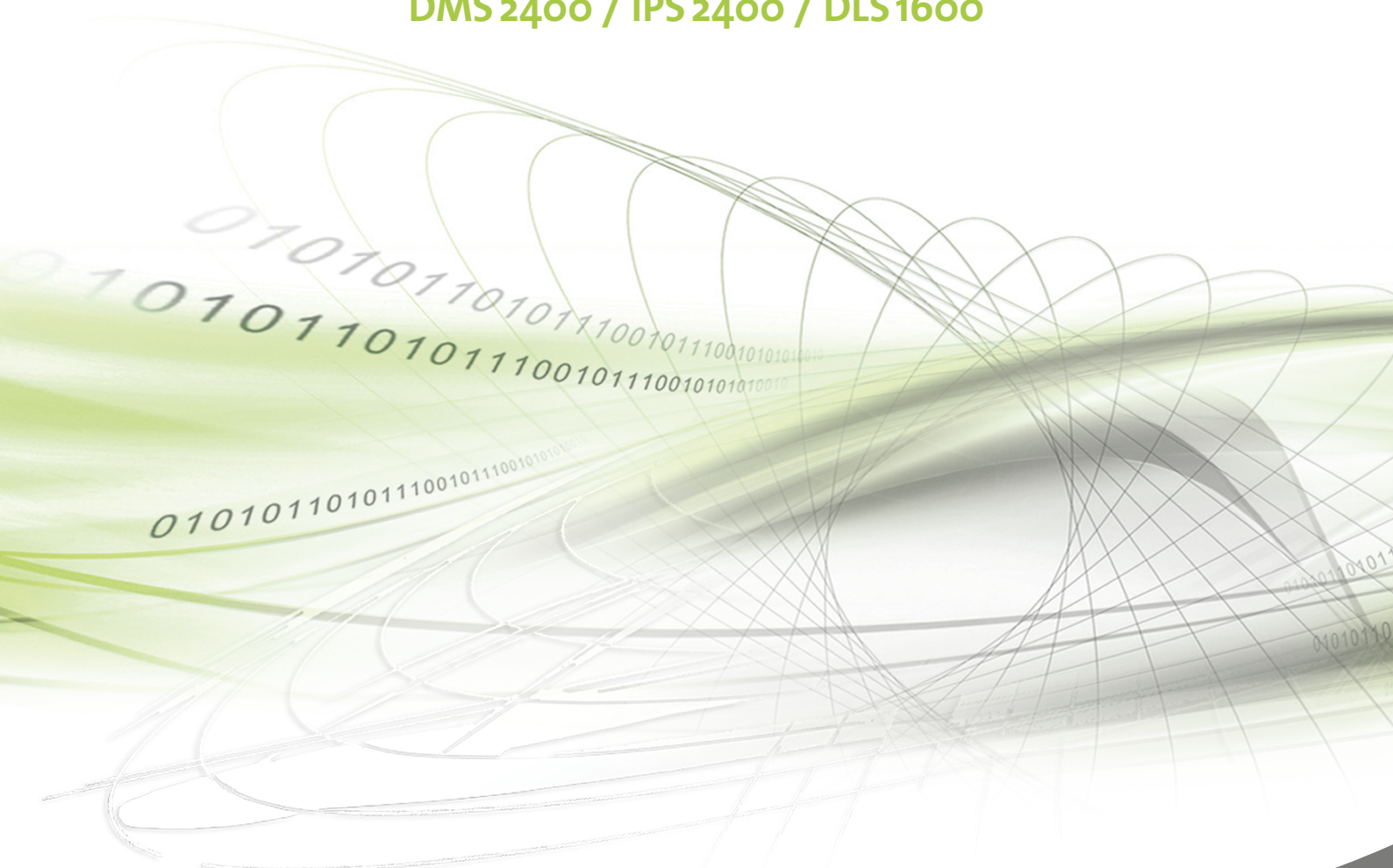




LAN Interface for Data Reception

DMS 2400 / IPS 2400 / DLS1600





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1 Introduction

1.1 Validity

This document is valid for the preloaded VideoIP server software **SMAVIA Recording Server** in conjunction with the function of **LAN Interface for Data Reception** (License 004685). It is based on the following software versions: **8.1.3** (DMS 2400), **8.7.3** (IPS 2400) and **8.6.3** (DLS 1600).

The illustrations in this document might differ from the actual product.

1.2 Documents

Configuration (this document)

The document **Configuration** contains detailed descriptions of the configuration of the software. Safety notes, general information and technical data are additionally provided. The target audience of this document is trained and authorized professionals (installers).

Note the documentation "Operation" and "Configuration" for SMAVIA Recording Server. In addition, the documentation for the NPC II protocol converter of NORMA systems.

1.3 Typographical Conventions

For reasons of clarity and readability, various text formatting elements and types of emphasis are used in this documentation:

NOTICE

NOTICE indicates practices for preventing property damage, incorrect configurations or faulty operations.

Instructions are indicated by arrows (➤).

➤ Always carry out instructions one after the other in the sequence described.

Expressions in **bold/italics** generally indicate a control element on the device (switches or labels) or on its user interface (buttons, menu entries).

Paragraphs in italics provide information on basic principles, special features and efficient procedures as well as general recommendations.

2 General Notes

2.1 Appropriate Use

The optional function LAN Interface for Data Reception (license 004685) allows for the reception of data from third-party systems over the network interface of the appliance, which includes linking, storing and displaying the data together with the video recordings.

The current versions of the SMAVIA Appliances support the direct connection of AWEK POS systems and the connection of POS systems, access control systems and ATMs of other suppliers using the NORMA systems protocol converter NPC II.

The external data are automatically linked and stored with the video recordings of the cameras. On demand, the data of appliances with LocalViewing can be directly displayed together with the live video. The sophisticated search functions enable their user to quickly and easily find the video sequences saved together with specific data.

Note that the software SMAVIA Viewing Client is particularly suitable for a convenient evaluation over the network. Live display, search and evaluation of the video sequences linked with the data are supported by default.

- Live display of the data and video sequences on appliances with LocalViewing
- Live display of the data and video sequences with SMAVIA Viewing Client over the network
- Easy and fast search and evaluation of the data and video sequences on appliances with LocalViewing
- Easy and fast search and evaluation of the data and video sequences with SMAVIA Viewing Client over the network

2.2 Performance Features

SMAVIA Appliance

- Link the data with video sequences of a camera
- Link the data with video sequences from multiple cameras
- Regardless of the recording mode (Permanent, Motion Detection, Contact)
- Regardless of the type of camera (analogue cameras, IP cameras, 3rd Party IP cameras)
- Compatible with ViProxy

AWEK POS Systems (AWEK C-POS GmbH)

- Customized protocols for AWEK POS systems integrated in the SMAVIA Appliance
- Supported connection of several AWEK POS systems to a SMAVIA Appliance

For more information, visit: <http://www.awek.de>.

