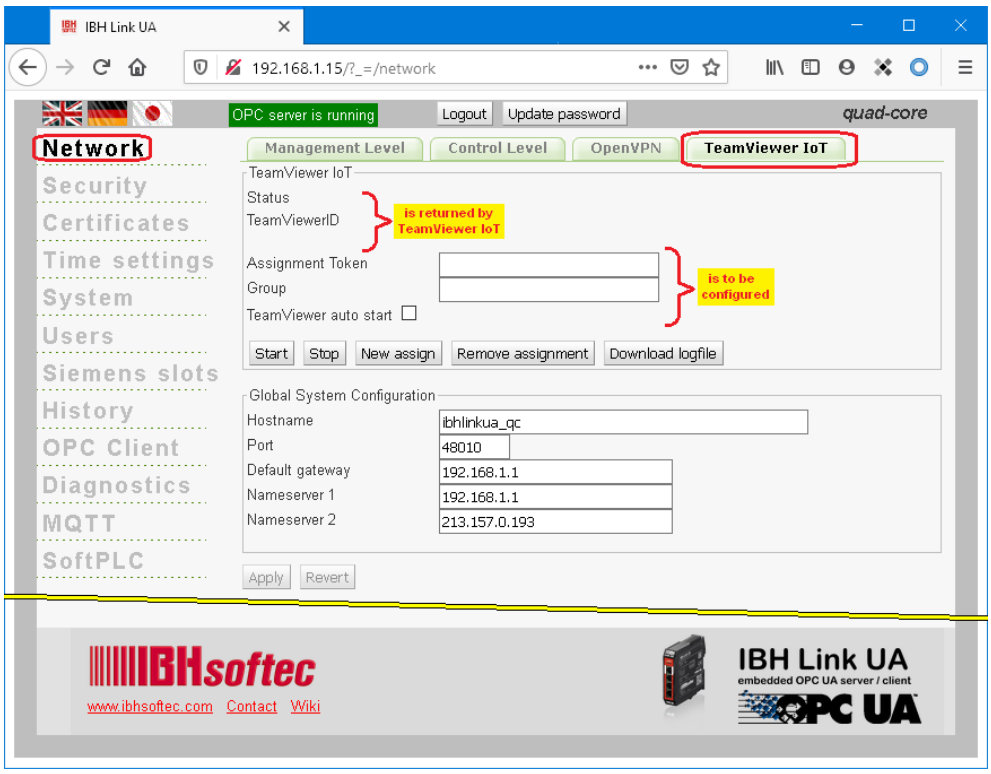
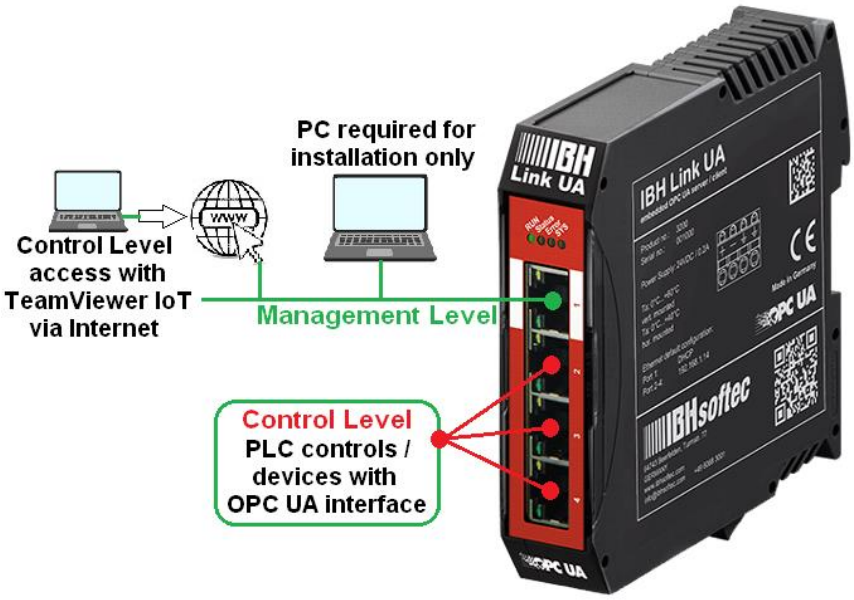
1 TeamViewer IoT activation – IBH Link UA

TeamViewer IoT software option is pre-installed in the IBH Link UA starting firmware V 7.5. This option offers the possibility of being able to access almost all PLC systems anytime and anywhere.

Complex modem solutions or the use of a PC on site are a thing of the past.



To establish a connection via ***TeamViewer-IoT***, the Ethernet subnet of the control level must have access to the Internet.



The IBH Link UA manages two subnet addresses separated by a firewall, each with its own MAC address.

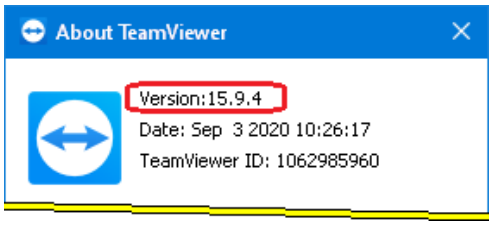
Ethernet areas:

Level	Port	
Management Level	Port 1	**must be in different subnets**
Control Level	Port 2 - 4	

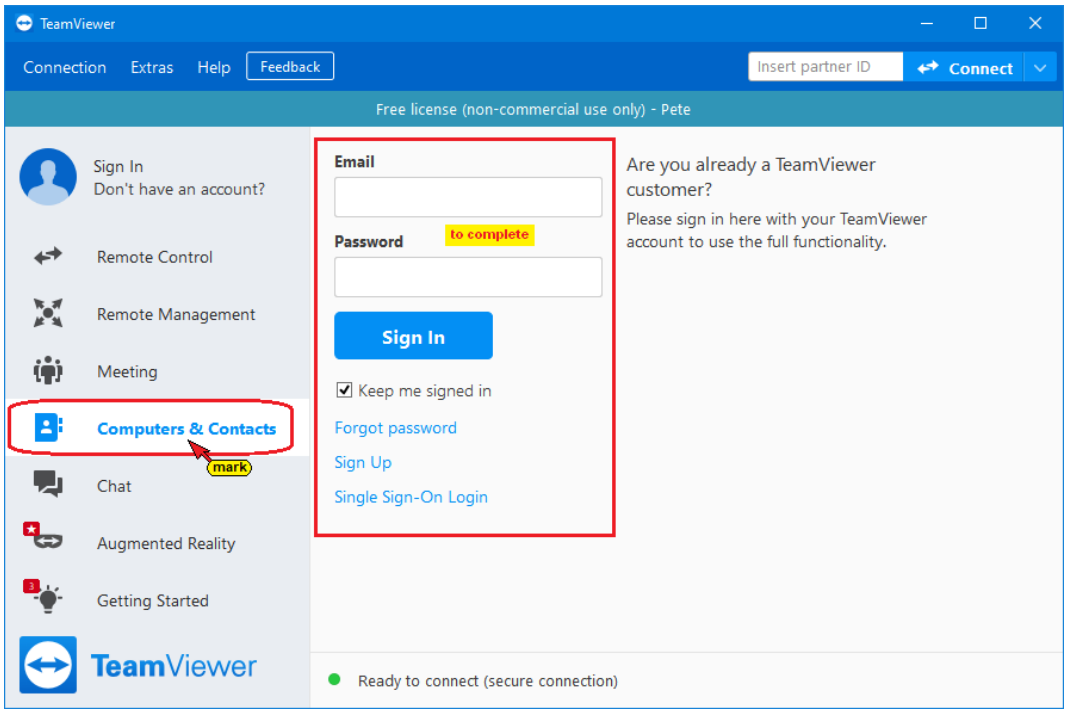
PC preparations – connected to the Ethernet port of the Management Level

To use the access options of the pre-installed TeamViewer IoT software, the following conditions must be met:

TeamViewer software version 15.9.4 or newer must be installed on the PC that is to be used to access the external IBH Link UA.



A TeamViewer account with a corresponding license must be ready for activation.

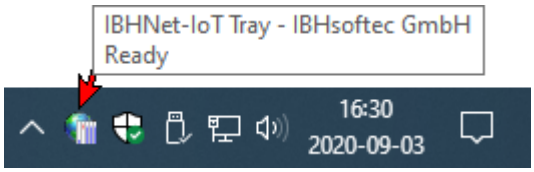


Install the IBHNet-IoT-Setup.exe software on the PC. This software is available for download at
https://download.ibhsoftec.com/neutral/IBHNet-IoT-Setup.exe

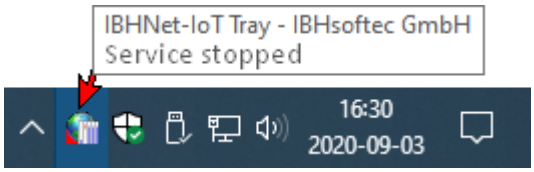
Install IBHNet-IoT software

Double-click the ***IBHNet-IoT*** icon created during installation. The ibhsoftec-agent-service is started.

The service is displayed in the ***IBHNet-IoT Tray*** in the task bar. It may be necessary to change the properties of the taskbar to display the icon.



