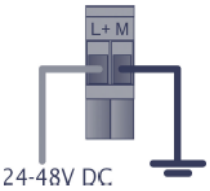
USB Server Gigabit 2.0/ USB-Server HT - Quick Start Guide

Power supply



24 V power supply

or

Power **o**ver **E**thernet [**Part-No.: ACPIPOE**]

System LED (green/ red)

GREEN ON	Power supply and system OK
GREEN flashing	System start. firmware update or reset to factory settings
RED ON	System error

USB LED (green/ red)

GREEN ON	USB port in use
RED ON	The USB server has been disconnected the power supply of the port e.g. due to overload or temporary disconnecting of the USB device

Software

Install the software programs from the Software-CD (folder: **`USB-Server`**):

- ***WuTility***
- ***USB Redirector***

Scope of Supply

- USB Server Gigabit 2.0/ USB-Server HT
- 24 V power supply
- Ethernet cable, 1 m
- Quick Start Guide

- Only the USB Server (Part-No.: **ACPIUSBSGB** or **ACPIUSBSHT**) is supported, which is ordered directly from Optris!
- PIX Connect software version Rel. 3.1.3011.0 or higher

Connection variants USB server

Model	Channel	max. speed	max. number of units on one USB server
PI 400i/ 450i	IR	80 Hz	1
		27 Hz	2
PI 640i	IR	32 Hz	1
PI 1M/ 08M/ 05M	IR	27 Hz	2
		32 Hz	1
		80 Hz	1
		1 kHz	1
Pyrometer	IR	-	2
PI + Pyrometer	IR	-	2
Xi 400	IR	80 Hz	1
		27 Hz	2
Xi + Pyrometer	IR	-	2

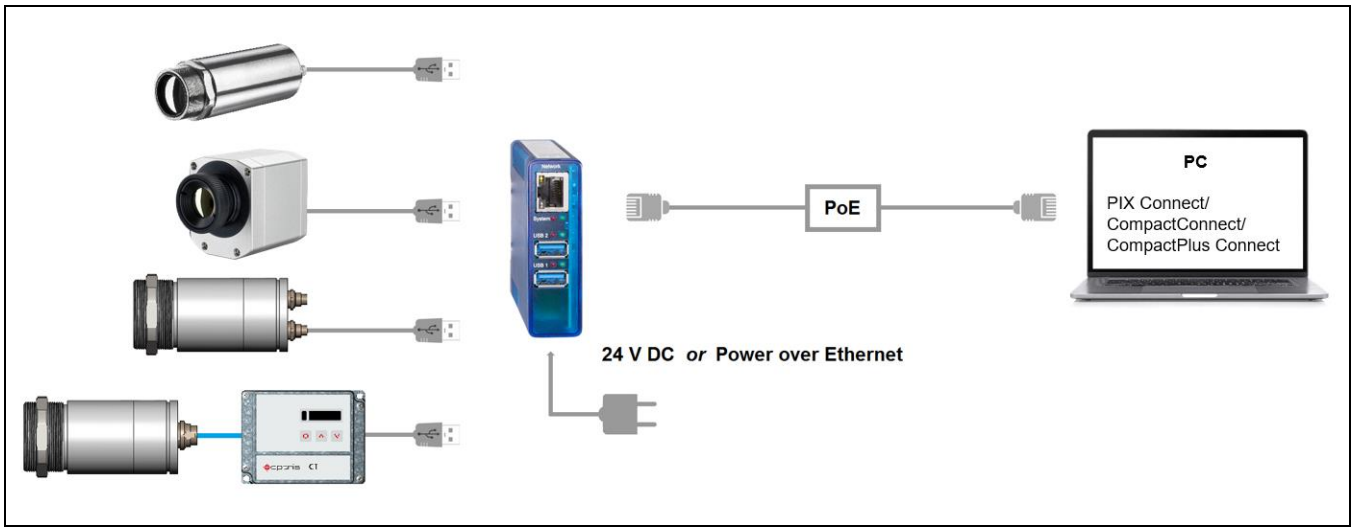
How-to video

https://www.optris.global/video-tutorial-pi-camera-and-usb-server

The USB-Server (Part-No.: **ACPIUSBSHT**) is suitable just for one PI 450i (27Hz mode) in combination with Outdoor protective Housing (Part-No.: **ACPIOPH24xxx**)