NORMA systems Protocol Converter NPC II (NORMA systems GmbH)

- Protocols for POS systems, access control systems and ATMs integrated in the protocol converter

- Supported connection of several NPC II protocol converters to a SMAVIA Appliance

For more information, visit: <http://www.norma-systems.de>.

2.3 Warranty

The terms and conditions valid at the signing of the contract shall apply.

3 Configuration

3.1 SMAVIA Recording Server

In order to use the **LAN Interface for Data Reception** function the following license must be available on a SMAVIA Recording Server appliance (DMS 2400 / IPS 2400 / DLS 1600):

DLC - LAN Interface for Data Reception (License 004685)

3.1.1 Licenses

Follow the steps below to check licenses and active functions:

- Start the SMAVIA Recording Server appliance.
- Log in as described in the document “Operation” for SMAVIA Recording Server.
- Open the **Info** dialogue via **Setup > System > Info**.



Fig. 3-1

- Click the **Licenses** button.

The **Licenses** dialogue is displayed.



Fig. 3-2

- Check that the **DLC - LAN Interface for Data Reception** license is present (checkbox enabled = function active).
- Click the **OK** button in order to close the dialogue.

Note that the relevant license can be displayed in older versions of the software as "Cash-point Interface".

3.1.2 Activation

Functions can be activated by entering a license code. A license code can be purchased from the sales partner or the Dallmeier support.

- Open the **License Code** dialogue via **Setup > System > Service > Extensions**.

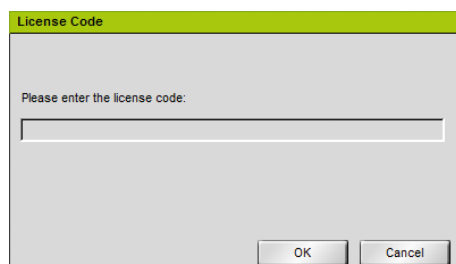


Fig. 3-3

- Enter the **license code**.
- Click the **OK** button in order to save the license code.
- Verify the successful activation of the function in the **Licenses** dialogue, as described above.

3.1.3 Recording Settings

The **Recording Settings** must not be configured for recording and display of external data. The data is automatically recorded to the corresponding video sequence and shown both live and playback.

- Make the settings for recording as described in the documentation “Configuration” for SMAVIA Recording Server.

To display the data in a dual split window of the SMAVIA Viewing Client the “Recording Settings” must, however, be specially configured. Refer to the section “[SMAVIA Viewing Client](#)” on page 24.

3.1.4 Search Criteria

The **Search Items** dialogue allows to specify the individual data criteria that are to be displayed in the live image and that are available for the search function. In addition, the **Name** of the data criteria can be changed.

- Open the **Search Items** dialogue via **Setup > Recording > Search Criteria**.

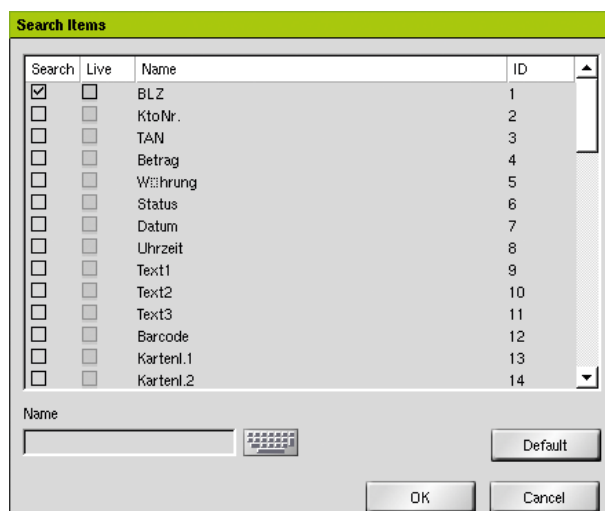


Fig. 3-4

- Note the explanations below.
- Enable the required search criteria.
- Adjust the names of the data if required.
- Confirm with **OK**.

Search

The data received from an external POS system are stored and are available for the **Extended search**.

Live

The data received from an external POS system are briefly displayed in the live image.

Name

The **Name** of an **ID** can be changed individually.

- Select the required **ID**.
- Enter in the **Name** box the new name.

For AWEK POS systems the following names of data criteria are pre-configured:

Name	ID
Betrag	4
Währung	5
Datum	7
Uhrzeit	8
Bonzeile	9
Kassierer-ID	10
Artikel-NR	12
Kassen-ID	13

For systems that are connected to the NPC II protocol, the following names of data criteria are pre-configured:

Name	ID
Betrag	4
Währung	5
Uhrzeit	8
Bonzeile	9

3.2 AWEK POS Systems

The product and price data are recorded at the POS and sent over the network to a SMAVIA Recording Server appliance. The appliance can be used to display some or all data (amount, currency, date, time, receipt line, cashier ID, Item NO, cash ID) can be configured with the video sequences of the corresponding camera.

The analysis of the recordings can be made on the SMAVIA Recording Server appliance or the SMAVIA Viewing Client over the network. The corresponding data of each video sequence is displayed in both live mode and during playback. In addition, with numerous playback and viewing options can also be searched for specific POS data with the corresponding video sequences.

Note before configuration on which port the data are sent and activate the video interface of the AWEK system.

3.2.1 Link

Linking an AWEK POS system with the appropriate cameras is done through the browser interface of a SMAVIA Recording Server appliance.

It is recommended to use the Microsoft[®] Internet Explorer[®] (version 10).

- Open the browser on a workstation / PC.
- Make sure that the SMAVIA Recording Server appliance is reachable over the network.
- Enter the IP address of the appliance in the address bar of the browser.
- Confirm the input by pressing the *Enter* key.

The connection to the appliance is made. The login dialogue is displayed.