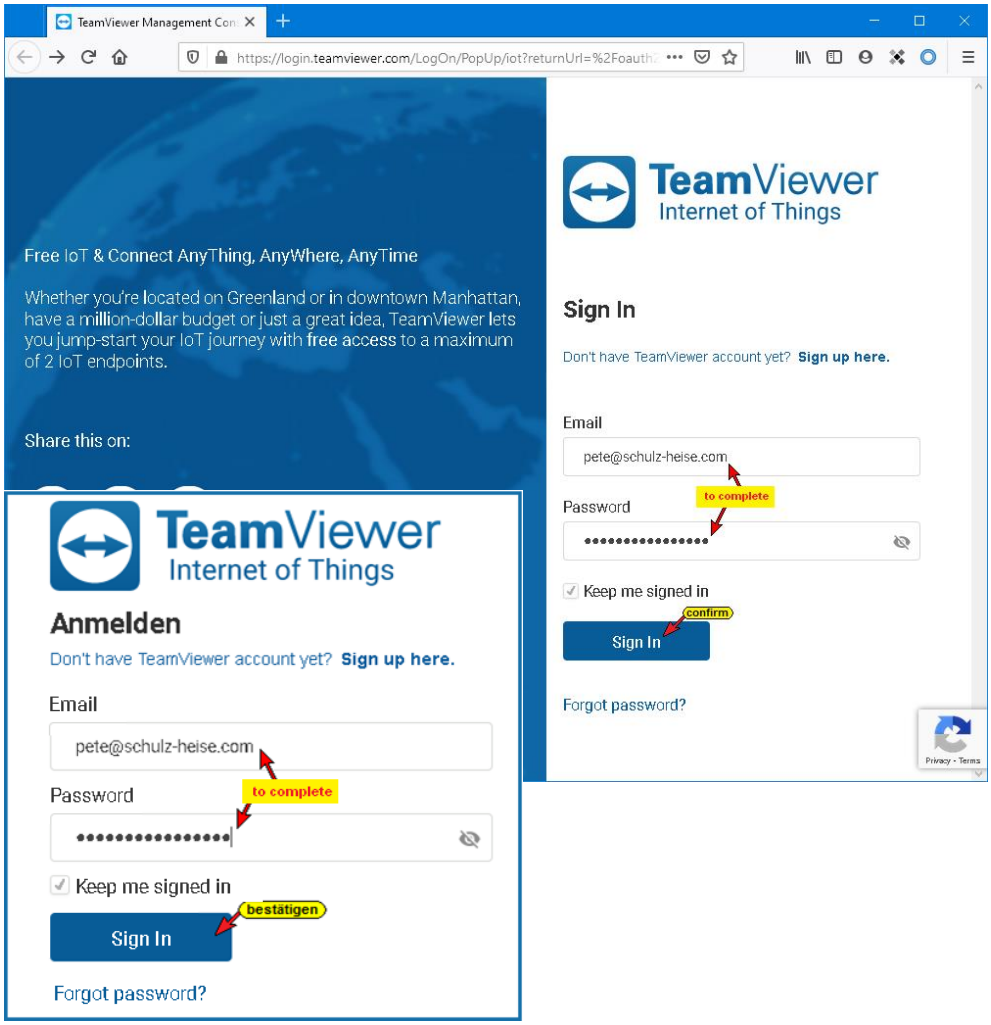
Pointing to the icon, displays the readiness of the service.



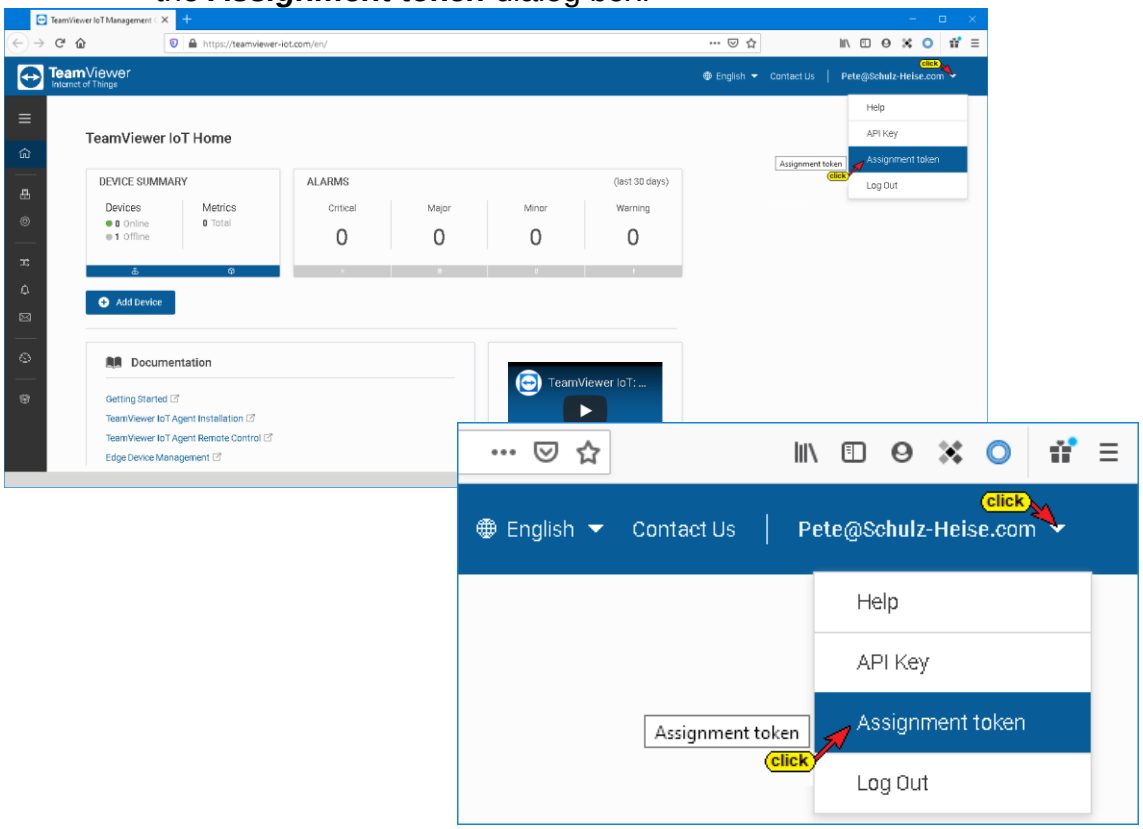
If the symbol indicates a stopped service, it must be started.

1.1.1 Opening the TeamViewer IoT Management Console

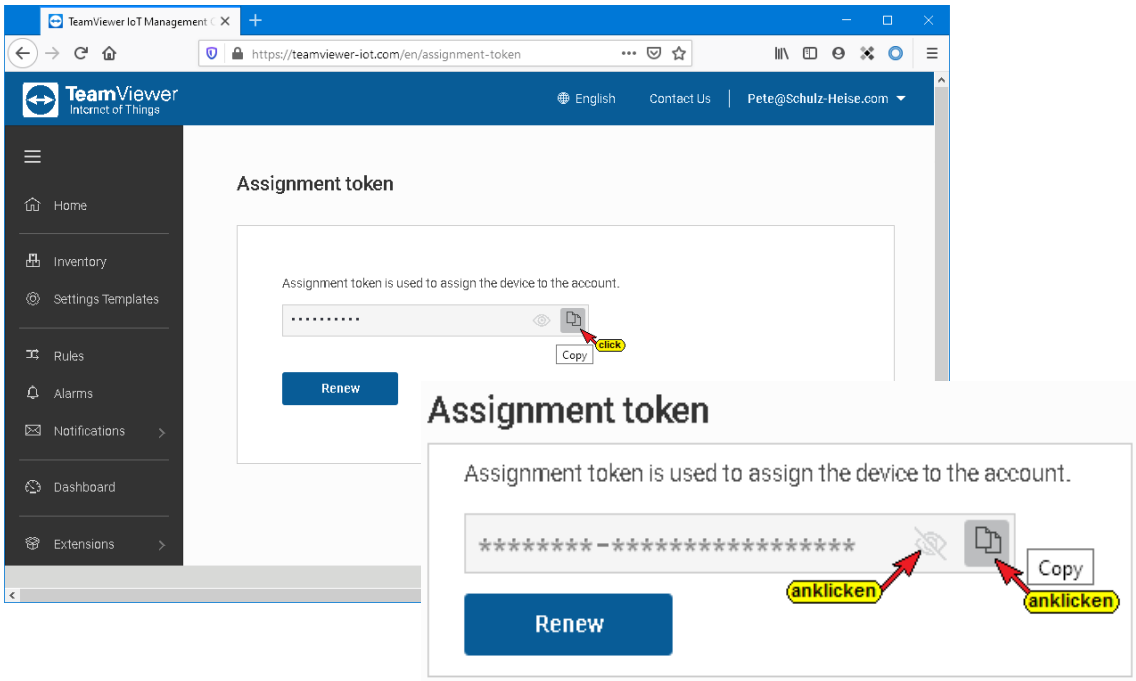
Use the link https://teamviewer-iot.com/en/ to open the TeamViewer Internet of Things login page and log in.



After logging into the ***TeamViewer IoT Management Console***, open the ***Assignment token*** dialog box.

