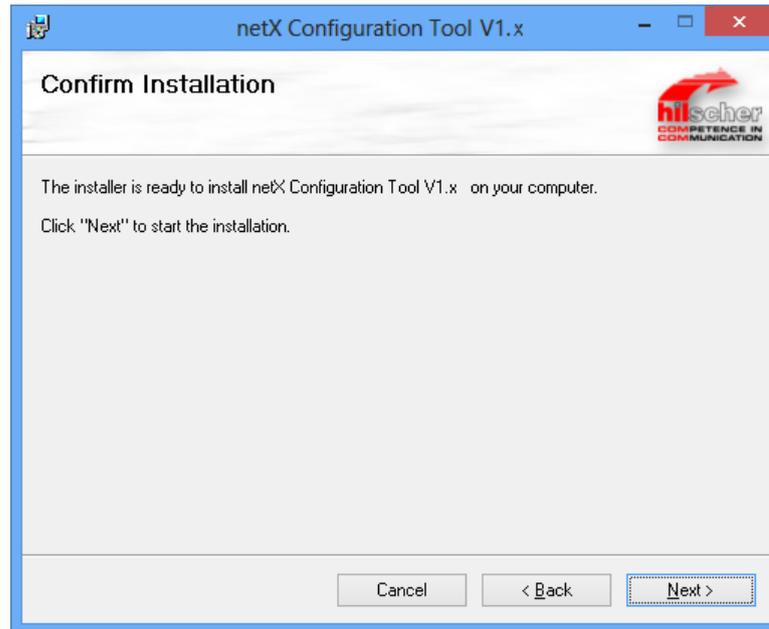


Figure 196: Confirm Installation

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

## 7. Installation Progress

- netX Configuration Tool is being installed.

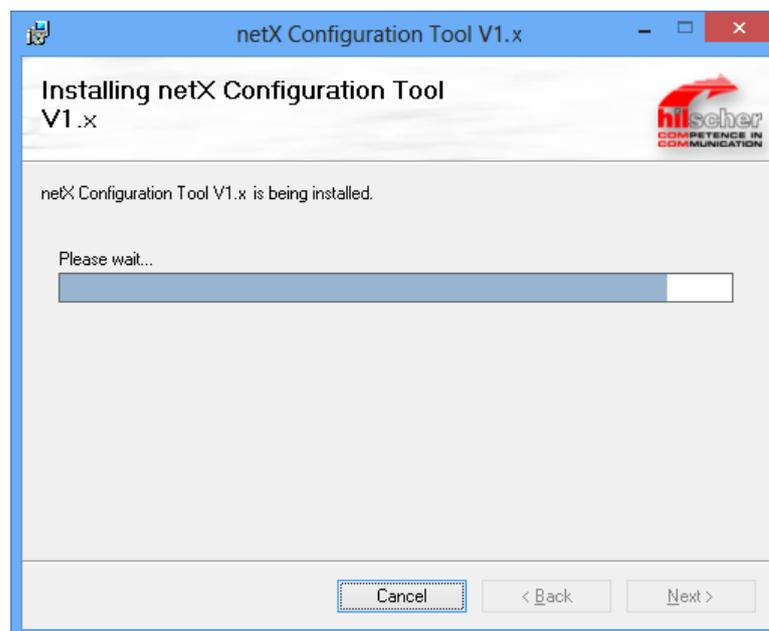


Figure 197: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.

## 8. Installation Complete

- The netX Configuration Tool installation is complete.

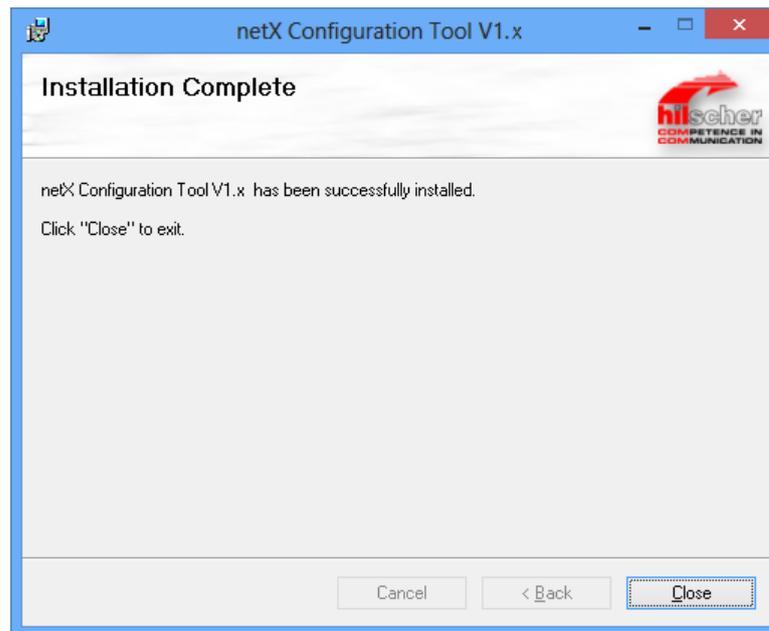


Figure 198: netX Configuration Tool - Installation complete

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

## 6.6 Installation under Windows 10

### Requirement

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



**Note:** You need administrator privileges under Windows® 10 to install the Slave configuration tool netX Configuration Tool on your PC.



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

### Preparation

1. Close all application programs on the system and download the Communication Solutions DVD as a ZIP-file to the local hard disk of your PC and unpack it.
  2. Double-click the  **Communication-Solutions.exe** file in the root directory of the DVD to open the Autostart menu.
- The startup screen **Communication Solutions** is displayed.



Figure 199: Start the Installation for the Slave Configuration Tool netX Configuration Tool

- Click on **Drivers, Software and Tools > Install Slave Configuration Software**.

Or:

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



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

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

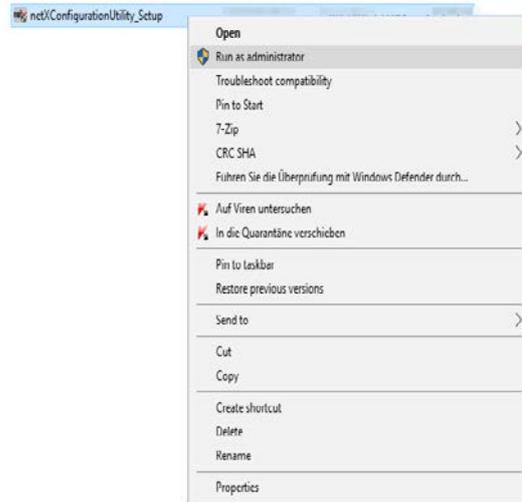


Figure 200: SYCONnet netX setup.exe - Run as Administrator

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



Figure 201: netX Setup and Configuration

## Installation Steps

### 3. netX Configuration Tool Setup Wizard

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

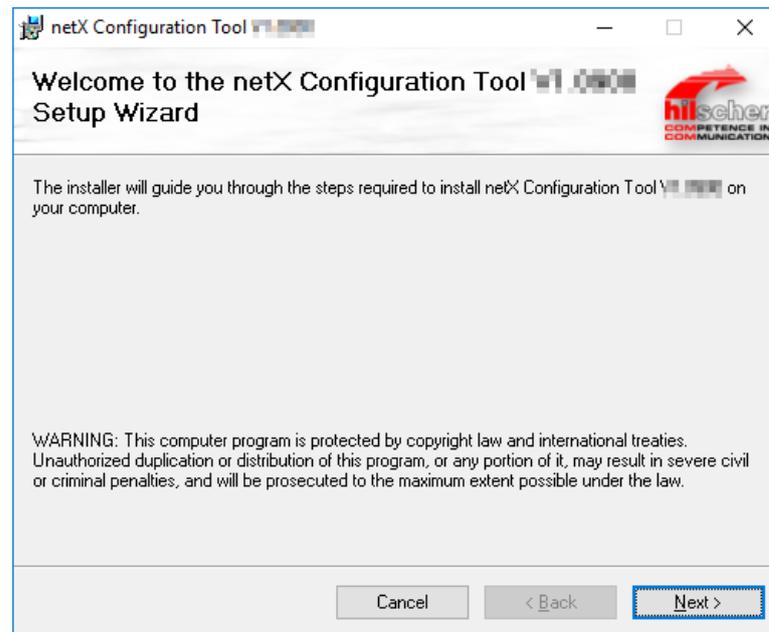


Figure 202: netX Configuration Tool Setup Wizard

➤ Click on **Next**.

### 4. Select Installation Folder

➤ **Select Installation Folder** is displayed.

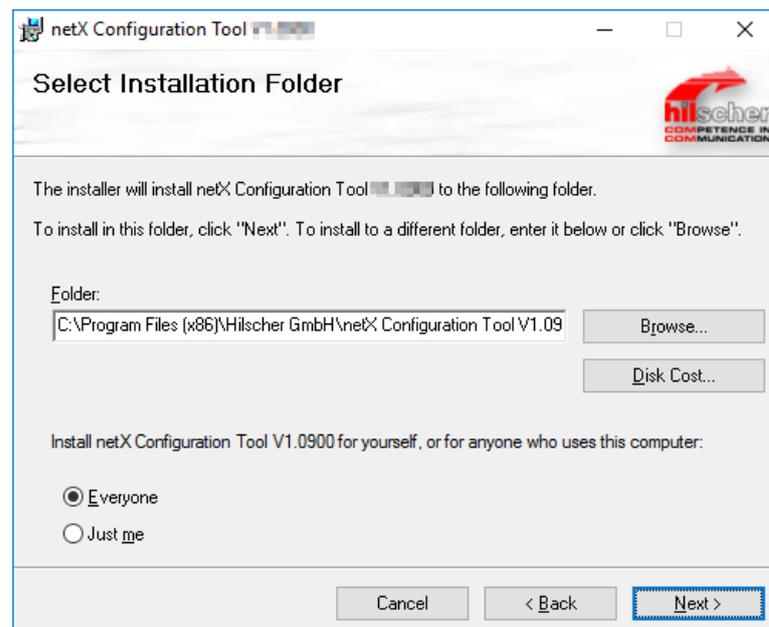


Figure 203: netX Configuration Tool Setup Wizard

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

Or:

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

Or:

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

➤ **Browse for Folder** is displayed.

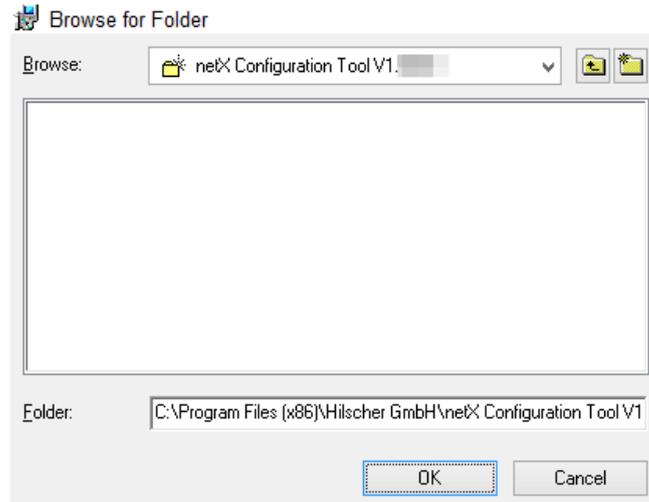


Figure 204: Browse for Folder

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

## 5. Check Disk Space

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

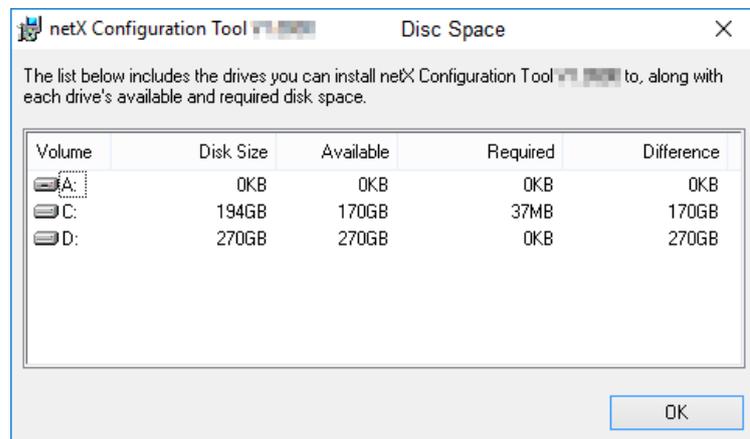


Figure 205: Disk Space

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

### 6. Starting Installation

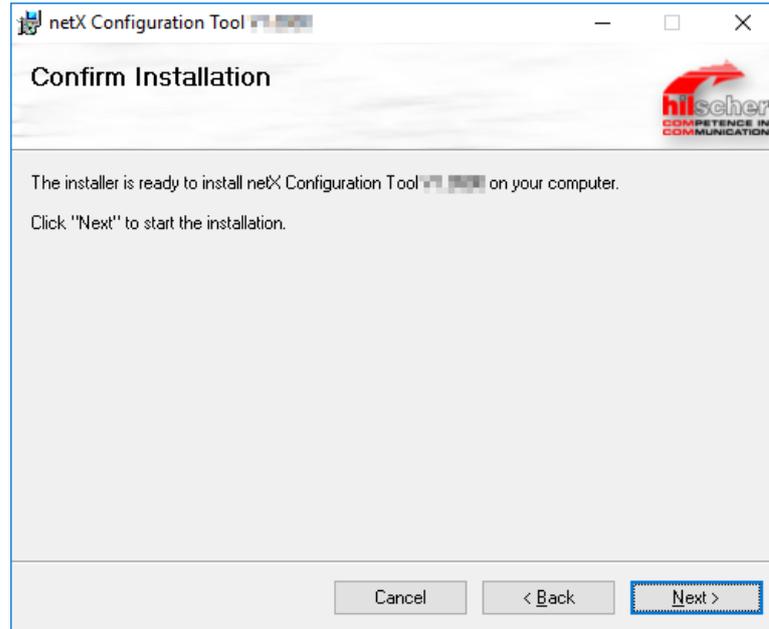


Figure 206: Confirm Installation

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

### 7. Installation Progress

- netX Configuration Tool is being installed.

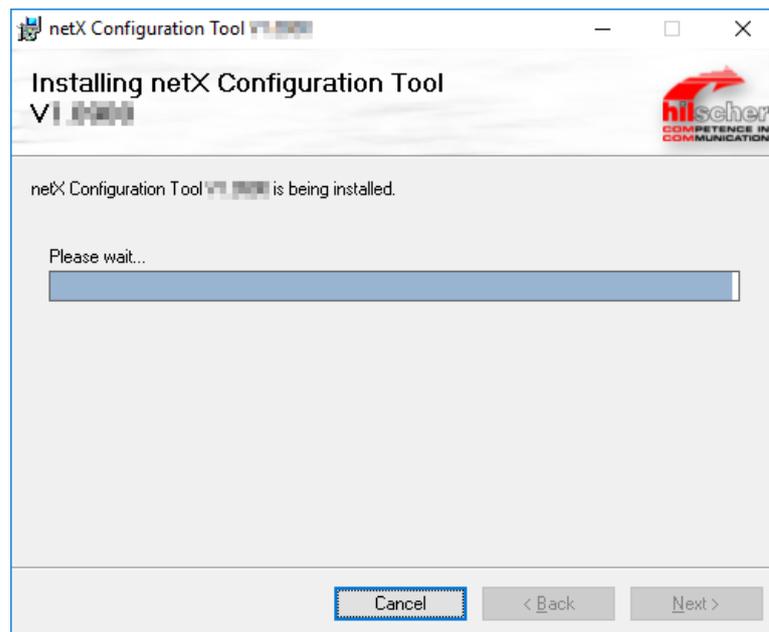


Figure 207: netX Configuration Tool - Installation Progress

- Wait until the installation has been completed.