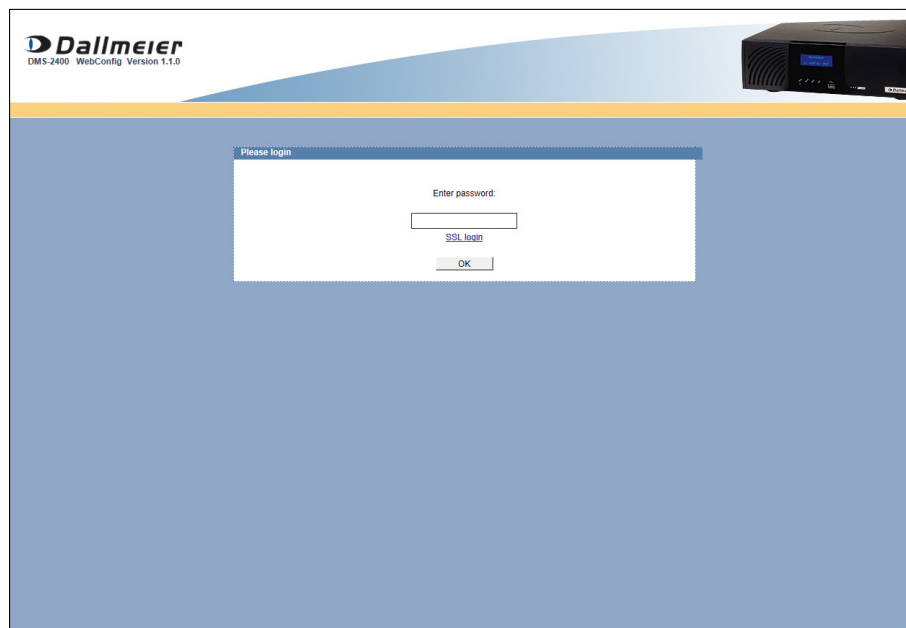


Fig. 3-5

- Enter the password and confirm with **OK**.

The WebConfig surface of the SMAVIA Recording Server appliance is displayed.

- Open the **LAN Data Interface** dialogue via the **LAN Data Interface** button.

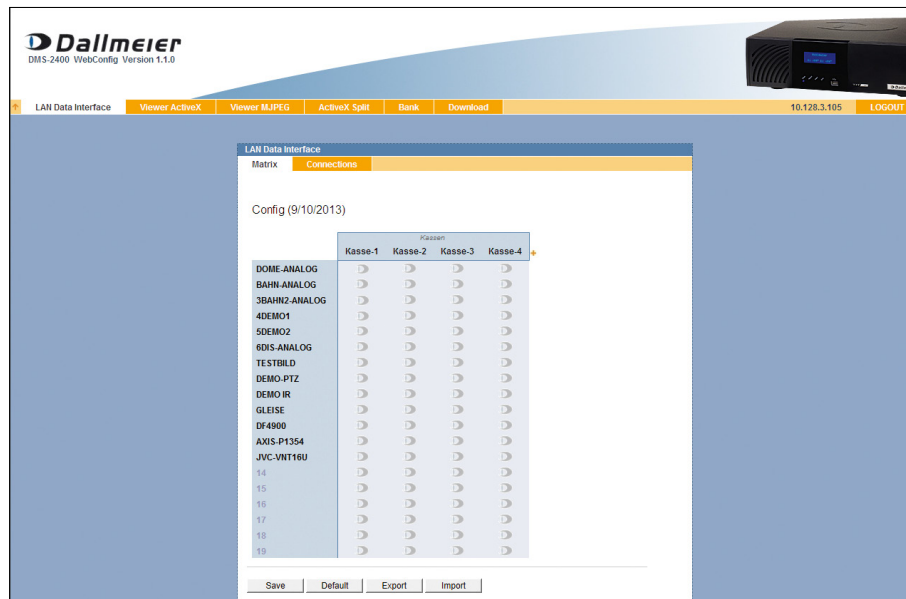


Fig. 3-6

On the left side are the active cameras of the SMAVIA Recording Server appliance, on the top line the POS systems.

3.2.2 Add POS

- Select the **Matrix** tab.
- Click the **+** button in the line of the POS systems.

The **Add new source** dialogue is displayed.

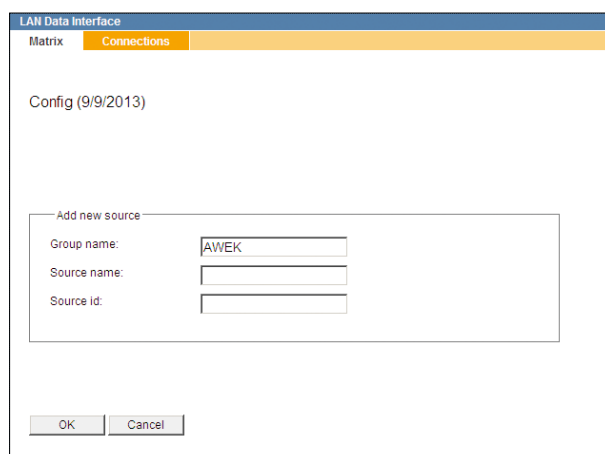


Fig. 3-7

- Select the **AWEK** entry from the dropdown box **Group name**.
- Enter the name of the new POS as **Source name**.

- Enter a number sequence as **Source id**.
- Confirm with **OK**.

The line of the POS systems is extended with the new entry.

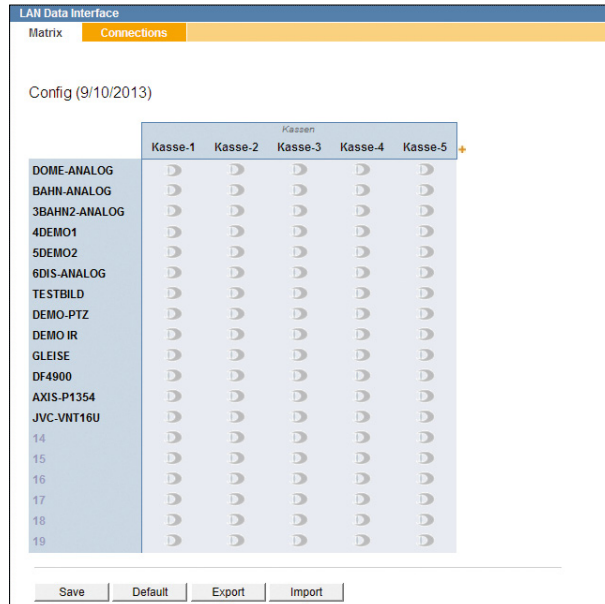


Fig. 3-8

- Proceed as described above to add more POS.

3.2.3 Connect Cameras with POS

- Select the **Matrix** tab.
- Click on the appropriate link point to connect a camera with a POS.
- Proceed analogue to connect additional cameras and POS.

