



Hydromet

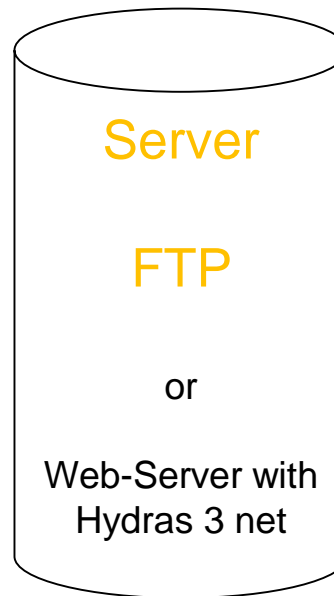


Tech Tip: IP camera application with OTT netDL 1000



2.

netDL forward picture from the IP cam to the Server defined in the transmission settings (via LAN or GPRS).



1.

netDL queries a picture from the IP cam according to the configured measurement interval or at defined conditions (action management e. g. limit event at flood water level).



Three options to connect an IP camera to an OTT netDL

1. Direct connection between OTT netDL and IP camera with ethernet crossover cable (GPRS data + picture transmission only)
2. Connection via switch-device and two standard Ethernet cables for one or several IP cameras in parallel (GPRS data + picture transmission only)
3. IP camera in a local network (link between netDL and IP camera) with router (DSL internet connection for data + picture transmission)

Configuration details

A) for D-Link camera (option 1 & 2)

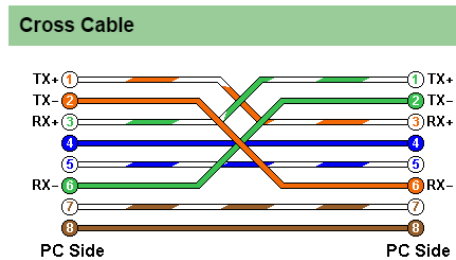
B) for OTT netDL (option 1 & 2)

C) for D-Link camera and OTT netDL in a routed network (option 3)

1. netDL directly connected with IP camera

IP addresses of netDL and IP camera have to be configured in the netDL with OTT datalogger operating program.

Additionally IP camera has to be setup (IP number, ...) with software tool of manufacturer (e. g. D-Link).



The picture shows that TX wires are crossed to the RX wires on the other side of the cable. For 10 baseT cables the unused pairs are connected straight through.

netDL with IP address
192.168.1.2
LAN port of netDL:
10 Mbit/s

Crossed Ethernet cable



IP camera with IP address
192.168.1.20

2. netDL with switch for several external IP devices

For this setup standard Ethernet cables are used.
Second advantage is, that several cameras
can be connected.



