



User Manual

CamIQ® 8.0

06.02.2023 / 8.0.4

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Errors, changes and omissions excepted.

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1 INTRODUCTION CAMIQ 8

1.1 SYSTEM REQUIREMENTS

Minimum requirements are depending on configuration/ cameras and activated modules/ options.
Recommended platform [Minimum requirements for standard version without options in brackets]

- Microsoft® Windows 11 & 10, Windows Server 2022 & 2019 (21H2)
- Intel® Core™ i5-11500 Processor, 4,6 GHz [Intel® Atom N2800, 1,8 GHz or better]
- 8 GB RAM [2 GB RAM]
- Graphics card for Full HD resolution [minimum 1280x1024], (dual head recommended for Adv. & Enterprise Client)
- 1 GB free hard disk space for installation
- Installed TCP/IP network
- 1 USB port for dongle for Enterprise Client (optional, provided that no extension modules are in use.)

Additional for CamIQ Server

- Additional hard disk space depending on required recording time (typical min. 250 GB per camera)
- 1 USB port for dongle (optional for online licenses)

Please note: Additional information about system & hardware requirements as well as compatibility can be found in the FAQ area on our website: **www.camiq.net**

The use of this software is subject to the corresponding End User Licence Agreement (EULA) of rosemann software GmbH. The End User Licence Agreement can also be found on the internet at www.rosemann-software.de.

Please read the End User Licence Agreement before installing and using the software.

1.2 TECHNICAL SUPPORT

If you have any questions or do you need help for the installation, do not hesitate to contact our technical support.

E-Mail: support@camiq.net

Serviceline: +49 (0) 431 799 699-20

2 CAMIQ 8 SATELLITE

2.1 PRODUCT DESCRIPTION

Thank you for having chosen this high-quality software product. It allows the convenient recording and evaluation of images from sources such as camera servers and cameras.

The server module enables multi-user simultaneous access to the management software, allowing live image display and the evaluation of permanent tracks as well as alarm entries. Commonly available IP camera types and camera servers can be used as image sources; tilt swivel camera models can be employed as well. A specially patented panel control field has been integrated to regulate the control of standard network cameras.

In addition to its recording functionality, the software supports alarms via motion detection, the control of relays, manual recording, professional alarm processing functions (alarm actions), live image recompression for the evaluation of narrow-band connections (ISDN or UMTS, for example) and many other useful functions which will be covered in this manual.

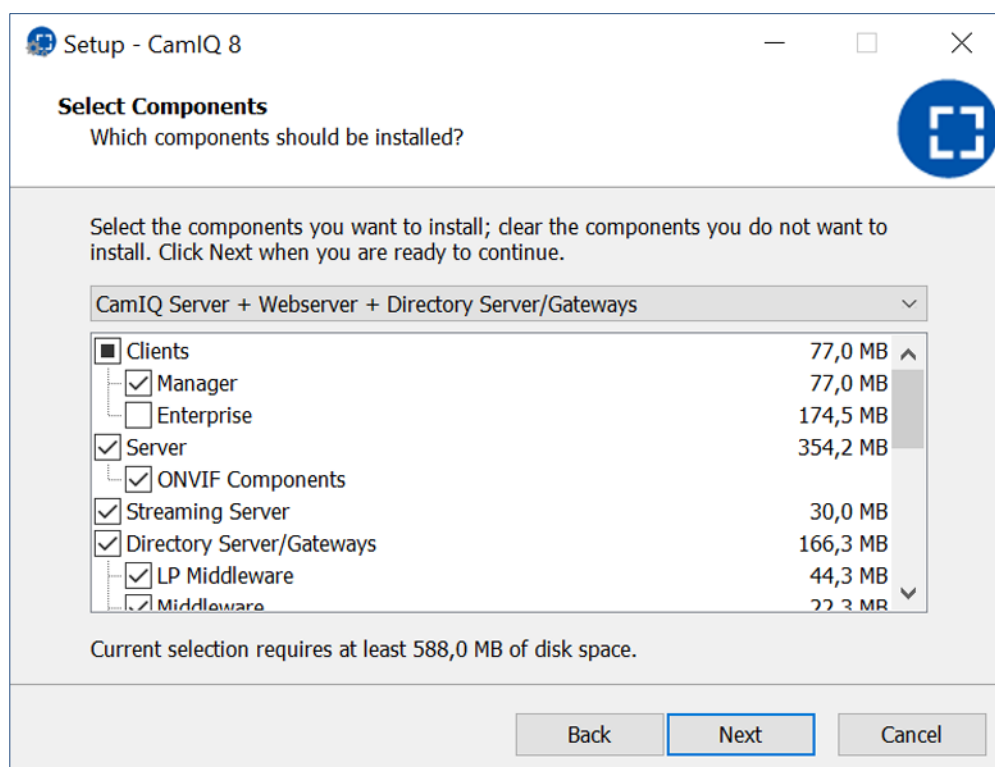
The evaluation software can run on PCs in the background and will automatically be switched on in case of an alarm event (configurable). Moreover, it is possible to integrate the server module within higher-level software applications and thus create the basis for setting up very large video units.

We have incorporated all of our expertise as well as many years of experience in the area of video surveillance into this product. In our view, the user interface provides the optimal compromise between easy operation and installation while also effectively covering all of the real-life demands in actual practice. Thus, we hope that you will experience the handling and operation as smooth and simple while fully meeting your demands for a truly professional video surveillance system.

2.2 INSTALLATION

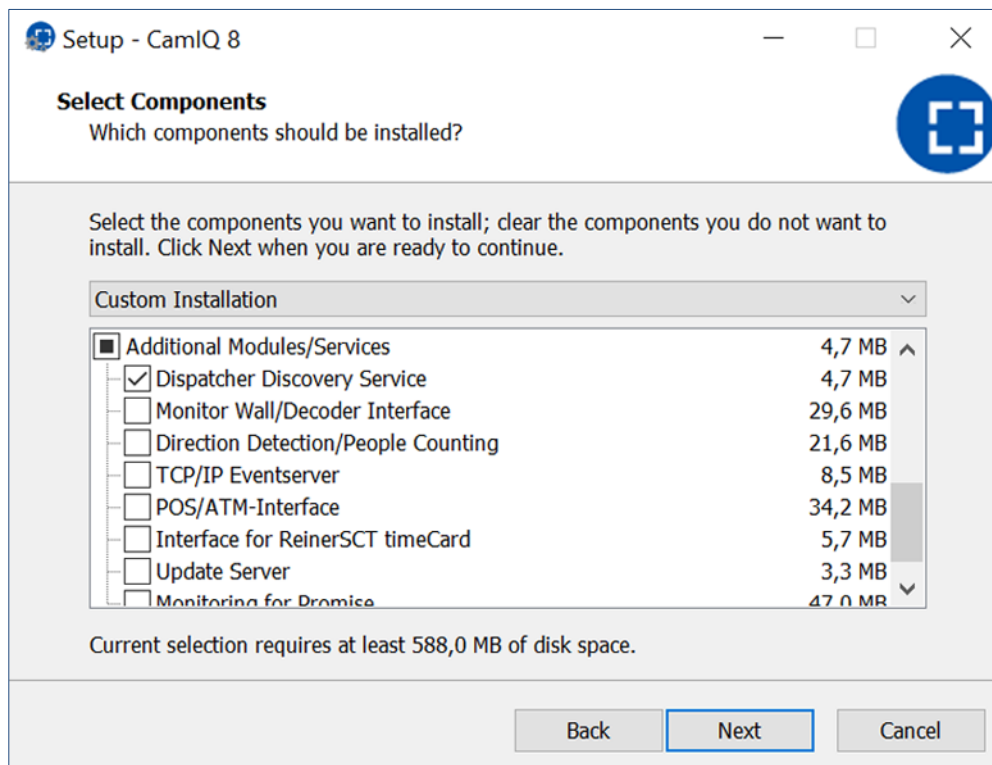
2.2.1 CamIQ Server Installation

- Please download the current CamIQ Version from our website (www.camiq.net) and start the "Setup.exe". This is a typical Windows installation procedure similar to those that you are most likely already familiar with. Simply follow the installation instructions presented on the screen.
- Before the data is written to your hard drive, you can select the type of installation desired from the menu.
Please select the type of installation.



- Confirm your selection with a click on "Next". The installation will continue from here. Simply follow the instructions as seen on the screen until the installation is complete.


Please note: The "Custom Setup" option should only be used by informed technical staff. It offers the possibility of changing the installation path and installing further special device drivers.



- In the „Modules“ section you can install additional modules, e.g., CamIQ Direction Detection, CamIQ POS/ATM Interface or update services
- Furthermore, you can determine if the Web Client should be installed.
- Activate the "TCP/IP-Alarms" module in order to install a TCP/IP interface for alarms.
- Select the “Middleware/Web Client” in order to install the middleware needed for access to the server using a browser.
- In the “Clients” section you can select whether the Manager should be installed or not. CamIQ Enterprise can also be installed.

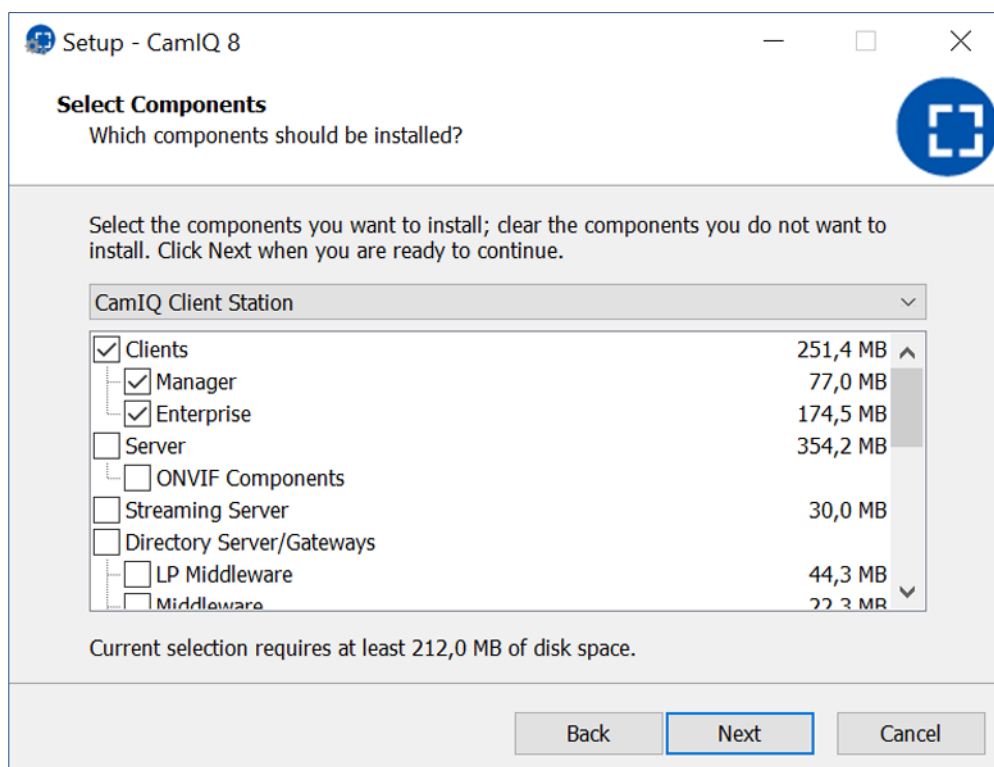
2.2.2 License Activation

License activation automatically takes place in CamIQ during the order process. As part of the delivery you will receive a listing of everything that has been activated as an .pdf and .xml file.

Report for Dongle 100-300003-B7			
Dongle Information		Date: 22.06.2015	
Comment:			
Activations			
Art.-No.	Description	Licence Number	Activation Code
20001	CamIQ	██████████	██
End-User Registration			
CamIQ-ID:	10000	Street:	Fraunhoferstr. 13
		Street (2):	
Name/company:	rosemann software GmbH	ZIP:	24118
Name/company (2):		City:	Kiel
Contact person:		State:	
Addition:		Country:	Deutschland

2.2.3 CamIQ Manager Installation

- Download the current CamIQ version from the website www.camiq.net and run the “setup.exe” file.
- This is a typical Windows installation procedure similar to those that you are most likely already familiar with. Simply follow the installation instructions presented on the screen.
- Before the data is written to your hard drive, you can select the preferred type of installation from the menu.

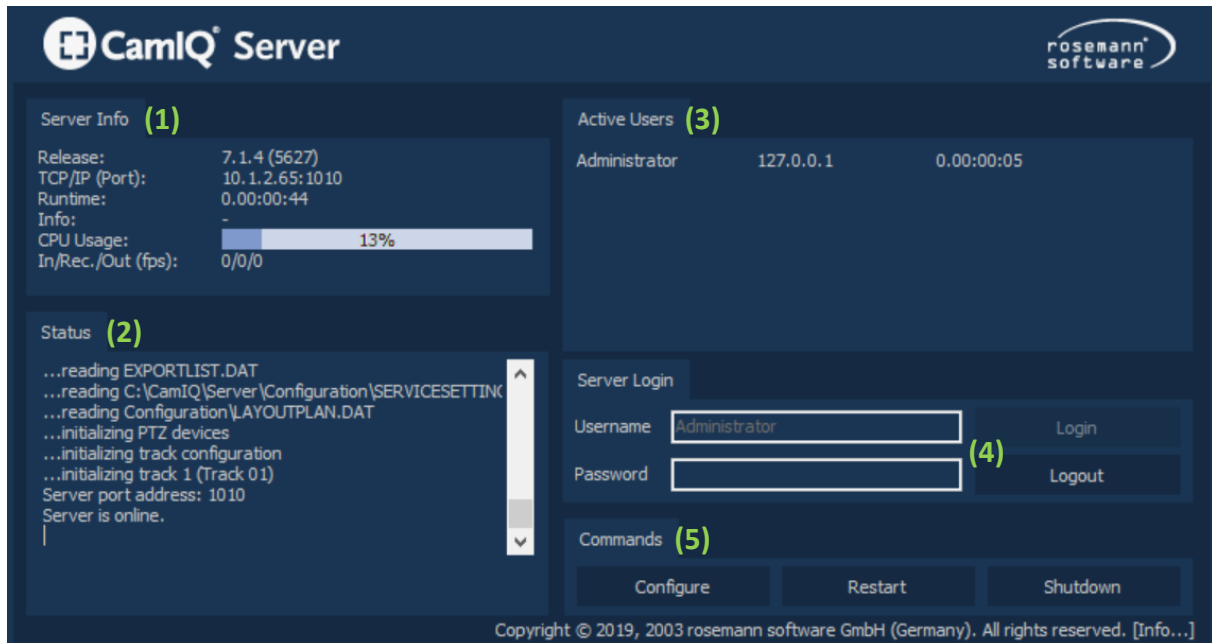


- Select the CamIQ Client installation.
- Confirm your selection with a click on "Next". The installation will continue from here. Follow the instructions as seen on the screen until the installation is complete.

2.3 THE CAMIQ SERVER

The CamIQ server is the central unit. The server receives and decodes the video data, records it and forwards it to connected clients.

With Windows 7 services can't interact with the desktop. According to this the surface of the CamIQ Server is only visible, if it is used as an application.



2.3.1 Server Information

Various items of information concerning the current operating status of the server are displayed in the "Server Info" area (1):

- The software version of the server application
- The TCP/IP address and the port in use
- The operating time (runtime)
- The current processor workload
- The number of pictures the server receives, records and forwards to client systems per second

2.3.2 Status

The status display (2) shows you the protocol of the executed server processes - the initialization of a track, for instance.

2.3.3 Active Users

Under "Active Users" **(3)** you will find a record of all connected users along with their IP addresses and the duration of their connections.

Please note: In the basic version a maximum of 5 users can be connected simultaneously.

2.3.4 Server Login

In order to activate the buttons in the "Commands" area **(5)**, log in at the login screen **(4)** with a user account that has the right to log in at the server console (see chapter 0).

2.3.5 Commands

After you have logged in, you can operate the buttons **(5)**.

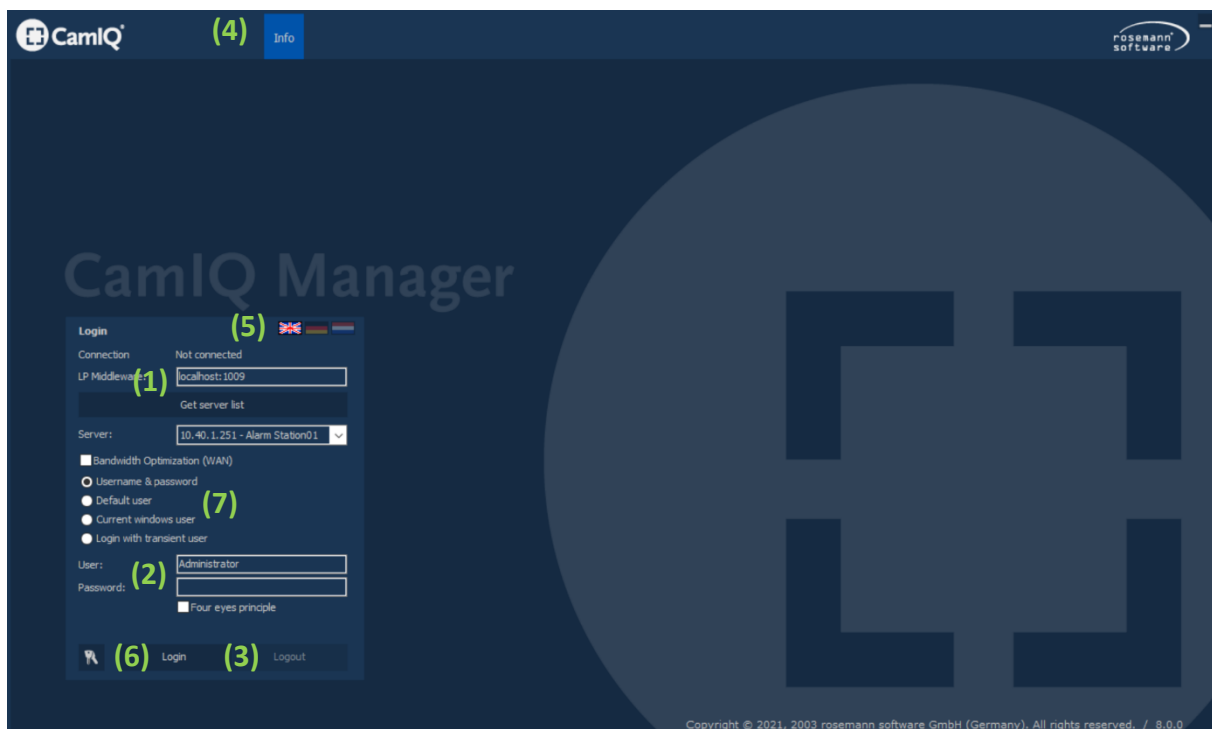
- By clicking on the "Configure" button, you can open the Manager.
- By clicking on the "Restart" button, you can restart the server application.
- The "Shut Down" button allows you to shut down the server application.

2.4 SYSTEM CONFIGURATION

Please note: When you configure the server from a client system, some options will not be available. You will only be able to access these when you operate the Manager directly at the server station. If an option is affected by this, it will be covered in the relevant chapter.

2.4.1 Login

Several options in the login screen are available to you.



- Under "Connection" (1), enter the IP address and the port of the LP Middleware at "LP Middleware". Now click on "Open server list" and select which of the CamIQ servers from this "Server" list you want to connect to.
- In order to log in, you must enter your valid account credentials in the "User" and "Password" fields (2).
The Manager supports the four-eye- principle for passwords which can be activated by clicking on the corresponding button.
- Additionally, you can activate the "Bandwidth Optimization (WAN)" by which the use of the Manager will be optimized (how to configure the bandwidth optimization will be covered in chapter 2.4.8.4).

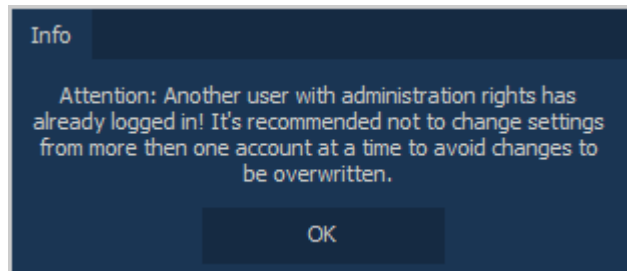
Please note: Only activate the bandwidth optimization in a WAN. It should remain deactivated in a LAN because the picture quality will be reduced.

- When using the four-eye-principle, two passwords are needed in order to connect. The use of this function requires that the user account in question has been configured with a corresponding four eyes password (see chapter 3.15).

Please note: After the installation, you can log in with the user name "Administrator" even without a password. For security reasons, please go to the "User" menu and change the administrator password as soon as possible (see chapter 3.15).

- Click on a desired flag **(5)** at any time to change the language accordingly.
- After entering all required data, click on "Login" **(3)** to log in.
- To log out, click on "Logout" **(3)**.
- By clicking on the **(6)** tool symbol you can change your current password (provided you have been granted the necessary permission by your administrator).
- You can choose between alternative login methods in area **(7)**:
 - Logging in with your standard browser: Enter a fixed user name for the value "StandardUserName=" in the config.ini file in the manager's configuration directory. With this login method the user name entered is applied automatically.
 - Logging in with the current Windows user: Use the active Windows login for authentication over a Windows Active Directory server. The application will require access to an AD server (requires an additional CamIQ license and compatible Windows versions). For detailed information please contact CamIQ Support.
 - Logging in with a temporary user: This type of login makes it possible to login by means of an ABI transponder. The prerequisite for this is a compatible ABI installation and an add-on module. For detailed information please contact CamIQ Support.
- You can return to this screen at any time to log out or change the language settings by selecting the tab "Info" **(4)**.

Please note: If a login is attempted with an incorrect password, the login will be disabled for 15 seconds after the 10th attempt.

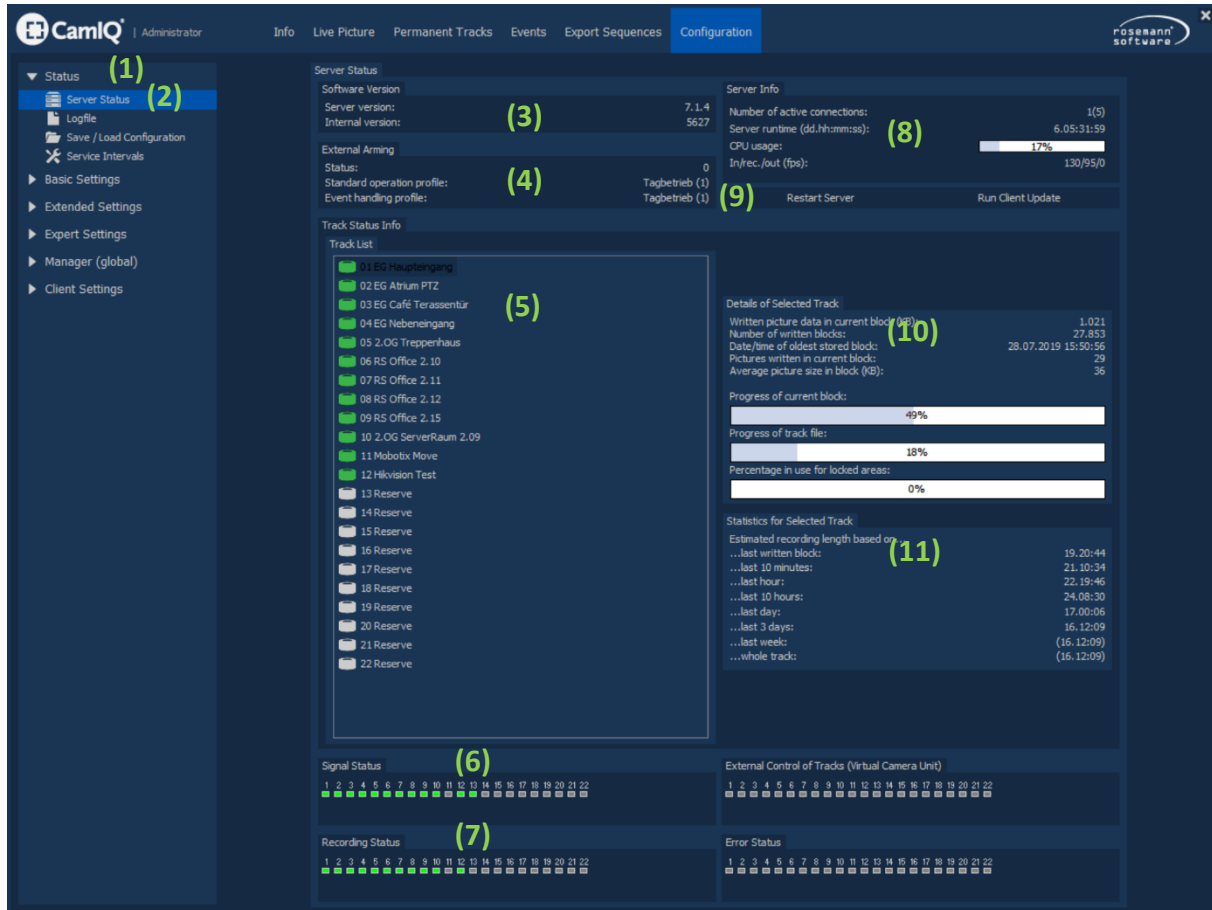


- If this message appears, it means that another user with server configuration rights is already logged in. Multiple users will not limit each other's activities but they should nevertheless coordinate their actions to avoid actions (i.e. configuration activities) that could unintentionally lead to incorrect user settings.

Once you are logged in, you can use the various tabs available to navigate to other Manager areas. To open the Manager's configuration section, select the "Configuration" tab.

2.4.2 Server Status

When you click on the "Configuration" tab, you gain access to the "Server Status" menu **(2)** within the "Status/Info" function group **(1)**. This menu serves primarily for diagnostic purposes.



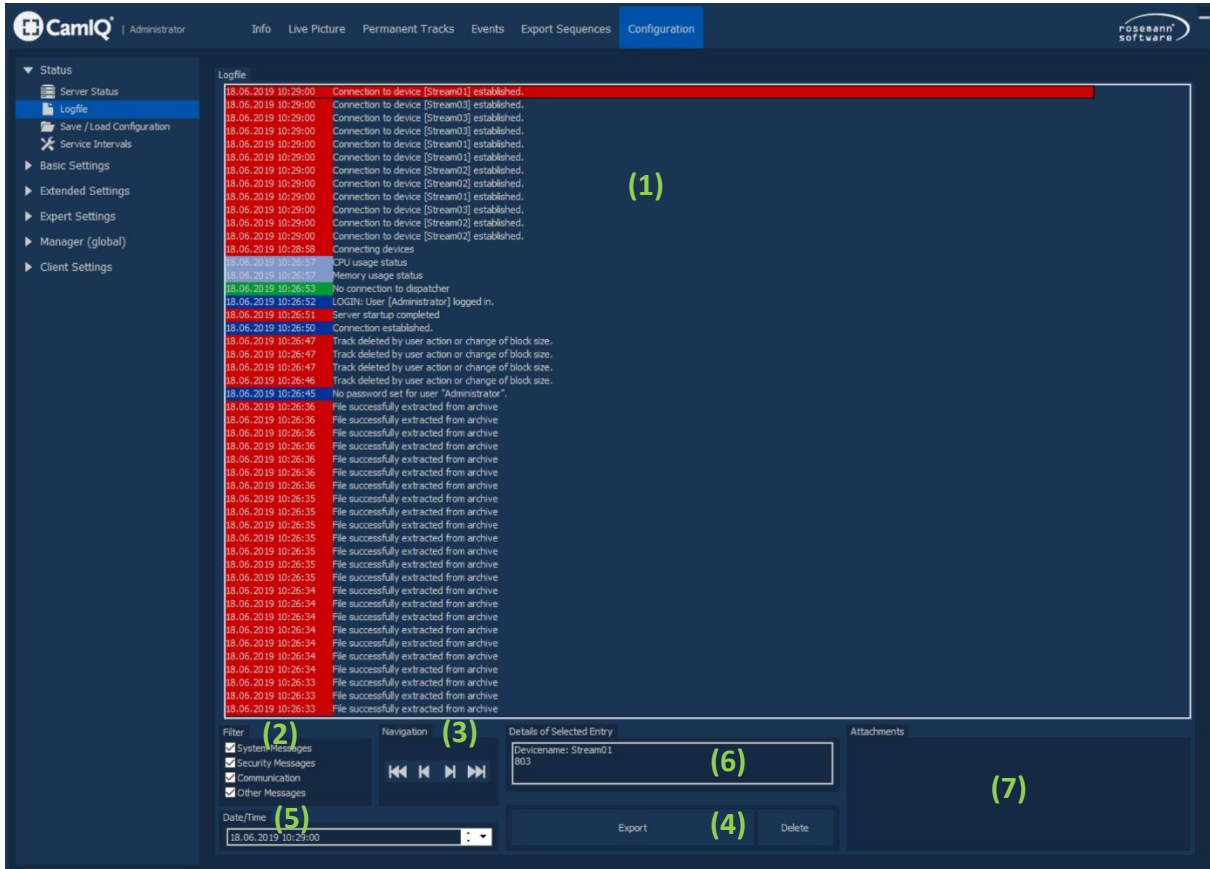
- The server application version is displayed under the item "Software Version" **(3)**. A "Server Version" and an "Internal Version" will be indicated; both refer to the server.
- In the "External Arming" section **(4)** (see chapter 2.4.13), the external arming status will be displayed. If the status is 0, then no arming contact has been established. If the status is 1, however, a contact has been made.
The numbers seen in connection with "Configuration for Standard Operation" and "Configuration for Event Handling" refer to the configuration settings in the menus "Standard Operation" (see chapter 2.4.9) and "Event Handling" (see chapter 2.4.10) and indicate which are currently active.
- All established tracks (see chapter 2.4.8.4) are displayed in the field "Track List" **(5)**.
- The line "Camera Status" **(6)** offers information concerning the analog connections assigned. Green indicates an occupied connection, gray indicates an open one.
- The line "Recording Status" **(7)** shows which tracks are currently being recorded. Green indicates an active recording while gray marks the tracks that are currently not being recorded.

- The information displayed in the field "Server Information" **(8)** is the same information that can be seen on the server console:
 - The number of users who are currently accessing the server (In front of the bracket you can see the number of users logged in who are using a user login subject to license. Within the bracket you can see the actual number of logged in users, including CamIQ system users who are exempt from licensing.)
 - The server runtime
 - The current CPU workload
 - The number of images the server is currently receiving, recording and forwarding to clients
- In field **(9)** you have the option of restarting the server or running the "Client Updater" to bring the Manager status up-to-date.
- When you select a track in the field "Track List" **(5)**, additional information about this track will be displayed in the section "Selected Track Information in Detail" **(10)**. The server displays the image data in graduated blocks:
 - The amount of image data in the current block in kilobytes
 - The overall number of blocks written to in this track (up to now)
 - The oldest unlocked image entry in the track
 - The number of images written per block in the track
 - The average block size in the track in kilobytes
 - The number of the current block

Furthermore, three progress bars furnish additional information about the track:

- The progress made writing the current block
 - The progress made writing the current image
 - The amount of the locked areas in proportion to the total track
- There is also an additional "Recording Statistics for the Selected Track" **(11)** item which can be selected in the "Track List" field **(5)**. These statistics evaluate the track's current recording duration. The longer the measuring period, the more exact the representation.

2.4.3 Protocol

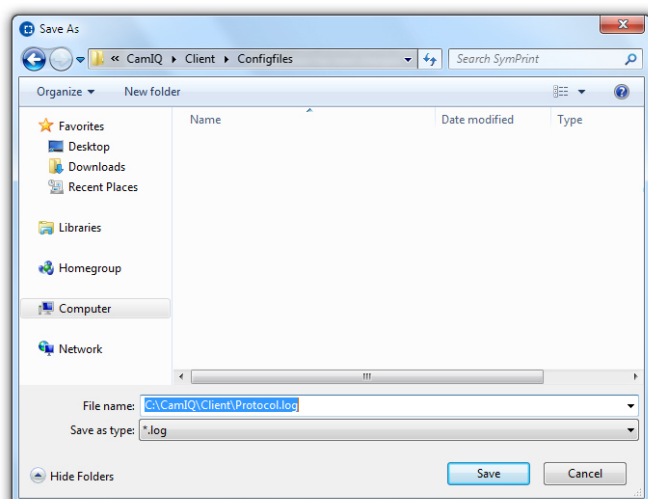


- The protocol messages (1) record all server processes.
- By setting filters (2) you can sort the messages in various ways. You can activate or deactivate the display of certain types of messages by clicking on the relevant button.
 - **System messages** (red) relate to the system, i.e. starting and shutting down the server.
 - **Security messages** (blue) deal with data security such as the locking or deletion of image data.
 - **Communication messages** (green) are concerned with questions of communication to other sites, the sending of e-mails, for example.
 - **Miscellaneous messages** (light blue) do not belong to any of the categories listed above and are, for the most part, status messages.