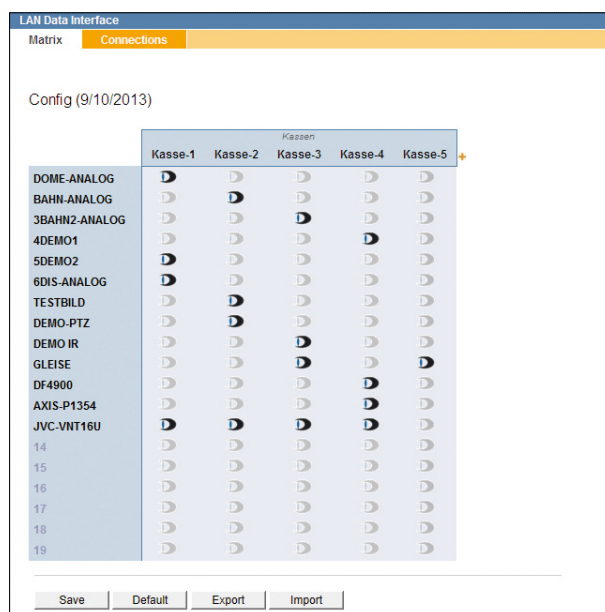


Fig. 3-9

In order to evaluate the data on different video sequences, multiple cameras can be assigned to a POS.

- Click the **Save** button in order to save the settings.
- Select the **Connections** tab.

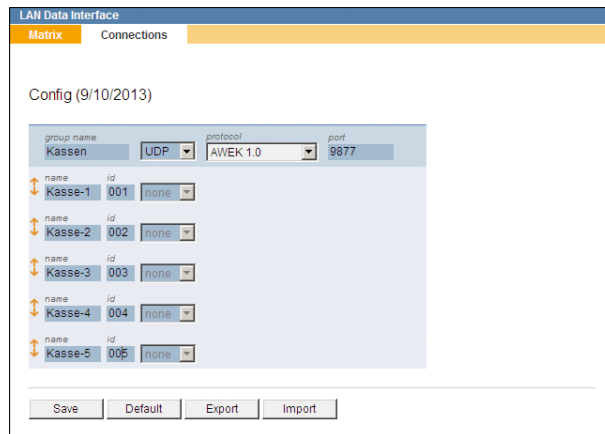


Fig. 3-10

- Select **AWEK** as **protocol**.
- Enter the required **port**.
- Enter the ID of every POS in the **id** field.
- Finally, click the **Save** button in order to save the settings.

3.2.4 Remove POS

A POS can also be removed again.

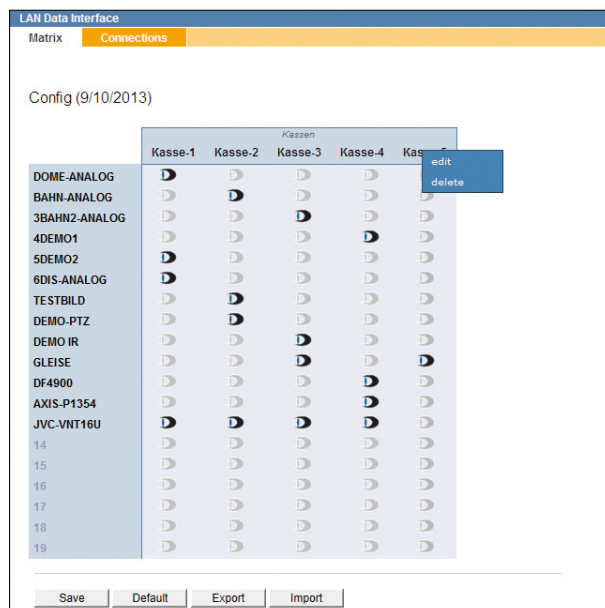


Fig. 3-11

- Click in the line of the POS systems to the required POS.

The context menu is displayed.

- Click the ***delete*** button.
- Confirm the subsequent info dialogue.

3.3 NPC II

About the NPC II protocol, it is possible to connect many external third-party systems (POS, ATM, access control systems). In addition, four data criteria (see section “[Search Criteria](#)” on page 9) can be stored and analyzed with the corresponding video sequence.

Note before the configuration on which port the data will be sent.

Note also for the preparation and programming of the NPC II protocol converter, the corresponding documentations of NORMA systems.

- First make the required settings to configure the NPC II protocol converter as described in the documentation of NORMA systems.

3.3.1 Link

Linking an external system with the appropriate cameras is done through the browser interface of SMAVIA Recording Server appliance.

It is recommended to use the Microsoft Internet Explorer (version 10).

- Open the browser on a workstation / PC.
- Make sure that the SMAVIA Recording Server appliance is reachable over the network.
- Enter the IP address of the appliance in the address bar of the browser.
- Confirm the input by pressing the *Enter* key.

The connection to the appliance is made. The login dialogue is displayed.

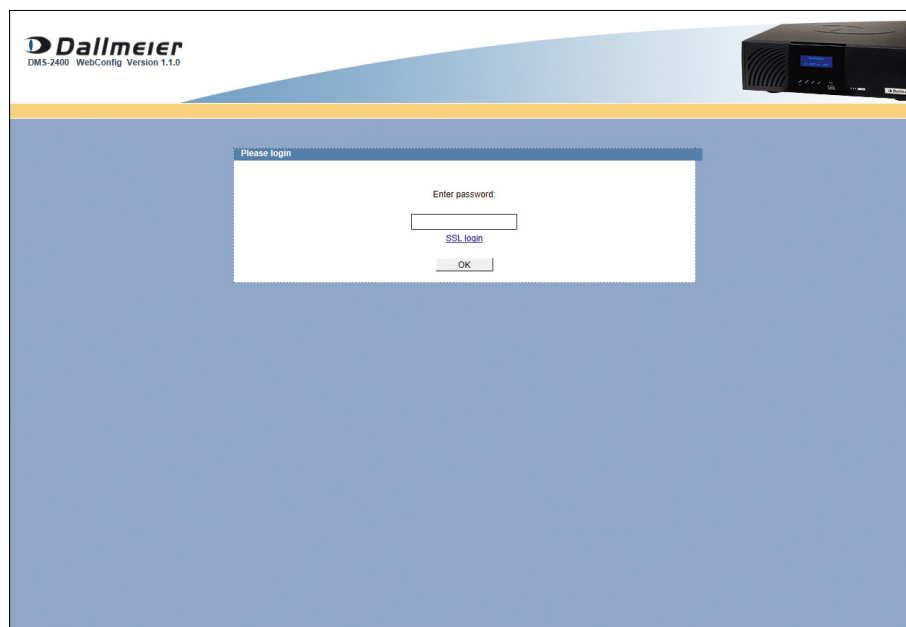


Fig. 3-12

- Enter the password and confirm with **OK**.

The WebConfig surface of the SMAVIA Recording Server appliance is displayed.

- Open the **LAN Data Interface** dialogue via the **LAN Data Interface** button.