## 8. Installation Complete

➤ The netX Configuration Tool installation is complete.

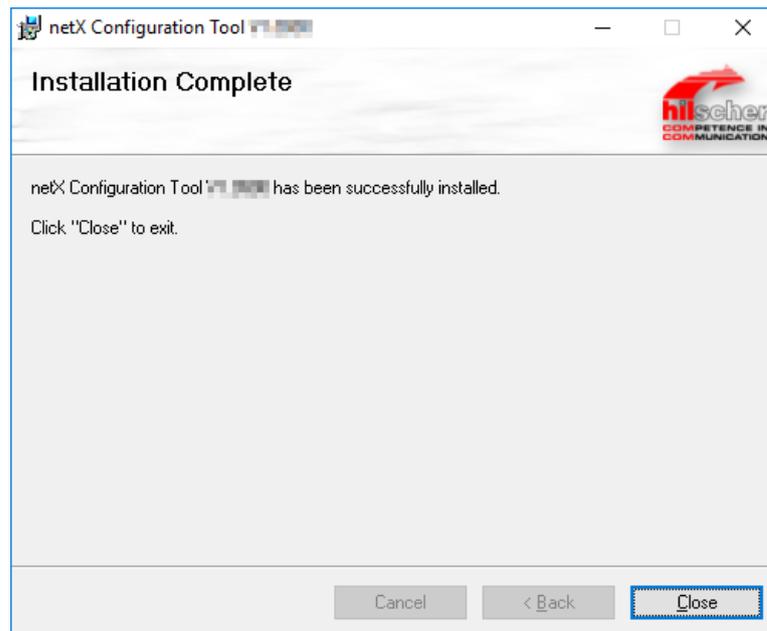


Figure 208: netX Configuration Tool - Installation complete

➤ Click on **Close**, to finish the installation.

➤ netX Configuration Tool is installed and can be started via **Start > All Programs > Hilscher GmbH > netX Configuration Tool**.

## 6.7 Uninstalling under Windows XP

### Requirements



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

### Preparation

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

- Close all application programs.

### Steps for Uninstalling

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

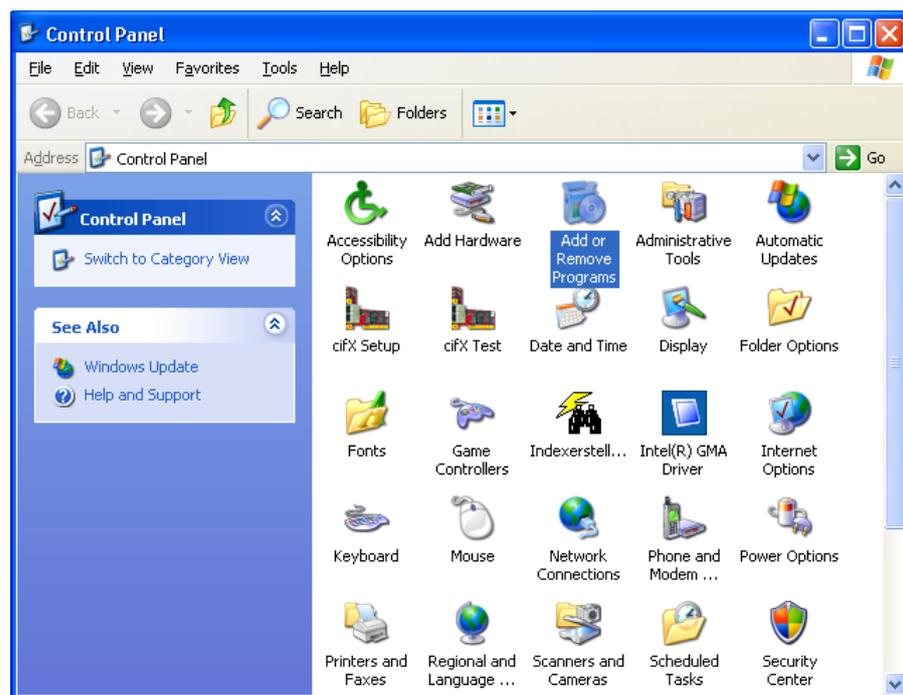


Figure 209: Windows Control Panel - Add or Remove Programs

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

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

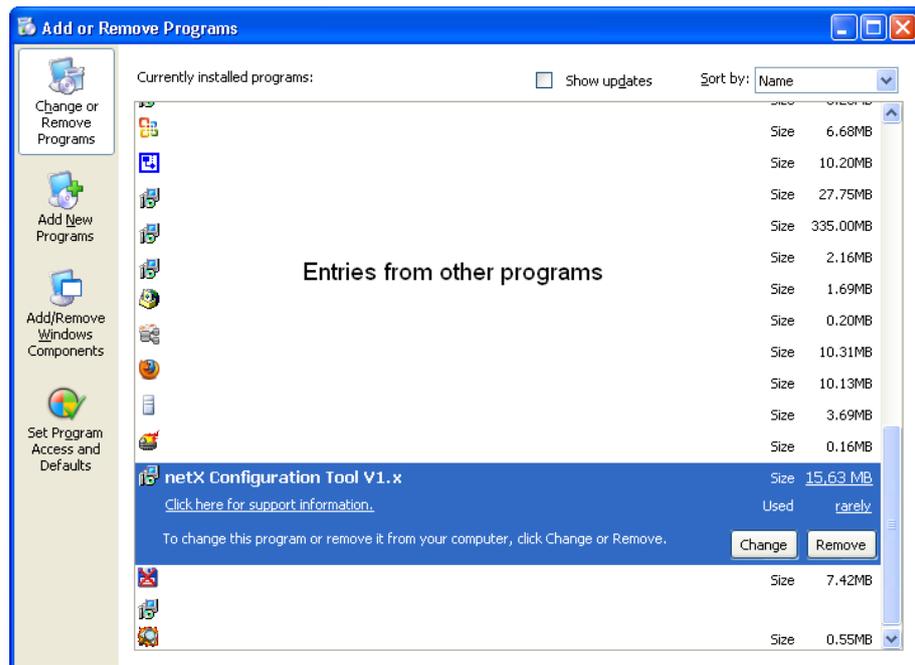


Figure 210: Windows – Add or Remove Programs

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

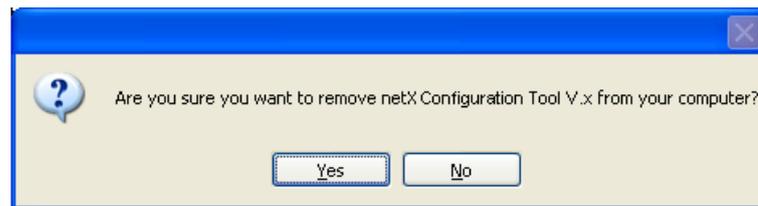


Figure 211: netX Configuration Tool Confirmation Box

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

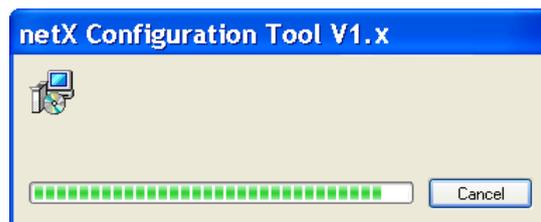


Figure 212: netX Configuration Tool Uninstalling Progress

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

## 6.8 Uninstalling under Windows 7

### Requirements



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

### Preparation

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

- Close all application programs.

### Steps for Uninstalling

1. Open **Start**

- Click on **Start**



Figure 213: Start > Control Panel

- Click on **Control Panel**.



➤ At first, a confirmation dialog appears:

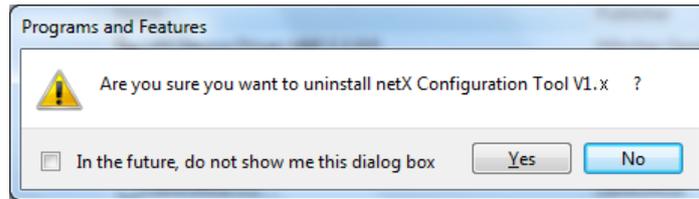


Figure 216: Programs and Features

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

➤ Preparing to remove:

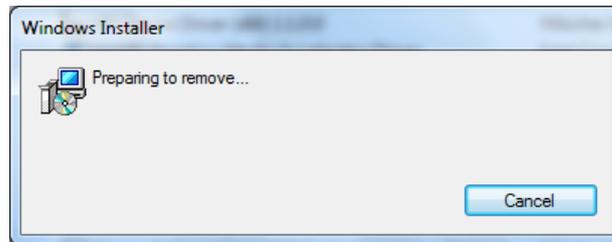


Figure 217: Windows Installer - Preparing to remove

➤ A Windows® safety questions appears.

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

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

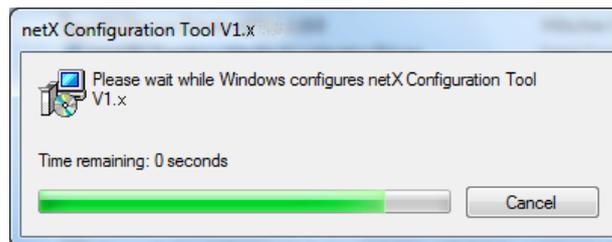


Figure 218: netX Configuration Tool Uninstalling Progress

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

## 6.9 Uninstalling under Windows 8

### Requirements



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

### Preparation

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

- Close all application programs.

### Steps for Uninstalling

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



Figure 219: Start Screen Windows 8

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

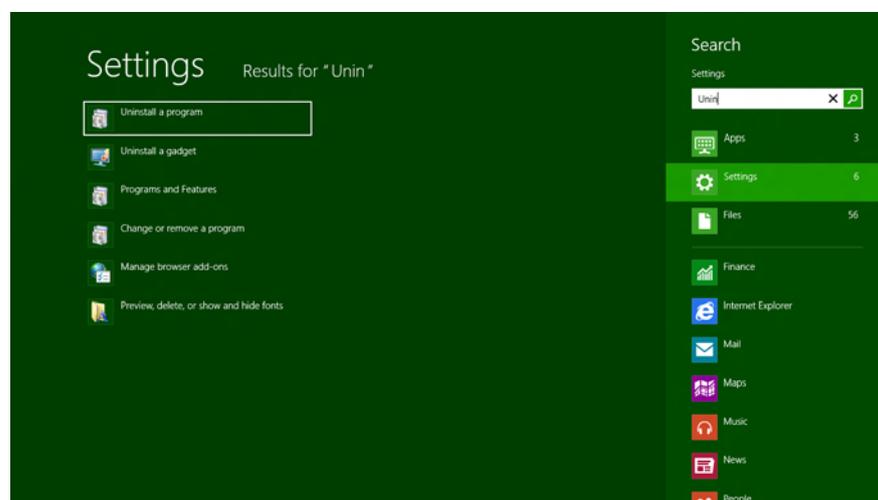


Figure 220: Uninstall a program

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

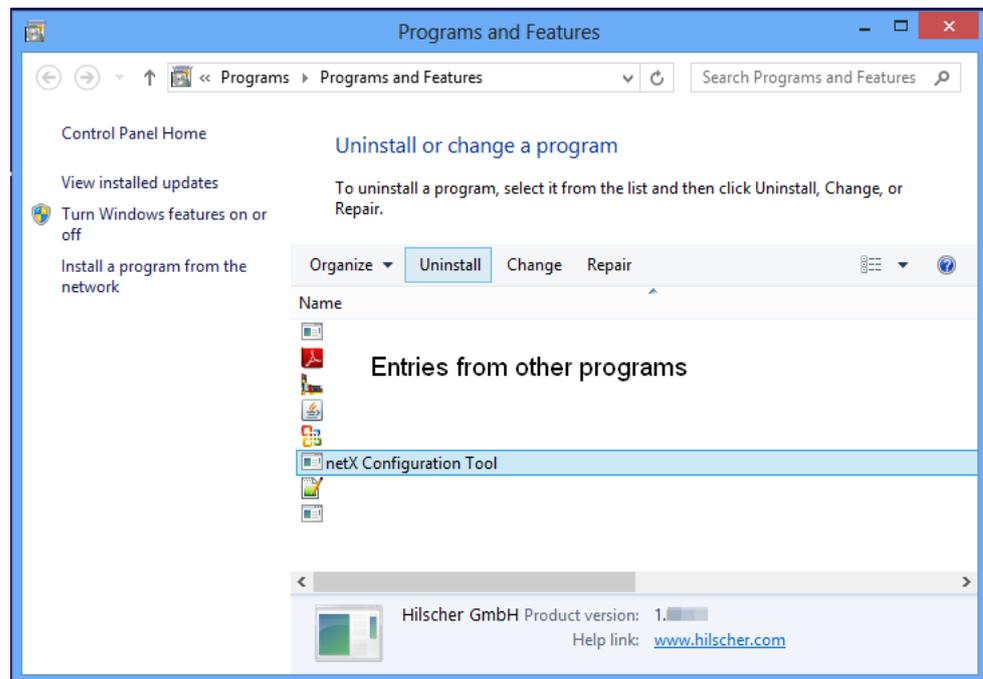


Figure 221: Control Panel - Uninstall or Change Programs

### 3. Uninstalling netX Configuration Tool.

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

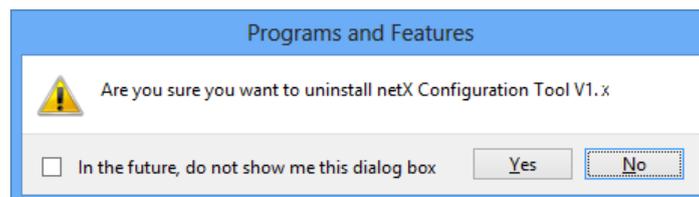


Figure 222: Programs and Features

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

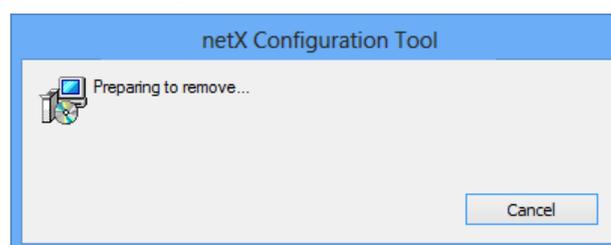


Figure 223: Windows Installer - Preparing to remove

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



## 6.10 Uninstalling under Windows 10

### Requirements



**Note:** You need administrator privileges under Windows® 10 to uninstall the Slave configuration tool netX Configuration Tool from your PC.

### Preparation

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

- Close all application programs.

