



Camera User Guide

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1 LICENSE AGREEMENT

Please read the license agreement of this license contract carefully, before you install the software. By the installation of the software you agree to the conditions of this license contract.

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2 PRODUCT LIABILITY

The General Terms and Conditions of Sale and Delivery of MAGNA Telemotive GmbH can be found on our website at:

[General Terms and Conditions of Sale and Delivery Telemotive AG.pdf](#)

3 Overview

This user guide describes the installation and usage of a system for video recording. It consists of one network camera AXIS P12-series / F-series / 211 / 210 / 207 or a Video Encoder AXIS Q7404 / P7214 with analog cameras and a one of the data logger

- blue PiraT2
- blue PiraT2 5E
- blue PiraT Mini
- blue PiraT Remote

of MAGNA Telemotive GmbH. The Video Encoders are used to connect analog cameras (NTSC/PAL). The network cameras can be connected directly to the data logger.

The system allows the recording of up to four different video streams at the same time. For that the server (or a network camera) and the data logger must be connected to each other and configured separately by a HTML-based client.

The video streams are recorded in real-time and in a specified time interval in the logger. They can be downloaded into a control unit for offline use. They can also be converted to a video file and transferred from the logger into a computer. The video block length can be adjusted to 15 up to 60 seconds and the videos are stored in the mpeg4 format.

When converting into a video file, the system can combine a maximum of 400 blocks per file. The length of the blocks can change. If more video blocks are available and they cannot be converted to one file, the system creates several files. In this way no video data is lost.

Attention:

The Video Encoder and the cameras are not set by default to standby mode, which may be a reason for an empty battery.

After rebooting the system takes approximately 120 seconds to be synchronized. The recording starts immediately after the synchronization.

If the Ethernet cable was removed between the Video Encoder / camera and the data logger and plugged in again, the system takes around 11 seconds for the resynchronization.

If the supply voltage is removed from the Video Encoder / camera during the recording, it takes about 120 seconds to be synchronized (after a reconnection).

AXIS camera and Video Encoder should be operating within the AXIS specification. This is especially required for power and environmental parameters.

This user guide describes the configuration and usage of this feature. The general configuration is described in the user guides of the used data logger as well as the Telemotive System Client, which is valid together.

This document refers to **firmware version 03.04.01** and the **Telemotive System Client** from **version 3.4.1**. Some features depending on model and feature license or may not be available in older versions.

Software updates and user guides for other, optional, licensed enhancements are available in the Telemotive ServiceCenter. (Please find the address under Contact at the last page.)

To ensure the most reliable operation of your system as possible, please make sure to use always current firmware and software versions.

**Please note these important instructions about the handling of devices of
MAGNA Telemotive GmbH!**

There's a linux system running on the devices and sometimes when the device has a dirty shutdown due to a power break down or unplugging the power supply, the system is corrupt from this time. You know this situation from a PC, when you switch it off some times it maybe will not work any more or show you some mistakes.

In most cases this issue is catched up and repaired by the linux system we use, but sometimes it can happen that the system on the logger is damaged and there's no access to the device any more.

We are optimizing the handling of corrupted systems permanently and are integrating some new enhancements regarding this kind of issues with every new release to save the system. But we can't make the system for 100% save against these influences.

So please use always the provided mechanism for shutting down the device or the implemented standby function in which the device shutting down when no traffic is detected any more in an adjustable time.

4 System requirements

Control Unit

A Windows based Laptop or PC is needed to configure the devices by **Telemotive System Client**. It also allows to save the recorded data and to use them offline later.

Telemotive System Client

The software client is used for configuring the data logger as well as downloading the recorded data or convert these into your needed file format. An firmware update can be performed by the **Telemotive System Client** too to ensure that your devices are always up to date.

blue PiraT2 / blue PiraT2 5E / blue PiraT Mini

The communication between bus systems and control units is monitored and relevant data can be recorded very precisely with the data logger. The collected data are stored to the logger and can be downloaded via Ethernet to a PC.

The **blue PiraT2** is our top-class all-in-one data logger. Seven models cover a wide range of interfaces.

Additionally, the **blue PiraT2 5E** offers improved power management and power backup, five integrated Ethernet ports and super-fast start-up behavior. The blue PiraT2 can be flexibly expanded via [Telemotive System Link](#).

The **blue PiraT Mini** is smallest data logger in the world with an outstanding functional scope. It offers a wide range of interfaces, stable temperature behavior, very low energy consumption, four GBit Ethernet ports, and much more. Different blue PiraT Mini can be flexibly expanded to one cluster and therefore handled very easily by using [Telemotive System Link](#).

Remote Control Touch (optional)

Operate your blue PiraT Mini or blue PiraT2 data loggers safely and comfortably from the driver's or passenger seat. Via Telemotive System Link our new remote control becomes part of your logger network. One remote control can handle all connected loggers.

blue PiraT Remote

While Remote Control Touch is just a control unit for handling unique devices or a TSL network, the blue PiraT Remote additional has logger functionality by offering internal storage and some interfaces.

blue PiraT2 Ethernet kit

This optional enhancement Ethernet kit is connected via a FCI cable to the rear side of the **blue PiraT2**. With his four Ethernet interfaces it establishes the connection between data logger and the Video Encoder or one single camera and allows connecting to a Local Area Network (LAN). In this way the Ethernet port on the front side of the data logger is open. This allows using the front Ethernet port for communication with the Telemotive System Client and manages the logger.

The Ethernet kit is available for blue PiraT2 only, because **blue PiraT2 5E** has an integrated Ethernet switch and four ports at the rear side.

Network camera AXIS P12 / F44 / F41 / 211 / 210 / 207

Network cameras have an Ethernet port and therefore can be connected directly to the data logger. Up to four cameras are supported to record the video streams. These cameras can be connected to the four channels of the encoder. The following AXIS camera types are supported: P12, F44, F41, 211, 210 and 207.

AXIS Q7404 / P7214 Video Encoder

The AXIS Video Encoder is a high performance, four-channel standalone device that integrates up to four analog cameras (NTSC/PAL) at a time into an IP-based video surveillance system. Video Encoder and camera are connected via BNC connector. Both Video Encoders support the compression formats H.264, MJPEG and MPEG-4. Therefore they are capable to reduce bandwidth and storage requirements without compromising image quality.

The AXIS Q7404 Video Encoder contains four separate video channels, one for each video input. Each channel has its own IP address.
The AXIS P7214 Video Encoder uses only one IP address for all four channels.

License

For the additional feature **Camera Link**, an installed license is required. Settings for licensed features can be performed with a valid license only.

If you need a license for your logger, please contact our sales department (please find the address under contact at the last page).

4.1 Accessing a connected camera / camera server

If the camera / camera server is connected to a data logger and has to be modified, it can be reached by the IP address of the logger and **port 11400**.

To access the configuration just put the IP address and port into your browser, e.g.:
192.168.0.233:11400

If there are more cameras / camera server connected, they can be reached by the ports 11401, 11402, 11403.

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4.2 Further manuals

Beside this user guide we offer the main manuals for our client as well as for the different data logger generations in our ServiceCenter at <https://sc.telemotive.de/bluepirat>.

User manual for the Telemotive System Client

https://sc.telemotive.de/4/uploads/media/TelemotiveSystemClient_UserManual.pdf

User manual for blue PiraT2 / blue PiraT2 5E

https://www.telemotive.de/4/uploads/media/blue_PiraT2_UserManual.pdf

User manual for blue PiraT Mini

https://www.telemotive.de/4/uploads/media/blue_PiraT_Mini_UserManual.pdf

User manual for Remote Control Touch

https://sc.telemotive.de/4/uploads/media/RCTouch_UserGuide.pdf

User manual for blue PiraT Remote

https://sc.telemotive.de/4/uploads/media/blue_PiraT_Remote_UserGuide.pdf

For having an easy access if necessary, the most important manuals are linked in the client under the menu item **[Help]** and are reachable easily from there.

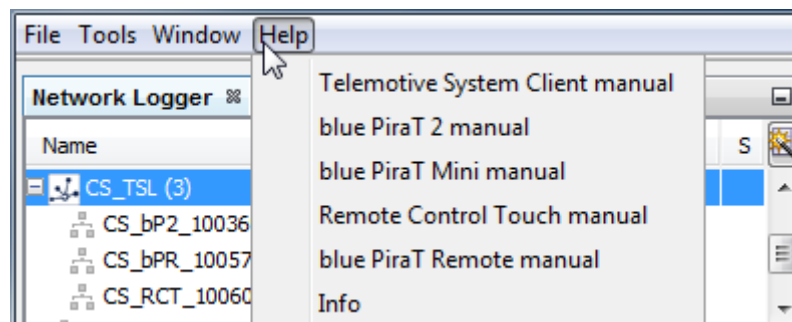


Figure 4.1: links to the manuals

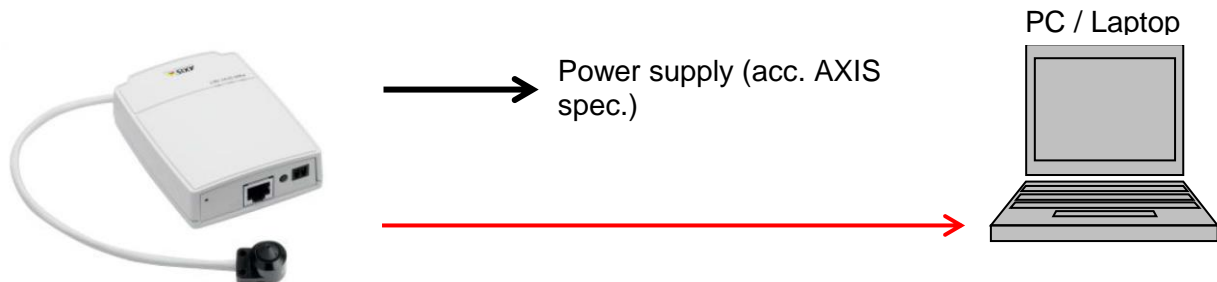
Our licensed enhancements have own manuals which are stored in the ServiceCenter too. You will find a list of these enhancements in the user manuals in the chapter **Additional features by optional licenses**.

5 Configuring the network camera AXIS P12xx

5.1 Connecting the network camera AXIS P1204 / P1214 / P1224

Connect the camera with the associated main unit. Connect the power supply to the main unit. Connect your PC or laptop via Ethernet cable to the main unit. Turn on the power supply. All LEDs should light green after about 60 seconds.

Network camera AXIS P1204 / P1214 / P1224



Change your PC's IP configuration. Use static IP address with the following settings:

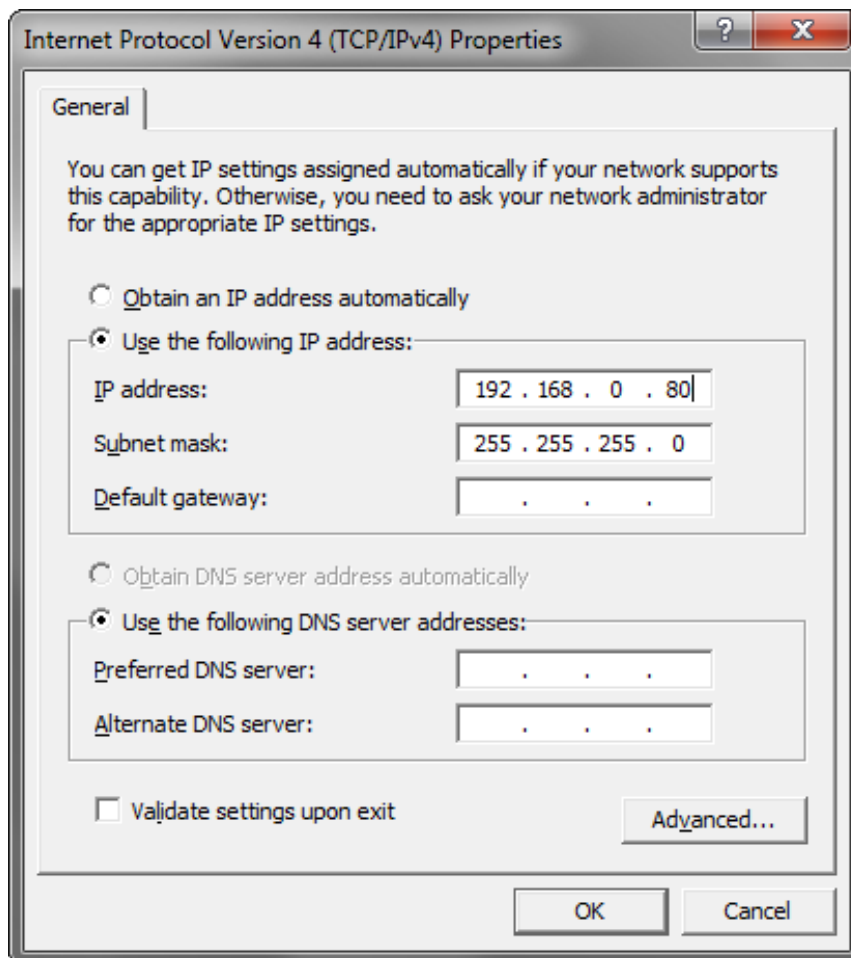


Figure 5.1: Setting a static IP address

5.2 Access to the network camera AXIS P12xx

Open your browser and type in the preset IP address of the network camera: **192.168.0.90**.
(<http://192.168.0.90>)

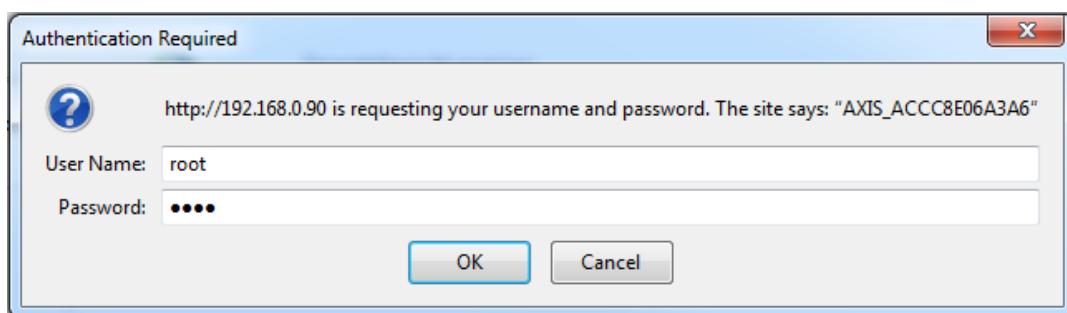
Choose your password and type it in. This password will be needed later.
If the system asks for a further authentication, please type in the same password like before.



The screenshot shows the web interface for configuring the camera. It features the AXIS logo at the top left. The main heading is "Create Certificate" in blue. Below it, a message states: "Secure configuration of the root password via HTTPS requires a self-signed certificate." A button labeled "Create self-signed certificate..." is provided. The next section is "Configure Root Password using HTTP" in blue. It contains three input fields: "User name:" with the value "root", "Password (max 64 characters):" with an empty field, and "Confirm password:" with an empty field. An "OK" button is located to the right of the confirm password field. Below the form, there are two paragraphs of text: "The password for the pre-configured administrator root must be changed before the product can be used." and "If the password for root is lost, the product must be reset to the factory default settings, by pressing the button located in the product's casing. Please see the user documentation for more information." At the bottom, it states "ONVIF will be disabled. To enable ONVIF go to Setup > System Options > Security > ONVIF".

Figure 5.2: Create a user password

After setting the password please login to the web interface:



The screenshot shows a standard browser authentication dialog box titled "Authentication Required". The message reads: "http://192.168.0.90 is requesting your username and password. The site says: 'AXIS_ACC8E06A3A6'". There are two input fields: "User Name:" containing the text "root" and "Password:" with four black dots representing a masked password. At the bottom, there are "OK" and "Cancel" buttons.

Figure 5.3: Login to the web interface

User name: root

Password: (your chosen password from before)

A browser add-on is necessary to display the video stream in some cases.

Thereafter you have to set the power line frequency of the power supply. In Europe 50 Hz is common.

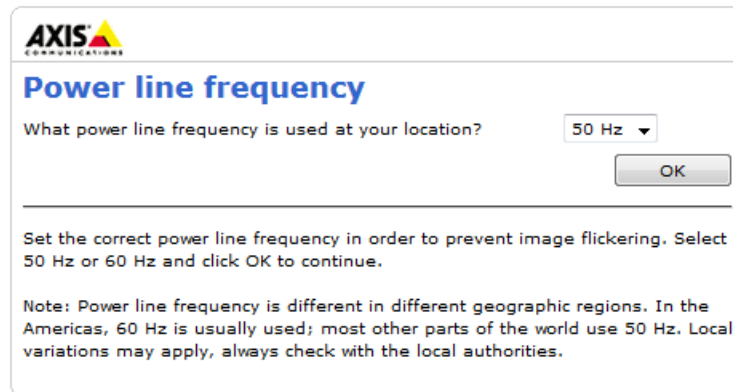


Figure 5.4: Configure the power line frequency

Now you should see the live stream of the connected network camera.



Figure 5.5: Picture of a connected network camera

5.3 Creating the user “admin”

For communicating with the blue data logger a special user is needed with administrator rights.

Click [Setup] → [Basic Setup] → [1 Users] → [Add...].

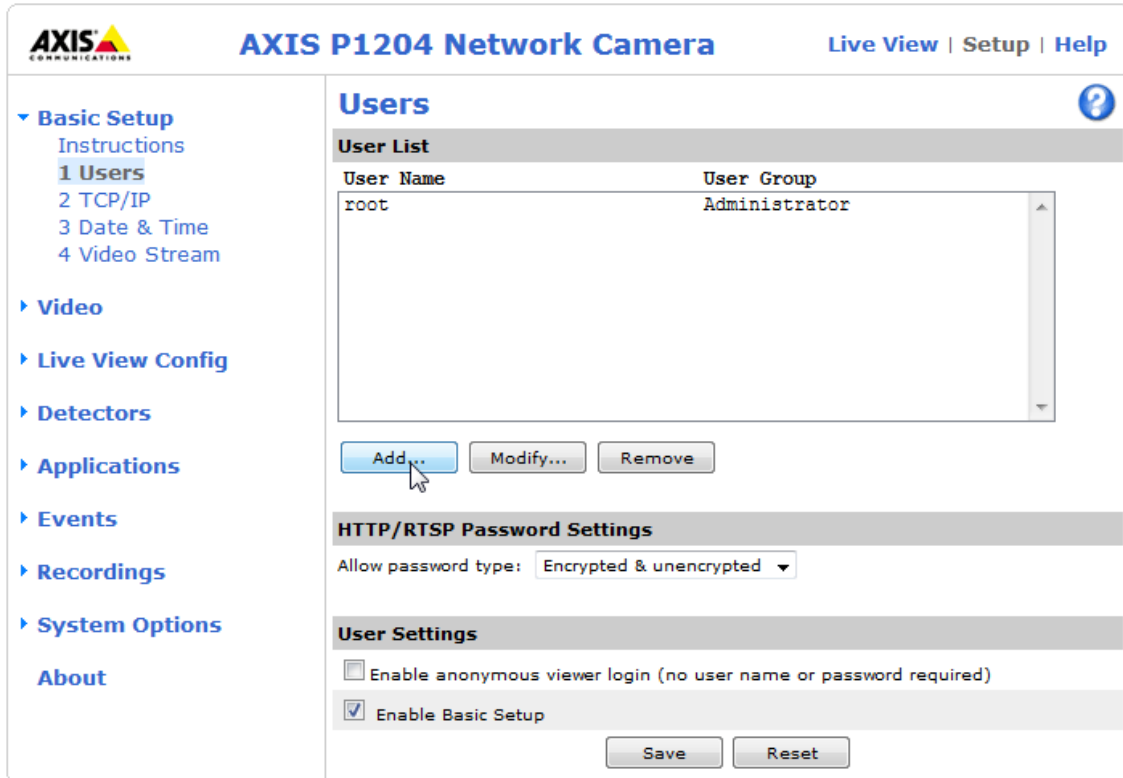
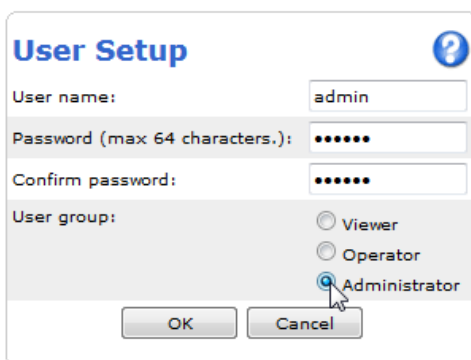


Figure 5.6: Add a new user

A new window is opened.



Name the new user “admin” and define a password. This user and password will be needed later too.

Recommended:

User name: admin
Password: 2x8bg4

Choose the <User group> (o) **Administrator** and click [OK].

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)**. Confirm the settings with [Save].

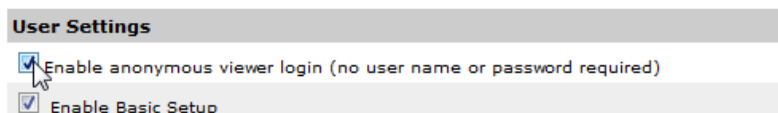


Figure 5.7: Enable anonymous viewer login

5.4 Setting date and time

Change to the entry **[Basic Setup]** → **[3 Date & Time]**. Choose the <Time mode> **(o) Set manually**. Set up date and time. Confirm the settings with **[Save]**.

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

The screenshot shows the 'Date & Time Settings' page for an AXIS P1204 Network Camera. The left sidebar contains a navigation menu with 'Basic Setup' expanded to show '3 Date & Time'. The main content area is titled 'Date & Time Settings' and includes a help icon. It is divided into sections: 'Current Server Time' (Date: 2014-08-01, Time: 12:13:40), 'New Server Time' (Time zone: GMT (Dublin, Lisbon, London, Reykjavik), Automatically adjust for daylight saving time changes: unchecked), 'Time mode' (Synchronize with computer time: unselected, Synchronize with NTP server: unselected, Set manually: selected with a mouse cursor), and 'Date & Time Format Used in Images' (Specify date format: Predefined, YYYY-MM-DD; Specify time format: Predefined, 24h, With resolution: 1 second). 'Save' and 'Reset' buttons are at the bottom.

