



# Schaeffler SmartCheck

Network basics

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## Imprint

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# 1 Generell

## 1.1 About this guide

This document describes the basics of computer networks. Most of it is common knowledge, some parts are specific to the vibration monitoring system Schaeffler SmartCheck, the Schaeffler SmartUtility or Schaeffler SmartUtility Light software, the Schaeffler SmartCheck software and the operating system Microsoft Windows 7.

### Further information

The Schaeffler SmartCheck vibration monitoring system also includes the integrated Schaeffler SmartWeb software. To operate the Schaeffler SmartCheck device, you will also need the supplied Schaeffler SmartUtility Light software. You also have the option of purchasing the Schaeffler SmartUtility, which features enhanced functionality.

The vibration monitoring system and the software products are dealt with in separate manuals.

### Symbols used



This symbol indicates

- helpful additional information and
- device settings or practical tips that will help you to perform activities more efficiently.

Cross-reference symbol : This symbol refers to a page in the manual that provides further information. If you are reading the manual in PDF format on screen, clicking the word to the left of the cross-reference symbol will take you straight to the section in question.

## 2 Network basics Schaeffler SmartCheck

### 2.1 What is a network?

A network is a connection of several computers or other network-compatible devices, like e.g. a Schaeffler SmartCheck device. The connection can be realized by Ethernet or by WLAN (**W**ireless **L**AN).

There are public networks (e.g. the Internet), where each network address must only exist once and local private networks (e.g. company networks).

### 2.2 What is the TCP/IP protocol?

To understand each other, all members of a computer network need a common language, which is called protocol. Among different protocols, the following documentation is restricted to the TCP/IP protocol (**T**ransmission **C**ontrol **P**rotocol / **I**nternet **P**rotocol) and the UDP protocol (**U**ser **D**atagram **P**rotocol).

### 2.3 What is a IP address?

In a telephone network each member needs a telephone number. Accordingly each member of a computer network needs an identification number. In TCP/IP networks this identification number is called IP address. A commonly used IPv4 address is a number built of 4 parts, where each part is a number between 0 and 255.

#### Example:

IP address
192.168.1.22
10.13.100.5

#### 2.3.1 What is a subnet mask?

The subnet mask is also a number built of 4 parts . A subnet mask determines, which parts of the associated IP address must be identical, so that 2 network members can communicate. The number 255 says "this part must be identical", the number 0 says "this part does not matter".

#### Example:

Subnet mask	255.255.255.0
Member A	192.168.1.50
Member B	192.168.1.70
Member C	192.168.2.90

Members A and B can communicate, because they are only different in the 4th part. Member C cannot communicate, because his IP address is different in the 3rd part, but the subnet mask is not 0 here. With a subnet mask of 255.255.0.0 member C could also communicate.

---

### 2.3.2 What is the difference between IPv4 and IPv6?

There are IP addresses of the fourth (IPv4) and the sixth generation (IPv6). IP addresses of the fourth generation (IPv4) consists of 4 parts and the IPv4 protocol provides an address space of max.  $256 \times 256 \times 256 \times 256 =$  approximately 4 billion IP addresses. That is not enough in the foreseeable future, so, the Internet protocol of the sixth generation (IPv6) was invented. This IP addresses consists of 8 parts and it provides 340 sextillion addresses.

#### Example:

Protocol version	IP address
IPv4	192.168.1.22
IPv6	2001:0db8:85a3:08d3:1319:8a2e:0370:7344

### 2.4 What is a hostname?

A hostname is a unique name of a network member in a network. A hostname is usually easier to remember than for example an IP address. Each Schaeffler SmartCheck device, a hostname can be assigned (see chapter "Setting the IP address of the SmartCheck device" (16)).

### 2.5 What is a MAC address?

The MAC address (**M**edia-**A**ccess-**C**ontrol address; or also called physical address) is a globally unique number of each network adapter hardware. Typically, a MAC address consists of 6 bytes which are written in hexadecimal. Because each MAC address is unique, it is often used as a serial number of a device, e.g. with the Schaeffler SmartCheck device.

#### Example:

MAC address
f4:3d:80:00:16:b5

### 2.6 What is a DHCP server?

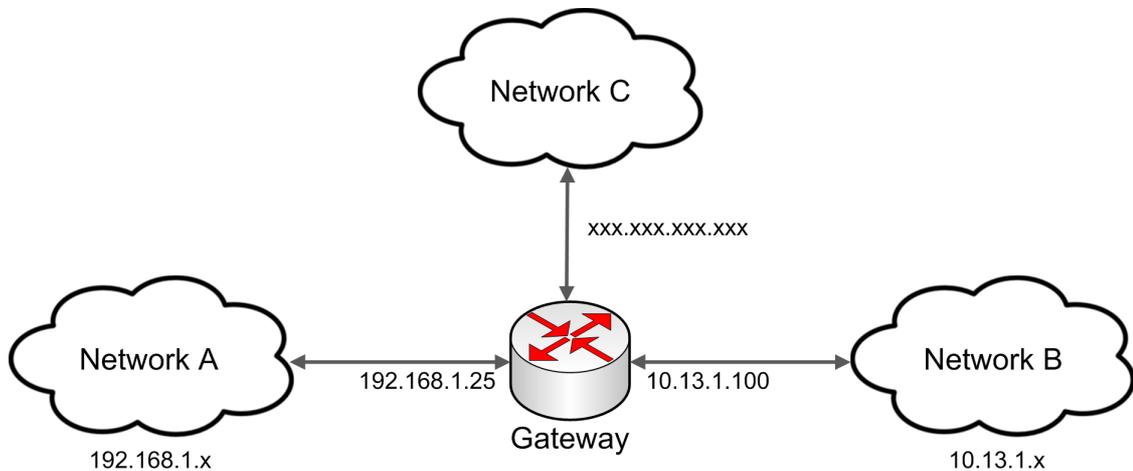
IP addresses can be assigned statically or dynamically. In the case of static assignment, the IP address is entered directly at the device and the network member thus has a fixed IP address. With dynamic assignment, the DHCP-Server (**D**ynamic **H**ost **C**onfiguration **P**rotocol) assigns automatically an IP address to the network member until it is switched on again.

A DHCP server manages a pool of IP addresses and assigns each network member (also known as DHCP client) an IP address if he requests one. This IP address must not always be the same, but this can be enforced, if the system administrator configures a fixed IP address for the associated MAC address.

The Schaeffler SmartCheck device can work with a fixed IP address as well as receiving its address from a DHCP server. The latter corresponds to the delivery status of the Schaeffler SmartCheck device.

## 2.7 What is a gateway?

A gateway is a juncture for a number of different networks or subnets. Today mostly "default gateway" were used, that simply transmit all requests to foreign networks or subnets according to their configuration settings:



### Example:

The members from the networks A and B may not communicate normally, because their IP addresses belong to different networks. But if each member sends his requests to his gateway instead, the gateway can forward the request accordingly. Therefore a gateway has multiple IP addresses, one for each network. In the example, a computer with Schaeffler SmartUtility (Light) software installed can communicate with a Schaeffler SmartCheck device on another network through a gateway.

## 2.8 What is a proxy?

A proxy is also a connector between different networks. But a proxy acts more as a representative for a network with respect to other networks.