- Navigate through the protocol pages using the buttons in the "Navigation" field **(3)** (from left to right),



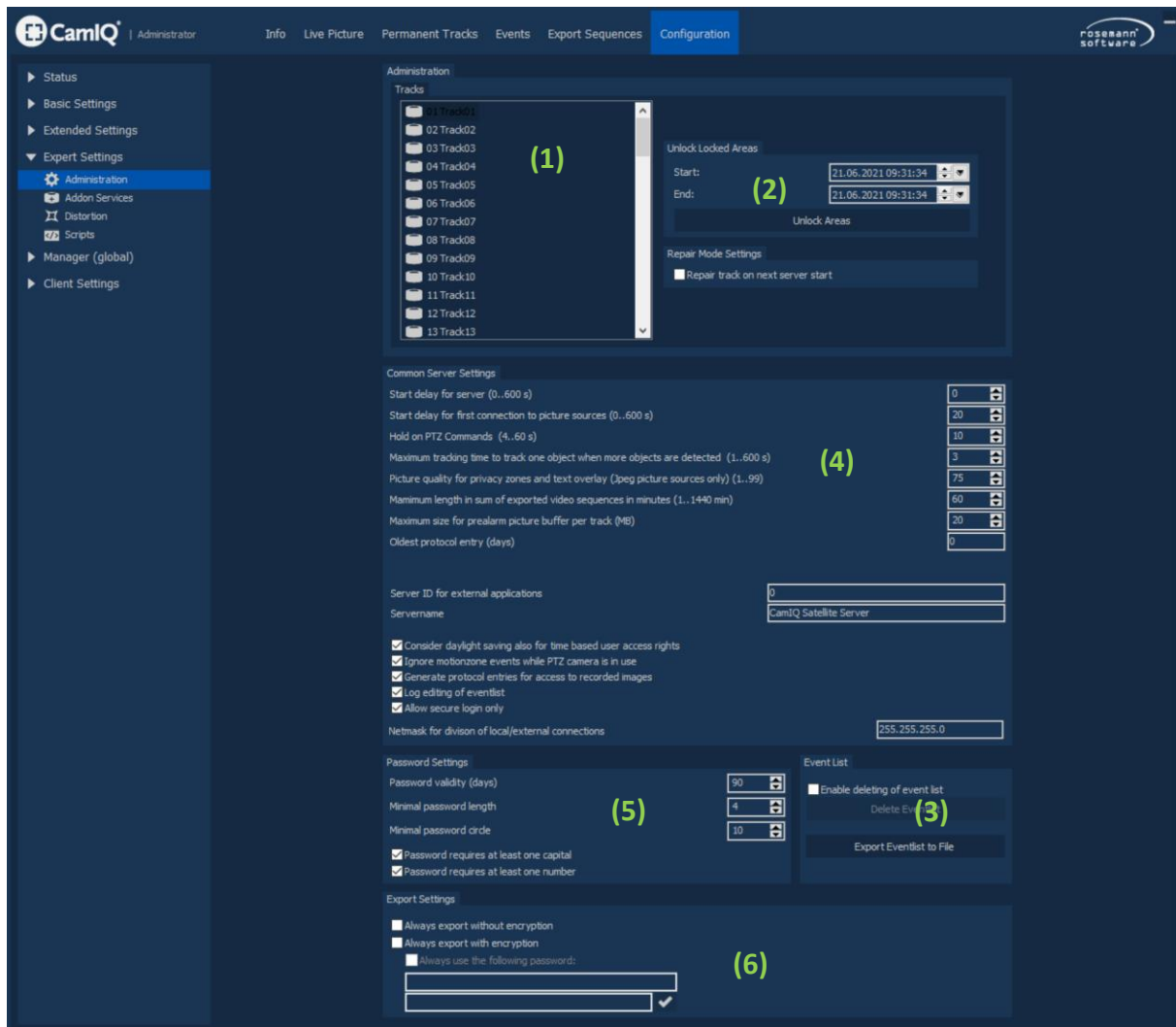
- To the first protocol page (the oldest entries)
 - One page backward
 - One page forward
 - To the last protocol page (the newest entries)
- These buttons **(4)** allow you to delete the protocol. The deletion of the the protocol will be logged as well. But they also allow you to export the protocol to a text file. To do this, you will be asked to select a location to save the file, file name and an file format (.log or .csv) for the exported protocol. Confirm your selection with a click on "Save" to export the protocol.



- In the area "Date/Time" **(5)** you can enter a date and a time in order to access specific protocol entries directly.
- When you select one of the protocol messages **(1)**, "Selected Entry Details" **(6)** will be displayed. This will provide you with additional information about every selected entry.
- If a data export has been selected in the protocol, an image preview of the export will be displayed to you in the "Attachments" **(7)**.

2.4.4 Administration

The Administration Menu allows you to unlock image data, export the Event List and make additional setting changes for the server.



- Certain areas of a recorded track can be blocked during operation to ensure that image data is not overwritten. In order to unlock these locked areas and free up storage space, first select the desired track from the track list (1).
- In area (2) you can enter a starting and an ending time. All locked video data within this time frame will be unlocked as soon as you select the button "Unlock Area."

Please note: If the locked image files are so old that they would have normally been overwritten through the rewriting cycle, unlocking them will lead to their immediate deletion.

- In the "Event List" menu (3) you can export the current event list as a text file (see chapter 2.7.3) using the "Export Event List" button. After the "Activate Data Deletion" button has been selected, you can delete the Event List with the "Delete Event List" button.

Carry out additional setting changes – as needed - under the item "General Server Settings" **(4)**.

- You can, for example, set the "Server Startup Delay" within a range of between 0 to 600 seconds. If the server application should start automatically after the server station startup, this function can be used to delay the application start until the server has started completely. For instance, only after all network services have successfully initialized.
- The option "Delay until Device Connections Established" performs a similar function. In this case, the application must wait a designated amount of time in order to allow the server to first establish connections to its registered image sources before starting.
- With the "Holding Period for PTZ Commands" function, the locking period for tilt and swivel operations with lower priority than the last operation carried out (manual control, for example) can be configured.
- With the "Maximum Holding Period for Tracking Objects with Other Objects in the Image" option, you can set the duration of focus on one object when another object is also visible in the image.
- Use the "Image Quality in Fade-Out Areas" function to reduce - through compression - excessively large image files which have been created using fade-out areas (see chapter 0).
- With the "Display Duration for Live Images during Alarms" function, you can arrange to have pictures from live cameras with deactivated live image settings (see chapter 2.4.9) displayed during an alarm. The duration of the display can be set to last between 1 and 3600 seconds.
- The "Maximum Overall Duration of Image Data Export (with limited rights)" option allows you to determine the maximum overall duration for exported material to users with limited image export rights.
- The "Factoring in Time Changes with Time-Limited Access Rights" function makes it possible for users with limited access rights on the day of the switch to summer/winter time to ignore the time change. For example, in the case where 5 hours of rearwards directed access have been configured, the full 5 hours of access time would be available for analysis despite a loss of one hour due to daylight saving time.
- By activating the "Recording Access Protocol" option, a protocol is established for any and all access to a recording.
- By activating the 'Log editing of events' option, you can get any event editing logged.
- If the check mark for 'Only encrypted login allowed' has been set, then only encrypted logins (digest authentication) will be permitted on the server. Outdated (insecure) login attempts will be rejected and noted accordingly in the record.

Requirements for the validity of passwords used on the server can be defined under item "Password Settings" **(5)**.

- With the "Password Validity (Days)" option you can define the number of days a password will be valid. Once the validity date has expired, the user is no longer entitled to use this password at login. Provided the user has been given the "Change Password" right, he or she will be able to change the password after the validity date has expired.
- The "Minimum Password Length" entry indicates the minimum number of characters a password must have to be allowed.
- "Minimum Interval Between Identical Passwords" determines how many successful password changes must have taken place before a password can be used again.
- If the "Password Must Contain At Least One Capital Letter" option is selected, only passwords containing at least one capital letter will be accepted.
- If the "Password Must Contain At Least One Digit" option is active, only passwords containing at least one digit will be accepted.

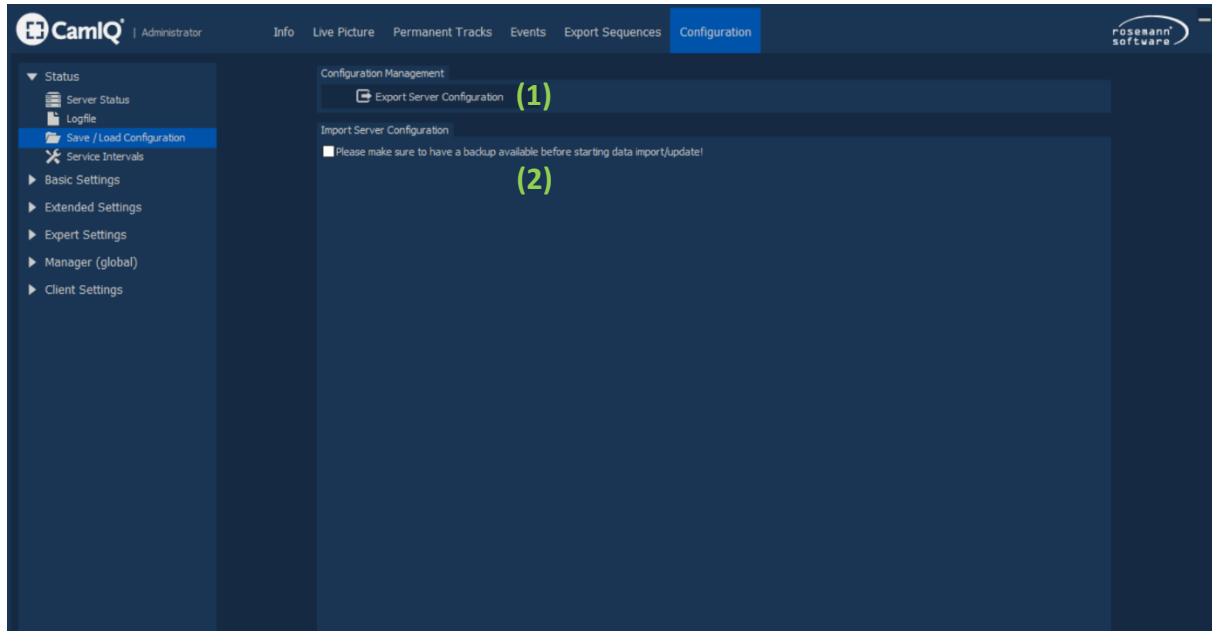
Please note: This menu should only be accessed by administrators. As indicated in the name, it is not meant for regular users. Please be sure to take this to heart.

In the section "Export settings" **(6)**, you can define standard rules for exporting operations.

- The "Always export without encryption" option ensures that no option for encrypted export will be offered during the export process. Instead, every export operation will always be carried out without encryption.
- The option "Always export with encryption" ensures that no option for unencrypted export will be offered during the export process. Instead, every swap operation will always be carried out encrypted.
- Furthermore, the "Always export with encryption" variant offers the additional option of storing a predefined password. All exports are then exported in encrypted form with the predefined password.

2.4.5 Saving/Loading

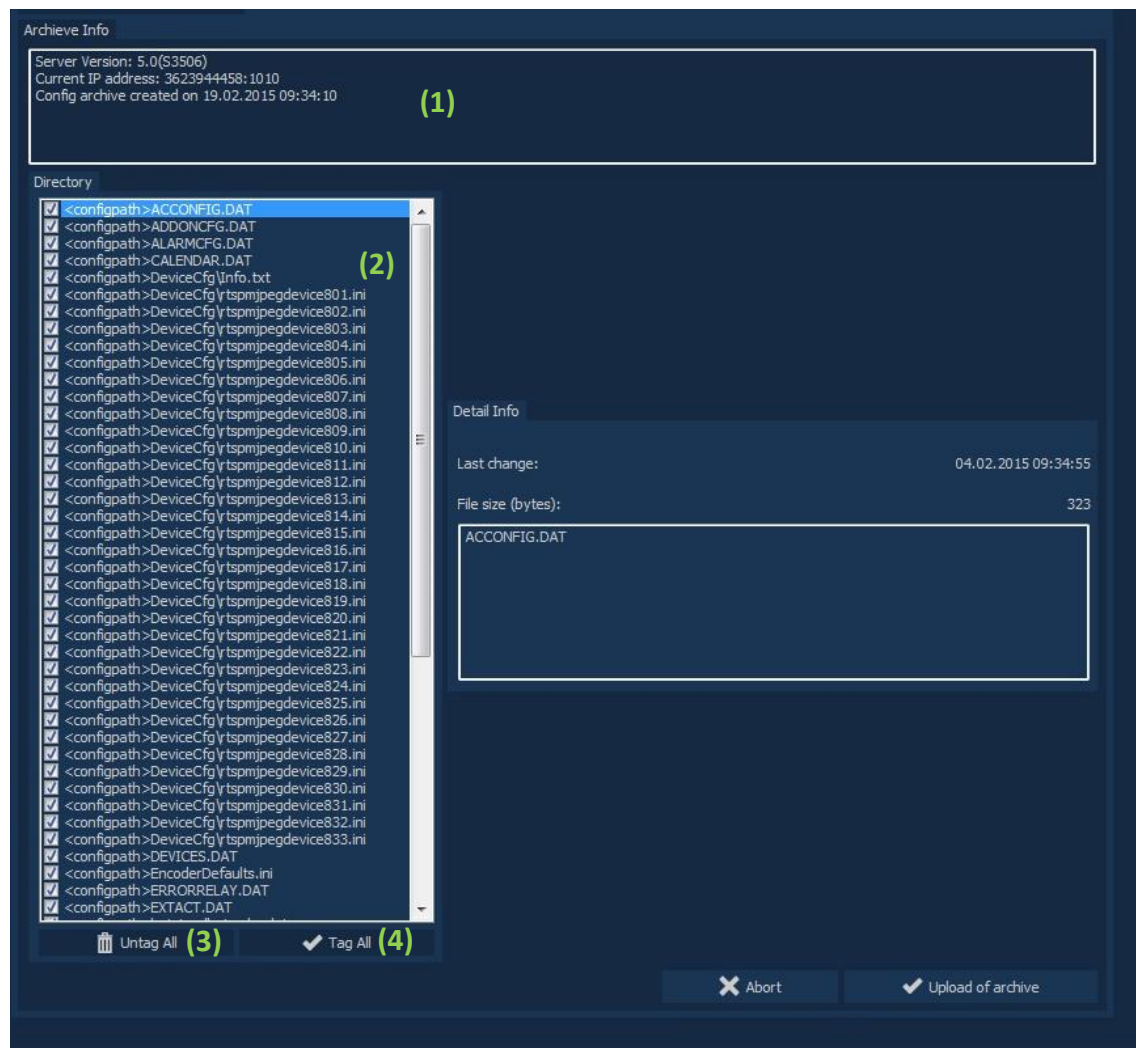
In the "Saving/Loading" menu, you can export and import the server configuration.



- To use the "Data Export" function, click on the "Export Server Configuration" **(1)** button. The following window appears in which you are asked to enter a file name and location. A file name with the date and program version number will be suggested by the program. Confirm your entries by clicking on "Save".

Please note: It is advisable to accept the suggested file name because the version number is included in the entry!

- To import a configuration file, first – within the "Import Server Configuration" area **(2)** – activate the button indicating that you should backup your current configuration before importing the new configuration! Then click on the "Load the Archive File" button. A window appears in which you are requested to select a configuration file. Confirm your selection and click on "Open".



- After that, the information related to the selected configuration file appears in the menu:
- You can see with which server version the configuration file was created in the „Archive Information“ area (1). Please compare this server version with the version you are currently using! They should correspond; otherwise this could lead to your server not functioning properly anymore! In addition, you can see on which day the file was generated.
- Various configuration components will be displayed under the "Table of Contents" item (2). You can activate or deactivate any of the elements you see by placing or removing a check in the appropriate box. You can also use the buttons "Untag All" (3) and "Tag All" (4).

- Specifically, the components stand for the following configuration areas:

ACCONFIG.DAT:	Configuration for establishing the active connection
ALARMCFG.DAT:	Event handling
CALENDAR.DAT	Calendar
DEVICES.DAT:	Devices/Image sources
ERRORRELAY.DAT	Error relay
EXTACT.DAT:	External arming
LICENCES.DAT:	License

Please note: Make certain that you deactivate this entry if you plan to use the configuration file on a device other than the one on which the configuration file was generated!

MESSAGING.DAT:	E-Mail
MOTDET.DAT:	Alarm zones
PERMANENT.DAT:	Standard operation
PRIVACYZONES.DAT:	Private zones
PTZSERIAL.DAT:	Standard network cameras and tracking
SERVICESETTINGS	The menu service
TRACKADV.DAT:	Further track settings
TRACKS.DAT:	Basic track settings
USER.DAT:	Users

Warning: Make sure to always load the files DEVICES.DAT and USER.DAT together! Both files are dependent upon each other for technical reasons. Loading only one of the two files can lead to a system failure!

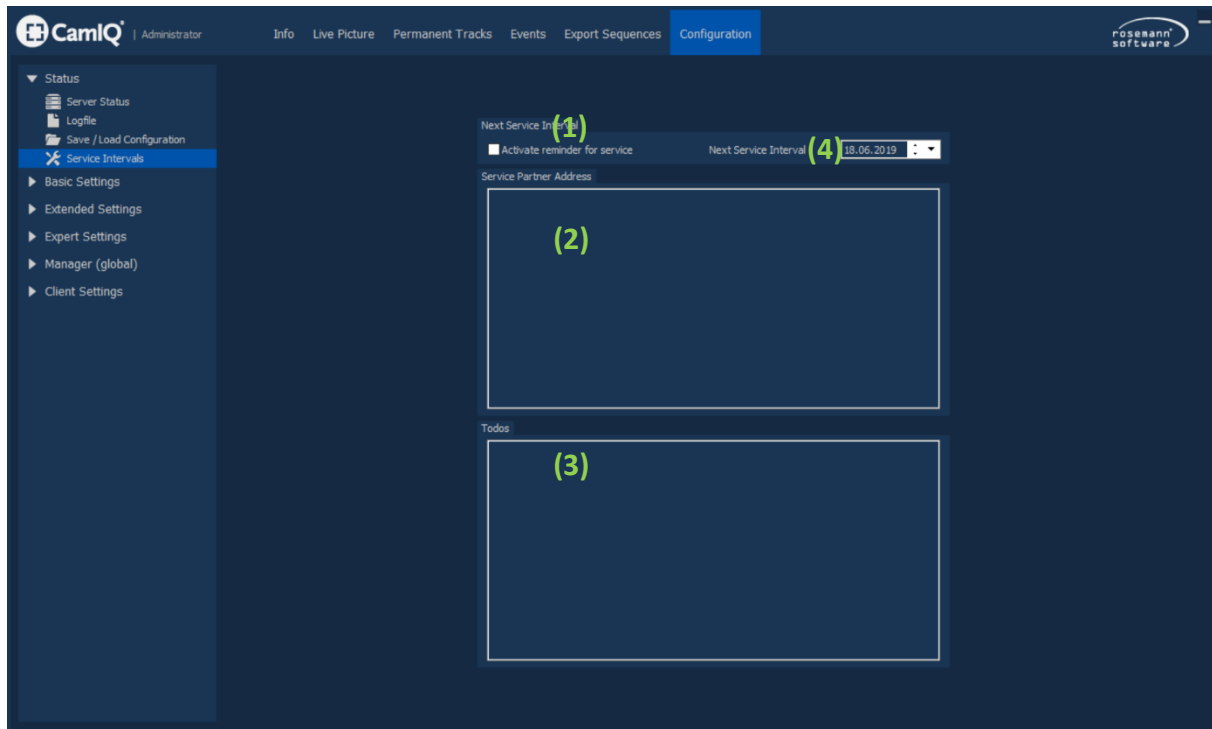
- After the configuration has been loaded, the server must be restarted. It is possible that the server will take longer to start than usual. Do not shut off the computer during the loading process!

Warning: Exporting and importing configuration data should only be done with the same software versions!

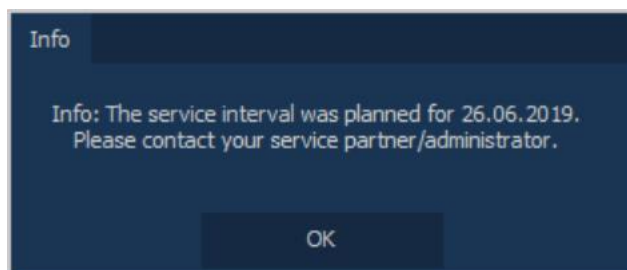
Warning: The LICENCES.DAT file can only be imported when the exported configuration stems from the same device which is now importing it! Or to put it more precisely: The LICENCES.DAT file is linked to the dongle. If another dongle is connected to the computer, the licenses will no longer be accepted!

2.4.6 Service

Smooth performance can be guaranteed only when hardware maintenance is carried out regularly. For this reason, the Manager offers you the option of entering the next service appointment along with a description of the work that is to be carried out; the user will be notified when the appointment date has arrived.



- You can activate the reminder function in the "Next Service Interval" field **(1)** as well as enter the appointment date **(4)**. When the service appointment is due or exceeded, the date display turns red.
- Enter the address of the servicing company that will be doing the maintenance work in the "Service Partner Address" field **(2)**.
- In the "Todos" **(3)** field, you can enter what type of work should be carried out at this time. This way the technician in charge knows precisely what is to be done and can undertake comprehensive maintenance.
- The reminder message appears on the due date after the user has logged in.

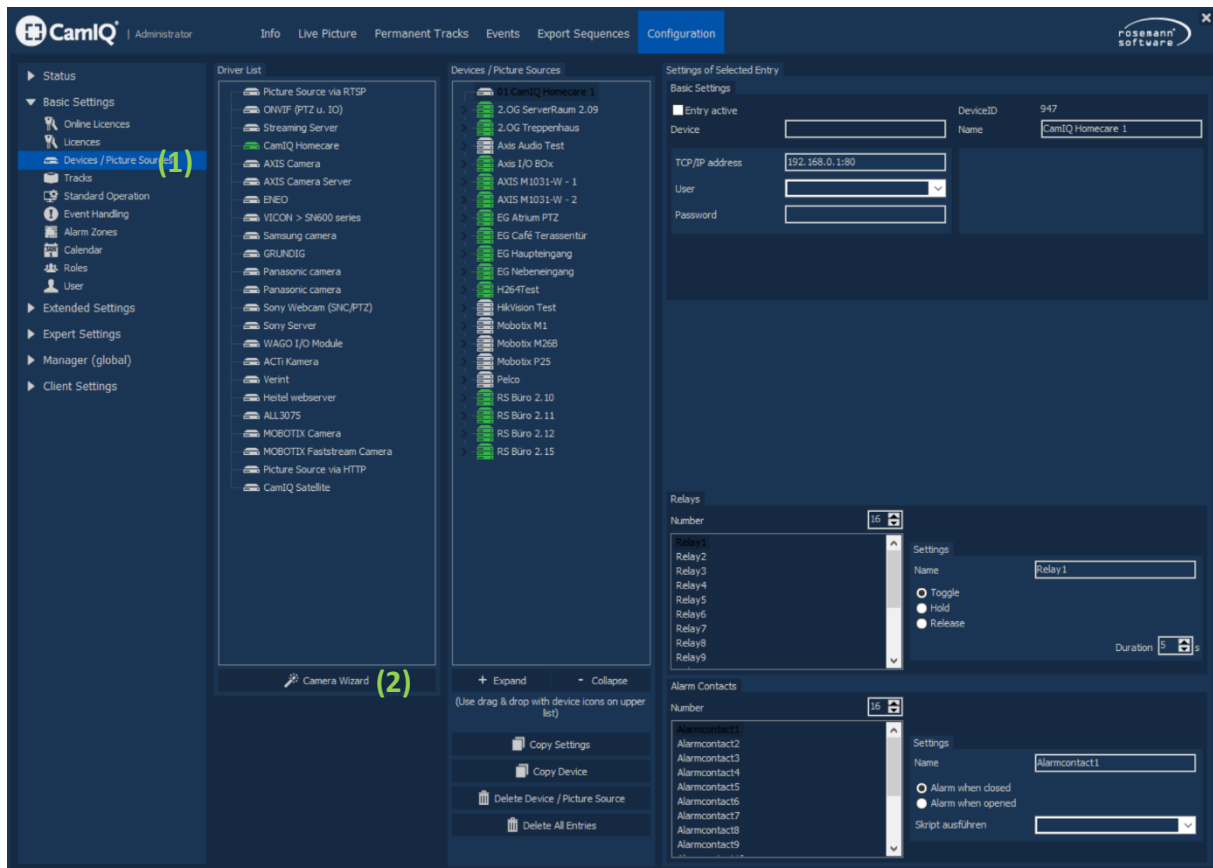


2.4.7 Automatic device configuration

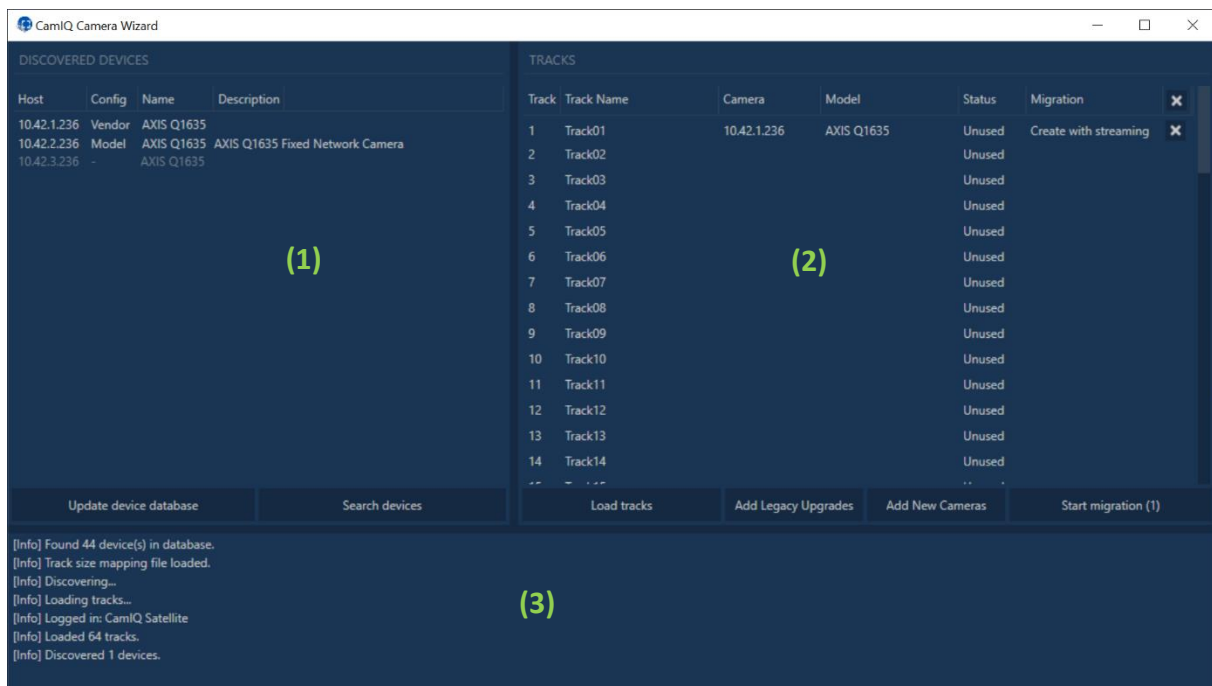
2.4.7.1 CamIQ Camera Wizard

The CamIQ Camera Wizard serves in setting up the basic configuration or in the migration of cameras into the CamIQ environment.

- Click on the “Camera Wizard” button **(2)** in the “Configuration -> Devices/Image Sources” menu **(1)** to open the Camera Wizard.



- The Camera Wizard is divided into 3 areas:
 - Discovered Devices (1):**
Here is where a search for compatible cameras in your network can be carried out and where the discovered devices are listed.
 - Tracks (2):**
The CamIQ server tracks are displayed here. Using drag and drop, cameras discovered in the network can be dragged onto the desired tracks in order to then perform the corresponding device configuration.
 - Log (3):**
All operations are recorded in the log. When needed, these entries can provide information regarding any problems encountered.



- When opening the CamIQ Wizard, your network is automatically searched for compatible cameras. Please note that the CamIQ Camera Wizard can currently only find cameras that support SSDP (**Simple Service Discovery Protocol**) or WS Discovery (**Web Service Discovery**).

DISCOVERED DEVICES			
Host	Config	Name	Description
10.42.1.236	Vendor	AXIS Q1635	
10.42.2.236	Model	AXIS Q1635	AXIS Q1635 Fixed Network Camera
10.42.3.236	-	AXIS Q1635	

- After the search is completed, all devices located will be displayed in the "Discovered Devices" list. The following information is available for every entry:
 - Host:** The IP address of the device
 - Name:** The name of the device
 - Config:**
 - "Model": A configuration is available for this model.
 - "Vendor": A configuration is only available for the vendor but not for the specific model (detailed settings should be checked manually afterwards).
 - "-" No configuration is available for this vendor.
 - Description:** The device description (in the case that an appropriate device configuration is available).

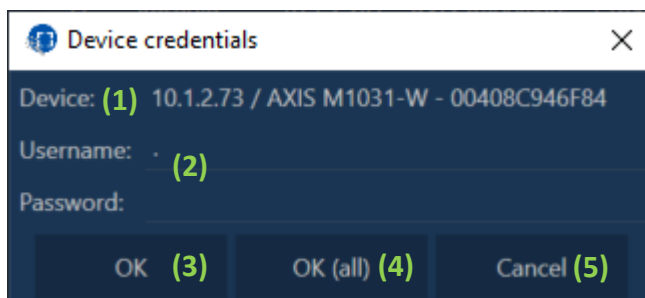
TRACKS					
Track	Track Name	Camera	Model	Status	Migration (2) X
1	Track01	10.42.1.236	AXIS Q1635	Unused	Create with streaming (1) X
2	Track02			Unused	
3	Track03			Unused	
4	Track04			Unused	

- To prepare the configuration for the discovered cameras, drag and drop them from the "Discovered Devices" list to any track in the "Tracks" list.
- The following information is available in the "Tracks" area:
 - **Track:** The number of the track
 - **Track Name:** The name of the track
 - **Camera:** The IP address of the camera to be configured.
 - **Model:** The model of the camera to be configured
 - **Status:** The current status of the track
 - **Migration:** The current migration scenario to be performed
- Click the X next to an entry (1) if you decide to remove the assigned migration again.
- Click the X in the list header (2) to delete all prepared migrations.

(1) Load tracks	(2) Add Legacy Upgrades	(3) Add New Cameras	(4) Start migration (1)
-----------------	-------------------------	---------------------	-------------------------

- Click on "Load Tracks" (1) to reload all track information.
- Click on "Add Legacy Upgrades" (2) following an update to reconfigure devices that were configured without H.264 support, for example, CamIQ version 1-3 without H.264 support, to now use H.264 support.
- Click on "Add New Cameras" (3) to assign all discovered cameras to the currently unused tracks for migration.
- Click "Start Migration ("Number of prepared migrations")" (4) to start and perform all prepared migrations.

Once you start the migration process, you will be prompted to enter the credentials for the corresponding devices:



- The IP address and the name of the related camera will be displayed behind “Device” (1).
- Enter the valid login data for the corresponding camera in the fields “User name” and “Password” (2) and then select “OK” (3).
- If you would like to use the identical login data for all cameras, select “OK (all)” (4).
- If you would like to cancel the process, select “Cancel” (5).
- The database for the supported devices is continually upgraded and updated. Provided you have access to an active Internet connection, you can update the local device database with the “Update device database” button (, <https://camiq.net> must be accessible).
- Once the migration process has been completed, you can close the CamIQ Camera Wizard.

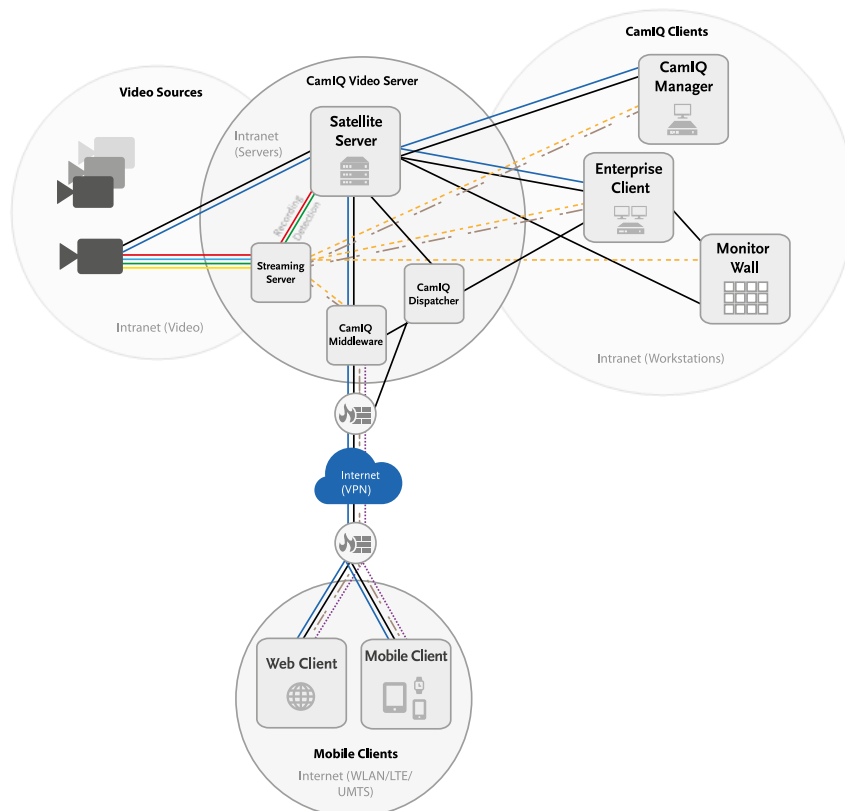
IMPORTANT:

Please note that the CamIQ Camera Wizard is only meant to provide support for the setup process. The configuration must, in any event, be checked and amended/corrected if necessary.

2.4.8 Manual device configuration

2.4.8.1 Streaming Server

With the aid of Advanced H.264 Streaming, CamIQ makes it possible to automatically adjust the quality of the video stream in the current live image view, thus saving CPU and bandwidth capacity.