Figure 5.8: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

Click **[Video]** → **[Video Stream]**. Activate both checkboxes **Include date** and **Include time** to activate the display on the video image. Confirm the settings with **[Save]**.

If desired, change format options like <Text color>, <Text background color> and text place. Confirm the settings with **[Save]**.

AXIS P1204 Network Camera Live View | Setup | Help

Video Stream Settings

Image H.264 MJPEG

Image Appearance

Resolution: 1280x720 (16:9) pixels

Compression: 30 [0..100]

Mirror image

Rotate image: 0 degrees

Video Stream

Maximum frame rate:

Unlimited

Limited to [] [1..30] fps per viewer

Overlay Settings

Include overlay image at the coordinates: X 0 [0..] Y 0 [0..]

Include date Include time

Include text: []

Text color: white Text background color: black

Place text/date/time at top of image

Preview

View image stream while configuring. Video format: MJPEG Open...

Save Reset

Figure 5.9: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

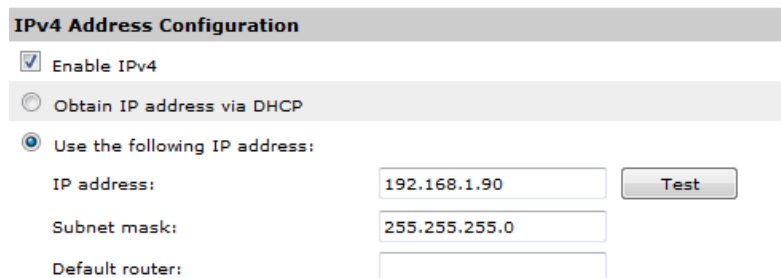
In case that the video is stuttering or has breaks, please reduce the preset **<Maximum frame rate>**. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

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5.5 IP configuration

Change to the entry **[Basic Setup]** → **[2 TCP/IP]**. Choose the <IPv4 Address Configuration> **(o) Use the following IP address**. Type in these data:

IP address:	192.168.1.90
Subnet mask:	255.255.255.0



IPv4 Address Configuration

Enable IPv4

Obtain IP address via DHCP

Use the following IP address:

IP address:

Subnet mask:

Default router:

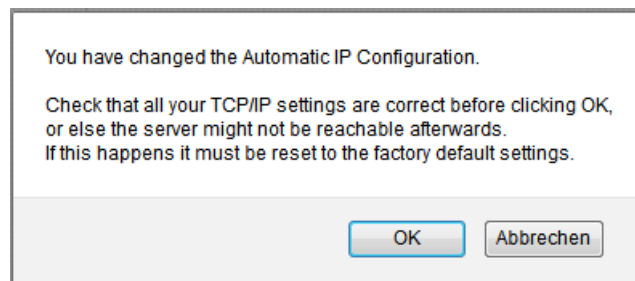
Figure 5.10: Setting an IP address

Confirm the settings with **[Save]**.

Note:

By changing the IP address you lose the connection to the network camera.

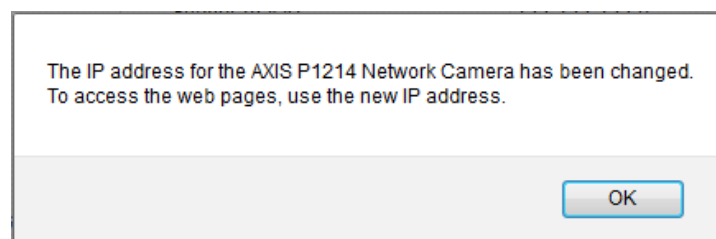
This also will be told to you in an information window:



You have changed the Automatic IP Configuration.

Check that all your TCP/IP settings are correct before clicking OK, or else the server might not be reachable afterwards. If this happens it must be reset to the factory default settings.

Figure 5.11: popup window 1



The IP address for the AXIS P1214 Network Camera has been changed. To access the web pages, use the new IP address.

Figure 5.12: popup window 2

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

<http://192.168.1.90>

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

5.6 Resetting configuration

The AXIS P-series can be set to default settings by the following steps:

1. Disconnect the connection to the power supply.
2. Press and hold the control button next to the PWR connector and
3. reconnect to the power supply.
4. Hold the control button for 15 to 30 seconds till the Stat-LED flashes yellow.

When the Stat-LED turns green the process is finished.

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6 Configuring the network camera AXIS F41/F44

6.1 Connecting the network camera AXIS F41/F44

Connect the camera with the associated main unit. Connect the power supply to the main unit. Connect your PC or laptop via Ethernet cable to the main unit. Turn on the power supply. All LEDs should light green after about 60 seconds.

Network camera AXIS F41

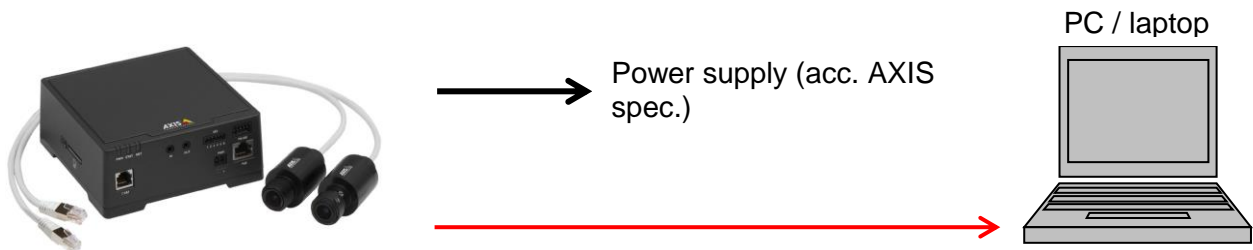


Figure 6.1: Connecting the network camera with a PC/ laptop

Change your PC's IP configuration. Use static IP address with the following settings:

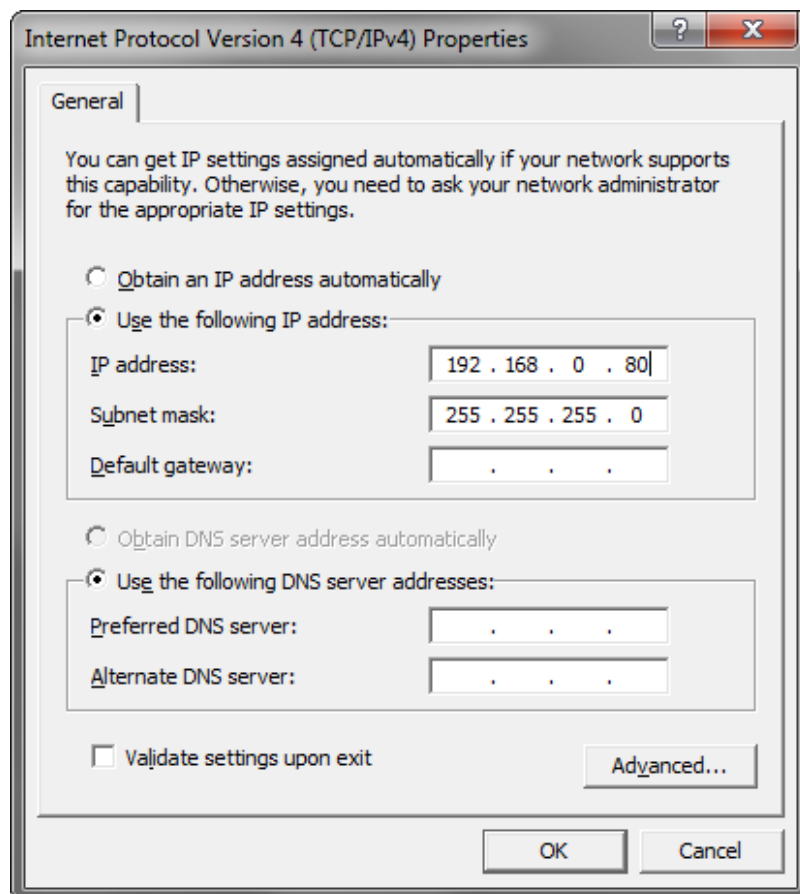


Figure 6.2: Setting a static IP address

6.2 Access to the network camera AXIS F41/F44

Open your browser and type in the preset IP address of the network camera: **192.168.0.90**.

Choose your password and type it in. This password will be needed later.

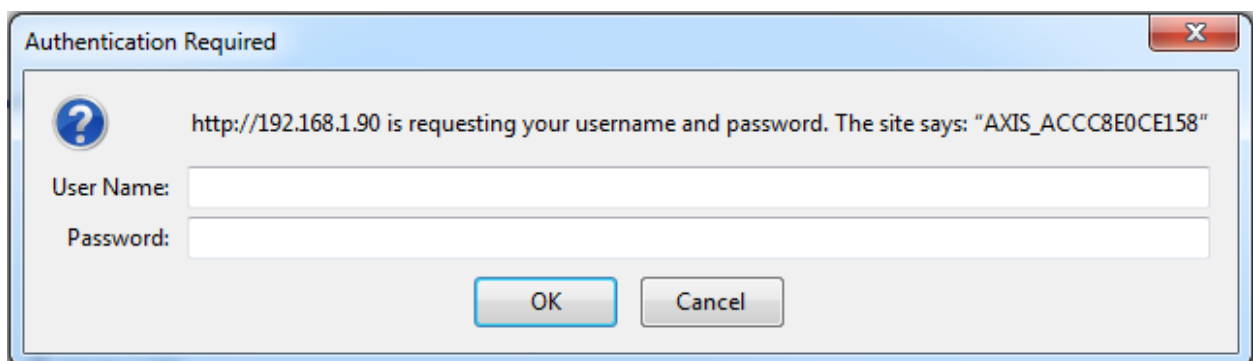
If the system asks for a further authentication, please type in the same password like before.



The screenshot shows the AXIS F41/F44 web interface. At the top, there is the AXIS logo and the text 'Create Certificate'. Below this, a message states: 'Secure configuration of the root password via HTTPS requires a self-signed certificate.' A button labeled 'Create self-signed certificate...' is visible. The next section is titled 'Configure Root Password using HTTP'. It contains three input fields: 'User name:' with the value 'root', 'Password (max 64 characters):', and 'Confirm password:'. An 'OK' button is located to the right of the 'Confirm password' field. Below the input fields, there is a warning message: 'The password for the pre-configured administrator root must be changed before the product can be used.' Another message follows: 'If the password for root is lost, the product must be reset to the factory default settings, by pressing the button located in the product's casing. Please see the user documentation for more information.' At the bottom, it states 'ONVIF will be disabled. To enable ONVIF go to Setup > System Options > Security > ONVIF'.

Figure 6.3: Creating an user password

After setting the password please login to the AXIS F41/F44 web interface:



The screenshot shows a dialog box titled 'Authentication Required'. It contains a question mark icon and the text: 'http://192.168.1.90 is requesting your username and password. The site says: "AXIS_ACC8E0CE158"'. Below this, there are two input fields: 'User Name:' and 'Password:'. At the bottom, there are two buttons: 'OK' and 'Cancel'.

Figure 6.4: Login to the web interface

User name: root

Password: (your chosen password from before)

In some cases a browser add-on is necessary to display the video stream.

Thereafter you have to set the capture mode and the power line frequency of the power supply. In Europe 50 Hz is common.



AXIS
COMMUNICATIONS

Configure capture mode

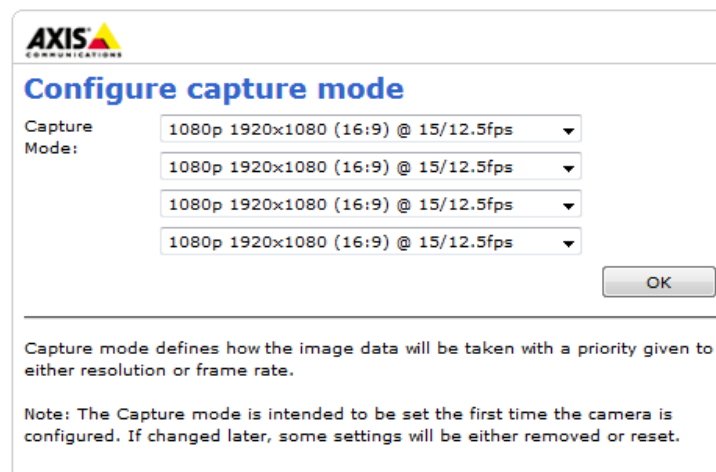
Capture Mode: 1080p 1920x1080 (16:9) @ 15/12.5fps ▼

OK

Capture mode defines how the image data will be taken with a priority given to either resolution or frame rate.

Note: The Capture mode is intended to be set the first time the camera is configured. If changed later, some settings will be either removed or reset.

Figure 6.5: Configure the capture mode F41



AXIS
COMMUNICATIONS

Configure capture mode

Capture Mode: 1080p 1920x1080 (16:9) @ 15/12.5fps ▼

1080p 1920x1080 (16:9) @ 15/12.5fps ▼

1080p 1920x1080 (16:9) @ 15/12.5fps ▼

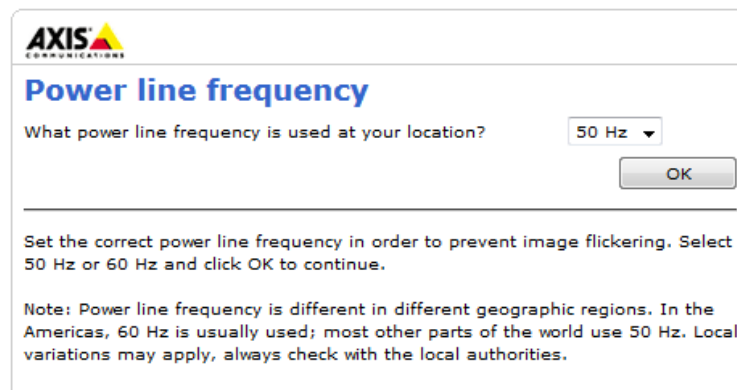
1080p 1920x1080 (16:9) @ 15/12.5fps ▼

OK

Capture mode defines how the image data will be taken with a priority given to either resolution or frame rate.

Note: The Capture mode is intended to be set the first time the camera is configured. If changed later, some settings will be either removed or reset.

Figure 6.1: Configure the capture mode F44



AXIS
COMMUNICATIONS

Power line frequency

What power line frequency is used at your location? 50 Hz ▼

OK

Set the correct power line frequency in order to prevent image flickering. Select 50 Hz or 60 Hz and click OK to continue.

Note: Power line frequency is different in different geographic regions. In the Americas, 60 Hz is usually used; most other parts of the world use 50 Hz. Local variations may apply, always check with the local authorities.

Figure 6.6: Configure the power line frequency

Now you should see the live stream of the connected network camera.

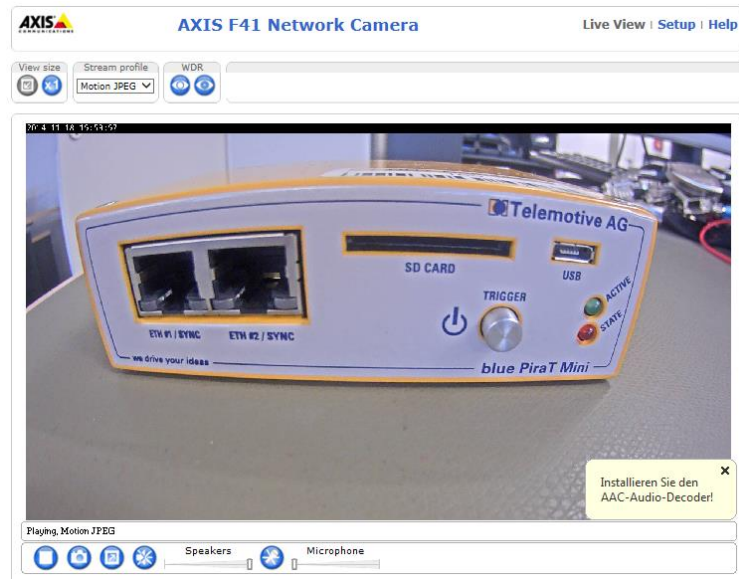


Figure 6.7: Picture of a connected network camera

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6.3 Creating the user “admin”

For communicating with the data logger a special user is needed with administrator rights.

Click **[Setup]** → **[Basic Setup]** → **[1 Users]** → **[Add...]**.

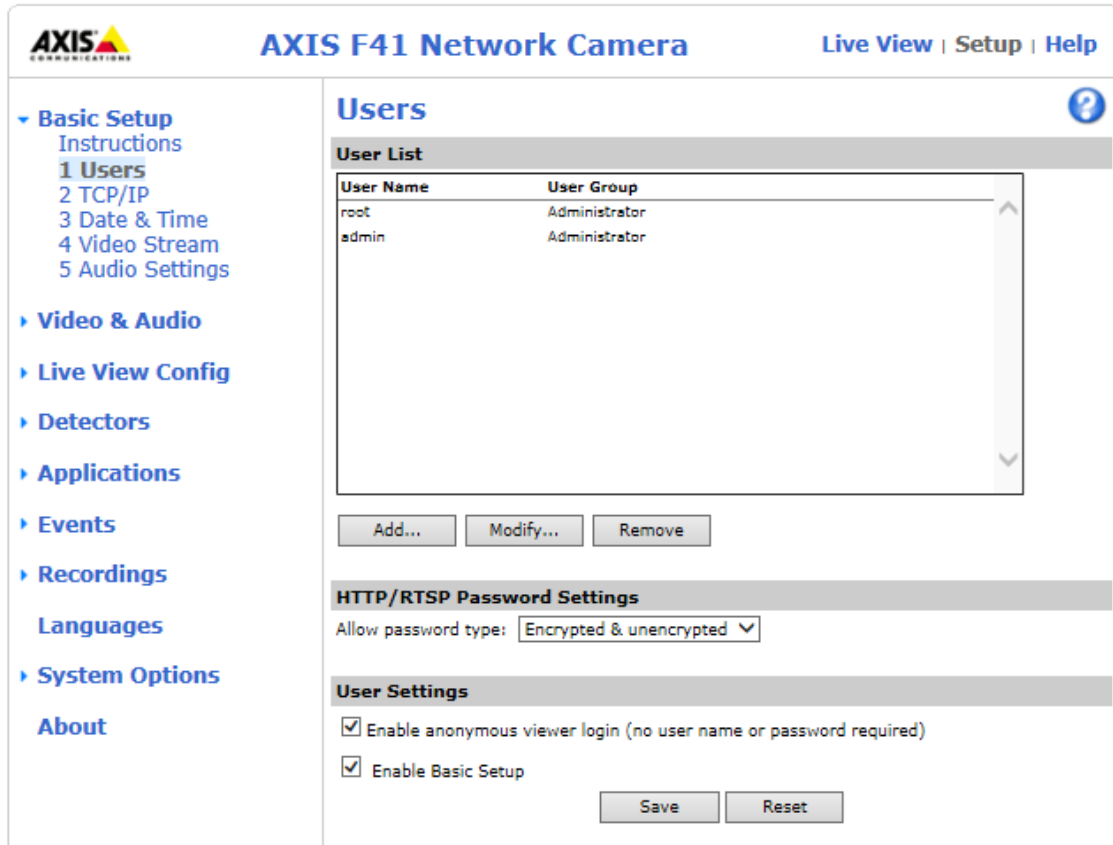
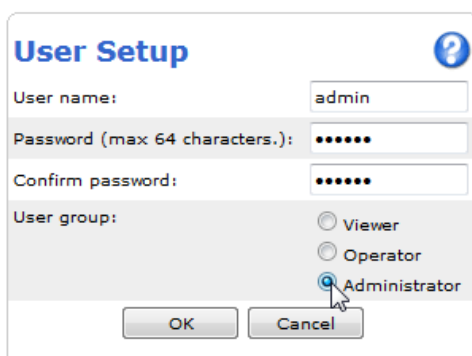


Figure 6.8: Adding a new user

A new window is opened.



Name the new user “admin” and define a password. This user and password will be needed later too.

Recommended:

User name: admin
Password: 2x8bg4

Choose the <User group> **(o) Administrator** and click **[OK]**.

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)**. Confirm the settings with **[Save]**.

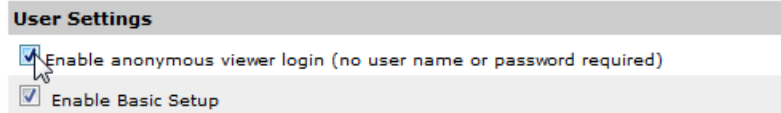


Figure 6.9: Enable anonymous viewer login

6.4 Setting date and time

Change to the entry **[Basic Setup]** → **[3 Date & Time]**. Choose the <Time mode> **(o) Set manually**. Set up date and time. Confirm the settings with **[Save]**.