Compared to a simple gateway, a proxy can analyze the data traffic, filter requests, make modifications or buffer answers. Thus, they are quickly available in case of recurring requests, which is mainly important in the Internet traffic.

Often, a network member is configured in a way, that it does not send all inquiries directly to the target address, but instead of that it sends to the proxy.

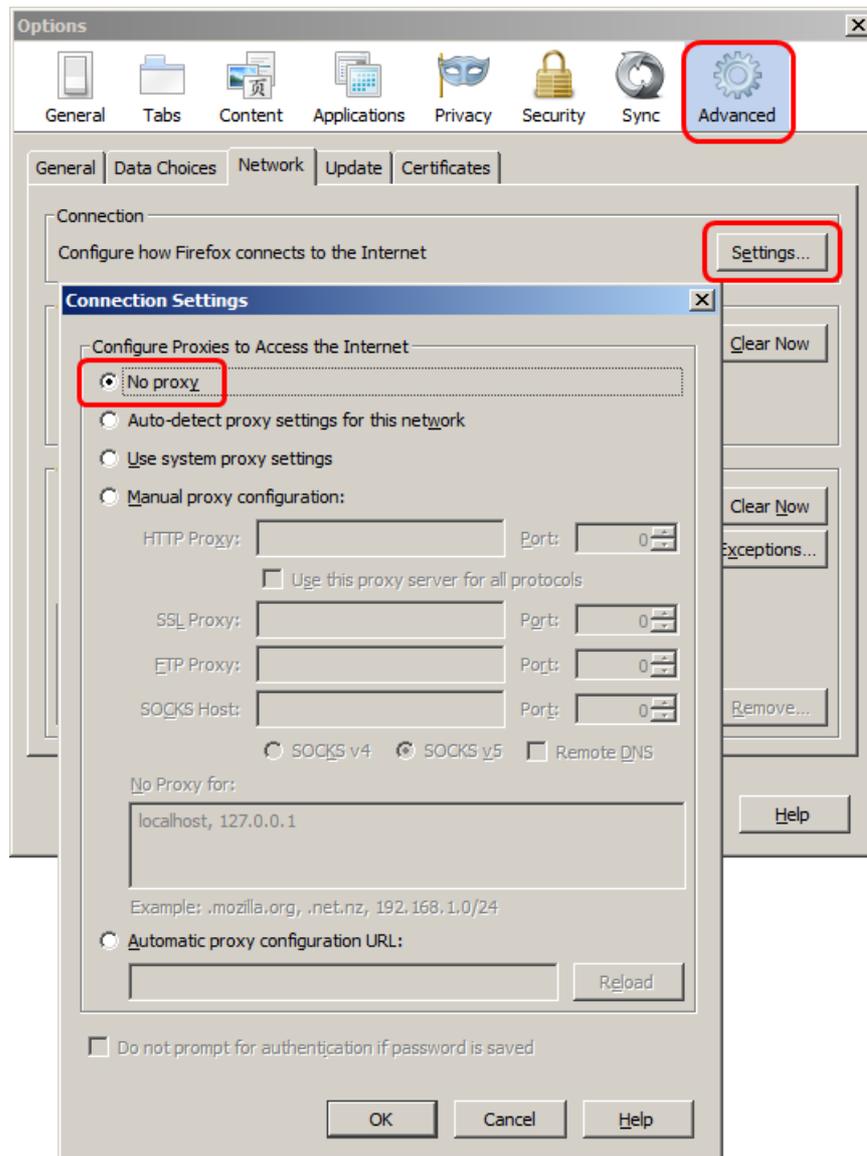
### 2.8.1 Deactivate proxy

If you cannot reach the Schaeffler SmartCheck device, this may be due to the proxy settings in your Internet browser.

You can disable the proxy in your Internet browser as follows:

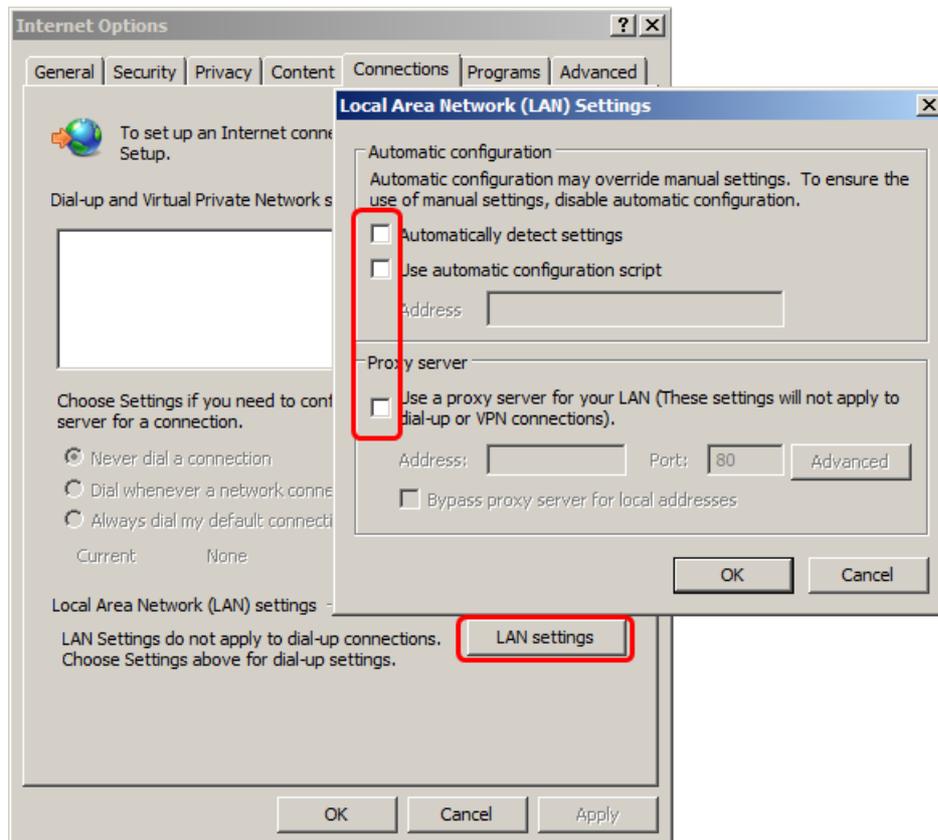
## Deactivate proxy in Mozilla Firefox

- Click on the button **Open menu** .
- Open **Advanced** in the **Settings** section.
- Select the **Network** tab and
- click in the **Connections** area on **Settings**.
- Select the connection settings **No proxy** and click **OK**.
- Close the settings.



## Deactivate proxy in Microsoft Internet Explorer

- Click on the button **Extras** .
- Open the **Internet Options**.
- Select the **Connections** tab and
- click **LAN Settings**.
- Disable all 3 checkboxes and click **OK**.
- Close the settings.



## 2.9 What is a browser cache?

The browser cache is a buffer which stores temporarily graphics, scripts and other web page content locally stored on the user's PC. This will speed up many operations, because these data do not have to be downloaded again the next time.

Sometimes the browser cache contains outdated data without recognizing this. As a result the SmartWeb web interface of the SmartCheck device is no longer functioning properly.