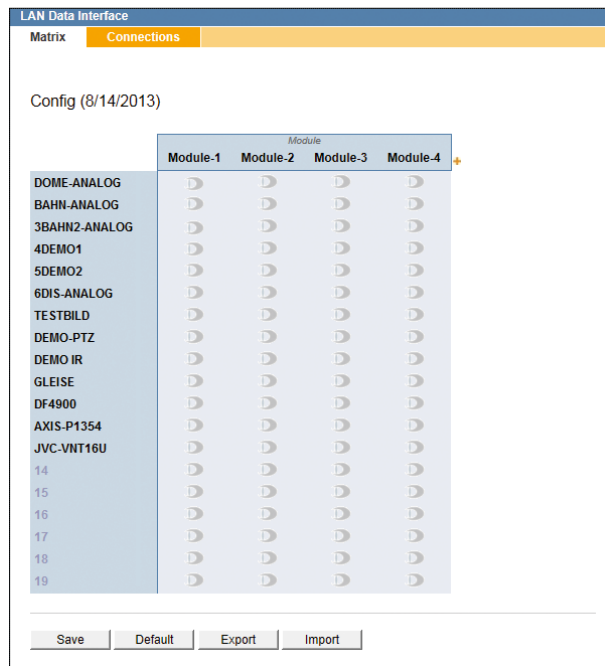


Fig. 3-13

On the left side are the active cameras of the SMAVIA Recording Server appliance, above the line of the external modules.

External systems are preconfigured with the term "Module". The name can be changed and adapted (see section "[Change Names](#)" on page 20).

3.3.2 Add Modules

- Select the **Matrix** tab.
- Click the **+** button in the line of the external modules.

The **Add new source** dialogue is displayed.

LAN Data Interface

Matrix Connections

Config (9/9/2013)

Add new source

Group name: Module

Source name:

Source id:

OK Cancel

Fig. 3-14

- Select the **Module** entry from the **Group name** dropdown box.
- Enter the name of the new module as **Source name**.
- Enter a number sequence as **Source id**.
- Confirm with **OK**.

The line of the external modules is extended with the new entry.

LAN Data Interface

Matrix Connections

Config (9/10/2013)

	Module-1	Module-2	Module-3	Module-4	Module-5
DOME-ANALOG					
BAHN-ANALOG					
3BAHN2-ANALOG					
4DEMO1					
5DEMO2					
6DIS-ANALOG					
TESTBILD					
DEMO-PTZ					
DEMO-IR					
GLEISE					
DF4900					
AXIS-P1354					
JVC-VNT16U					
14					
15					
16					
17					
18					
19					

Save Default Export Import

Fig. 3-15

- Proceed as described above to add more modules.

3.3.3 Connect Modules with Cameras

- Select the **Matrix** tab.
- Click on the appropriate link point to connect a camera with a module.
- Proceed analogue to connect additional cameras and modules.

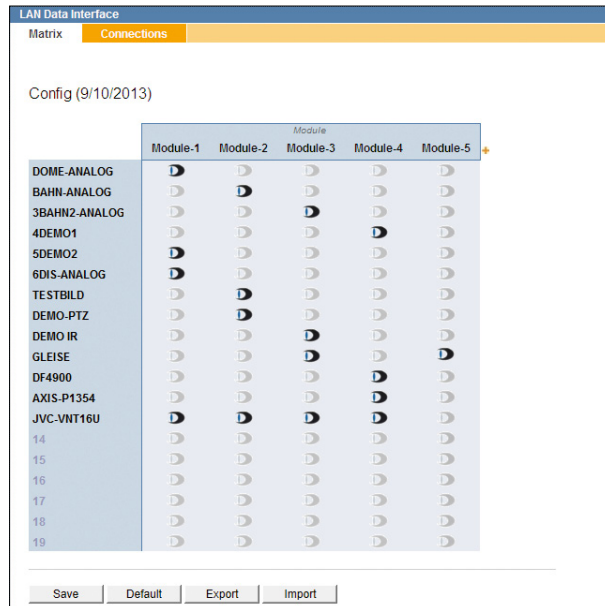


Fig. 3-16

In order to evaluate the data on different video sequences, multiple cameras can be assigned to a module.

- Click the **Save** button in order to save the settings.
- Select the **Connections** tab.

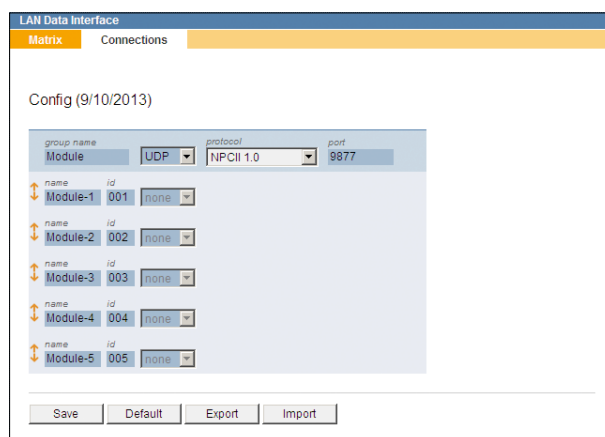


Fig. 3-17

- Select **NPC 1.0** as **protocol**.
- Enter the required **port**.
- Enter the ID of every module in the **id** field.
- Finally, click the **Save** button in order to save the settings.

3.3.4 Remove Modules

Modules can be removed again.

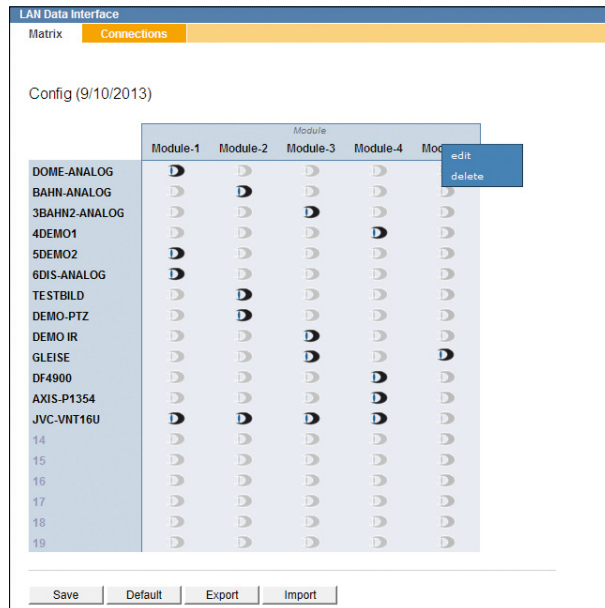


Fig. 3-18

- Click in the line of the external modules to the required module.