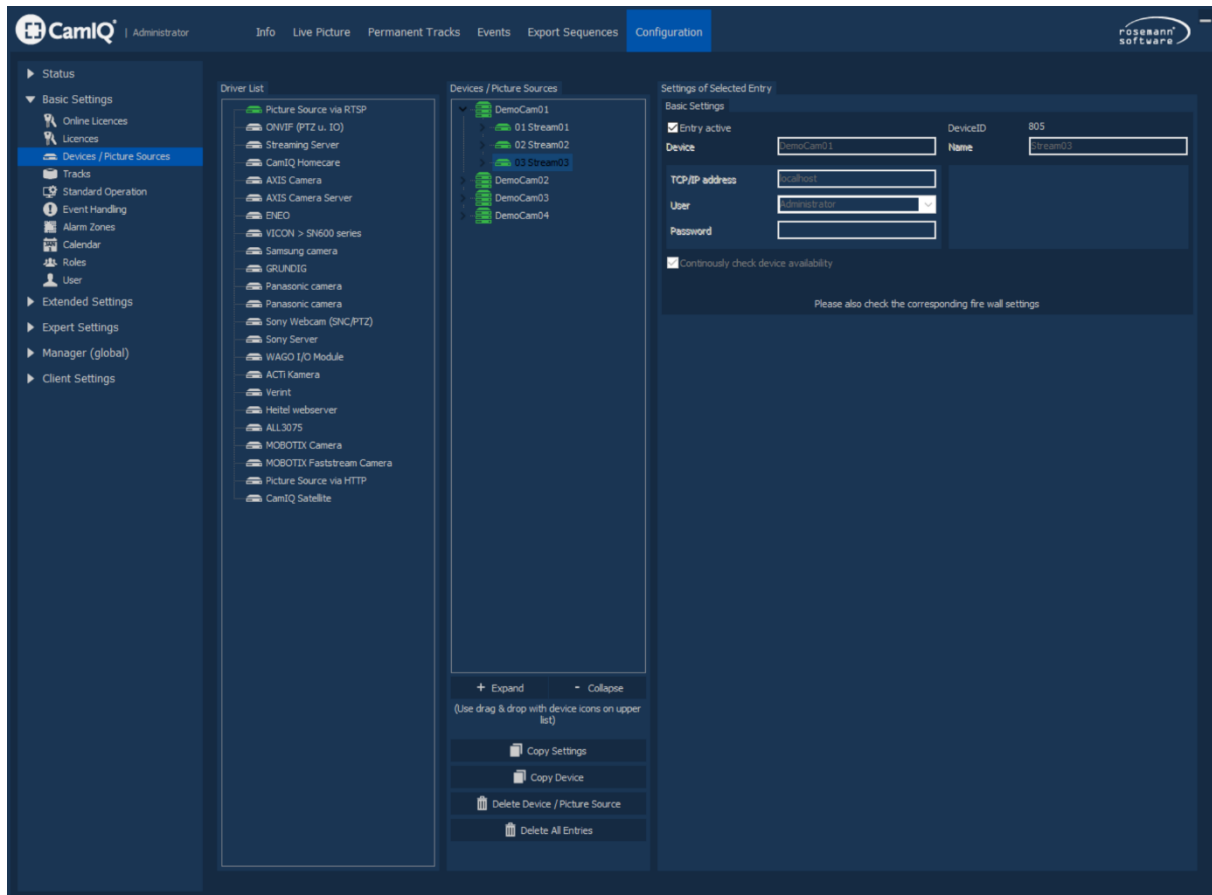


- CamIQ Access & Control Layer (Video Fallback, Camera & PTZ Commands, Events)
- Stream 1 - High Definition Resolution
- Stream 2 - Medium Resolution
- Stream 3 - Low Resolution
- Stream 4 - Audio Receiving
- Selectable Stream
- Selectable Stream via HTTPS
- Live Audio to camera
- Live Audio from camera

In the following section, the necessary configuration to be carried out is explained step by step using the example of an AXIS M1054.

Driver Configuration in CamIQ 8 Satellite

First install three new “Camera via RTSP” drivers. The group designation should be clear and identical for all three devices so that the 3 streams can be easily located for track assignment. Name the three devices “Stream 1” – “Stream3”. To minimize configuration overhead, enter all the relevant data such as IP address, user and password for the first device and then use the “Copy Entry” function.



The three newly created drivers will now be defined with three different resolution and frame rate settings. The streams will later be utilized in the following way:

- Stream 1** 1280x800 | This is a high resolution and frame rate that will later be used for recording and for the live image in a 1-on-1 view.
- Stream 2** 640x400 | This stream will be used for presentation in a 4-on-1 view. Moreover, this stream can be used in a 1-on-1 and 4-on-1 view for client connections with small bandwidth. Alternatively, you can also work with just two streams and disregard the third stream altogether.
- Stream 3** 160x100 | This stream will be used for CamIQ detection. Its resolution should be defined depending on the desired detection sensitivity and the distance to the objects, in other words, from 160x100 (standard sensitivity) to 320x240 (very high

sensitivity). Additionally, this resolution will be displayed starting from a 9-on-1 to a 64-on-1 view.

Info: Stream assignment to the respective views will be explained in more detail later in the document.

Select the camera model under “Device Setup” for each of the three drivers and add the following parameters to the corresponding “Request String” entry:

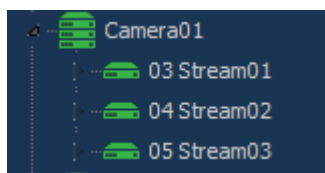
Stream 1 /axis-media/media.amp?**videocodec=h264&resolution=1280x800&fps=25**

For the configuration of Stream 1 it will also be necessary to check the “Use recording only mode” selection. This option defines the stream as a “recording stream.”

Stream 2 /axis-media/media.amp?**videocodec=h264&resolution=640x400&fps=10**

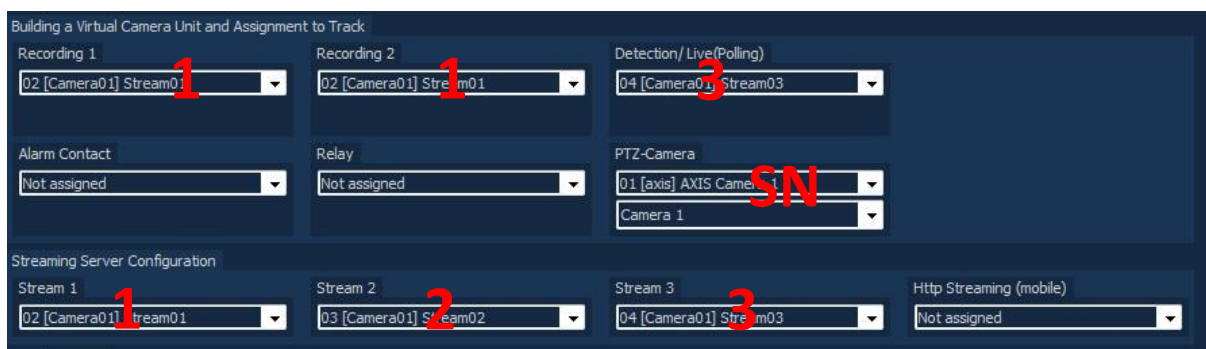
Stream 3 /axis-media/media.amp?**videocodec=h264&resolution=160x100&fps=10**

Then activate the three devices.



Track Configuration in CamIQ 8 Satellite

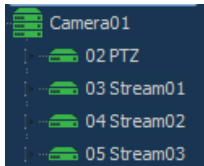
Assign the devices to the track as follows:



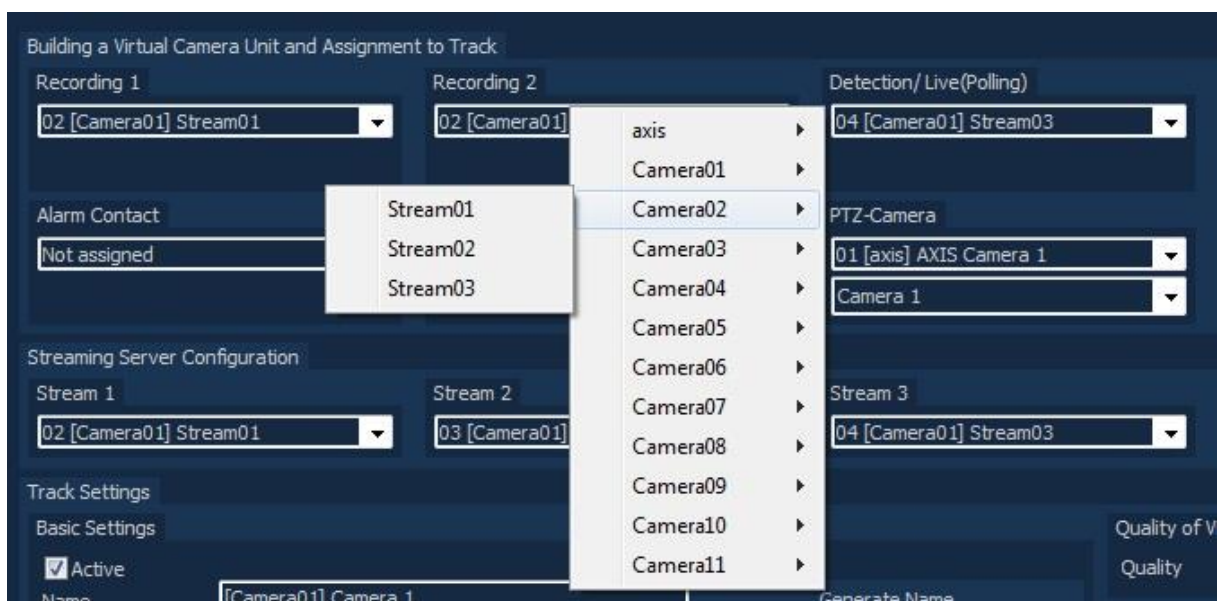
Recording	=	Stream 1	Stream 1	=	Stream 1
Detection/Live	=	Stream 3	Stream 2	=	Stream 2
			Stream 3	=	Stream 3

Should your device be a PTZ camera, add an Axis driver with active PTZ functionality to your driver group (as is usual with Satellite V1.x to V4.x).

Select this driver from the track assignment field “SN Camera”.



Please note: If you click in an assignment field with your right mouse key, the group overview opens. If you work with many devices, this grouping function can simplify the overview for you.



Configuring the CamIQ Manager

Using the local configuration of the CamIQ Manager (Configuration > Manager (local) > General), the assignment of the stream to the respective views can be defined exclusively for this CamIQ Manager.

The following should be defined here for the example scenario:



LAN access (fast connection)

Single View	-	Quad View	=	Stream 1	(1920x1080)
9-Split View	-	16-Split View	=	Stream 3	(640x400)
25-Split View	-	64-Split View	=	Stream 2	(160x100)

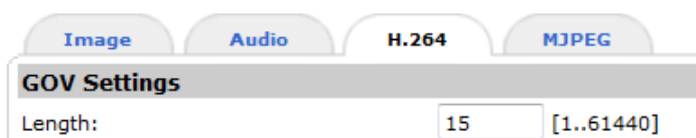
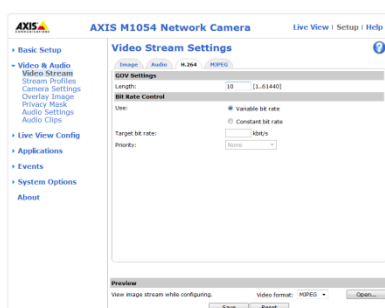
WAN access (slow connection /can be activated in the login window)

Single View	-	Quad View	=	Stream 2	(640x400)
9-Split View	-	16-Split View	=	Stream 3	(160x100)
25-Split View	-	64-Split View	=	Stream 3	(160x100)

These settings are saved locally in the CamIQ Manager and must also be configured for other Manager installations.

Please note: It can take a few seconds before the image switches to the desired resolution in the live view. This switching time is dependent upon the frame rate of the stream and the camera's key frame interval. The default key frame interval setting for the Axis configuration is "30." Being that streams 2 and 3 in the example configuration only supply 10 fps, it can take up to three seconds before the first key frame arrives and the live image is displayed with its correct resolution.

With devices that stream with less than 10 fps, the key frame interval should be reduced. Depending upon the frame rate, we recommend the two-fold value of this frame rate.



2.4.8.2 Audio Configuration

2.4.8.2.1 License

For audio support in CamIQ an additional license is required.

The number of tracks to receive audio support determines the number of '*CamIQ Audio +*' licenses that are needed.

Add these licenses to your server with the license file as usual.

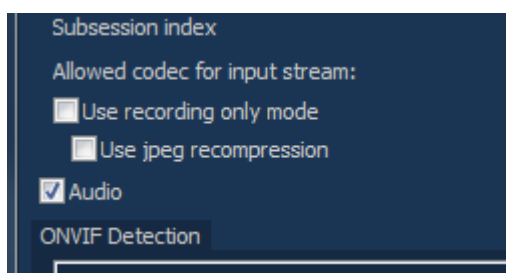
2.4.8.2.2 Device Drivers

Receiving an audio stream from a camera

In order to capture the audio stream of a camera via RTSP and render it live in CamIQ, add an additional RTSP driver to the device list and open the device configuration.

(The device configuration can only be opened if the CamIQ Manager is connected with the 'localhost' IP address.)

Enter here, as usual, the type of camera and perform the 'Auto detect' function. In contrast to the video driver configuration, for this driver select 'Audio' support only.



Close the window and set the driver to 'Active'.

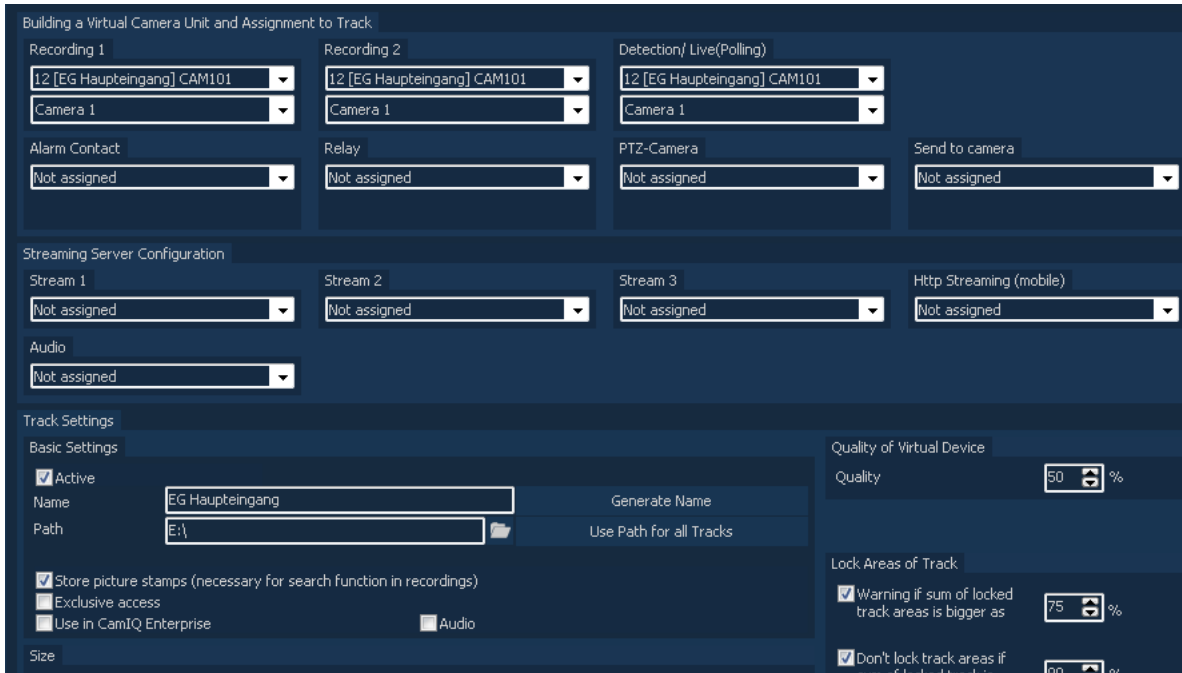
Sending an audio stream to a camera

In order to send an audio stream to a camera, add the corresponding native device driver to your device list. An Axis driver is used in our example. Simply add the IP address, user name and password and set the driver to 'active'.

2.4.8.2.3 Tracks

Select the corresponding track in the track configuration and assign the RTSP (audio) driver you previously added using the respective selection boxes:

- **Audio to camera:** Native driver for sending an audio stream to the camera
- **Audio:** RTSP driver for receiving an audio stream from a camera



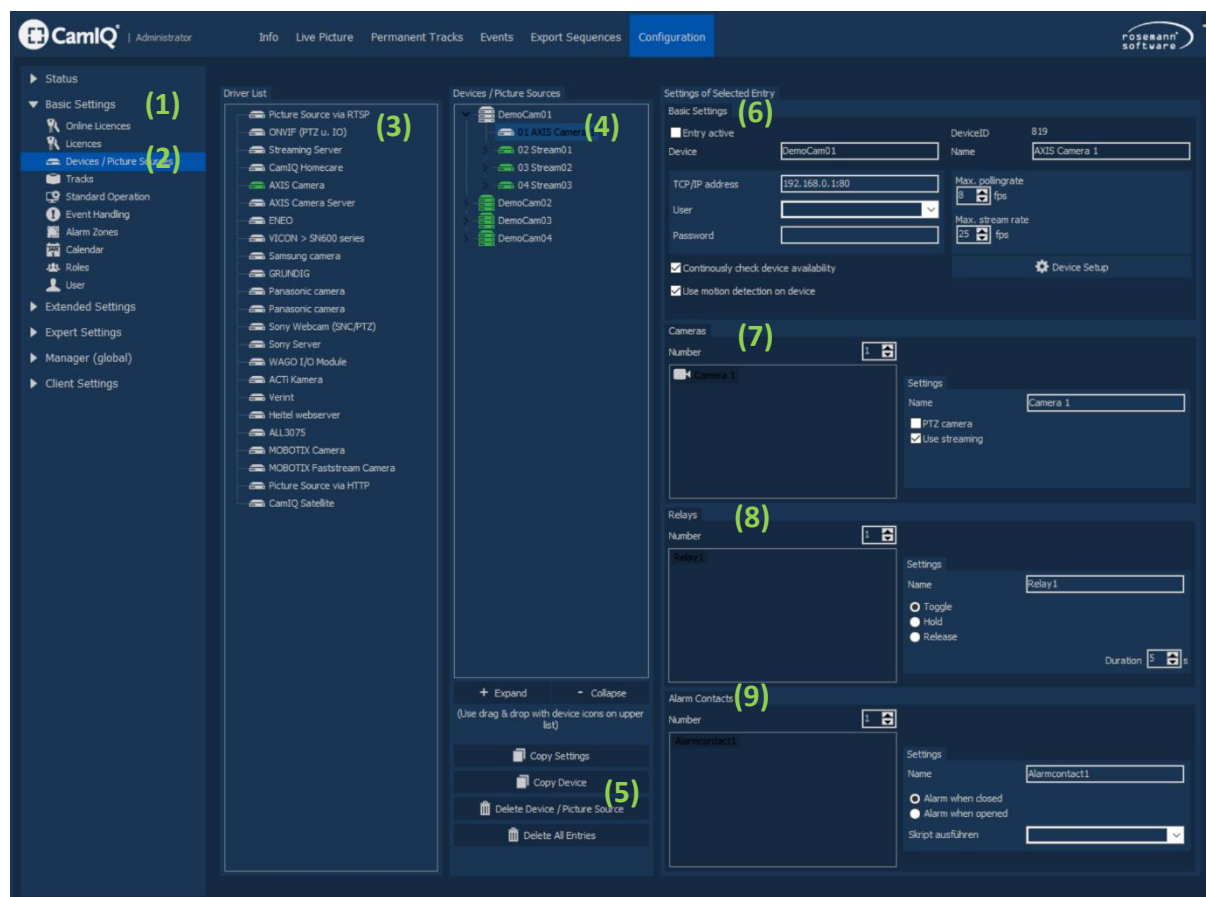
The screenshot displays the 'Building a Virtual Camera Unit and Assignment to Track' configuration window. It is divided into several sections:

- Recording 1, Recording 2, Detection/ Live(Polling):** Each section contains dropdown menus for '12 [EG Haupteingang] CAM101', 'Camera 1', 'Alarm Contact', 'Relay', 'PTZ-Camera', and 'Send to camera'.
- Streaming Server Configuration:** Contains dropdown menus for 'Stream 1', 'Stream 2', 'Stream 3', 'Http Streaming (mobile)', and 'Audio', all currently set to 'Not assigned'.
- Track Settings:**
 - Basic Settings:** Includes a checked 'Active' checkbox, a 'Name' field with 'EG Haupteingang', a 'Path' field with 'E:\', and a 'Generate Name' button. There are also checkboxes for 'Store picture stamps (necessary for search function in recordings)', 'Exclusive access', and 'Use in CamIQ Enterprise'.
 - Quality of Virtual Device:** Includes a 'Quality' slider set to 50%.
 - Lock Areas of Track:** Includes a checked 'Warning if sum of locked track areas is bigger as' checkbox with a slider set to 75%, and a checked 'Don't lock track areas if sum of locked track is' checkbox with a slider set to 30%.

Also set a checkmark in the 'Audio' field in order to activate audio for this track.

2.4.8.3 Devices/Image Sources

You can configure the server to meet your needs in the “Basic Settings” **(1)** function group. Add and configure devices as image sources in the “Devices/Picture Sources” menu **(2)**. The integration of a video server (AXIS 241S) will be used as an example in this manual. But first, here is an overview of the menu:



- All the devices that can be added are displayed in the "Driver List" **(3)**. In order to install one of these drivers, click on the desired entry, hold the mouse button pressed, pull it over to the Device/Picture Sources list **(4)** and let go (drag & drop).
- The Devices/Picture Sources list **(4)** specifies all devices that you can use and configure as image sources. The icon next to the image source entry displays the current status:
 - Green: The device has been configured and activated
 - Gray: The device has not yet been activated
 - Red: The device is activated but a connection is currently not possible (in this case, check the IP address and user data)
- **(5)** Click on the "Copy Device" button in order to duplicate the selected entry.

Click on the “Copy Settings” button to open the dialog box to take over specific driver properties.

Click on the "Delete Device/Image Source" button if you wish to delete the entry selected in the device list. A dialog box will appear. Confirm with "Yes" if you wish to delete the selected entry.

Click on the "Delete All Entries" if you wish to delete all devices. A dialog box will appear. Confirm with "Yes" if you wish to delete the entire list.

- In the "Basic Settings" field **(6)**, you can examine and configure the general settings of a selected device.
 - **Entry active:** After you have configured the device, checkmark the device to activate it.
 - **Name:** Enter a designation for the device. This designation serves to identify the device in other lists like the Live Image View, for instance.
 - **TCP/IP address:** Enter the IP address of the device. If a port entry is necessary, you can add this to the IP address by using a colon.
 - **User:** If authorization for a device is necessary, enter the user name here. The entry field is only visible when the device supports authorization.
 - **Password:** If authorization on a device is necessary, enter the user's password here. The entry field is only visible if the device supports authorization.
 - **Max. pollingrate:** When camera images are retrieved ("polling"), the number of images retrieved per second can be limited here. This option is only visible if the driver supports polling.
 - **Max. stream rate:** If the camera images are immediately broadcast ("streaming"), the number of images received per second can be limited here. This option is only visible if the driver supports streaming.
 - **Continuously check device availability:** If this option is selected, the server checks cyclically to see if the device is still available.
 - **Use motion detection on device:** If the device supports motion detection, this option can be activated or deactivated as desired. This option is only visible if motion detection can be activated on the device.
 - **Device Setup:** If the device has a special external configuration program, you can start it by clicking on this button. This button will only appear if the device has an external configuration program at its disposal. (This button is only visible when logged on locally and with deactivated devices)
 - **Automatic Configuration:** Click on this button in order to initialize this device with a standard configuration. This button is visible only in a few drivers. It will appear, if applicable, when the device has been activated.

- In the "**Cameras**" field **(7)** you can make changes to the detailed settings of the various camera connections of the device selected.
 - **Number:** Select here the number of cameras for the given device.
 - **Name:** Choose a designation for the camera here. This designation serves to identify the camera.
 - **PTZ camera:** If the camera selected is a standard network camera, select this option.
 - **Use streaming:** Select this option if you want to use a streaming procedure for the image collection. If this option is deactivated, the camera images will be polled. This option is only visible if the driver supports streaming and polling.
 - **Activate Image Compression:** This activates an additional image compression process. This option is only visible if supported by the driver.
 - **Image Quality:** Select an image quality with which the retrieved images are to be saved. A very high image quality means that the images will be saved with practically the original image resolution; this requires hardly any compression and also requires the biggest amount of storage space. When the image quality is low, the images will be highly compressed and need little storage space. This option is only visible if supported by the driver.

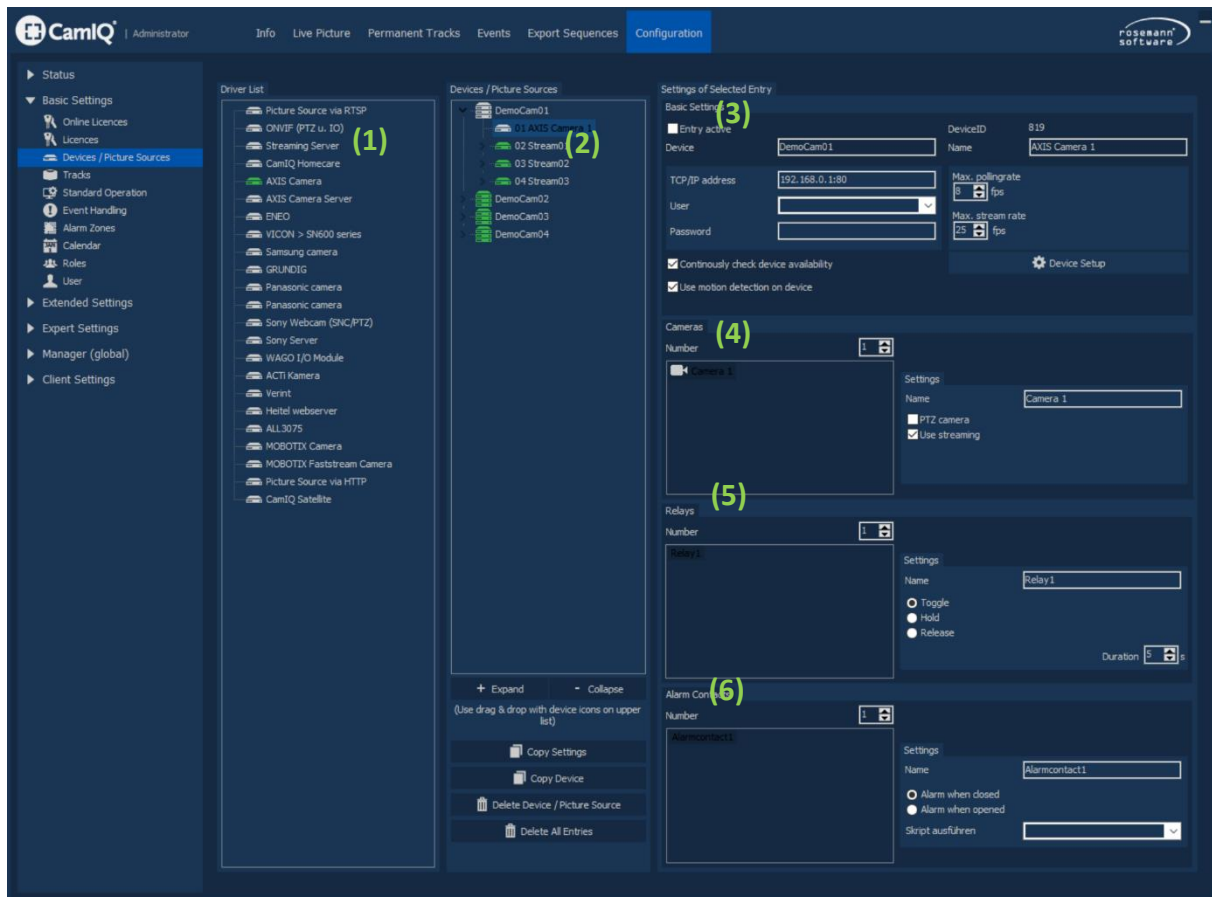
The relays are shown on a list **(8)**. Additional settings can be made to any relay on the list. Select the desired relay and configure the settings as follows:

- **Number:** Select here the number of relays for the given device.
- **Name:** Choose a designation for the relay. This designation serves to identify the relay.
- **Toggle/ Hold / Release:** Select one of the three options. If a relay event is triggered, it can switch the current state (toggle switch), trigger or release.
- **Duration:** Enter a holding time in seconds to have the relay trigger or release respectively. If the relay should be set to operate in "toggle switch" mode, holding time will have no influence.

The alarm contacts are shown on a list **(9)**. Additional settings can be made to any alarm contact on the list. Select and configure the given alarm contact as you wish:

- **Number:** Select here the number of alarm contacts for the given device.
- **Name:** Choose a designation for the alarm contact. This designation serves to identify the alarm contact.
- **Alarm when Closing/Opening:** Determine whether the alarm should be generated when the contact is closed or when it is opened.

2.4.8.3.1 Embedding of AXIS Camera Server (MJPEG)



- First select the "AXIS Camera Server" from the list of available drivers **(1)** and pull it into the "Devices/Picture Sources" field **(2)** with "drag and drop".
- In the "Basic Settings" **(3)** you can enter a name for the image source in the "Name" field. Thereafter, enter the "TCP/IP Address" and the "User" and "Password" appertaining to it, if applicable.
- Under the "Cameras" item **(4)** you can first enter the number of cameras that can be connected. Then you can select each camera individually and assign their names. Additionally, you can define a selection as being a tilt swivel camera by activating the "Standard Network Camera" button, thus allowing the camera to be controlled by the Manager.
- In the "Relay" section **(5)** you can enter the number of available relays. You can also give every selected relay a designation and define its switching properties.
- Under the "Alarm Contacts" item **(6)** you can first define the number of alarm inputs and then give each selected alarm input entry a designation.
- Once you have completed the configuration, click on "Entry active" **(3)**.
If the IP address, user and password entries are correct, the symbol in the "Devices/Image

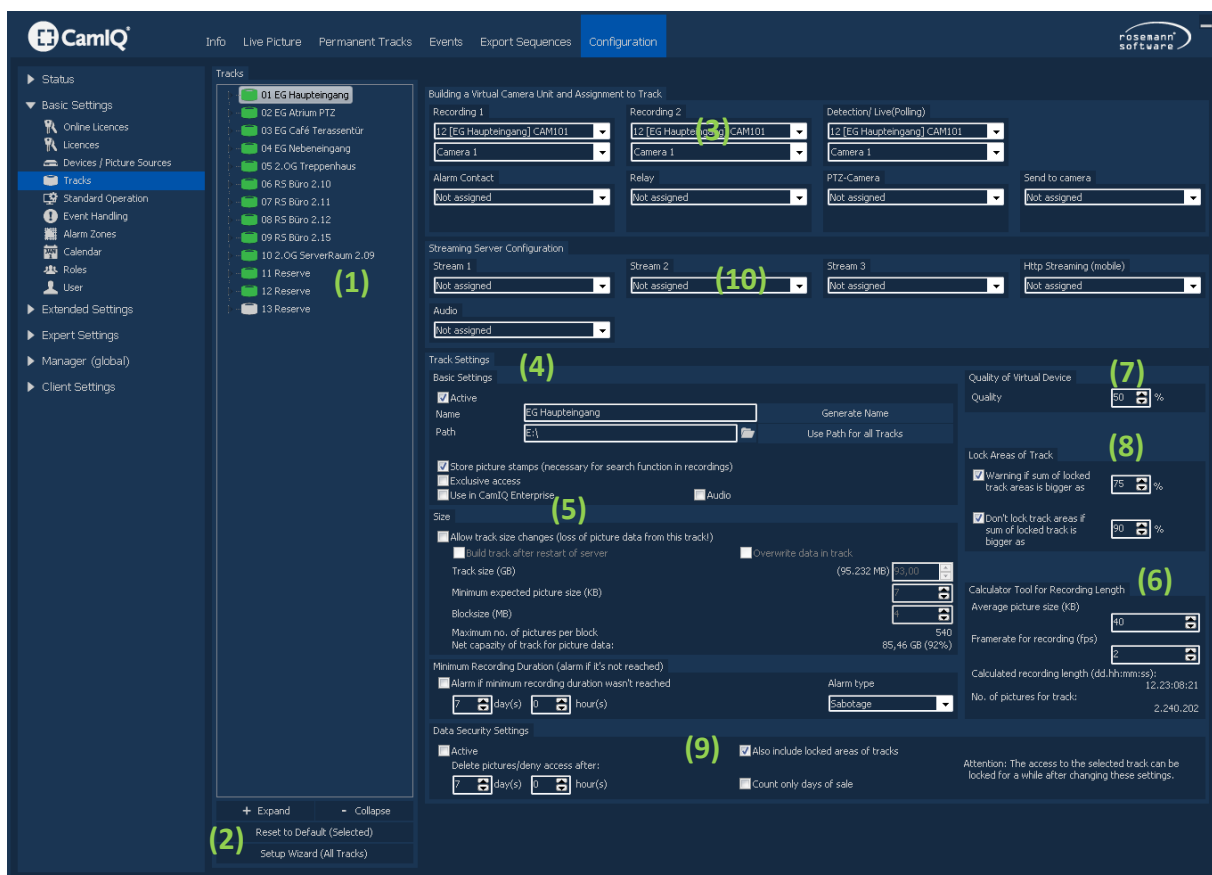
Sources" field will turn green.

If a connection could not be established, the symbol will turn red. In this case, check all data entered as well as device connectivity.

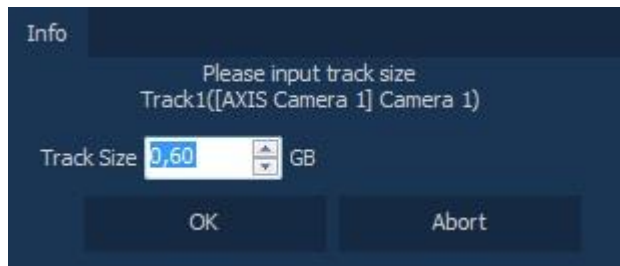
When your entry is inactive, the symbol will turn gray.

2.4.8.4 Tracks

Image sources were added to the server in the "Devices/Image Sources" menu (3.8). Now so-called "tracks" will be created. Every individual track can be assigned a camera signal from an image source. In addition, one can add to every track a recording area on the hard drive, an alarm contact and a relay. In this way, you create a virtual camera device.

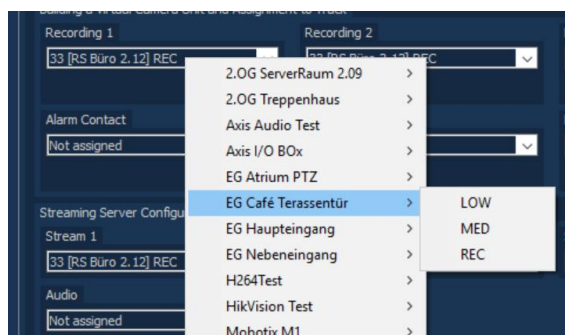


- First select a track in the "Tracks" section (1).
- In section (2) you can reset the track's configuration to its default values by clicking the "Track Defaults (Selection)" button. And with a click on the "Setup Assistant (All Tracks)" button you start an assistant process which asks during each track configuration for the track size and automatically gives a designation to every track. The track size must lie within a range of 100MB and 2TB. You can also manually create the tracks as described below.