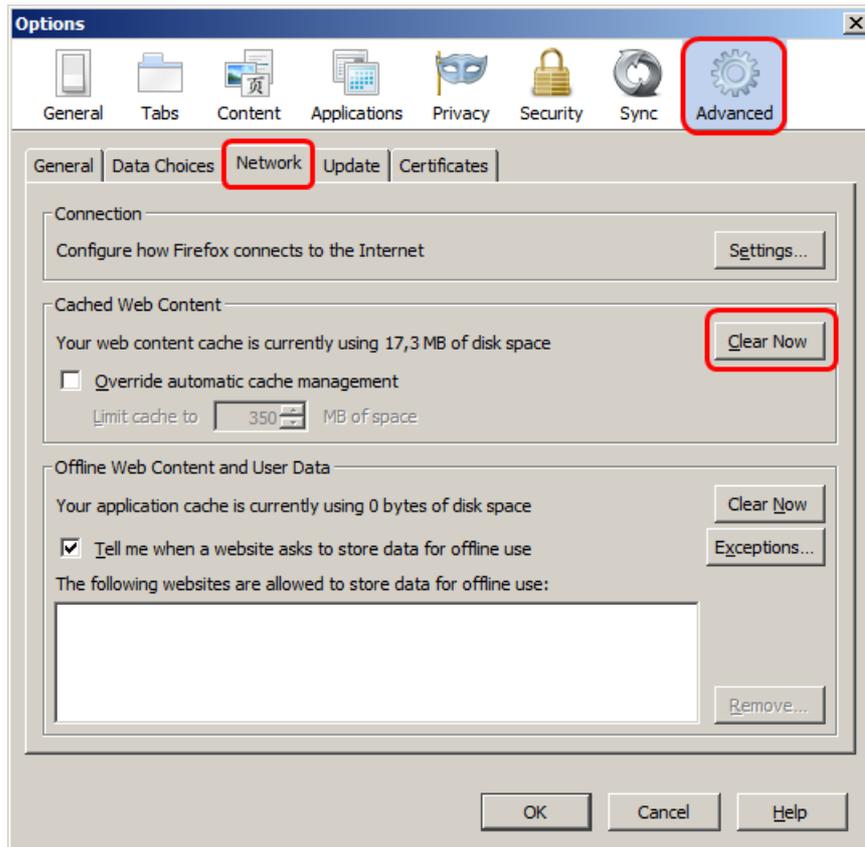
If you update the Schaeffler SmartCheck firmware, please clear the browser cache.

### 2.9.1 Clear browser cache

You can clear the browser cache in Mozilla Firefox and Internet Explorer as follows:

#### Clear browser cache in Mozilla Firefox

- Click on the button **Open menu** ☰.
- Open **Advanced** in the **Settings** section.
- Select the **Network** tab and
- click in the **Cached Web Content** area on **Clear now**.
- Click **OK**.



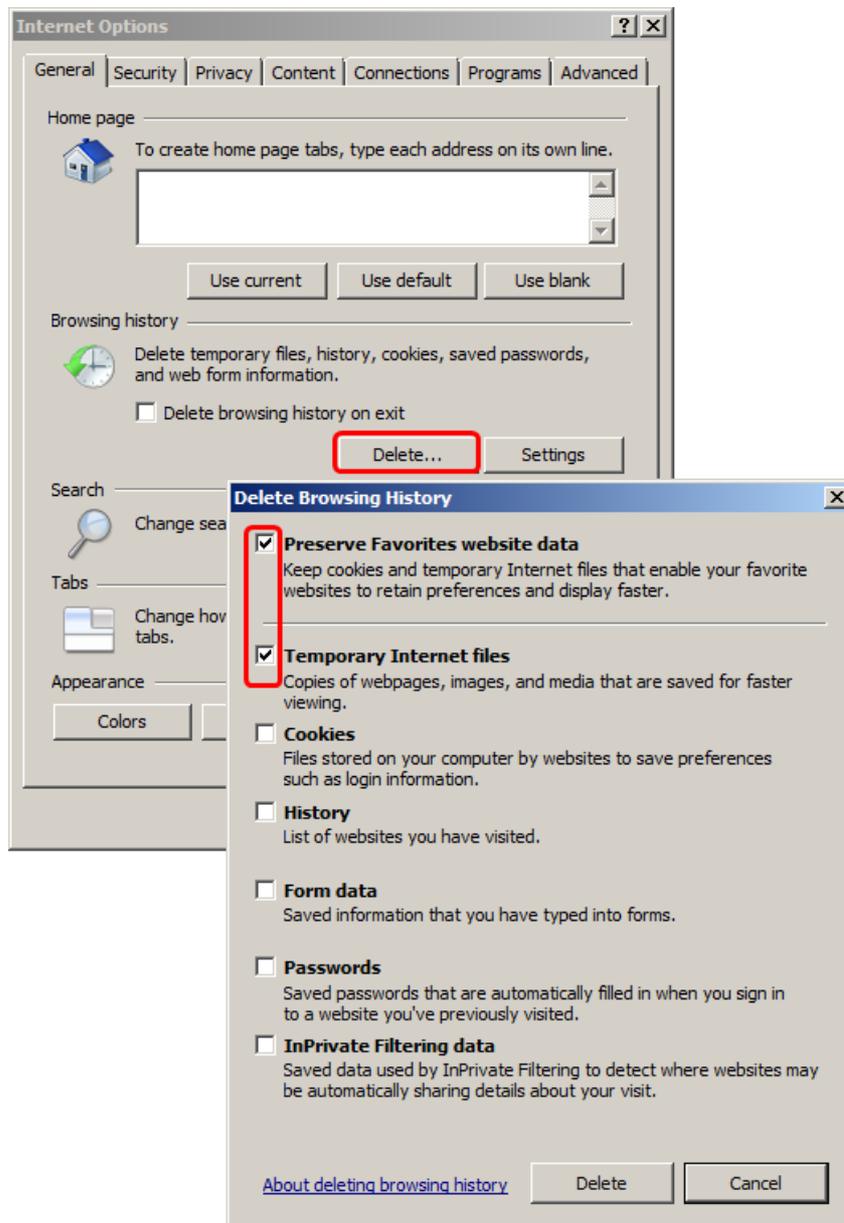
## Clear browser cache in Microsoft Internet Explorer

- Click on the button **Extras** .
- Open the **Internet Options**.
- Select the **General** tab and
- click in the **Browsing history** area on **Delete**.
- Select the options **Preserve Favorites website data** and **Temporary Internet Files** and
- click on **Delete**.



Please do not select the other options. Otherwise more data will be deleted, as required.

- Close the settings.



## 2.10 How to determine the active IP address?

The following section describes how you can determine the active IP address of your PC and the IP address of the Schaeffler SmartCheck device.

### 2.10.1 Determine the IP address of the PC



To determine the IP address of your own PC, your PC must already be connected via network cable to a network or a network device.

You can determine the IP settings of your PC under Windows 7 as follows:

- Click **Start** on the Windows taskbar.
- Enter **CMD** into the search field and press **Enter**.

The window with the Windows command prompt opens. Here you can enter MS DOS commands and other computer commands after the > prompt.

- Type **ipconfig** and press **ENTER**.