### Steps for Uninstalling

1. Open Windows® 10 Start Screen.

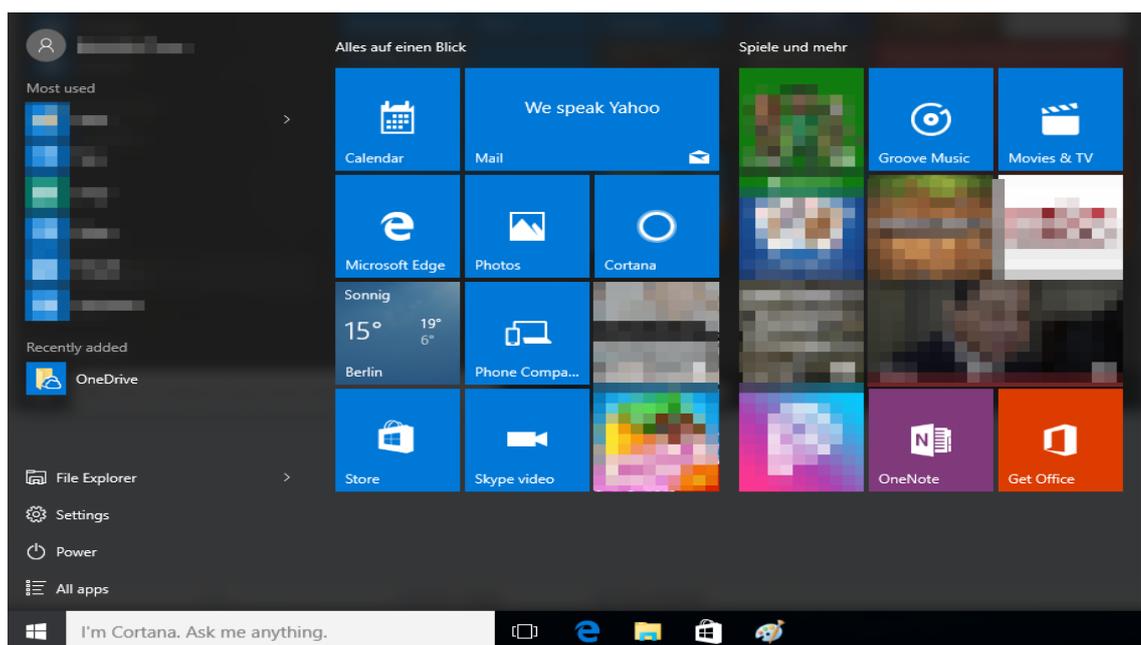


Figure 225: Start Screen Windows 10

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

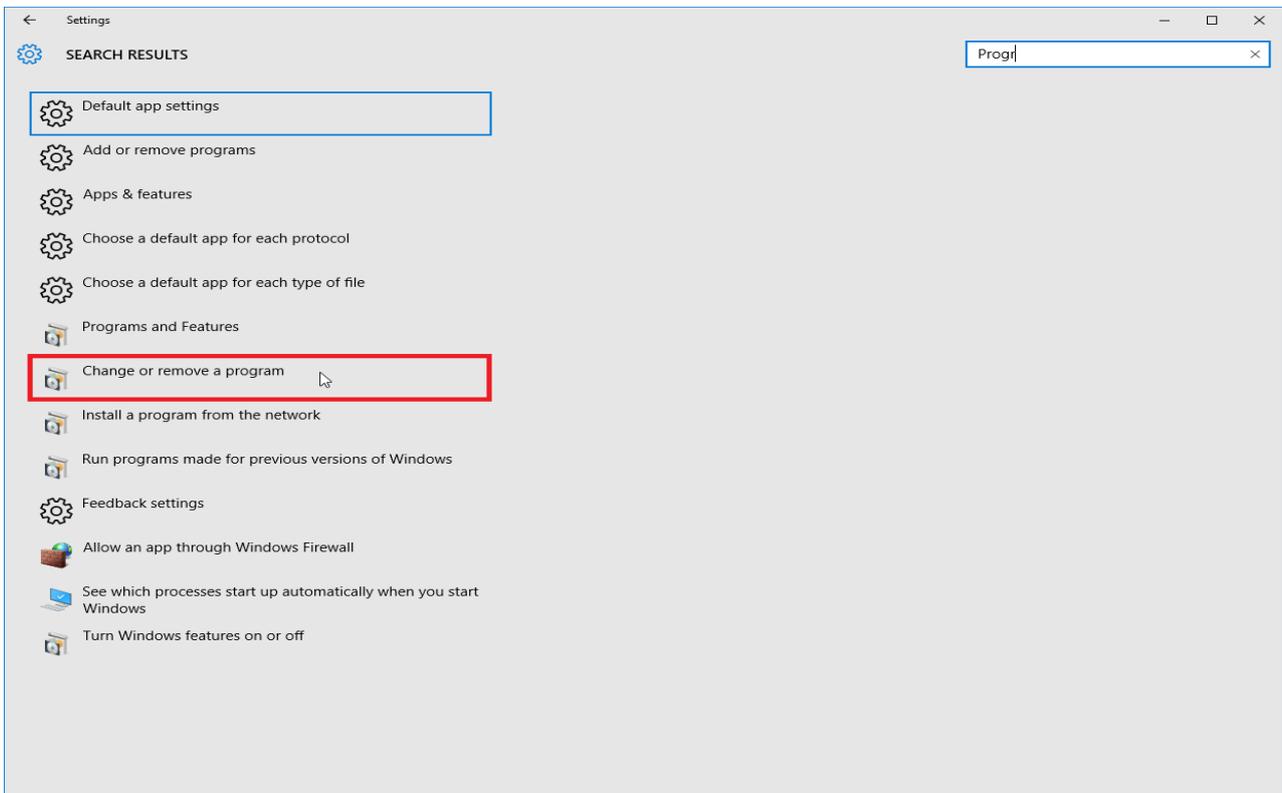


Figure 226: Uninstall a program

2. Click on **Uninstall program**.

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

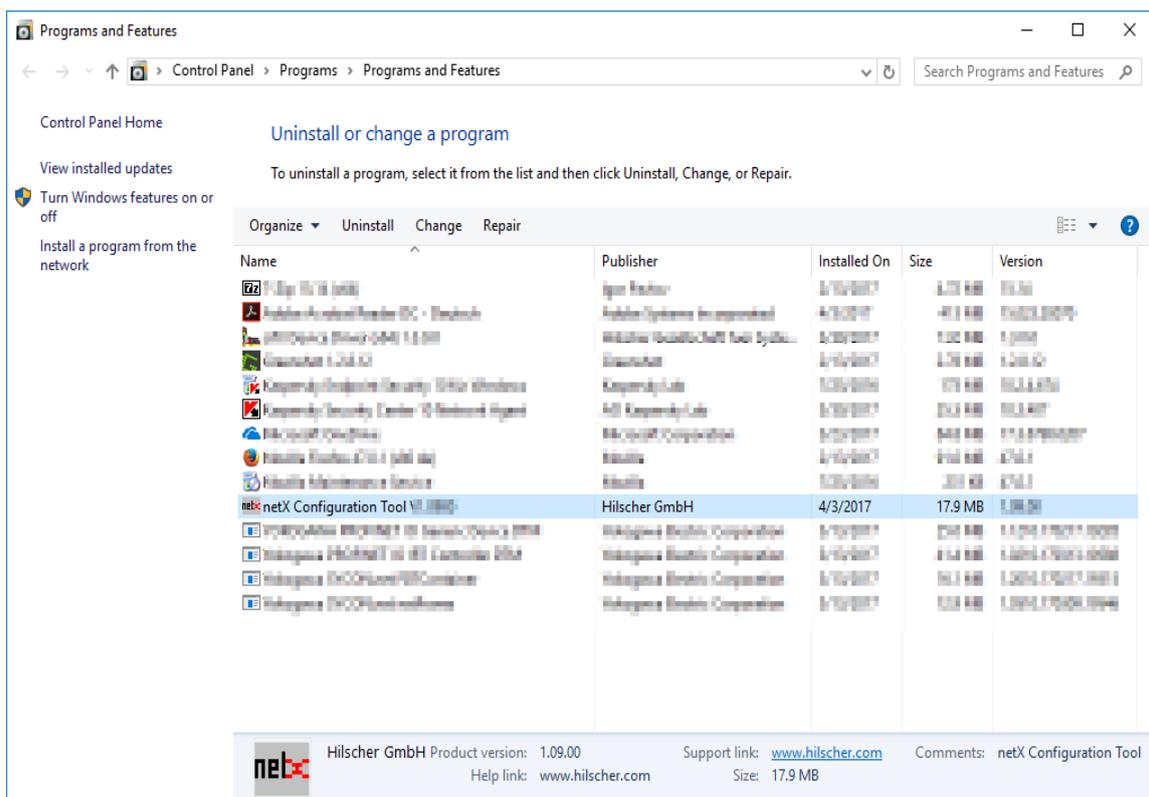


Figure 227: Control Panel - Uninstall or Change Programs

### 3. Uninstalling netX Configuration Tool.

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

⇒ At first, a confirmation dialog appears:

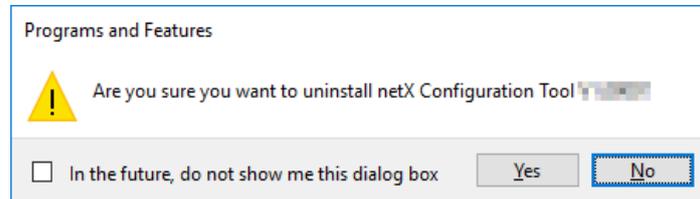


Figure 228: Programs and Features

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

⇒ Preparing to remove:

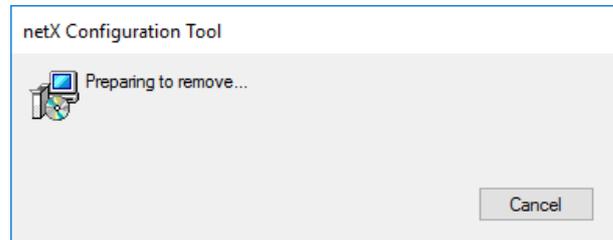


Figure 229: Windows Installer - Preparing to remove

⇒ A Windows® safety questions appears.

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

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

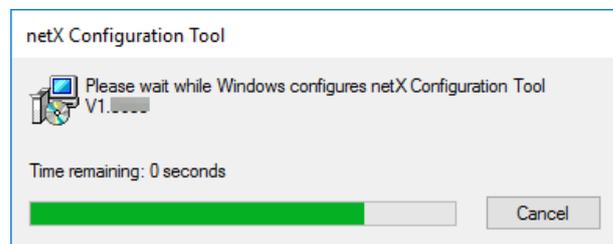


Figure 230: netX Configuration Tool Uninstalling Progress

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

## 7 PC Cards cifX PC/104 (ISA)

### 7.1 System Requirements



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

### 7.2 Installation under Windows XP

#### Requirements

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



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

#### Installation steps

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

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

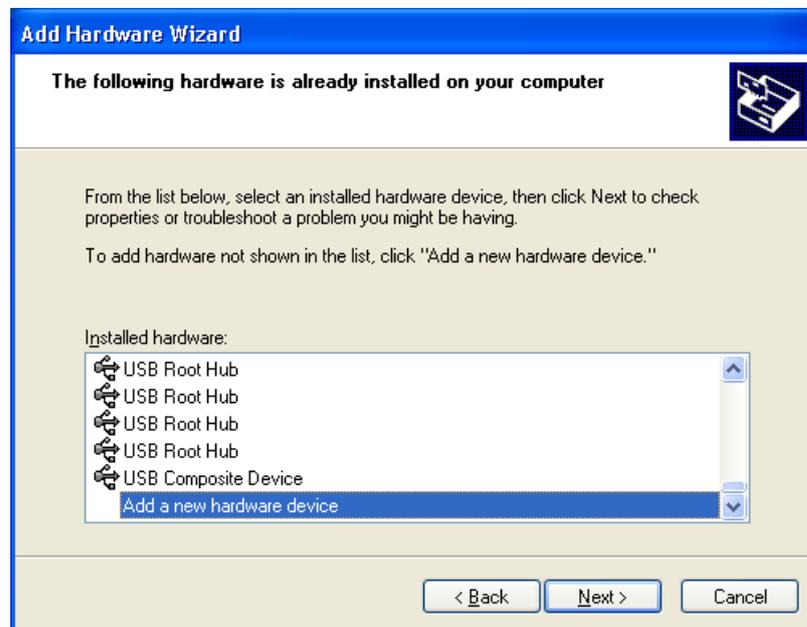


- Click **Next >**.

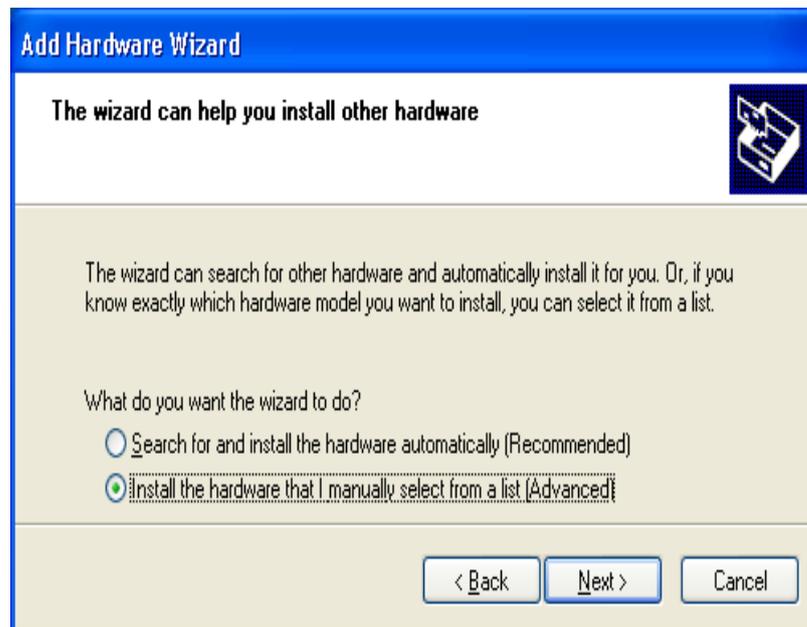


## 2. Hardware Wizard

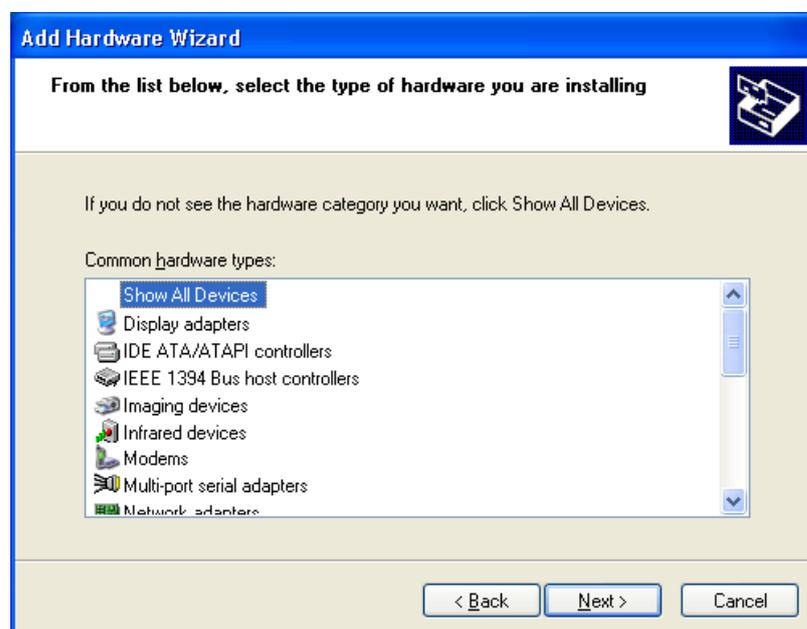
- Select **Yes, I have already connected the hardware.**
  
- Click **Next >**.
  