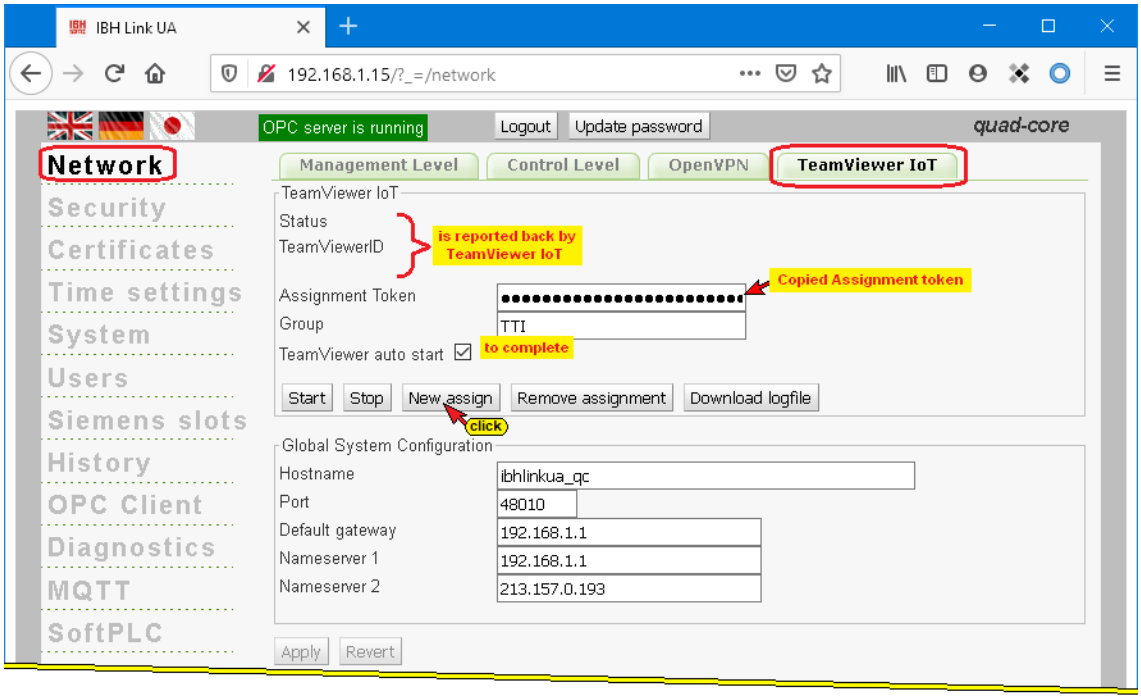


Assignment token dialog box

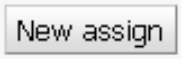


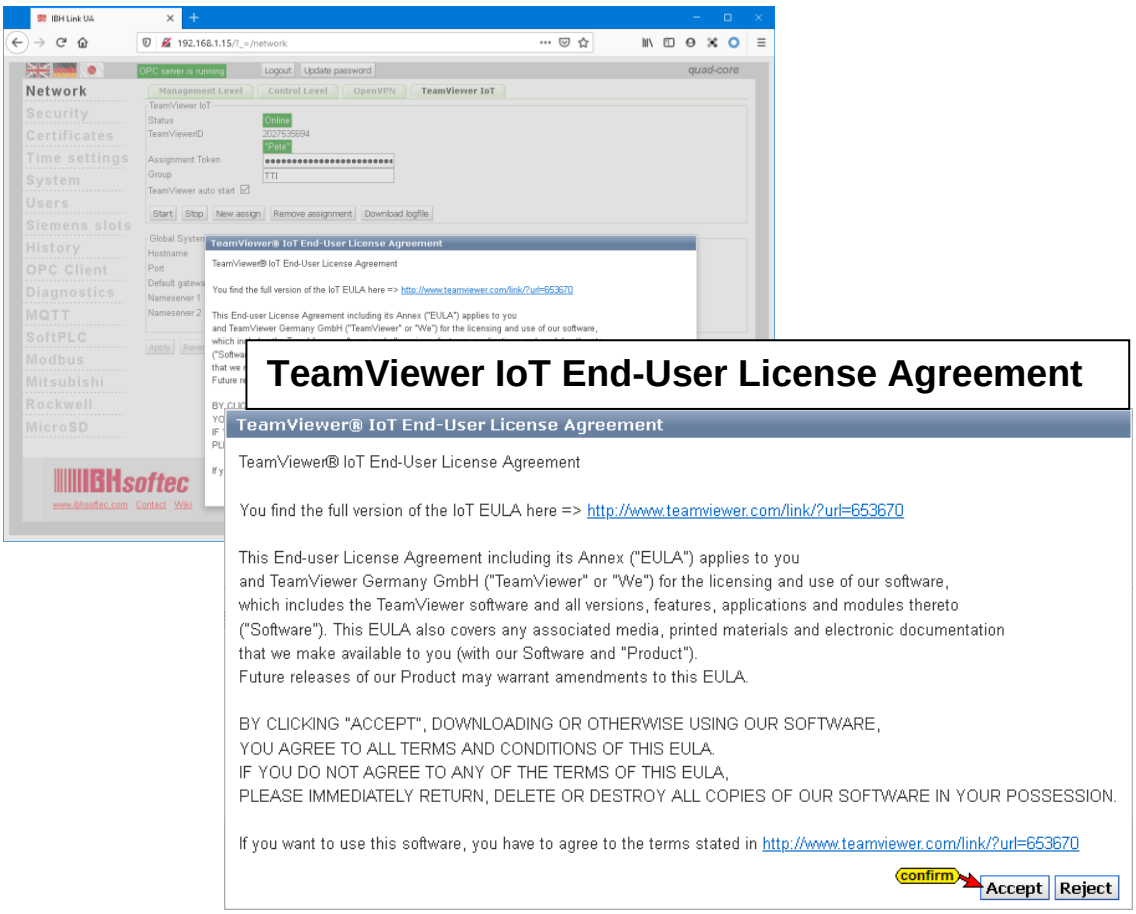
By clicking the Copy icon, the ***Assignment token***, shown with several dots, is copied to the Windows clipboard.

The ***Assignment token*** must be copied into the field with the same name in the ***IBH Link UA*** browser window Network/TeamViewer IoT.



Enter the group name and mark that the TeamViewer is switched on automatically. Clicking the ***New assign*** button opens the ***TeamViewer IoT End-User License Agreement.***



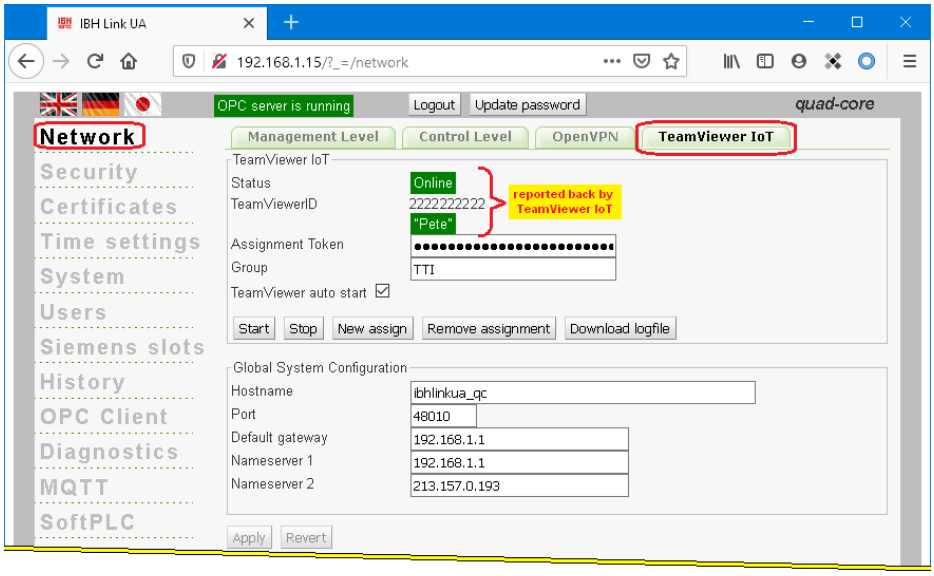


To apply the settings, the TeamViewer IoT end user license agreement must be accepted by clicking the button Accept.

Note!

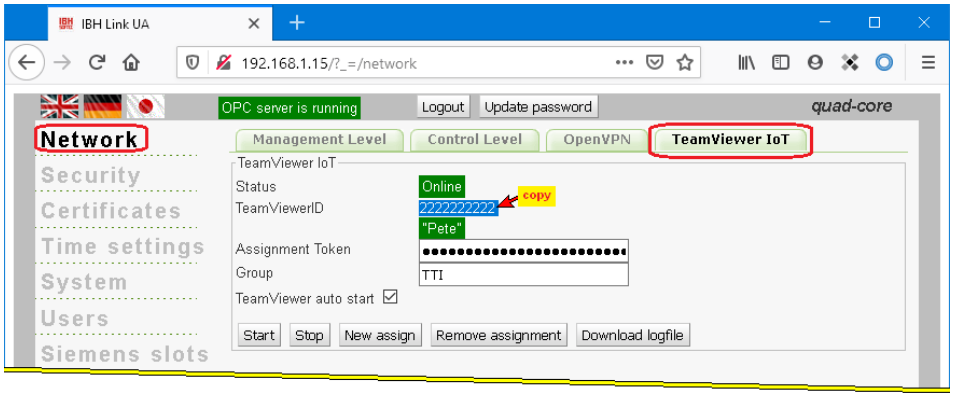
The transmission of the ***Assignment token*** to ***TeamViewer*** can take some time.

The online connection to the ***TeamViewer IoT server*** has been established.