netDL with IP address
192.168.1.2



IP cam with IP
address 192.168.1.20

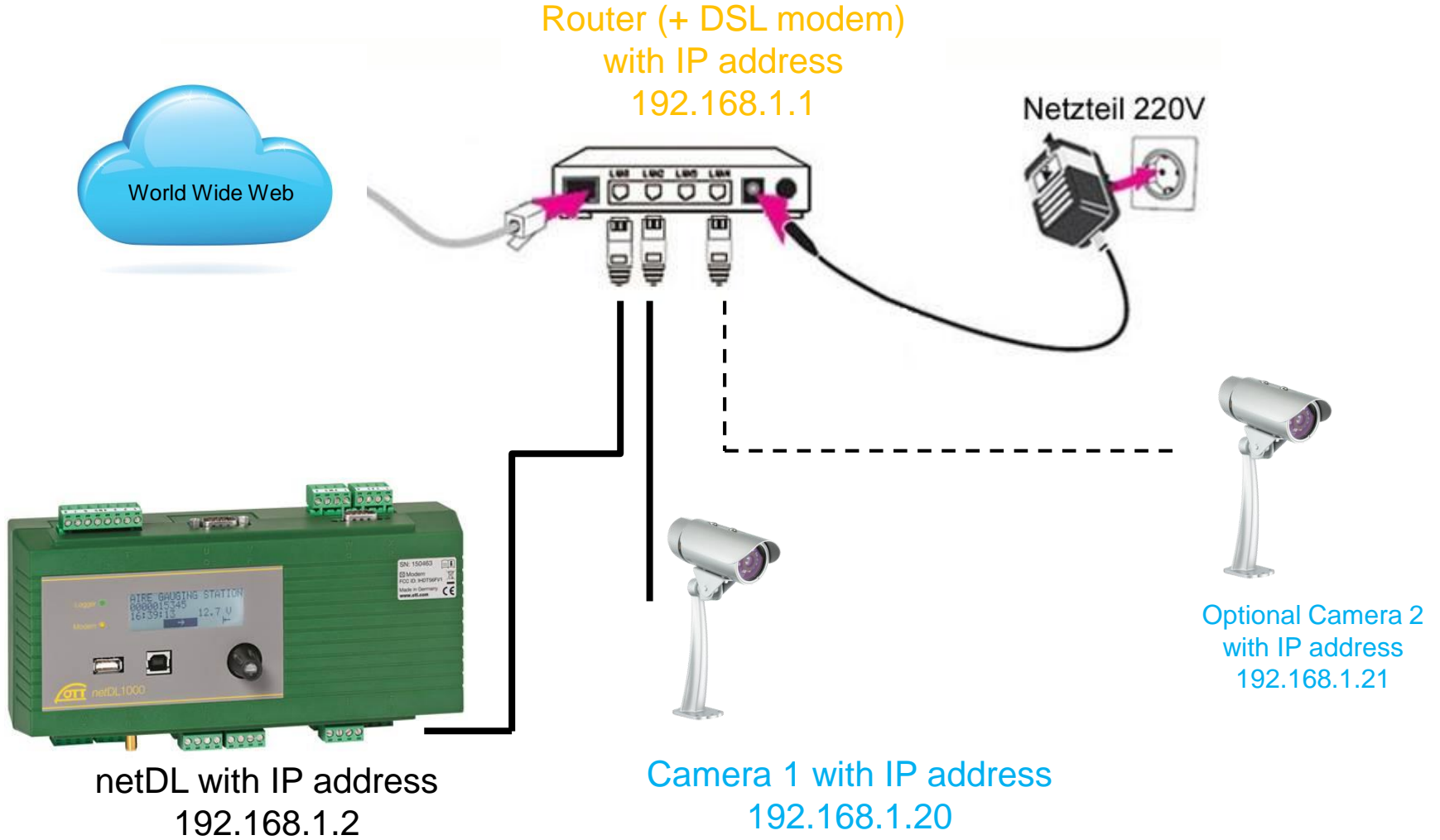


Optional:
IP cam 3 with IP address
192.168.1.22

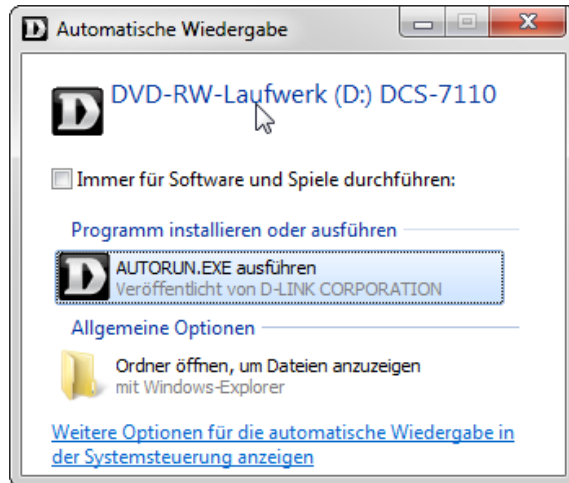


Optional:
IP cam 2 with IP address
192.168.1.21

3. IP camera in a routed IP network

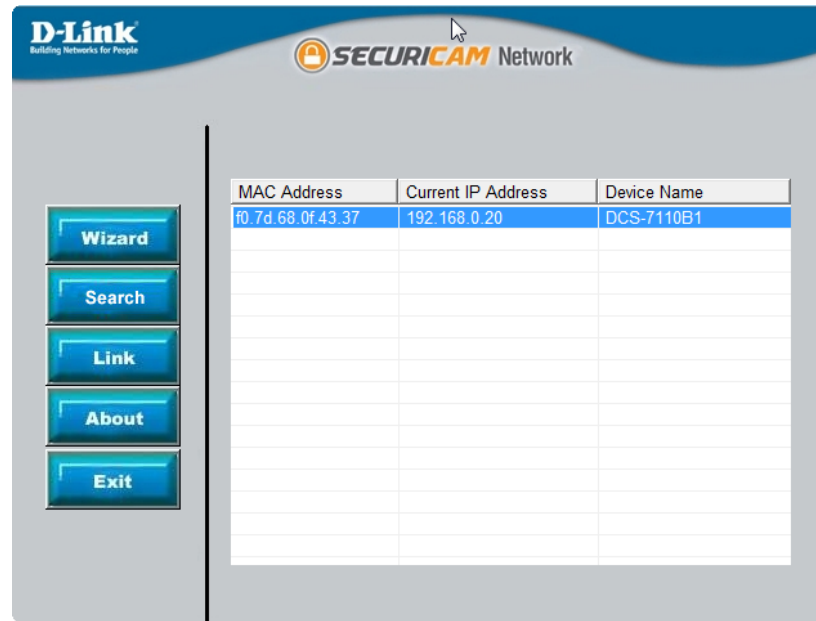


Setup of camera program after inserting the delivered CD to the PC



A) Configuration example D-link camera (option 1 & 2)

- Direct Ethernet connection of the camera to the PC with the D-link software (in this case normally both types of Ethernet cables can be used: standard or crossed).
- With help of the „Wizard“ function in the D-link software you can set the IP address and other parameters for the camera.



A) Configuration example D-link camera (option 1 & 2)

Admin ID: admin
PW: no default password defined

Set password by checking ‚Change‘, enter two times the password and click „Next“ (you may also create a separate account for the IP cam).



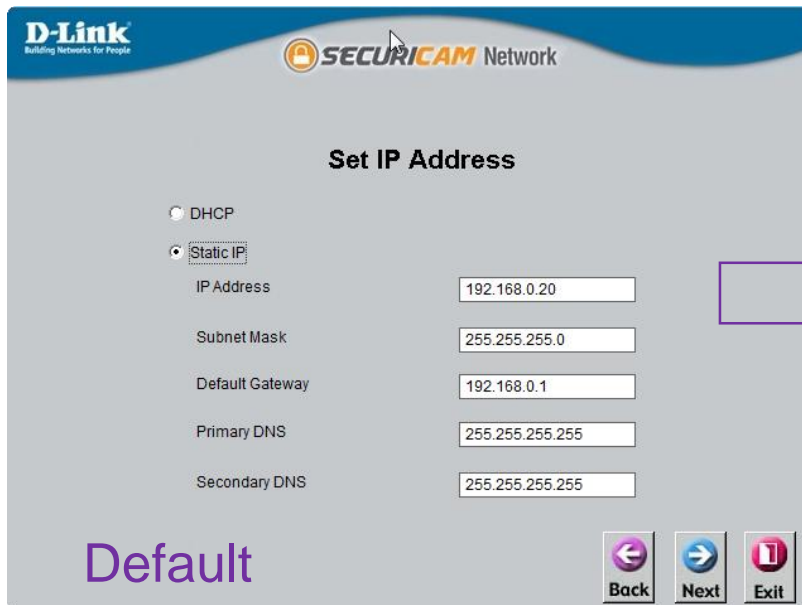
The screenshot shows the D-Link Securicam Network configuration interface. The header includes the D-Link logo and "SECURICAM Network". The main heading reads "Set up an Admin ID and Password to secure your camera. Click Next to continue." Below this, there are two columns of input fields. The first column contains "Admin ID" (with "admin" entered) and "New ID" (with an empty field). The second column contains "Password" (with an empty field), "New Password" (with an empty field), and "Reconfirm" (with an empty field). Below the "New ID" and "New Password" fields, there are checkboxes labeled "Change". Both checkboxes are currently unchecked. At the bottom, there are three buttons: "Back", "Next", and "Exit".



The screenshot shows the same D-Link Securicam Network configuration interface as the previous one, but with the "Change" checkbox for "New Password" checked. The "New Password" and "Reconfirm" fields now contain four asterisks (****). The "Admin ID" field still contains "admin". The "Next" button is highlighted, indicating it is the next step in the process.