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

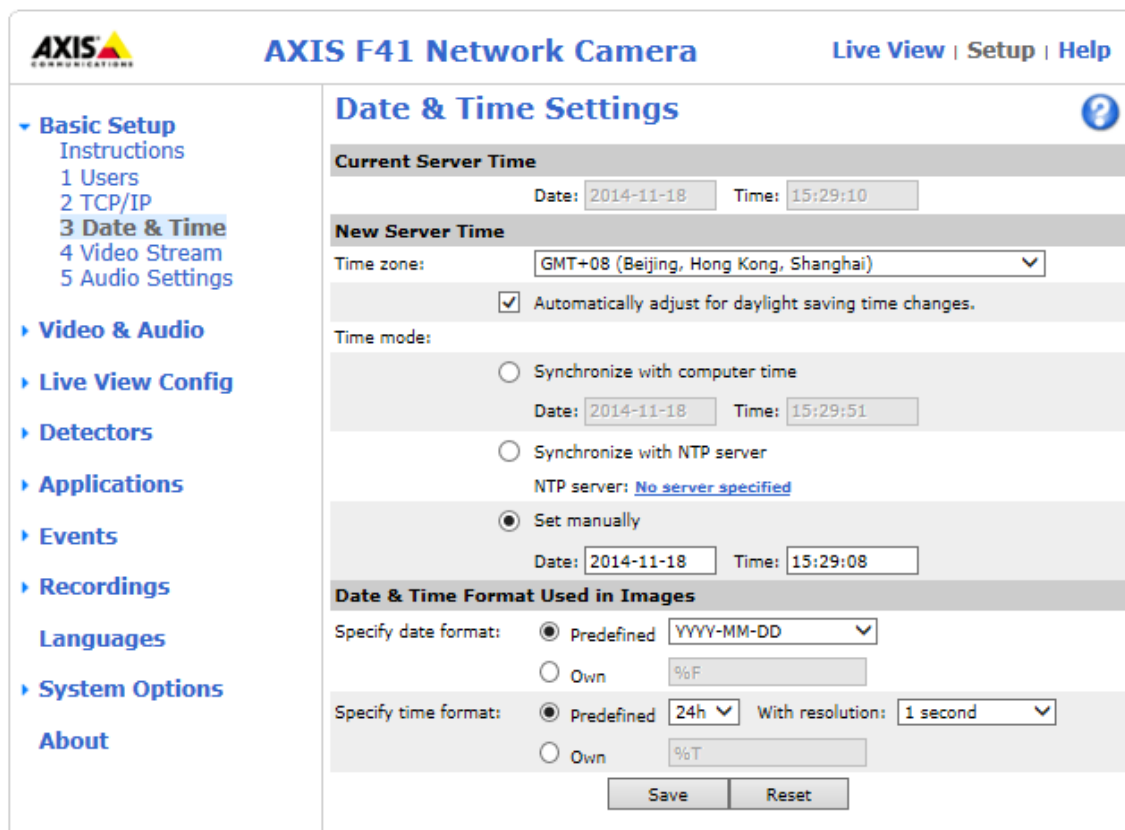


Figure 6.10: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

Click **[Basic Setup]** → **[4 Video Stream]**. Activate both checkboxes **Include date** and **Include time** to activate the display on the video image. Confirm the settings with **[Save]**.

If desired, change format options like <Text color>, <Text background color> and text place. Confirm the settings with **[Save]**.

Note:

Using the **AXIS F44** these settings must be made for **Camera 1 to 4**.
[Basic Setup] → **[4 Video Stream]** → **[Camera ...]**

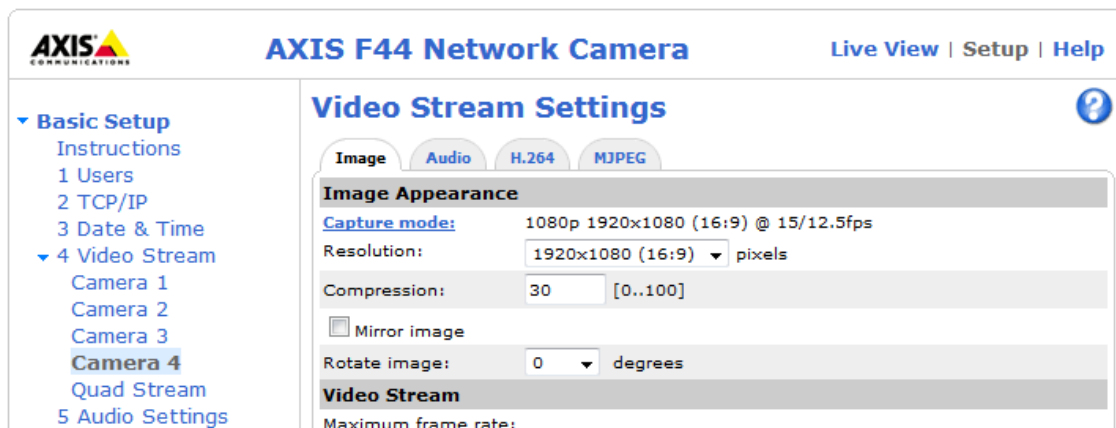


Figure 6.11: Settings for cameras 1 - 4

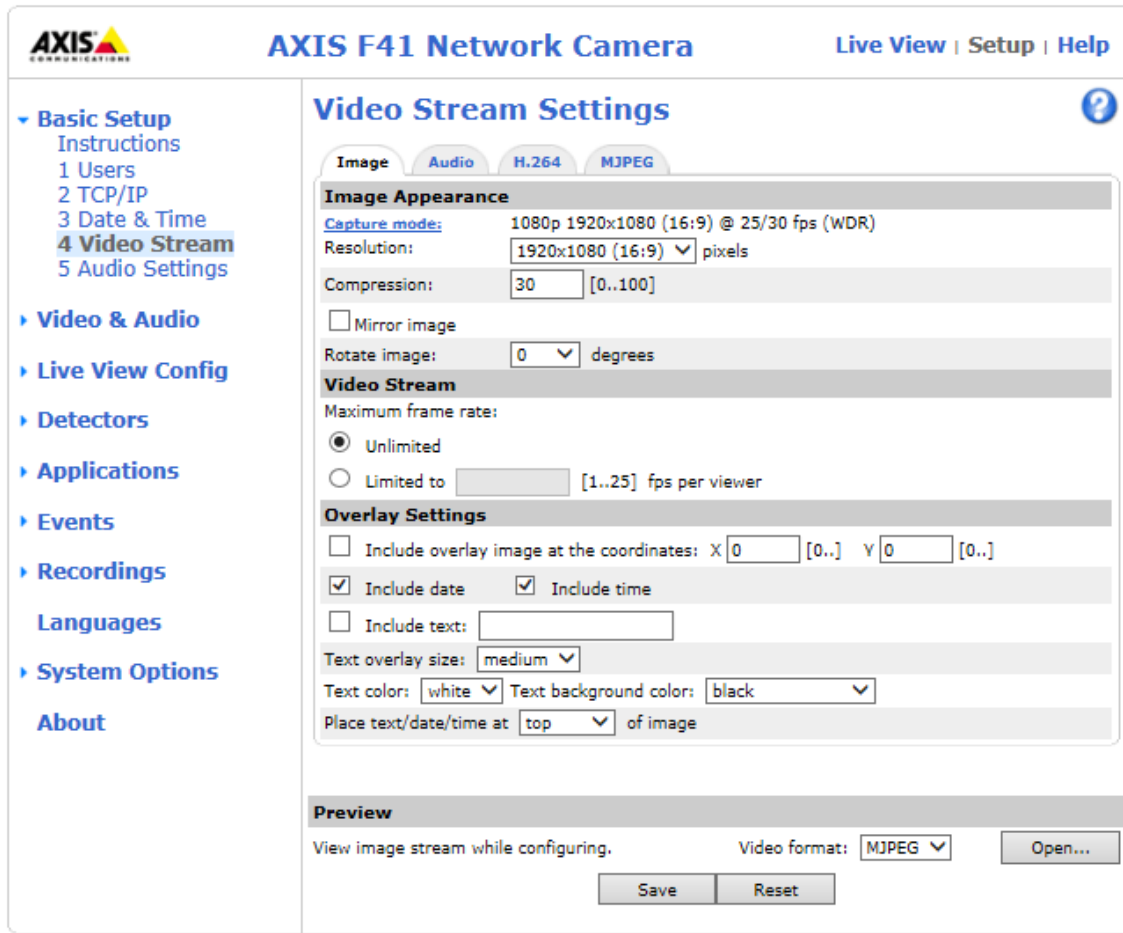


Figure 6.12: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

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6.5 Audio settings (FW 2.0.1 onwards)

Change to **[Basic Setup]** → **[4 Video Stream]** and switch to the tab **[Audio]**. Activate the checkbox **Enable audio** to enable the general audio functionality.

Note:

Using the **AXIS F44** these settings must be made for Camera 1 to 4.
[Basic Setup] → **[4 Video Stream]** → **[Camera ...]**



Figure 6.13: Enable audio

6.5.1 Adjusting audio source

Change to the entry **[Video & Audio]** → **[Audio Settings]**. Here you can configure the connected source as well as the recorded audio quality.

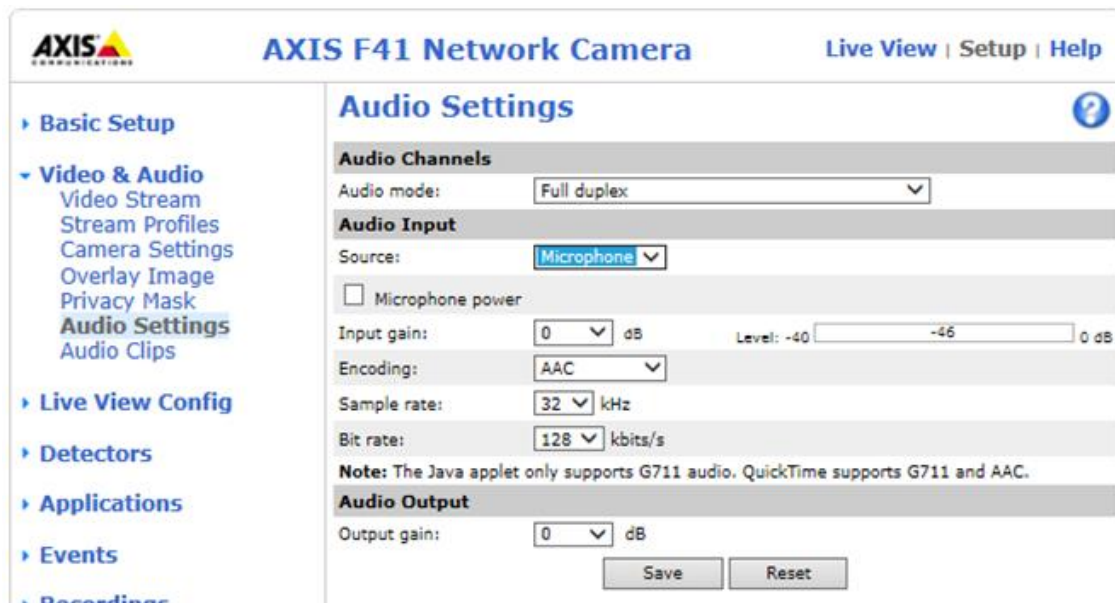


Figure 6.14: Configure audio settings

In the dropdown box next to <Source> you can choose between **[Line]** for an audio source like an MP3 player and **[Microphone]**.



Figure 6.15: Select audio input (Line)

The source **[Microphone]** supports additionally the functionality to power a microphone.

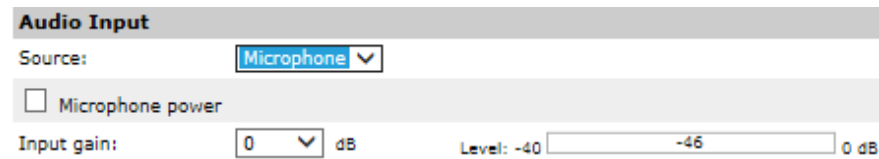


Figure 6.16: Select audio input (Microphone)

The setting of the <Input gain> can be used to configure an internal preamplifier for signal improvement.

Note:

If the source configuration is not valid the audio signal may be distorted.

6.5.2 Adjusting audio quality

For a high audio quality we recommend to configure the <Sample rate> and the <Bit rate> at the highest value. The <Encoding> is left by default (AAC).

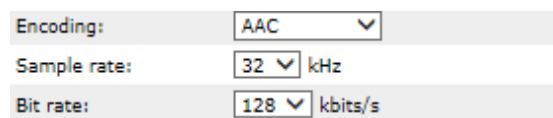


Figure 6.17: Adjust audio quality

6.6 IP configuration

Change to the entry **[Basic Setup]** → **[2 TCP/IP]**. Choose the <IPv4 Address Configuration> **(o) Use the following IP address**. Type in these data:

IP address:	192.168.1.90
Subnet mask:	255.255.255.0

IPv4 Address Configuration

Enable IPv4

Obtain IP address via DHCP

Use the following IP address:

IP address:

Subnet mask:

Default router:

Figure 6.18: Setting an IP address

Confirm the settings with **[Save]**.

Note:

By changing the IP address you lose the connection to the network camera.

This also will be told to you in an information window:

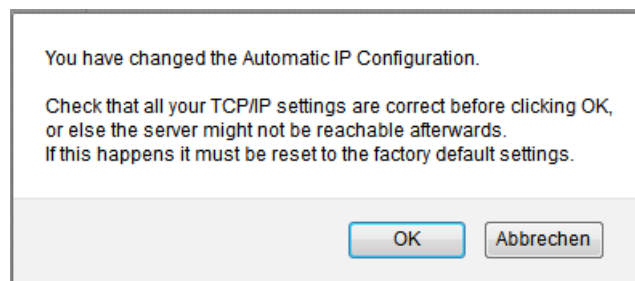


Figure 6.19: Hint 1



Figure 6.20: Hint 2

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

6.7 Resetting configuration

The camera AXIS F41/F44 can be set to default settings by the following steps:

1. Disconnect the connection to the power supply.
2. Press and hold the control button next to the SD slot and
3. reconnect to the power supply.
4. Hold the control button for 15 to 30 seconds till the Stat-LED flashes yellow.

When the Stat-LED turns green the process is finished.

7 Configuring the network camera AXIS 207/210/211

Warning:

The camera must have installed the firmware version 4.40. If there is another firmware version installed it is recommended to install the 4.40.

Any camera that is used with the data loggers blue PiraT2 / blue PiraT2 5E / blue PiraT Mini can be installed manually or automatically (recommended).

The manual configuration is done over the camera web interface.

The automatic configuration is done with the program "AXIS Camera Management". For this variant a template is available.

7.1 Related manuals

- AXIS 207 User Manual [1]
- AXIS 210 User Manual [2]
- AXIS 211 User Manual [3]

7.2 Automatic configuration (recommended)

Needed software: AXIS Camera Management v2.00.31

<http://www.axis.com/techsup/software/index.htm> or
http://www.axis.com/de/products/cam_mgmt_software/interface.htm

Configuration steps:

1. Check firmware version. Recommended: 4.40 (more information see [1], [2], [3] or AXIS online).
2. Resetting camera to the factory default settings (more information see [1], [2] or [3] chapter "Resetting to the Factory Default Settings").
3. Connect the camera with the PC / laptop via an Ethernet cable.
4. Set the password (more information see [1], [2] or [3] chapter "Set the password").
5. Install camera template by using the program "AXIS Camera Management".
6. Add administrator.

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7.2.1 Installing the camera template

The template “blue PiraT_Kamera_AXIS-ConfigTemplate_vX.X.cmt” configures your camera automatically. The download file is available in our ServiceCenter at **[blue PiraT] → [Dokumentationen]** under the manual of the camera connection.

1. Click **[Apply Template]**.
2. Click on the template file in the shortcut menu or choose it from the memory location with **[Browse...]**.

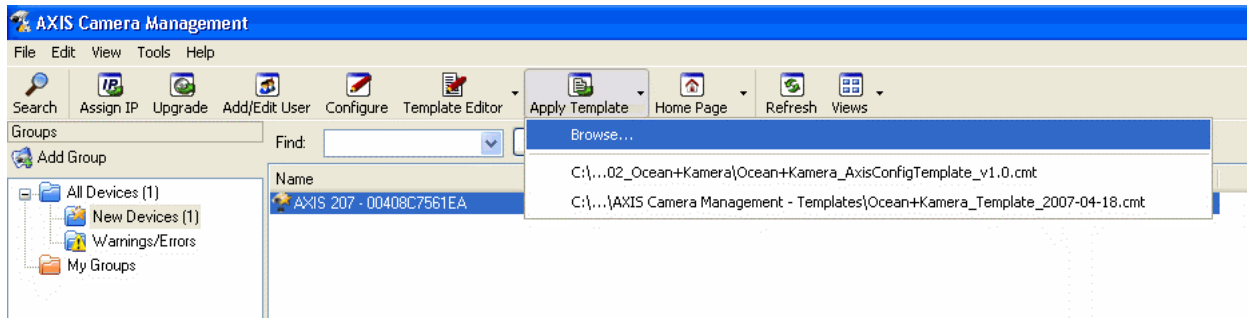


Figure 7.1: Select a template

A dialog opens:

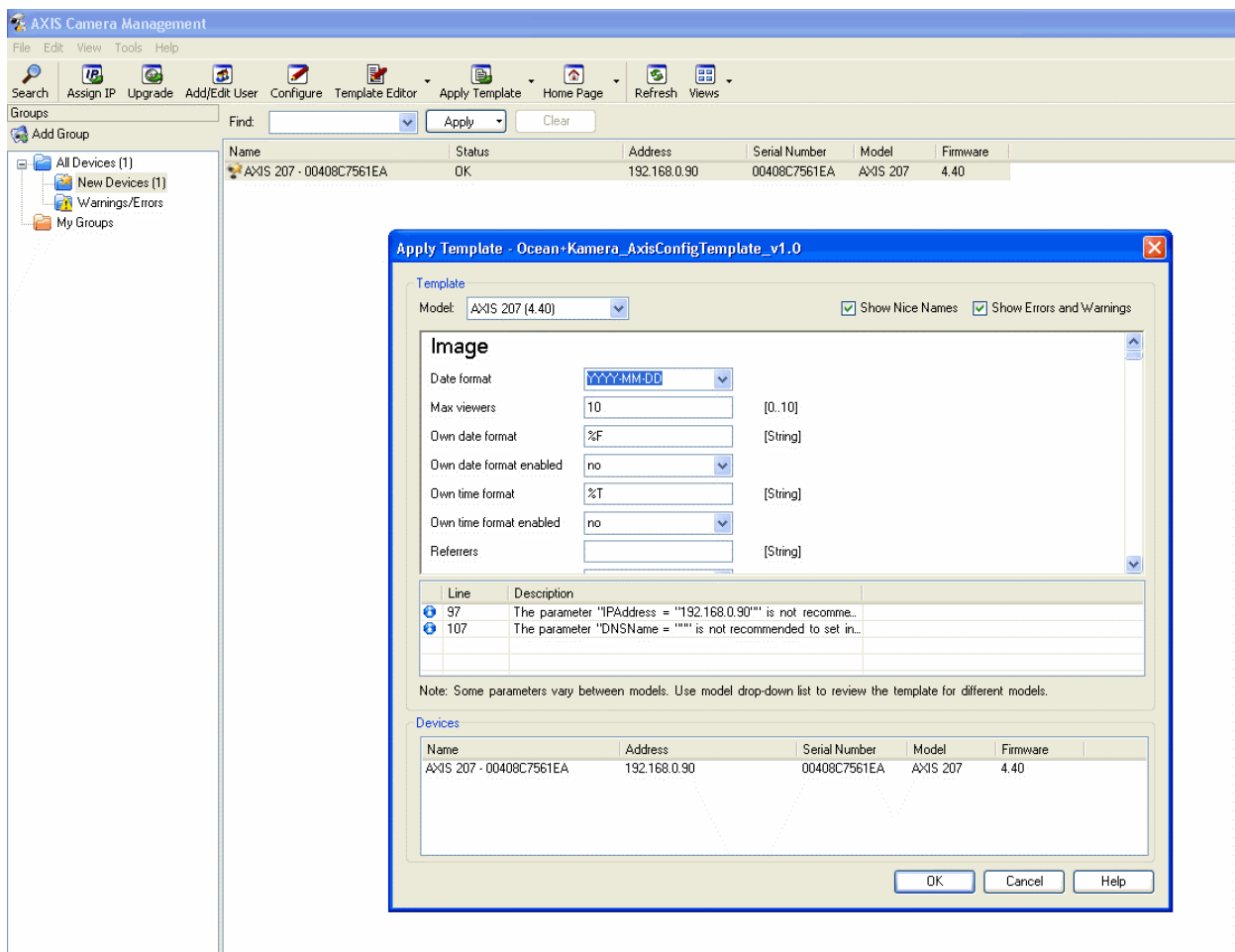


Figure 7.2: Apply template

3. Click **[OK]** to confirm the template.

A dialog opens.

4. Check the configuration process.

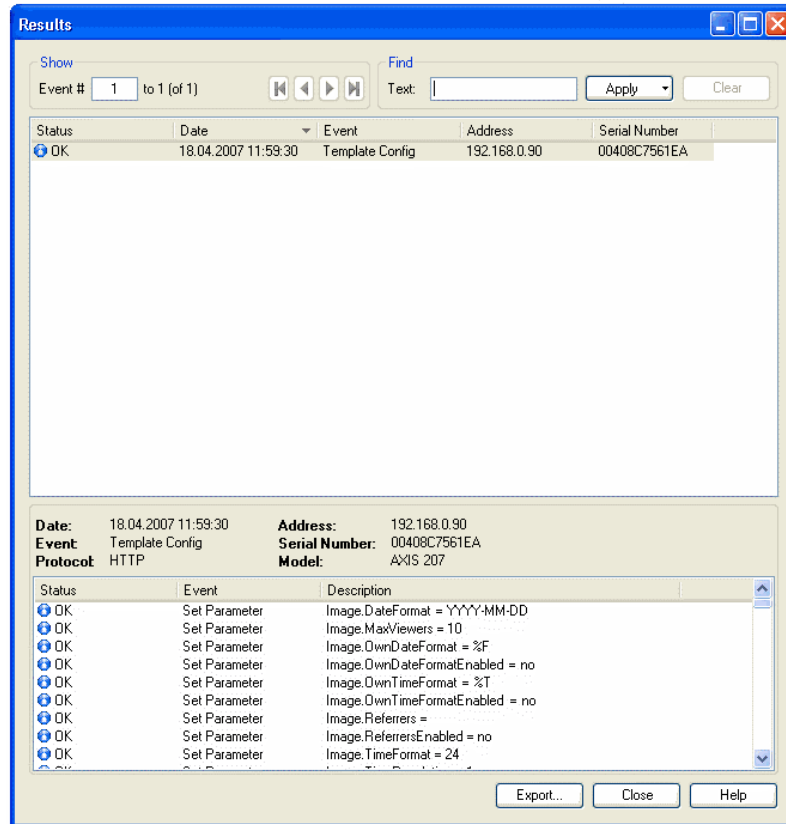


Figure 7.3: Result of the configuration process

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7.2.2 Creating the user “admin”

For communicating with the data logger a special user is needed with administrator rights.

1. Click the configured AXIS camera with the right mouse button.
2. Click **[User Management]** → **[Add/Edit User...]** in the shortcut menu.