Now the IP address<sup>5)</sup>, the subnet mask<sup>5)</sup> and the default gateway<sup>7)</sup> of your PC will be displayed.

```
C:\Windows\system32\cmd.exe
C:\Windows\System32> ipconfig
Windows IP Configuration

Ethernet adapter LAN-Verbindung:

    Connection-specific DNS Suffix  . : emea.fag.com
    Link-local IPv6 Address . . . . . : fe80::25c9:919f:8135:40d0%11
    IPv4 Address. . . . . : 172.28.205.202
    Subnet Mask . . . . . : 255.255.252.0
    Default Gateway . . . . . : 172.28.204.254

C:\Windows\System32>
```

You can close the Windows command prompt by clicking **×** **Close**.

## 2.10.2 Determine the IP address of the Schaeffler SmartCheck device

You can determine the IP settings of the Schaeffler SmartCheck device in the Schaeffler SmartUtility or Schaeffler SmartUtility Light software as follows:

- Open the Schaeffler SmartUtility or Schaeffler SmartUtility Light software.
- Click **Open devices**.
- Search the desired device in the list by its serial number or name and read the IP address.



You can find further information to the dialog "Open devices" in the Schaeffler SmartUtility or Schaeffler SmartUtility Light software manual.

SmartUtility  
Open devices

1. Select devices  
2. Open devices

Select the devices that you want to open in the browser.  
Press F5 to update the device list.

Alarm	Device name	IP address	Serial number	Firmware
<input type="checkbox"/>	FAG SmartCheck 242	172.28.205.242	f4:3d:80:00:21:1f	1.6.12
<input type="checkbox"/>	FAG SmartCheck 100	192.168.1.100	f4:3d:80:00:13:4d	1.6.10
<input type="checkbox"/>	FAG SmartCheck 130	172.28.205.130	f4:3d:80:00:00:b6	1.6.20
<input type="checkbox"/>	FAG SmartCheck 96	172.28.205.96	f4:3d:80:00:08:84	1.6.12
<input type="checkbox"/>	FAG SmartCheck 154	172.28.205.154	f4:3d:80:00:16:c6	1.6.20
<input checked="" type="checkbox"/>	FAG SmartCheck 165	172.28.205.165	f4:3d:80:00:15:22	1.6.12
<input type="checkbox"/>	FAG SmartCheck 132	172.28.205.132	f4:3d:80:00:01:22	1.6.12
<input type="checkbox"/>	FAG SmartCheck 60	172.28.205.60	f4:3d:80:00:07:55	1.6.12
<input type="checkbox"/>	FAG SmartCheck 100	192.168.1.100	f4:3d:80:00:1b:d9	1.6.12
<input type="checkbox"/>	FAG SmartCheck 100	192.168.1.100	f4:3d:80:00:12:5c	1.6.10
<input type="checkbox"/>	FAG SmartCheck 232	172.28.205.232	f4:3d:80:00:0d:ce	1.6.20
<input type="checkbox"/>	FAG SmartCheck 238	172.28.205.238	f4:3d:80:00:16:a6	1.6.20
<input type="checkbox"/>	FAG SmartCheck 92	172.28.206.92	f4:3d:80:00:13:68	< 1.6
<input type="checkbox"/>	FAG SmartCheck 139	172.28.205.139	f4:3d:80:00:01:3c	1.6.6
<input type="checkbox"/>	FAG SmartCheck 137	172.28.205.137	f4:3d:80:00:01:6e	1.6.20
<input type="checkbox"/>	FAG SmartCheck 230	172.28.205.230	f4:3d:80:00:0d:cc	1.6.10
<input type="checkbox"/>	FAG SmartCheck 131	172.28.205.131	f4:3d:80:00:01:81	1.6.12
<input type="checkbox"/>	FAG SmartCheck 134	172.28.205.134	f4:3d:80:00:01:37	1.6.12
<input type="checkbox"/>	FAG SmartCheck 138	172.28.205.138	f4:3d:80:00:01:98	1.6.12
<input type="checkbox"/>	FAG SmartCheck 141	172.28.206.141	f4:3d:80:00:0b:81	1.6.6
<input type="checkbox"/>	FAG SmartCheck 83	172.28.205.83	f4:3d:80:00:0a:f5	1.6.12
<input type="checkbox"/>	FAG SmartCheck 222	172.28.205.222	f4:3d:80:00:1c:3f	1.6.12

68 Devices (New devices are searched for every 120 seconds)

Hilfe Back Next Finish Cancel

## 2.11 How to set the IP address?

The following section describes how you can set the active IP address of your PC and the Schaeffler SmartCheck device.

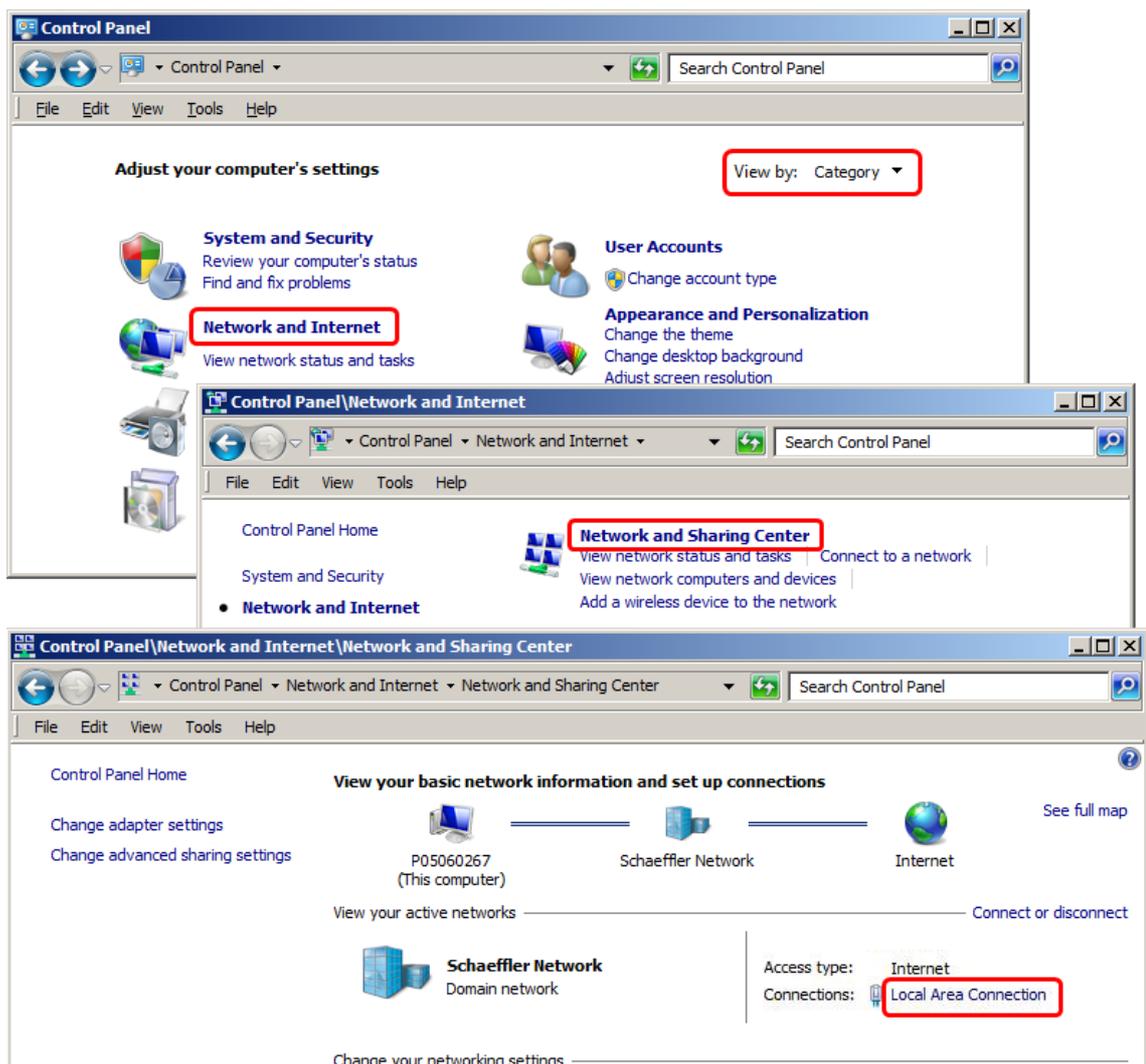
### 2.11.1 Setting the IP address of the PC