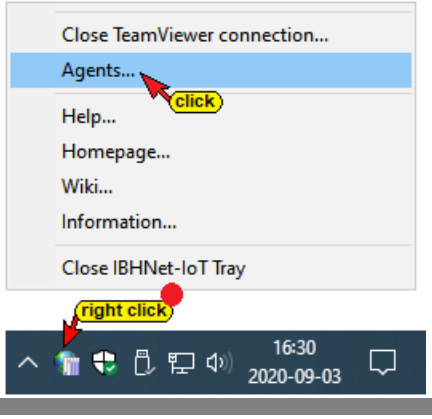


Copy the TeamViewer ID

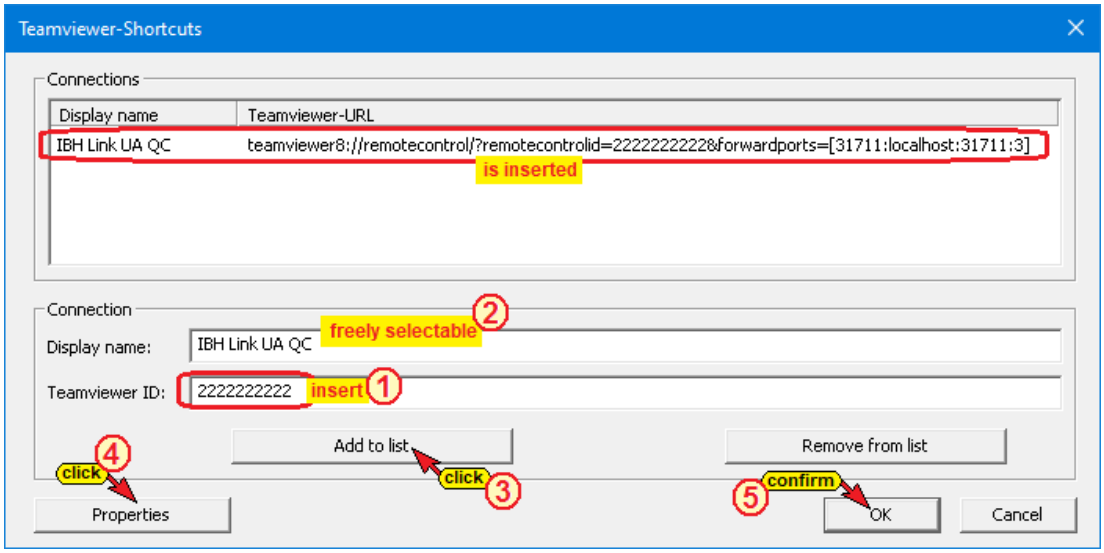
Copy the TeamViewer ID number to the Windows clipboard.



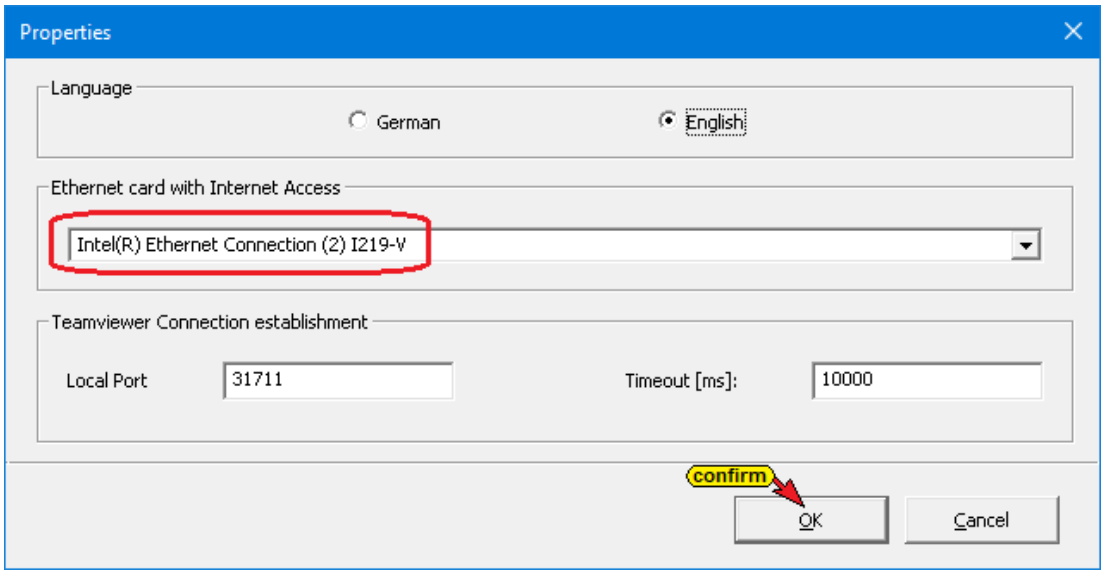
Right-click on the *IBHNet-IoT Tray* icon to open the context menu. The ***Agents…*** command opens the ***TeamViewer Shortcuts*** dialog box.



Insert the TeamViewer ID number in the field of the same name. The display name is transferred to the ***TeamViewer account***. This name can be used to establish a connection to the IBH Link UA via the Internet.



Clicking the Properties button, a dialog box appears with the details of the network card via which the IBH Link UA is connected.



By clicking the Add to list button, the display name and the TeamViewer ID are adopted. The dialog box is closed with ***OK***.

The installation of ***TeamViewer IoT*** in the IBH Link UA is now complete.

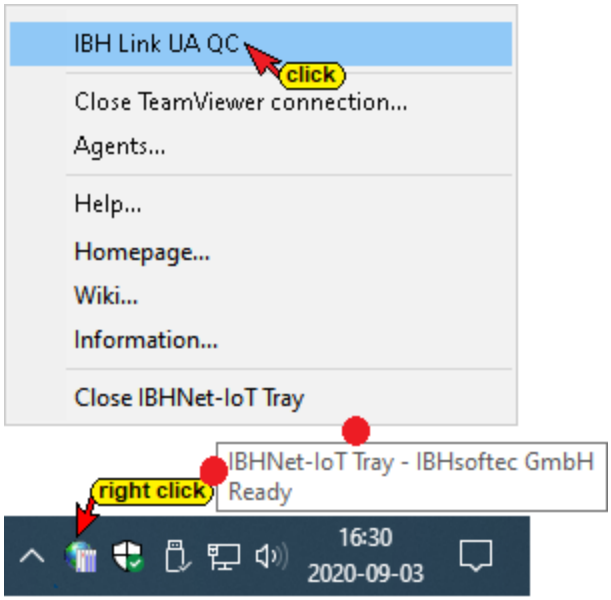
1.1.2 Establishing a connection

A connection to the IBH Link UA and thus to the PLC controls and other devices that are connected to the ports of the control level can be established via the Internet from any PC.

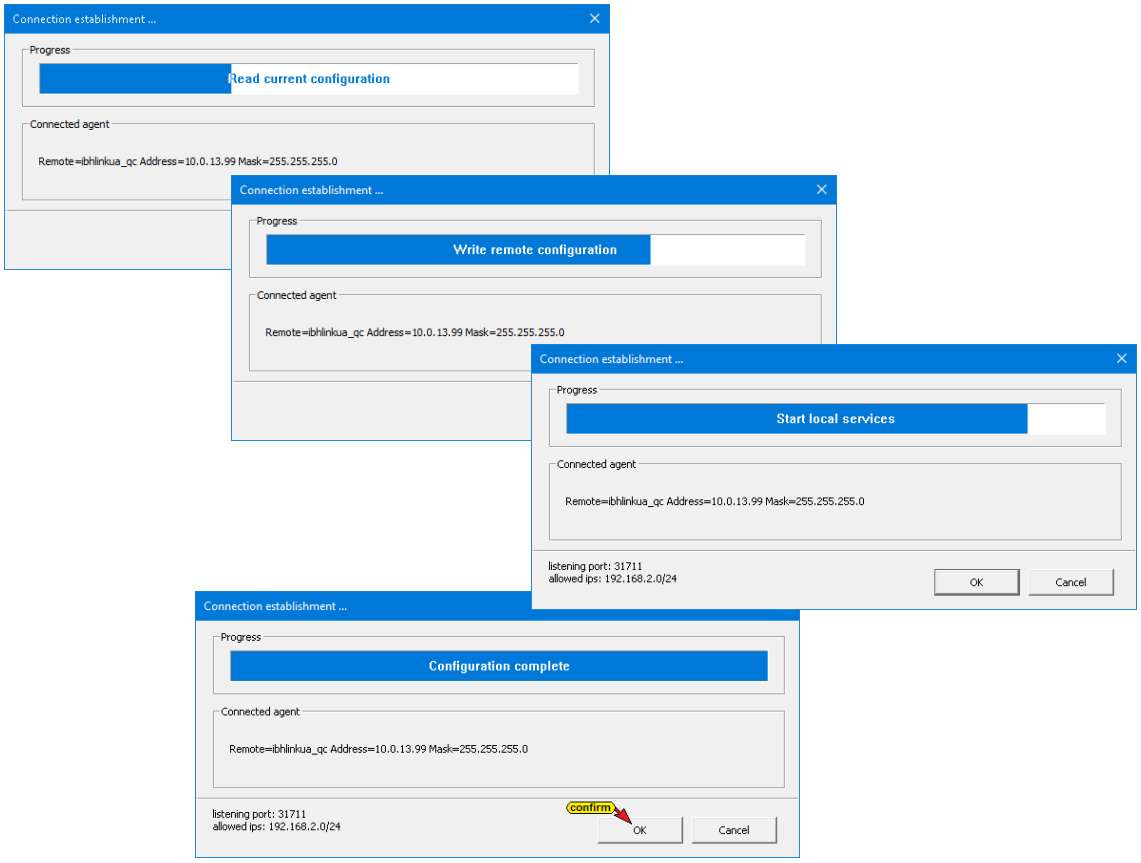
The ***IBHNet-IoT software*** must be installed on this PC.

TeamViewer must be started, and you have logged into the TeamViewer account.

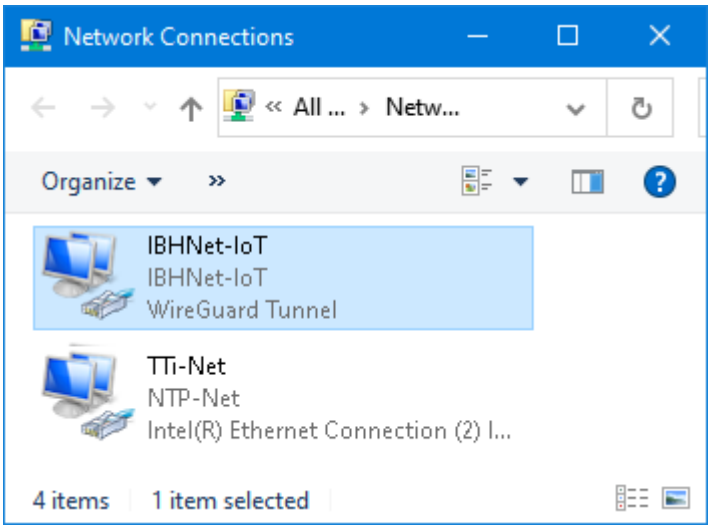
Right-click on the ***IBHNet-IoT Tray*** icon to open the context menu. The devices registered with the ***TeamViewer account*** are listed in the upper area of the context menu. The connection is established with a click on the desired device (IBH Link UA).