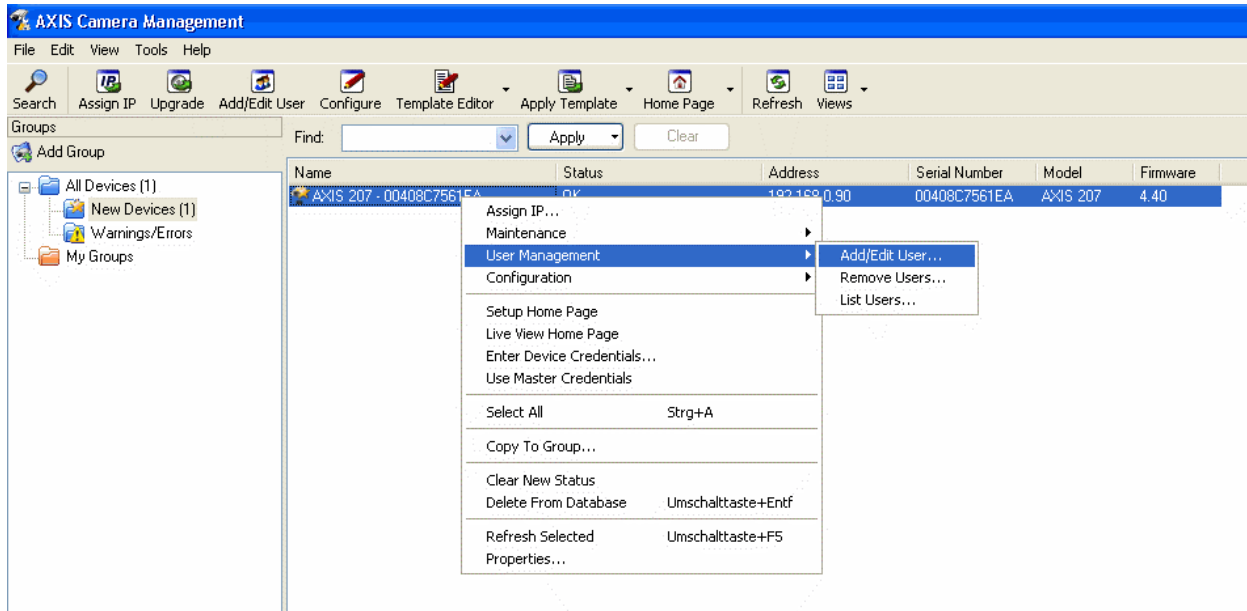


Figure 7.4: Add a user

A dialog opens.

3. Add administrator as follows:



Name the new user “admin” and define a password. This user and password will be needed later too.

Recommended:

User name: admin
Password: 2x8bg4

Choose the <Access rights> “Administrator” and click **[OK]**.

Figure 7.5: Select a user password

7.3 Manual configuration

1. Reset camera to the factory default settings.
2. Connect camera with the PC / laptop via an Ethernet cable.
3. Open browser.
4. Type in the preset IP address of the network camera: **192.168.0.90**.
5. Press **[Enter]**.
6. Click **[Setup]**.
7. Add administrator.

If you don't know the cameras IP address, use the program "IP-Utility" on the AXIS CD-ROM for detection.

If it is still not possible to connect to the camera setup, please reset the camera via hardware reset. This is described in the camera manual. In this case you have to use the fix IP address 192.168.0.10 for your PC. The camera is reachable by the IP address 192.168.0.90.

A step by step configuration of the camera is described in the section below.

The following instructions are illustrated by screenshots of the camera setup of the AXIS 210. The layout of the other supported cameras 207, 207W and 211 can differ.

Note:

All modifications of one setup screen must be applied by the [Save] button. Otherwise the changes will be discarded.

7.3.1 Resetting configuration

The camera AXIS 207/210/211 can be set to default settings at **[System Options]** → **[Maintenance]** with the **[Default]** button under <Maintain Server>.

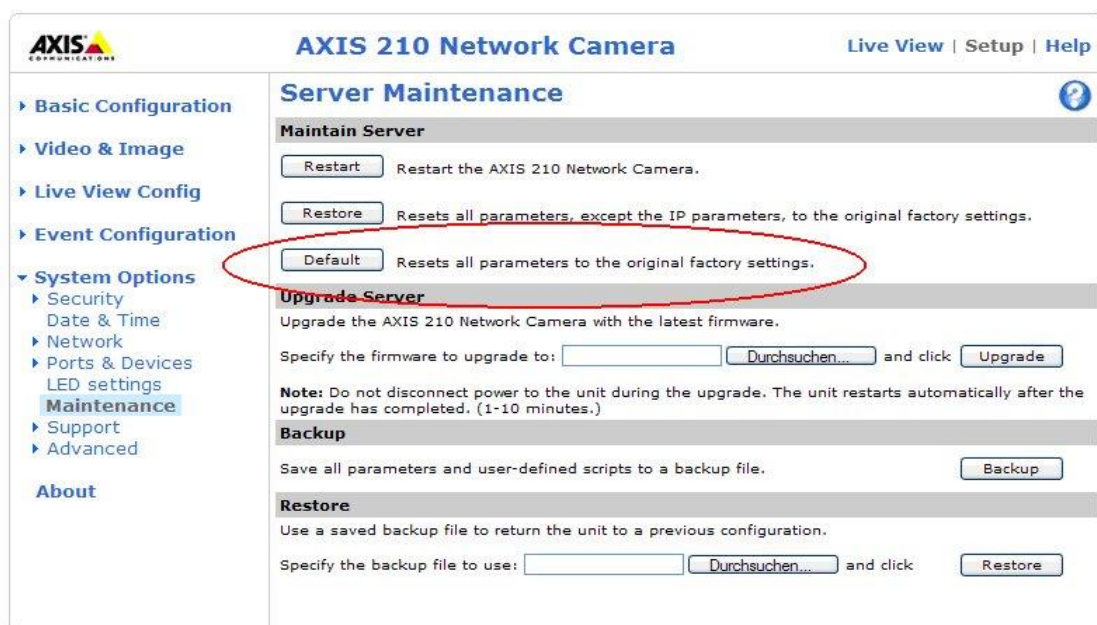


Figure 7.6: Reset configuration

7.3.2 IP configuration

Change to the entry **[Basic Configuration] → [2. TCP/IP]**. Choose the <IPv4 Address Configuration> **(o) Use the following IP address**. Type in these data:

IP address:	192.168.1.90
Subnet mask:	255.255.255.0
Default router:	192.168.1.1

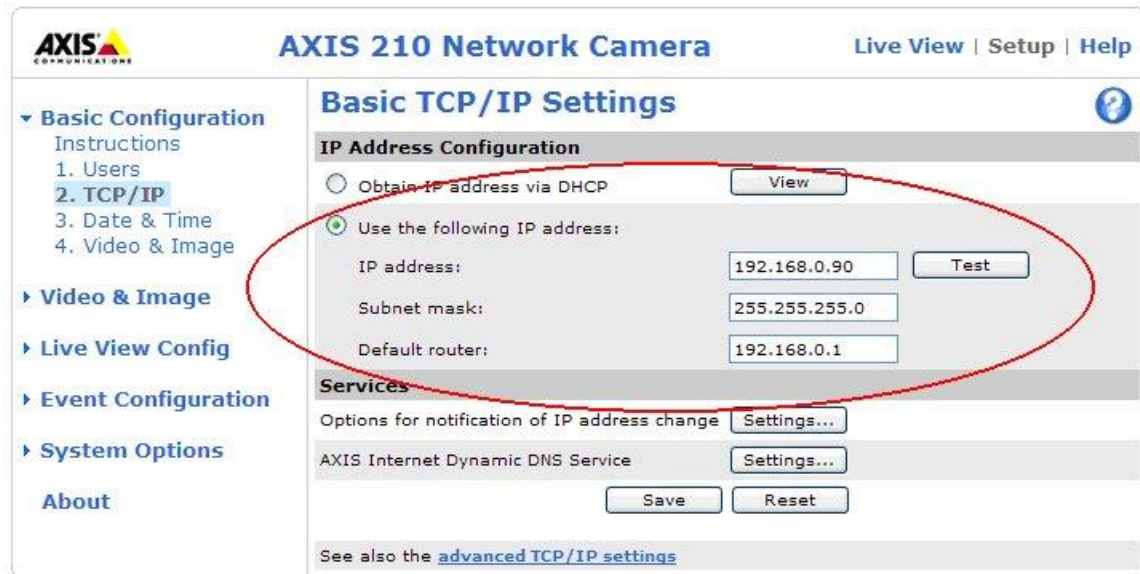


Figure 7.7: Setting an IP address

Note:

When using a port on the rear side of the logger, please type in the <IP address> 192.168.0.90 and the <Default router> 192.168.0.1. The same IP address has to be used in the data loggers configuration.

Confirm the settings with **[Save]**.

Note:

By changing the IP address you lose the connection to the network camera.

This also will be told to you in an information window:

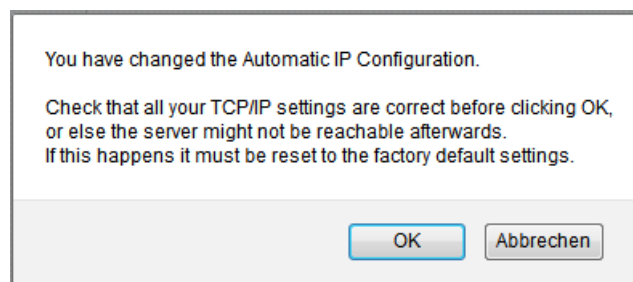


Figure 7.8: Hint 1

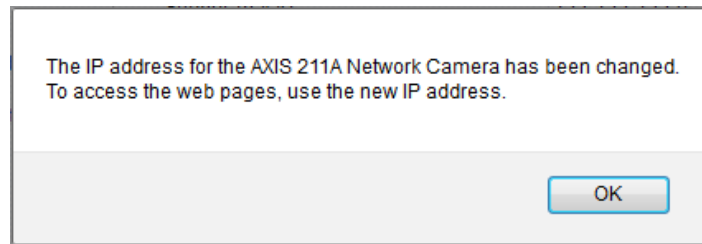


Figure 7.9: Hint 2

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

7.3.3 Creating the user “admin”

For communicating with the data logger a special user is needed with administrator rights.

Click **[Setup]** → **[Basic Configuration]** → **[1. Users]** → **[Add...]**.

A new window is opened.

Name the new user “admin” and define a password. This user and password will be needed later too.

Recommended:

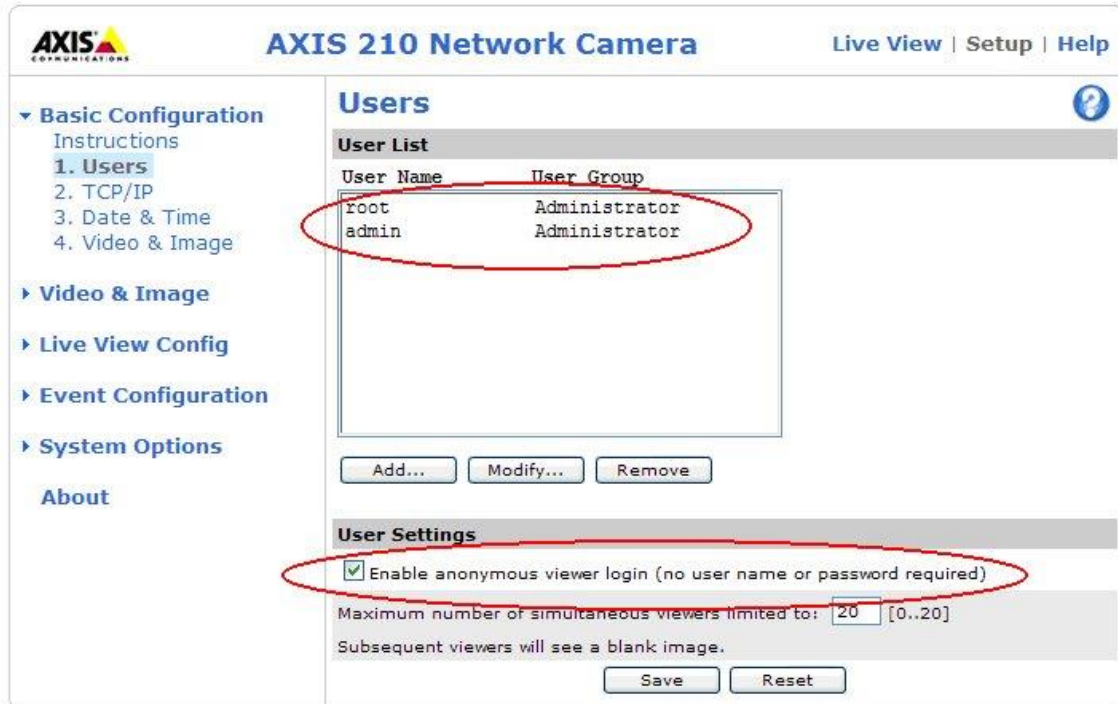
User name: admin
Password: 2x8bg4

Choose the <User group> **(o) Administrator** and click **[OK]**.

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)**. Confirm the settings with **[Save]**.

Note:

If you want to use an individual password for the camera, you have to deactivate this checkbox. Now you can change the password for the user “admin” individually. This password has also to be configured in the client.



AXIS 210 Network Camera Live View | Setup | Help

Users

User List

User Name	User Group
root	Administrator
admin	Administrator

Buttons: Add... Modify... Remove

User Settings

Enable anonymous viewer login (no user name or password required)

Maximum number of simultaneous viewers limited to: [0..20]

Subsequent viewers will see a blank image.

Buttons: Save Reset

Figure 7.10: Enable anonymous viewer login

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7.3.4 Setting date and time

Change to the entry **[Basic Configuration] → [3. Date & Time]**. Choose the <Time mode> **(o) Set manually**. Set up date and time. Confirm the settings with **[Save]**.

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

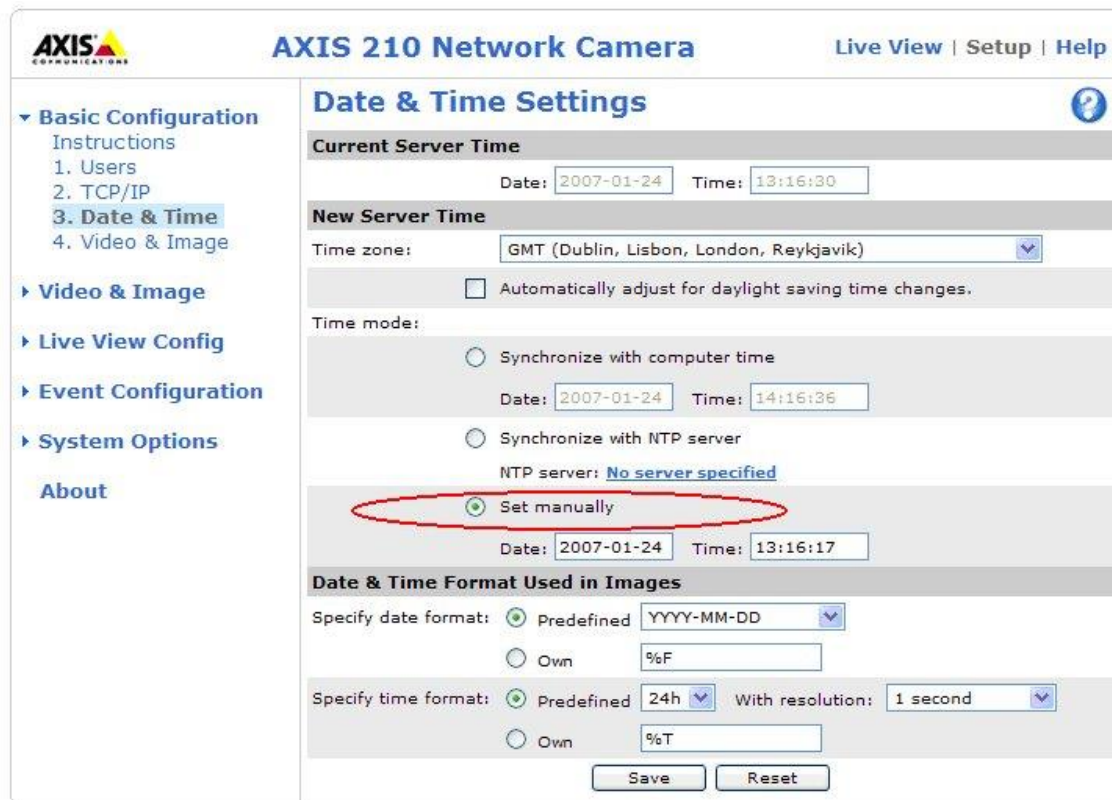


Figure 7.11: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

Click **[Video & Image] → [Image]**. Activate both checkboxes **Include date** and **Include time** to activate the display on the video image. Confirm the settings with **[Save]**.

If desired, change format options like <Text color>, <Text background color> and text place. Confirm the settings with **[Save]**.

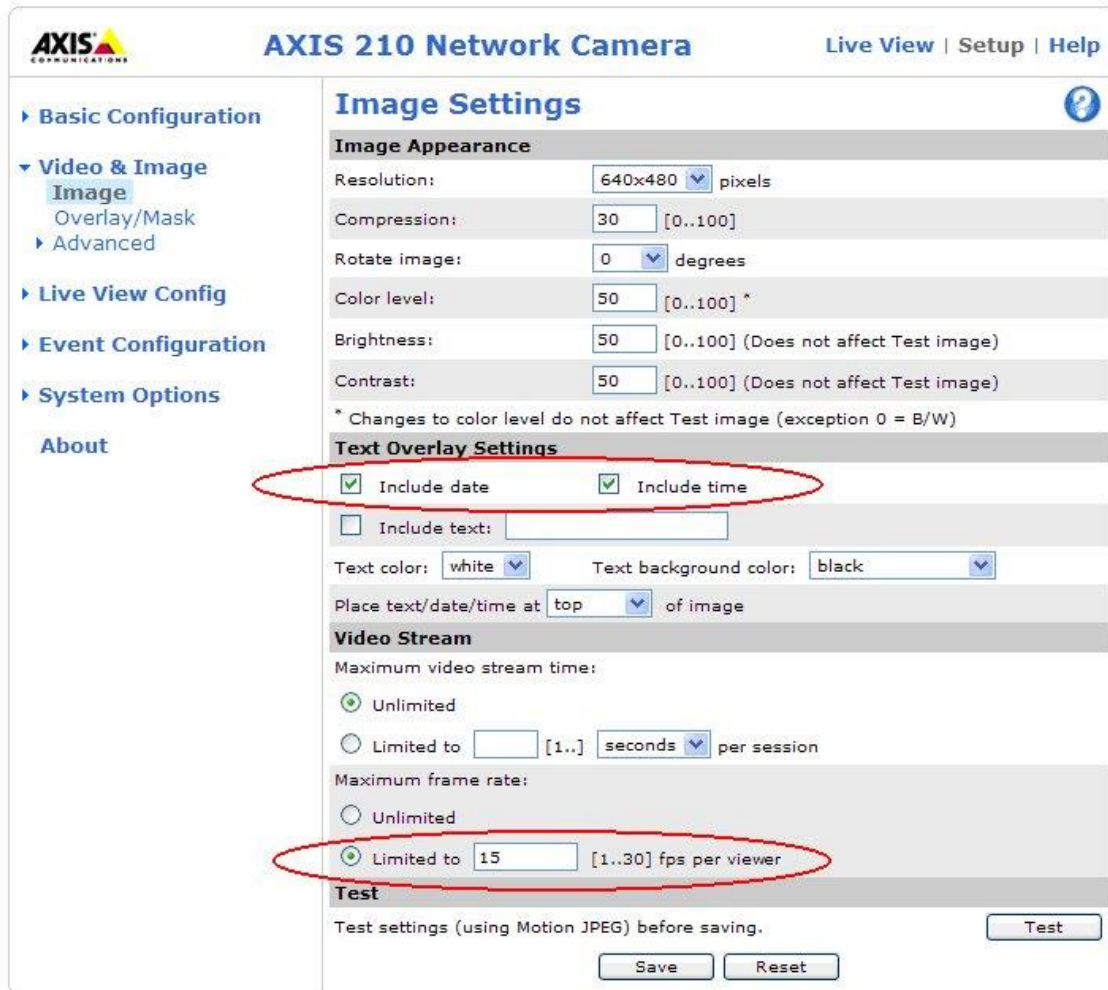


Figure 7.12: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

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7.3.5 Setting MPEG-4

Change to the entry [Video & Image] → [Advanced] → [MPEG-4]. Change <Length> to 32. Choose the <Maximum bit rate> (o) Limited to ... kbit/s. Type in “3000”.

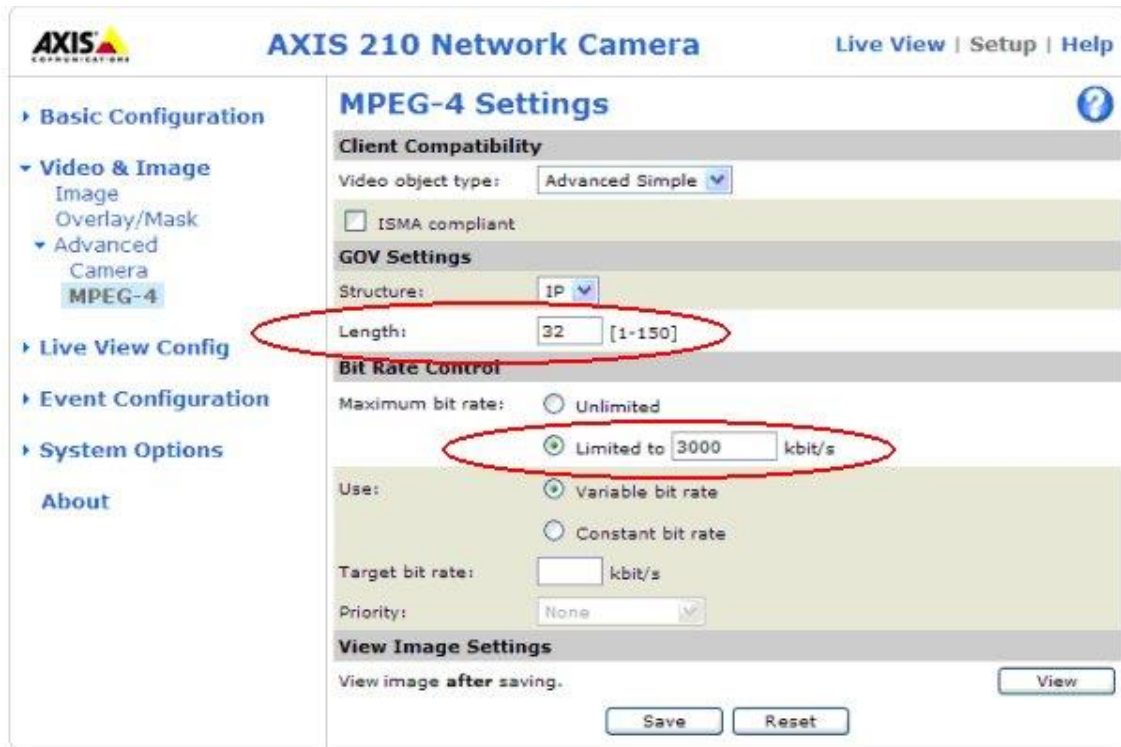


Figure 7.13: MPEG-4 settings

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8 Configuring the Video Encoder AXIS Q7404

8.1 Connecting the Video Encoder AXIS Q7404

Connect the required cameras with the Video Encoder. The BNC connectors of the Video Encoder are numbered. Always start with the first connector.