- Move the scroll bar to the bottom to display the end of the list **Installed Hardware.**
  
- Select **Add a new hardware device.**



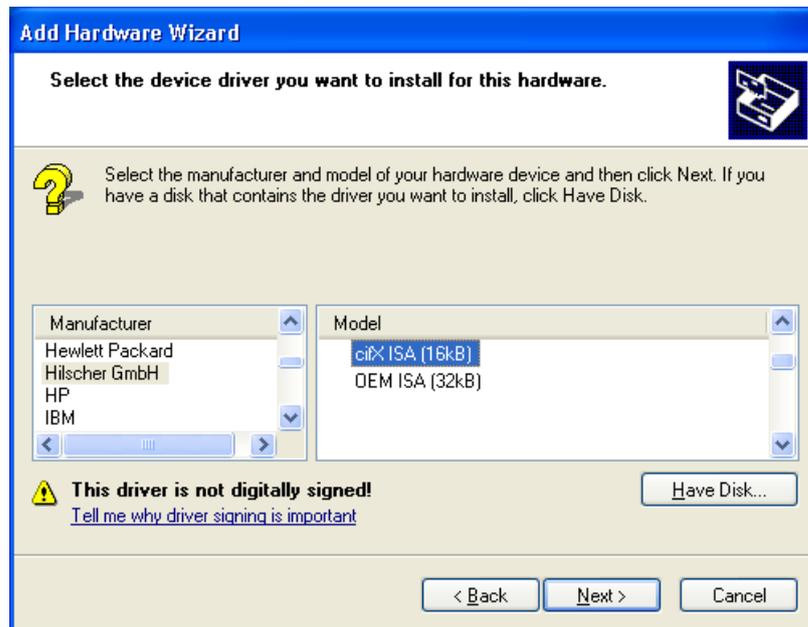
- Click **Next >**.
  
- Select **Install the hardware that I manually select from a list (Advanced).**



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



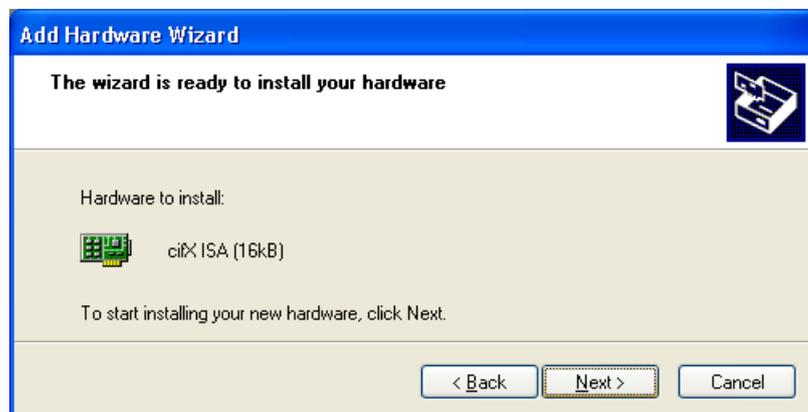
- Click **Next >**.
- Select from the list of **Manufacturer > Hilscher GmbH**.
- Then select from the list of **Model > cifX ISA (16kB)**.



➤ Click **Next >**.

3. Install

➤ Click **Next >**.



⇒ The cifX Device Driver is installed.

4. Finish or change resources

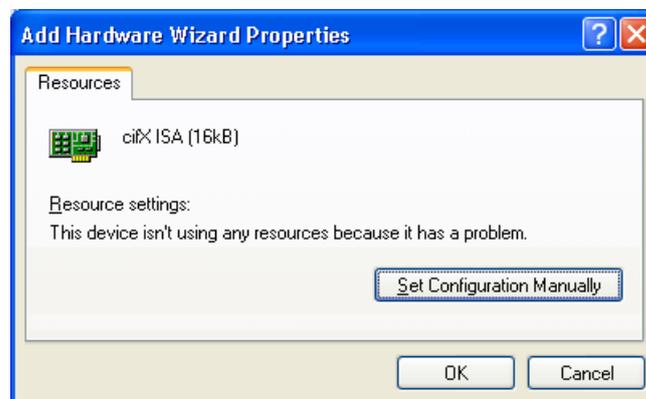
➤ If the PC Card cifX PC/104 is jumpered for memory address D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **Finish**.



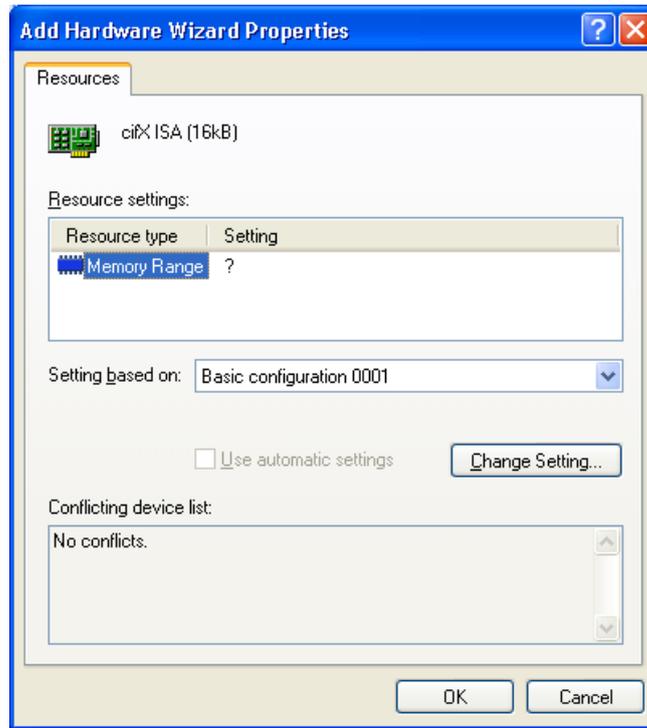
- If you have clicked on Finish, then restart the PC.
- If the PC Card cifX PC/104 is jumpered for a memory address other than D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address for polling (Basic Configuration 0001)* on page 161.
- If the PC card cifX is to be used with interrupt, then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 164.

### Select Memory Address for polling (Basic Configuration 0001)

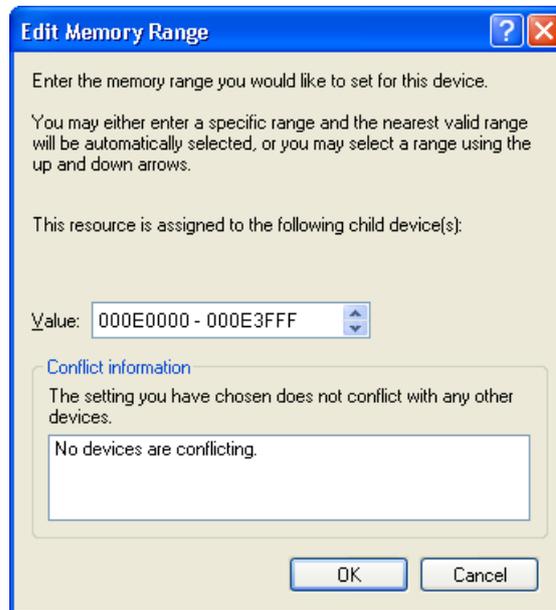
- Click **Set Configuration Manually**.



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

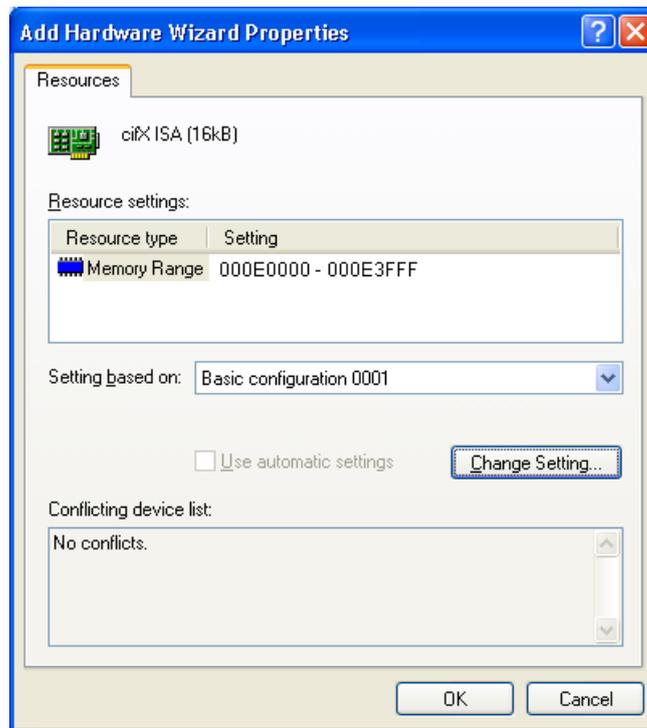


- Click **Change Settings**.
- Set the memory address: e. g. address E0000.



- Click **OK**.





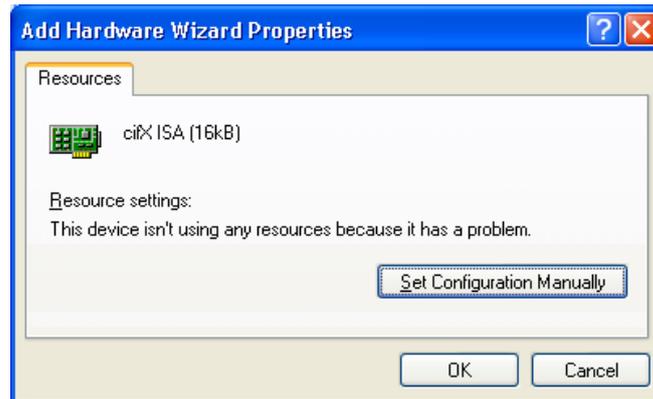
- Click **OK**.
- Click **Finish**.



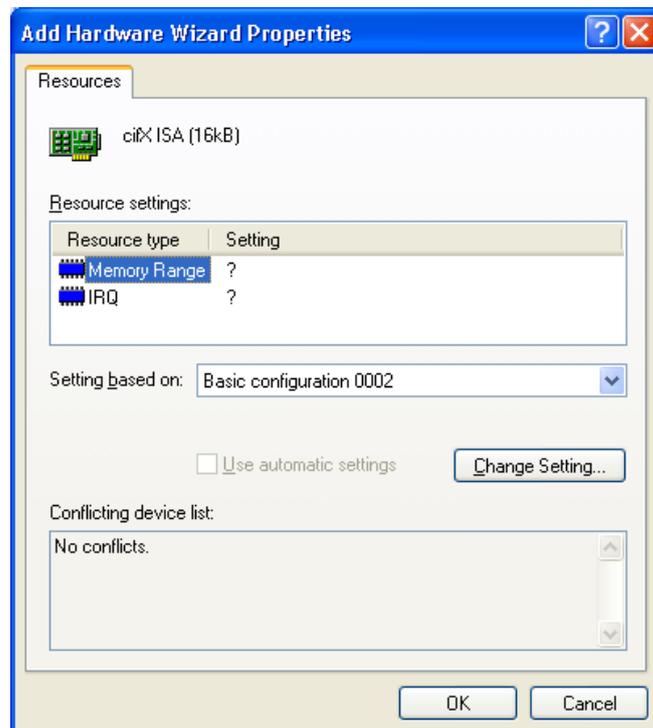
- Restart the PC.

**Select Memory Address and interrupt (Basic Configuration 0002)**

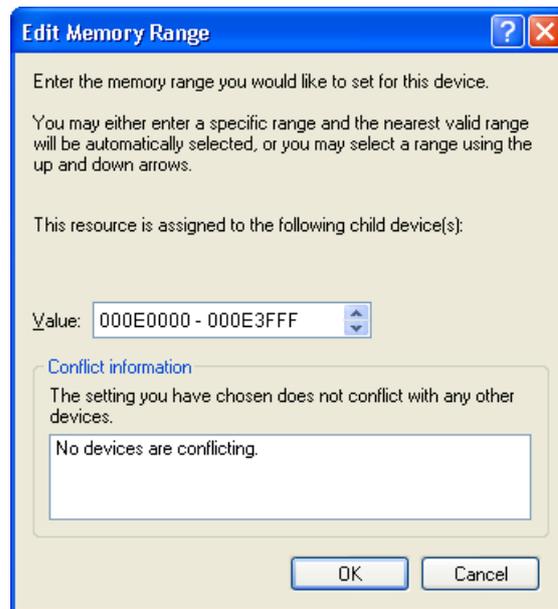
- Click **Set Configuration Manually**.



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

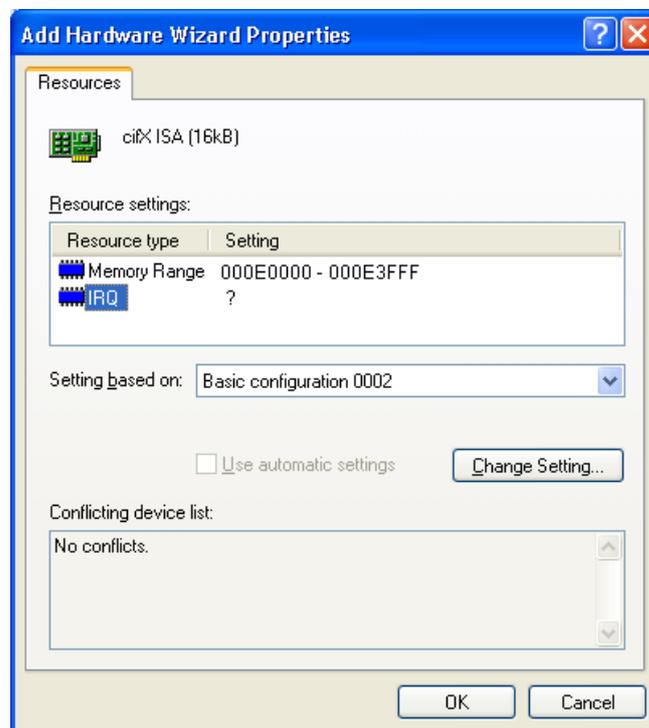


- Click **Change Settings**.
- Set the memory address: e. g. address E0000.