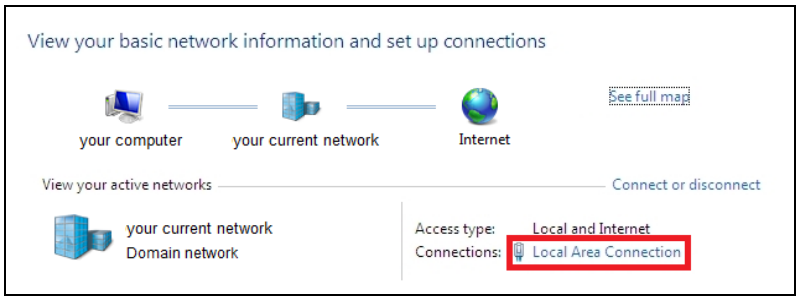
1. Direct Connection USB Server [ACPIUSBSxx] (Point-to-Point-Network)

Installation

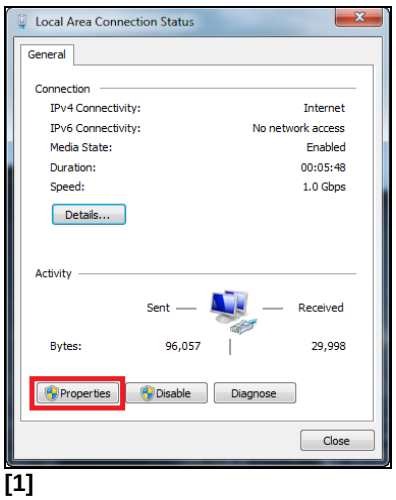


On a direct connection to a PC both, the USB server as well as the PC must use a fixed IP address. There is no DHCP server available. Accomplish the following settings on your PC once (depending on the operating system the procedure can differ from the here shown – the following description refers to a Windows 7 system).

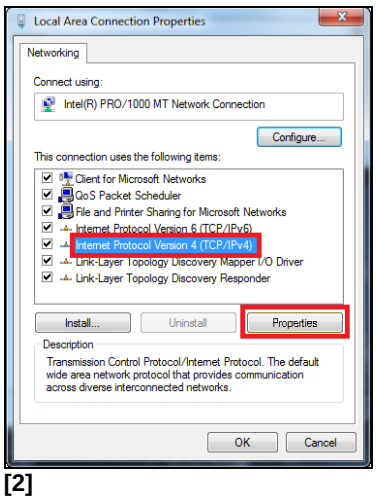
1. Go to **`Control Panel`**; open **`Network and Sharing Center.`**



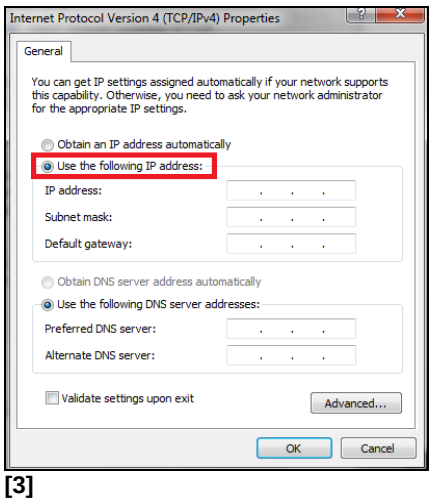
2. Enter **`Local Area Connection`** – status screen **[1]** is shown and subsequently **`Properties`**.
3. Mark **`Internet protocol Version 4 (TCP/IPv4)`** **[2]** and go to **`Properties`** again.



[1]

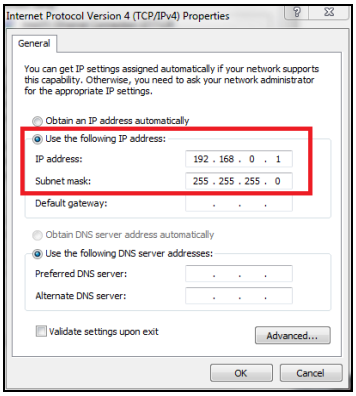


[2]