Connect the power supply to the Video Encoder. Connect your PC or laptop via Ethernet cable to the Video Encoder. Turn on the power supply. All LEDs should light green after about 60 seconds.

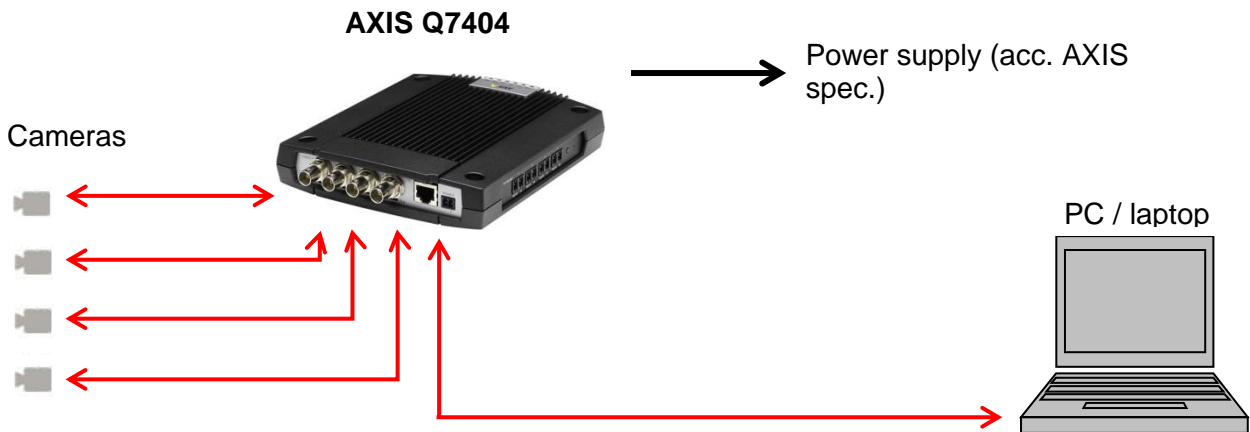


Figure 8.1: AXIS Q7404

Change your PC's IP configuration. Use static IP address with the following settings:

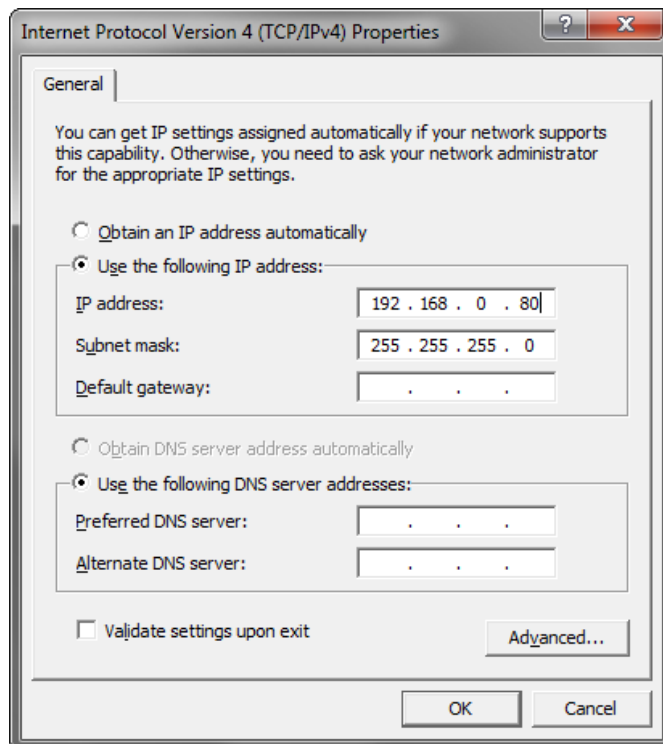


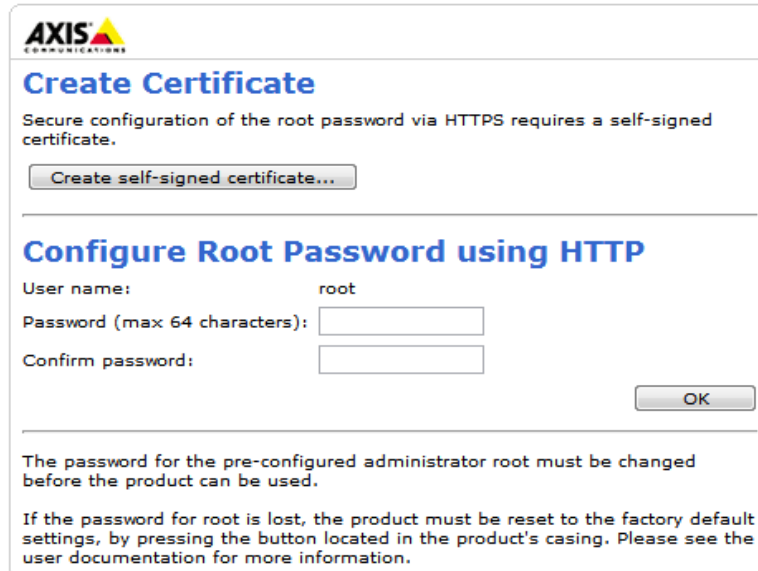
Figure 8.2: Setting a static IP address

8.2 Access to the Video Encoder AXIS Q7404

Open your browser and type in the preset IP address of the video server: **192.168.0.90**.

Choose your password and type it in. This password will be needed later.

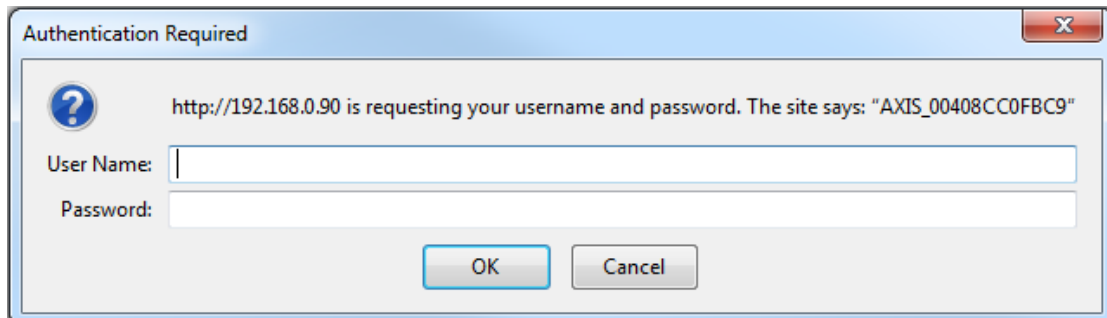
If the system asks for a further authentication, please type in the same password like before.



The screenshot shows the AXIS Q7404 web interface. At the top, there is the AXIS logo and the text 'Create Certificate'. Below this, a message states: 'Secure configuration of the root password via HTTPS requires a self-signed certificate.' There is a button labeled 'Create self-signed certificate...'. The next section is titled 'Configure Root Password using HTTP'. It contains a form with the following fields: 'User name:' with the value 'root', 'Password (max 64 characters):' with an empty text box, and 'Confirm password:' with an empty text box. An 'OK' button is located to the right of the confirm password field. At the bottom of the form, there is a warning message: 'The password for the pre-configured administrator root must be changed before the product can be used. If the password for root is lost, the product must be reset to the factory default settings, by pressing the button located in the product's casing. Please see the user documentation for more information.'

Figure 8.3: Creating a user password

After setting the password please login to the video server:



The screenshot shows a standard Windows-style dialog box titled 'Authentication Required'. It contains a question mark icon and the text: 'http://192.168.0.90 is requesting your username and password. The site says: "AXIS_00408CC0FBC9"'. Below this text are two input fields: 'User Name:' and 'Password:'. At the bottom of the dialog box are two buttons: 'OK' and 'Cancel'.

Figure 8.4: Login to the video server

User name: root

Password: (your chosen password from before)

Depending on the installed language at the video server you can download a new language file or select the existing.



Figure 8.5: Selecting a language

In some cases a browser add-on is necessary to display the video stream.

Now you should see the live stream of the connected network camera number 1.

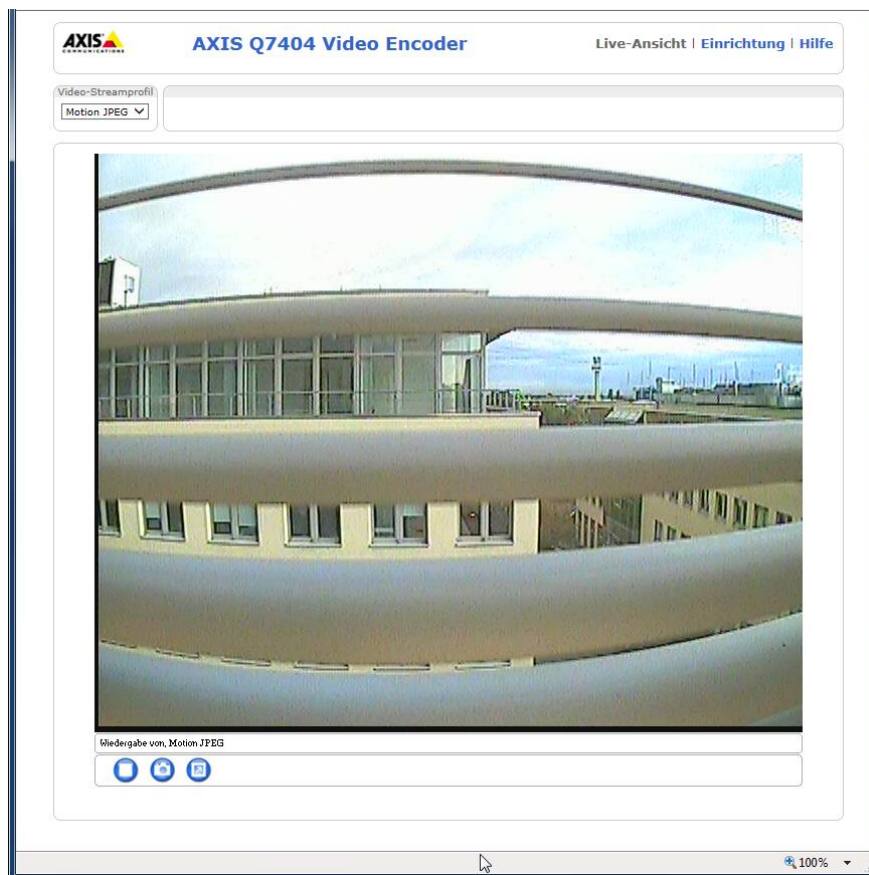


Figure 8.6: Picture of a connected network camera

8.3 Creating the user “admin”

For communicating with the data logger a special user is needed with administrator rights.

Click [Setup] (1) → [Basic Setup] → [1 Users] (2) → [Add...] (3).

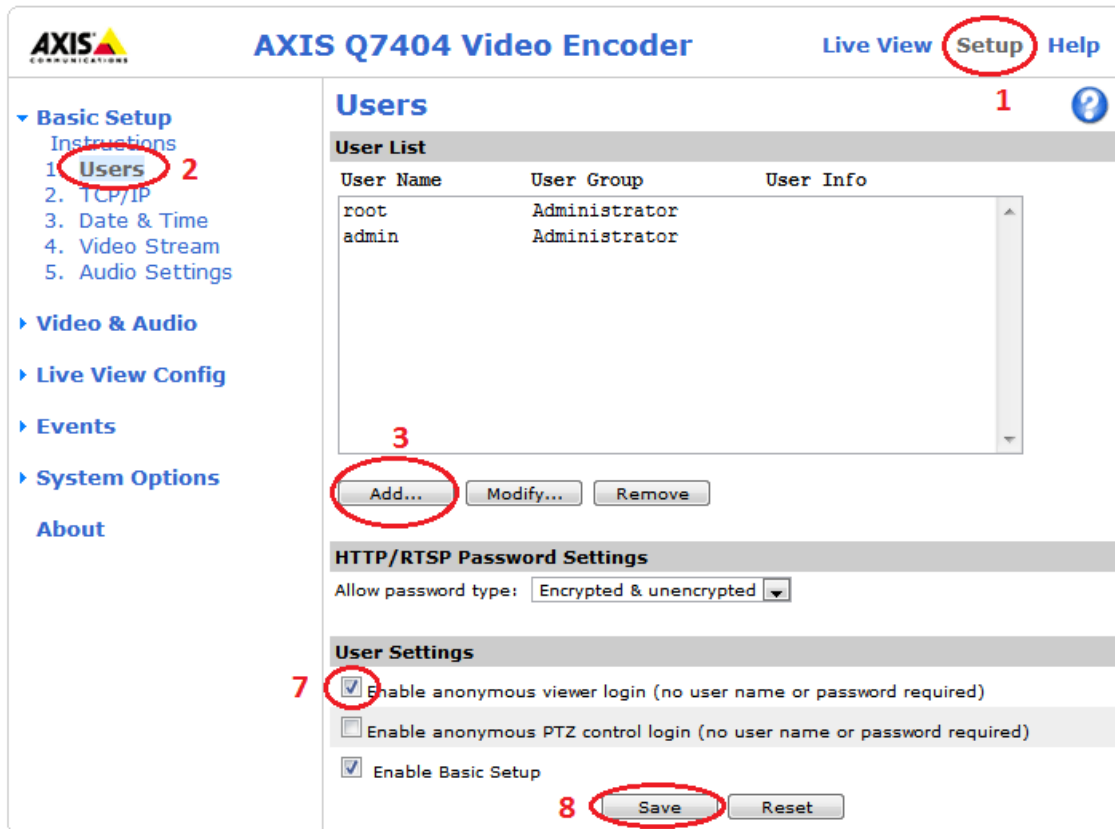
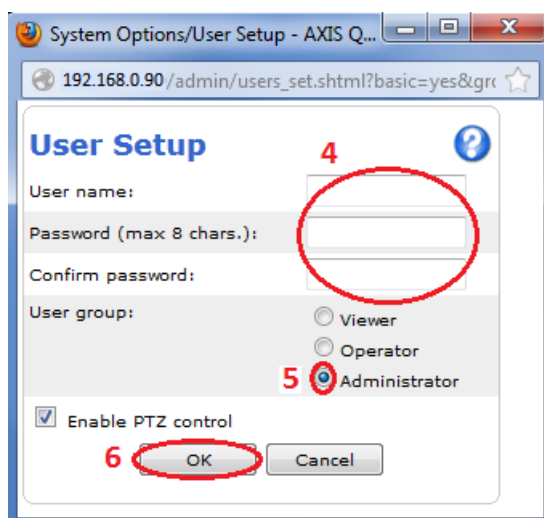


Figure 8.7: Adding a new user

A new window opens.



Name the new user “admin” and define a password (4). This user and password will be needed later too.

Recommended:

User name: admin
Password: 2x8bg4

Choose the <User group> (o) Administrator (5) and click [OK] (6).

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)** (7). Confirm the settings with [Save] (8).

8.4 Setting date and time

Change to the entry [Basic Setup] → [3. Date & Time] (9). Choose the <Time mode> (o) Set manually (10). Set up date and time. Confirm the settings with [Save] (11).

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

The screenshot shows the 'Date & Time Settings' page for an AXIS Q7404 Video Encoder. On the left sidebar, the 'Date & Time' menu item is circled in red and labeled '9'. The main content area shows 'Current Server Time' (Date: 2012-07-20, Time: 18:15:59) and 'New Server Time' settings. Under 'Time mode', the 'Set manually' radio button is selected and circled in red, labeled '10'. Below it, the date is set to 2012-07-20 and the time to 18:19:00. The 'Date & Time Format Used in Images' section shows 'Specify date format' set to 'Predefined' with 'YYYY-MM-DD' selected, and 'Specify time format' set to 'Predefined' with '24h' selected and 'With resolution' set to '1 second'. At the bottom, the 'Save' button is circled in red and labeled '11'.

Figure 8.8: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

Click [Basic Setup] → [4 Video Stream] (6). <----- Unterschied zu deutscher Version. Activate both checkboxes **Include date** and **Include time** (7) to activate the display on the video image. Confirm the settings with [Save] (9).

If desired, change format options like <Text color>, <Text background color> and text place (8). Confirm the settings with [Save] (9).

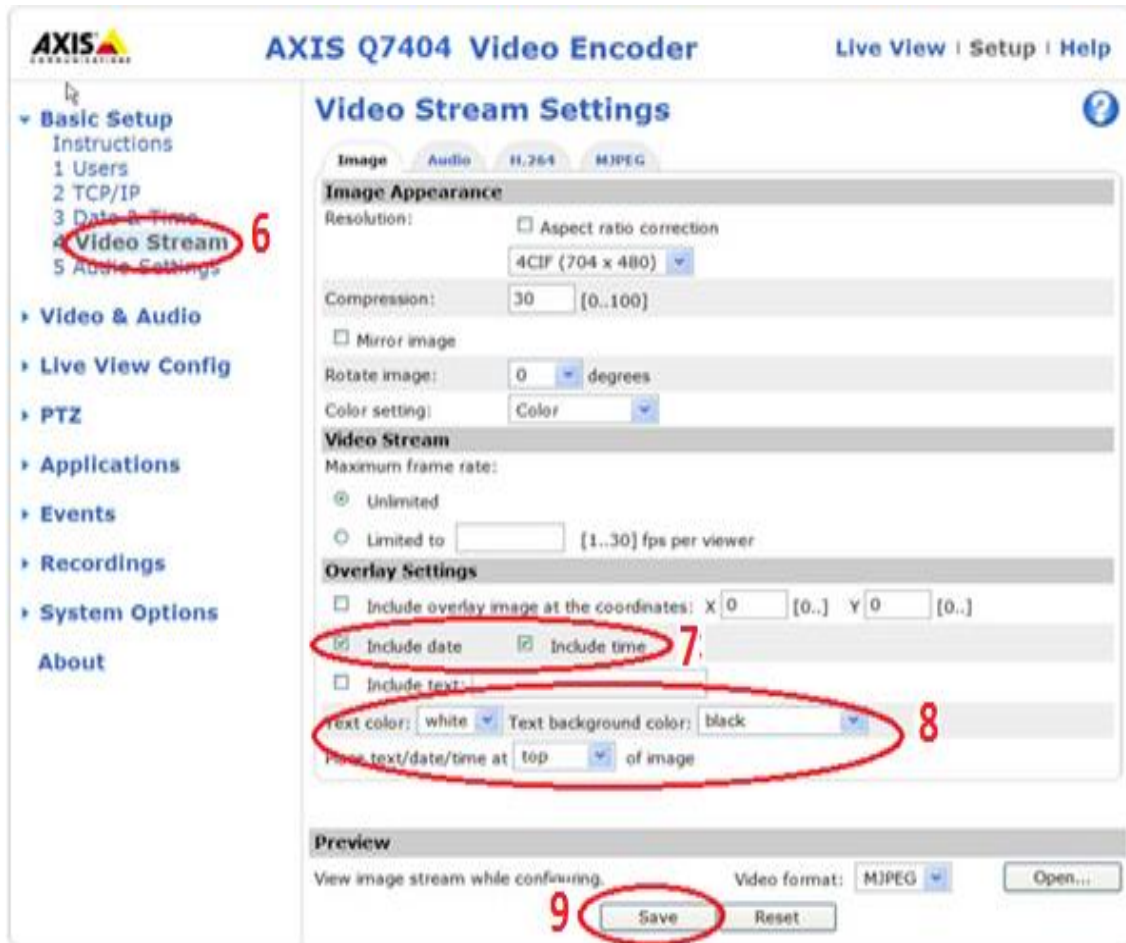


Figure 8.9: Including date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

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8.5 IP configuration

Change to the entry **[Basic Setup] → [2. TCP/IP] (12)**. Choose the <IPv4 Address Configuration> **(o) Use the following IP address (13)**. Type in these data **(14)**:

IP address:	192.168.1.90
Subnet mask:	255.255.255.0

Confirm the settings with **[Save] (15)**.