- Your PC needs a suitable IP address [12] to be able to communicate with a network (or Schaeffler SmartCheck device). To determine the IP address of your PC, your PC must already be connected via network cable to a network or a network device.
- If you change the IP settings, the functionality of the computer and the communicating systems can be impaired.
- If you are in a corporate network, contact your system administrator beforehand.

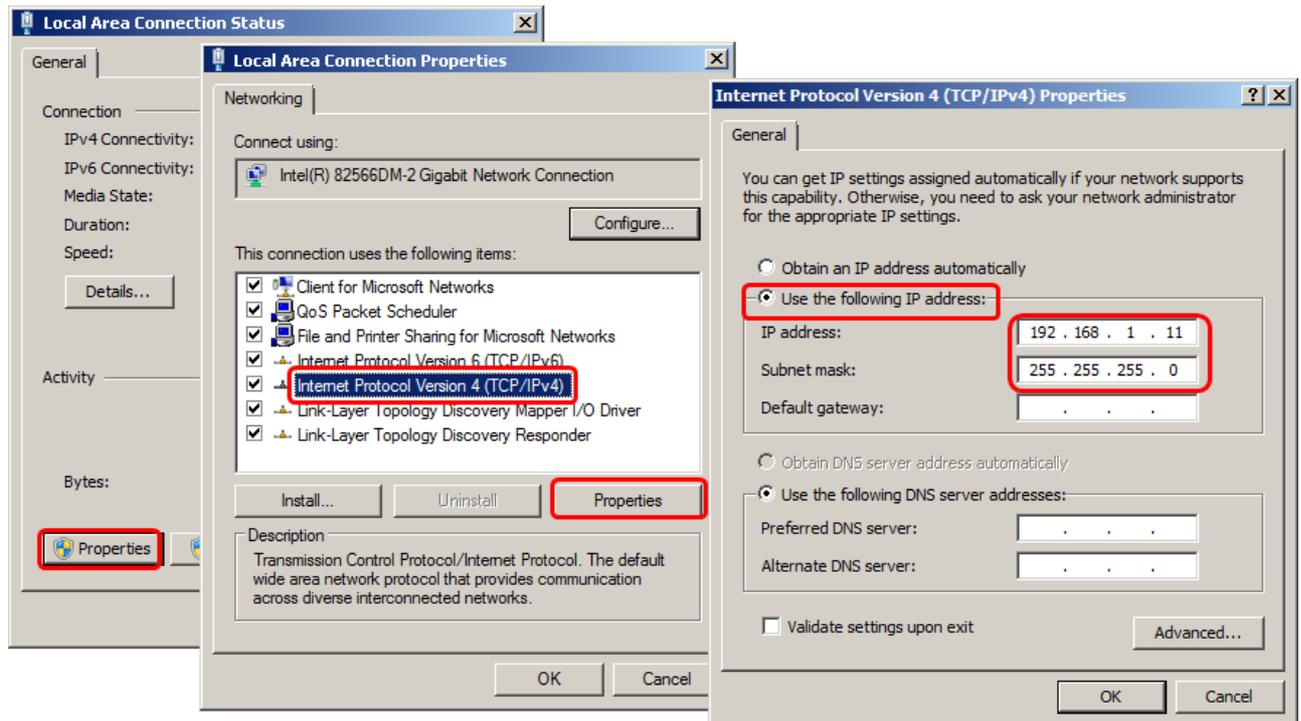
You can set the IP address of your PC under Windows 7 as follows:

- Click **Start** on the Windows taskbar.
- Click **Control panel**.
- In the area "Adjust your computer's settings" set view by **Category**.
- Select **Network and Internet** and click **Network and Sharing Center**.
- Click **Connections** and then click **Local Area Connection**.



The dialogue "Local Area Connection Status" opens.

- Click **Properties**.
- Select **Internet Protocol Version 4 (TCP/IPv4)** in the list and click **Properties**.
- Select **Use the following IP address** and enter the desired **IP address** and **Subnet mask**.  
If necessary, you can also enter the default gateway. In this case please contact your system administrator.
- Click **OK**.
- Click **OK** again.
- Close the Network properties.



## 2.11.2 Setting the IP address of the Schaeffler SmartCheck device

You can set the IP address of a Schaeffler SmartCheck device in the Schaeffler SmartUtility or Schaeffler SmartUtility Light software as follows:

- Start the Schaeffler SmartUtility or Schaeffler SmartUtility Light software.
- Click **Edit device settings**.
- Select the desired SmartCheck device whose settings you want to edit.
- Click **Next**.

SmartUtility  
Edit device settings

1. Select device  
2. Edit device settings  
3. Transferring device settings

Edit the device settings for the selected device. The settings include the network parameters and the device name for example.

Edit device settings

DHCP mode:  
No DHCP

IP address:  
172 , 28 , 205 , 132

Netmask:  
255 , 255 , 252 , 0

Gateway:  
172 , 28 , 204 , 254

Host name:  
FAGSmartCheck

Device name:  
FAG SmartCheck

Help Back Next Cancel

- Select the DHCP mode **No DHCP**.
- Enter the **IP address**, the **subnet mask** and if necessary the default **gateway**.
- If necessary, adjust the **hostname**.
- Click **Next**, to send the settings to the SmartCheck device.



- Contact your system administrator to get the IP address, the subnet mask and the default gateways.
- The hostname is by default "SmartCheck" plus the last 6 digits of the serial number<sup>[6]</sup> of the Schaeffler SmartCheck device (e.g. "SmartCheck001b95"). You should change this value only if your system administrator this requests.
- You will find more information about the dialogue "Edit device settings" in the Schaeffler SmartUtility or Schaeffler SmartUtility Light software manual.

## 2.12 How to test an IP address with PING?

With the Command Prompt command "Ping" you can check whether a network member is reachable.

Proceed as follows:

- Click **Start** on the Windows taskbar.
- In the search box, type **CMD** and then press **Enter**.