A) Configuration example D-link camera (option 1 & 2)

- a) Settings of the IP adress: 192.168.1.20
- b) Subnet mask: 255.255.255.0
- c) For the direct link there is **no default gateway** to be defined
- d) Also there is **no Primary and Secondary DNS** to enter



D-Link
Building Networks for People

SECURICAM Network

Set IP Address

DHCP

Static IP

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS:

Secondary DNS:

Default

Back Next Exit



D-Link
Building Networks for People

SECURICAM Network

Set IP Address

DHCP

Static IP

IP Address:

Subnet Mask:

Default Gateway:

Primary DNS:

Secondary DNS:

New settings

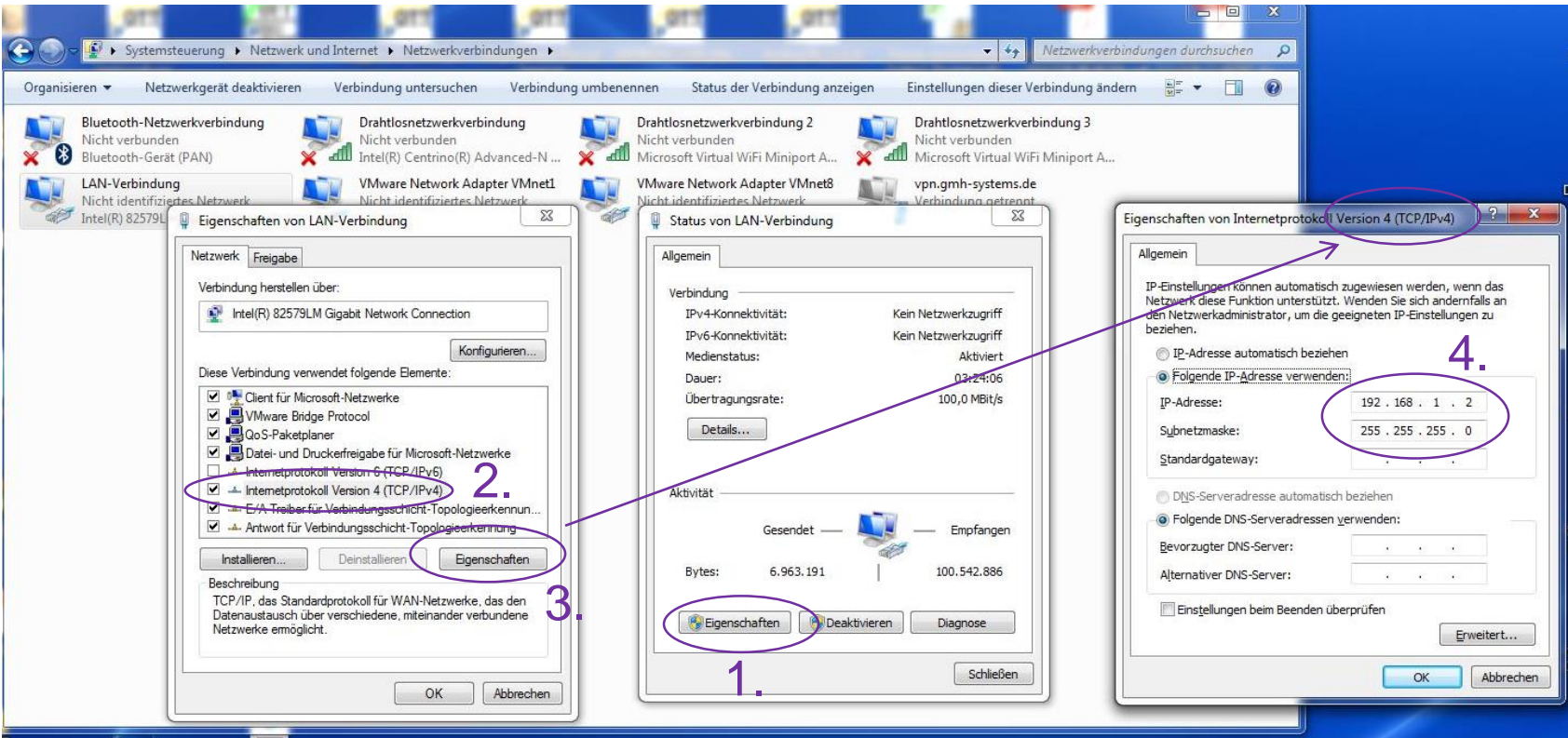
Back Next Exit

A) Configuration example D-link camera (option 1 & 2)

Not mandatory (just skip this page and come back to it later in case of problems)

Check the camera connection with browser of your Laptop

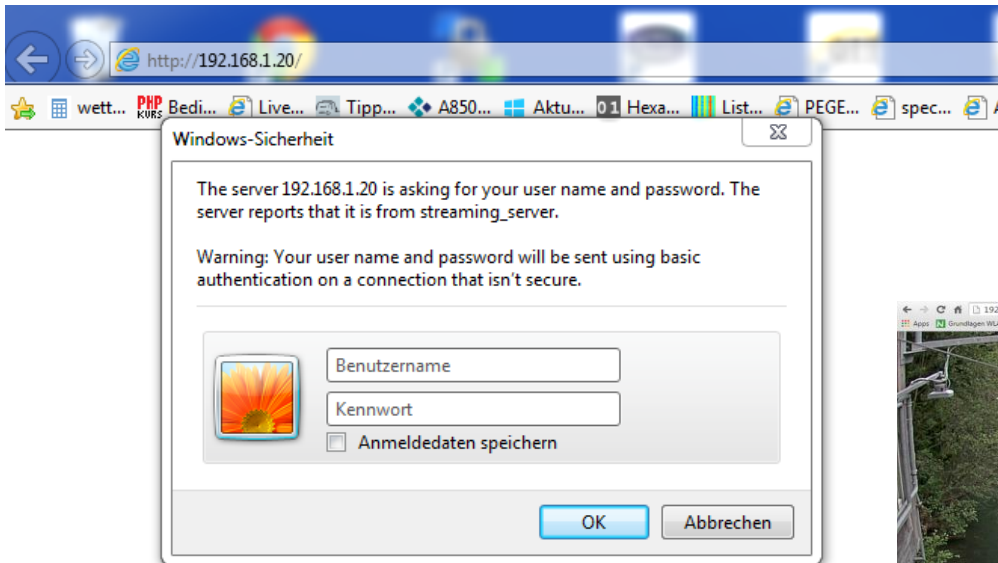
Settings for LAN interface (system settings, network, internetprotocol V4)



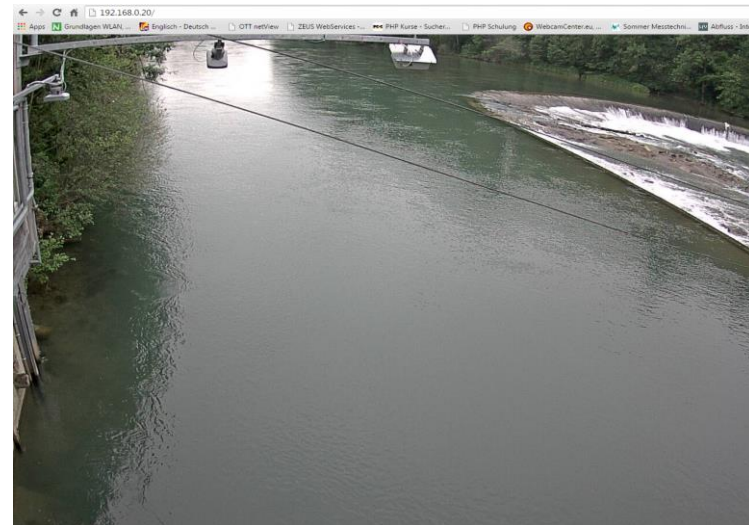
A) Configuration example D-link camera (option 1 & 2)