- In the "Creation of a Virtual Camera Device and Track Assignment" section **(3)** you can assemble a virtual camera device by yourself. For this, first select a track and then click on the device assignment selection below the designation:
 - **Recording 1:** Select the device driver that is to be used for a standard recording.
 - **Recording 2:** Select here the device driver that is to be used for an alternative recording. (The alternative recording source can be activated using the calendar, for example, or the external arming function.)
 - **Detection/Live Polling:** Select the image source that is to be used for the detection process. Take into consideration that the resolution of the image stream for your detection scenario must be sufficient. Too high of a resolution leads to an unnecessary demand on system resources.
 - **Alarm contact (optional):** Select the device driver to be used for the query of the alarm contact state.
 - **Relays (optional):** Select the device driver to be used for the switching of a relay.
 - **PTZ Camera (optional):** Select the device driver to be used for the communication with the pan/tilt unit of a camera.
 - **Camera audio (optional):** Select the device driver that is to be used for sending audio data to a compatible device.

Please note: For a better overview when using many device drivers, you can alternatively right-click on the selection box to call up a summary of the camera groups.



- Under the "Basic Settings" item **(4)** you can give the track a designation. You can either choose a name yourself or let the Manager do it for you by clicking on the "Suggest Designation" button. This designation will be composed of the device name and the camera name.
- Tracks can also be configured in such a way that they will be treated as a group in the management view. Thus, an entire group of camera signals can be switched on with just one mouse click, for example
The name prefix you give determines which cameras belong to a given group. This prefix must be located within brackets, **[Group1]** for example. The entire name of the group members would be

[Group1] Camera 1

[Group1] Camera 2 and so on.

You can also group together cameras from different image sources. You can put together as many groups as you wish.

To allow the group to be displayed in the management view, the option "Group Function for Cameras in Live Image" in the "Settings" menu must be activated.

- In the "Path" field you will enter the location where the track's image data should be saved. You can select this location by clicking on the folder symbol.

Please note: The track paths can only be changed when working directly at the server but not while working on a client station. The new path will come into effect only after the server has been restarted.

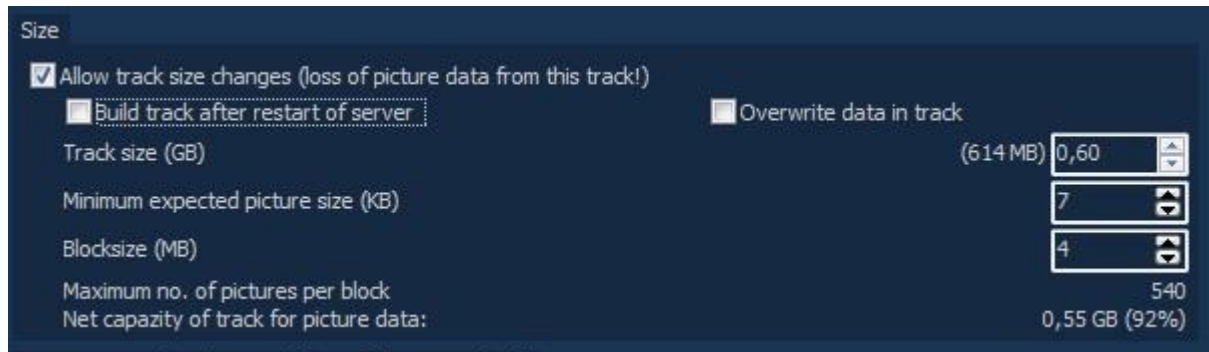
- In order to use the search function for the evaluation of permanent track, you must activate the "Ascertain Image Change" button.
- If this track is to be displayed in a CamIQ Enterprise Installation, put the check mark on 'Use in CamIQ Enterprise' (One additional license is required per track.)
- Set the check mark to 'Audio' to activate the audio functionality for this track. For this purpose, an additional license and corresponding compatible audio-capable device (intercom, for example) will be needed.
- You can carry out a detailed track configuration in the "Track File Organization" section **(5)**.

Warning: The following setting changes should only be undertaken by competent technical personnel. Changes can cause image data loss, and incorrect entries can lead to incomplete recordings and system crashes.

In order to make configuration changes, you must first activate the "Allow Track Setting Changes" button. Using the "Create Track after Server Restart" button, you determine whether the selected track should be created after a new system start (all image files are deleted in this process). This corresponds to quick formatting. When you activate the "Overwrite Data Completely" button, the track will be thoroughly formatted after the new start. Please note that in this case the reboot process will last much longer than usual!

In the "Track Size" field you enter how many gigabytes will be made available for saving the image data of the selected entry. A value between 0.1 and 450 GB must be selected. Make sure that tracks are not assigned a storage space exceeding the physical hard drive space available. In the field "Smallest Expected Image Size" underneath, you can enter this value in kilobyte. Finally, you can enter the "Block Size" for the track in megabytes. It is recommended that you accept the default values as offered.

Using the data entered for "Maximum Image Number per Block" and "Track Net Capacity for Image Data", the Manager automatically makes the calculation for you.



- The Manager provides you with a "Calculator for Recording Duration and Image Number" **(6)**. To use it, first enter the "Average Image Size" in kilobyte. In the "Server Status" you can access this data. Then enter the "Image Recording Rate". Using these values, the Manager calculates for you the expected recording duration and the number of images that will be recorded during this time. With the help of this calculator, you can adjust server settings to attain the recording time you wish.
- In the "Virtual Device Quality" section **(7)** you can enter the image quality in a percentage corresponding to high, medium and low. A high percentage value represents good quality. You will find these settings in the "Settings" menu located in the "Manager (local)" function group application where the compression strength for the various levels can be automatically adjusted.
- You can limit the automatic locking of image data under the "Locking Track Areas" item **(8)**. Locked track areas are no longer made available for cyclical rewriting until they have been unlocked again. You can configure the automatic locking of tracks in the "Event Handling" menu. Click on the "Warning When a Locking Percentage Level is Reached" button and enter a percentage of total track size that will serve as the trigger to issue a warning message. By activating the "Discontinue Event-Driven Locking at a Locking Level of" button and entering a percentage, you can prevent additional track areas from being locked when a certain percentage of total track size has already been locked.

Please note: By locking track areas, the overall recording time is shortened because locked areas are no longer available for cyclical rewriting. When 100% of a track is locked, no further recording can take place.

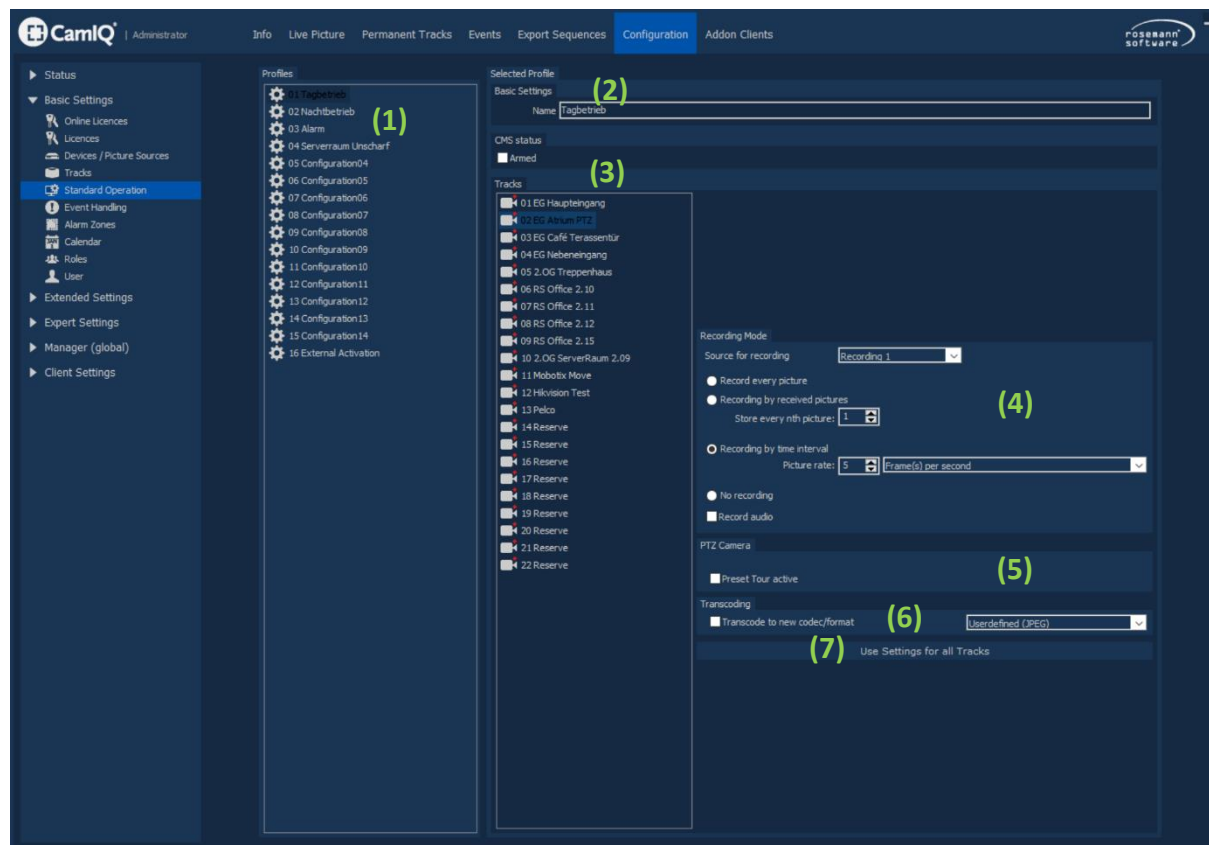
If the configured locking level is reached, the warning will be visible in the Live Image. The text color of the camera in the camera list will initially change to orange. If a second locking level is reached, the text changes to red.

- In the "Data Protection Regulations" section **(9)** you can limit the time available for image access. First enter a time period in days and hours and then click on the "Active" button. All image data older than the time you entered will be deleted. If you enter 7 days, for instance, recordings older than 7 days will not be available.
- By activating the "Include Locked Image Data" button, locked track areas will also be deleted.
- Detailed information about the use of H.264 with help of the streaming server **(10)** can be found in chapter 2.4.7.

2.4.9 Standard Operation

Standard server operation (and with it the permanent recording process) can be controlled with up to 16 configuration settings. The Calendar (see chapter 0) administers these configuration settings.

Please note: The first configuration setting with the name "Default" is important. If – for a certain time frame - no time value in the calendar has been configured, this configuration will automatically become the active one!



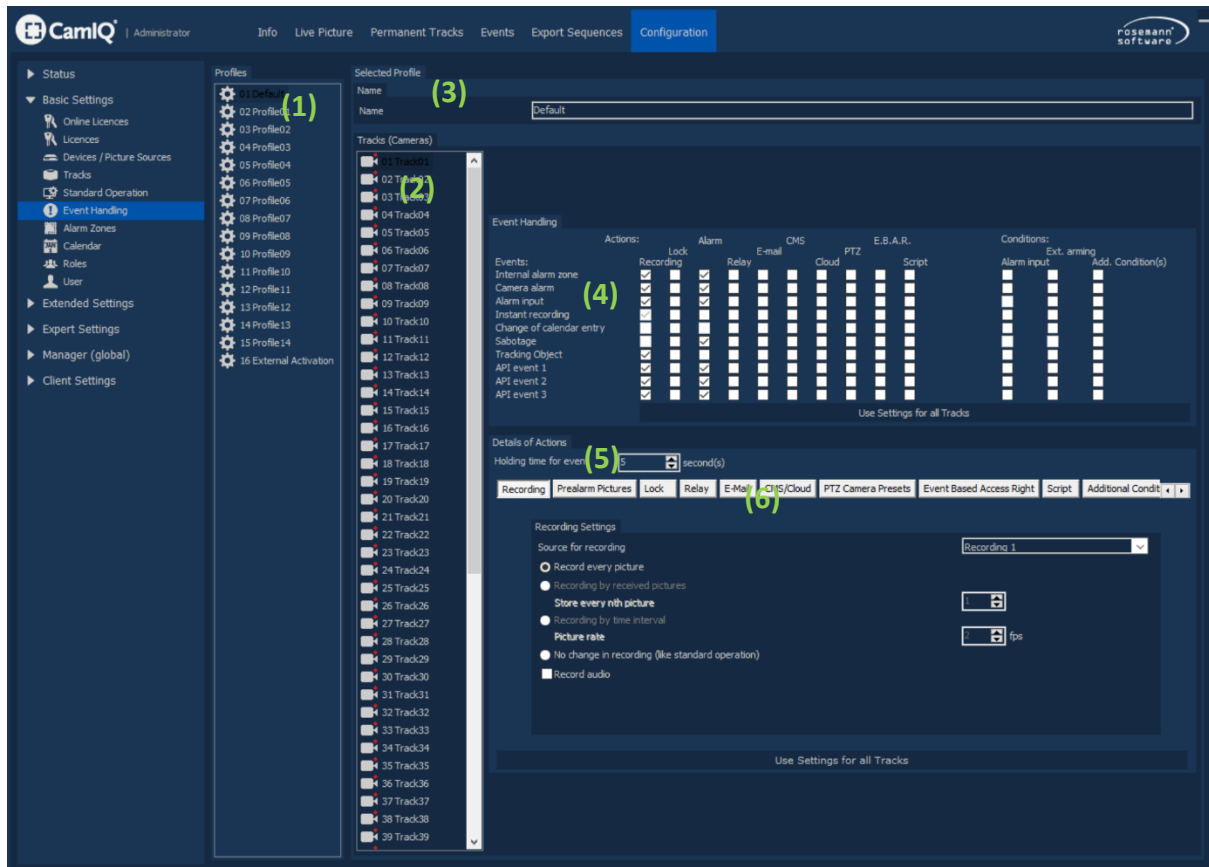
- First select a configuration setting in the "Profiles" section (1).
- You can give this setting a name under the "Basic Settings" section (2).
- Now select the track to be configured from the "Tracks" field (3).
- You can select from various options in the "Recording Mode" (4) area:
 - **Recording Source:** Select here the stream that is to be used for the recording.
 - **No Recording:** The track will not record permanently
 - **Recording With Time Interval:** Enter how many images per second, per minute or per hour should be recorded

- **Record Every Nth Number of Received Images:** Every nth number of all received images will be recorded (a value of 1 would mean every image would be recorded)
- **Record Every Image:** Select this option to always record every received image.
- **Record audio:** Select this option to record the assigned audio stream. Please note that an additional license is necessary for this.
- If the selected camera is a virtual camera or a standard network camera, you can select the "Activate Preset Tour" button in the "PTZ Camera" field **(5)**. If this button is active, the camera will begin running through a preset tour. You can learn how such a tour can be configured in chapter 2.4.20.
If your license includes the tracking option, you can use the "Activate Tracking" button to activate object tracking for selected cameras.
- Under the "Transcoding" item **(6)** you can select a pre-defined profile. You can then select the "Code Conversion to a New Format" checkbox. The selected profiles properties will now be used for recording the chosen track.
- Click on "Use Settings for all Tracks" **(7)** if you want to use this configuration for all tracks.

2.4.10 Event Handling

The server can react automatically to various events. These reactions can be saved in up to 16 configuration settings which can be administered via the calendar.

Please note: The first configuration setting with the name "Default" is important. If no configuration in the calendar has been made, this configuration will be the active one!



- First select a configuration setting in the "Profiles" section (1).
- You can give this setting a name under the "Selected Profile" section (3). Now select the track to be configured from the "Tracks ((Cameras))" field (2).

In the "Event Handling" section (4) you can configure how the track should react to certain events. There are different types here that need to be considered:

Events:

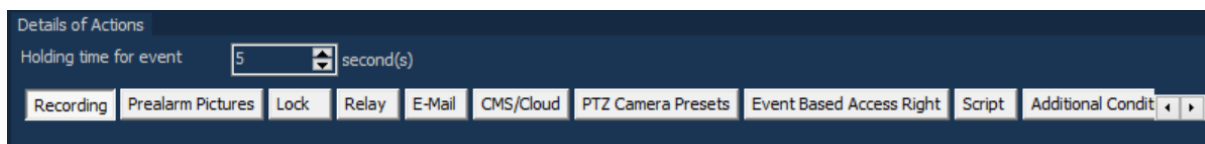
- Alarm Zone:** When you have defined an alarm zone and something moves within this zone
- Camera Alarm:** A connected device reports the alarm
- Alarm Contact:** When a signal is received via an alarm input

- **Recording:** When a manual image recording is initiated
- **Alarm Group Change:** In this case, alarm group refers to the event handling profile. This alarm event occurs when the configuration changes (either through the calendar or via external arming)
- **Sabotage:** When the server determines sabotage (severed connection)
- **Tracking Object:** When the tracking option is activated and a tracking object has been detected (an event like this will trigger both the tracking camera and the reference camera)
- **API event:** Events that are sent to the server over an API interface

Conditions: (the last two columns with grey buttons)

- **Alarm Contact:** The action will only be carried out if an additional contact on the trace-related alarm input is present
- **External Arming:** The action will only be carried out if a contact made to the input was defined as an arming contact in the "External Arming" menu (see chapter 2.4.13).
- **Further Requirement:** The action will only be carried out if the configured requirement is met.

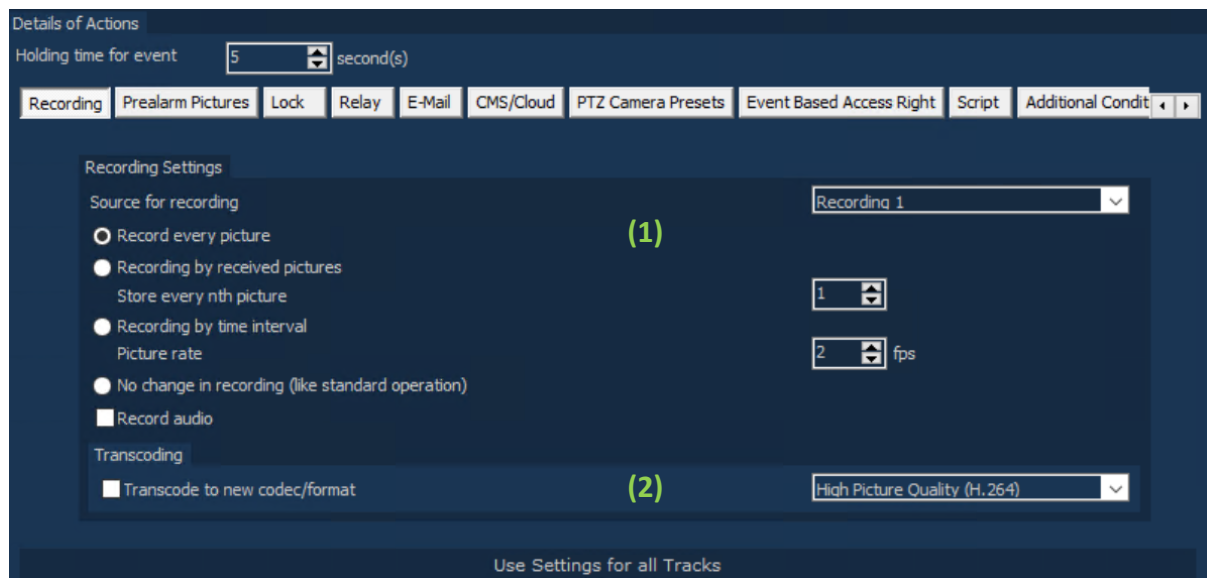
Actions:



- **Recording:** The selected track will be recorded for the length of the holding time (**5**)
- **Pre-Alarm Images:** Pre-alarm images for the selected track are saved. This makes it possible to save image data before a triggered event takes place.
- **Lock:** The image data being recorded during the holding time (**5**) will be locked and thus protected from being overwritten
- **Alarm:** The event will be handled as an alarm and consequently give cause for a notification in the management view
- **Relay:** The relay assigned to the track will be switched
- **E-Mail:** And e-mail will be sent

- **CMS/Cloud:** If the CamIQ Server is connected with a CamIQ Cloud Account it can transmit a push message to authorized mobile devices when an event is triggered.
 - **PTZ Camera Presets:** If the selected track uses a standard network camera, a preconfigured preset position can be started up when an incident occurs
 - **Event-Based Access Rights:** This makes it possible for users to have the needed access rights in case of an alarm - and this only during the immediate alarm period
 - **Scripts:** You can execute scripts in case of an alarm
- Select an event on the left side and then go through the line with the white squares (buttons) from left to right. Activate all buttons for actions that should take place in case of an incident (these are described above the corresponding buttons)
 - Please note that the last two buttons on each line are no longer actions but conditions. If you activate conditions, then the desired action will not be carried out with every event, but only when this condition is met once the event takes place.
 - In the "Detailed Settings for Actions" section **(5)** you can enter the „Event Holding Period“ in seconds. If an event takes place and then occurs once again within this period, another event will not be triggered. Instead, the current event will be retained and extended (for instance; an alarm recording is triggered and another triggering lengthens the recording time instead of triggering a new alarm event).
 - By clicking on the buttons seen in the bar **(6)**, you will be directed to menus that address these individual actions in greater detail.

2.4.10.1 Recording

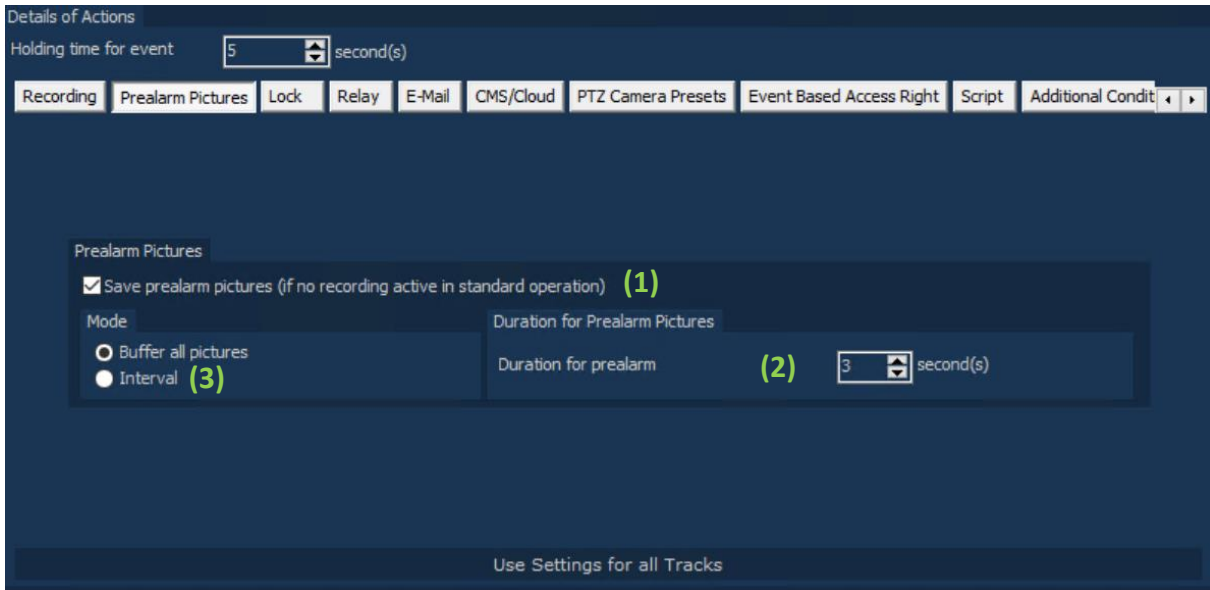


- In the "Recording Settings" section **(1)** you can configure how the alarm sequence is recorded. You have the choice here between 4 modes:
 - **"Record every picture"**
If this setting is active, every received image will be recorded.
 - **"Recording Every Nth Image Received"**
You can determine how many images of all received images should be recorded. Set to "1", every image received will be recorded, set to "2", every second, set to "3", every third ...and so forth.
 - **"Recording by time interval"**
You can determine how many alarm sequence images per second should be recorded.

Note: If you use "Advanced H.264 Streaming" or Dual Streaming with H.264 "recording only," it is not possible to control the recording interval with the help of the modes. Only "record every image" will be available.
The "Recording Source" selection allows you to select one of the two possible recording sources available for the event.

 - **"No change in recording"**
With this setting, the alarm sequence will be recorded with the same recording rate that is used for the permanent recording.
- Under the "Transcode" item **(2)** you can select a preconfigured profile. Then select the "Transcode to new codec/format" checkbox. The selected profile properties will now be used in recording the chosen track.
 - Click on the "Apply to All Tracks" button to take over the effected changes for all tracks.

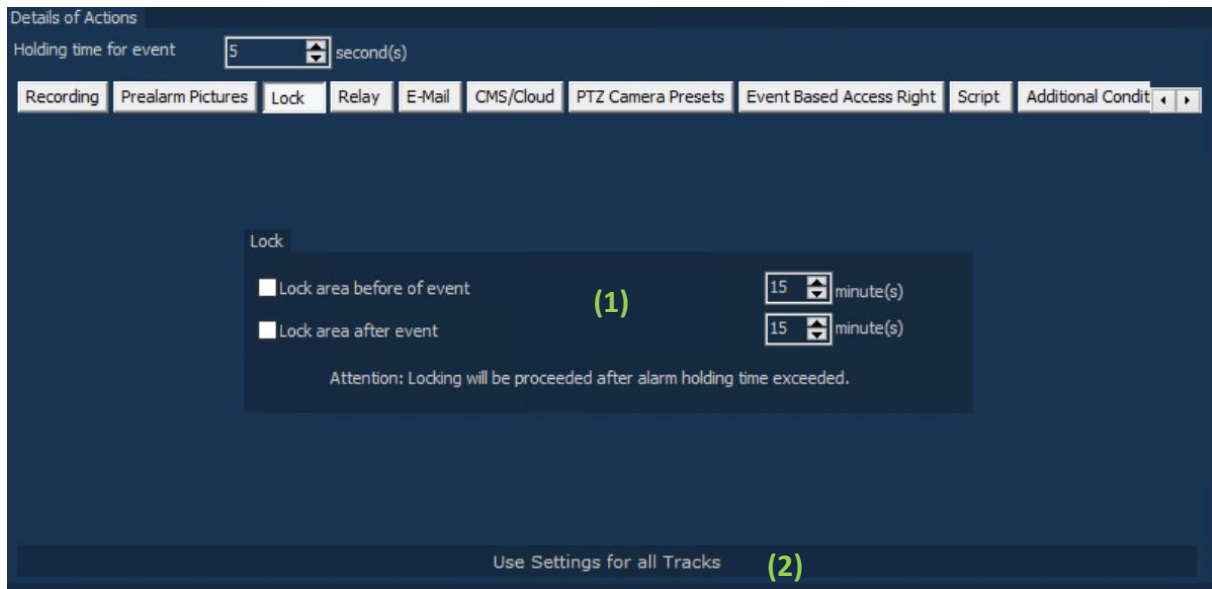
2.4.10.2 Pre-Alarm Images



- In the "Prealarm Pictures" section **(1)** you can indicate if and how many pre-alarm images should be saved. When an alarm is triggered, pre-alarm images already precede the alarm sequence so that the seconds before the actual alarm triggering are also saved. To activate this, first click on the "Save Pre-Alarm Images" button.
- Then click on the "Duration for prealarm" **(2)** button and enter how long the pre-alarm should be (between 1 and 30 seconds).
- Then determine with which image rate the pre-alarm images should be recorded (Interval – only with .jpg recording) **(3)**. In the example above, the "Recording Interval" has been set to 0.5 seconds. An image will be recorded every half a second - or 2 images per second.

2.4.10.3 Lock

In case of an event, a section of the permanent track can be locked. This ensures that this part of the recording will not be overwritten during the cyclical recording process. However, it must be noted here that recording capacity is reduced when track segments are locked.



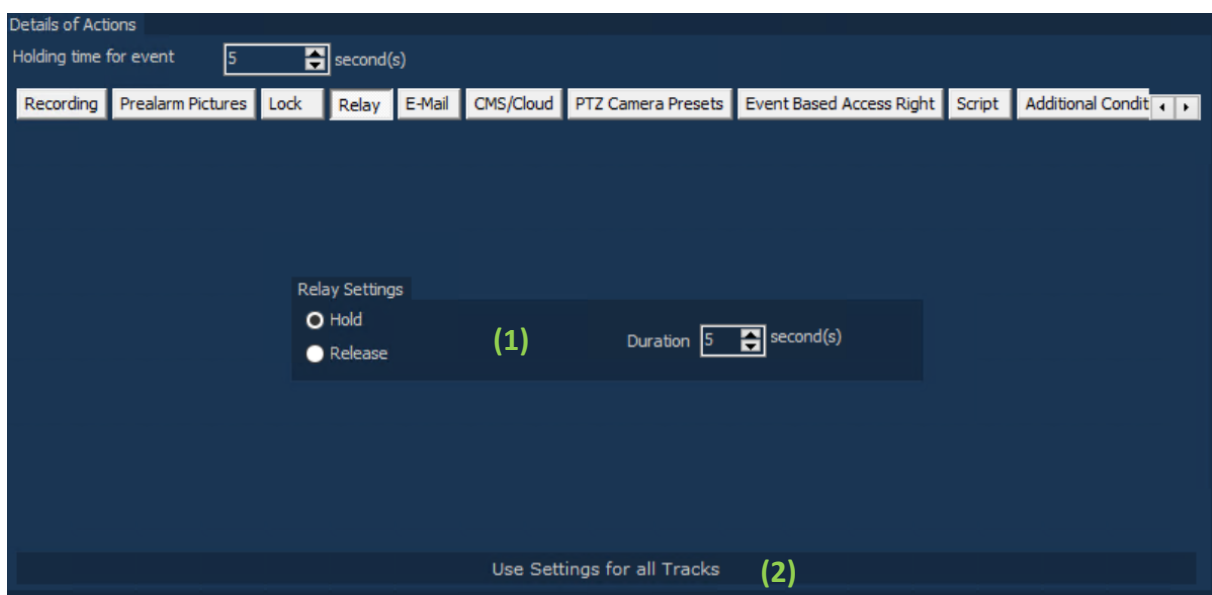
- In the "Lock" section **(1)** you can determine that specified time periods close to an event will be protected by selecting the buttons "Lock Segment before Event" and "Lock Segment after Event". After clicking on the respective button, enter a time between 1 and 120 minutes which should be locked on the permanent track.
- Click on the "Use Settings for all Tracks" button **(2)** to take over the effected settings for all tracks.

Please note: Locking will first take place after the expiration of the holding period event.

2.4.10.4 Relay

In this sub menu, you can determine how the relays assigned to the current track will react when an event takes place.

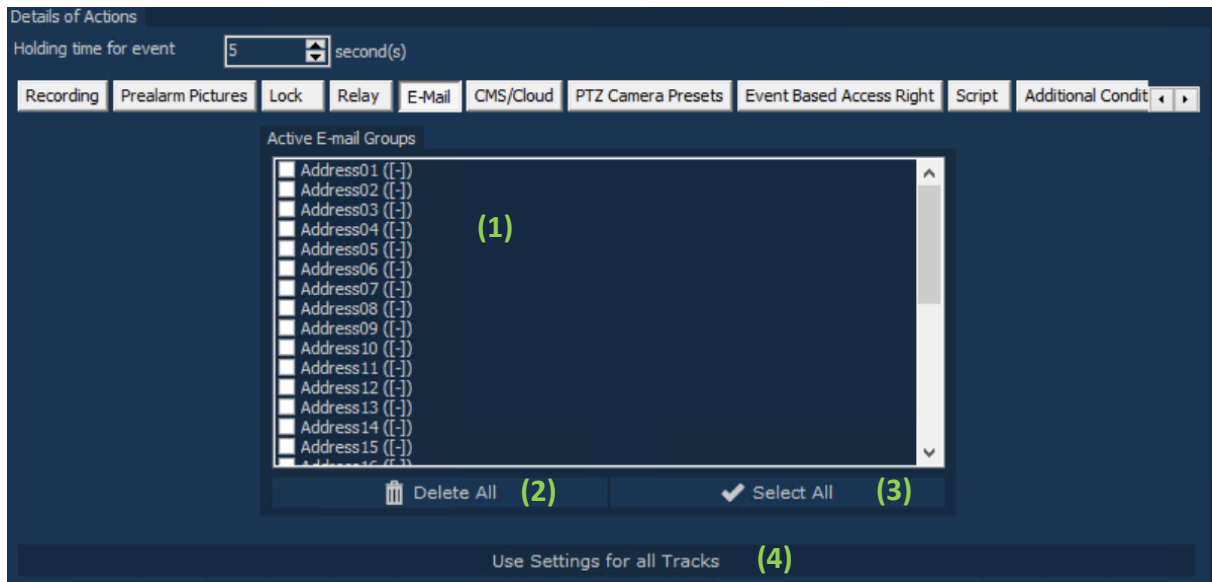
- In the "Relay Settings" section **(1)** you can first configure whether the relay should "trigger" or "release" when an event takes place. Then, with the help of a "holding time" value in seconds, you can determine how long the relay should maintain this state before returning to its original condition.
- Click on the " Use Settings for all Tracks " button **(2)** to take over the effected settings for all tracks.



2.4.10.5 E-Mail

In case of an event, server e-mails can be sent. Please see the chapter on e-mails (0) for information concerning the technical configuration of e-mail transmission.