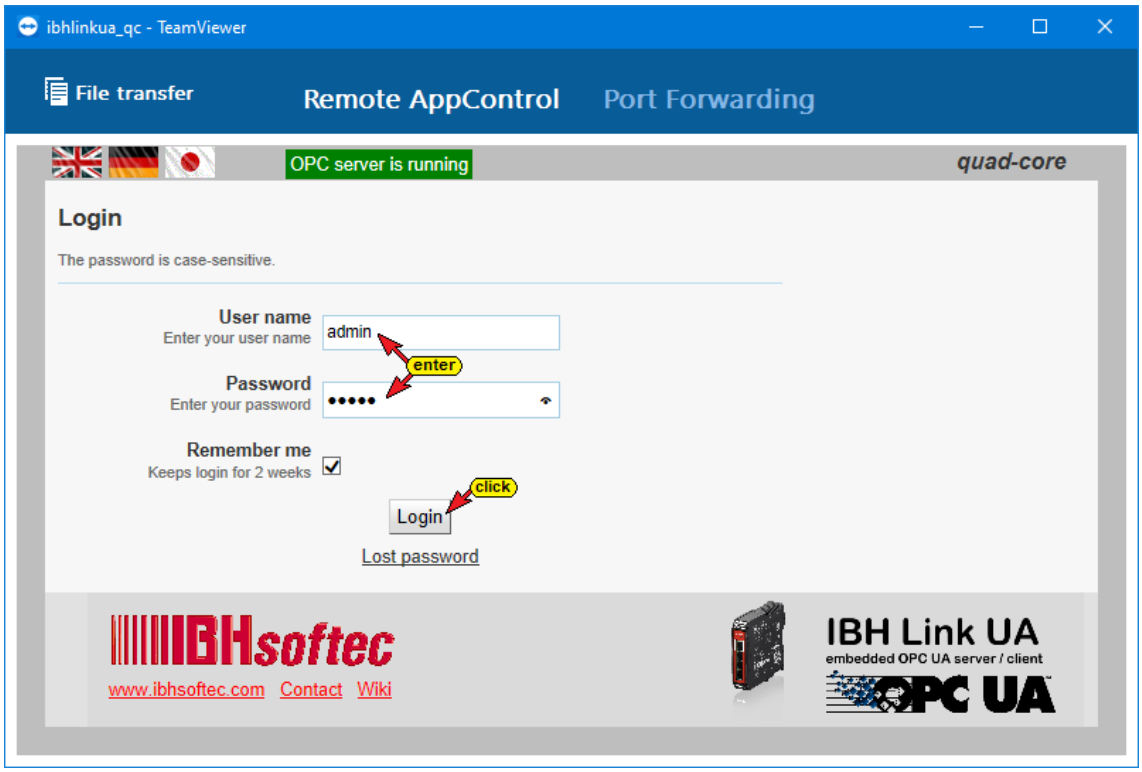
The establishment of the connection is displayed.



After the connection has been successfully established, the ***IBH Link IoT*** appears as a ***WireGuard tunnel*** under the network adapters of the PC.



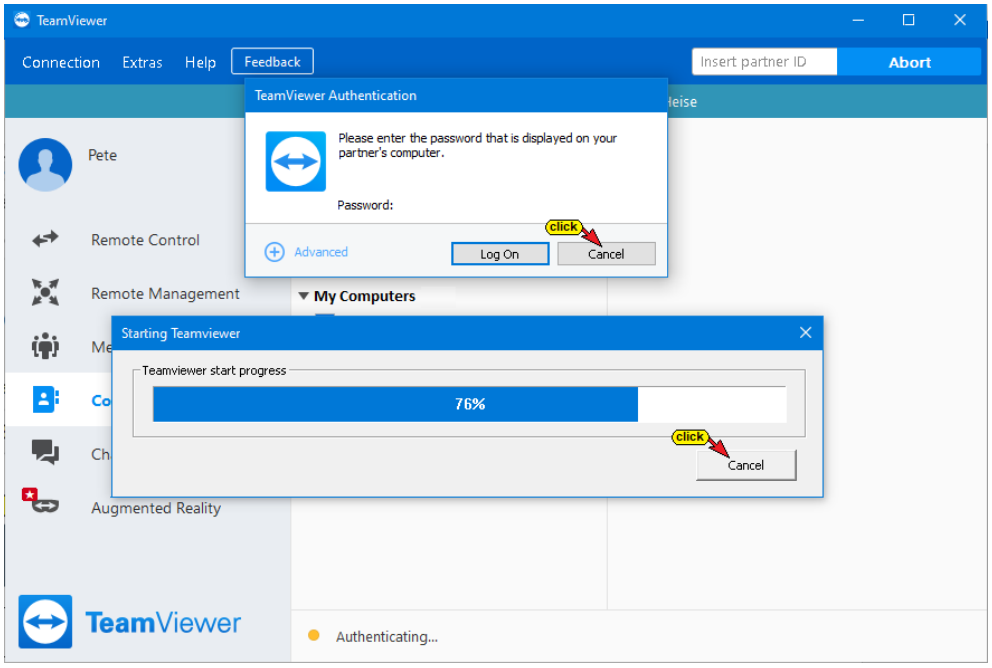
From now on, all controls and devices that are connected via the ***Control Level*** of the ***IBH Link UA*** can be reached.



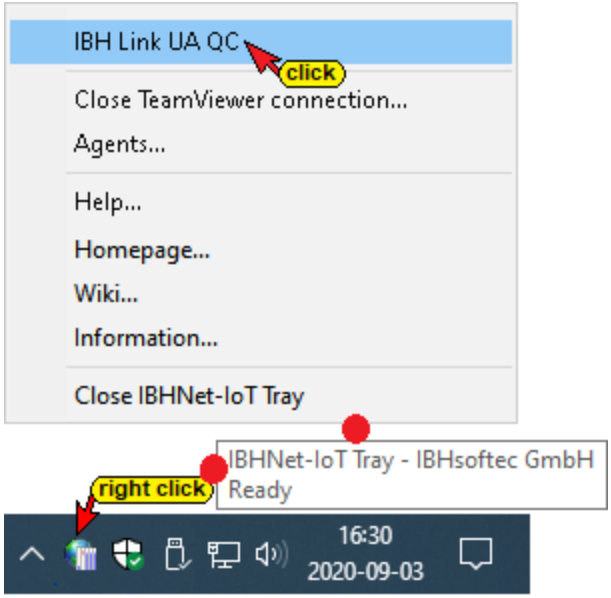
Note!

During the TeamViewer start process it may happen that no connection is established, and the error messages are displayed. These error messages are to close with Cancel.

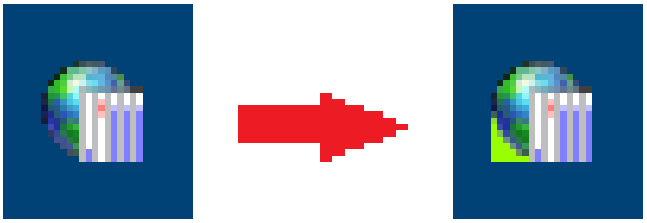
The starting process must be started again.



Activate the start process again



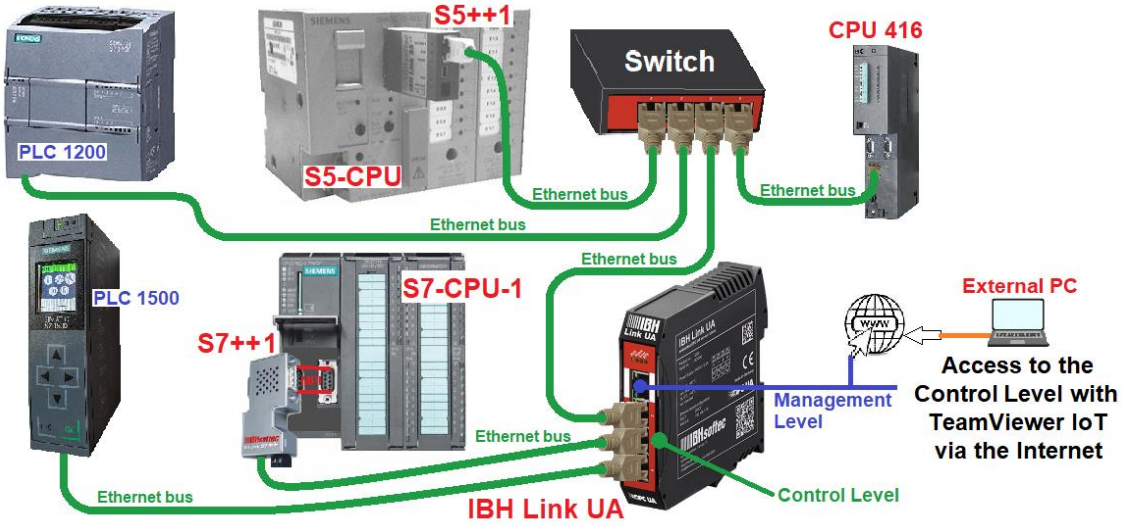
After the connection has been successfully established, the ***IBHNet-IoT Tray*** icon in the taskbar changes. It gets an additional green mark.