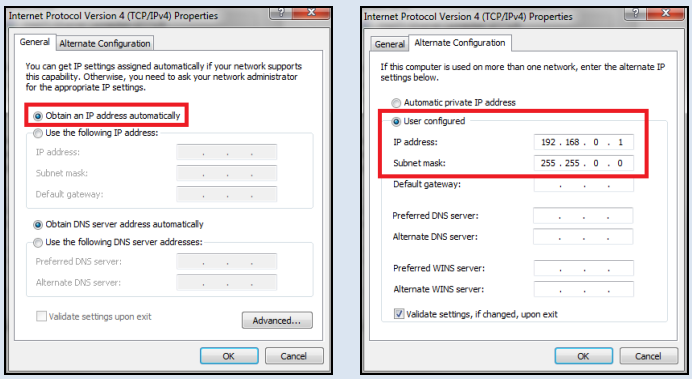


[3]

4. In the register card **General** enable the checkbox **Use the following IP address [3]**
5. Now enter a user defined IP address for your PC, for example **192.168.0.1**.

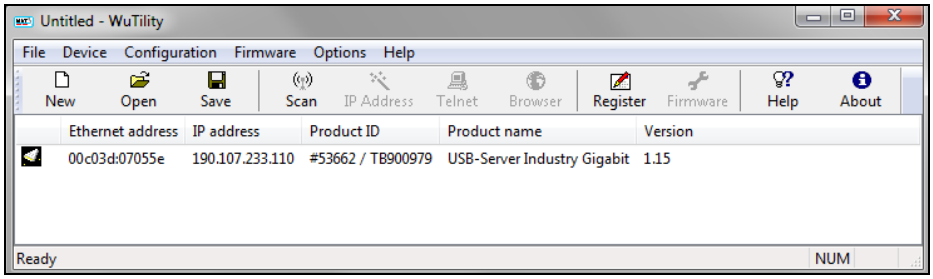


If you want to switch between a user-defined IP address and a DHCP server, the following alternative configuration is recommended: Under the **`General`** tab choose **`Obtain an IP address automatically`**, and on the **`Alternate Configuration`** tab, click **`User configured`** and enter a user defined IP address:



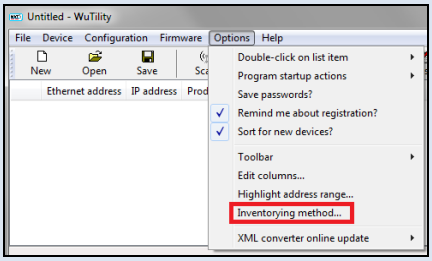
Starting the program WuTility

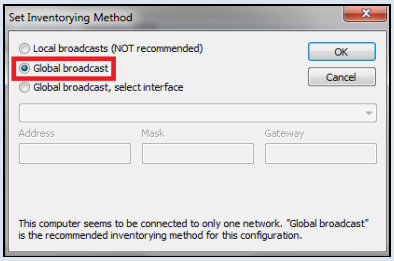
6. To change the network settings of the USB server start the ***WuTility*** program:



Independent on the current network settings of the USB server the device is displayed now (if not, refresh the current view with **`Scan`**).

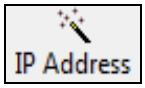
If there is any problem in the **WuTility** software with the detection of connected USB server, check the following setting:

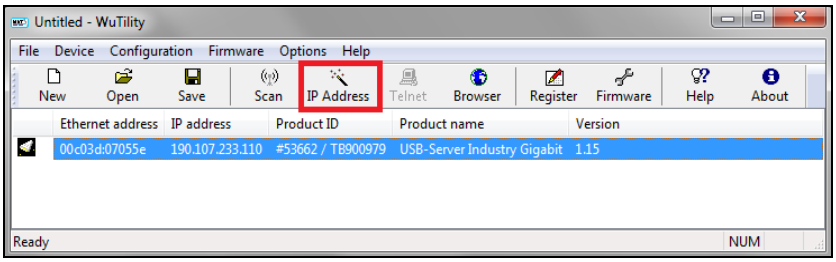




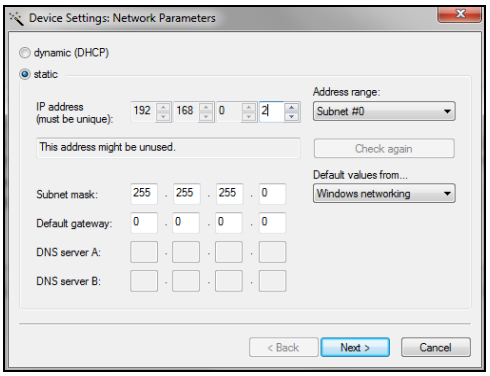
1. Go to **`Options/Inventorying method`** and choose **`Global broadcast`**.