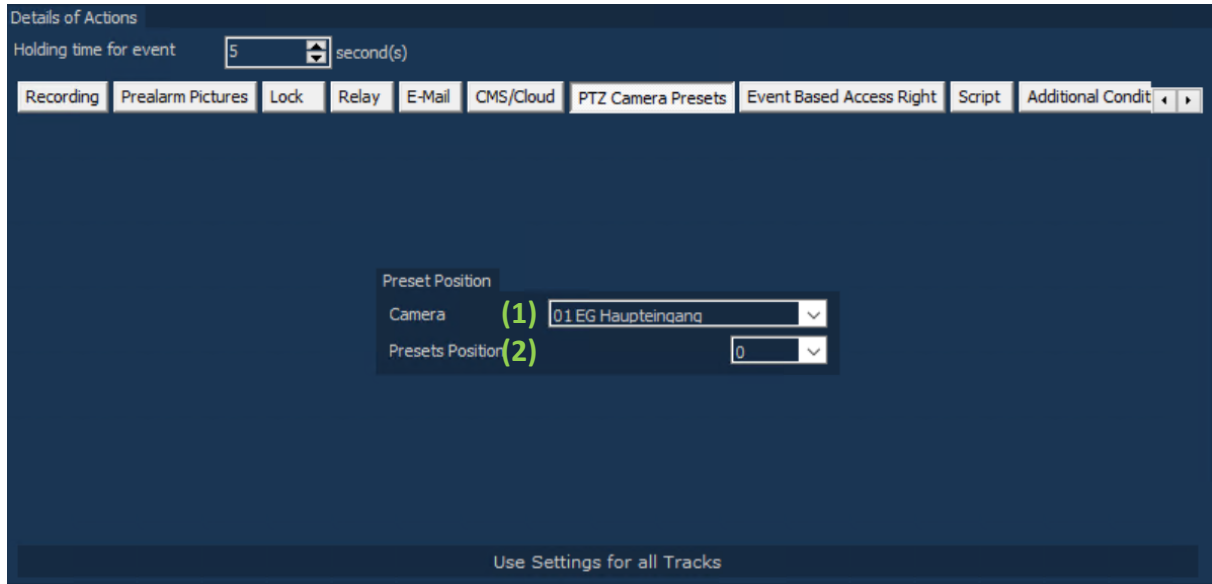
In the present menu, you can only assign e-mail users to specific tracks.



- In the "Active E-Mail Groups" section **(1)**, select which e-mail recipient should receive a message by clicking on the corresponding address.
- You can deactivate all addresses with the "Delete All" button **(2)**.
- With the "Select All" button **(3)**, you can activate all addresses.
- Click on the "Use Settings for all Tracks" button **(4)** to take over the effected settings for all tracks.

2.4.10.6 PTZ Cameras

When an event takes place, an installed PTZ camera can be moved to one of your preset positions.

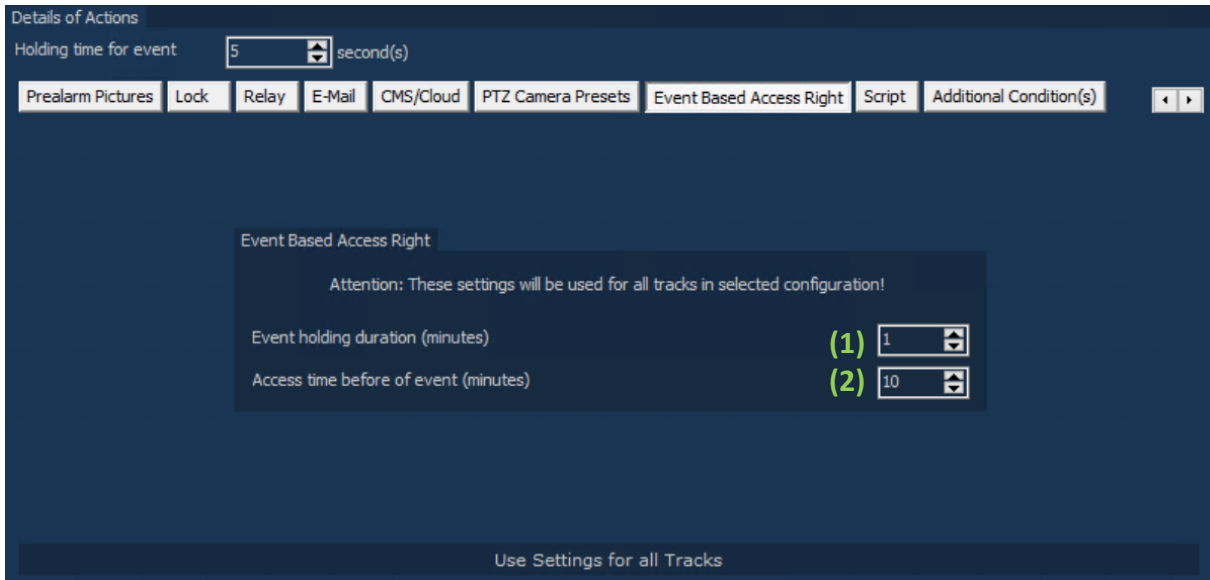


- First, select the PTZ camera or dome camera from the "Camera" list **(1)**.
- Then select from the "Position" list **(2)** the preset position that the camera should be set to in case of an event.

You can get information concerning the configuration of preset positions in the chapter 2.4.20.

2.4.10.7 Event-Driven Access Rights

In case of an event, a user can optionally be given access to the image material taken during the time of the alarm (plus or minus a defined time period).



Details of Actions

Holding time for event: 5 second(s)

Prealarm Pictures Lock Relay E-Mail CMS/Cloud PTZ Camera Presets **Event Based Access Right** Script Additional Condition(s)

Event Based Access Right

Attention: These settings will be used for all tracks in selected configuration!

Event holding duration (minutes) (1) 1

Access time before of event (minutes) (2) 10

Use Settings for all Tracks

- Define here the time period during which the user with limited access can evaluate the occurring alarm **(1)**.
- Select the time period during which the user with limited access can evaluate the recording before the alarm took place **(2)**.

2.4.10.8 Script

A predefined script can be called up when an event takes place.

Details of Actions

Holding time for event: 5 second(s)

Prealarm Pictures Lock Relay E-Mail CMS/Cloud PTZ Camera Presets Event Based Access Right Script Additional Condition(s)

Script

Run script (1) TESTTEST

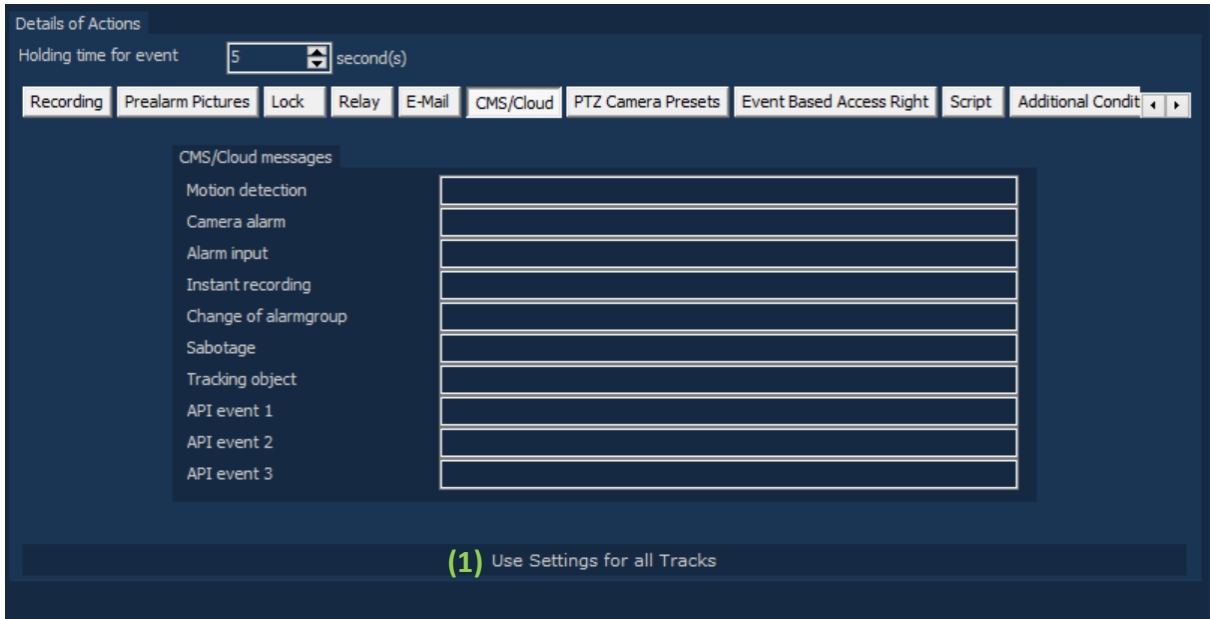
(2) Use Settings for all Tracks

- Under "Run script" (1), select the script which should be run in case of an event (information concerning the creation of a script can be found in the chapter 2.4.29).
- Click on "Use Settings for all Tracks" (2) to take over the script for every track in case of an event.

2.4.10.9 CMS/Cloud

In case an event is triggered, the CamIQ Server can transmit a push message to the associated cloud account which is then forwarded to the authorized mobile devices or central monitoring stations.

Should you wish to transfer your own alarm text, which varies from the standard text: ("Event:[Track Name] ([Alarm Type])"), you can add this behind the corresponding event.



Details of Actions

Holding time for event: 5 second(s)

Recording Prealarm Pictures Lock Relay E-Mail CMS/Cloud PTZ Camera Presets Event Based Access Right Script Additional Conditions

CMS/Cloud messages

Motion detection	
Camera alarm	
Alarm input	
Instant recording	
Change of alarmgroup	
Sabotage	
Tracking object	
API event 1	
API event 2	
API event 3	

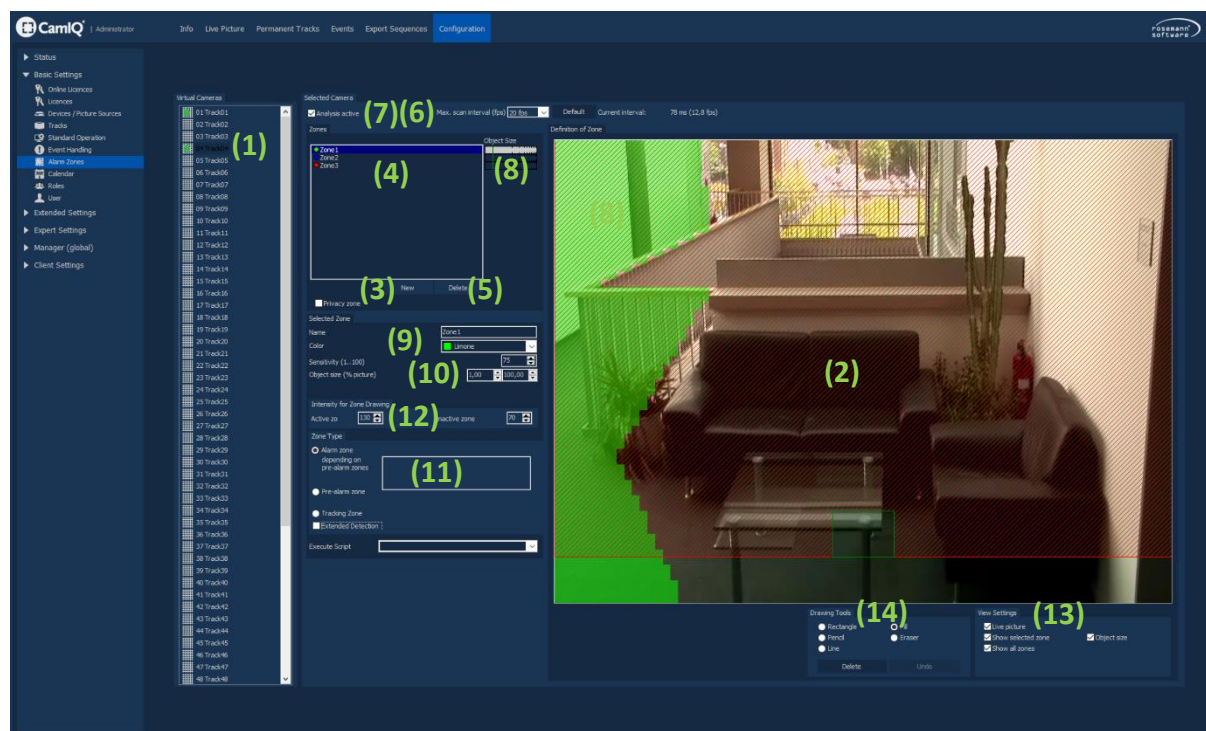
(1) Use Settings for all Tracks

Click on "Use Settings for all Tracks" (1) if you wish to have your changes assigned to all of the tracks.

2.4.11 Alarm Zones

The CamIQ Server comes equipped with integrated motion detection. In order to use it, a so-called alarm zone must be defined for the screen in which the motion detection is to be implemented. Up to 16 freely-definable alarm zones are available and command an extensive range of adjustment settings such as **sensitivity**, minimum and maximum **object size**, pre-alarm zone (**direction detection**), **detection resolution** and **perspective analysis**.

Please note: An additional license is necessary in order to use the perspective analysis functionality.



Setting Up an Alarm Zone

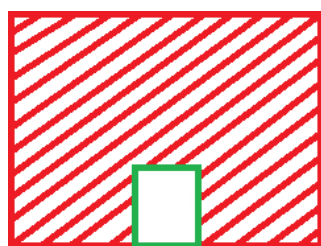
- First select a track from the “Virtual Cameras” list (1). The current camera image appears in the “Definition of Zone” field (2).
- Then click on “New” (3) to add a new zone. The new zone will be displayed in the list “Zones” (4).
- If you wish to delete a zone, highlight the zone in the Zone List (4) and select the “Delete” button (5).
- Use this area (6) to set the “Max. scan interval (fps)”. This is the sampling rate at which the images are to be searched for motion – it can lie between 1 and 1000 milliseconds. The current “Actual Interval” is displayed to the right of the field as the actual sampling rate is dependent upon the processor’s workload. If you click on the “Suggestion” button the Manager will enter a suitable interval for you.

- Select the “Analysis active” button (7) in order to activate the zone evaluation function.
- In the “Object Size” area (8) you can see a detection display. The vertical green line is the threshold at which an event will be triggered; the red line is the threshold at which no alarm will be triggered as the object in question is too large. The bar on the left shows the current detection intensity. If the bar exceeds the green line, it will turn red and has then reached the event-triggering range.
- In the “Selected Zone” area (9) you can give the zone a designation as well as assign it a color.

The menu item “**Sensitivity**” allows you to select how sensitively the sensor should react to movement. The higher the sensitivity, the more discerning the sensor’s reaction to image changes, even smaller ones.

You can drastically decrease the number of false alarms and differentiate between objects based on size with the help of the configurable minimum and maximum object size function.

For better visualization, an auxiliary interface is superimposed directly onto the image:



The small green frame is configurable using the input window on the left (10) and visualizes the minimum object size (an object that is smaller than the green frame will not trigger an alarm).

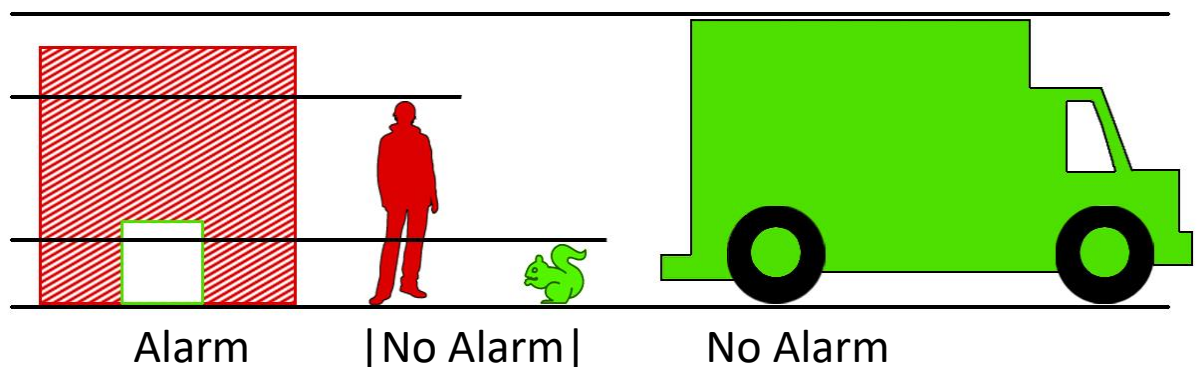
The minimum object size lends itself to preventing alarms that would otherwise be triggered by animals or weather conditions, for instance.

The red frame visualizes the maximum object size leading to an alarm. It is configurable using the second input window (10).

The range between the minimum and maximum object sizes is cross-hatched in red and indicates the object size which will trigger an alarm.

The object sizes here always correlate to 100% of the image to be analyzed.

The effect brought about due to settings changes made can be seen in the detection display (8).



- The “Zone Type” item **(11)** allows you to determine what type of zone your selected zone should be configured as.

Alarm Zone: If a movement is detected in this zone, the server triggers an event. If pre-alarm zones have been defined, the alarm zone can be linked to these. To do this, select the corresponding pre-alarm zone in the “Linked to Pre-Alarm Zone” field. Now a movement must first be detected in the pre-alarm zone and then in the alarm zone before an event will be triggered. If the alarm zone is linked to several pre-alarm zones, it will suffice if movement is detected in only one of them before an event is triggered. It is not necessary for something to occur in all of the pre-alarm zones.

Pre-Alarm Zone: This zone detects changes to the image just like the alarm zone does. However, it does not trigger events. It merely precedes the alarm zone. You can adjust the time in seconds under the “Holding Period” item. This holding period is the time limit in which a movement must be detected in both the pre-alarm and alarm zones so that an event will be triggered. If this time limit is exceeded, no event will be triggered.

Please note: If you want to implement the direction recognition function, ensure that the space between the alarm and pre-alarm zones is as large as the object. Otherwise, this object will also trigger an event in the border area of both zones if it moves in the opposite direction.

Tracking Zone: You also have the possibility of defining a zone as a tracking zone. This setting is only useful when using a so-called reference camera, as the zone highlights the area in the image in which object tracking should be executed with the help of a PTZ camera (an additional license is necessary to order to use tracking).

- The “Intensity” area **(12)** allows you to determine the opacity the alarm zone should have in the live image. The first setting refers to the “Active Zone.” A zone is active when movement is detected within it. The second setting refers to the “Inactive Zone.” “Inactive” here means that no movement is currently being detected in the zone. Enter your values, whereby 255 sets the zone to full opacity and completely covers up the live image behind the zone.
- In the “View Settings” area **(13)** you can configure the image display **(2)**, which can be helpful when setting up the zones.

If the “Live Image” button is active, a video stream will be played in area **(2)** showing the current image being received. If the button is deactivated, only a frozen image will be displayed.

If one activates the “**Display Selected Zone**” button, the currently selected zone will be embedded within the image. If the button is deactivated, the zone is hidden. If the „Display All Zones” button is activated, all zones for the currently selected track are shown. In this way one can directly calibrate pre-alarm and alarm zones to one another.

If the “**Object Size**” selection box is active, the visualization for minimum and maximum object size will be superimposed.

- Using the tools offered in the “Drawing Tools” area **(14)** you can plot the zones in the camera image **(2)**.

The **“Rectangle”** tool allows you to draw a rectangle zone. To do this, place the mouse pointer on the position where one of the corners should be. Click on this position and press down on the mouse button. Keeping the button pressed, pull the mouse pointer away from the position. The drawn zone under the mouse pointer will increase in size in proportion to the distance moved.

The **“Pencil”** tool enables you to draw lines manually. Draw a circle in the middle of an area, for instance, by bringing the mouse pointer into position and then moving it accordingly with the mouse button pressed.

Subsequently, you can use the **“Fill-In”** tool to fill in the arc of the circle you created by clicking anywhere within the circle. The “Fill-In” tool functions by filling in connected areas of the same kind with the zone marking.

Use the **line tool** to draw a straight line in the image.

The **“Eraser”** tool functions in the same way that the “Rectangle” does, only in this case the delineated zone is removed.

By using the **“Distance Calculation”** drawing function you can shift points “A (foreground)” and “B (background)”. (This tool is part of the Enhanced Detection functionality of Distance Calculation.)

By clicking on the **“Delete”** button you can completely delete the selected zone.

With a click to the **“Undo”** button you can undo the last change made.

Enhanced Detection

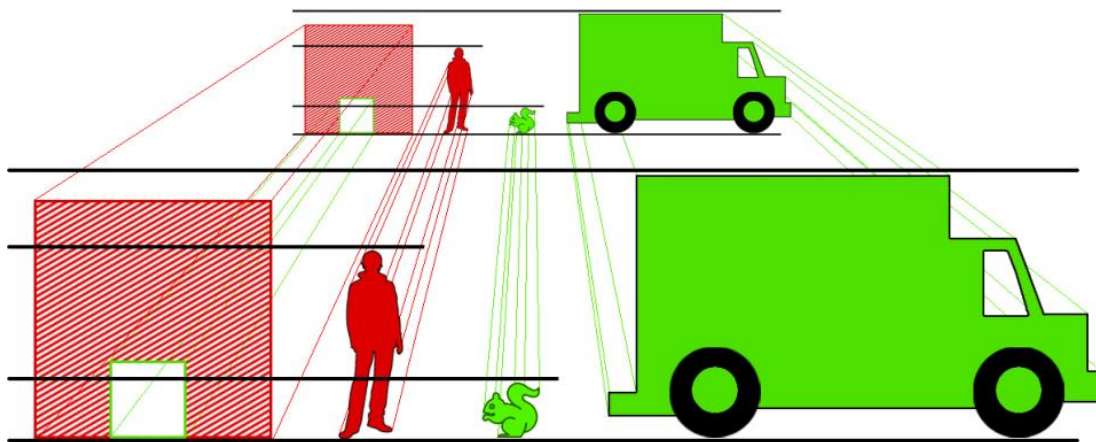
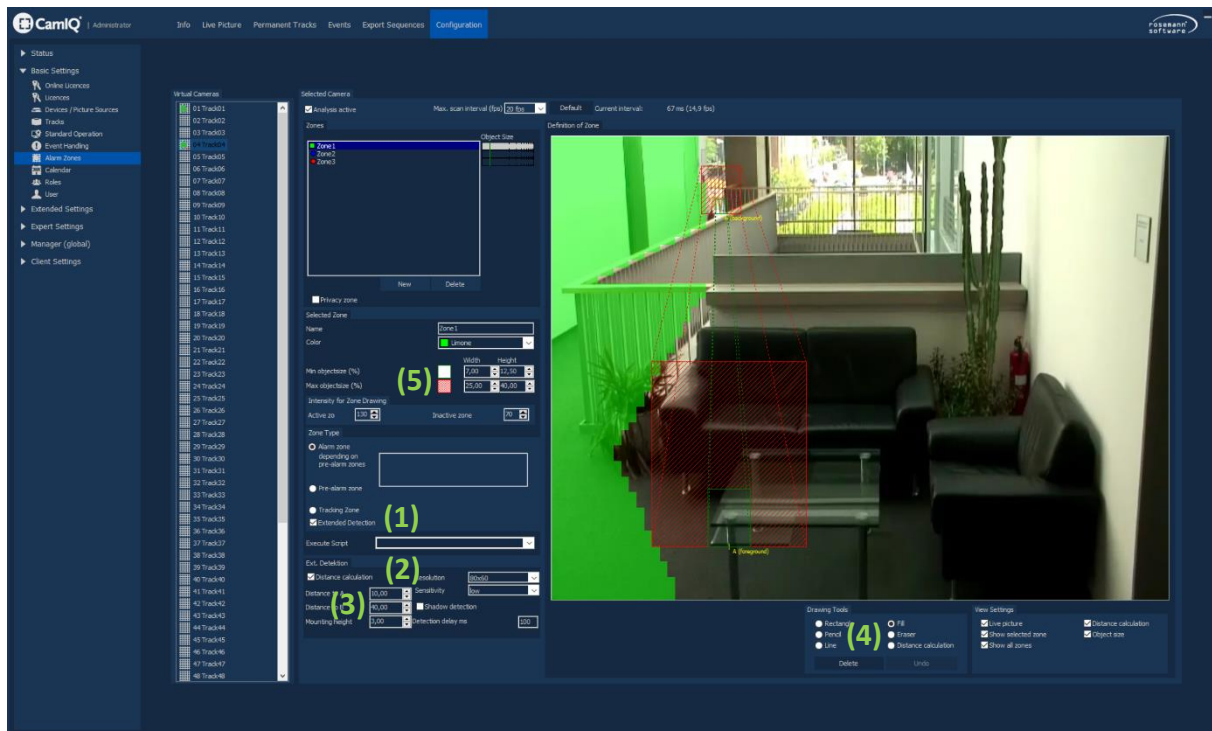
Enhanced Detection uses complex algorithms for the gathering and analysis of characteristic objects under consideration of the camera perspective.

To use Enhanced Detection and the Distance Calculation (perspective), set up an alarm zone as described before and then activate the **“Enhanced Detection” (1)** and **“Distance Calculation” (2)** functions.

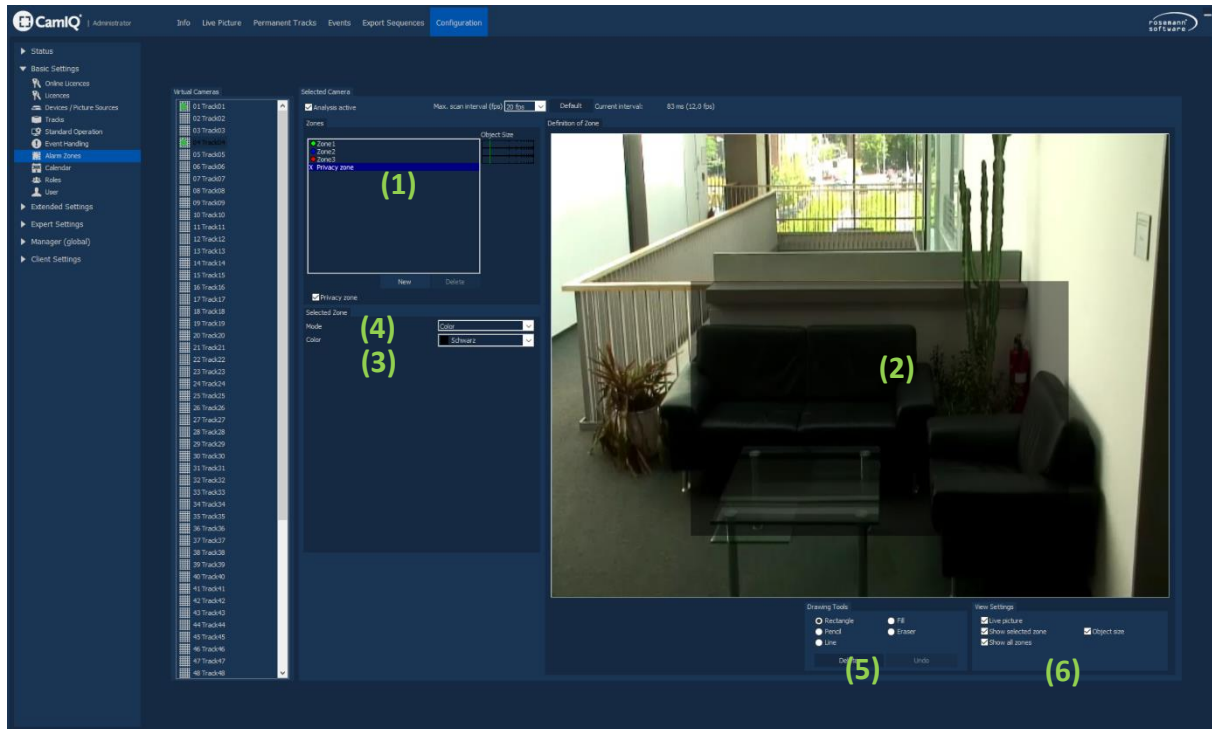
First complete the calibration of the reference points. Measure the distance between the camera to point (A) and the distance between the camera and point (B).

Also enter the installation height of the camera in the Distance Calculation **(3)**. You can freely position reference points **A** and **B** on the camera image. To shift the points select from the drawing tools the **“Distance calculation” tool (4)**.

Please note: Select the reference points carefully and enter the most accurate measurements possible. The more precise the distance entered, the more precise the detection result. The minimum and maximum object size is defined in the same way as in a “normal” alarm zone **(5)** (Enhanced Detection allows object size to be separately configured in height and width).



2.4.11.1 Privacy Zones / Fade-Out Area



- In order to delineate a private zone and, through this, black out an area of the image, you will first need to activate the "Privacy zone" entry (4). Through this, the fade-out area will appear in the "Zones" (1).
- Then, under the settings for the selected zone (3), select the "mode" to be used and the "color" for the zone.
- The settings and tools under the items (5) and (6) function exactly the same way as when creating alarm and prealarm zones.
- The zone will be drawn in the camera image (2).

Please note: The privacy zone is no longer visible either in the Live Image or in the recording!

IMPORTANT: The fade-out areas must only be used while using Motion JPEG since otherwise a large system load is generated on the server.

2.4.12 Calendar

The various configurations for permanent recording and event-handling (see chapters 2.4.9 and 2.4.10) can be used in a scheduled fashion with the help of the calendar. This allows certain configurations to be activated at designated times.



- In the "Calendar Entries" section **(1)**, you can view existing calendar entries. The currently active entry is green, the currently selected entry is blue.
- In order to make a new calendar entry, click on the "New Entry" button **(6)**. If you wish to delete an entry, click on "Delete Selected Entry" **(8)**.
- In the "Time" section **(2)** you can determine how often the selected entry should be active. You have the choice between "once", "daily", "weekly", "monthly" and "yearly" (in descending priority).
- Depending upon which repetition you have selected, you can place a time limit on it under the "Repetition Start/Finish" item **(3)**.
Choose a time for the start and a day and month when necessary.
Choose a time for the finish and a day and month when necessary.
- If you click on the button "Repetition Time Limit" under item **(9)**, you can determine the repetition time with the calendar.

Select for "Start" and "End" a respective calendar date in the "Time Limit" section **(10)**.

The selected entry will then be active only within the time period as set under items **(2)** and **(3)**.

- If two entries of the same type of repetition overlap during the same time period, you can give each entry a different priority under item **(9)**. The higher value has the higher priority.
- In the "Remark" section **(4)** you can add a comment to your entry.
- Under the "Settings/Effects" item **(5)**, select for every calendar entry a "Configuration for Standard Operation" (see chapter 2.4.9) and a "Configuration for Event-Handling" (see chapter 2.4.10).
- After you have made all the settings, click on the "Use new Settings" button **(11)**.
- If you would like to disregard the settings you have made, click on the "Abort" button **(7)**.

Please note: If there is no calendar entry for a particular time period, the first configuration for standard operation and the first configuration for event-handling will be activated! Normally this configuration is referred to as the "Default".

Configuration example:

Employees in your company only work during the day, Mondays through Thursdays from 0800 to 1800 hours and Fridays from 0800 to 1500 hours. They are pleased to have their weekends off. A permanent recording is to take place 24/7. In addition, motion detection with alarm should be active at night and on weekends when no one is working.

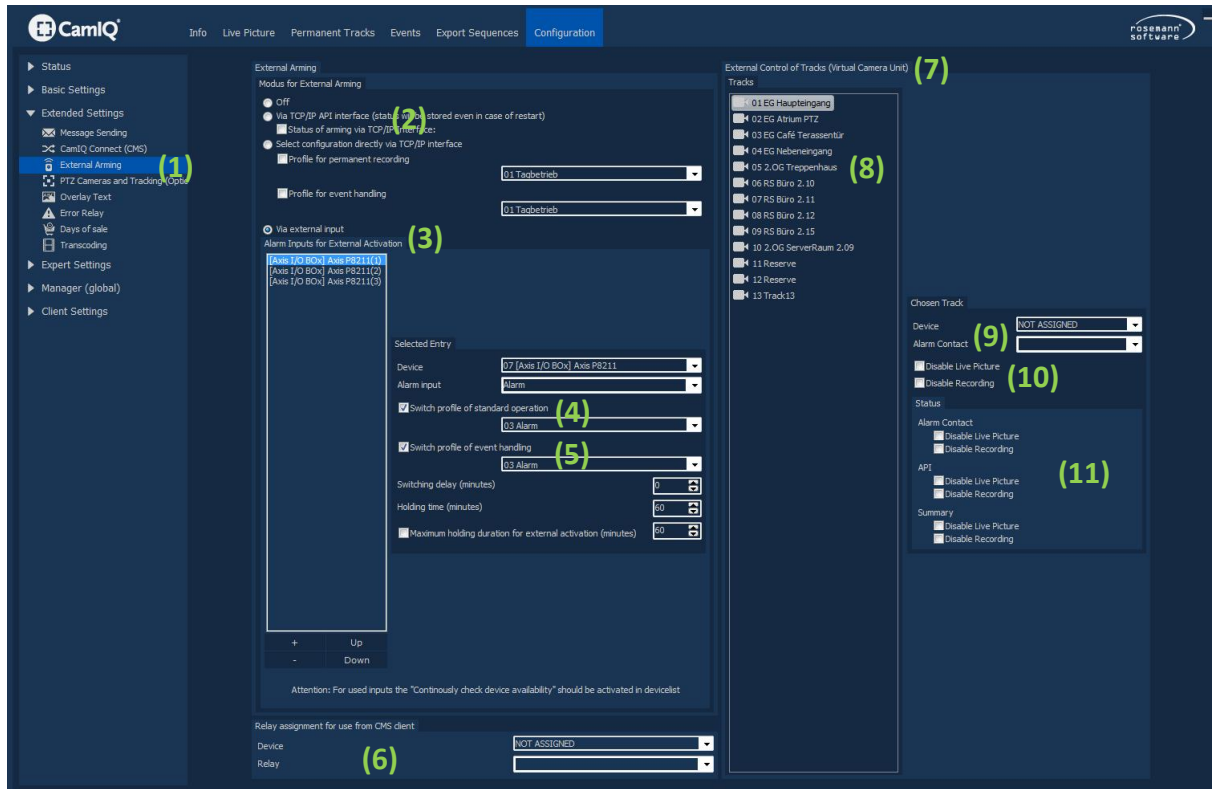
For this example you would need a configuration for standard operation in which permanent recording has been configured. We will name this "Recording", for example.

Two configurations for event-handling will also be necessary; one which leads to an alarm when motion has been detected and one with which no alarm is given. These examples can be called "Armed" and "Unarmed".

First make a calendar entry with the "Daily" (repetition) setting and with a starting time of 0800 hours and an ending time of 1800 hours. This entry will be linked to the "Recording" and "Unarmed" configurations.