Not mandatory (just skip this page and come back to it later in case of problems)

Enter user and password and the D-link camera webserver appears



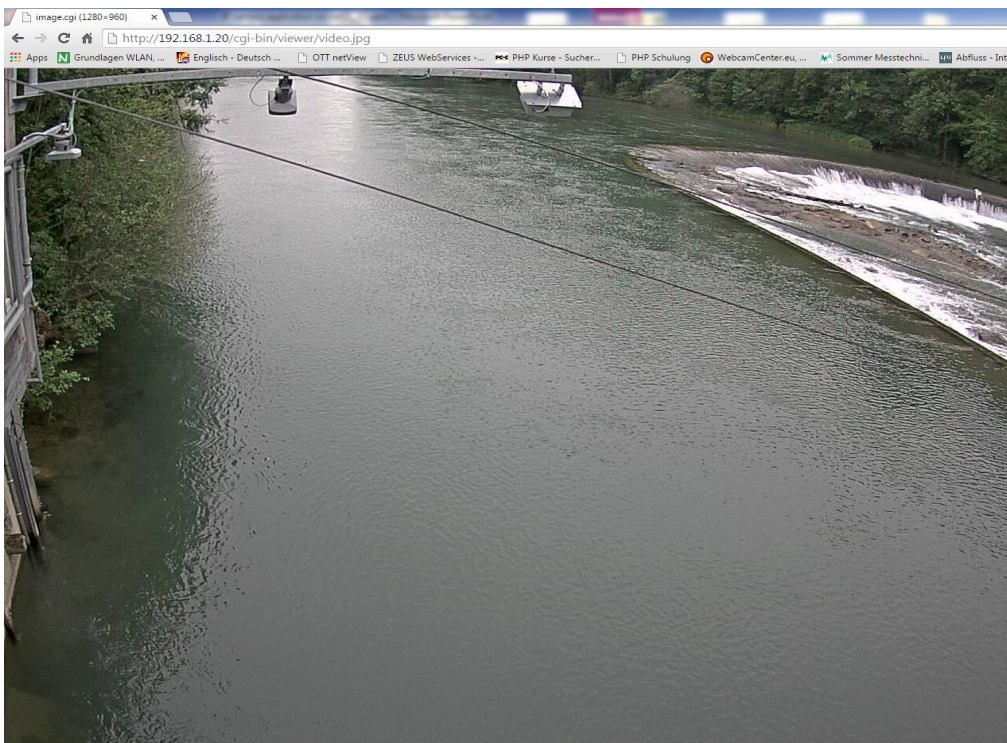
Enter username admin
(or your new accountname)
and your defined password



A) Configuration example D-link camera (option 1 & 2)

- This **camera dependend URL** needs to be configured in the netDL

- <http://192.168.1.20/cgi-bin/viewer/video.jpg>



B) netDL Configuration (option 1 & 2)

OTT Data Logger Operating Program - netDL 1000

File Device netDL 1000 Configurations Voice announcer Assistant Tools Help

Channel Meas. cycle Analog sensors Digital sensors Serial sensors Sonicflow Processing Output Specials

New Channel

netDL 1000: WEBCAM__S / Webcam Service

- Interfaces (3)
 - [1] COM1 (O-P)
 - [2] COM2 (Q-R)
 - [3] ETH (F)
- Devices (2)
 - [1] LAN [ETH (F)]
 - [2] Genpro GPRS [COM2 (Q-R)]
- Connections IP (2)
 - [1] LAN [LAN]
 - [2] Genpro GPRS [Genpro GPRS]
- Servers (1)
 - [2] FTP GPRS [FTP]
- Transmissions (1)
 - [1] Picture [Schulung Training 2 [Genpro GPRS] [...]]
- Maintenance windows (2)
 - [1] LAN [LAN]
 - [2] Genpro GPRS [Genpro GPRS]
- External IP Devices (1)
 - [2] IP Cam Service [LAN, Camera D-Link DCS-7110]
- Time synchronisation
- Action management (0)
- Display / Observer
- Channel 0001 / WebDL

Stored Templates

- Lufft_Ventus200A_C1_C3_SDI_de
- Lufft_Ventus200A_C1_C3_SDI_en
- Lufft_Ventus200A_C1_C3_SDI...

Connection IP

General LAN

Use Proxyserver for LAN

Obtain an IP address automatically (DHCP)