The context menu is displayed.

- Click the **delete** button.
- Confirm the subsequent info dialogue.

3.4 Change Names

For AWEK POS systems the term **Kasse** is preconfigured for other systems the term **Module**. These can be individually modified and adapted.

- Select the **Connections** tab.
- Click the required module / the required POS.

The text cursor is displayed.

- Enter a new name.
- Proceed analogue to customize other names.
- Finally, click the **Save** button in order to save the settings.

3.5 Edit Settings

Settings can be saved and restored on the bottom button bar. In addition, the settings of the LAN Data Interface can be set back to the original default settings.

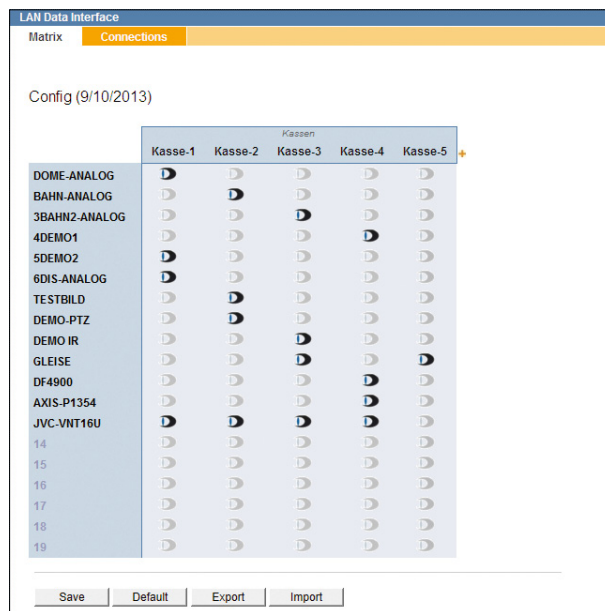


Fig. 3-19

Save Settings

Settings can be saved on the **Export** button.

- Make the required settings as described above.
- Click the **Export** button.
- Follow the subsequent export dialogues.

Restore Settings

- Click the **Import** button.
- Use the file manager to select the required file and import it.
- Finally, click the **Save** button in order to save the settings.

Reset to Default

With the **Default** button, the settings can be reset back to default.

- Click the **Default** button.
- Confirm the subsequent info dialogue.

The default settings are restored.

4 Evaluation

The evaluation (live or playback) of the data and video sequences can be made directly to a SMAVIA Recording Server appliance with LocalViewing. Over the network the evaluation can take place with the SMAVIA Viewing Client.

4.1 SMAVIA Recording Server

On SMAVIA Recording Server appliances of the DMS 2400 and DLS 1600 series the evaluation can take place on the device.

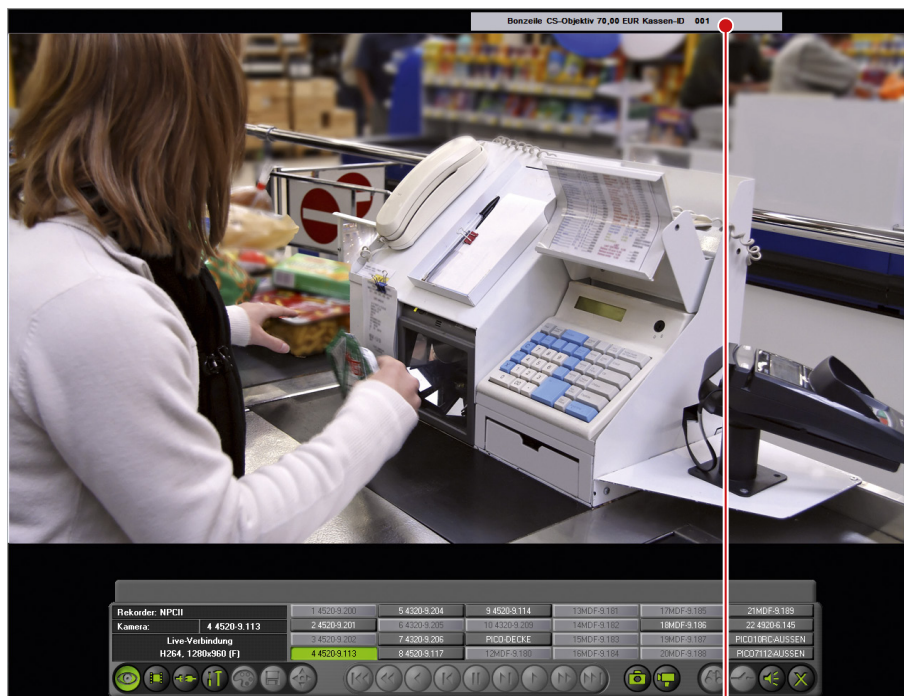
4.1.1 Live

The data can be displayed in the live image.

Note therefore the documentation "Operation" for SMAVIA Recording Server.

➤ Click the required camera button.

The live image is displayed and the button of the corresponding camera lights green.



Info field data

Fig. 4-1

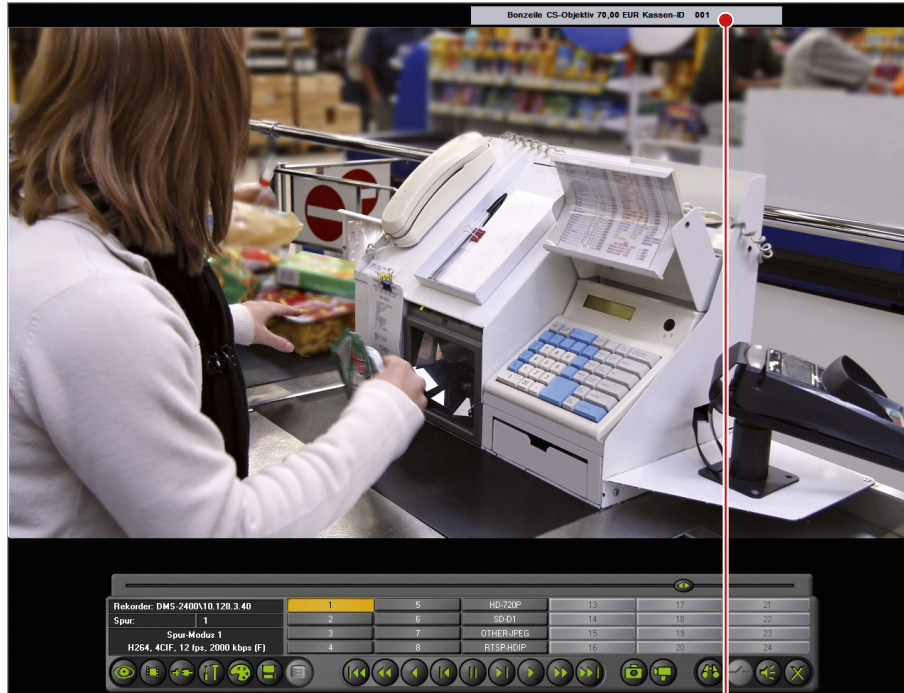
The data are continuously displayed in an info box on the live image.