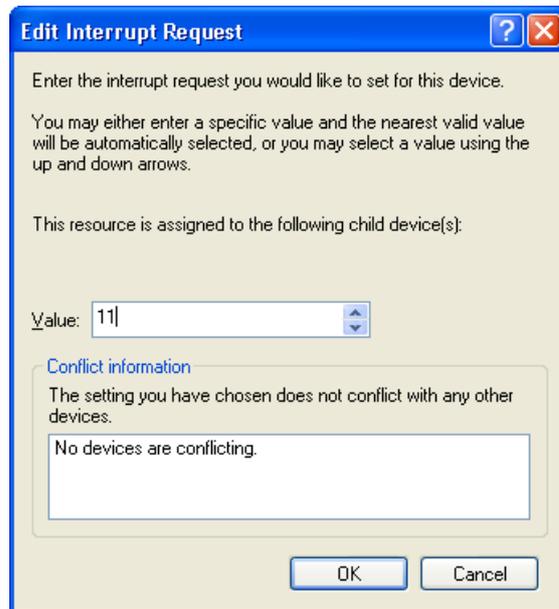
➤ Click **OK**.

➤ Select **IRQ**.

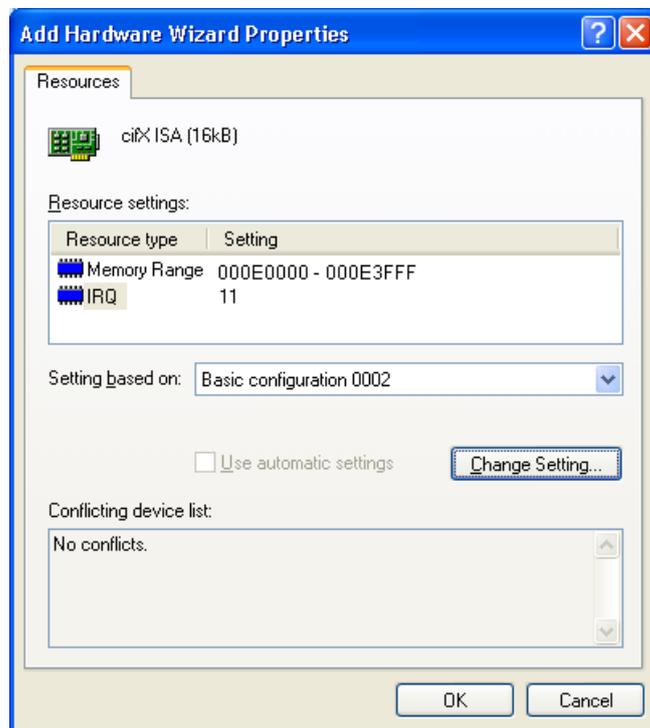


➤ Click **Change Settings**.

➤ Set the interrupt number: e. g. interrupt 11.



➤ Click **OK**.



➤ Click **OK**.

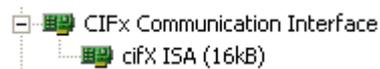
➤ Click **Finish**.



- Restart the PC.

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

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



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

- If an exclamation mark is shown with **cifX ISA (16kB)**, then either a resource conflict exists or the requested resources are not available.
- Select from the context menu on **cifX ISA (16kB)** > **Properties**.
- Select the tab **Resources**.
- Change the setting for the memory range respectively the interrupt with **Set Configuration Manually**, as described in section *Select Memory Address for polling (Basic Configuration 0001)* on page 161 or in section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 164.

## 7.3 Installation under Windows 7

### Requirements

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



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

### Installation steps

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

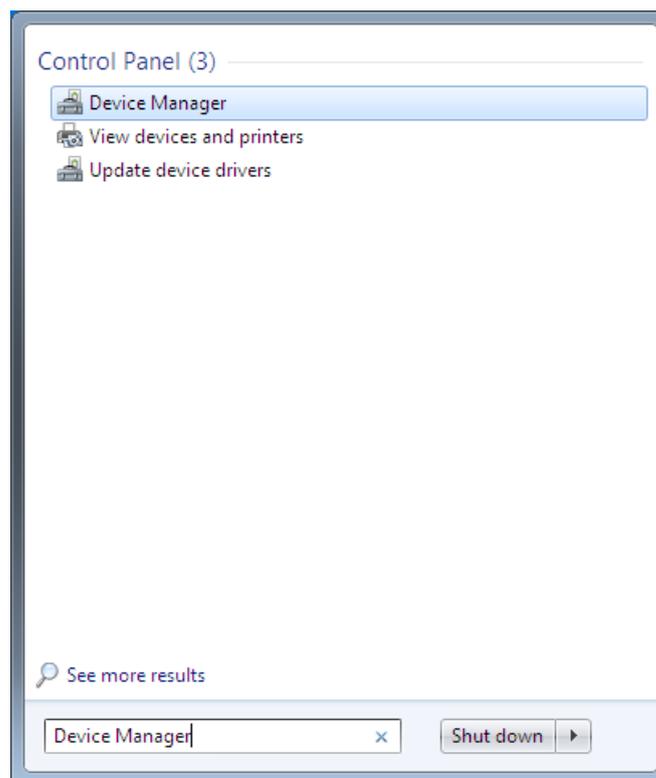
1. Open Start

- Click on Start



2. Search and start the Device Manager.

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

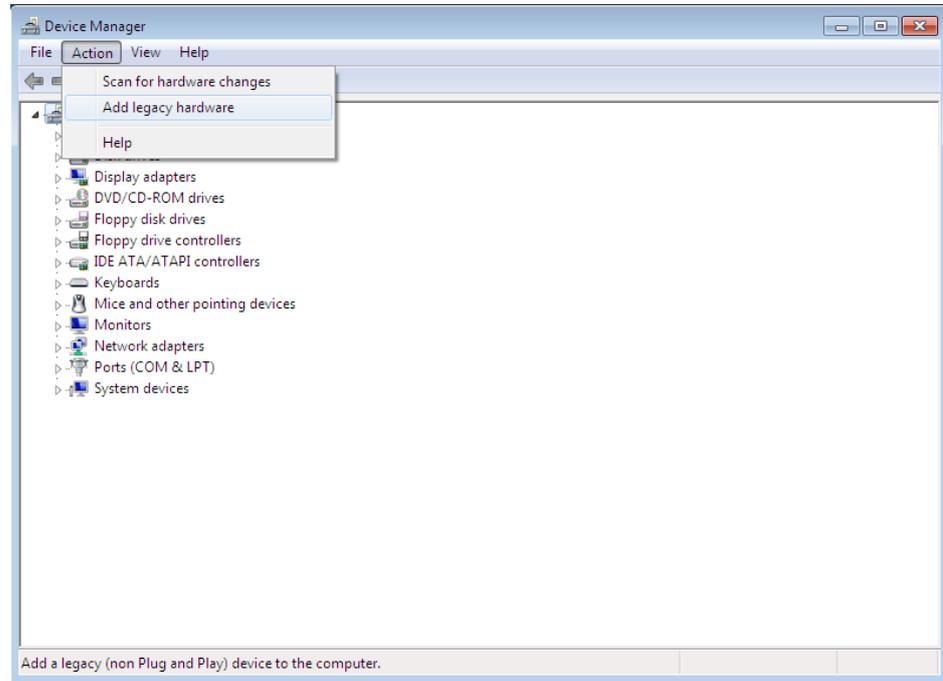


- Click on Device Manager.

- The Device Manager starts.

3. Add legacy hardware

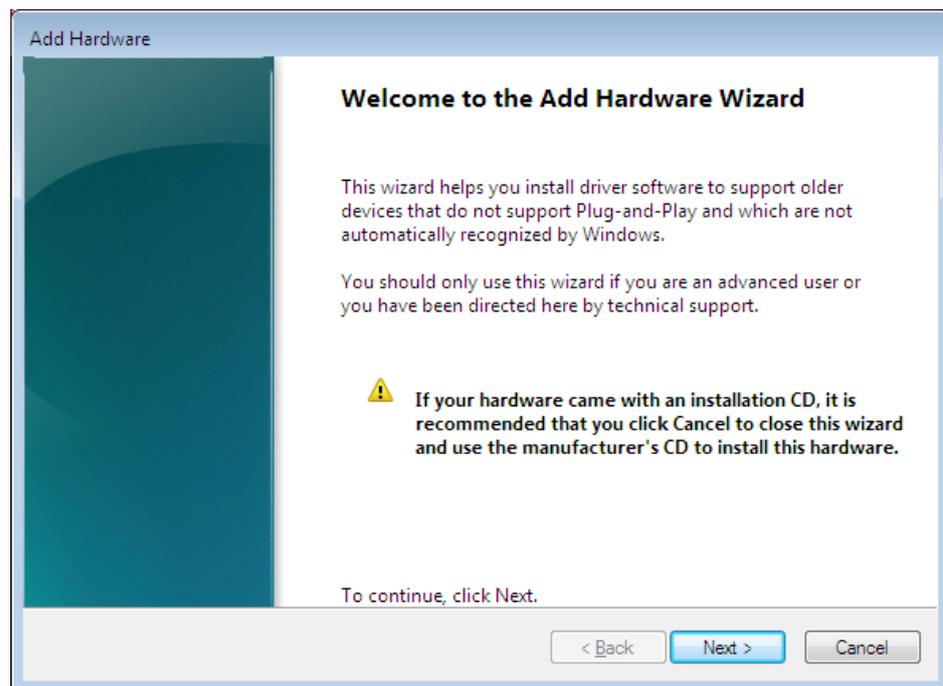
- In the Device manager click on the any element of the tree, e. g. select the top element of the tree.
- Select from the menu **Action > Add legacy hardware**.



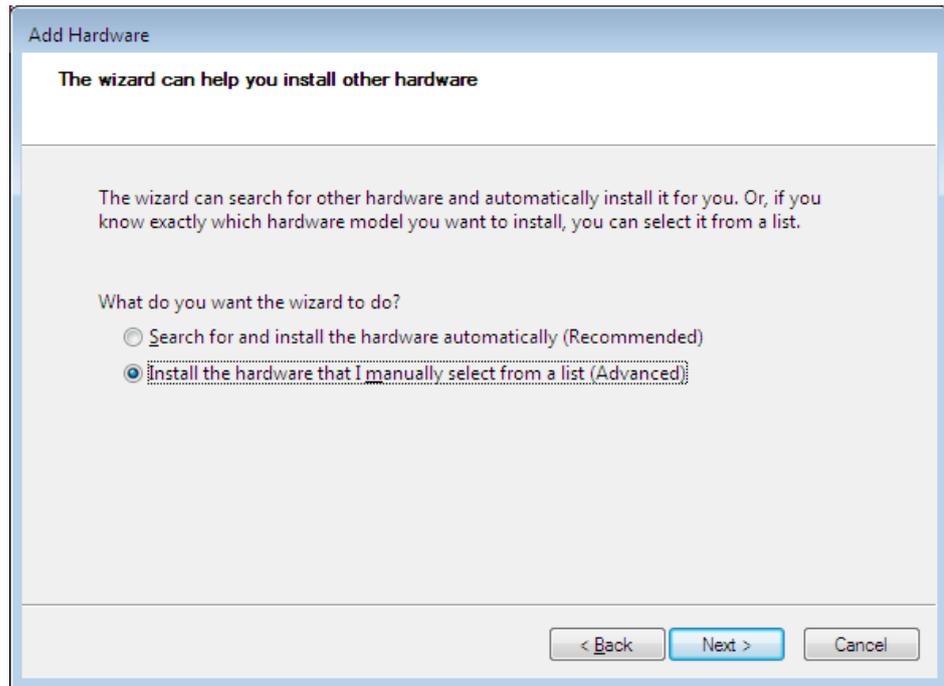
➤ The Hardware Wizard starts.

4. Hardware Wizard

- Click **Next >**.

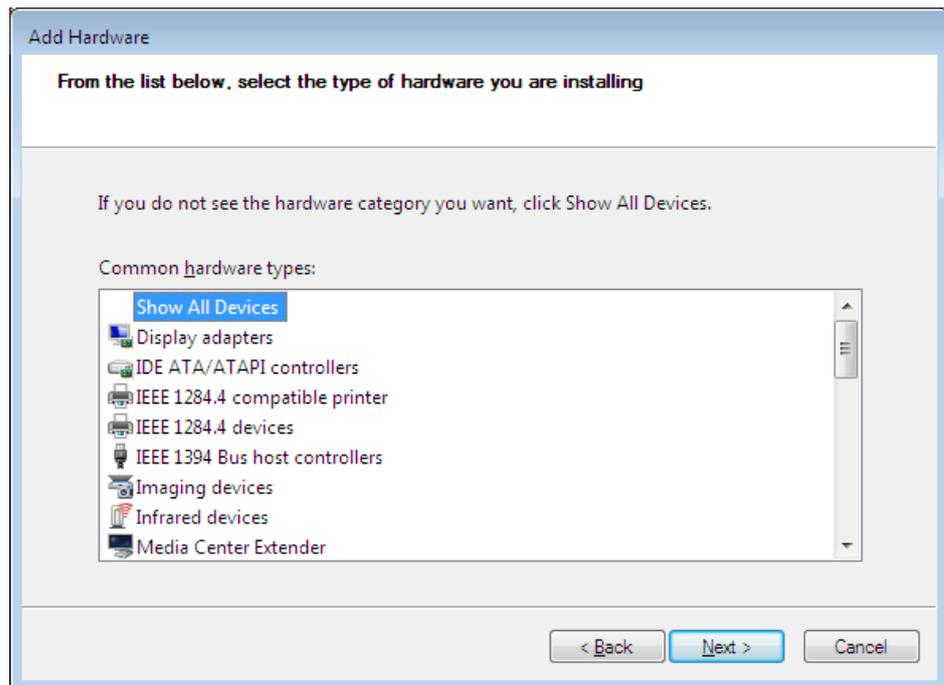


- Select **Install the hardware that I manually select from a list (Advanced)**.



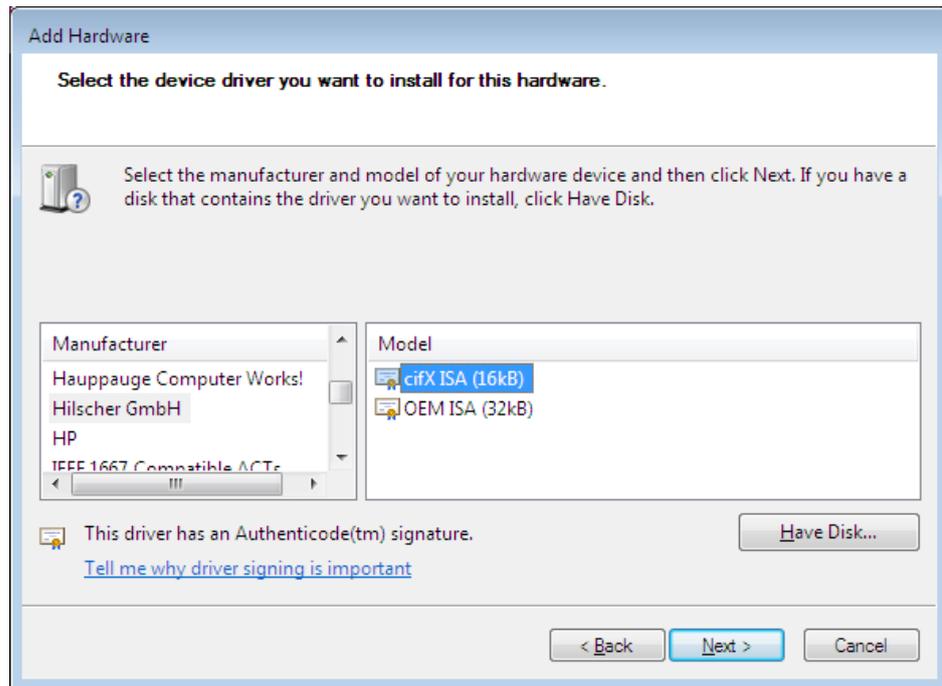
- Click **Next >**.