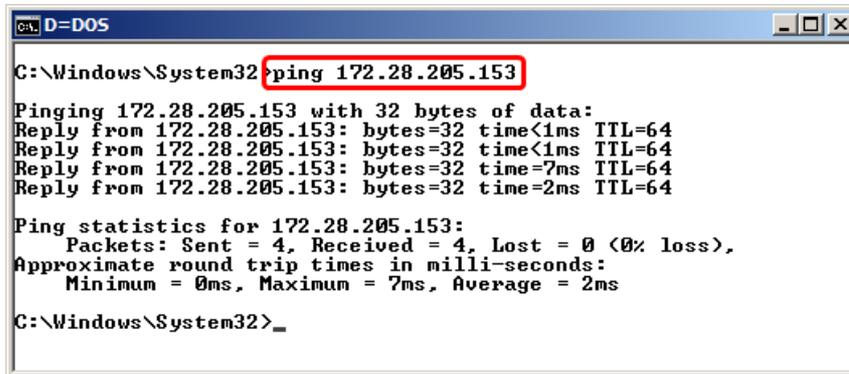
In the Command Prompt window you can enter MS DOS commands and other computer commands.

- Behind the angle bracket character (>) enter the command **ping** and the IP address, which you want to test, e.g. "ping 172.28.205.153".
- Press **ENTER**.

Now the PC sends echo request packets to the other member, that the other must answer mandatory.

### The member is reachable

If the member can be reached, a message similar to the following will be shown:



```

C:\Windows\System32>ping 172.28.205.153

Pinging 172.28.205.153 with 32 bytes of data:
Reply from 172.28.205.153: bytes=32 time<1ms TTL=64
Reply from 172.28.205.153: bytes=32 time<1ms TTL=64
Reply from 172.28.205.153: bytes=32 time=7ms TTL=64
Reply from 172.28.205.153: bytes=32 time=2ms TTL=64

Ping statistics for 172.28.205.153:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 7ms, Average = 2ms

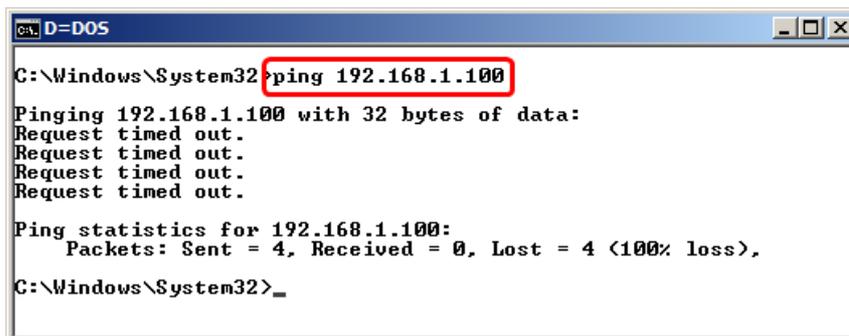
C:\Windows\System32>_

```

The transmitted echo request packets have been received completely.

### The member is not reachable

If the member cannot be reached or does not answer, a message similar to the following will be shown:



```

C:\Windows\System32>ping 192.168.1.100

Pinging 192.168.1.100 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.100:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Windows\System32>_

```

The transmitted echo request packets have not been received again.

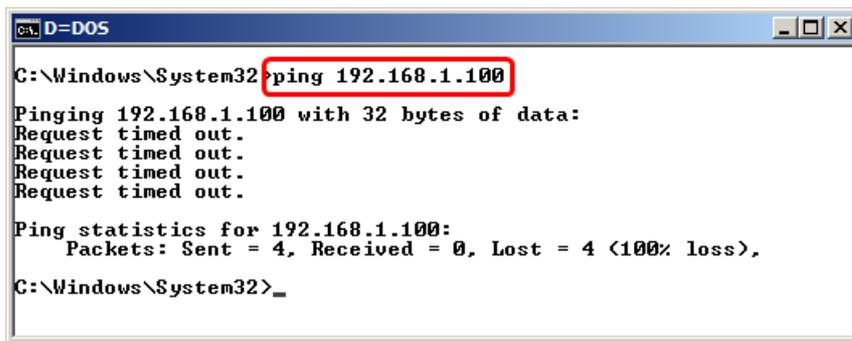
#### Possible causes are:

- an incorrect IP address: Please check the IP address<sup>54</sup>.
- the member does not exist (due to a switched-off device, a cable break or an other defect).
- the member is behind a firewall.

---

### The member is not reachable, because he is located in a foreign network

If the member is located in a foreign network that is generally not reachable, a similar message to the following will be shown:



```
C:\Windows\System32>ping 192.168.1.100
Pinging 192.168.1.100 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.100:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\Windows\System32>
```

The Gateway<sup>7</sup> cannot forward to the desired IP address.

#### Possible causes are:

- an incorrect IP address: Please check the IP address<sup>5</sup>.
- the member does not exist (due to a switched-off device, a cable break or an other defect).
- the member is behind a firewall.

## 2.13 How to integrate a Schaeffler SmartCheck device into a network?

This section describes how you can integrate a Schaeffler SmartCheck device in a computer network.

The following scenarios are considered:

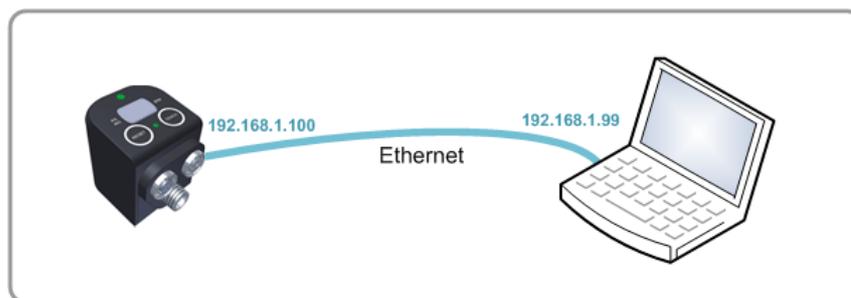
- Connect the Schaeffler SmartCheck device directly with the PC (without network)<sup>[19]</sup>
- The Schaeffler SmartCheck device is located in a network without DHCP<sup>[20]</sup>
- The Schaeffler SmartCheck device is located in a network with DHCP<sup>[21]</sup>



- Make sure that the Schaeffler SmartCheck device is supplied with power and that the device is ready-for-operate.
- If you cannot reach the SmartCheck device, please refer to the checklist<sup>[22]</sup>. Contact the support if necessary.

### 2.13.1 Connect Schaeffler SmartCheck device directly with the PC (without network)

You can connect the SmartCheck device directly via ethernet cable to your PC.



Proceed as follows:

- Connect the ethernet cable (M12 connector on RJ45) with the SmartCheck device and
- connect the other end of the ethernet cable to your PC.
- Now determine the IP address of the SmartCheck device<sup>[13]</sup>. By default, the device has the IP address 192.168.1.100. In this case the IP address of your PC must be in the range 192.168.1.x and the subnet mask must be set to 255.255.255.0. Think of a matching IP address.