7. Mark the USB server and then press **`IP Address`**:

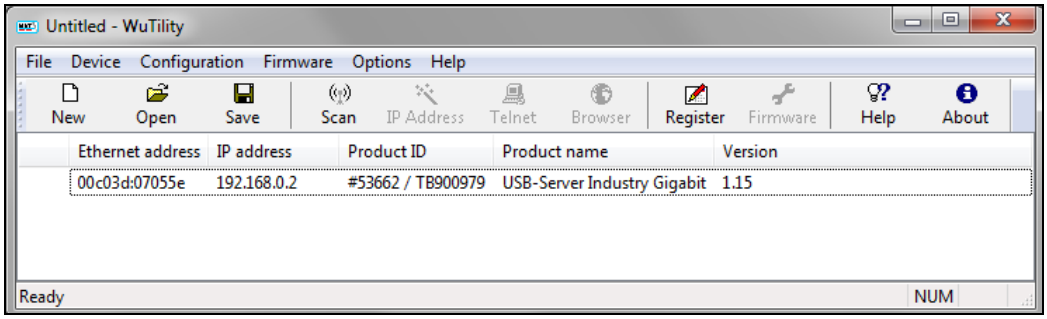




8. The standard setting of the USB server is DHCP. On a direct connection to a PC set a static IP address to the device. Take care that the network part of the address is identical to the network part of the IP address of the connected PC (therefore: **192.168.0**). The host part must have a different digit than the user-defined IP address of your PC (for example: 192.168.0.**2**):

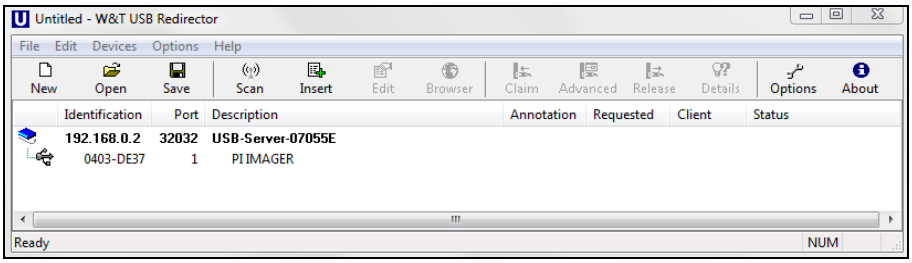


9. Now press **`Next`** and then **`Finish`**. The network connection between PC and USB server will be established and you can perform the USB Redirector as described previously. Close the ***WuTility*** software.



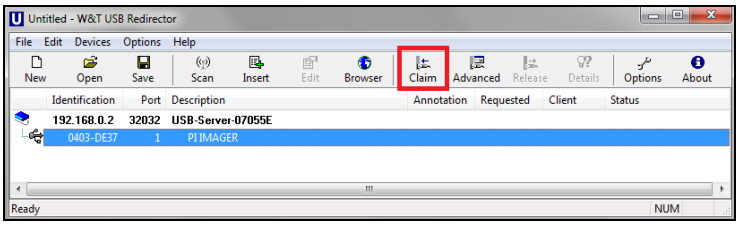
Starting the USB Redirector

10. Start the ***USB Redirector***. The local network will be automatically scanned for available USB servers (if not, refresh the current view with **`File/ New`**).

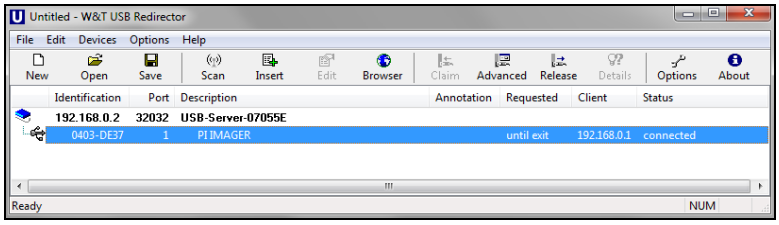


If several USB servers are in your network you can identify your own by the number you find in the overview of ***Redirector*** (under *Description*) as well as on the serial number label of your device(e.g.: USB server-**07055e**).