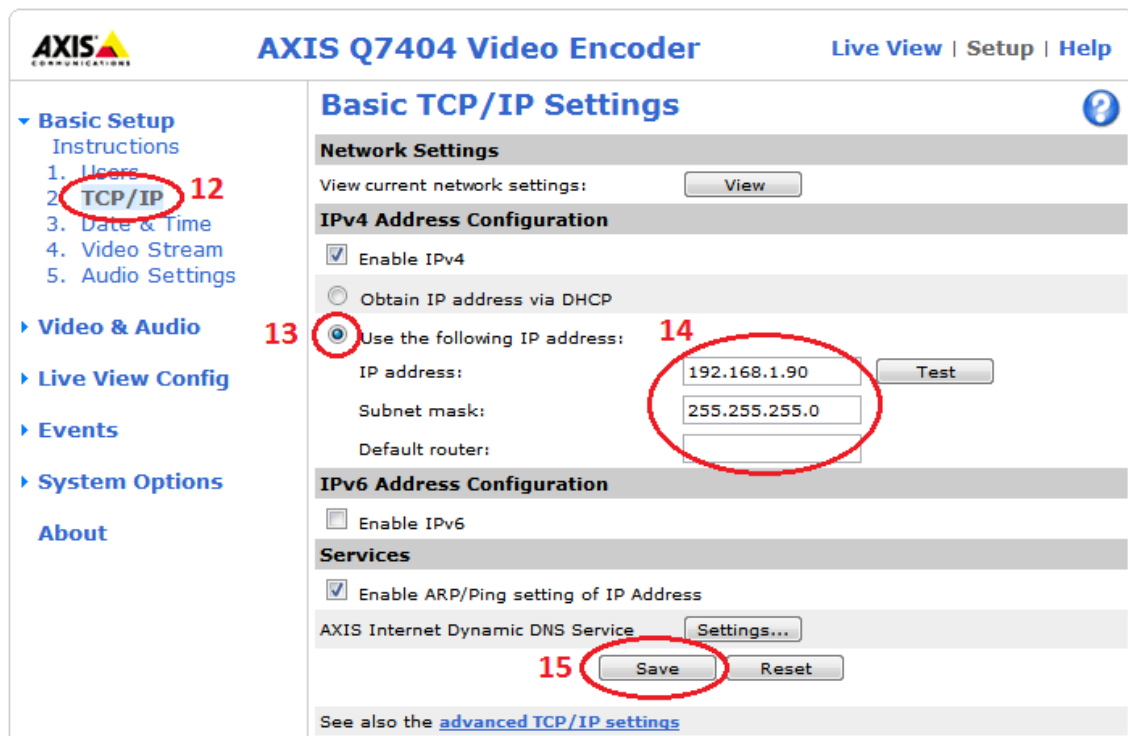


Figure 8.10: Setting an IP address

Note:

By changing the IP address you lose the connection to the video server.

This also will be told to you in an information window:

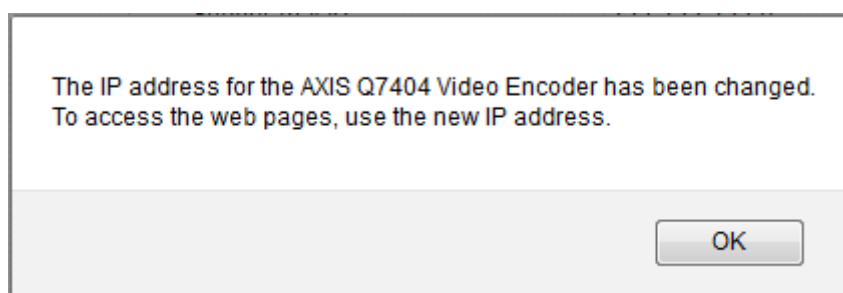


Figure 8.11: Hint

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

The first camera connected to the Video Encoder AXIS Q7404 is now configured. If more than one camera should be connected, the same changes for all connected cameras have to be done. Use the specified IP address in the following table for its respective camera.

	Camera 2	Camera 3	Camera 4
IP address	192.168.1.91	192.168.1.92	192.168.1.93
Subnet mask	255.255.255.0	255.255.255.0	255.255.255.0

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

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9 Configuring the Video Encoder AXIS P7214

9.1 Connecting the Video Encoder AXIS P7214

Connect the required cameras with the Video Encoder. The BNC connectors of the Video Encoder are numbered. Always start with the first connector.

Connect the power supply to the Video Encoder. Connect your PC or laptop via Ethernet cable to the Video Encoder. Turn on the power supply. All LEDs should light green after about 60 seconds.

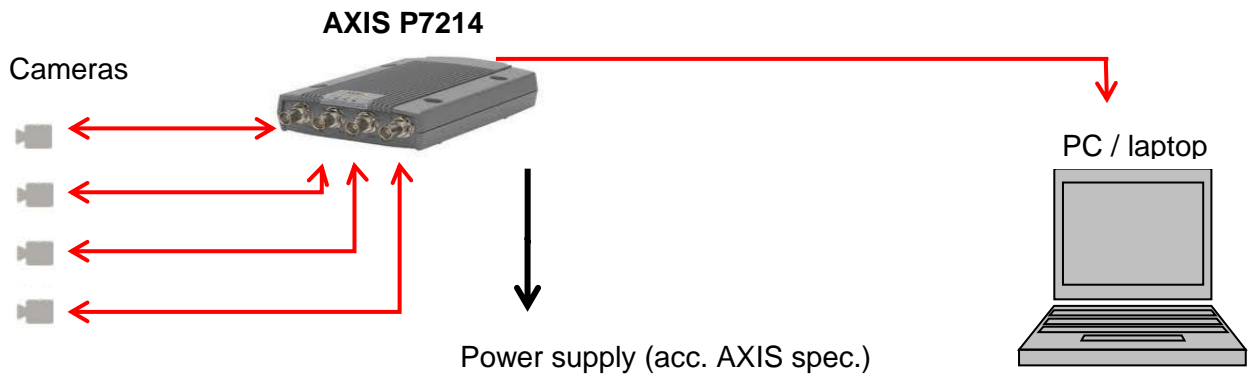


Figure 9.1: Connecting a Video Encoder

Change your PC's IP configuration. Use static IP address with the following settings:

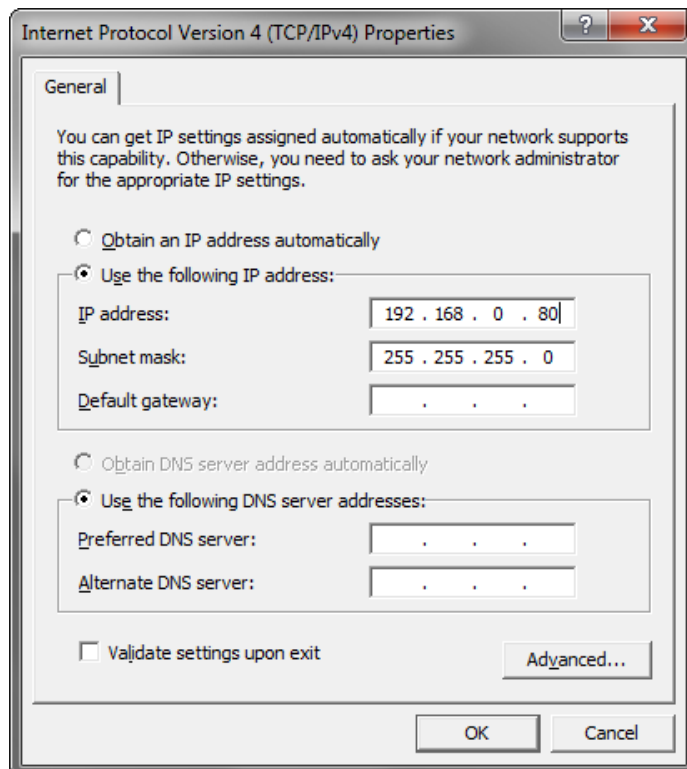


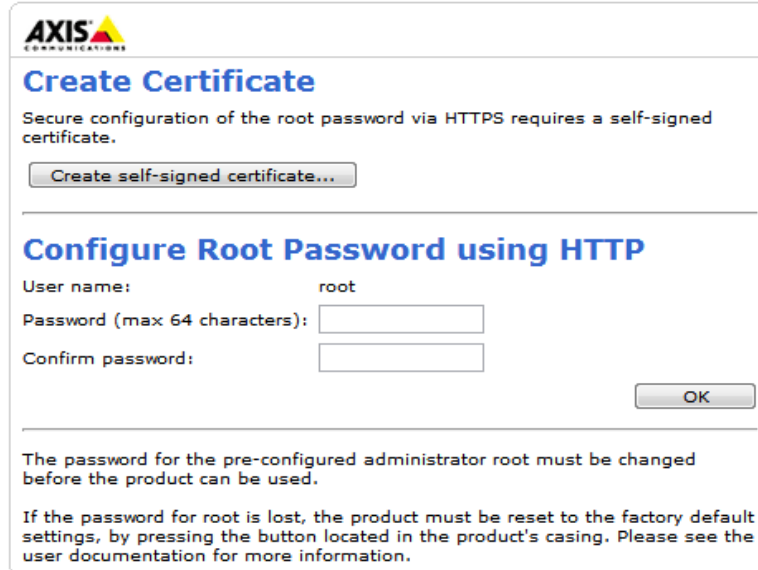
Figure 9.2: Setting a static IP address

9.2 Access to the Video Encoder AXIS P7214

Open your browser and type in the preset IP address of the video server: **192.168.0.90**.

Choose your password and type it in. This password will be needed later.

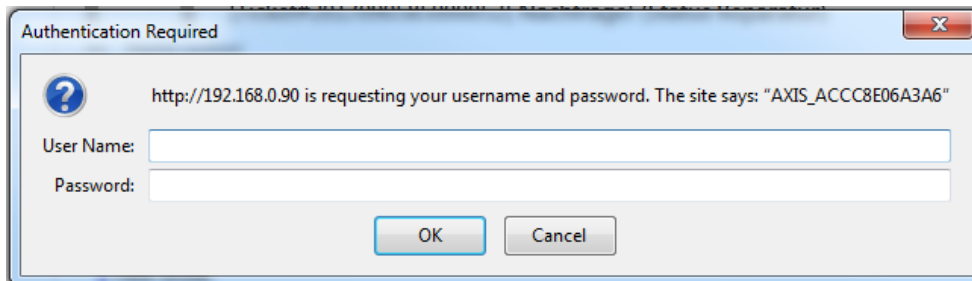
If the system asks for a further authentication, please type in the same password like before.



The screenshot shows the AXIS P7214 web interface. At the top, there is the AXIS logo and the heading "Create Certificate". Below this, a message states: "Secure configuration of the root password via HTTPS requires a self-signed certificate." A button labeled "Create self-signed certificate..." is visible. The next section is titled "Configure Root Password using HTTP". It contains a form with the following fields: "User name:" with the value "root", "Password (max 64 characters):" with an empty text box, and "Confirm password:" with another empty text box. An "OK" button is located to the right of the confirm password field. At the bottom of the form, there are two lines of text: "The password for the pre-configured administrator root must be changed before the product can be used." and "If the password for root is lost, the product must be reset to the factory default settings, by pressing the button located in the product's casing. Please see the user documentation for more information."

Figure 9.3: Selecting a user password

After setting the password please login to the video server:



The screenshot shows a standard Windows-style dialog box titled "Authentication Required". It contains a question mark icon and the text: "http://192.168.0.90 is requesting your username and password. The site says: 'AXIS_ACC8E06A3A6'". Below this text are two input fields: "User Name:" and "Password:". At the bottom of the dialog, there are two buttons: "OK" and "Cancel".

Figure 9.4: Login to the video server

User name: root

Password: (your chosen password from before)

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Depending on the installed language at the video server you can download a new language file or select the existing.



Figure 9.5: Select a language

In some cases a browser add-on is necessary to display the video stream.

Now you should see the live stream of the connected network camera number 1.

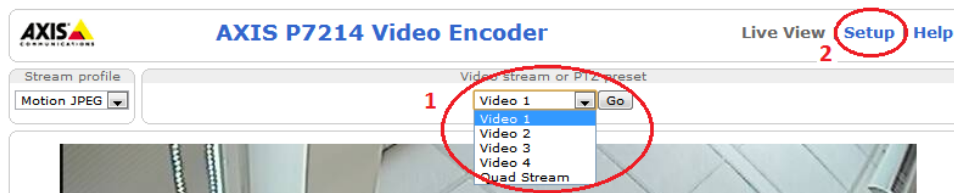


Figure 9.6: Display a video stream

To have a look at the other cameras open the dropdown menu on top and select the one you want to see or to see the videos of all four cameras in one screen click **[Quad Stream]**.

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9.3 Creating the user “admin”

For communicating with the data logger a special user is needed with administrator rights.

Click **[Setup]** (1) → **[Basic Setup]** → **[1. Users]** (2) → **[Add...]** (3).

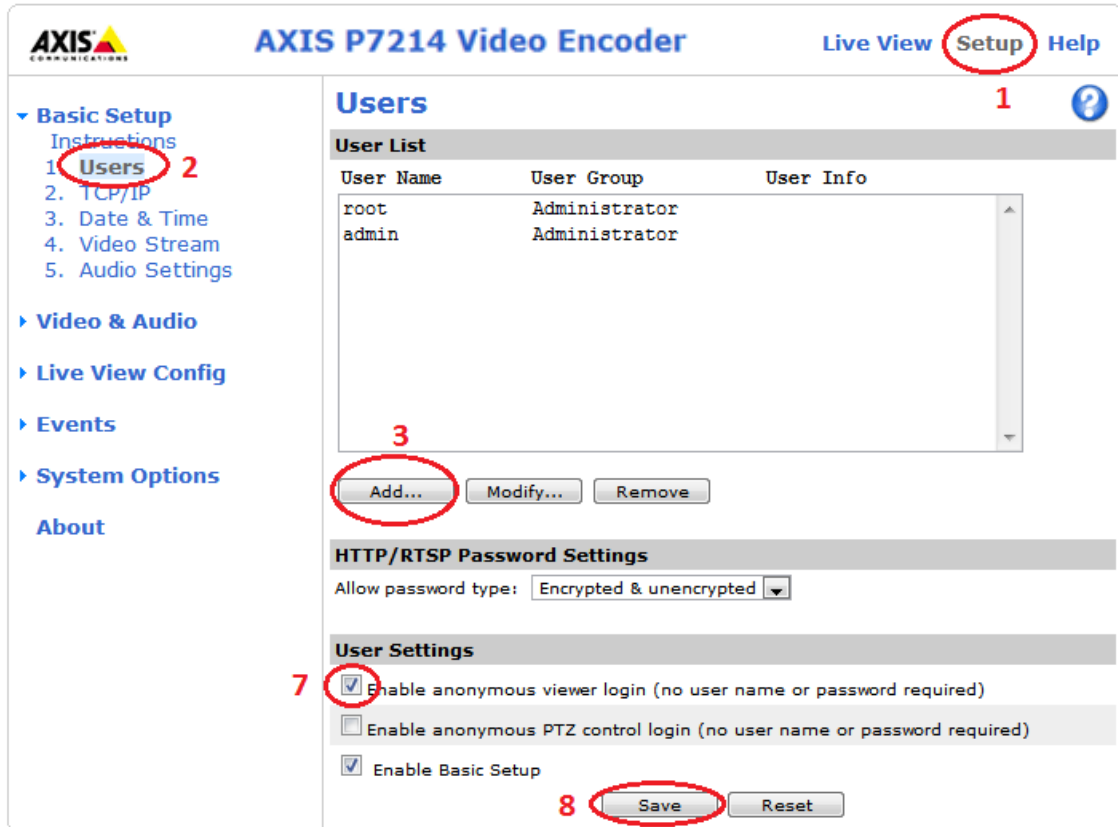
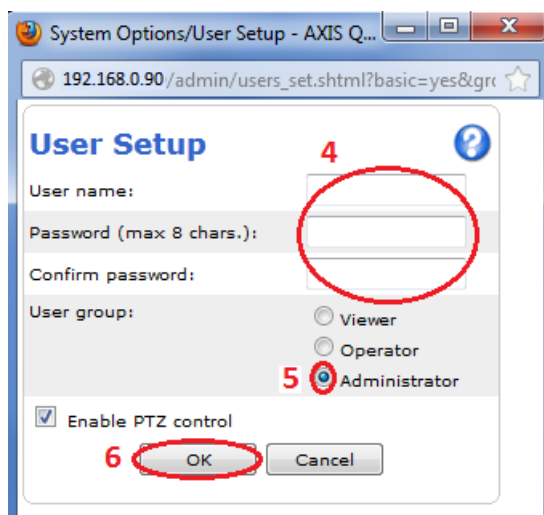


Figure 9.7: Adding a new user



A new window is opened.

Name the new user “admin” and define a password (4). This password will be needed later.

Recommended:

User name: admin
Password: 2x8bg4

Choose the <User group> (o) **Administrator** (5) and click **[OK]** (6).

Figure 9.8: Choose a password for the new user

Activate at <User Settings> the checkbox **Enable anonymous viewer login (no user name or password required)** (7). Confirm the settings with **[Save]** (8).

9.4 Setting date and time

Change to the entry **[Basic Setup] → [3. Date & Time] (9)**. Choose the <Time mode> **(o) Set manually (10)**. Set up date and time. Confirm the settings with **[Save] (11)**.

Comment:

The time set here is initially only a temporary adjustment. In our system the data logger is the time master and overwrites the logger time after successfully synchronizing with the video server.

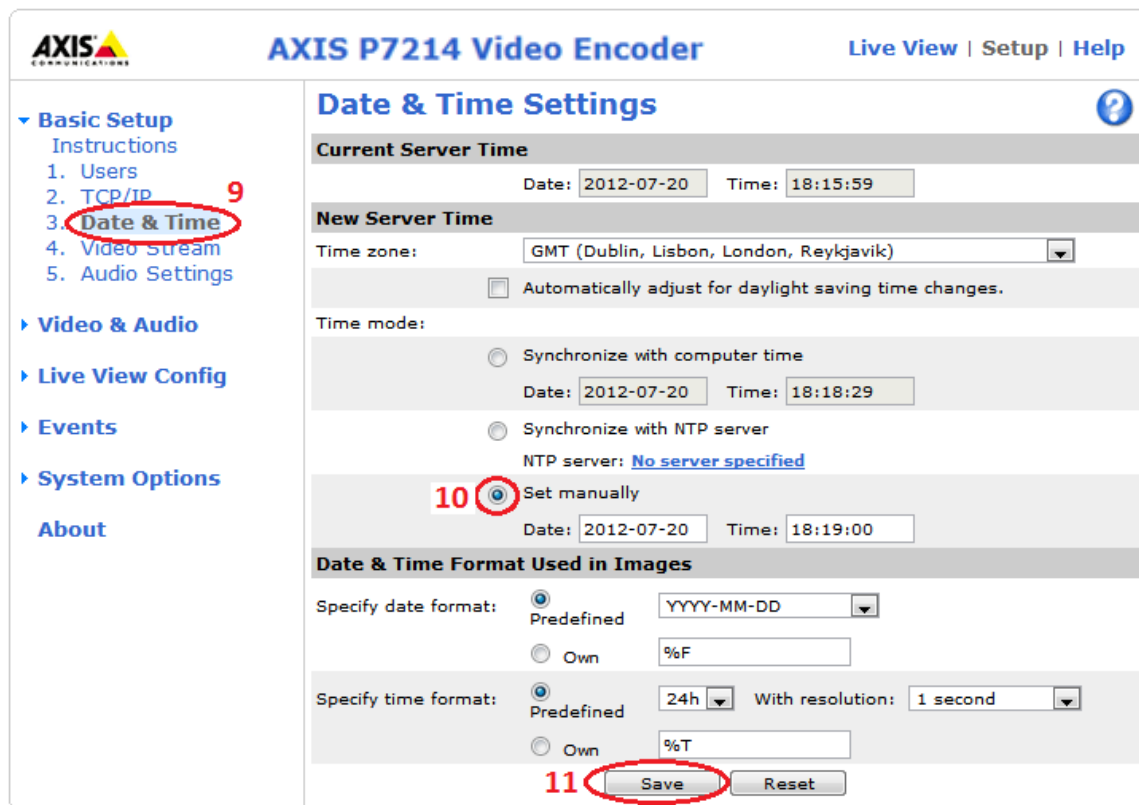


Figure 9.9: Set date and time manually

You can also display date and time on the video image.

Attention:

Before you start recording always set the date and time in the data logger first. It is impossible to change the timestamp at recorded video data. This means, the setup of a new logger time before downloading does not change the time within the video pictures. In this case, the timestamps of the other channels and the video picture timestamp could not match.

Click **[Basic Setup] → [4 Video Stream] (6)**. Activate both checkboxes **Include date** and **Include time (7)** to activate the display on the video image. Confirm the settings with **[Save] (9)**.

If desired, change format options like <Text color>, <Text background color> and text place **(8)**. Confirm the settings with **[Save] (9)**.

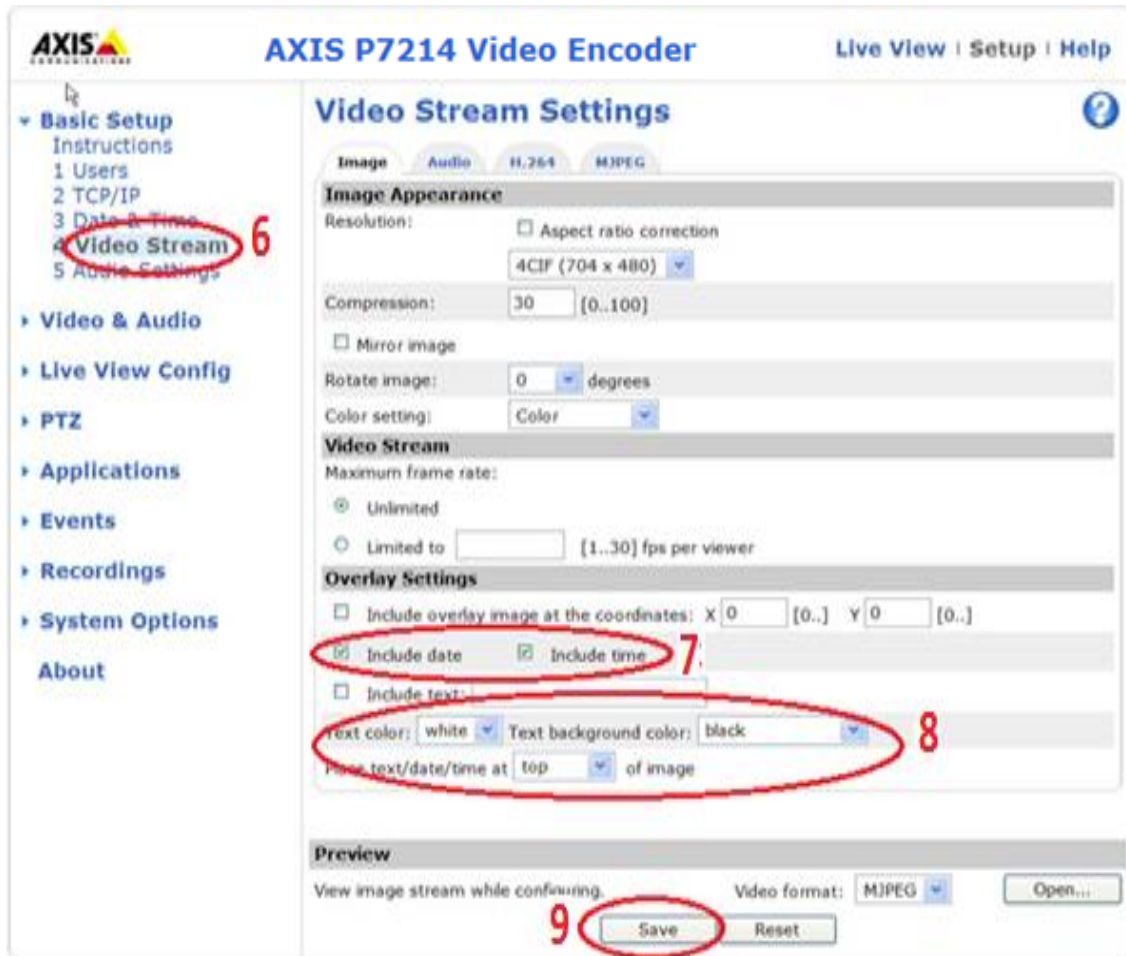


Figure 9.10: Include date and time in the video stream

The setup for in the video image embedded timestamps is finished.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by too high frame rates especially with HD cameras.