Then a second entry is made. Here too, use "Daily" - but with a starting time of 1800 hours and a finishing time of 0800 hours. This will then be linked with the "Recording" and "Armed" configurations. Now the weekend must still be considered. We add for it a third entry with the "Weekly" repetition and set the starting time as "Friday, 1500 hours" and the finishing time as „Monday, 0800 hours“. You will select for this the "Recording" and "Armed" configurations. Due to its higher priority, the weekend entry will overlay the daily entry and in this way achieve the desired operating mode.

2.4.13 External Arming



The standard operation and event-handling configurations can be manually altered using external wiring.

- Select how the circuit should be switched in the „External Arming“ section (1):
 - **Out:** External arming is deactivated.
 - **Via TCP/IP API Interface:** The signal comes in over a TCP/IP connection (2)
 - **Via External Contact:** First select under the "Device" item (3) a device which has at least on alarm input at its disposal and then enter which "Alarm Contact" is to be used for the external arming.
- Then click on the "Switching the Configuration for Standard Operation" button (4) in the "Effects" section and select a configuration. You can manage the configurations in the "Standard Operation" menu (see chapter 2.4.9).
- After this, activate the "Switching the Configuration for Event-Handling" button (5) in the "Effects" section and select a configuration. You can manage these configurations in the "Event-Handling" menu (see chapter 2.4.10).

Please note: Configurations that are activated by external contact have priority over those which are activated by the Calendar.

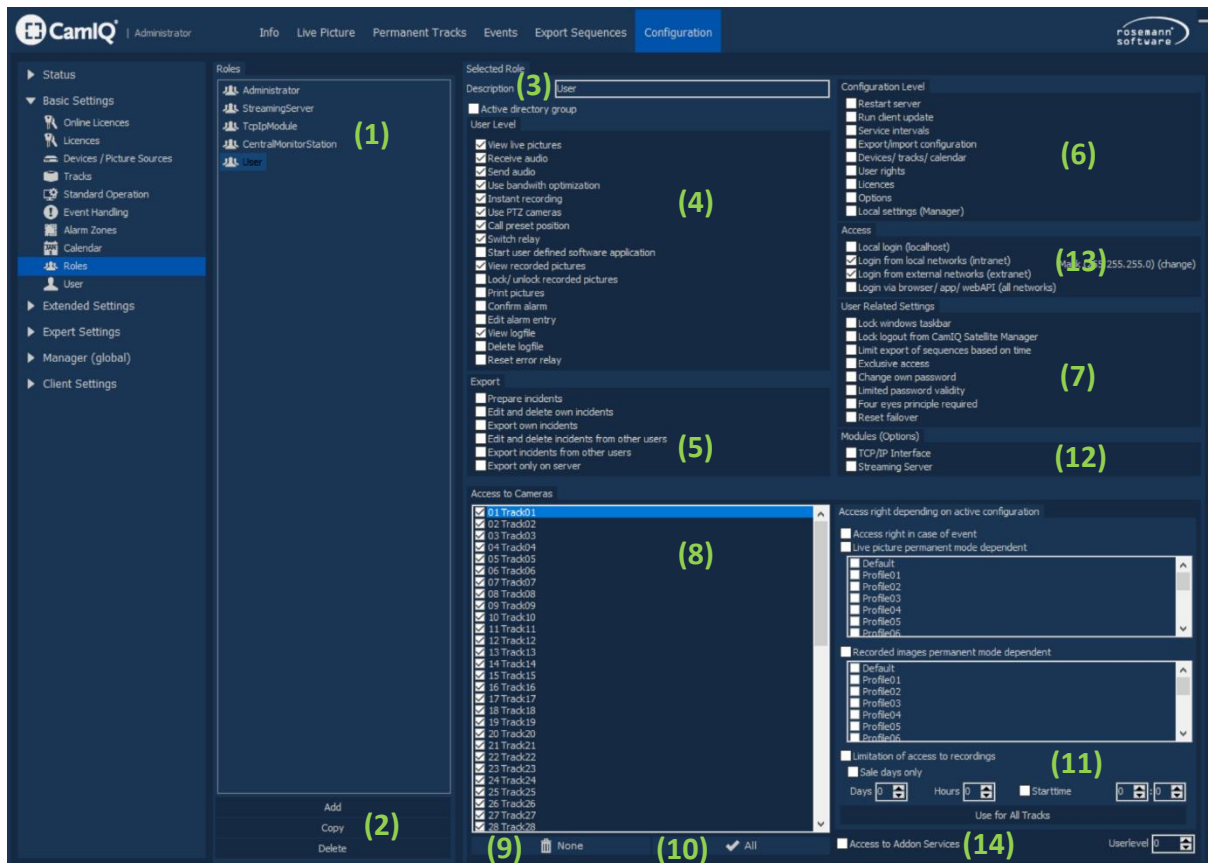
- Under “relay assignment for use from CMS client” (6), select any device and relay that is supposed to be managed by an authorized surveillance center. (This function can be used by security staff to reset an alarm state, for instance).
- With the help of the “external control of tracks (virtual camera unit)” (7) feature, the live image and/or camera recordings can be deactivated via the alarm contact or the CamIQ API.
- First select a track from the track overview (8) whose live image/recording is to be deactivated by an external trigger.
- From “device/alarm contact”(9), select the device and the alarm contact that should be used to deactivate the live image/recording.

Please note: Provided that the “external individual control” is to be used solely via the CamIQ API, it is not necessary to assign an alarm contact.

- Under item (10), select whether the live image, the recording – or both – should be deactivated in case of alarm contact switching /triggering via the CamIQ API.
- The current switching state of the selected track is displayed for you in the status box (11). Should the live image or recording of the selected track be currently deactivated, the corresponding box will be displayed as filled.

2.4.14 Roles

You can create up to 32 roles. Some roles have already been preconfigured and can either be edited or deleted (**with the exception of the administrator account!**). You can issue individual permissions to each role.

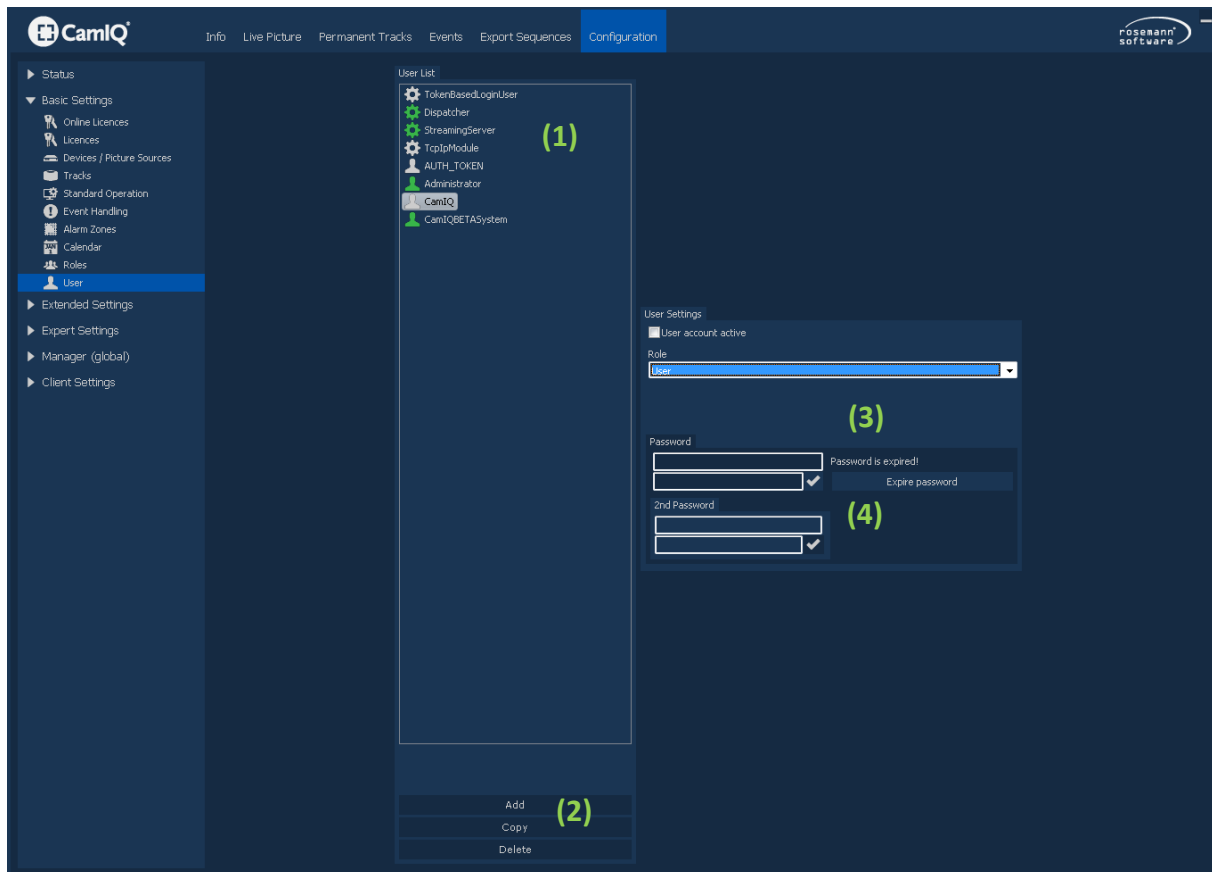


- First select a role from the role list “Roles” (1).
- Alternatively, you can also create a new role by clicking on “Add” under item (2). You can also copy roles if, for example, you have already configured one role and need an additional one with the same permissions. To do this, just select the entry that you would like to duplicate and click on “Copy” (2). To delete roles again select the corresponding role and click on “Delete” (2).
- Under item (3), you can give a name to the role you have selected. User accounts can be assigned to this role with the help of this unique name.
- You can either add or remove Manager permissions to a selected role in the “User Level” area (4). To do this, click on the corresponding buttons to either issue or remove these permissions.
- In the “Export” (5) area you can define how the user should manage exports.
- Under the item “Configuration Level” (6), the selected role can be issued with the permissions needed to configure the server. **Be very careful when issuing these permissions!**

- Network “Access” **(13)** to the system can also be restricted here. Define, for example, whether or not a user is permitted to log in from the local network or with the CamIQ app.
- You can adopt other security measures in the “User Related Settings” area **(7)**. For example, you can limit the validity of the password or give the role user permission to change their password. In addition, you can make the Windows taskbar disappear and prevent the role user from logging out of the Manager. This ensures that the Manager is always active in the foreground and that all alarm messages are immediately recognized.
- Under the “Access to Cameras” item **(8)**, you can either permit or deny the selected role access to certain cameras. To do this, either activate or deactivate the camera buttons by clicking on them. You can deny the role all camera access by clicking on the “None” button **(9)**. You can grant the role access to all cameras by clicking on the “All” button **(10)**.
- Under the item “Limitation of access to recordings” **(11)**, you can grant or deny a role access to the Live Image and the recording based upon certain criteria.
- In the “Modules (Options)” section **(12)** you can give the user the right to access the server through the TCP/IP interface. This is necessary if a connection should be established.
- To give the selected user access to the connected Add-on Services click on “Access to Add-on Services” **(14)**. Here, you can also configure the access level.

2.4.15 Users

You can create up to 32 user accounts. Some user accounts have already been preconfigured and can either be modified or deleted (**with the exception of the administrator account!**). Each user account can be assigned a previously configured role.



- First select a user account from the “User List” (1).

Please note: User accounts that have a cogwheel as an icon are system users. These are automatically created by CamIQ and should, as a rule, not be edited.

- Alternatively, you can create a new user account by clicking on “Add” under item (2). You can also copy user accounts if, for example, you have already configured one account and wish to use it to create an additional account with the same permissions. First select the account you wish to duplicate and then click on “Copy” (2). A field in which you can enter the new user name will appear above the button. To delete user accounts select the respective user and click on “Delete” (2).
- You can select one of the available roles from the selection box under item (3). The permissions configured for this role will now also apply for the selected user.
- You can enter a password for the user account under the item “Password”(4). Enter it in both fields and confirm it by clicking on the check mark. If both password entries are identical the

asterisks visible in the field will disappear. If they do not match, the color of the fields will turn red. In this case you will need to verify your entries. By clicking on the “End Password Validity” button you can declare a password as invalid before its regular expiration time has lapsed.

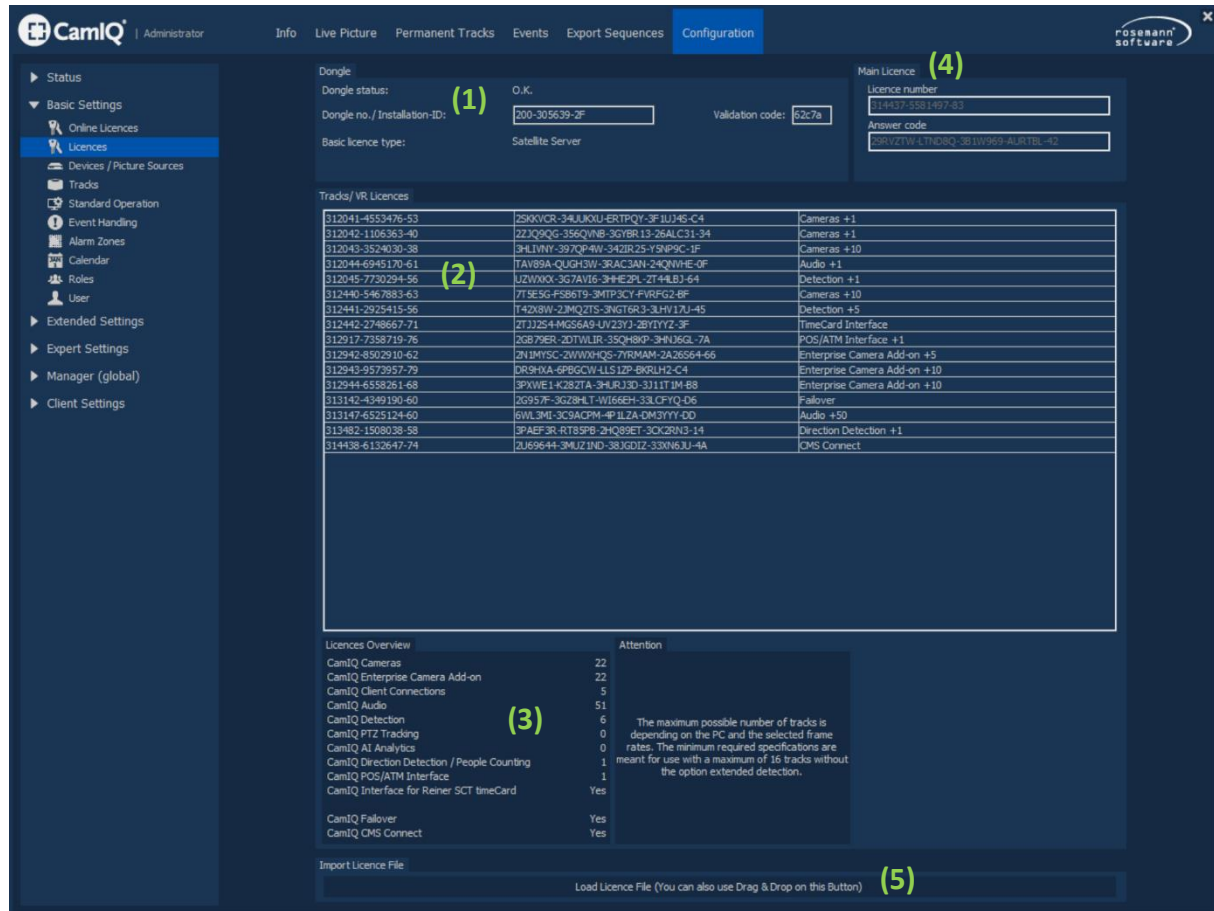
Attention: After installation, no password has yet been issued to the administrator account! For this reason you should enter one as soon as possible to ensure that your system is protected from abuse!

- The system user account 'TokenBasedLoginUser' is used for login access from a control center for a limited amount of time. The validity period – along with the role – of this user account can be configured in the user settings.

Please note: This user account is not activated by default and can therefore not be used. Provided that an external control center has been tasked, this account must be manually activated.

2.4.16 Dongle-bound licenses

In this menu you can see the licenses stored on your dongle and activate additional options and extensions.



The screenshot shows the CamliQ Administrator Configuration menu. The left sidebar contains a navigation tree with 'Licences' selected. The main area is divided into several sections:

- Dongle:** Displays 'Dongle status: O.K.', 'Dongle no./ Installation-ID: 200-305639-2F', 'Validation code: 62c7a', and 'Basic licence type: Satellite Server'. A green circle (1) highlights the 'Dongle no./ Installation-ID' field.
- Main Licence:** Displays 'Licence number: 119437-5581497-83' and 'Answer code: 001270-CTH00Q-3811099-AUR10L-42'. A green circle (4) highlights the 'Licence number' field.
- Tracks/ VR Licences:** A table listing various licenses and their features. A green circle (2) highlights the table header.
- Licences Overview:** A table showing the total number of licenses for various features. A green circle (3) highlights the 'CamliQ Cameras' row.
- Attention:** A text box providing information about the maximum number of tracks and the minimum required specifications for the option extended detection.
- Import Licence File:** A button to load a license file. A green circle (5) highlights the button.

- In the "USB Dongle" section (1) you can view the information concerning the USB Dongle. Along with the "Dongle Status", the "Dongle Number" and the "Main License" are displayed.
- In the "Camera Licences" section (2) all of the activated extended camera licenses to date are displayed. Under item (3) you will see the itemized total of activated cameras. In addition, you can see the maximum number of clients allowed to connect to the server.
- In the "Main License" section (4) you can see your main license.

Please note: You can read up about license activation in chapter 2.2.2.

- Click on "Load license data" (5) to open a license file and apply the licensing. (Please observe that the licensing must match with your dongle number.)

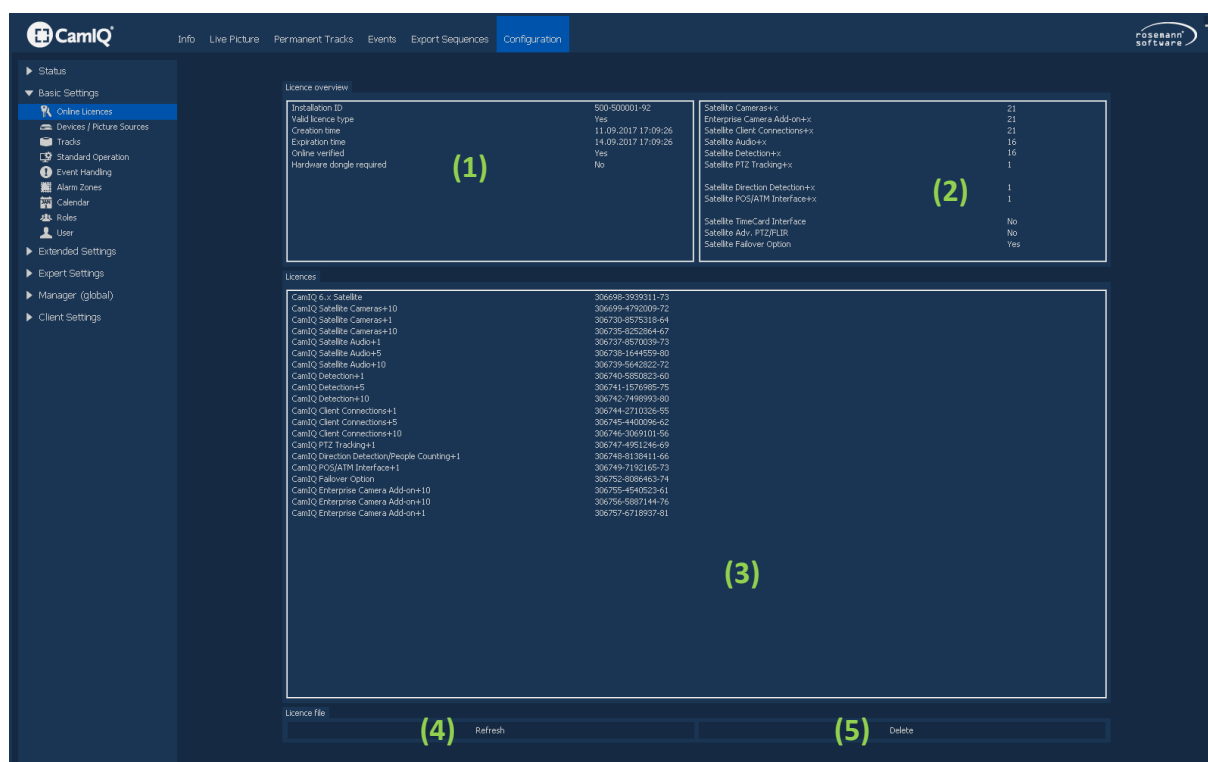
2.4.17 Online licenses

As an alternative to dongle-bound licensing, CamIQ also offers online licensing. Here one must consider that a permanent Internet connection with the 'CamIQ Dispatcher' service is necessary.

If online licensing was issued but no Internet connection is available, the system will be shut down after a tolerance period.

Furthermore, a CamIQ Cloud account is required. Information about the setup can be found in our FAQ document "[CamIQ Cloud Services - Quick Guide](#)" on our website.

When using online licenses, we strongly recommend activating the corresponding notification functions ([2.4.18 email](#)).



The screenshot shows the CamIQ Configuration window with the 'Configuration' tab selected. The left sidebar contains a tree view with 'Online Licenses' highlighted. The main area is divided into two sections: 'License overview' and 'Licenses'.

License overview: This section contains a table with general license information. It is divided into two parts by a vertical line. The left part contains information about the installation and license type, and the right part contains information about the license features.

License overview	
Installation ID	500-500001-92
Valid license type	Yes
Creation time	11.09.2017 17:09:26
Expiration time	14.09.2017 17:09:26
Online verified	Yes
Hardware dongle required	No
Satellite Cameras+xx	21
Enterprise Camera Add-on+xx	21
Satellite Client Connections+xx	21
Satellite Audio+xx	16
Satellite Detection+xx	16
Satellite PTZ Tracking+xx	1
Satellite Direction Detection+xx	1
Satellite POS/ATM Interface+xx	1
Satellite TimeCard Interface	No
Satellite Adv. PTZ/PLR	No
Satellite Failover Option	Yes

Licenses: This section contains a list of licenses with their details. It is a table with three columns: License Name, License ID, and License Key.

License Name	License ID	License Key
CamIQ 8.0 - Satellite	306696-3939111-73	
CamIQ Satellite Cameras+10	306699-4702009-72	
CamIQ Satellite Cameras+1	306730-8575318-64	
CamIQ Satellite Cameras+10	306735-8252864-67	
CamIQ Satellite Audio+1	306707-8870039-73	
CamIQ Satellite Audio+5	306739-1644559-80	
CamIQ Satellite Audio+10	306739-5642822-72	
CamIQ Detection+1	306740-9250823-60	
CamIQ Detection+5	306741-1127685-95	
CamIQ Detection+10	306742-7498993-90	
CamIQ Client Connections+1	306744-2710326-55	
CamIQ Client Connections+5	306745-4600856-62	
CamIQ Client Connections+10	306746-3069101-56	
CamIQ PTZ Tracking+1	306747-4951246-69	
CamIQ Direction Detection/People Counting+1	306748-4813811-56	
CamIQ POS/ATM Interface+1	306749-7132165-73	
CamIQ Failover Option	306752-8086463-74	
CamIQ Enterprise Camera Add-on+10	306755-4540523-61	
CamIQ Enterprise Camera Add-on+10	306756-5671144-76	
CamIQ Enterprise Camera Add-on+1	306757-6718937-81	

License file: This section contains a table with the license file name and buttons to refresh or delete the file.

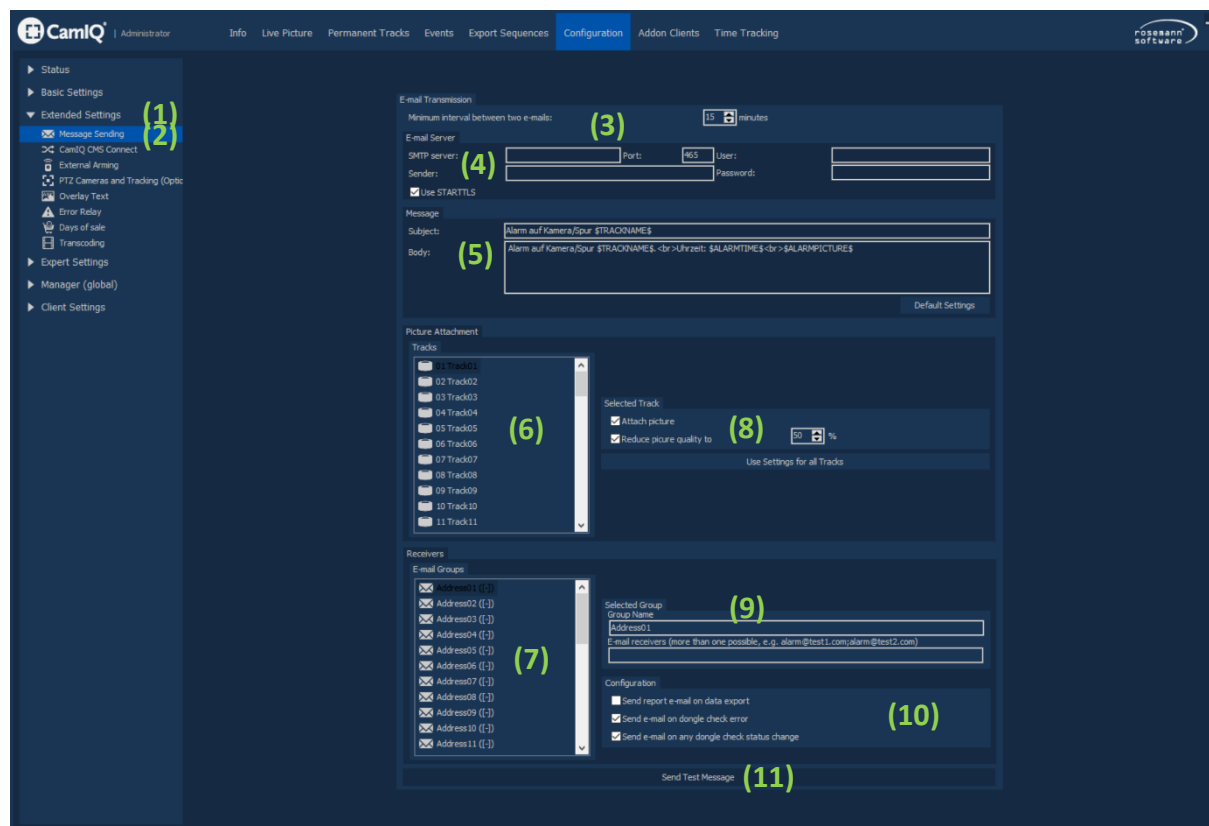
License file

Buttons: Refresh, Delete

- In the 'License overview' area (1) you can see general information regarding your license.
 - **Installation ID:** This is your own unique installation ID.
 - **Valid license type:** Displays whether a valid basic license type was found or not.
 - **Creation date:** This time stamp displays the last time a valid license file was received.
 - **Expiry date:** Displays when your license loses its validity (provided no new license file can be received).
 - **Online verification:** Displays whether your online licensing could be verified online or not.

- **Hardware dongle required:** Defined here is whether a hardware dongle is required for licensing or not.
- Item **(3)** displays a complete overview of your licensed functions.
- In the license list **(4)** the individually purchased licenses will be itemized for you.
- Click on 'Load license file' to import and apply a license file. (This button is only visible if no valid licensing is available.)
- Click on 'Update' **(4)** to immediately carry out an update of the licenses. (After the acquisition of additional extensions, for example.)
- Click on 'Delete' **(5)** to delete the current licensing.

2.4.18 E-Mail



- In the "Extended Settings" function group (1), you will find additional configuration menus for extended functions and optional modules. In the "Message Sending" menu (2), you can configure e-mail messaging.
- Under item (3) you can set the "Minimum interval between two e-mails" in minutes. This applies for e-mails that are initiated by an individual track. Other tracks can still send e-mails within this time interval.
- In the "SMTP Server" section (4) you can enter data about the mail delivery server which will be used by the server to send the e-mails. This can be a free mailer service in the Internet, for example, or an SMTP server in a local network. Enter the IP address or domain of the SMTP server (only when your network supports name resolution) in the "Server" field. For some mail services the sender address will need to be entered in the "Sender" field. If this is not required, you can enter anything here.
SMTP servers (as well as free mail services in the Internet) demand authentication or dial-up data. You must enter this user name here along with the corresponding password in the "Password" field. It is only in this way that the server can gain access to the e-mail account and send the e-mails. Provided your email provider supports or requires SSL, activate the option "SSL Transfer."

- In the "Message" section **(5)** you can individually adapt the alarm mail by making changes to the "Subject" and "Message" fields. You can use the HTML format for this, but do not change any of the variables denoted with the \$ sign. \$TRACKNAME\$ stands for the track used by the alarm-triggering camera, \$ALARMTIME\$ is the point in time in which the alarm takes place and \$ALARMPICTURE\$ is the designation for the alarm image.
- Under the "Picture Attachment" item **(6)** you can initially select a track. Then you can decide whether the alarm mail should have an image attached to it or not by activating or deactivating the "Attach picture" button under item **(8)**. You can also compress the image by clicking on the "Reduce image quality to" **(8)** button and entering a compression rate in percent. 100% corresponds to the original quality without compression but results in a high amount of data. By clicking on the "Apply to All Tracks" button, the current setting will be taken over for all other tracks.

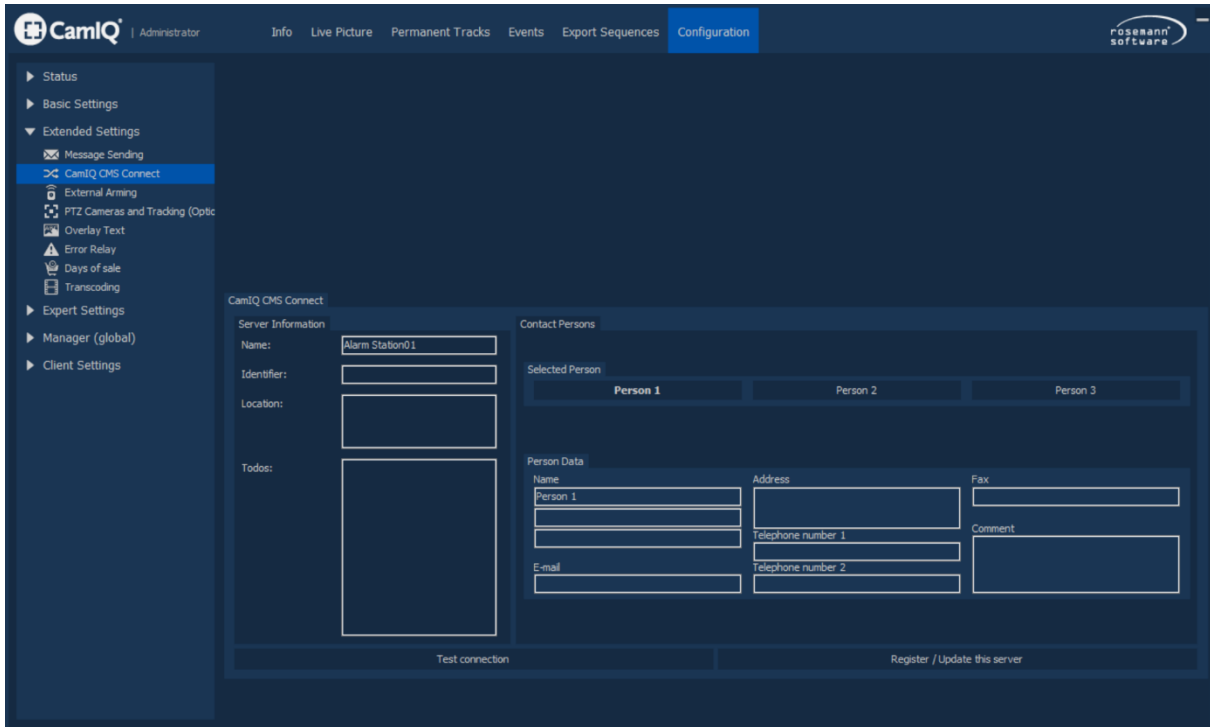
Warning: If the images were taken using the interlaced scanning process, it is possible that they will appear squeezed together. In this case, click on the "Reduce image quality to" button **(8)**. This recompresses the images and saves them using the proper ratio.

- In the "Receivers" section **(7)**, first select an entry from the "E-Mail Groups" list. Under the "Selected Group" item **(9)** you can give the group a name by adding it in the "Designation" field. In the e-mail address field you can enter several e-mail addresses, each separated by a semicolon.
- In the "Configuration" area **(10)**, you can select general scenarios for which the selected e-mail address is to be notified
 - „Send report e-mail on data export“: The email address will receive two emails with details about the operation and status each time the data is exported.
 - „Send e-mail on dongle check error“: If the license check cannot be performed successfully within a certain tolerance (applies to dongle and online licenses), an e-mail is sent to the defined address.
 - „Send e-mail on any dongle check status change“: If this option is enabled, an email is sent each time the license check state changes.
- With a click on the "Send Test Message" button **(11)** you can forward a test message and test to see whether your settings are correct.

2.4.19 CamIQ CMS Connect

With the help of CamIQ CMS Connect, it will be possible for you to send events to a higher level CamIQ Connect server and to specify the appropriate measures.

CamIQ CMS Connect is a separate product. For this reason, the CamIQ CMS Connect configuration will not be covered in the user manual.