- Select **Show All Devices**.



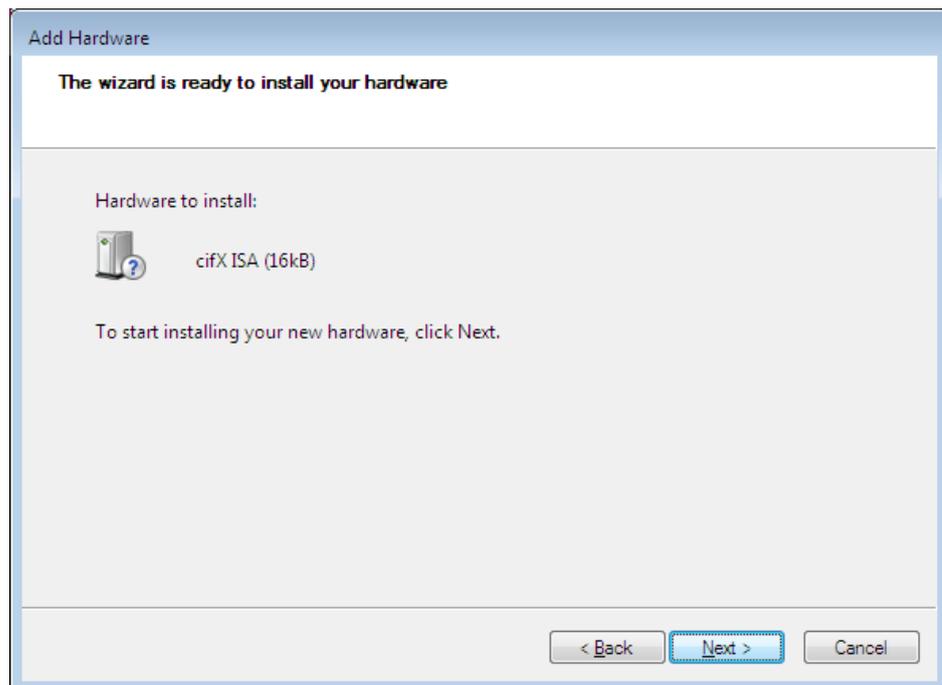
- Click **Next >**.

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



- Click **Next >**.

- Click **Next >**.



## 5. Install

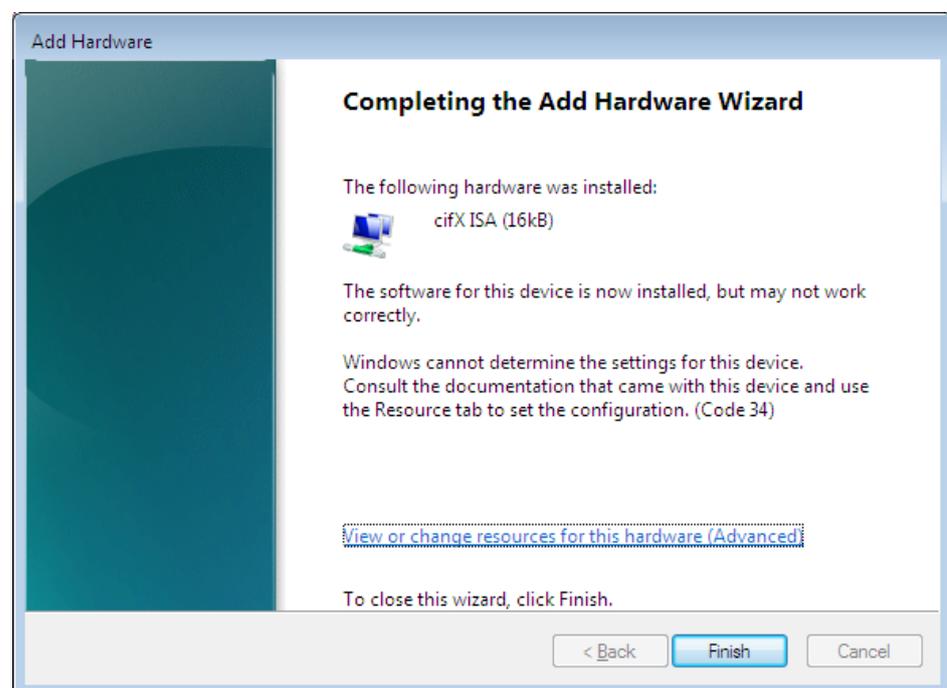
- If the Windows® Security asks, then click **Install**.



- The cifX Device Driver is installed.

## 6. Finish or change resources.

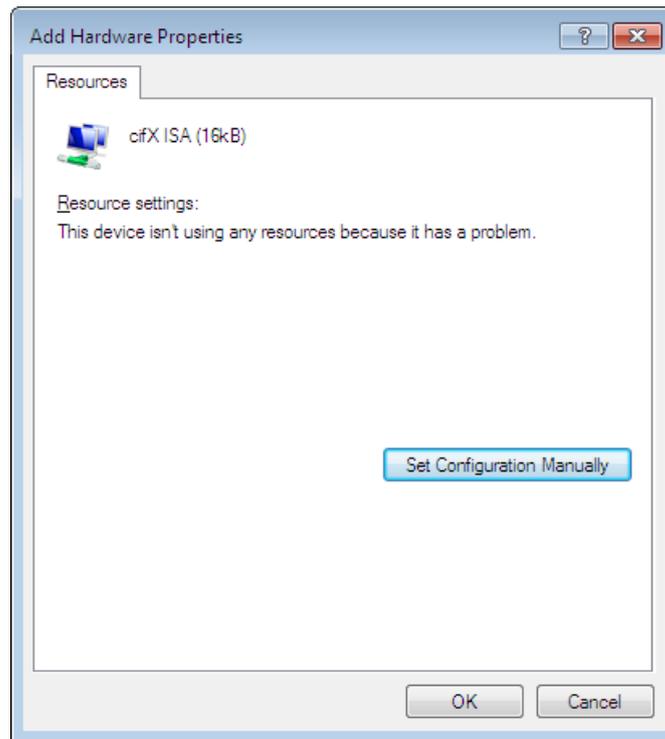
- If the PC Card cifX PC/104 is jumpered for memory address D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **Finish**.



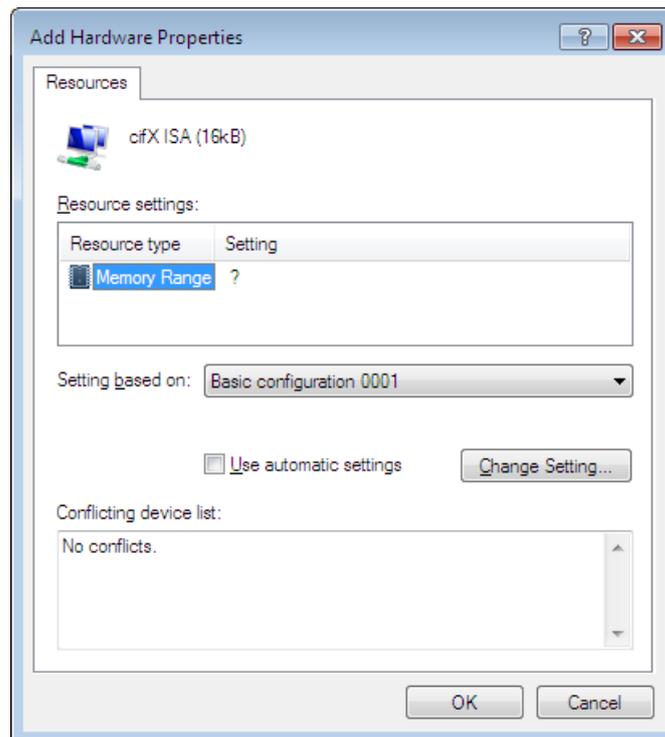
- If you have clicked on Finish, then restart the PC.
- If the PC Card cifX PC/104 is jumpered for a memory address other than D0000 and no interrupt jumper is set on the PC card cifX (polling), then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address for polling (Basic Configuration 0001)* on page 173.
- If the PC Card cifX PC/104 is to be used with interrupt, then click **View of change resources for this hardware (Advanced)**. Continue with section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 175.

**Select Memory Address for polling (Basic Configuration 0001)**

- Click **Set Configuration Manually**.

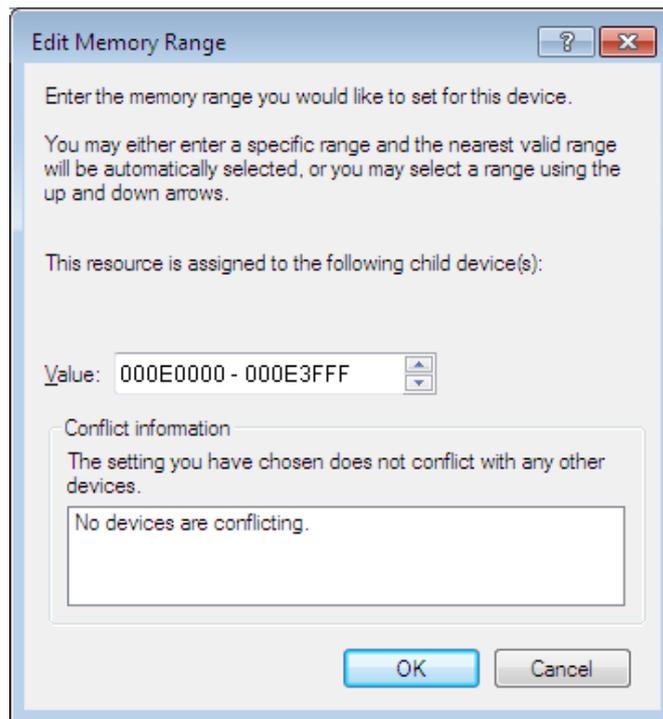


- Uncheck **Use automatic settings**.
- At **Settings based on** select **Basic configuration 0001**.
- Select **Memory Range**.

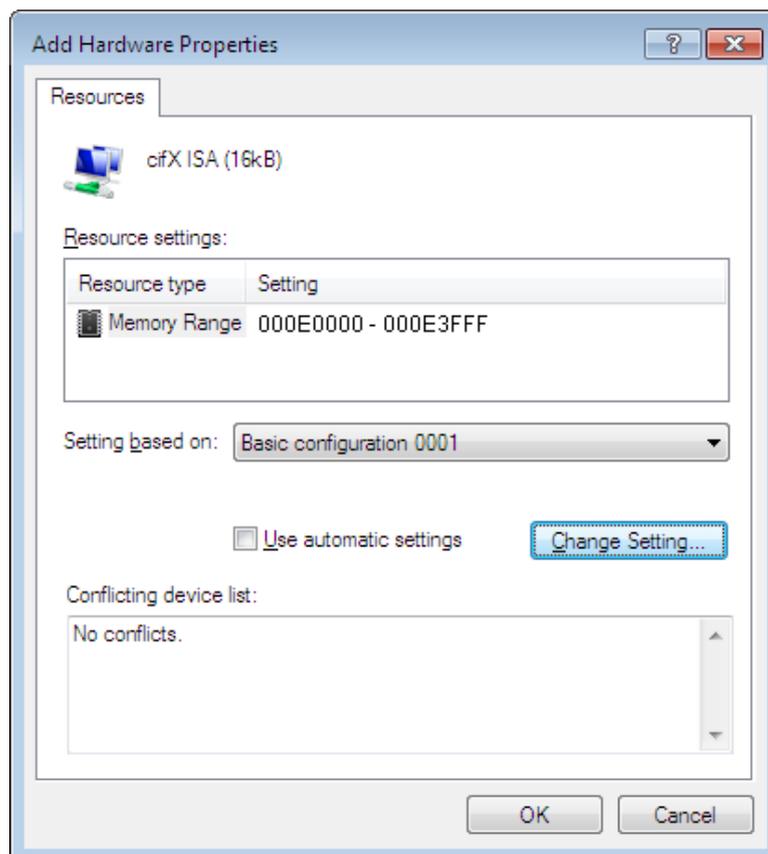


- Click **Change Settings**.

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

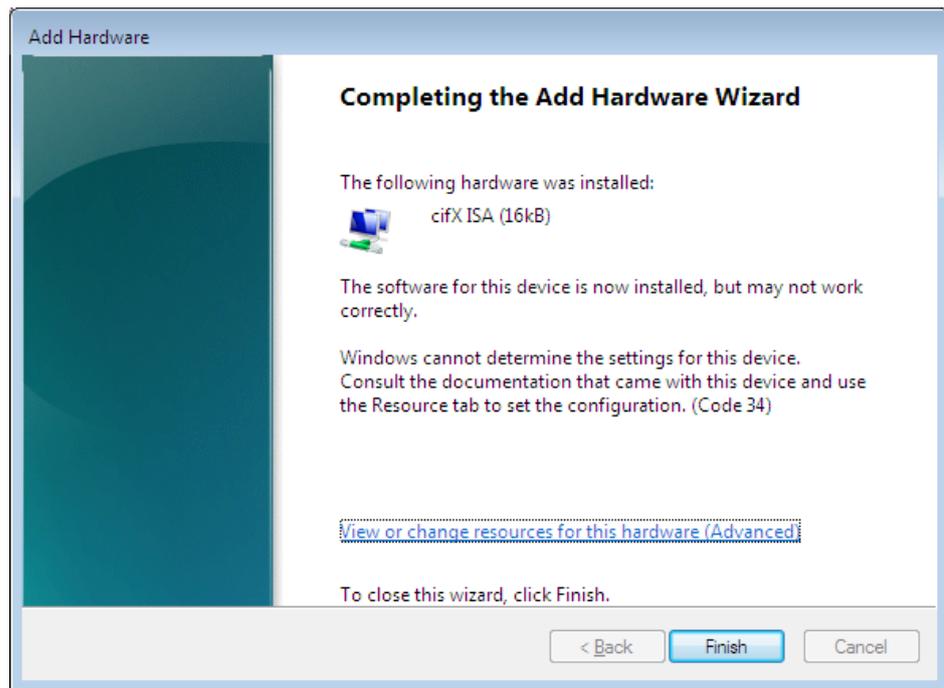


- Click **OK**.



- Click **OK**.