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9.5 IP configuration

Change to the entry **[Basic Setup]** → **[2 TCP/IP]** (3). Choose the <IPv4 Address Configuration> (o) **Use the following IP address** (4). Type in these data (5):

IP address:	192.168.1.90
Subnet mask:	255.255.255.0

Confirm the settings with **[Save]** (6).

The screenshot shows the 'Basic TCP/IP Settings' page for the AXIS P7214 Video Encoder. The left sidebar has '2 TCP/IP' circled in red with a '3' next to it. In the main content area, under 'IPv4 Address Configuration', the radio button for 'Use the following IP address:' is selected and circled in red with a '4' next to it. The IP address field contains '192.168.1.90' and the subnet mask field contains '255.255.255.0', both circled in red with a '5' next to them. At the bottom of the page, the 'Save' button is circled in red with a '6' next to it.

Figure 9.11: Setting an IP address

Note:

The video server AXIS P7214 has only one IP address. The camera configuration automatically changes the settings of the other cameras. It is therefore unnecessary to set the other cameras.

Note:

By changing the IP address you lose the connection to the video server.

This also will be told to you in an information window:

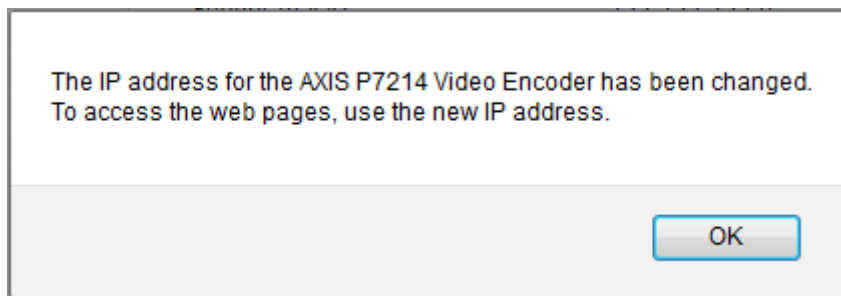


Figure 9.12: Hint

For reconnecting you have to change your computers IP address to **192.168.1.80**. Then type in your browser the new IP address of the network camera, to access the configuration again.

Note:

Finally, change your PCs or laptops IP configuration back to dynamic configuration.

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10 Save and restore the Video Encoder settings

To save all settings of the AXIS video server you can use the program “AXIS Camera Management”, which can be downloaded on the website of AXIS (registration required).

Needed software: AXIS Camera Management v2.00.31

<http://www.axis.com/techsup/software/index.htm> or
http://www.axis.com/de/products/cam_mgmt_software/interface.htm

Attention:

If you use a newer version of the program it may be that the communication between software client and data logger is disturbed. That is because the program changes some network settings, so UDP pings are not correctly transferred from the logger to the AXIS Camera Management Client.

In this case the older version (mentioned above) should be used or the program should be uninstalled after the saving.

After installing the software you can start it by using **[Start] → [AXIS Camera Management] → [AXIS Camera Management Client]**.

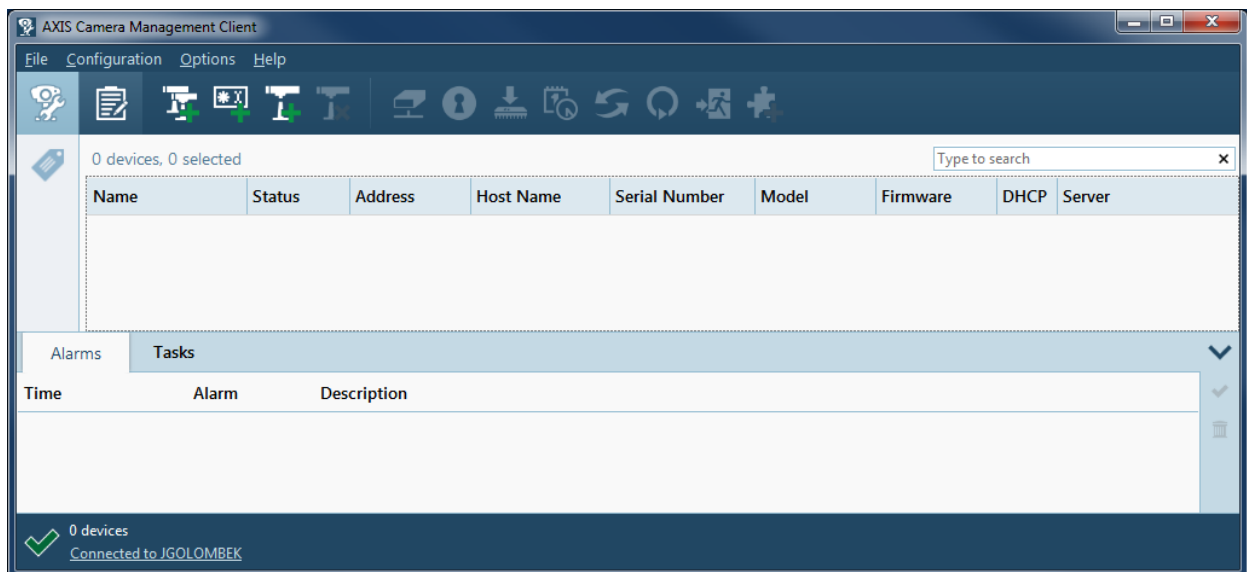


Figure 10.1: AXIS Camera Management Client

You can add your device by clicking **[Add devices]**.



Figure 10.2: Adding devices step 1

After selecting your device and logging in with your chosen password for the user “root” from before you add the device to the device list with **[Next >]** and **[Finish]** in the next window.

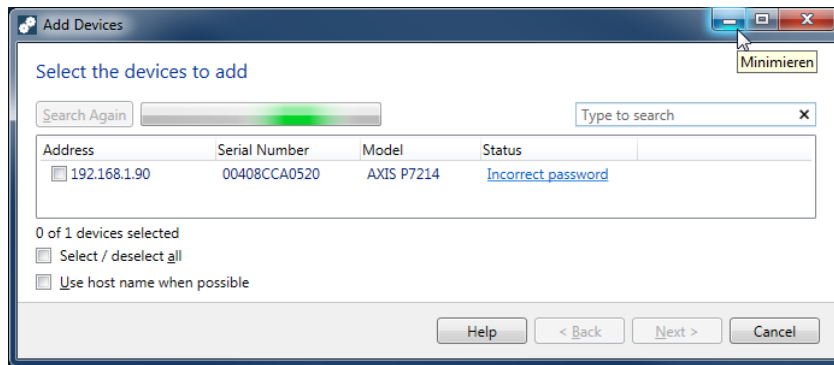


Figure 10.3: Adding devices step 2

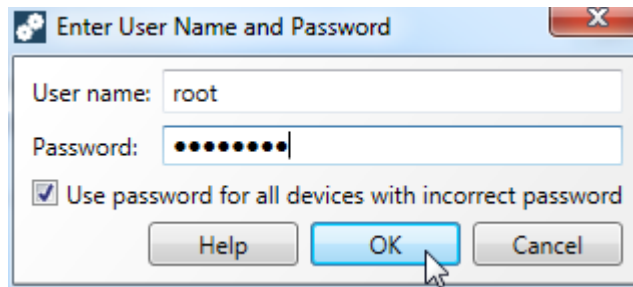


Figure 10.4: Adding devices step 3

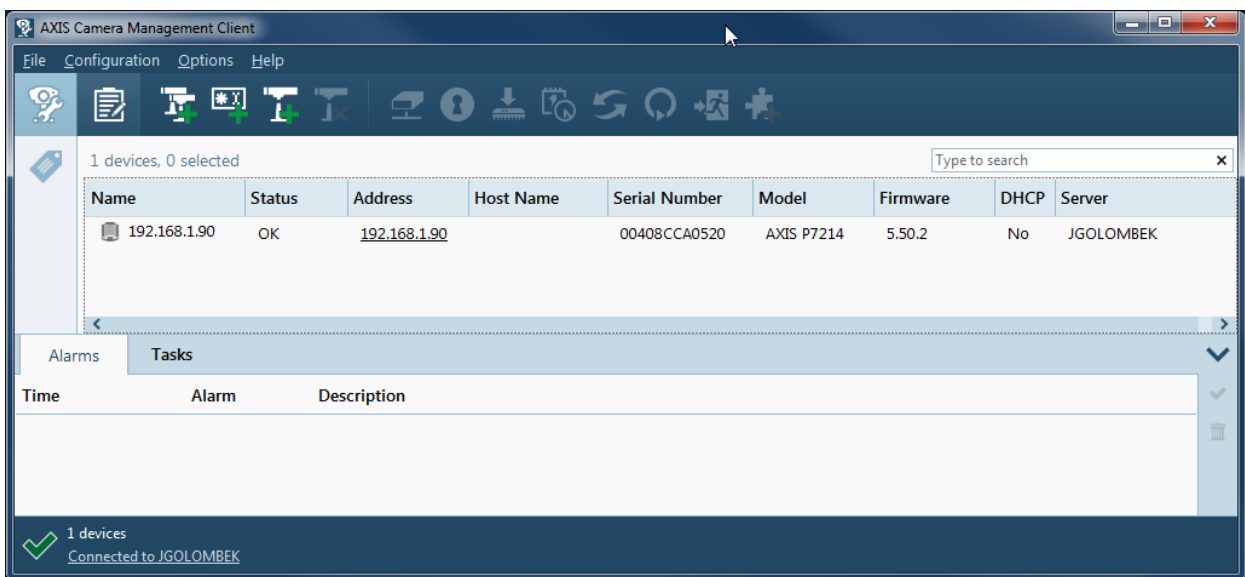


Figure 10.5: Device added

To save the current settings please right click your device. In the shortcut menu select **[Parameter Management]** → **[Create Parameter File...]**.

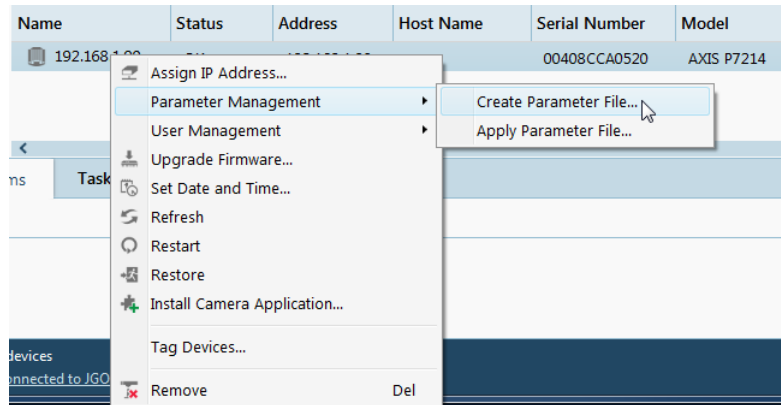


Figure 10.6: Creating Parameter File

The program reads the configuration from the video server. Activate the checkbox **Select / Deselect all** and then click **[Save]** to save the configuration to your local system.

To restore the saved settings to your device select **[Parameter Management]** → **[Apply Parameter File...]** in the shortcut menu of the device.

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11 Resetting the Video Encoder AXIS Q7404 / P7214

If something is configured incorrectly in the camera or the password is lost, it is important to reset the video server for a new configuration. This will reset all parameters in all four video channels (including all IP addresses) to the factory default settings.

First disconnect the power supply from the AXIS Video Encoder. Then press and hold the **[RESET]** button (1) while reconnecting with the power supply.

AXIS Q7404

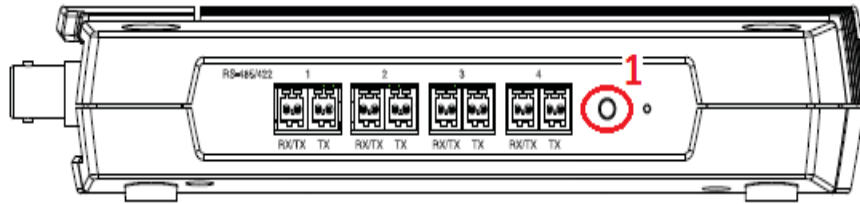


Figure 11.1: Reset button AXIS Q7404

AXIS P7214

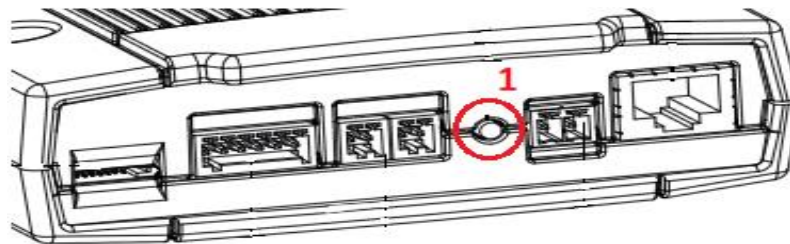


Figure 11.2: Reset button AXIS P7214

Keep the **[RESET]** button (1) pressed.
The STATUS LED turns yellow. This may take up to 15 seconds.

Release the **[RESET]** button (1) when the STATUS LED lights permanently green. This may take up to one minute.

The video server is set back to factory default settings and can be configured again.

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12 Connecting video equipment to the data logger

Depending on the logger model you have several ways to connect the network camera or Video Encoder to the logger.

blue PiraT Mini: It is possible to use one of the front Ethernet ports (**ETH #1 / TSL** or **ETH #2 / TSL**) or one of the back ports (**ETH #3** or **ETH #4**).

blue PiraT2 5E: It is possible to use the front Ethernet port (**ETH #1 / TSL**) or one of the back ports (**ETH #2** to **ETH #5**).

blue PiraT2: It is possible to use the **Gigabit-Ethernet** port on the front side or the **Ethernet kit** on the back.

At the blue PiraT2 / blue PiraT2 5E the back ports should be preferred. In this case the front port still can be used for access to the logger while the Video Encoder is recording data. This alternative is described in the following.

Connect the Gigabit-Ethernet port of the logger via an Ethernet cable with the Ethernet port of your PC / laptop. The data logger is configured as a DHCP server by default.
Connect the logger via the affiliated power harness (**red/+/clamp 30** and **black/-/clamp 31**) with a power supply (e.g., the vehicle battery).
Connect the Ethernet kit with the FCI port of the blue PiraT2 (rear side). Connect the Ethernet kit with the network camera or the Video Encoder.
When using a Video Encoder the network camera can be connected to its BNC connector number 1. Connect the Video Encoder and if required even the network camera to the according power supply. The Video Encoder is starting. Wait until all its LEDs turn green.

Universal cable set

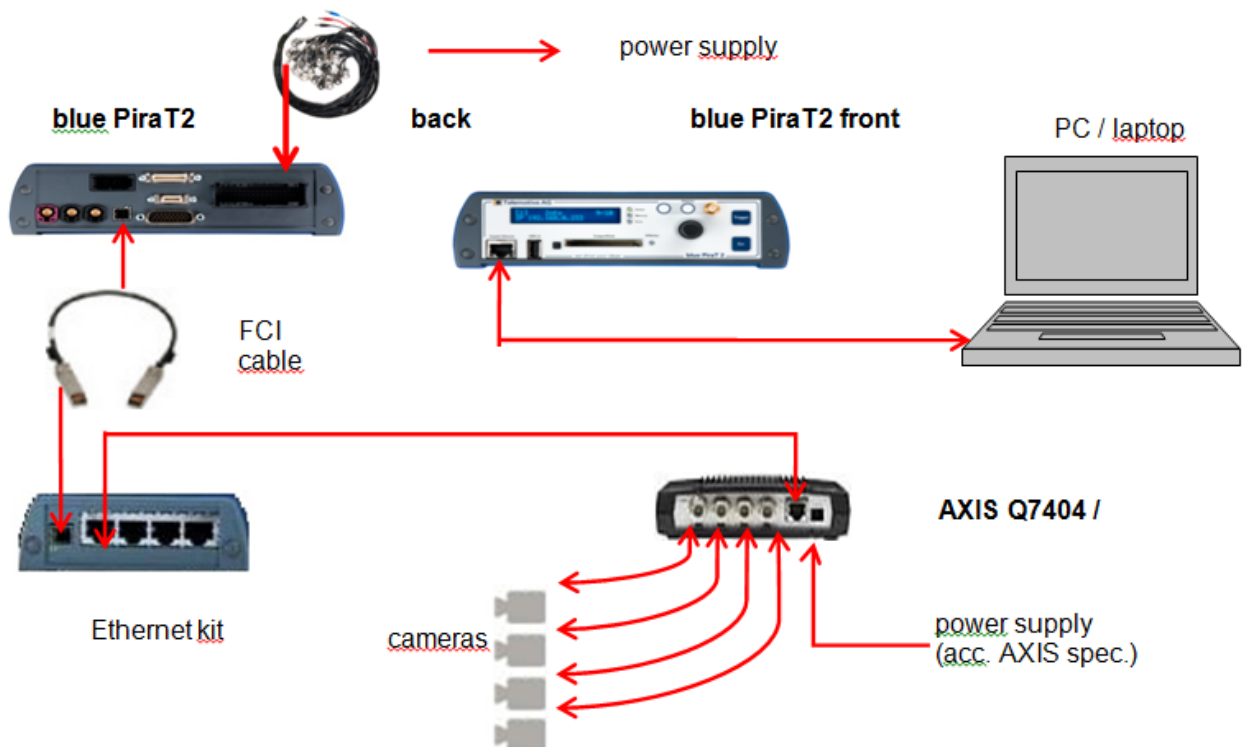


Figure 12.1: Connecting video equipment to a data logger

13 Configuring the data logger

13.1 General settings

The logger should be configured as DHCP server, if it is not already configured accordingly (default value).

Therefore click on the application **[Open configuration] (5)** in the Telemotive System Client. Expand the folder **[General]** in the window to the right and click on **[Network settings]**. Enable the <DHCP mode> **(o) DHCP server** or **(o) Automatic DHCP Configuration for TSL**.

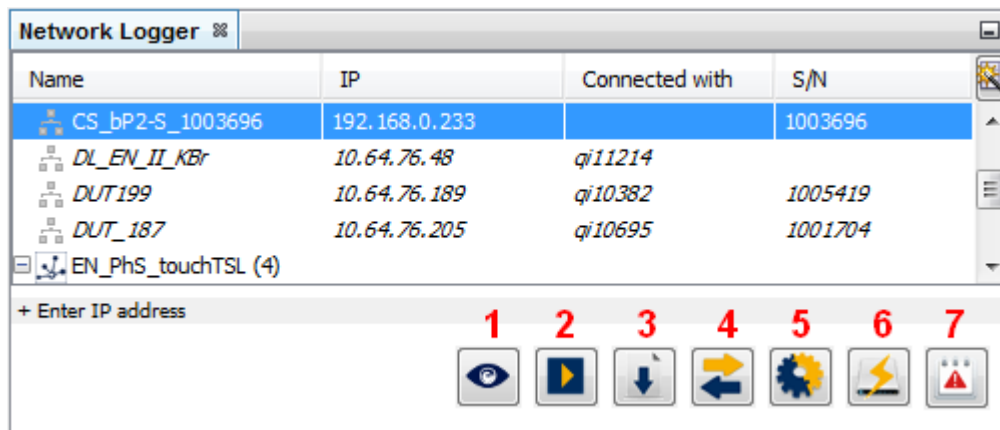


Figure 13.1: Selecting an application in the Telemotive System Client

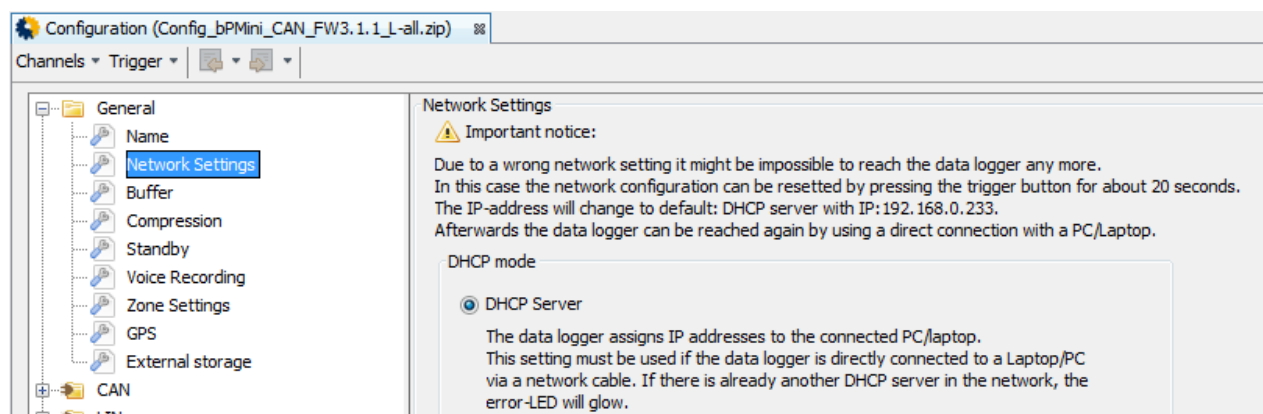


Figure 13.2: Setting the network settings in the Telemotive System Client

Please be sure about the setting of the logger's standby.