CamIQ CMS Connect

Server Information

Name:

Identifier:

Location:

Todos:

Contact Persons

Selected Person:

Person 1 Person 2 Person 3

Person Data

Name:

Address:

Fax:

Telephone number 1:

Telephone number 2:

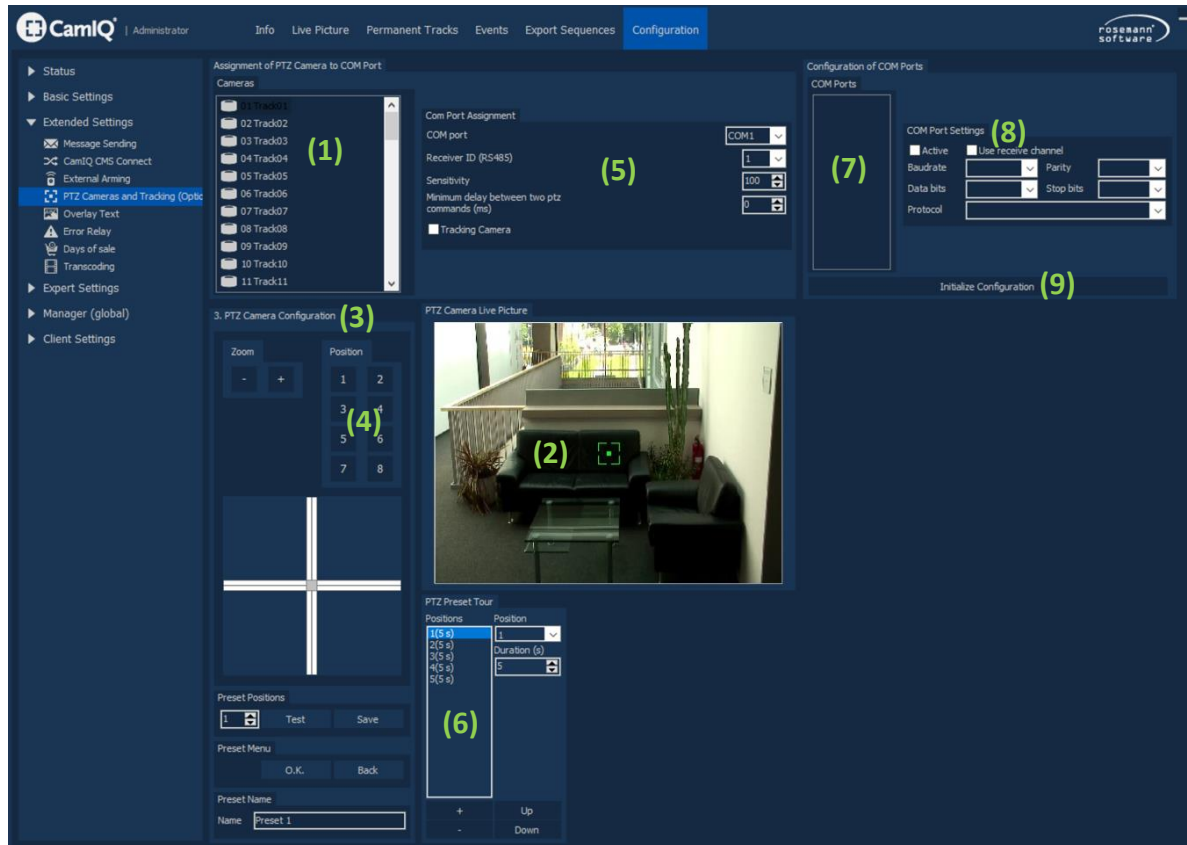
Comment:

E-mail:

Test connection Register / Update this server

2.4.20 PTZ and Tracking (Option)

PTZ and dome cameras connected to the station's COM ports or over a so-called PTZ box can be controlled by the server. Additionally, an activated tracking license allows you to track objects. You can monitor and film persons individually in a larger monitored area, for instance.



- First select the tilt swivel track in the "Cameras" section (1). The camera image appears under the "PTZ Live Image" item (2).
- You can assign the selected track to a COM port in the "COM Port Assignment" menu (5). Then enter the tilt swivel's "Receiver ID". This is the camera address that you must also set on the camera itself.
- In the "Sensitivity" field you can set how sensitively the tilt swivel camera should react to commands; 100 is the most sensitive setting.

Please note: If the camera supports a server-controlled distance parameter setting, it is recommended that the sensitivity be set to a lower value such as 30, for example. With this, the operation of the menu is usually much easier

- You can also enter a value for the "Minimum Distance between Two PTZ". This will be necessary with some dome cameras.

- Now the COM port can be configured. Select the desired port from the "COM Ports" list **(7)** and configure the "Baudrate", "Parity", "Data bits", "Stop bits" and the protocol in section **(8)**.

Please note: Baudrate, Parity, Data bits and Stop bits must correspond with the standard network device's COM port settings.

- Only activate the "Use Receive Channel" button if you must receive data over the dome camera interface (during tracking, for example). Deactivating this item enables the control commands to be carried out faster.
- Click on the "Active" button to activate the COM port.
- Finish the procedure by clicking on "Initialize Configuration" **(9)**. The configuration will be saved and the camera is now operational.

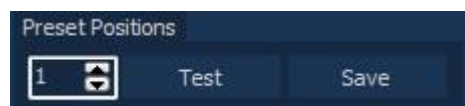
Please note: To control PTZ cameras over COM ports in a TCP/IP network, a PTZ box can be installed.

- Beneath the Live Image you will find the "PTZ Camera Configuration" section **(3)**. This is the so-called PTZ Panel with which the camera can be controlled. In order to control the PTZ, click on the gray quadrant in the middle of the cross with the left mouse button and hold it in place.

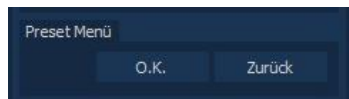
Now move the mouse pointer within the control field.

Observe that the camera moves faster the further away you move away from the middle of the control field. If you use an analog joystick, the camera will move faster the further you direct the stick in one direction.

- You can **zoom** in or out by clicking on the + and – buttons with the left mouse button.
- You can **focus** using the + and – buttons. But you can also **focus** the lens itself by clicking on **Auto**, if the camera supports this function. Various dome camera models' auto tours can also be started using this button.
- With buttons **1-8**, you can call up saved camera positions. In order to save a position, position your camera in the way you wish to save it, select a position number **(4)** and then click on "Save". The "Test" button allows you call up the position that you have entered to the left of the arrow buttons.



- Operate the camera's own OSD (On Screen Display) menu using this control field if it can be accessed by sending presets. An OSD menu then opens in which you can operate the directional pad and the "OK" and "Return" buttons.

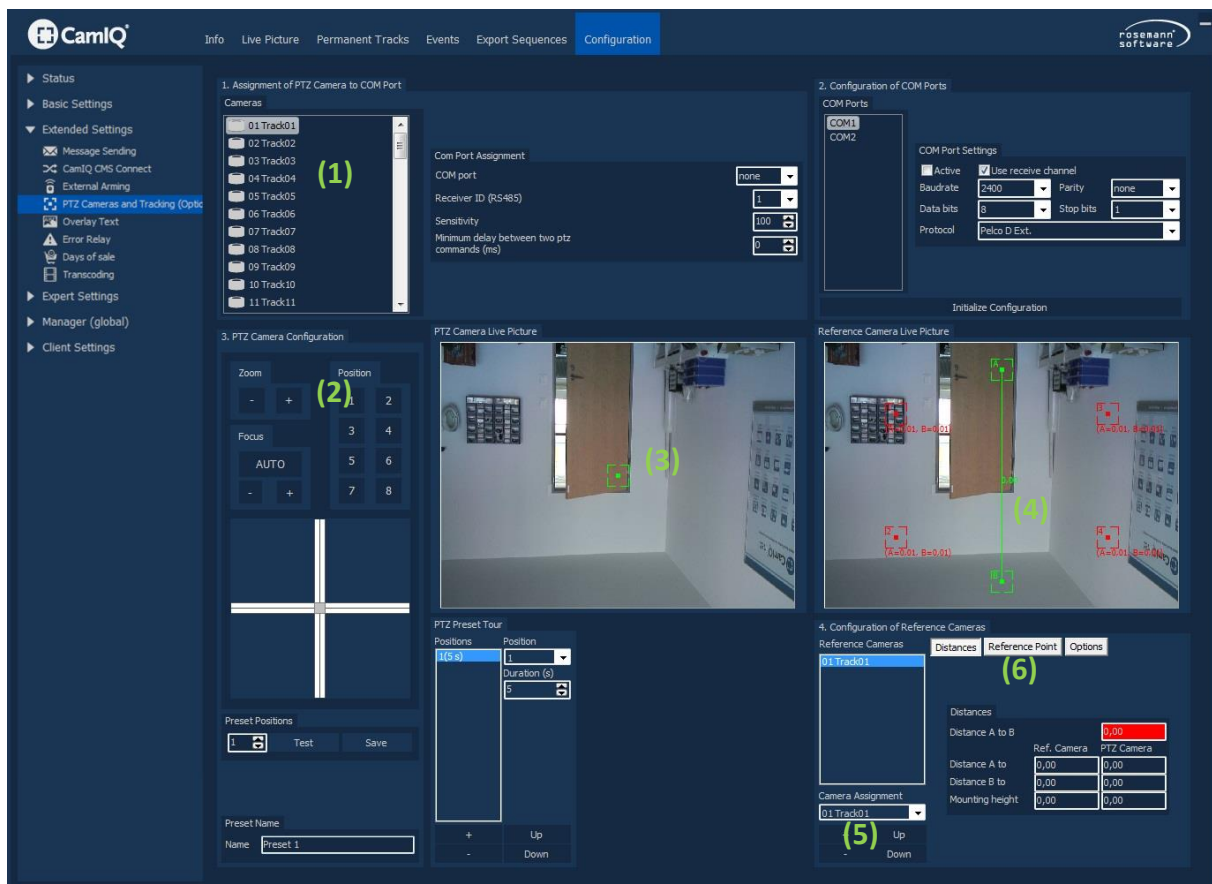


- In the "Preset Tour" section **(6)** you can configure a tour. First select a position from the "Position" list box. Then select the camera's dwelling time at this position from the "Duration" list box.
- Then click on the + button to add this position to the tour.
If you would like to remove a position, select it from the "Positions" list and click on the - button.
- In order to sort the positions in another manner, you can select a position and then change its place on the list with the "Up" and "Down" buttons.
- If the PTZ does not have its own home position, you can simulate one by entering only one position in the preset tour.
- Of course the camera still remains manually accessible during a tour. The tour will merely be interrupted and continue again ten seconds after the last control command.

2.4.20.1 Automatic Object Tracking

At least two cameras are necessary for object tracking. One camera (the reference camera) is set to cover the entire observable area. A second camera (a PTZ) is responsible for the actual object tracking. Depending upon the local conditions, up to four reference cameras can be used. Tracking can - in this way - help to significantly reduce the necessary number of cameras needed for the surveillance of large areas.

A special license is necessary for using the tracking option; it is obtainable from your supplier. Tracking will not be possible without this license.



Please note: The use of tracking makes sense when a large area must be monitored in which relatively few objects are in motion. These objects will then be recorded in detail by the PTZ.

Reference Camera Selection

- To set up a reference camera, first click on the "+" button (5). Select the camera you wish to use as a reference camera from the camera assignment section.
- You can change the position of the reference camera in the "Reference Cameras" list (4) by using the "Up" and "Down" buttons (5). You can remove a camera from the list using the "-" button.

Please note: Several reference cameras can be configured for a PTZ in order to cover a 360° area around it. The list of reference cameras is sorted by priority; this is why the correct layout of the cameras is important.

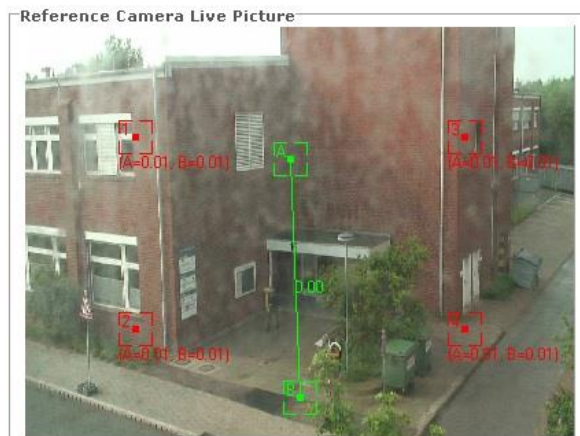
Dimensions

The dimensions relate to the coordinates that are to be measured. These values are entered in meters. The line between points A and B (green in the image) is thereby a reference line to which the four reference points (red in the image) relate. The following will explain the measuring process step by step:

- Set up a PTZ.
- Set up a reference camera.
- Position the reference points in the reference camera image **(3)** by shifting the red and green squares while holding the mouse button in place. If these points will not move, activate the "Allow Reference Point Shifting" option in the "Reference Point" menu **(6)**. Choose points in such a way that they will be easy to later locate for the measurement. All points must be within the viewing range of the PTZ.

Please note: If possible, the points in the image ("Reference Camera Live Image") should lie on one level. If tracking is to take place on a street, for instance, then the points should be positioned on the ground if possible (at the foot of a streetlight, for example). The more exact the measuring points lie on a level, the more precise the tracking will be. You should also distribute the points as evenly as possible across the entire area.

Example:

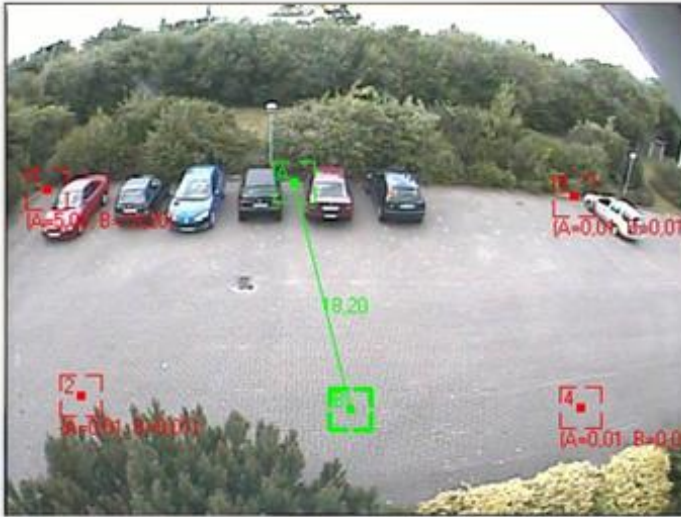


After you have placed the reference points in their suitable positions, go through the following steps for each of the six reference points:

- Select a reference point in the Live Image **(3)**.
- You can use the PTZ control field **(2)** of the PTZ **(1)** to position on the selected reference point. You can use the zoom and focus functions at your discretion.

- Click with the right mouse button on the selected point **(3)** and select "Set PTZ-Position" from the context menu window. The position will be saved.
- Check the positions of all six reference points by accessing them individually. Click with the right mouse button on the selected reference point **(3)** and select "Access PTZ Position".
- Under "Options" **(6)** you can press the "Print Reference Points" button. A page will be printed which can help you with the measuring of the points. The following picture represents the printout for our example:

Tracking Configuration



A-B (m) = _____

	A(m)	B(m)	Height(m)
1			X
2			
3			
4			
PTZ Camera			
Ref. Camera			

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The upper page displays the image taken by the reference camera along with the delineated points. The lower page shows a table in which the measurements are entered. The designations A, B, 1, 2, 3 and 4 in the table correspond to the points in the reference image.

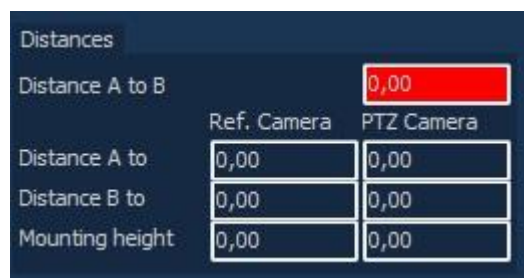
- A-B (m): The distance between points A and B. The distance in the image example is 18.2 meters.
- In the second step, the distances between the four red reference points to the green A and B reference points are determined. In the example above, the distance between reference point 1 and point A is 5.0 meters. The distance between reference point 1 and point B is 19.2 meters.

Using this method, the distances for all remaining reference points should be entered in the table.

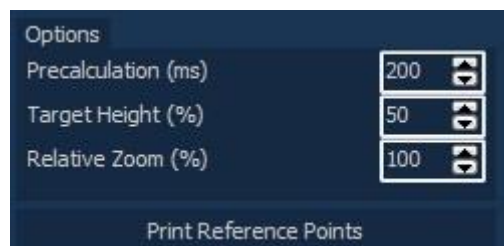
- The distance of points A and B to the reference and PTZ should also be ascertained using the same method. In this example, the cameras are located very close to one another, thus the values are identical. The camera distance to point A is 37.5 meters and to point B 20.0 it is meters. The height of the cameras must also be determined. In our example, the height is 18 meters. This gives us the following table:

A-B (m) = 18.2

	A (m)	B (m)	Height (m)
1	5.0	19.2	
2	15.3	14.5	
3	19.1	24.6	
4	13.7	8.5	
PTZ Camera	37.5	20.0	18
Ref. Camera	37.5	20.0	18



- The measured values are now entered into the software. First enter the distances between A and B under "Measurements" **(6)**, as well as their distances to the cameras and their heights. When slight deviations in the symmetry of the measured values occur -or invalid or incomplete values are entered - the corresponding fields turn red. In this case, you should check to see if the values were taken over properly or whether a measurement error has perhaps taken place.
- Enter the distances of the reference points to A and B. To do this, select one of the four red reference points in the Live Image of the reference camera **(3)** and enter the distances in the fields provided.
- Once you have entered all the reference points, the tracking has been successfully calibrated.



- In the last step, you can set additional tracking options:
 - **Projection (ms):** With fast moving objects, inertia will continually hold the PTZ back in its pursuit of the object. This option enables the camera to project the probable position of the moving object (in milliseconds) and pursue it accordingly.
 - **Targeted Object Heights:** Independent of the object, you have the option of entering a percentage height for the object. If you are detecting automobiles, for instance, and you want the camera's focus to be placed at the height of the license plate, then you would select a lower object height value, 20% for instance. If you are detecting people and want the PTZ to focus on the face, then a higher value would be more appropriate, 90% for example.
 - **Relative Zoom:** Enter the relative zoom factor in percentage to the object height.
- Tracking has now been configured. Hold the right mouse button and pull a square over the reference image. The PTZ will be directed to this area. In this way you can check the expected tracking results beforehand. If the results are unsatisfactory, the system has not been calibrated precisely and you should check the settings and the measurements once again.
- A tracking zone will now need to be set up for every camera under the "Alarm Zone" menu item. You will find details concerning the zone setup in the "Alarm Zone" chapter 2.4.11.

Warning: If the PTZ should encounter a completely abstruse angel of vision while tracking or accessing a reference point, please check to see if the receiving channel is in use and ready to operate. Should this error persist, check your measurements again; they must be very precise, especially when it comes to the installation height.

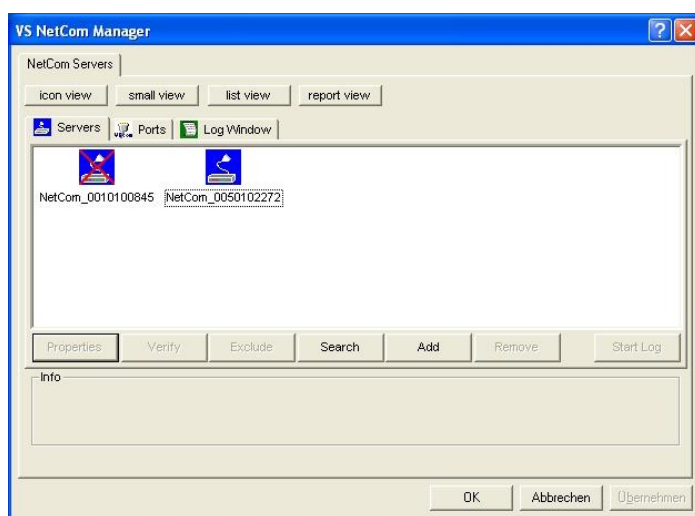
2.4.20.2 PTZ Box Installation

With the help of a PTZ box, you can define virtual COM ports which can be addressed over a TCP/IP interface. This way, the server station can communicate with and direct the PTZ using its COM ports which are physically located within the network of the PTZ box.

In the following example, the installation of a NetCom by Vision Systems will be described.

Warning: Deactivate the Windows Firewall in the server station's control panel, or reconfigure it if you have experience here. All UDP services and ports used by the server must be unlocked (see NetCom Manager).

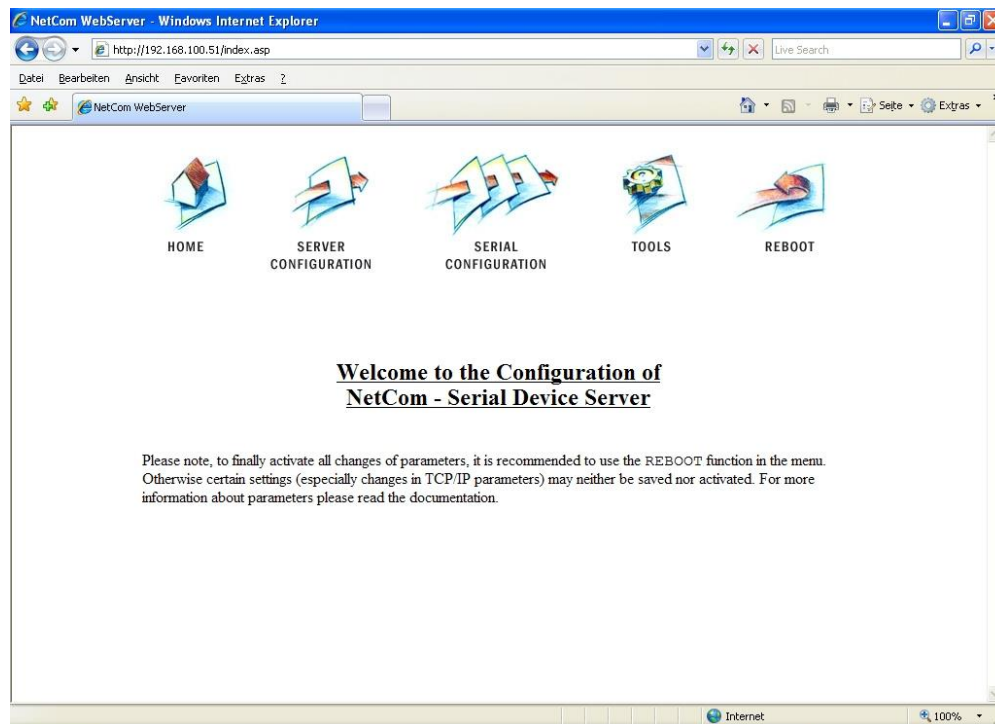
- Attach the NetCom to the server network. Alternatively, you can directly attach the NetCom to the server using a crosslink cable.



- Install the NetCom software and follow the directions given on the screen.
- The NetCom Manager starts automatically after the installation and begin searching for servers attached to the network. If this does not happen, start the NetCom Manager manually and click on the "Search" button. All servers discovered will be displayed with a blue symbol.
- If a question mark is visible on a blue symbol, click on it and then click again on "Verify". The system will check to see that the server is actually available and then the question mark will disappear.
- A red X on the blue symbol indicates that the server is not available.
- Click on the blue symbol and then click on "Properties". You can configure the server's IP address in the menu window that opens. Make sure that this IP address is in the same network as the server as they must communicate with each another.
- The method for configuring the IP address as recommended by the manufacturer is different, however, and somewhat more involved. First you must readout the NetCom's current IP address

under "Properties". Then adapt the server station's IP address to conform to this address thus enabling them to communicate with each other.

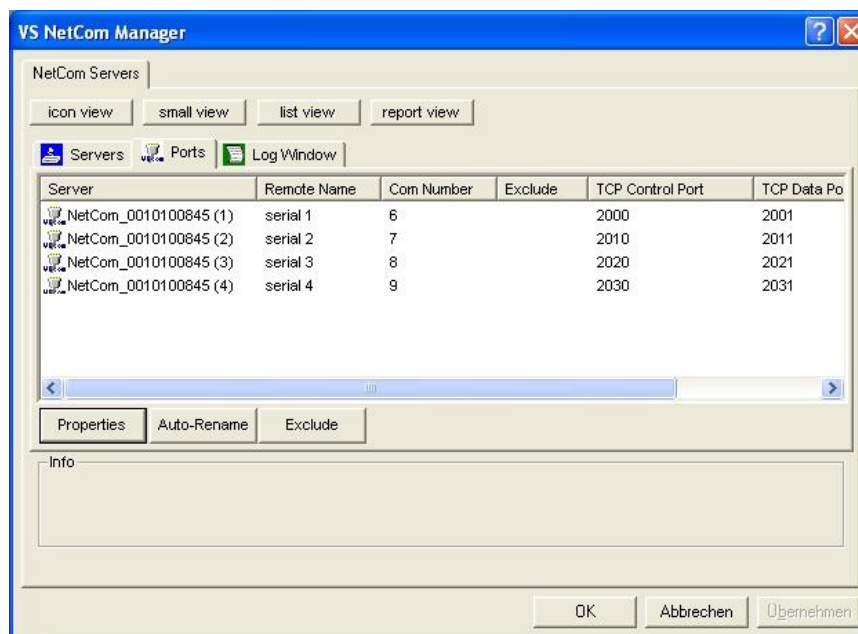
- Then you can enter the NetCom's IP address in your browser to enable access to the web interface. When it opens, click on "Server Configuration".



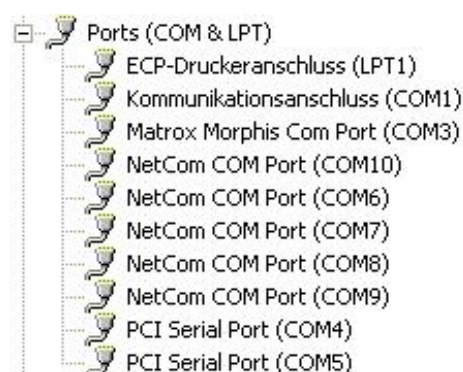
- In this menu you can configure NetCom's network properties, among other things. Enter here the desired IP address and click on "Save". NetCom takes over the address and will restart automatically. During this time, you can reset the server station's IP address back to its earlier settings.

Server Name?	<input type="text" value="NetCom_Showroom"/>
MAC Address	00:04:D9:80:11:4F
DHCP?	<input type="button" value="Disabled"/>
IP Address?	<input type="text" value="192.168.100.51"/>
Netmask?	<input type="text" value="255.255.255.0"/>
Broadcast?	<input type="text" value="192.168.100.255"/>
Gateway?	<input type="text" value="192.168.100.2"/>
DNS?	<input type="text" value="192.168.100.2"/>
Domain?	<input type="text" value="local"/>
ConfigPort?	<input type="text" value="23"/>
PrintServerPort?	<input type="text" value="515"/>
KeepAlive?	<input type="button" value="Off"/>
KeepAliveInterval?	<input type="text" value="0"/>

- The virtual COM ports should be set up automatically. Manual intervention should only be necessary when this is not the case or when several NetCom devices are connected to a server. You can configure the ports under the "Ports" tab and issue them COM port numbers.



- Once the numbers have been entered correctly in the NetCom Manager, close the software with a click on "OK." The COM ports will now be created. The Windows operating system will usually notify you that it will now begin with the installation of the drivers for the COM ports. This takes place for every port individually.
- In order to use the newly created ports, the server must be restarted again. First close the server applications and then close windows via "Start" – "Shutdown".
- Once the server has restarted, you can check to see if the COM ports are available by opening the Windows "Device Manager". You can do this by right-clicking on "Workplace" and then selecting "Properties". At the "Hardware" tab, click on the "Device Manager" button. You will find the NetCom COM ports there if everything functioned as it should have.



- If the installation has not worked up until this point, open the NetCom Manager once again. Click repeatedly on "Verify", issue new COM port numbers and then close the software with a click on "OK". Restart the server station as well. Also make sure that the NetCom IP settings are correct.

- Afterwards, you will still need to make changes to the NetCom server's IP switch settings depending on which camera is to be attached.

Please note: The NetCom server settings will be overwritten by the Manager settings. When in doubt, pay more attention to entering the correct configuration in the Manager application. Fine adjustments can be made by calling the NetCom server's IP address in the Internet Explorer.

2.4.20.3 Virtual Device

The virtual device makes it possible to enlarge, to move, and to track objects in image sections of a permanent camera image as desired - without the use of a PTZ camera.

The virtual device is created in the following manner:

First, configure a track for the virtual device in the "Tracks" menu. Choose as a camera the track of the desired image source.

You can now zoom and move image sections of the new track as you wish with the help of the „PTZ Panel“.

Please note: In order to move the image section you must first zoom into the image.

Virtual Tracking:

You can activate object tracking for the virtual device and use the real camera as reference camera. To do this, first activate "Tracking" for the virtual device in "Standard Operation". You can find more detailed information on this in chapter 3.10: "Standard Operation".

Set up a tracking zone for the real camera in which the object tracking should take place. You can read how to define a tracking zone in chapter 2.4.11.

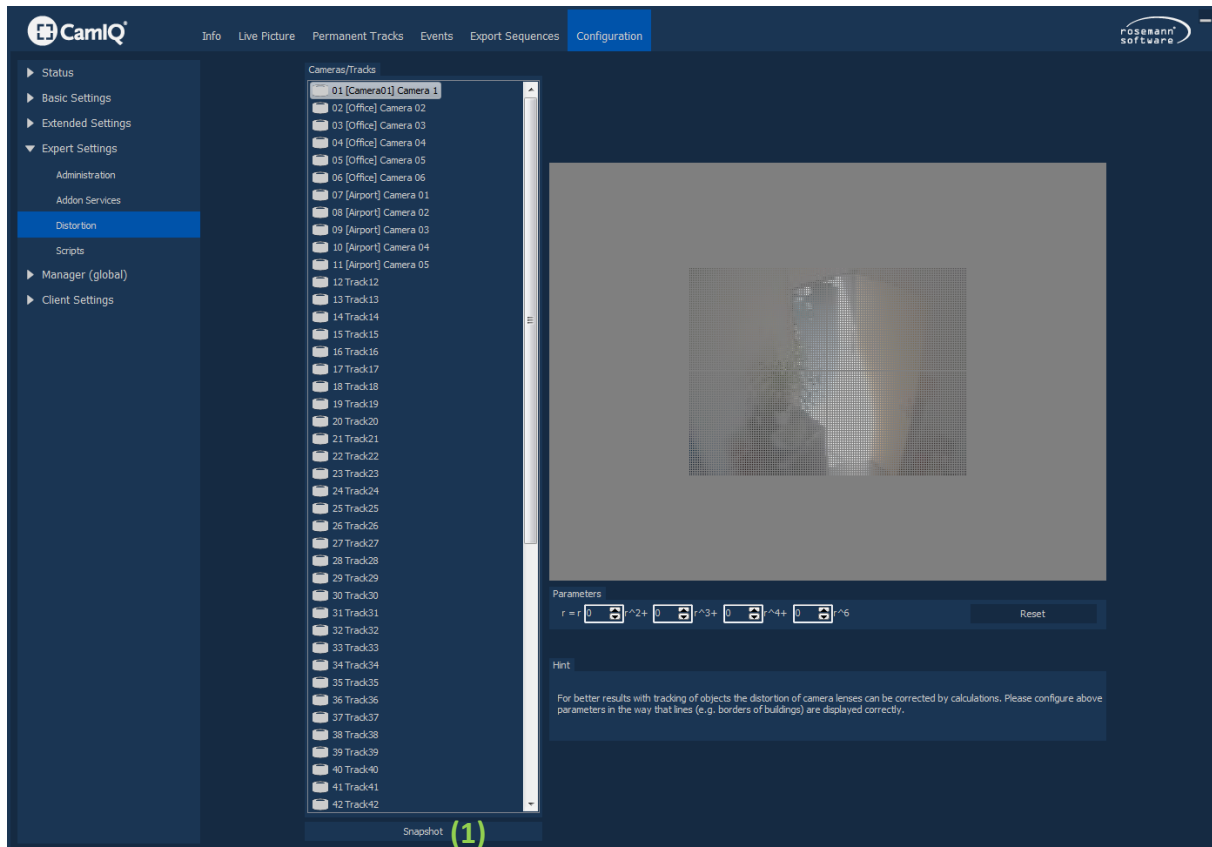
The virtual device will now track objects that are targeted by the real camera.

2.4.21 Lens Correction

For better tracking results, the distortion that can occur in the periphery of objects can be calculated out of the image.

First, select the desired track and configure the parameters in such a way that all the straight lines in an image, walls of houses for instance, are also displayed straight within the image.

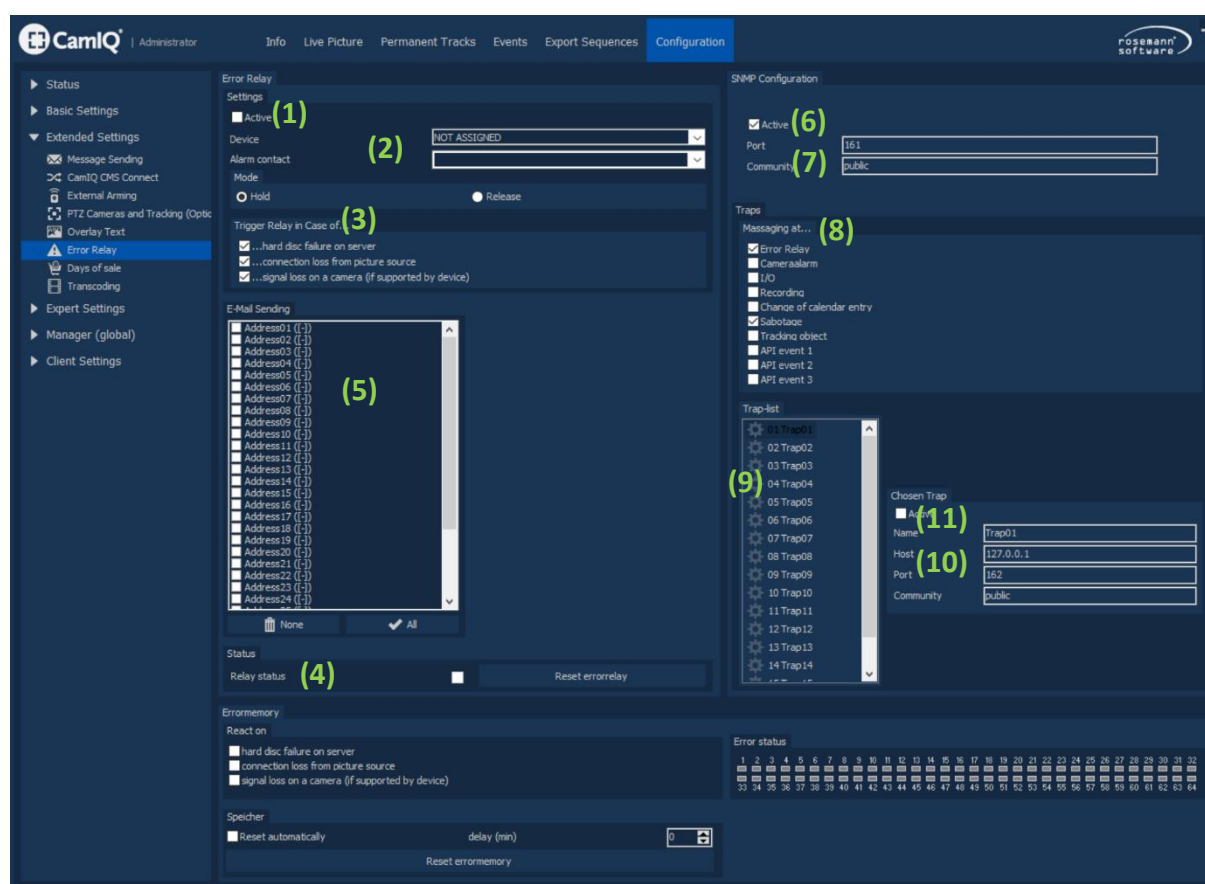
To preview the results, click on "Snapshot" **(1)** or wait for 4 seconds after your entry.