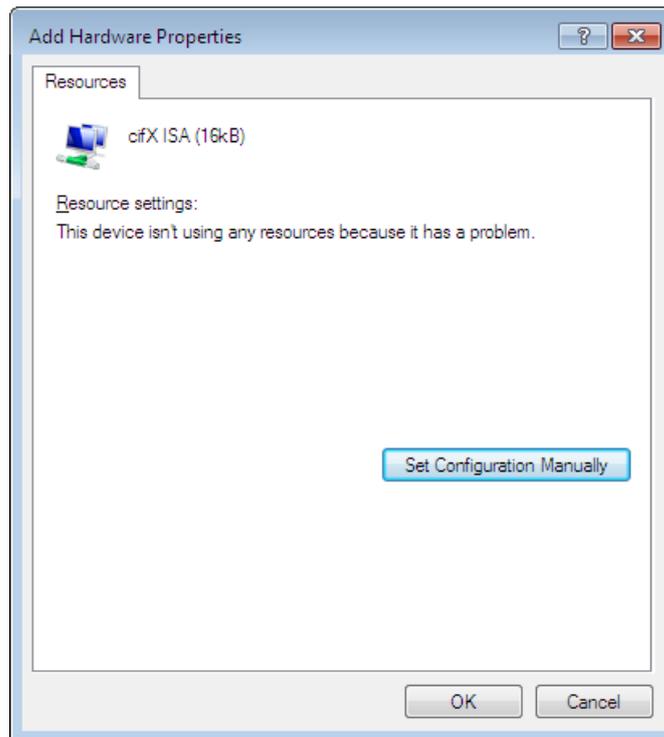
- Click **Finish**.



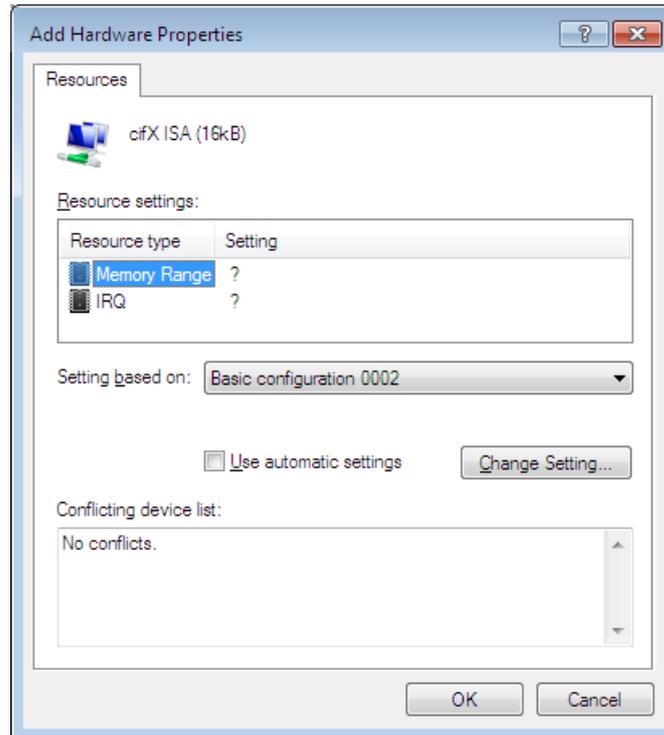
- Restart the PC.

**Select Memory Address and interrupt (Basic Configuration 0002)**

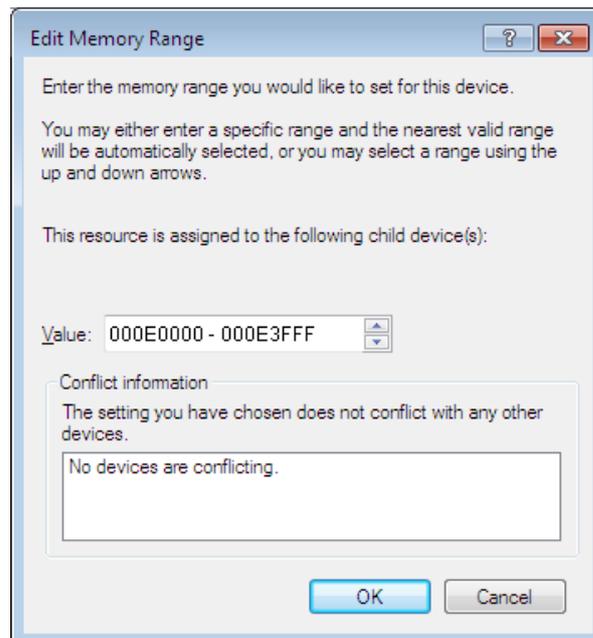
- Click **Set Configuration Manually**.



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

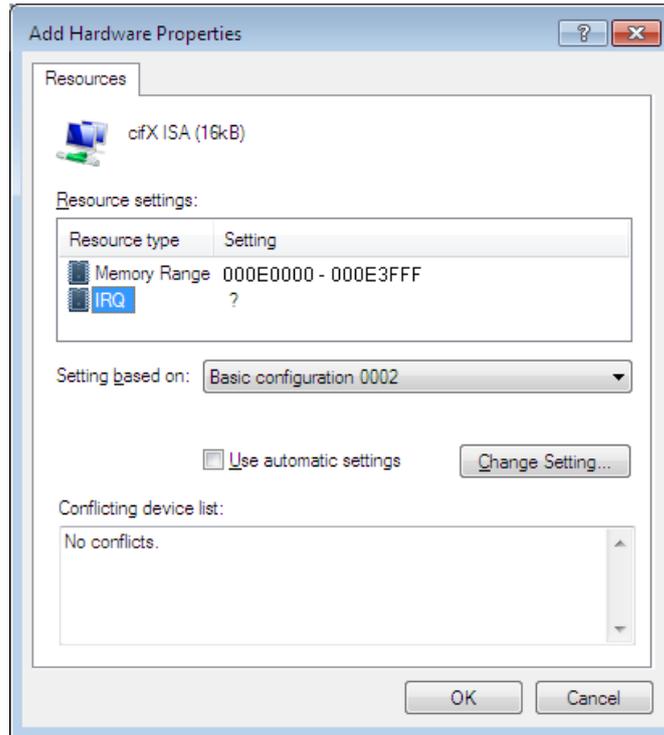


- Click **Change Settings**.
- Set the memory address: e. g. address E0000.



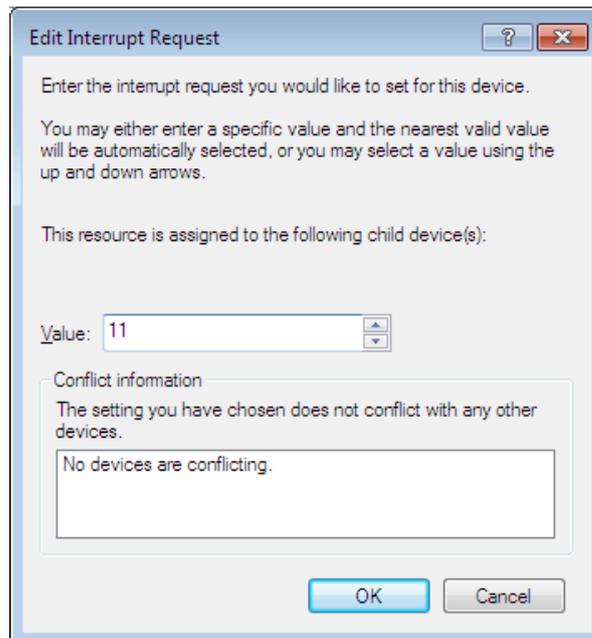
- Click **OK**.

➤ Select **IRQ**.

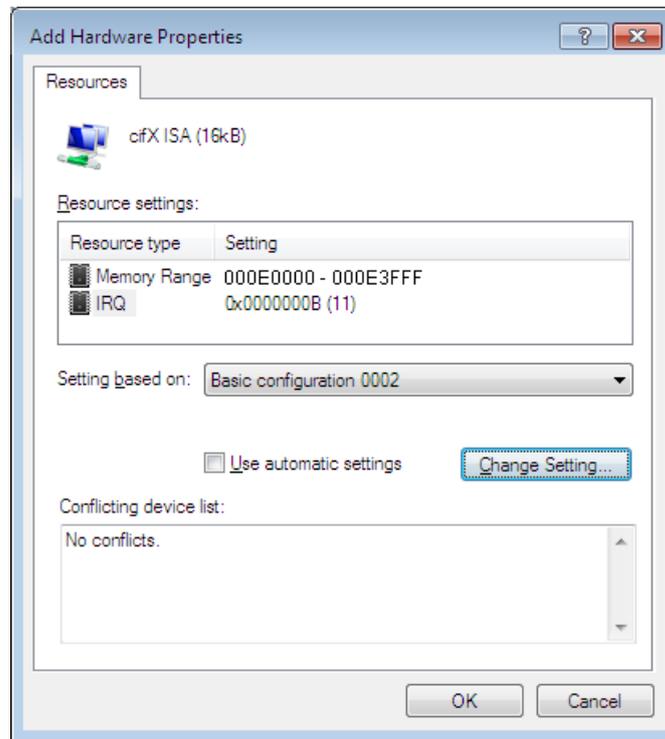


➤ Click **Change Settings**.

➤ Set the interrupt number: e. g. interrupt 11.

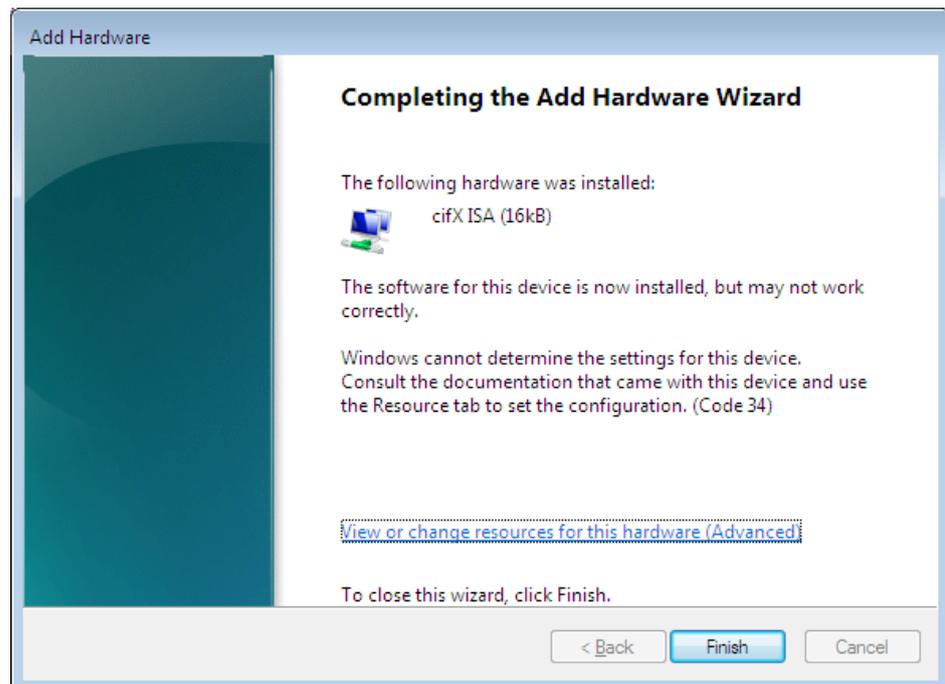


➤ Click **OK**.



➤ Click **OK**.

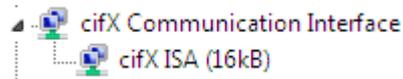
➤ Click **Finish**.



➤ Restart the PC.

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

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



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

- If an exclamation mark is shown with **cifX ISA (16kB)**, then either a resource conflict exists or the requested resources are not available.
- Select from the context menu on **cifX ISA (16kB)** > **Properties**.
- Select the tab **Resources**.
- Change the setting for the memory range respectively the interrupt with **Set Configuration Manually**, as described in section *Select Memory Address for polling (Basic Configuration 0001)* on page 173 or in section *Select Memory Address and interrupt (Basic Configuration 0002)* on page 175.

## 8 Hardware Settings

### 8.1 Slot Number (Card ID)

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

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

#### 8.1.1 cifX Device Driver Setup

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

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

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

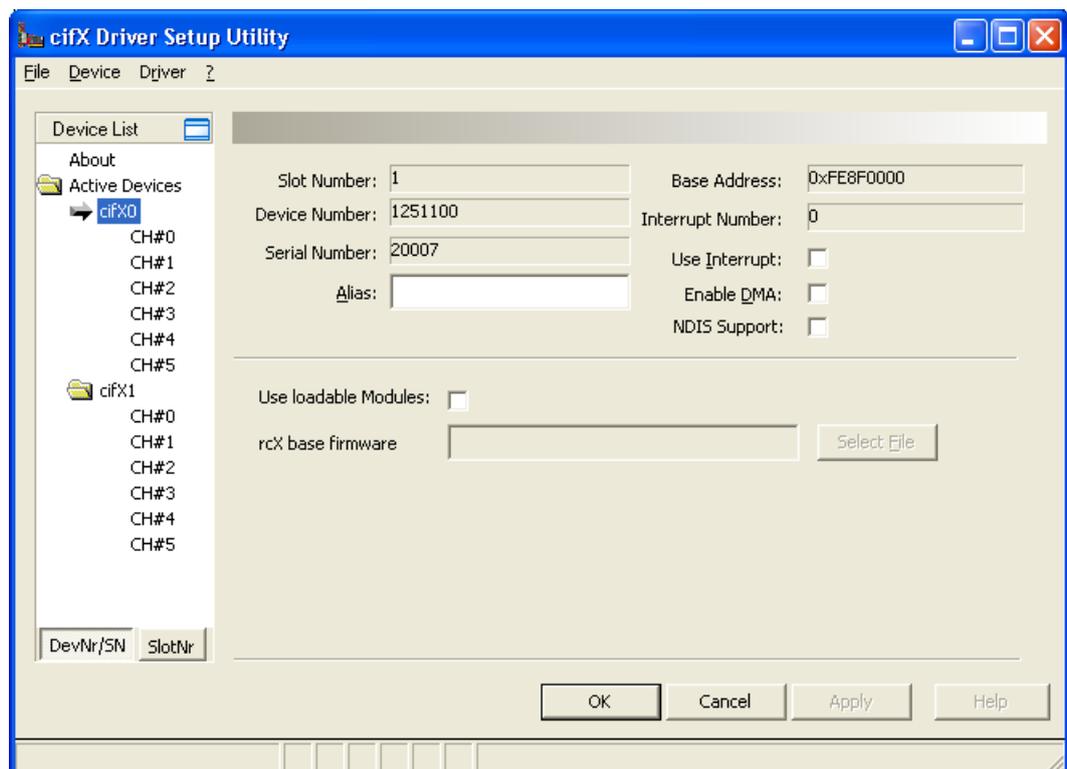


Figure 231: Slot Number (Card ID) in the cifX Device Driver Setup

Oder:

3. Switch to **SlotNr** presentation.
  - Click under **Device List** on **SlotNr**.
  - Click under **Device List** on **Slot 1**.