You can activate or deactivate the automatic standby at **[General] → [Standby]**. If active, there are two different time settings for network connection.

If the data logger is not connected to a network at the front Ethernet port and does not receive any data during the timeout entered in the upper text field, then it shuts down and enters standby mode.

If the data logger is connected to a network at the front Ethernet port with active link and does not receive any data during the timeout entered in the lower text field, then it shuts down and enters standby mode.

This has important implications when using the camera function since Ethernet is required. If you activated the automatic standby, no further channels are connected or they are inactive, the logger shuts down and enters standby mode according to the lower time indication despite the video recording. So you have two options:

- Deactivating the automatic standby and shifting the device to standby manually, if necessary or
- Configuring a channel (e.g., CAN channel), whose activity coincides with the camera activity.

13.2 Camera settings

13.2.1 Camera | General settings

Click on the application **[Open configuration]** in the Telemotive System Client. Expand the folder **[Camera]** in the window to the right and click on **[General settings]**.

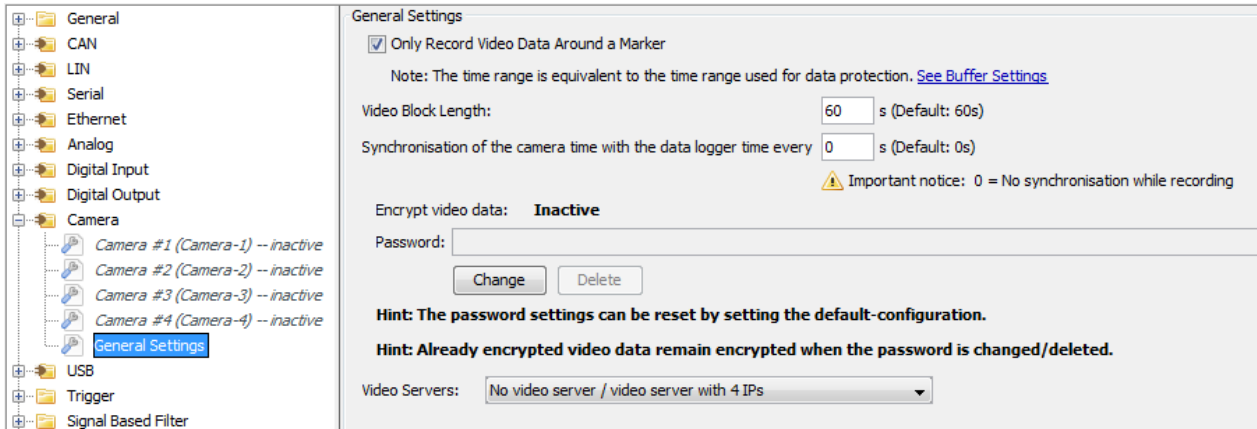


Figure 13.3: Camera => General settings

If the checkbox for **Only record video data around a Marker** is:

- activated: the logger records no data, except these around a Marker.
- deactivated: the logger always records all video data.

You can define the time range around a marker under **[General] => [Buffer]**:

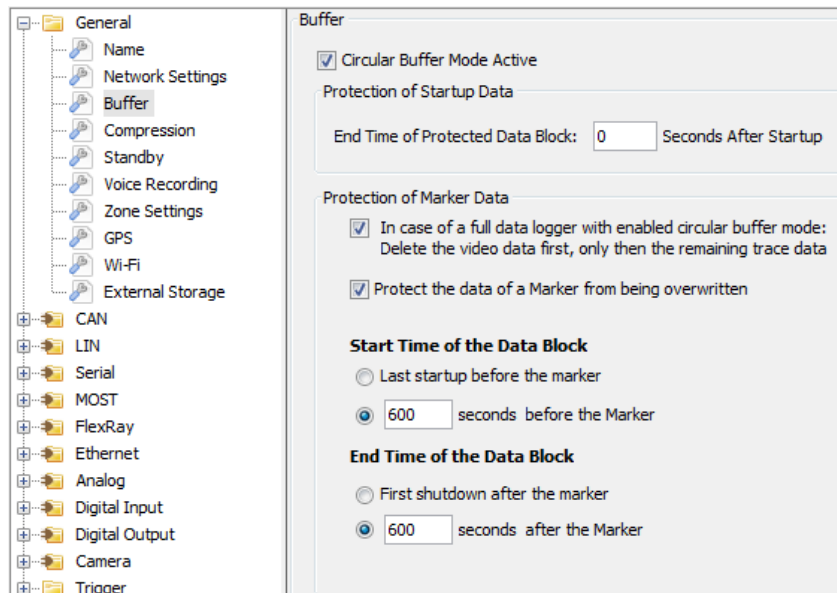
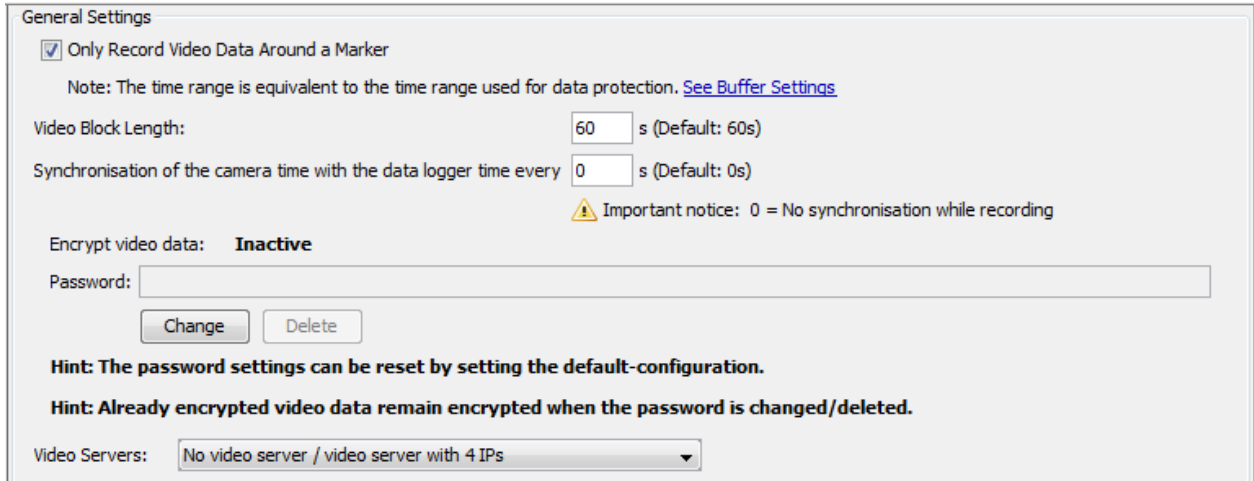


Figure 13.4: Setting the time range around a marker




General Settings

Only Record Video Data Around a Marker

Note: The time range is equivalent to the time range used for data protection. [See Buffer Settings](#)

Video Block Length: s (Default: 60s)

Synchronisation of the camera time with the data logger time every s (Default: 0s)

 Important notice: 0 = No synchronisation while recording

Encrypt video data: **Inactive**

Password:

Hint: The password settings can be reset by setting the default-configuration.

Hint: Already encrypted video data remain encrypted when the password is changed/deleted.

Video Servers:

Figure 13.5: Camera => General settings

To record video blocks of certain length, type in your desired value in seconds at **<Video block length>**.

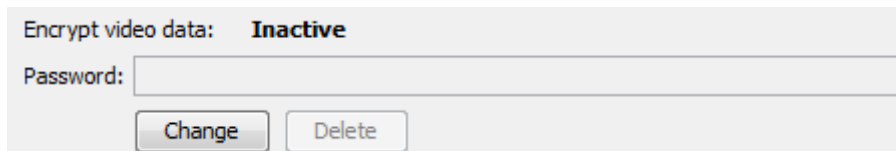
The field **<Synchronisation of the camera time with the data logger time every [] s>** allows defining his time range.

Note:

If there are some gaps in the recording it may be caused by this synchronisation. In this case please deactivate the synchronization by inserting *0* into the field.

13.2.1.1 Encrypting video data

If the video data should be encrypted, the Client offers the possibility to set, change or delete a password in this field:



Encrypt video data: **Inactive**

Password:

13.2.1.2 Setting the video server

In the dropdown menu at **<Video Servers>** select the connected network camera / Video Encoder. The following options are available:

Option 1: No video server / video server with 4 IPs
AXIS Q7404 / 207 / 210 / 211 / P12 series / F41

Option 2: Video server with one IP and 4 channels
AXIS P7214 / F44

Option 3: Video server with one IP and one *quad* channel
AXIS P7214 / F44

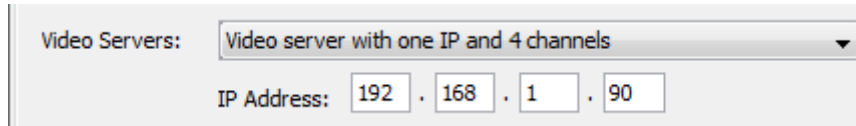
Note:

Quad channel means that up to 4 video streams are recorded in one window.

Attention:

With the setting Quad-View, the same maximum frame rate must be set for all cameras! You can find this setting in the camera configuration under Axis Setup => Basic Setup => Video Stream => Camera 1, Camera 2,... At different frame rates, otherwise connection breaks may occur.

If you select **option 2** or **3**, please type the IP address of the AXIS P7214 / F44 in the approaching fields below.



Video Servers: Video server with one IP and 4 channels

IP Address: 192 . 168 . 1 . 90

Figure 13.6: Setting an IP address

13.2.1.3 Configuring the cameras

In the folder **[Camera]** click **[Camera #1] (1)** and activate the checkbox for **Camera interface active (2)**. Choose the connector **(3)** depending on the Ethernet port the Video Encoder / network camera is connected to. Enter the Video Encoders / network cameras IP address **(4)**. If the AXIS P7214 is used, the IP address is already specified in the general settings. It is taken from there.

If you have chosen to use the recommended user and password, you can activate the checkbox for **Default password (5)**.

If you have chosen to use your own password, deactivate the checkbox for **Default password (5)** and type in your chosen "admin" password from before **(6)**.

Type in the additional IP-alias of the data logger **(7)**. The data logger has to be in the same subnet as the Video Encoder / network camera.

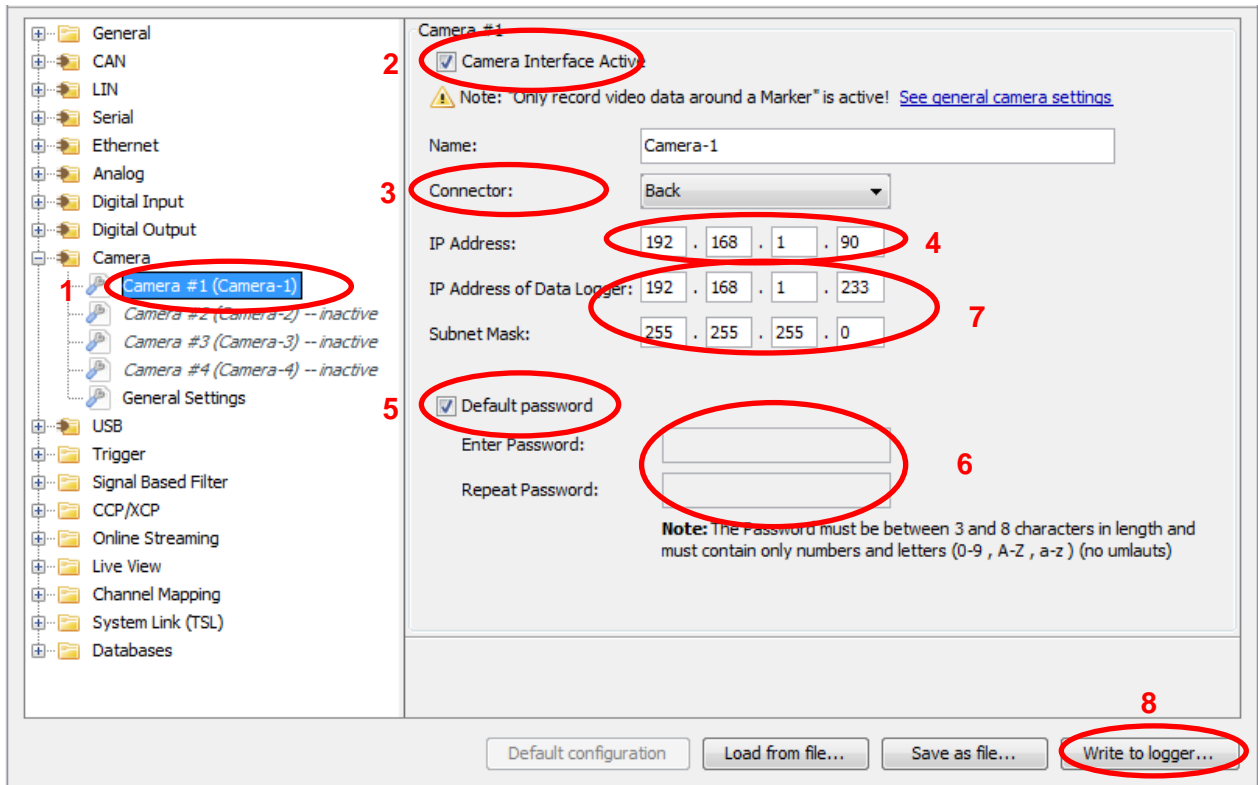


Figure 13.7: Configuring the cameras

If you have selected under **[General]**, make the same changes for all connected cameras with the following IP addresses:

	Camera 1	Camera 2	Camera 3	Camera 4
AXIS Q7404, 207, 210, 211 AXIS P1204, F41	192.168.1.90	192.168.1.91	192.168.1.92	192.168.1.93
AXIS P7214, F44	192.168.1.90	192.168.1.90	192.168.1.90	192.168.1.90

After setup click on the button **[Write to logger] (8)**.

The configuration is finished. The logger starts recording the video signal as configured.

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13.3 Front display of blue PiraT2

With the [OFF / Esc] button at the front of the data logger the main window appears on the display. By switching the rotary knob you can change the displayed interfaces. There you can see the configuration of the four cameras, represented by "VID" and meaning video. Each sign after the word "VID" is placed for one video channel.

Three cases are listed:

Case 1

"-" means, the camera license is installed but no configuration has been performed. All four channels are however recognized.



Figure 13.1: Display: VID ----

Case 2

„X“ means, all parameters are configured. The video data are not recorded or there is no connection between logger and server. The following figure shows that camera 1 and 2 are configured but not recorded and camera 3 and 4 are not activated.



Figure 13.2: Display: VID XX--

Case 3

„T“ means, logger and server are connected and the videos are recorded. The following figure shows that camera 1 and 2 are recording and camera 3 and 4 are not configured.



Figure 13.3: Display: VID TT--

Does the data recording runs without errors, there should always be shown a "T" (Traffic).

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14 Downloading video data

The Telemotive System Client application allows downloading and saving the recorded data as offline data set from the logger on the computers disk to use it later or to convert the data directly from the logger. (see chapter 15)

Download and conversion of data is explained in detail in the **Telemotive System Client User Guide**. This manual you can find in the ServiceCenter of Telemotive AG or directly under this link:

https://sc.telemotive.de/4/uploads/media/TelemotiveSystemClient_UserManual.pdf

While all of the other trace files are recorded in the Telemotive format from the logger, video signals are directly provided as MPEG4 stream from the camera and saved as it is on the logger.

For the video application, there is a special characteristic about the video block length. If you select a time period or a marker for download, so the downloaded data does not match exactly to the expected start- and end time. The reason is that the video block length of 60 seconds does not match exactly to the selected download time. The system always downloads complete video blocks. The downloaded video is in all cases longer than selected. It starts earlier and ends later than the selected period. But the selected time is always included.

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15 Converting video data

The Telemotive System Client additionally allows to save data from the logger in a requested format on a PC or external storage device. Because video signals are directly provided as MPEG4 stream there is no direct conversion possible.

This document describes only the specifics for the video conversion.

The conversion can left the video blocks separate (untouched) or converted to one video file. Choose the required option in the client output window (4).

Please keep in mind, that when converting into one video file, the system can combine a maximum of 400 video blocks per file. After that the client opens a new file.

For both options the result will be the “.mpeg4” video format.

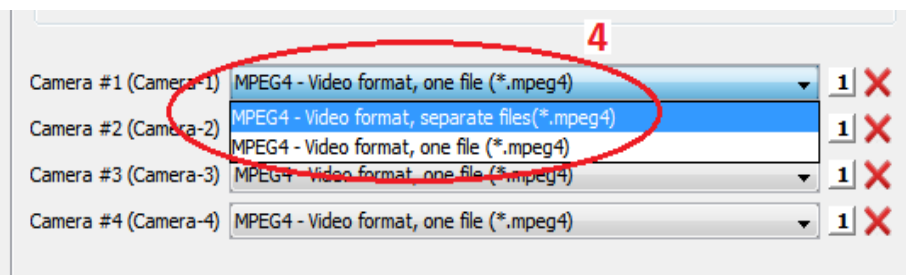


Figure 15.1: Settings for converting video data in the Telemotive System Client

The Telemotive System Client can also convert offline data, which are downloaded already from the data logger. Only an installed client is necessary.

In the tab <Favorites> click the green [+] (1) and choose the main download folder. The download folder appears (2). Double clicking the main folder (3) will open the conversion tab.



Figure 15.2: Choose an offline dataset

Like this you can convert every part of an offline data set at any time.

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16 Watching videos

The .mpeg4 video files cannot be watched with the data logger. They can be used only if they have been downloaded or converted and saved to a computers disk first.

They can be played on any standard video player.

Note:

In case that the video is stuttering or has breaks, please reduce the preset <Maximum frame rate>. Reducing to 15 or 20 fps eliminates the problem which is caused by to high frame rates especially with HD cameras.

17 Axis IP Utility

is a small tool that you can download from the Axis Homepage over the following link:

<http://www.axis.com/global/en/support/downloads/axis-ip-utility>

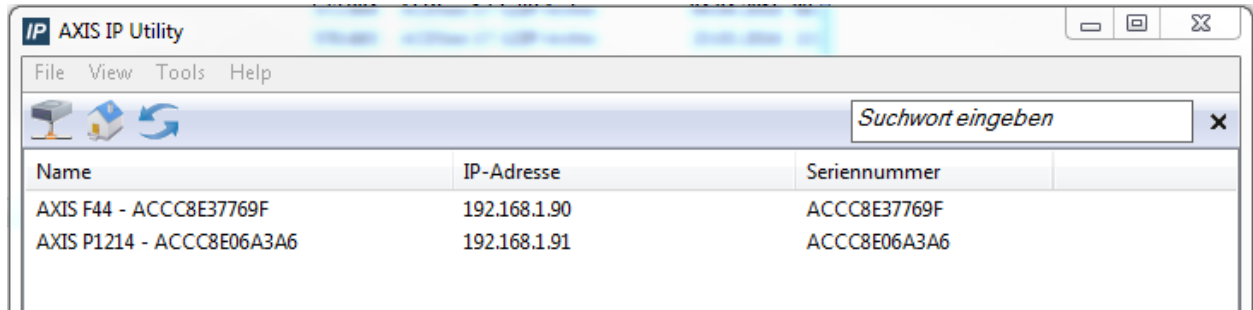


Figure 17.1: Axis IP Utility

AXIS IP Utility helps you set the IP address of an Axis network video product. Axis devices on the network are automatically discovered and displayed. Assign network parameters (IP Address, Subnet mask and Default router) or configure the device to obtain its IP address from DHCP.

The Axis device and the client computer must be on the same subnet/network segment.

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18 Abbreviations

Kürzel / abbreviation	Bedeutung / meaning
blue PiraT	P rocessing I nformation R ecording A nalyzing T ool
bP	blue PiraT
bP2	blue PiraT2
bP2 5E	blue PiraT2 5E
bPMini	blue PiraT Mini
RC Touch	R emote C ontrol T ouch
bP Remote	blue PiraT Remote
A2L	A SAM M CD-2 M C L anguage
AE	A utomotive E lectronics
ACK	A C K nowledged
CAN	C ontroller A rea N etwork
CCP	C AN C alibration P rotocol
CF	C ompact F lash
CRO	C ommand R eceive O bject
DAQ	D ata A cquisition
DTO	D ata T ransmission O bject
ECL	E lectrical C ontrol L ine
ECU	E lectronic C ontrol U nit
FIBEX	F ield B us E xchange F ormat
FW	F irmware
GMT	G reenwich M ean T ime
INCA	I N T egrated C alibration and A pplication T ool
LAN	L ocal A rea N etwork = Netzwerk
LIN	L ocal I nterconnect N etwork
MAC	M edia A ccess C ontrol
MCD	M easure C alibrate D iagnose
MDX	M eta D ata E Xchange F ormat
MEP	M OST E thernet P acket
MOST	M edia O riented S ystems T ransport (www.mostnet.de)
ODT	O bject D escriptor T able
ODX	O pen D ata E Xchange
OEM	O riginal E quipment M anufacturer

PHY	PHY sical Bus Connect
PW	Pass wort
RX	Recei ver Data
SD	Secure Digital
SFTP	Secure File Transfer Protocol
SHA	Secure Hash
SSL	Secure Sockets Layer
TCP/IP	Trans mission Control Protocol/ Inter net Protocol
TLS	Trans port Layer Security
TMP	Telemotive Packetformat
TSL	Telemotive System Link
UDP	User Datagram Protocol
USB	Univer sals Serial Bus
UTC	Univer sals Time, Coordinated
Wi-Fi	Wire less Fidelity
WLAN	Wire less Local Area Network
XCP	Univer sals Measurement and Calibration Protocol

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