From the PC, whose ***IBHNet-IoT Tray*** Icon shows the existing online connection, controls (CPUs / devices) connected to the ***Control level*** ports can be accessed with the appropriate software (programming system).

1.2 Access to controls (CPUs / devices) connected to the ports of the control level.

It should be possible to access controls that are connected to the ***Control level*** via an ***IBH Link UA***.



Several PLC programming systems for online access to the individual controls are installed on the external PC.

PLC control	Programming system	IP address
CPU 416 S7	10.0.13.93	STEP 7 Simatic Manager
CPU 312 S7	10.0.13.92	
PLC 1500	10.0.13.90	TIA Portal V16
PLC 1200	10.0.13.91	
S5 CPU	10.0.13.94	*S5 for Windows*

IBH Link UA	**Control Level**	**10.0.13.89**
	Management Level	**192.168.1.10**

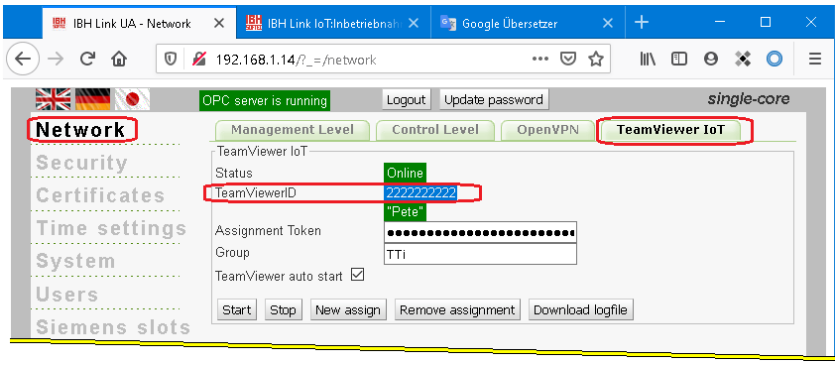
The control level port has direct access to the Internet.

A PC was available to set up.

During the ***TeamViewer IoT*** setup (***IBH Link UA control level 192.168.1.10***), the ***TeamViewer ID*** was transferred to the IBH Link UA.

The ***TeamViewer ID*** number is required by the external PC when installing the IBHsoftec software ***IBHNet-IoT-Setup.exe***.

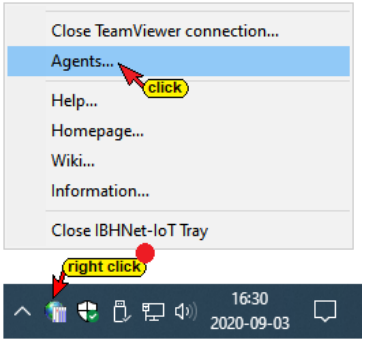
TeamViewer ID number



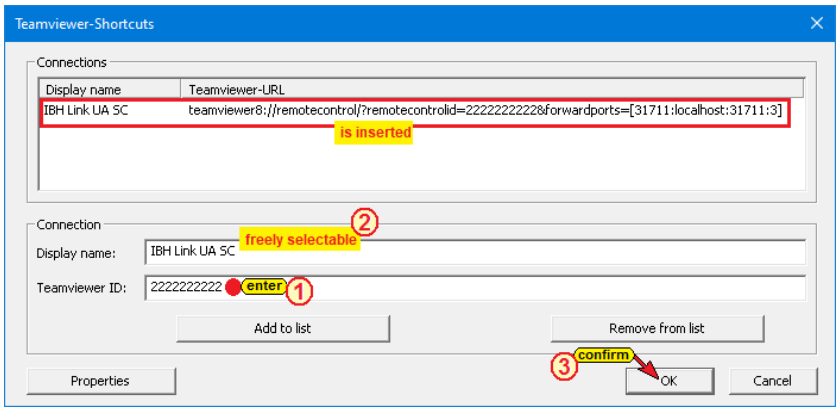
External PC

TeamViewer is installed on the external PC. There is access to a TeamViewer account with the corresponding IoT license. The IBHsoftec software ***IBHNet-IoT-Setup.exe*** must be installed

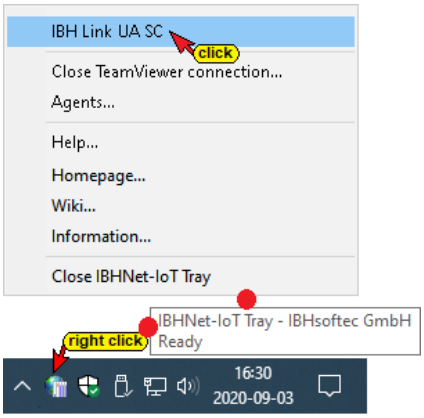
- The transferred TeamViewer ID is required for access.
- Start TeamViewer
- Start IBHNet-IoT setup
- Right-click on the ***IBHNet-IoT Tray*** icon to open the context menu. The ***Agents…*** command opens the ***TeamViewer Shortcuts*** dialog box.



- Insert the TeamViewer ID number in the field of the same name. A connection to the IBH Link UA can be established via the Internet using the display name.

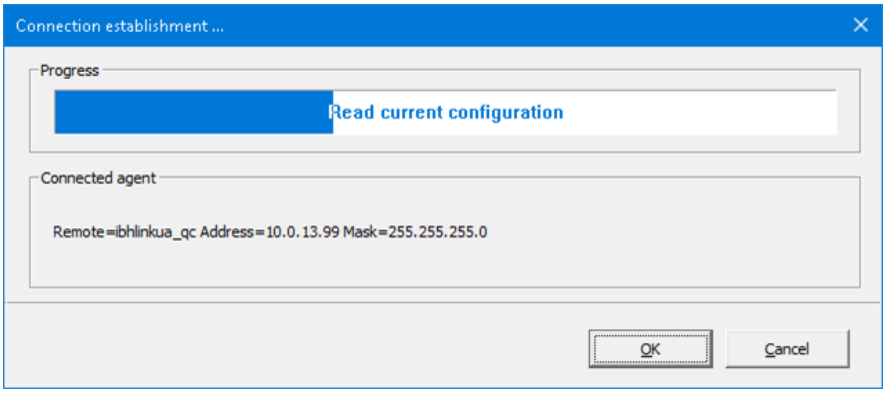


- Right click on the ***IBHNet-IoT Tray*** icon to open the context menu.

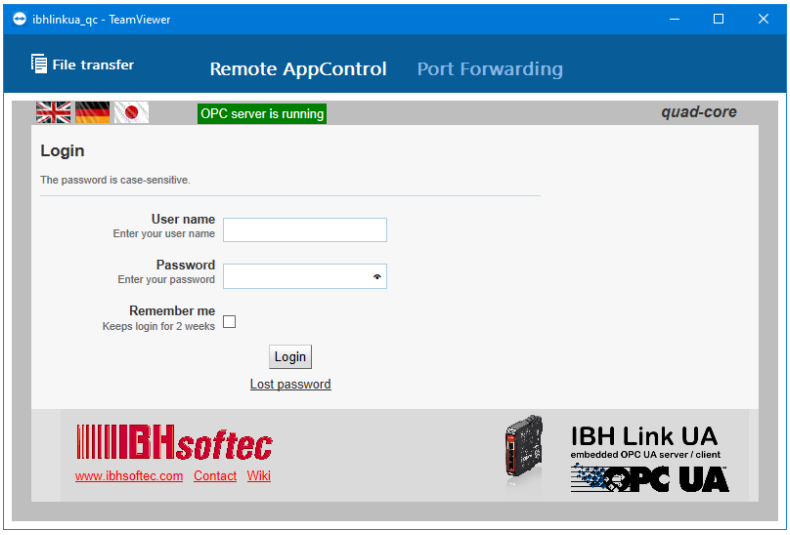


- With a click on IBH Link UA SC, the connection to the ibhlink-iot address is established via the Internet.

The establishment of the connection is displayed.



The ***Port Forwarding*** to the IP address is displayed.



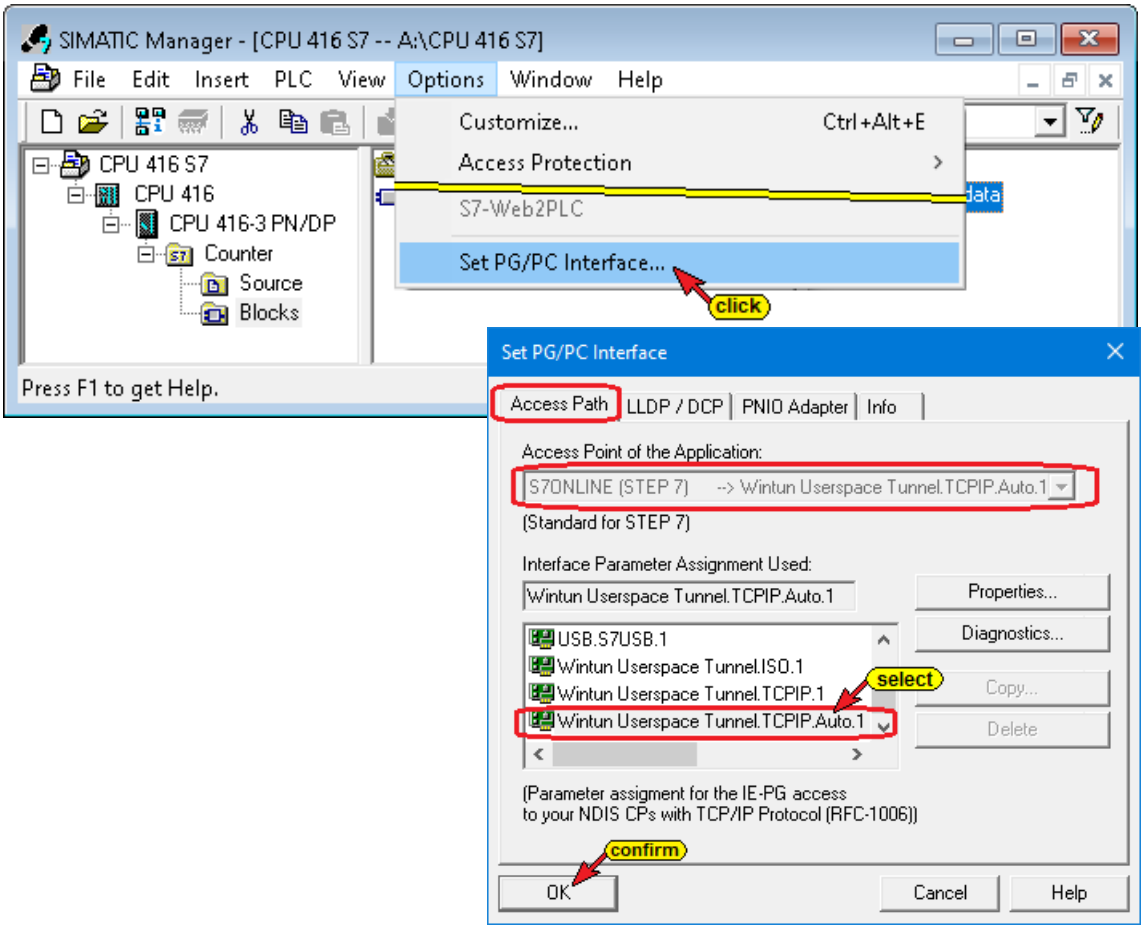
To access the individual CPUs (devices) (e.g. status) no registration to the IBH Link UA is necessary.