IP address: 192.168.1.10

Subnet mask: 255.255.255.0

Default gateway: _____

Primary DNS server: _____

Secondary DNS server: _____

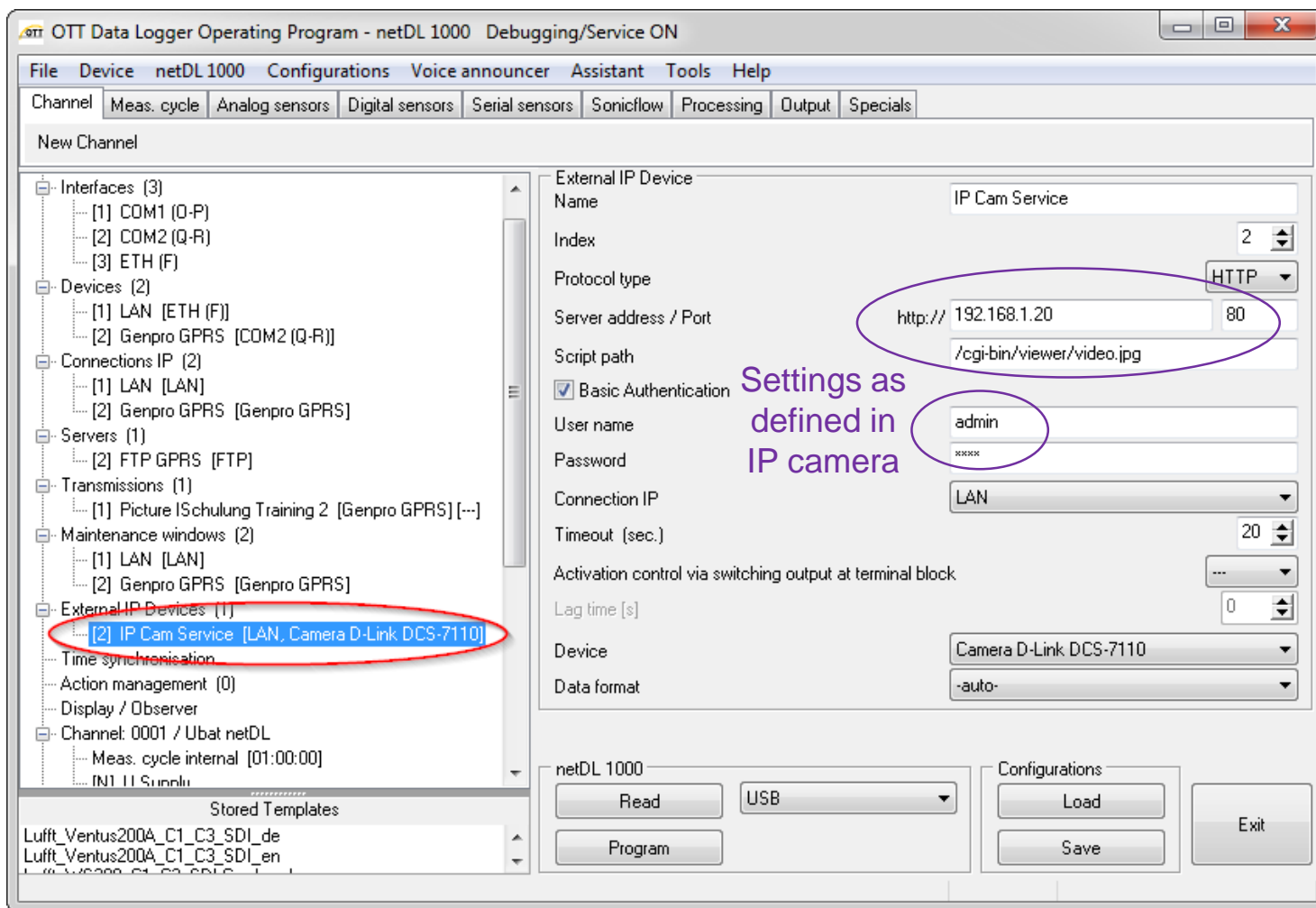
netDL 1000

Read USB Configurations Load Exit

Program Save

IP address of the netDL and same subnet mask like for the IP cam

B) netDL Configuration (option 1 & 2)



The screenshot shows the 'netDL 1000' configuration window. The left sidebar contains a tree view of configurations, with 'External IP Devices [1]' expanded to show '[2] IP Cam Service [LAN, Camera D-Link DCS-7110]', which is circled in red. The main configuration area for 'IP Cam Service' includes the following fields:

- Name: IP Cam Service
- Index: 2
- Protocol type: HTTP
- Server address / Port: http:// 192.168.1.20 80
- Script path: /cgi-bin/viewer/video.jpg
- Basic Authentication:
 - User name: admin
 - Password: ****
- Connection IP: LAN
- Timeout (sec.): 20
- Activation control via switching output at terminal block: ...
- Lag time [s]: 0
- Device: Camera D-Link DCS-7110
- Data format: -auto-

Annotations in purple include the text 'Settings as defined in IP camera' and two circles highlighting the 'Server address / Port' and 'User name' fields.

At the bottom, there are buttons for 'Read', 'Program', 'Load', 'Save', and 'Exit', along with a 'netDL 1000' dropdown set to 'USB'.

B) netDL Configuration (option 1 & 2)

The screenshot shows the OTT Data Logger Operating Program - netDL 1000 interface. The window title is "OTT Data Logger Operating Program - netDL 1000 Debugging/Service ON". The menu bar includes File, Device, netDL 1000, Configurations, Voice announcer, Assistant, Tools, and Help. The main area is divided into a left sidebar and a right configuration panel.

Left Sidebar: A tree view showing the configuration structure. The "External IP Devices" folder is expanded, showing "IP Cam Service [LAN, Camera D-Link DCS-7110]". Below it, "Channel: 0062 / IP Cam Service" is selected and highlighted with a purple box. Under this channel, "IP Cam Service IP Sensor external" is highlighted with a red oval.

Right Configuration Panel: The "IP Sensor external" configuration is shown. The "External IP Device" dropdown menu is set to "IP Cam Service" and is circled in red. Other fields include "Protocol" (set to "..."), "Lag time [s]" (set to 0), and a table for "Number Station / Channel", "Virtual Terminal ID", and "Validity period [s]".

Bottom Panel: Contains "netDL 1000" settings (Read, USB, Program buttons) and "Configurations" settings (Load, Save, Exit buttons).

Text Overlay: A purple text box in the center of the right panel reads: "New Channel to define the interval of taking a picture with the IP cam and forwarding it to the server."

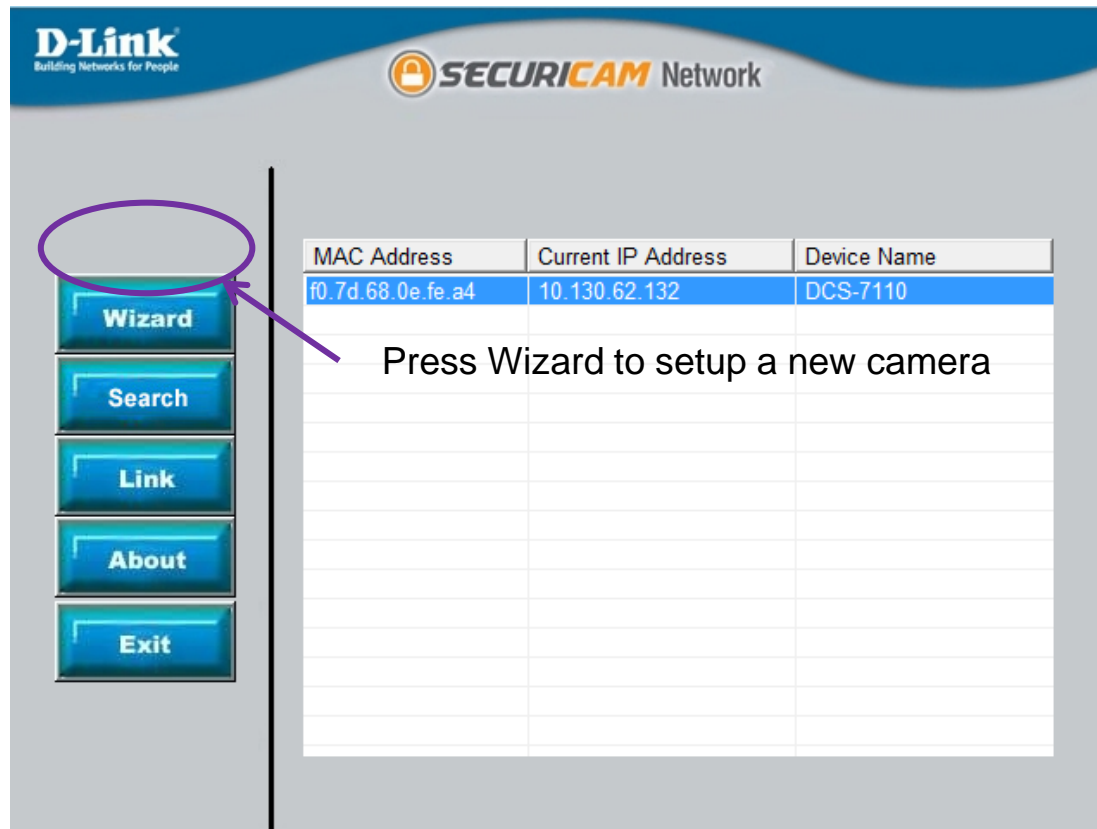
B) netDL Configuration (option 1 & 2)