#### Example:

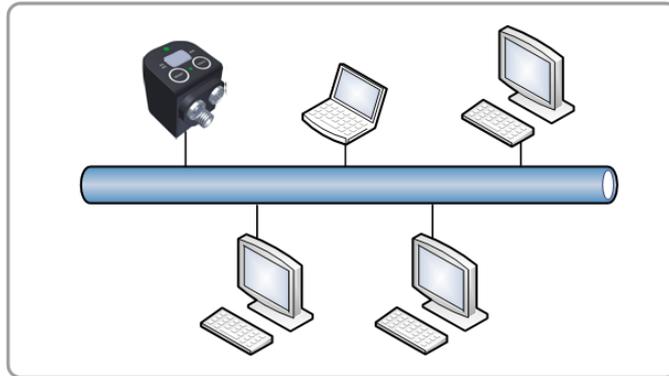
IP address SmartCheck	IP address PC	Subnet mask
192.168.1.100	192.168.1.99	255.255.255.0

Now set the IP address of the PC<sup>[14]</sup> as follows:

- Open **Network and Internet** and click **Network and Sharing Center**.
- Set in the Local Area Connection the IP address and the subnet mask.

### 2.13.2 The Schaeffler SmartCheck device is located in a network without DHCP server

If the SmartCheck device is located in a network without DHCP server, you can reach the device as follows:

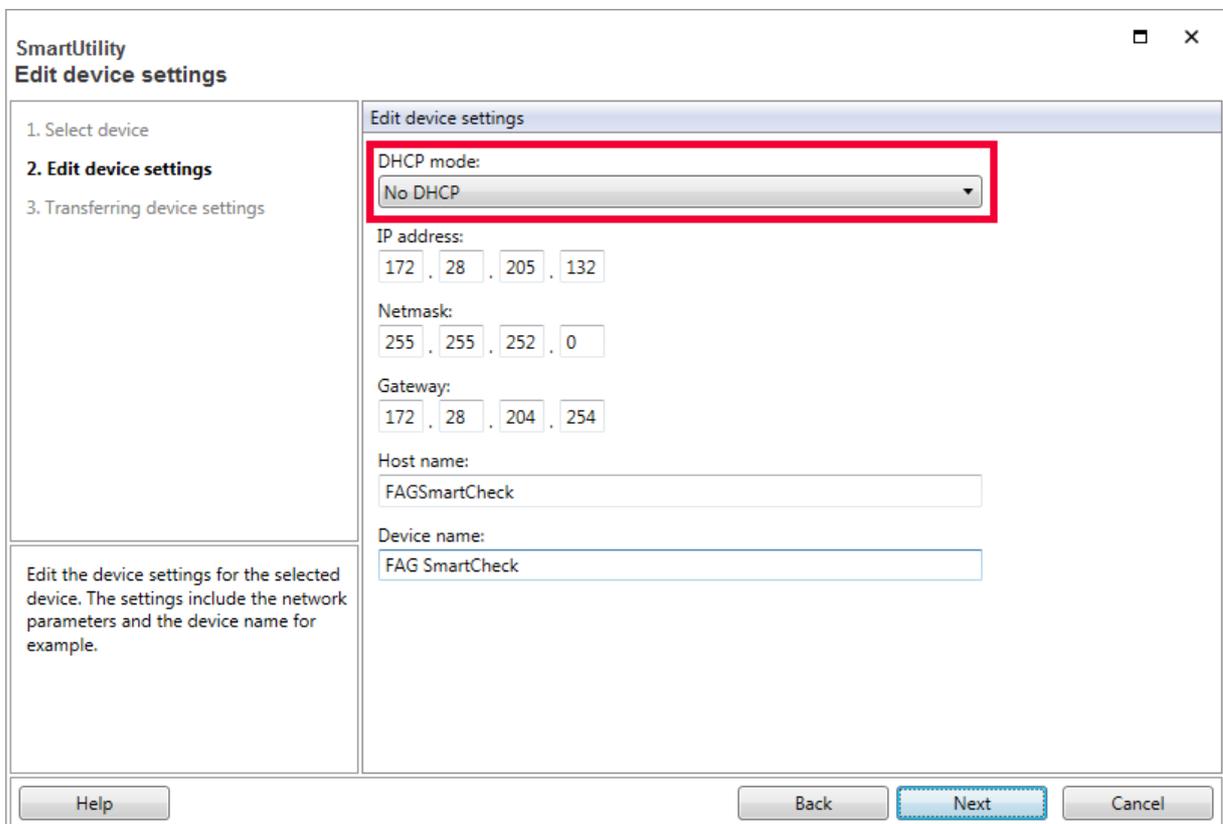


- Determine the IP address of the PC<sup>[12]</sup> and the subnet mask of your PC.
- Ask your system administrator for a free and matching IP address.

**Example:**

IP address SmartCheck	IP address PC	Subnet mask
172.28.205.132	172.28.205.93	255.255.255.0

- Connect the SmartCheck device with your network.
- Set the IP address and the subnet mask of the SmartCheck device in the Schaeffler SmartUtility or SmartUtility Light software an (see chapter "Setting the IP address of the Schaeffler SmartCheck device"<sup>[16]</sup>).



SmartUtility  
Edit device settings

1. Select device  
2. Edit device settings  
3. Transferring device settings

Edit the device settings for the selected device. The settings include the network parameters and the device name for example.