- Start the programming software (STEP 7, TIA, ***S5 for Windows*** etc.).

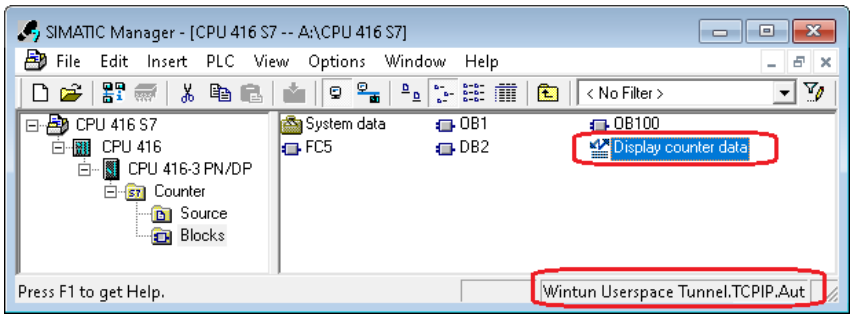
STEP 7 Simatic Manager – CPU 416 S7 – IP address 10.0.13.93

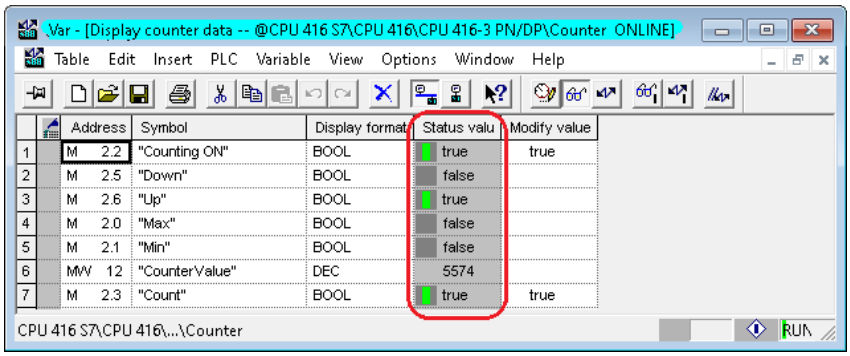
The CPU 416 has an Ethernet port and is directly connected to the Control Level of the IBH Link UA.

Set interface



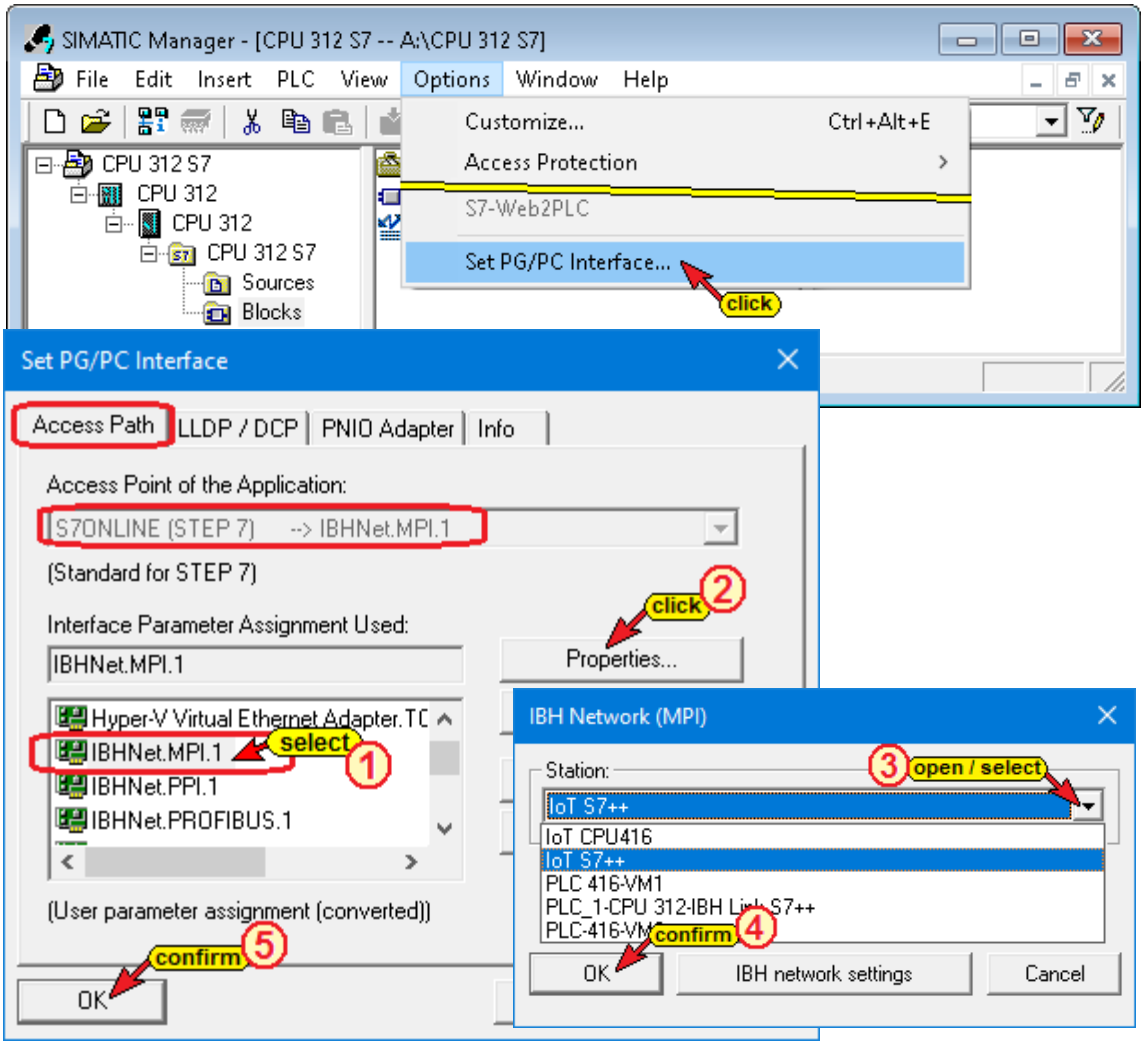
Status S7 CPU 416



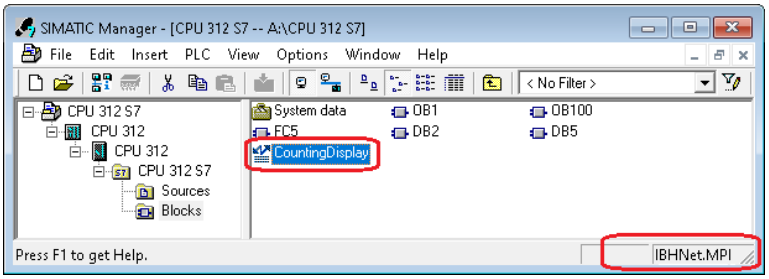


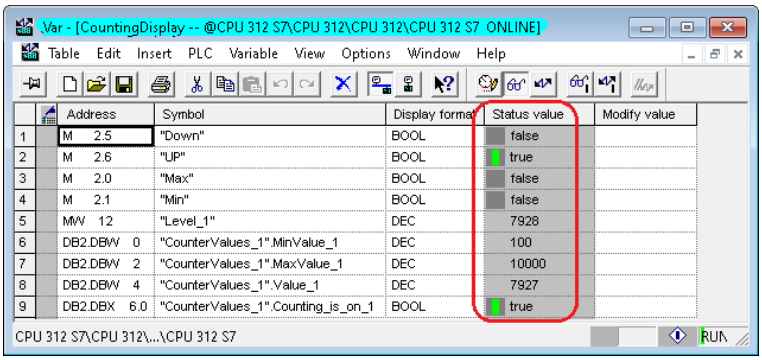
STEP 7 Simatic Manager –CPU 312 S7 – IP address 10.0.13.92

The CPU 312 is connected to the control level of the IBH Link UA via an LBH Link S7++ (IoT S7++).