11. You see in the ***Redirector*** the connected USB device. Mark it and press the **`Claim`** button.



The status is changing now to **`Connected`**. You can see the IP address of your local PC under **`Client`**:

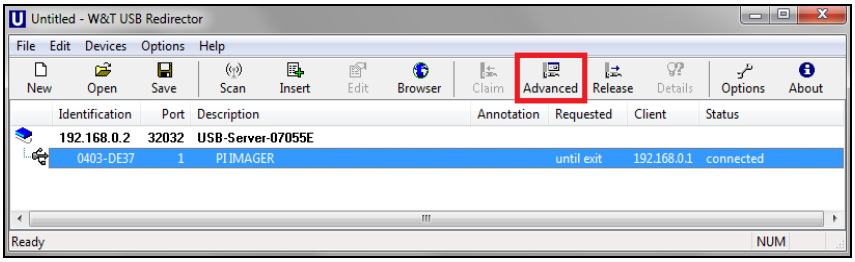


The device (IR camera PI, Xi, CTvideo or CSvideo) can now be used in the same way as it would be connected directly to a local USB port of your PC.
The program ***Redirector*** can be minimized – the connection will be determined if you close the window.

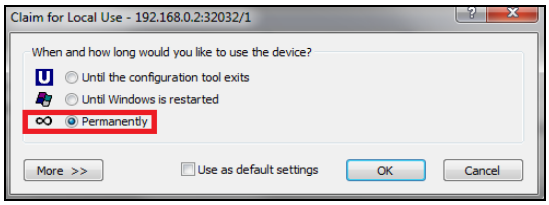
Automated USB Redirector

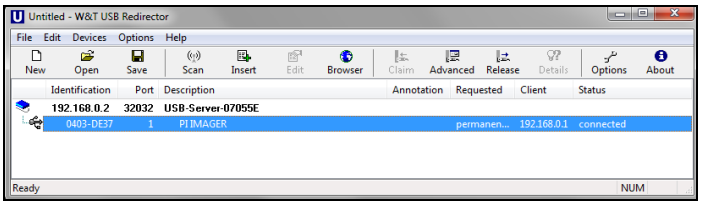
Open the ***Redirector*** and mark the connected device.

Then press **`Advanced`**:



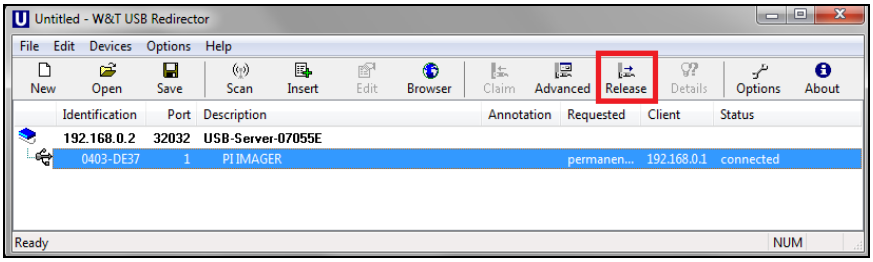
Select **`permanently`**:





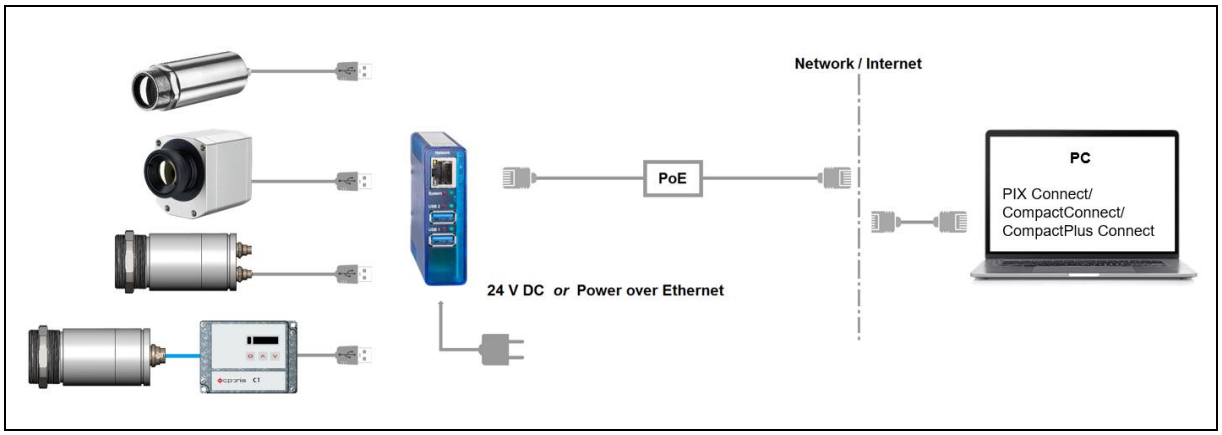
Stopping the USB Redirector

To stop the connection between the USB Redirector and the device, start the ***Redirector*** and press the **`Release`** button:


Untitled - W&T USB Redirector
File Edit Devices Options Help
New Open Save Scan Insert Edit Browser Claim Advanced Release Details Options About
Identification Port Description Annotation Requested Client Status
192.168.0.2 32032 USB-Server-07055E
0403-DE37 1 PI IMAGER permanen... 192.168.0.1 connected
Ready
NUM

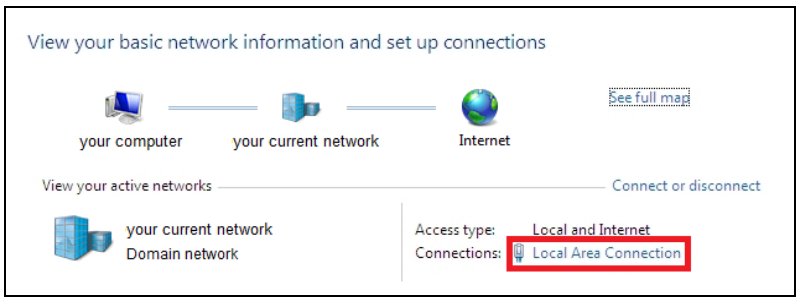
2. Connection USB Server [ACPIUSBSxx] via Network

Installation

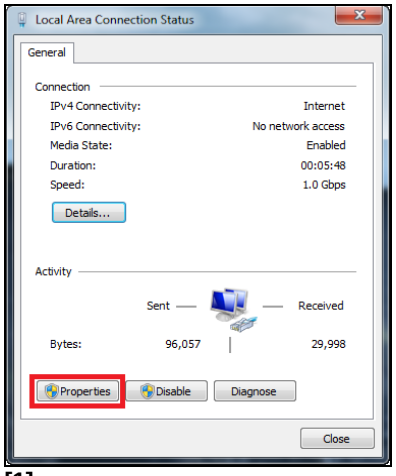


On a connection to a PC both over the network, the USB server as well as the PC must use an automatic IP address. Here the DHCP server is available. Review the following settings on your PC once (depending on the operating system the procedure can differ from the here shown – the following description refers to a Windows 7 system).

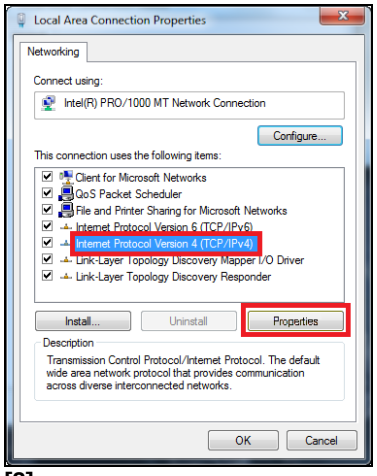
1. Go to **`Control Panel`**; open **`Network and Sharing Center.`**



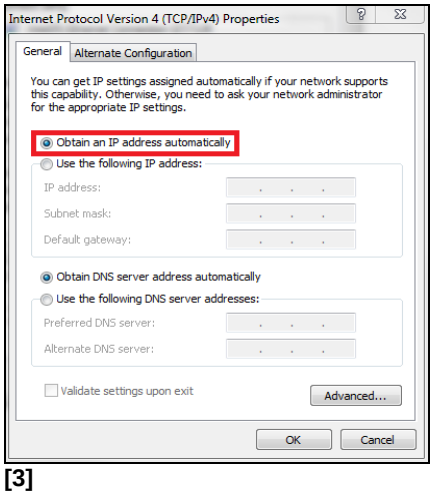
2. Enter **`Local Area Connection`** – status screen **[1]** is shown and subsequently **`Properties`**.
3. Mark **`Internet protocol Version 4 (TCP/IPv4)`** **[2]** and go to **`Properties`** again.