4.1.2 Playback

Note therefore the documentation "Operation" for SMAVIA Recording Server.

- Start the playback of the required track / camera.

The last image of the track is displayed and the button of the corresponding track / camera lights orange.



Info field data

Fig. 4-2

The data are continuously displayed in an info box on the live image.

- Control the playback with the corresponding buttons.

4.1.3 Search

The **Extended Search** allows to find specific data criteria. The criteria can be specified in the **Search Items** dialogue (see section "[Search Criteria](#)" on page 9).

Note therefore the documentation "Operation" for SMAVIA Recording Server.

- Click the **Search functions** button.
- Select the **Extended search** tab.



Search functions button

Fig. 4-3

- Make the required settings.
- Click the **Search** button.

4.2 SMAVIA Viewing Client

The SMAVIA Viewing Client allows to display and evaluate the data (live and playback) in a double split window over the network. Therefore, the client and the SMAVIA Recording Server appliance must be configured first.

4.2.1 Configuration

SMAVIA Viewing Client

- Start the SMAVIA Viewing Client.
- Enter the user name and the password.
- Open the Configuration dialogue via **Program > Configuration**.
- Select the **General** tab.

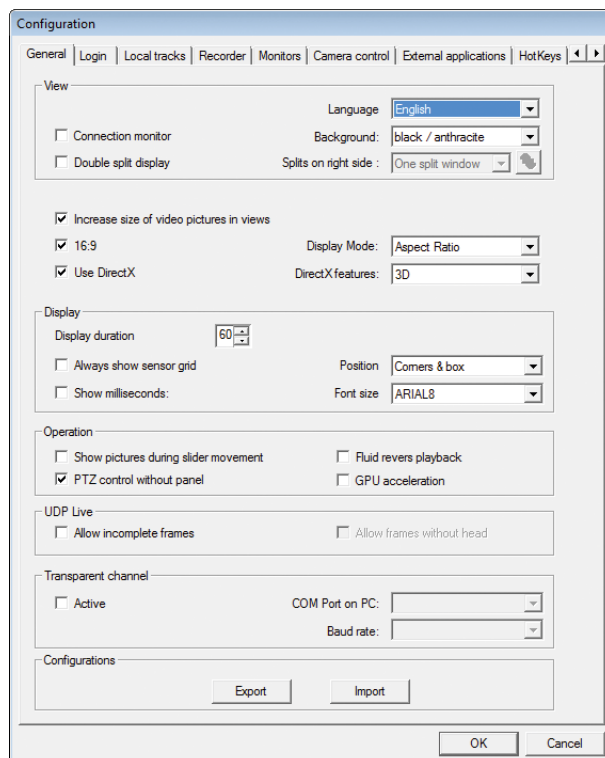


Fig. 4-4

- Enable in the **View** section the **Double split display** option.

- Select from the **Split on right side** dropdown box the **Data split** entry.
- Click the **OK** button in order to save the settings.

SMAVIA Recording Server Appliance

- Open the Recording Settings dialogue via **Setup > Recording > Cameras / Tracks**.

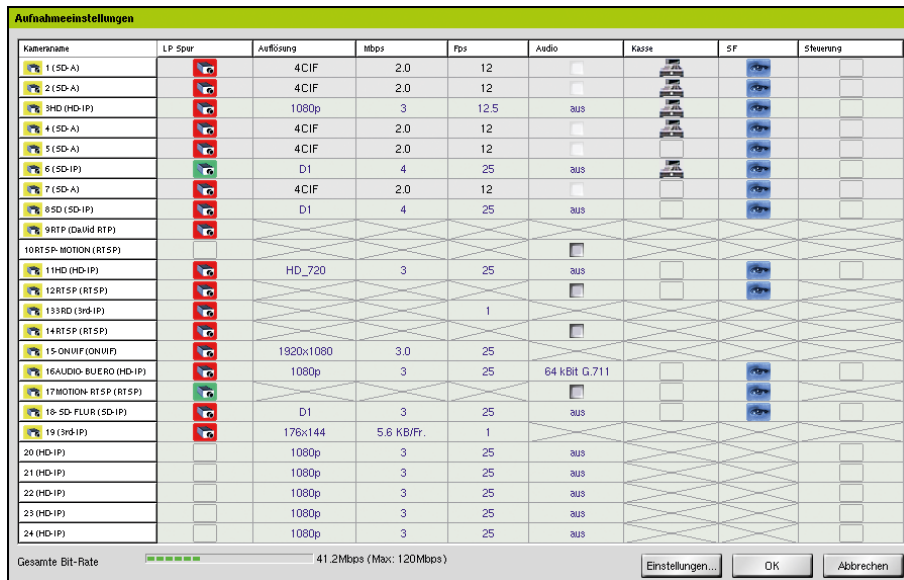


Fig. 4-5

- Click the **POS** column of the required camera.

The POS icon will be displayed in the **POS** line of the corresponding camera.

- Right-click on the camera button in the **LP-Track** column of the corresponding camera.

The **Camera Setup** dialogue is displayed.

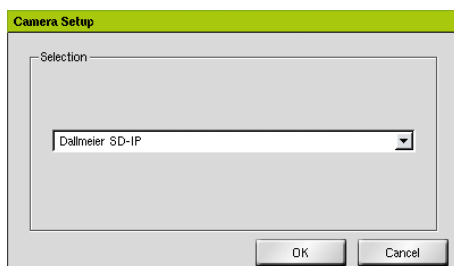


Fig. 4-6

- Select the relevant camera type if required.
- Click the **OK** button.

The configuration dialogue of the camera is displayed.