Using IP connection and server from the selected transmission.

Measurement interval defines how often the netDL will forward a picture to the FTP Server

C) Configuration example D-link camera (option 3)

In this example we are working in a network environment with a router. One Camera with IP 10.130.62.132 is already integrated to the network. With the wizard function you can „setup“ additional cameras



The screenshot shows the D-Link Securicam Network interface. On the left, there is a vertical menu with buttons for 'Wizard', 'Search', 'Link', 'About', and 'Exit'. The 'Wizard' button is highlighted with a purple circle and a purple arrow pointing to it. To the right of the menu is a table with the following data:

MAC Address	Current IP Address	Device Name
f0.7d.68.0e.fe.a4	10.130.62.132	DCS-7110

Below the table, there is a text instruction: "Press Wizard to setup a new camera".

C) Configuration example D-link camera (option 3)

Admin ID: admin

PW: no default password defined

Set password by checking ,Change‘, enter two times the password and click „Next“ (you may also create a separate account for the IP cam).



The screenshot shows the D-Link Securicam Network configuration interface. The header includes the D-Link logo and "SECURICAM Network". The main heading reads "Set up an Admin ID and Password to secure your camera. Click Next to continue." Below this, there are two input fields: "Admin ID" with the value "admin" and an empty "Password" field. Underneath, there are two sections for password creation, each with a "Change" checkbox. The left section has "New ID" and "Reconfirm" fields. The right section has "New Password" and "Reconfirm" fields. At the bottom, there are three buttons: "Back", "Next", and "Exit".

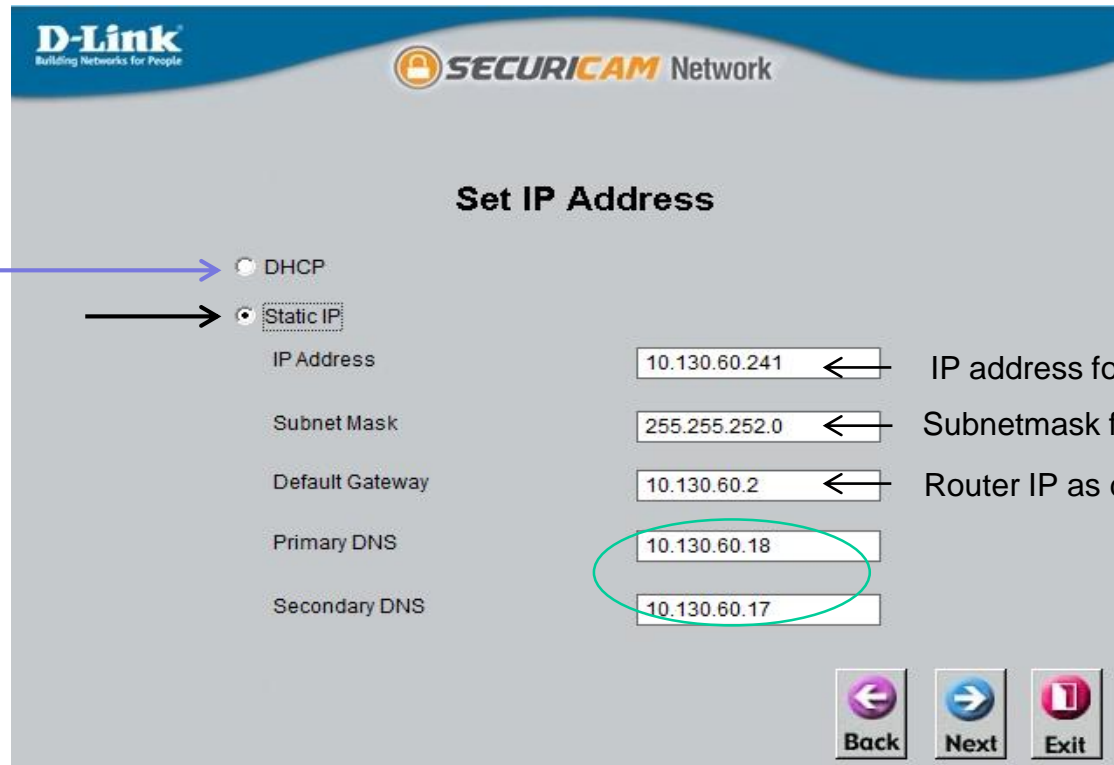


This screenshot shows the same configuration page as the previous one, but with the "Change" checkbox in the password section on the right checked. The "New Password" and "Reconfirm" fields now contain four asterisks (****). The "Admin ID" field remains "admin" and the "Password" field is still empty. The "Back", "Next", and "Exit" buttons are visible at the bottom.

For the internal IP settings ask your IT department. Each „IT Device“ (PC, Kamera, netDL etc.) has its own IP address in the network.

Primary/secondary DNS is only necessary if server is defined as URL (name) which needs to be resolved to a number using the DomainNameServer (e. g.: datacenter.ott.com => 213.182.6.27)

If the router DHCP feature is active you might check the DHCP option in the IP cam for automatically obtaining an IP address. Make sure the IP cam will always get the same address (which is normally a standard feature of the router). Having problems later on check again the assigned IP address for the IP cam in the router.