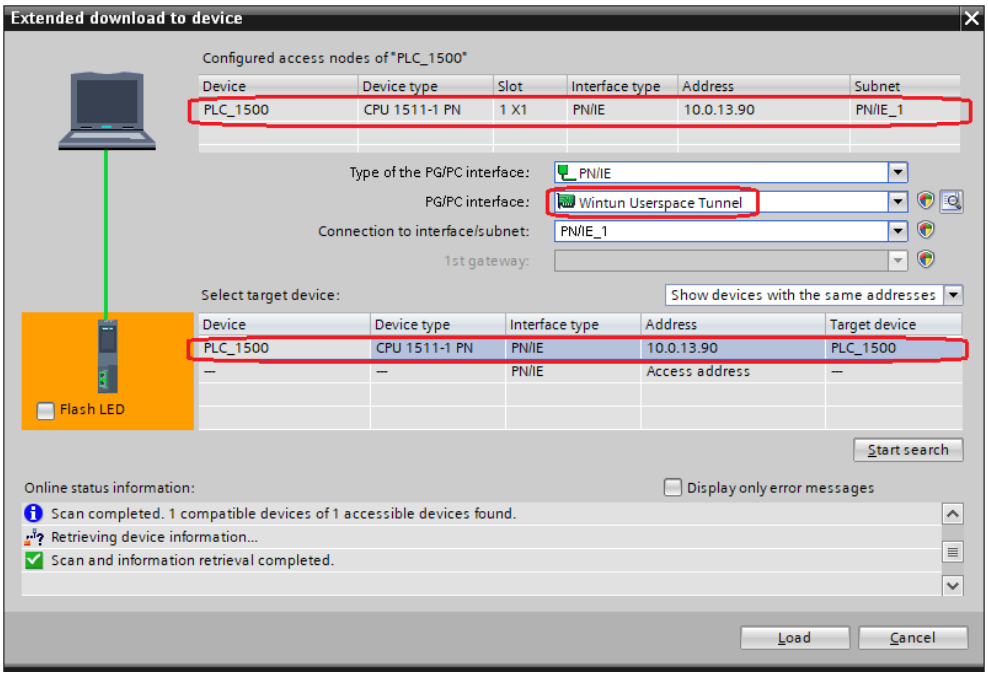


Status S7 CPU 312

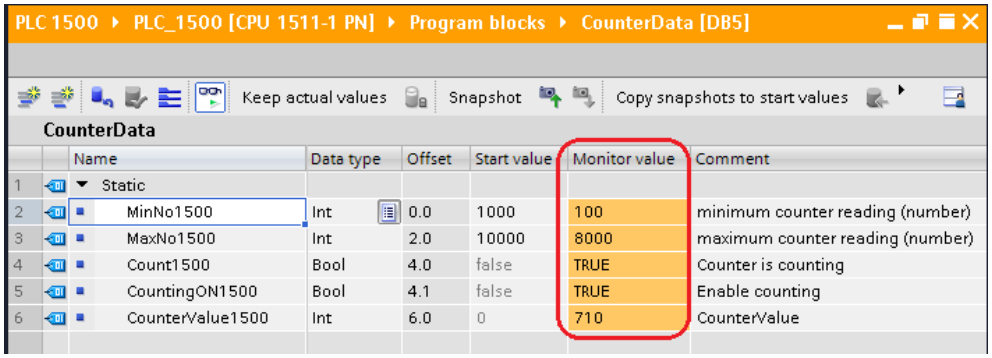




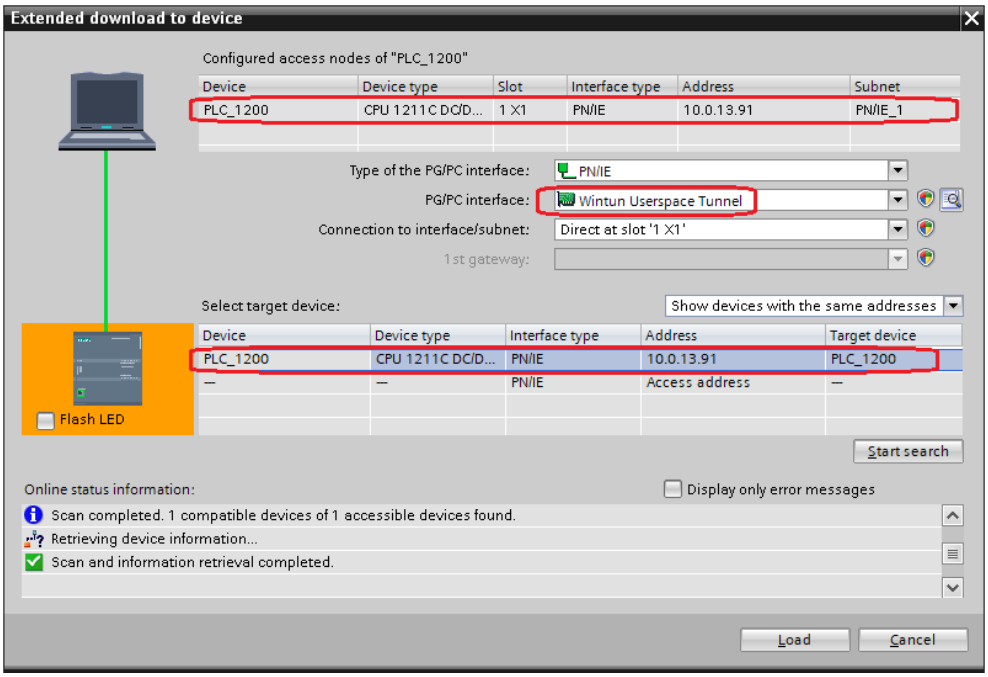
TIA Portal V16 – PLC 1500 – IP address 10.0.13.90



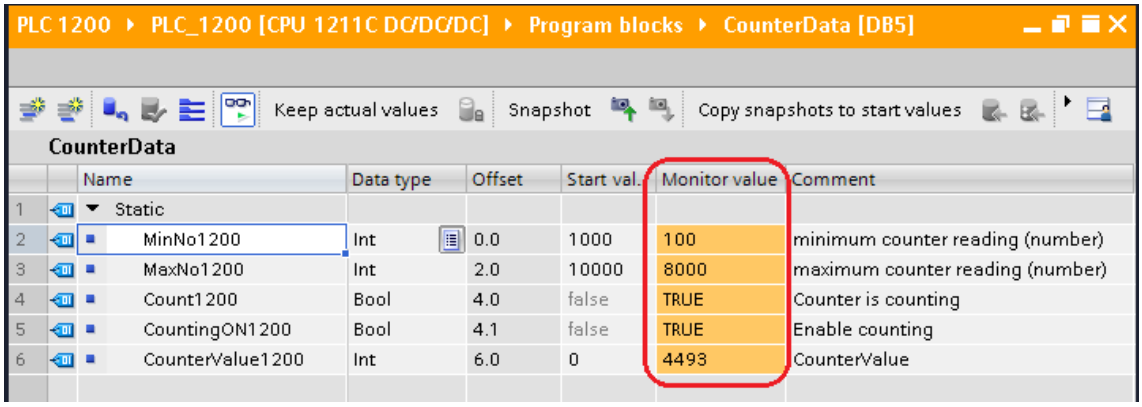
Status CPU 1500 – data block tank data [DB5]



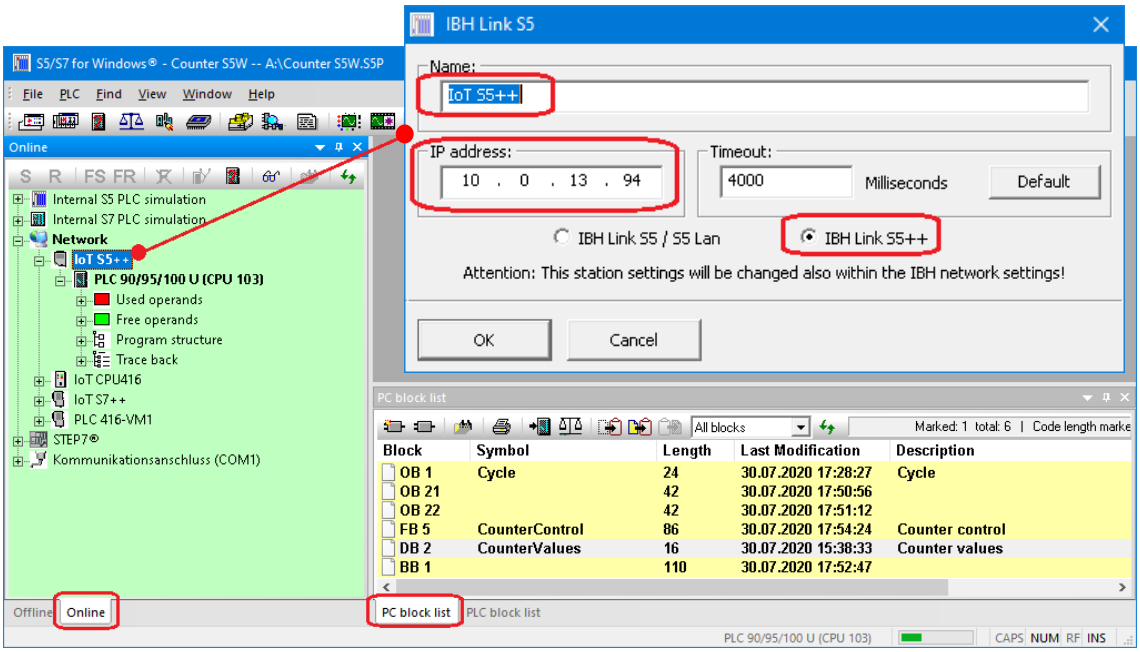
TIA Portal V16 – PLC 1200 – IP address 10.0.13.91



Status CPU 1200 – data block tank data [DB5]



S5 for Windows – CPU103-S5++ IoT – IP address 10.0.13.94



Status S5 CPU 103