Edit device settings

DHCP mode:  
No DHCP

IP address:  
172 . 28 . 205 . 132

Netmask:  
255 . 255 . 252 . 0

Gateway:  
172 . 28 . 204 . 254

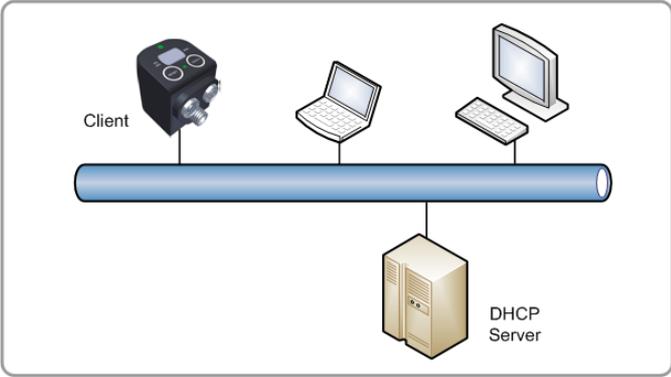
Host name:  
FAGSmartCheck

Device name:  
FAG SmartCheck

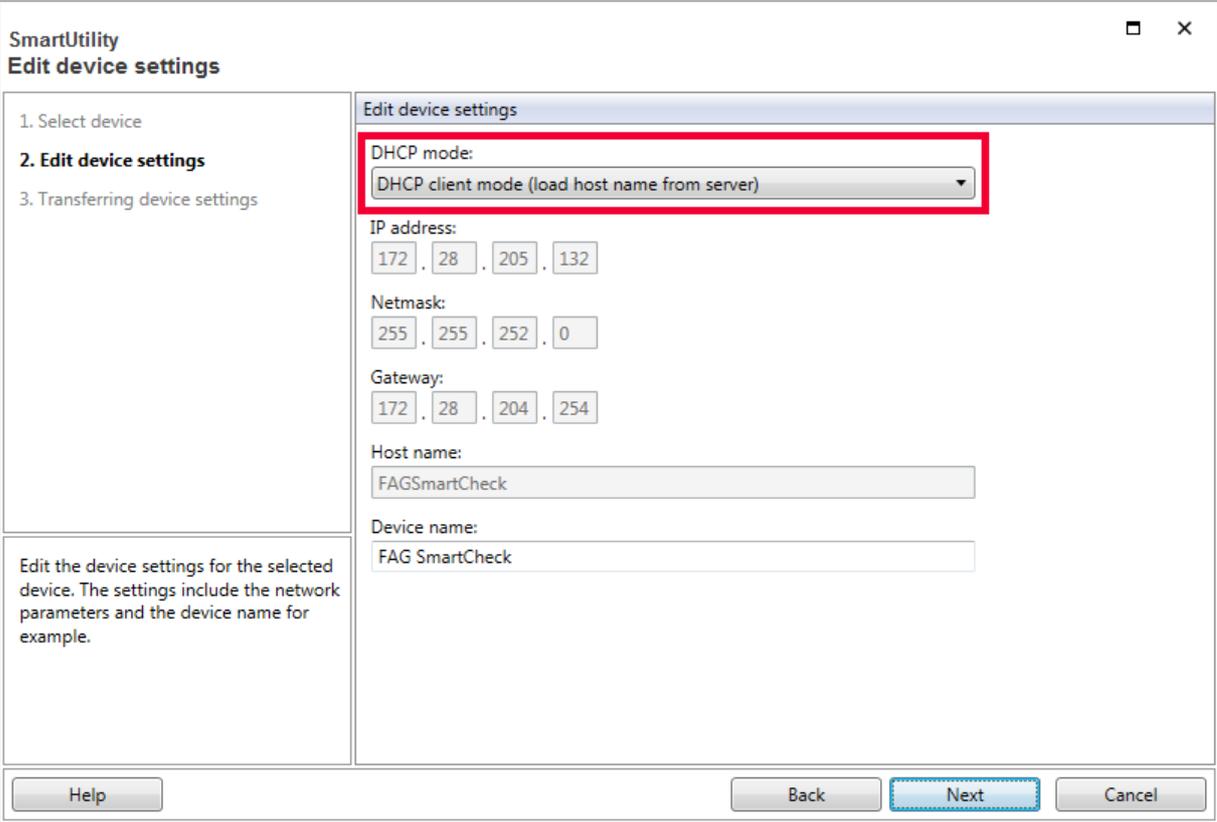
Help Back Next Cancel

### 2.13.3 The Schaeffler SmartCheck device is located in a network with DHCP server

If the SmartCheck device is located in a network with DHCP server, you can reach the device as follows:



- Talk to your system administrator and clarify that your DHCP server on request assigns an IP address to the SmartCheck device. Your system administrator might ask for the MAC address (the serial number) of the SmartCheck device.
- Connect the SmartCheck device with your network.
- Set the DHCP mode of the SmartCheck device in the Schaeffler SmartUtility or SmartUtility Light software on "DHCP client mode (Load hostname from server)" (see chapter "Setting the IP address of the Schaeffler SmartCheck device").



## 2.14 What if I cannot reach the Schaeffler SmartCheck device?

If you have connection problems in your network with the Schaeffler SmartCheck device, you will find in this section information for the diagnosis and troubleshooting.



If the connection problems persists, please contact your system administrator or the support.

### 2.14.1 Connection problems in the Schaeffler SmartUtility or Schaeffler SmartUtility Light software

If you cannot find the Schaeffler SmartCheck device in the device list of the Schaeffler SmartUtility or Schaeffler SmartUtility Light software:

Possible reason	Check / Action	Information
Is the SmartCheck device ready-to-operate?	Which color shows the status LED of the SmartCheck device?	While the status LED alternately flashes red and yellow, the SmartCheck device is booting. During the boot process, the device is not reachable via network.
Disables a firewall the connection to the SmartCheck device?	Deactivate the firewall on your PC and/or Gateway temporarily.	The UDP ports 19000 and 19001 must not be blocked by the firewall. All SmartCheck devices in the network are searched via an UDP broadcast. Your system administrator can include this exception in the firewall permanently.
Is the version of the SmartUtility or SmartUtility Light software compatible with the version of the SmartWeb firmware?	Compare the version numbers of SmartUtility or SmartUtility Light (under "Further actions" > "Info") and SmartWeb (under "Help" > "Version Information" > "Firmware").	The version number of SmartUtility or SmartUtility Light must be greater or equal of SmartWeb. If necessary, download the latest version under <a href="http://www.fag-smartcheck.com">www.fag-smartcheck.com</a> .
Does the SmartUtility or SmartUtility Light software work correctly?	Restart the SmartUtility or SmartUtility Light software.	Maybe a failure occurred while executing the SmartUtility or SmartUtility Light software.
Which is the easiest network connection to a SmartCheck device?	Connect the SmartCheck device directly via ethernet cable with your PC  .	All other error causes a complex network can thus be reduced to basic functions.
Is the SmartCheck device accessible?	Interrupt the power supply of the SmartCheck device for about 10 seconds. Then the SmartCheck will reboot.	Rebooting the firmware of the SmartCheck device, obtains a defined starting point.

## 2.14.2 Connection problems in the Schaeffler SmartWeb software

If you cannot open the Schaeffler SmartWeb software in the Internet Browser:

Possible reason	Check / Action	Information
Is the IP address of the SmartCheck device correct?	Check in the device list <a href="#">13</a> of the SmartUtility or SmartUtility Light software, which IP address the SmartCheck has. You can search the SmartCheck device via serial number.	Maybe the IP address has been reset to factory defaults. Then the IP address is 192.168.1.100.
Is the SmartCheck device ready-to-operate?	Which color shows the status LED of the SmartCheck device?	While the status LED alternately flashes red and yellow, the SmartCheck device is booting. During the boot process, the device is not reachable via network.
Is the IP address of the SmartCheck device reachable in the network?	Send the "Ping" command <a href="#">17</a> with the IP address of the SmartCheck device.	This checks whether the SmartCheck device is not reachable in the network.
Does your PC have an IP address?	Send the "ipconfig" command <a href="#">12</a> and make sure that your PC has an IP address.	If DHCP is enabled, an error may have occurred and no IP address has been assigned to your PC. In this case, network communication is impossible.
Does an IP address occur twice in your network?	Make sure, that neither the IP address of your PC nor the of the SmartCheck device are assigned twice in your network.	Each member in the network needs its own and unique IP address.
Can the proxy settings prevent your network connection?	Deactivate the proxy <a href="#">7</a> .	The request from the network is not send to the destination address, but to the proxy.
Is the content of the SmartWeb software displayed correctly?	Delete the cache <a href="#">10</a> of your internet browser.	The cache contains temporary data for a better performance. These temporary data might be outdated.
Which is the easiest network connection to a SmartCheck device?	Connect the SmartCheck device directly via ethernet cable with your PC <a href="#">19</a> .	All other error causes a complex network can thus be reduced to basic functions.
Is the SmartCheck device accessible?	Interrupt the power supply of the SmartCheck device for about 10 seconds. Then the SmartCheck will reboot.	Rebooting the firmware of the SmartCheck device, obtains a defined starting point.

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## 3 Contact / Support

### **Manufacturer**

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We provide support services for the Schaeffler SmartCheck device and related software products. A detailed description of the type and scope of the support services we provide can be found online at [www.schaeffler.de/en/condition-monitoring/smartcheck](http://www.schaeffler.de/en/condition-monitoring/smartcheck).