D-Link
Building Networks for People

SECURICAM Network

Set IP Address

DHCP
 Static IP

IP Address: 10.130.60.241
 Subnet Mask: 255.255.252.0
 Default Gateway: 10.130.60.2
 Primary DNS: 10.130.60.18
 Secondary DNS: 10.130.60.17

IP address for camera
 Subnetmask for available IP range
 Router IP as default gateway

C) Configuration example D-link camera (option 3)

To program the new settings to the camera „restart“ the system.



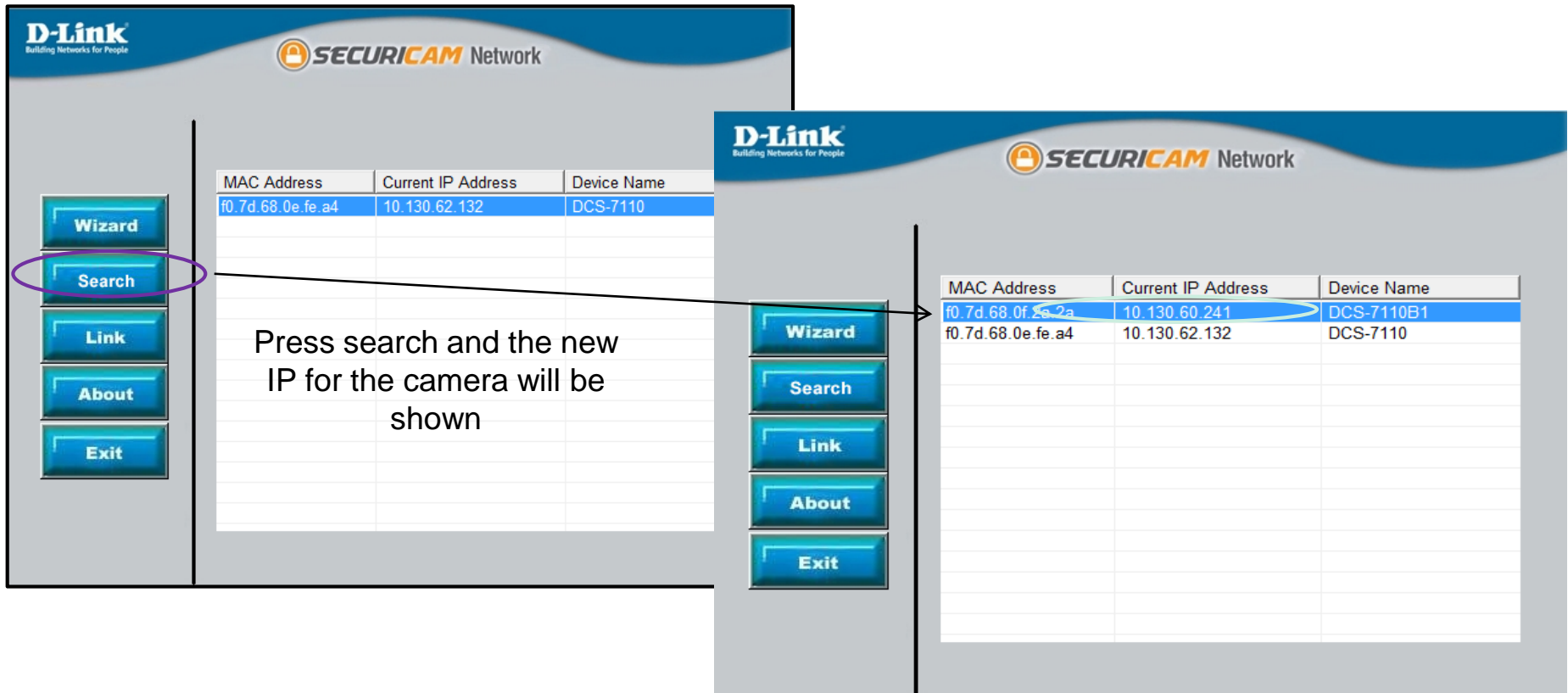
The screenshot shows the D-Link Securicam Network configuration interface. The page has a blue header with the D-Link logo and the text "Building Networks for People". Below the header, the "SECURICAM Network" logo is displayed. The main content area contains a list of configuration fields, each with a label and a text input box:

Admin ID	admin
Password	
IP Address	10.130.60.241
Subnet Mask	255.255.252.0
Default Gateway	10.130.60.2
Primary DNS	10.130.60.18
Secondary DNS	10.130.60.17

Below the configuration fields, there is a paragraph of text: "Now you have configured all settings. Please click button 'Restart' to commit the settings to the Internet camera and reboot it. Or, you can click button 'Back' to change the settings again." At the bottom right of the page, there are two buttons: "Back" (with a left-pointing arrow icon) and "Restart" (with a circular refresh icon). The "Restart" button is circled in red.

C) Configuration example D-link camera (option 3)

After „restarting“ the IP cam click on „Search“ to get the new list of all IP camera devices.



The image shows two screenshots of the D-Link Securicam Network web interface. The left screenshot shows the 'Search' button highlighted with a purple oval. A text box below the table says 'Press search and the new IP for the camera will be shown'. The right screenshot shows the result after clicking 'Search', with the 'Search' button also highlighted. A table in the right screenshot shows the updated list of IP camera devices.