[1]



[2]

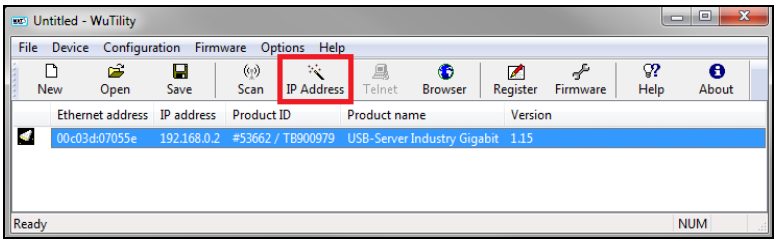


[3]

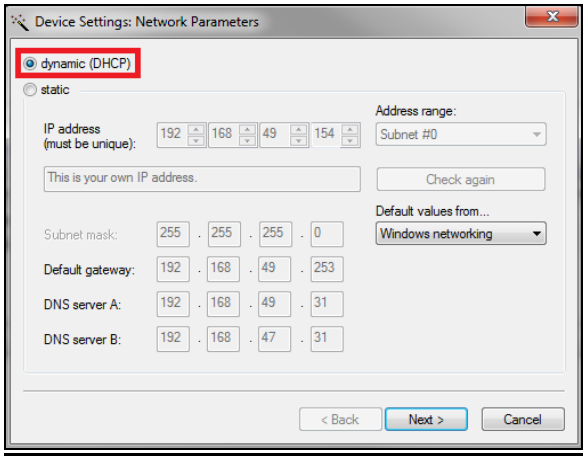
4. In the register card **General** enable the checkbox **Obtain an IP address automatically [3]**

The default setting for the USB server is DHCP. If you have not previously used the ***WuTility*** program, you do not have to start it. If you have already used it before, e.g. a direct connection, make sure that the following setting is configured:

- Start the ***WuTility*** program. Regardless of the network settings of the USB server, this is now displayed (if not, simply update the view with **`Scan`**).
- Select the USB server and then press the IP address:



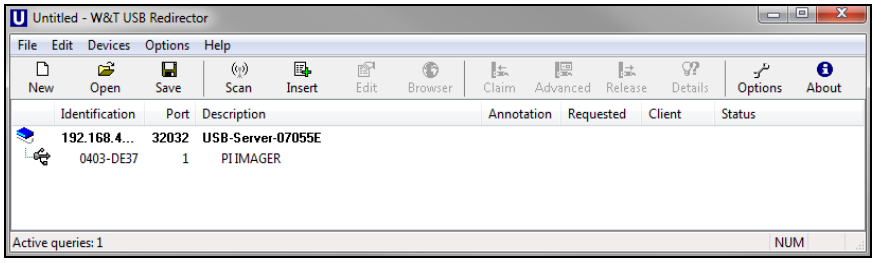
- The setting of the USB server must be set to **`dynamic (DHCP)`**.



Now press **`Next`** and then **`Finish`**. The network connection between PC and USB server will be established and you can close the ***WuTility*** software.

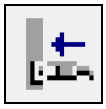
Starting the USB Redirector

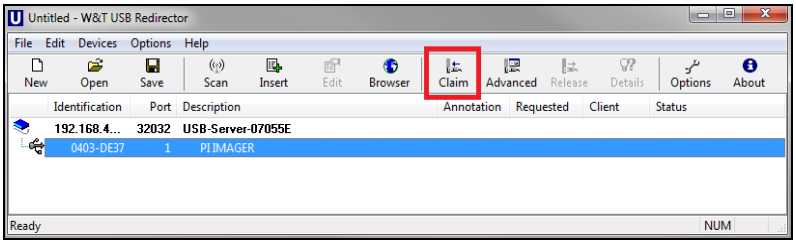
5. Start the ***USB Redirector***. The local network will be automatically scanned for available USB servers (if not, refresh the current view with **`File/ New`**).