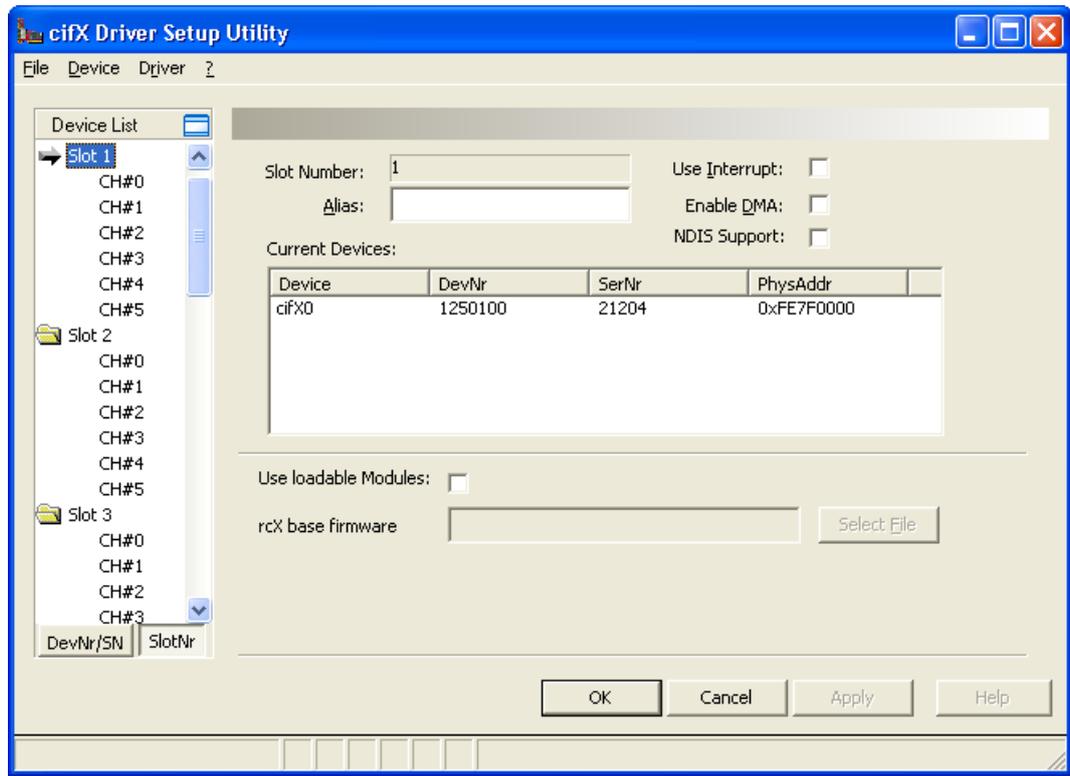


Figure 232: Slot Number (Card ID) in the cifX Device Driver Setup, „SlotNr“ selected

### 8.1.2 SYCON.net

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

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

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

Figure 233: Slot Number (Card ID) in the Configuration Software SYCON.net.

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

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

## 8.2 “DMA Mode”

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

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

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

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

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

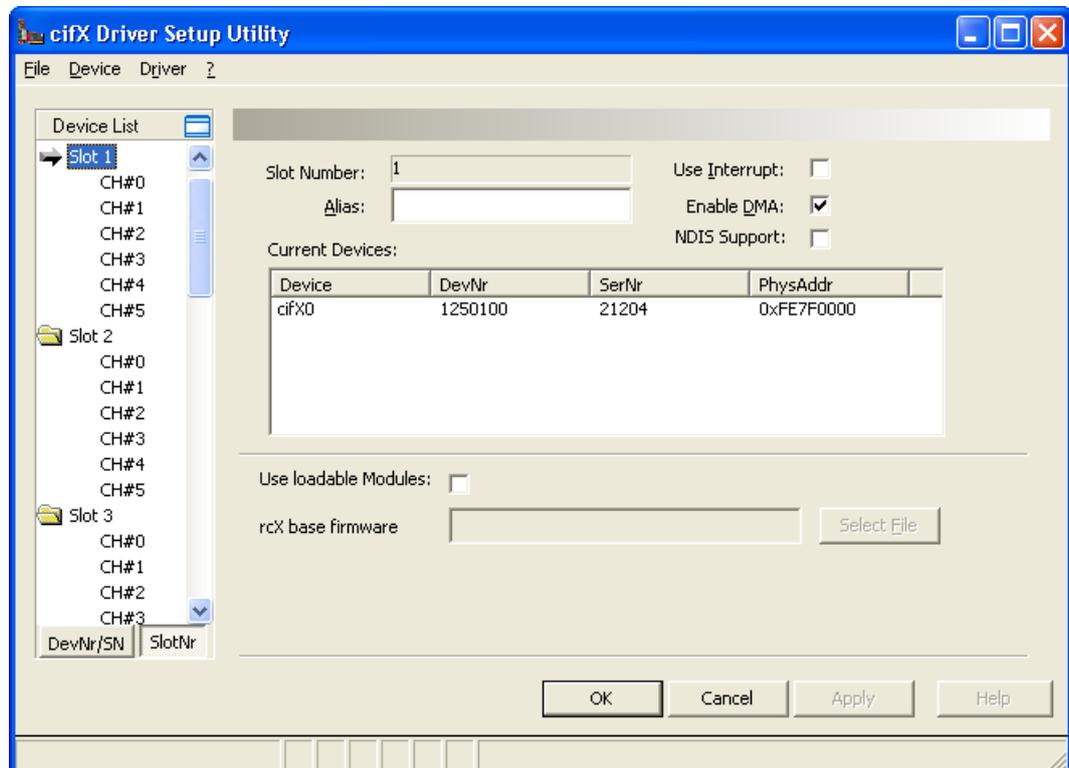


Figure 234: Activating DMA Mode in the cifX Device Driver Setup

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

## 9 PC Settings

### 9.1 Windows Power Management PC Cards cifX PCI Express

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

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

Table 5: PC Cards cifX PCI Express



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

## Shut off Windows Power Management

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

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

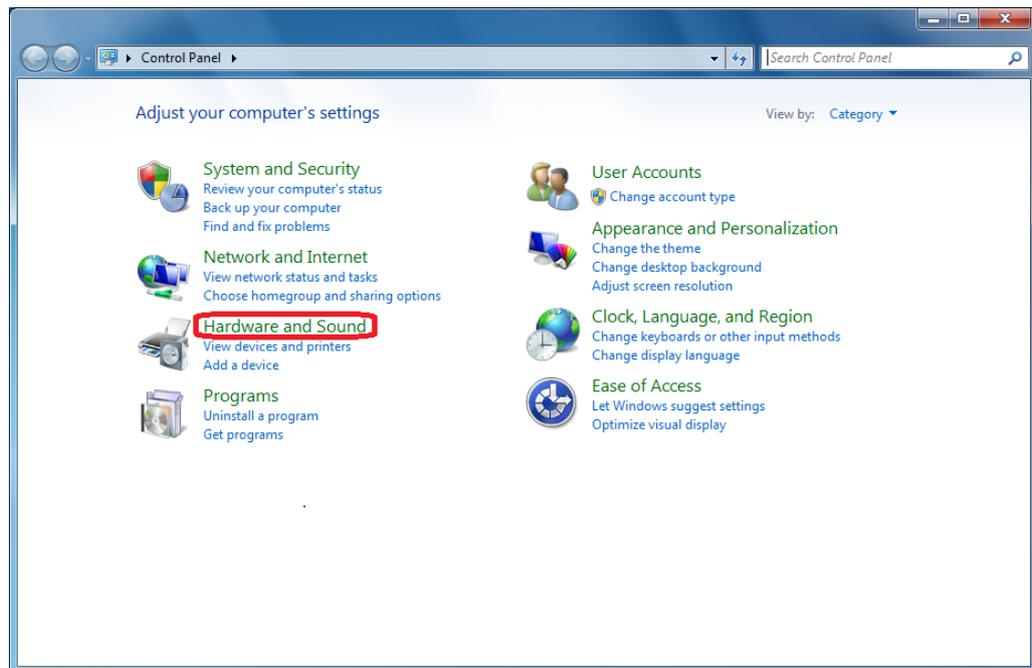


Figure 235: Click 'Hardware and Sound'

2. Click **Hardware and Sound**.

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

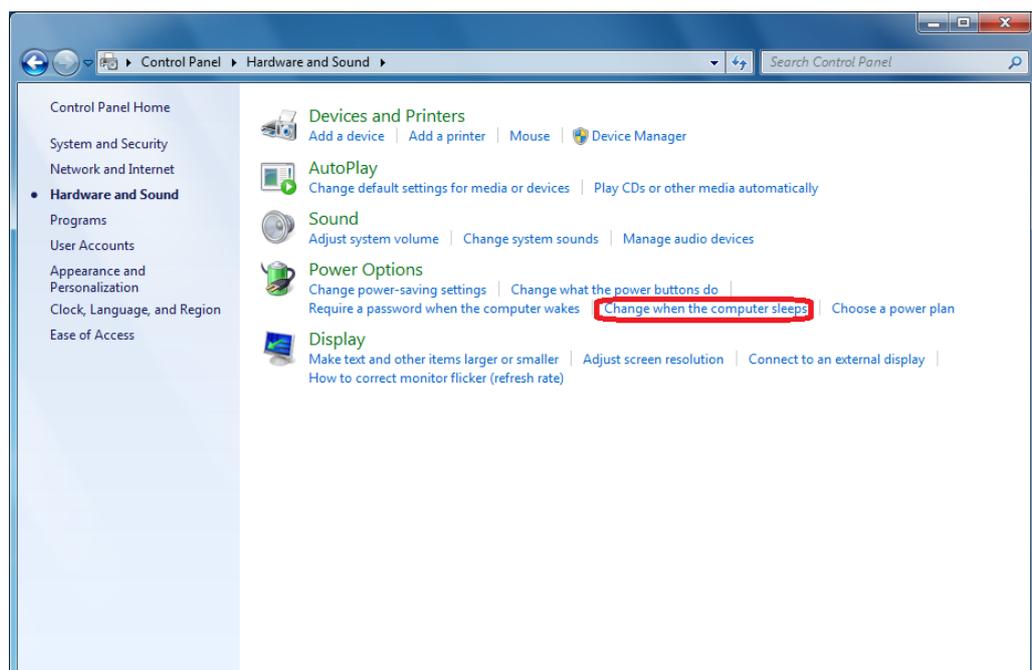


Figure 236: Click 'Change when the computer sleeps'

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

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

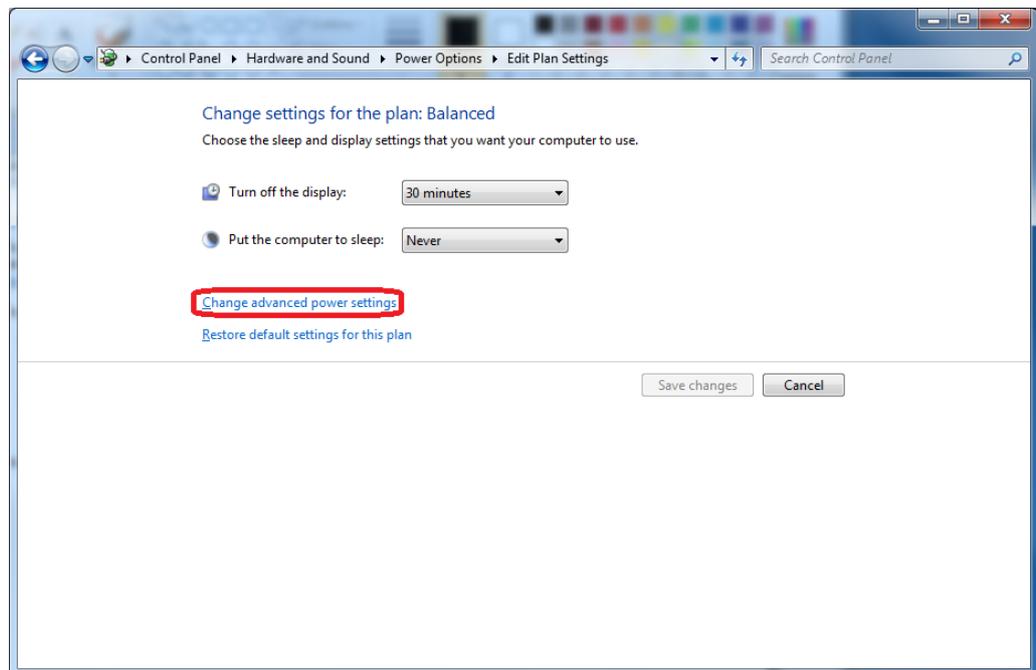


Figure 237: Click 'Change advanced power settings'

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

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

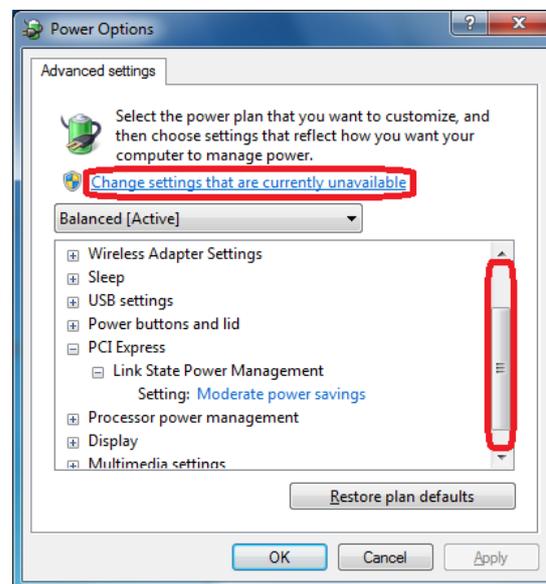


Figure 238: Click 'Change settings that are currently unavailable'

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

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

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

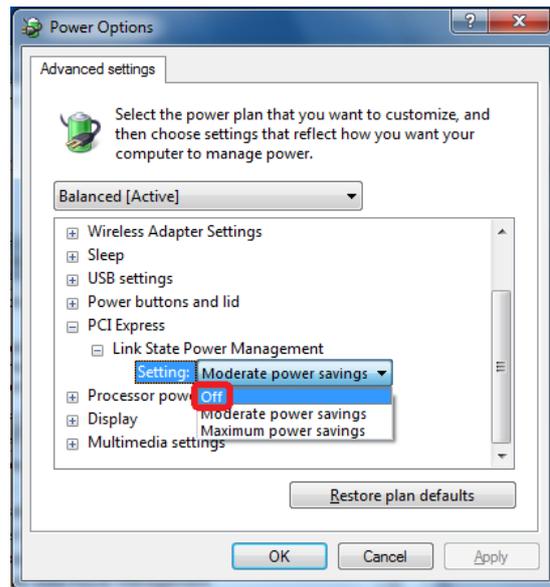


Figure 239: Set 'Link State Power Management' to 'Off'

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

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## 10.3 Glossary

### cifX

Communication InterFace based on netX

### cifX TCP/IP Server

*cifX TCP Server.exe*

Program for the remote diagnostics via Ethernet.

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

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

### netX

networX on chip, Hilscher network communication controllers

### netX Configuration Tool

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

### PC Card cifX

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

for the Real-Time Ethernet systems

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

and for the fieldbus systems

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

as Communication Interface netX with PCI Bus

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

and as Communication Interface netX with ISA Bus

- PC/104 (CIFX 104).

\*only Real-Time Ethernet

---

**Real-Time Ethernet**

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

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

**TCP/IP**

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

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