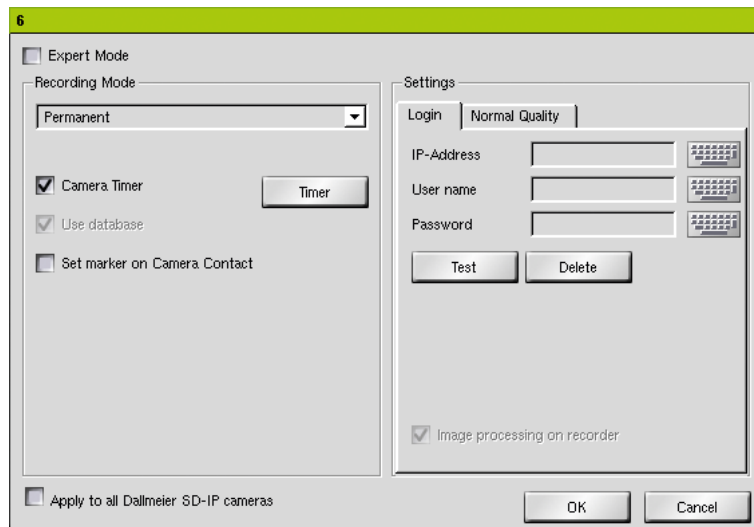


Fig. 4-7

- Select **Contact** as **Recording Mode**.
- or
- Select **Permanent** as **Recording Mode** and enable the **Set marker on Camera Contact** option.
- Set the **Pre-Event time** to **1 sec.**
- Set a **Frame Rate** at least of **10 fps**.
- Finally, click the **OK** button in order to save the settings.

The configuration for the data display in the double split window of the SMAVIA Viewing Client is complete.

4.2.2 Live

The data is displayed next to the live image in the double split window.

Note therefore the documentation “Operation” for SMAVIA Viewing Client.

➤ Click the required camera button.

The live image is displayed and the button of the corresponding camera lights green.

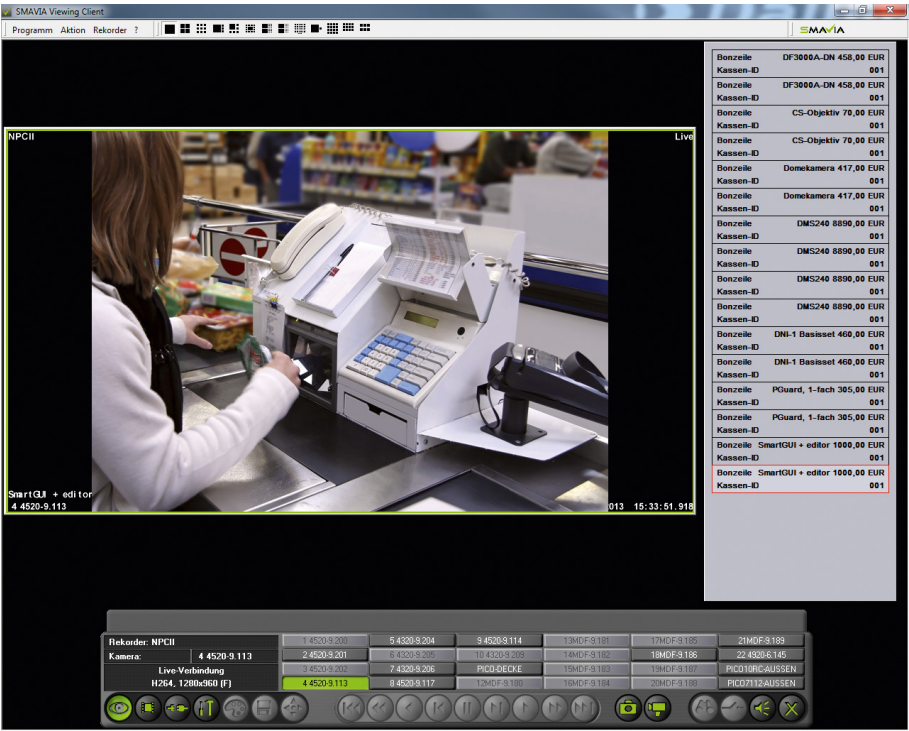


Fig. 4-8

The data are displayed in the split window.

4.2.3 Playback

Note therefore the documentation “Operation” for SMAVIA Viewing Client.

- Start the playback of the required track / camera.

The last image of the track is displayed and the button of the corresponding track / camera lights orange.

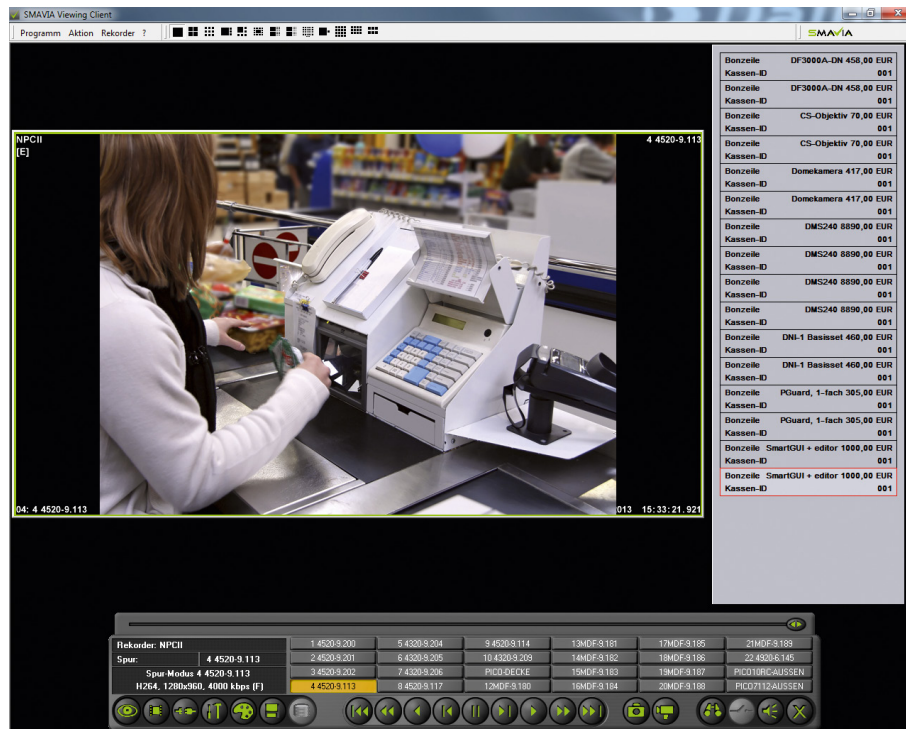


Fig. 4-9

The data is displayed in a split window to the right of the playback.

- Control the playback with the corresponding buttons.

4.2.4 Search

The **Extended Search** allows to find specific data criteria. The criteria can be specified in the **Search Items** dialogue (see section “Search Criteria” on page 9).

Note therefore the documentation “Operation” for SMAVIA Viewing Client.

- Click the *Search functions* button.
- Select the **Extended search** tab.



Search functions button

Fig. 4-10

- Make the required settings.
- Click the **Search** button.