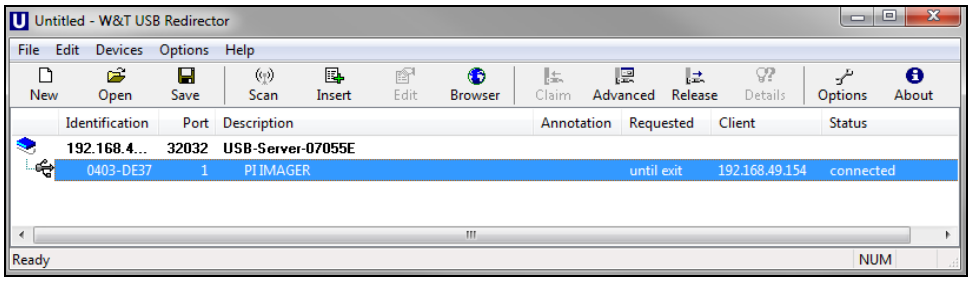
If several USB servers are in your network you can identify your own by the number you find in the overview of ***Redirector*** (under *Description*) as well as on the serial number label of your device (e.g.: USB server-**07055e**).

6. You see in the ***Redirector*** the connected USB device. Mark it and press the **`Claim`** button.





The status is changing now to **`connected`**. You can see the IP address of your local PC under **`Client`**:

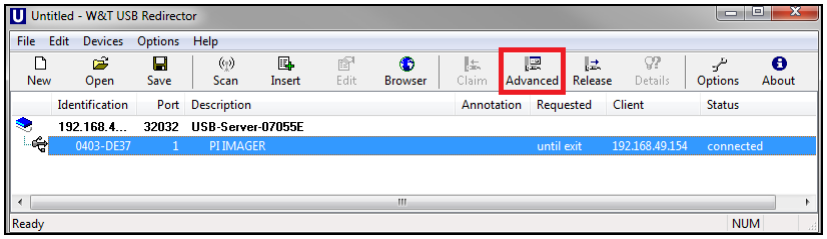


The device (IR camera PI, Xi, CTvideo or CSvideo) can now be used in the same way as it would be connected directly to a local USB port of your PC.
The program ***Redirector*** can be minimized – if you close the window, the ***Redirector*** will be automatically terminated.

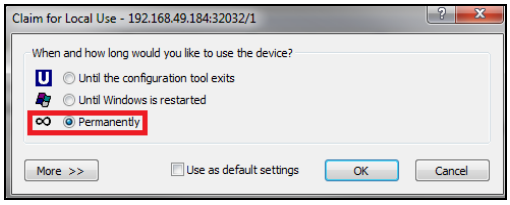
Automated USB Redirector

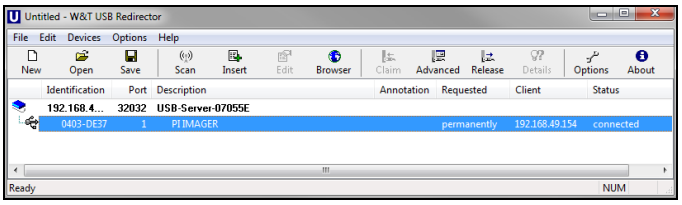
Open the ***Redirector*** and mark the connected device.

Then press **`Advanced`**:



Select **`permanently`**:

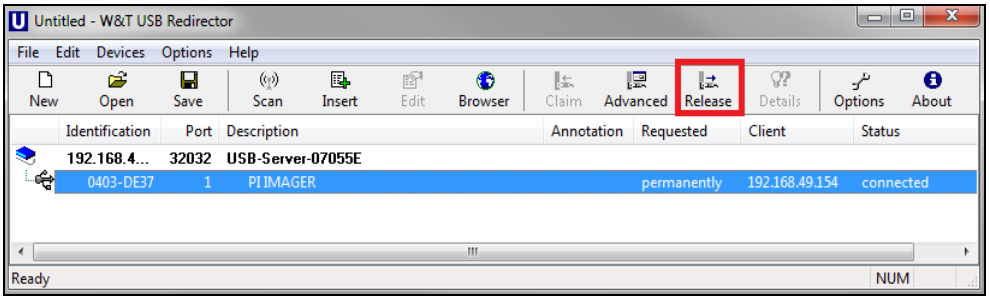




The connection is now kept also if the program ***Redirector*** will be closed. If the PC and/ or the USB server are restarted, the connection will be recovered automatically.

Stopping the USB Redirector

To stop the connection between the USB Redirector and the device, start the ***Redirector*** and press the **`Release`** button:


Untitled - W&T USB Redirector
File Edit Devices Options Help
New Open Save Scan Insert Edit Browser Claim Advanced Release Details Options About
Identification Port Description Annotation Requested Client Status
192.168.4... 32032 USB-Server-07055E
0403-DE37 1 PI IMAGER permanently 192.168.49.154 connected
Ready
NUM