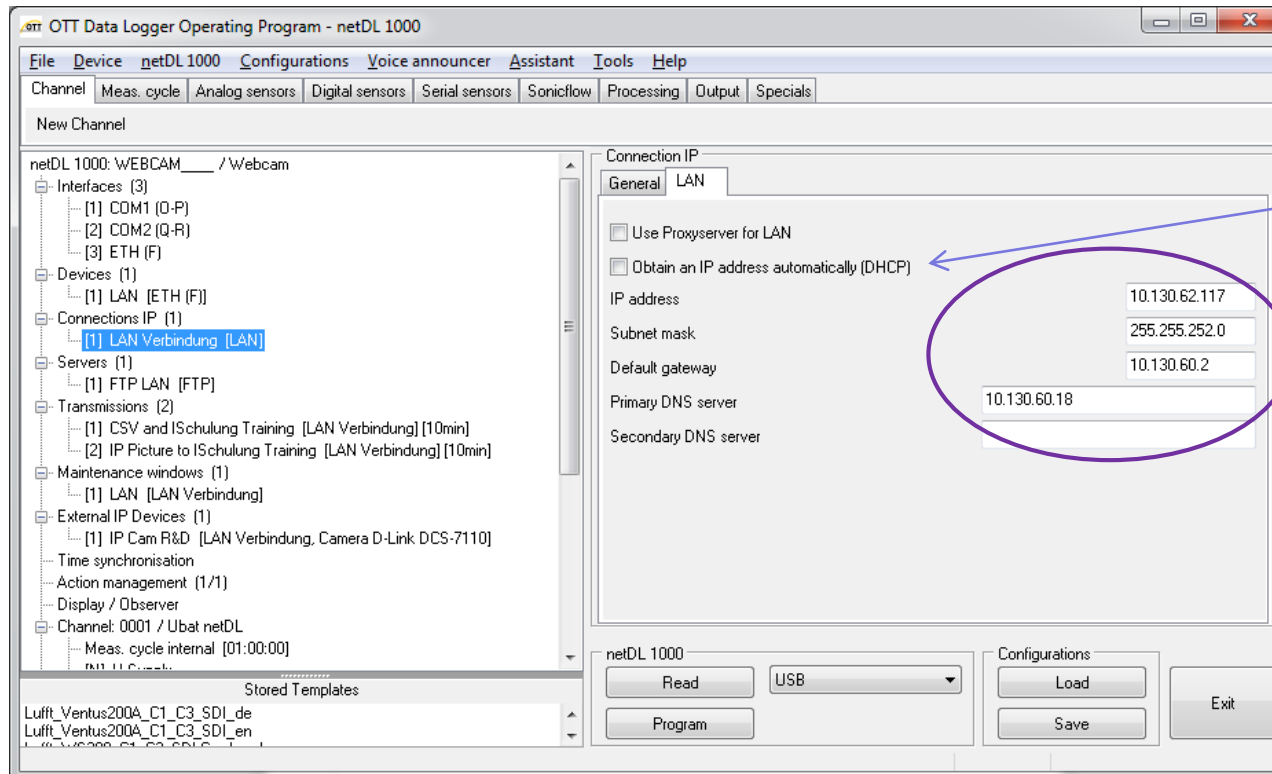
MAC Address	Current IP Address	Device Name
f0.7d.68.0e.fe.a4	10.130.62.132	DCS-7110

Press search and the new IP for the camera will be shown

MAC Address	Current IP Address	Device Name
f0.7d.68.0f.2e.2a	10.130.60.241	DCS-7110B1
f0.7d.68.0e.fe.a4	10.130.62.132	DCS-7110

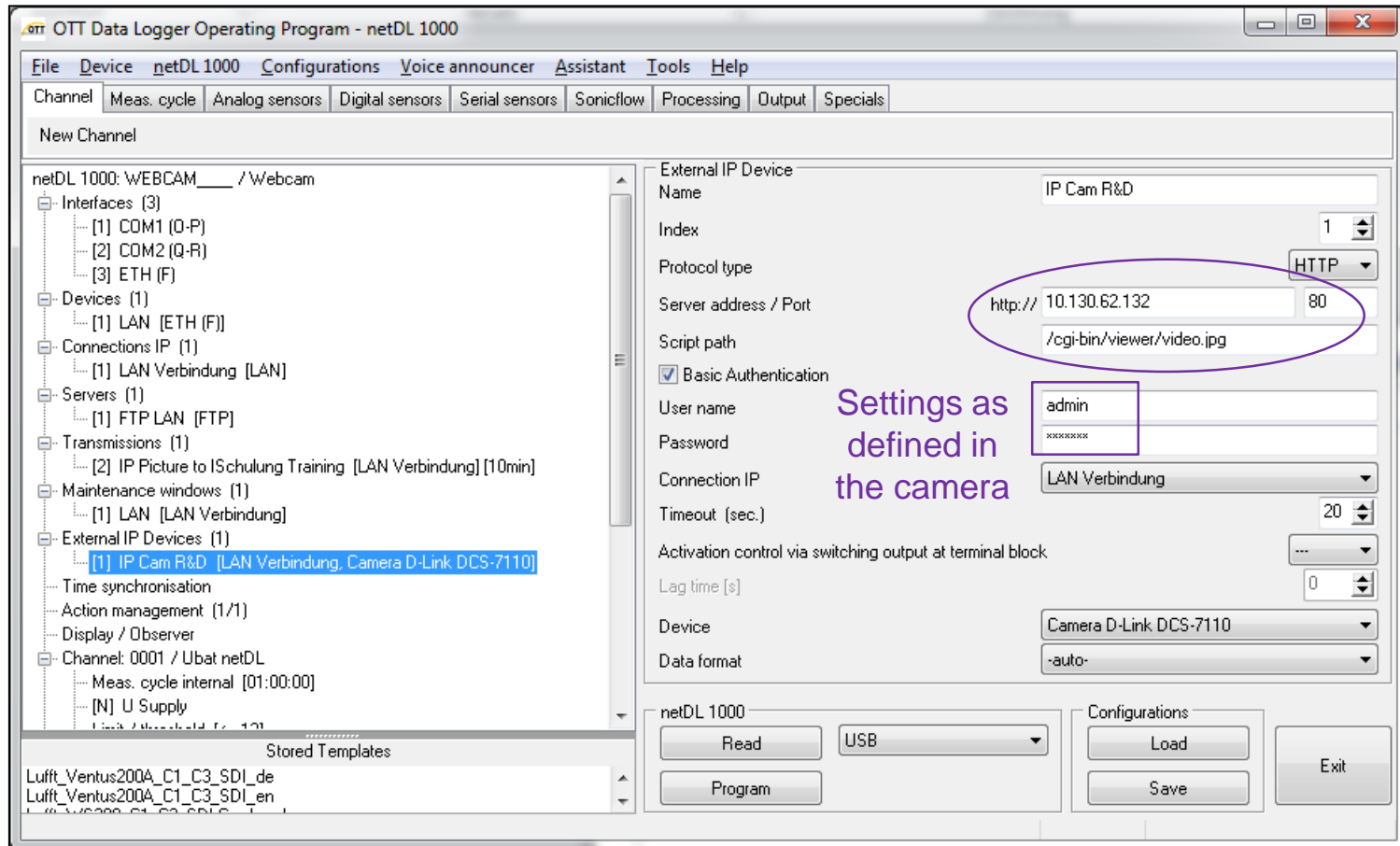
■ Settings for option A) 3 (netDL and IP camera with router)

- Gateway (normally router IP): 192.168.1.1 (in stand alone network, DSL internet connection)
Here router IP is 10.130.60.2, netDL IP is 10.130.62.117 (clarify with your IT department)
- Primary DNS is only necessary if server is defined as name which needs to be resolved to IP number using the DNS (e. g.: datacenter.ott.com = 213.182.6.27)



Router with DHCP feature active makes setup for netDL IP connections easy but check again note for IP cam settings

- netDL settings for camera in a routed network (IP address allocation depends on the IP Network; please clarify with your IT department)





OTT HydroService

(Dr. Torsten Dose)