2.4.22 Error Relay / SNMP Configuration

This menu offers you the option of defining the relay of a random component in such a way that it will be switched in case of component failure. You could connect this relay to a siren or a signal light, for example.

- Click on the "Active" button **(1)** to use this function or to deactivate it again.
- The "Device" button **(2)** enables you to select the device that disposes of the desired relay. The devices that are available here were previously added within the "Devices/Image Sources" menu.
- Then select the desired relay from the "Alarm Contact" list box.
- Use the "Trigger Relay in Case of ..." field **(3)** to select the events that should trigger the error relay. These can be things like a hard drive failure, a device failure or a signal drop.



- The relay's current state is displayed in the "Status" section **(4)**. After rectifying a failure, you can reset the relay back to its original state with the "Reset Error Relay" button.
- The "E-Mail Sending" box list **(5)** allows you to select the preconfigured e-mail addresses that should be contacted in the case of an error relay triggering.

Please note: You can find further information concerning e-mail transmission in chapter 0.

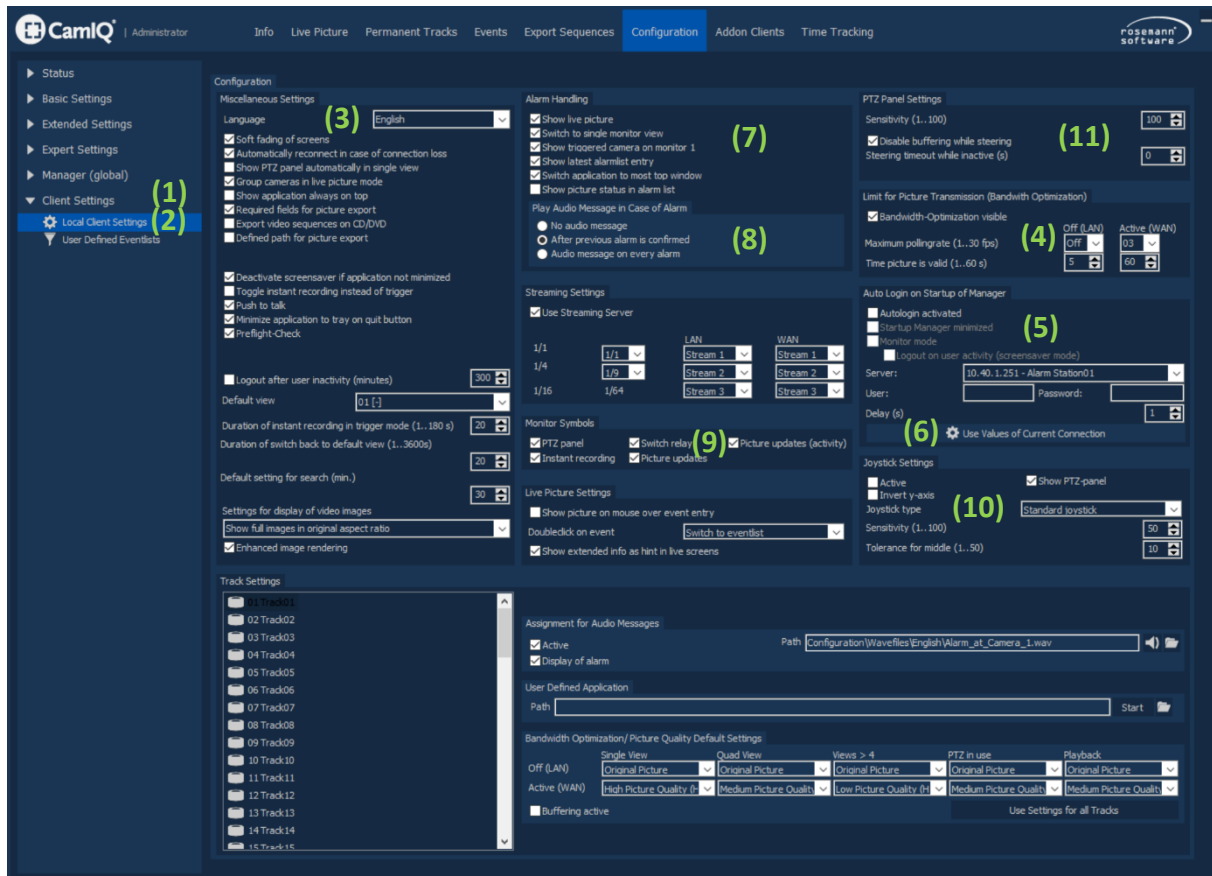
To the right of the error relay configuration you will find the SNMP configuration (you can find further information about SNMP in the Internet under ["en.wikipedia.org/wiki/Simple_Network_Management_Protocol"](https://en.wikipedia.org/wiki/Simple_Network_Management_Protocol)).

- Place a check in the "Active" **(6)** checkbox to activate SNMP. Enter a "port" in the desired "community"**(7)**.
- Use the "traps" **(8)** configuration to define which event will trigger a message. Possible events correspond to those found in the event handling configuration. To activate an event as a trigger, place a corresponding check.
- Select a trap from the "trap list" **(9)** enter the connection information **(10)** in your SNMP client and set the entry to active **(11)**. If you use several SNMP clients, define an additional trap **(9)** for this.

2.4.23 Settings Manager (local/ global)

In the "Client Settings" function group **(1)** you will find additional configuration menus dealing with the Manager software you are presently operating. Settings made here do not influence the server or the Manager software's running on other PCs!

You can configure the Manager software in the "Local Client Settings" menu **(2)**.



- In the "Miscellaneous Settings" section **(3)** you can set up how long a recording should be when you use the manual instant recording function in the Live Image View. Enter a time in seconds between 1 and 180 with the "Instant Recording Duration" button.
- Using the "Manager Overlay Effects Start/Finish" button, you can determine whether the Manager software should use fade-in effects. Should the software's image flicker or should it produce other unwanted effects, deactivate this button.
- Activate the "Automatic Reconnect after Connection Breakup" button to ensure that the Manager will automatically connect to the server should the connection be terminated (during a server restart, for instance). It is recommended that this button always remain activated.

- If you have activated the "Automatically Display PTZ Panel with Basic View" button, the PTZ Panel will be automatically overlain as soon as a PTZ has been switched to basic view.
- If the "Group Function for Cameras in Live Image" is active, the cameras listed in the Live View camera list will be sorted by devices. For example, all cameras associated with an AXIS or other server will be displayed as a group and can be turned on as such.
You can also put together groups yourself in the "Tracks" menu. All cameras (or tracks) that are supposed to be put together in a group need to have a common name prefix. **[Group1]**, for instance. The complete name of a group member would then be **[Group1] Camera 1**, **[Group1] Camera 2**, etc.

This way, cameras from various image sources can be put in a group together. You can create as many groups as you wish.

- When the "Always Display Application in the Foreground" button is active, no other program or window can cover the Manager.
- Under the "Maximum pollingrate" item **(4)** you can set how many images per second and track can be transferred over the network to the current Manager. You can configure this setting once for a local network (LAN) and once for a connection over a longer distance (WAN). WANs always have a lower bandwidth than LANs.
Use the list box to select the number of images to be transferred per active camera image. If you select 5 images and 1 image is active in the Live View, for instance, 5 images per second will be transferred from the server to the Manager. If 4 images are active, 20 images per second will be transferred. If you don't wish to use the maximum image interval limit, select the "OFF" entry from the list box.

Notice: This limitation takes place for live images which uses native drivers in Motion Jpeg.

- You can set the "Validity Period of an Image" for a LAN and WAN in seconds using the appropriate list box. This is the time after which a camera without image updates will be classified as being not available. This setting is expressly recommended for a WAN connection.
- In the "Automatic login at program start" section **(5)**, you can set the Manager to automatically log in to the server selected in the "Server:" field as soon as the program is started. To do this, enter the "User" and "Password" login data for the desired account in the appropriate entry fields. You can also use the user credentials you are currently logged in with by clicking on the "Use Values of Current Connection" button **(6)**.
- Activate the "Start Manager Minimized" button so that the Manager starts minimized in the task bar after automatic login.
- If you click on the "Start in Monitor Mode" button, the Manager will start in full screen mode after automatic login.

- Using the "Delay" button lets you enter the time to pass - in seconds - before the Manager starts after automatic login.
Click on the "Automatic Login Active" button to activate this function.
- The "Alarm Handling" item **(7)** allows you to configure how the Manager should react to incoming alarms. By clicking on the "Change to Live Image" button, the alarm-triggering track will be uplinked to the Live View. An automatic changeover to the Live View will also take place whenever one lingers in another area of the software. If the additional button "Change to Basic View" is activated, the alarm-triggering track will be uplinked in the basic view mode.
- When the "Switch the Manager to Foreground" button is activated, the Manager window covers the other windows which might be open in Windows. A minimized Manager would also be maximized in this case.
- Select the "Display Image Status in the Event List" button in order to see if image data for an alarm is present in the alarm list.
- Additionally, you can have a preview image of the alarm displayed by moving the mouse over the alarm.
Click on "Details" in the alarm list to switch on a view that will display the alarm preview images to you directly.

Preview Eventlist	Details	Preview Eventlist	Details
Do 13:47:36 [Office] Camera 01		Do 13:47:36 [Office] Camera 01	
Do 13:47:10 [Office] Camera 01		Do 13:47:10 [Office] Camera 01	
Di 12:32:31 [Airport] Camera 02		Di 12:32:31 [Airport] Camera 02	
Di 12:32:17 [Airport] Camera 02		Di 12:32:17 [Airport] Camera 02	
Di 12:32:08 [Airport] Camera 02		Di 12:32:08 [Airport] Camera 02	

Please note: This function should only be activated on powerful server stations as it produces additional system load.

- When you select the "Only Display New Alarms (until confirmed)" button, alarms that have been confirmed in the Event List (see chapter 2.7.3) will no longer be displayed in the "Alarms" list of Live Image (see chapter 2.5.3).
- The "Audio Playback" item **(8)** lets you configure if and how the Manager should give out acoustic signals in case of an alarm. In order to shut off the audio playback function completely, select the "No Audio Playback" option. If the option "Playback Only after Previous Alarm Confirmation" is selected, then it is always only the first alarm that will be audible. Other alarms that follow will not trigger acoustic alarms as long as the first alarm has not yet been confirmed. If an audio signal should sound with every alarm, select the "Playback With Every Alarm" option.

- In the "Monitor Symbols" section **(9)** you can select which symbols will be visible over the respective camera images in the Live View. By selecting or deselecting the symbols you can display them or hide them from view:



PTZ-Panel



Relay



Instant Recording



Image Updates



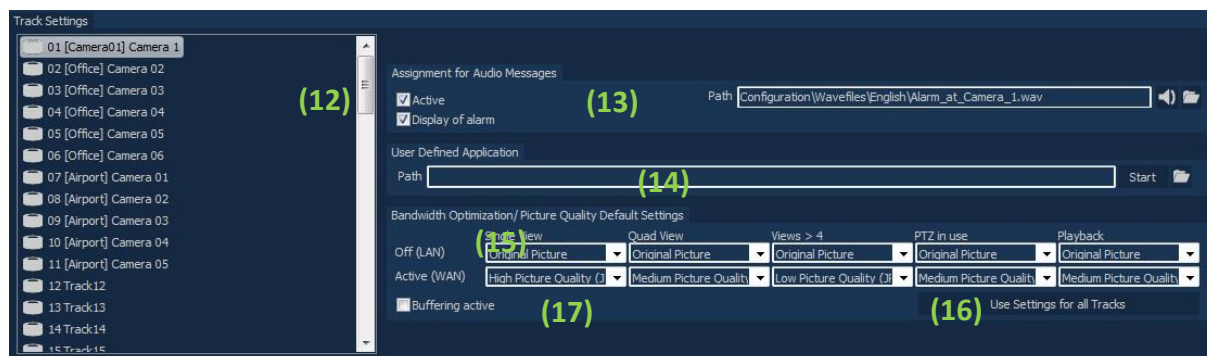
Image Updates (activity)

- Under "Joystick Settings" **(10)** you can configure that the PTZ Panel can be operated using a joystick. The joysticks will either be connected to the game port or using a USB connection. These can be commercially available devices like those used for computer games. We recommend analog joysticks because these offer 360 directions and recognize the intensity of the movement as well as transfer this to the camera.

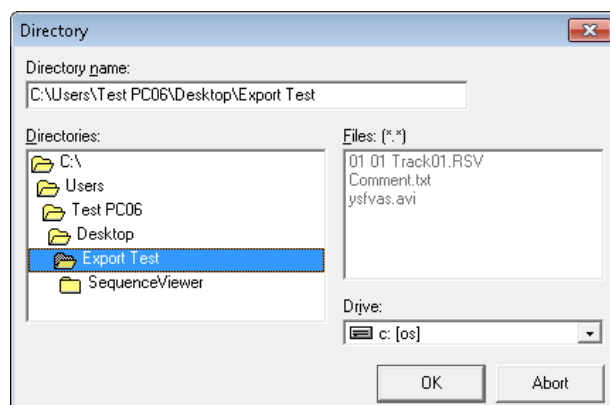
Additionally, 4 firing buttons are required as described below:

- **Button 1:** Zoom in
 - **Button 2:** Zoom out
 - **Button 3:** Focus
 - **Button 4:** Focus
- In the "Joystick" list box you can select which type of joystick you would like to use.
 - Click on the "Joystick Active" button to activate the joystick's control.
 - Activate the "Invert Y-Axis" button to interchange directions on the y axis. This means that the camera will not point upwards, but downwards instead when you move the joystick forward. And the other way around too, of course.
 - Use the "Sensitivity" button to determine how sensitively the PTZ reacts to movement. It might be necessary to experiment with this before you find the perfect settings.
 - Use the "Tolerance" button to compensate for unwanted control signals sent from the joystick. Analog joysticks show wear marks when used often, usually exemplified by a control stick that does not stand taut but always leans to the side instead. This causes unwanted signals to be sent. This phenomenon also occurs with joysticks that have been poorly calibrated (calibration is carried out within the Windows Control Panel)
If you should experience such behavior with your joystick, simply increase the tolerance setting. This compensates for the "false" control signals and does not influence movable cameras.
 - In the "PTZ Panel Settings" **(11)** you can set the sensitivity of the PTZ Panel globally (see chapter 2.4.20). Use the "Sensitivity" button to enter a value between 1 (not sensitive) to 100 (sensitive).

- In the "Settings per Track" menu, you can undertake additional settings that affect the alarm reactions and the image compression for the various tracks.



- First select a track under item (12).
- In the "Assignment for Audio Messages" section (13) you can have the Manager play an audio signal when an alarm for a chosen track is triggered by activating the "Playback Active" button.
- In the "Path" section you can enter the file path to the desired audio file. You can also click on the folder symbol to open the following pop-up window:



Select here the audio file you wish to use and then click on "Open" to accept your selection. If you click on the loudspeaker symbol, the audio signal will be played.

Along with the audio files supplied under **\Client\Configuration\Wavefiles** you can also use your own. Record these in .WAV format.

- Under the "User-Defined Application" item (14) you can enter the file path to an application in the "Path" field which will start in case of an alarm. You can also click on the folder symbol and select the executable file from the pop-up window that opens (see above). The file must have an .exe ending. To test the function, click on the "Start" button.

- You can individually set the image compression rate for various situations in the "Bandwidth Optimization / Picture Quality Default Settings" section **(15)**.

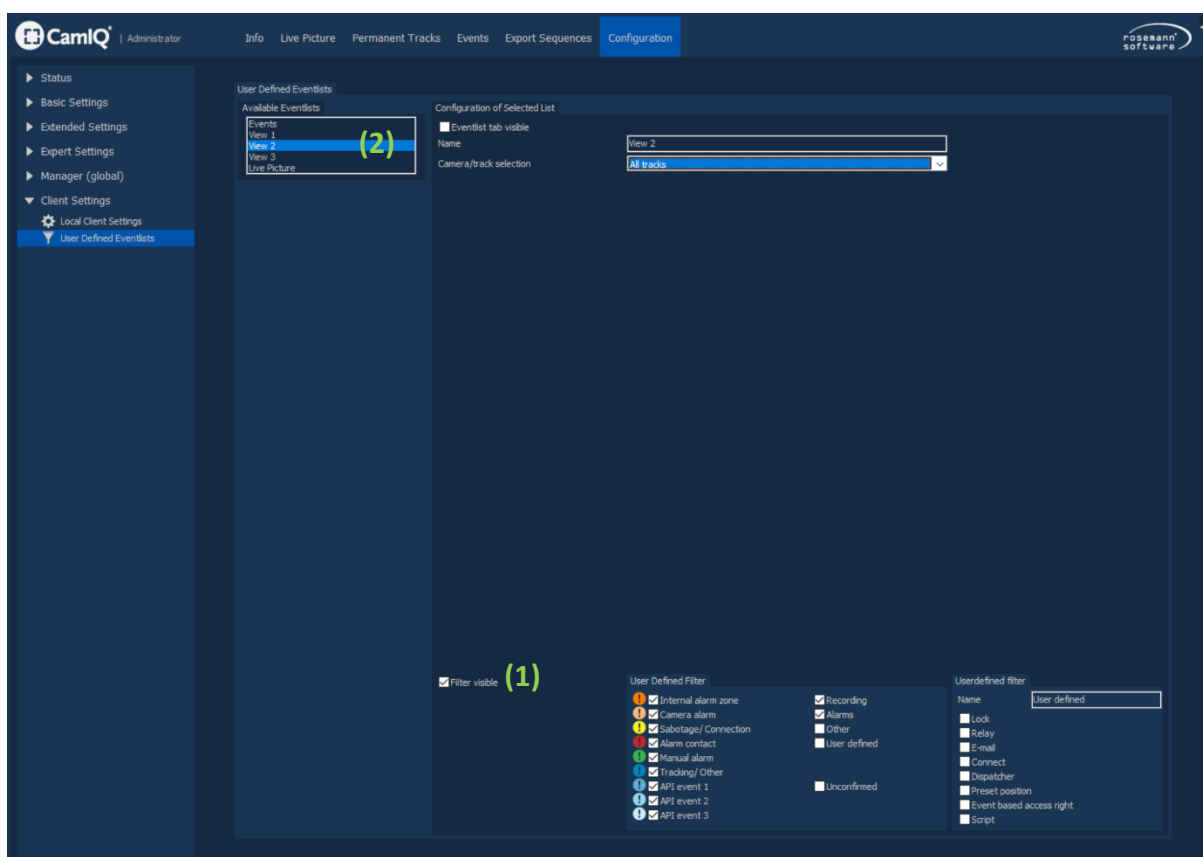
These various situations are as follows:

- **Basic View:** Only one track is displayed in the Live View
 - **Quad View:** Four tracks are displayed in the Live View
 - **Views > 4:** More than four tracks are displayed in the Live View
 - **PTZ Operation:** The controlling of a tilt swivel or dome camera
 - **Playback:** Playback of the permanent track or of event recordings
- For every situation, you can set the compression for a LAN or a WAN connection. It will be possible for you to completely turn off the compression, to set the compression to a low, medium or high compression rate, or to activate a code conversion profile of your own.
 - If the compression settings should be the same for all levels, click on the "Apply to All Tracks" button **(16)** to assign them to the rest of the tracks.
 - To compensate for frame drops, the live image display is delayed by a 250ms buffering procedure (the buffering procedure is switched off automatically through the control of a PTZ camera). If the use of the buffering feature is not desired, it can be deactivated in the manager for a selected track here **(17)** or with the "Use Settings for all tracks" button" **(16)** for the complete image display.

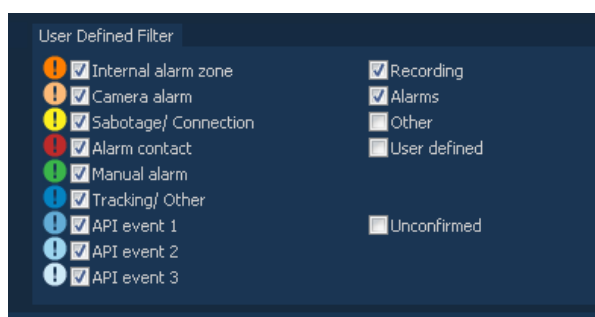
2.4.24 User-Defined Filters

In the "User-Defined Filters" function group you have the option of providing the CamIQ 8 Satellite with additional tabs that display user-defined filter settings in the Event List.

- To activate a new tab, select under "Available Filters" the Userbutton1. Place a checkmark in the "Filter Visible" checkbox **(1)**.
- You can also configure the filter's designation and the default track under "Selected Filter Configuration".

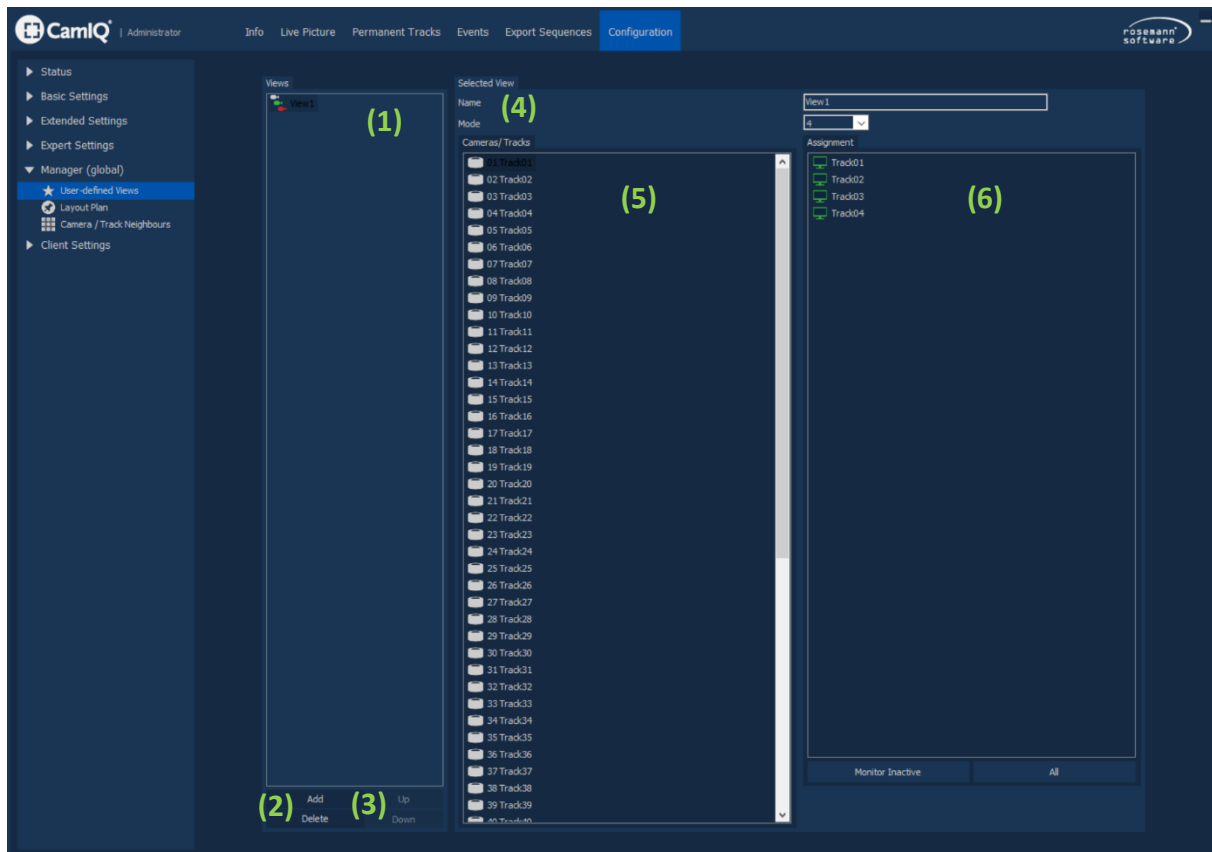


- Under "Available Filters" **(2)** you can make changes to your filter settings.
- The filter settings relate to all the settings in the standard Event List:

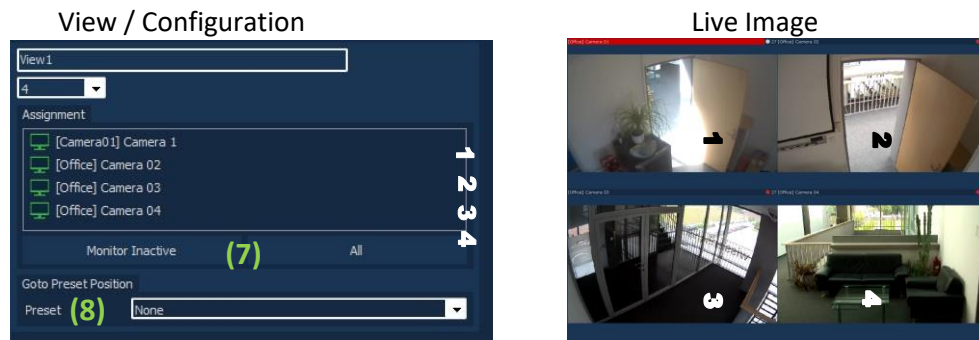


2.4.25 Views

Configure various views in the "Views" function group. These views can easily be displayed in Live Image with drag & drop.



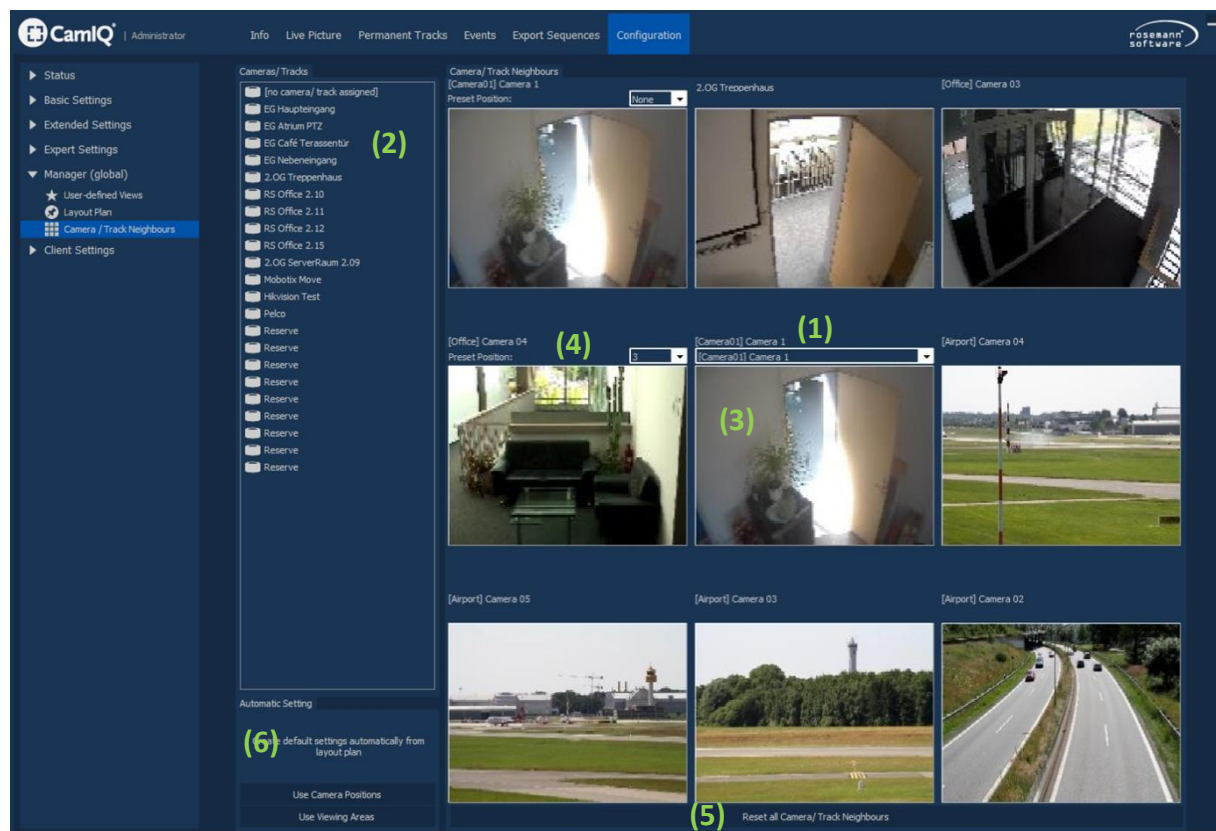
- In the "Predefined Views" section **(1)** you will find all saved views that are available for display in Live Image. The "Add/Delete" button **(2)** lets you create new views and delete views that you no longer need.
- The "Up/Down" buttons **(3)** let you sort your list as desired. The entry in focus will be moved above or below the respective entry.
- Under "Selected View" **(4)** you will be able to use the entry field to give the view a name. Under "Monitor Mode" you can also select the number of entries that should be viewed when your order is activated.
- You will find all available tracks in the "Cameras/Tracks" list **(5)**.
- On the right side in the "Assignment" section **(6)** you can see what you currently have displayed. You can pull in other tracks to the desired position here with drag & drop.



- The "Monitor Inactive" button (7) deactivates the focused monitor in the display. With a click on the "All" button, the standard display will be activated (Track01, Track02, Track03, etc.).
- Under "Goto Preset Position" (8) you can select a preset position for the focused track under "Cameras/Tracks" (5) which will be called up with the display of the view.

2.4.26 Neighboring Cameras

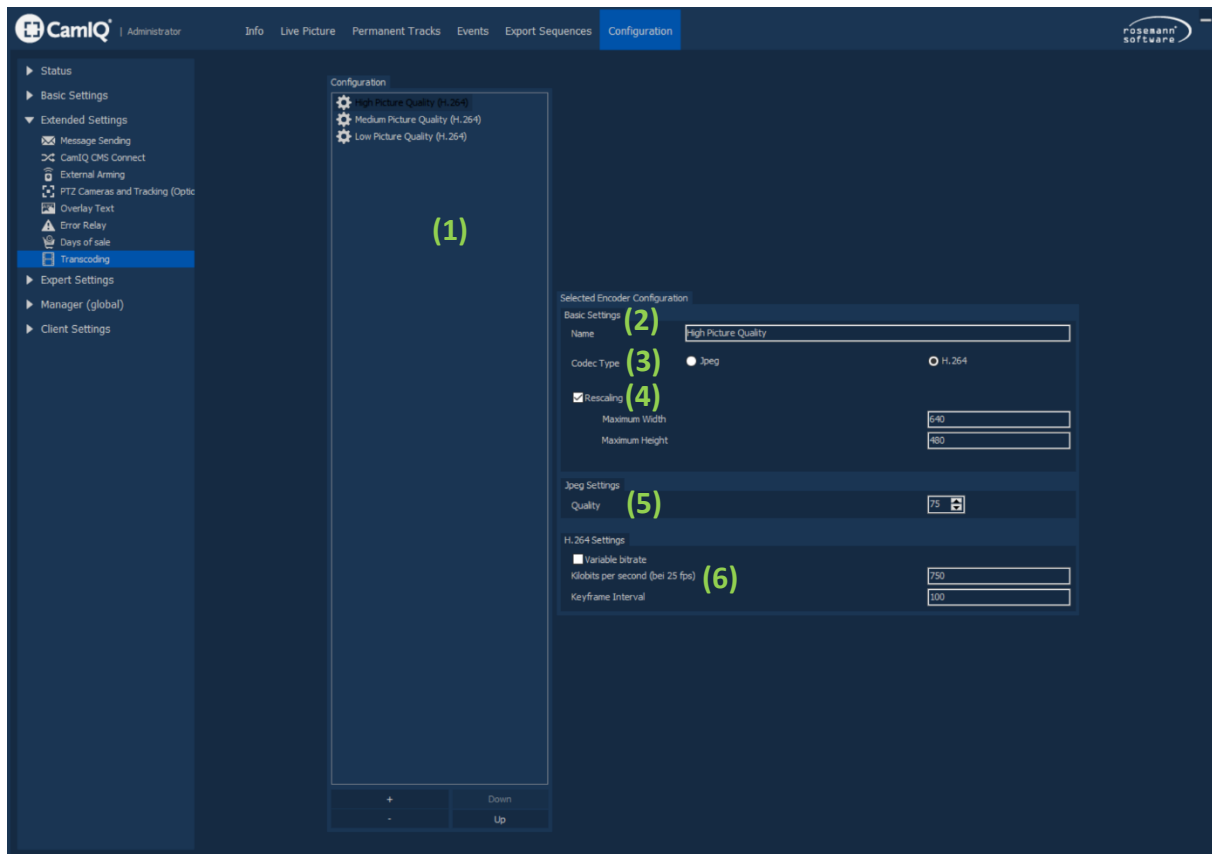
The CamIQ 8 Satellite makes it possible for you to define up to 8 neighbors that can be displayed in the Live Image, the Permanent Recording and the Event List using shortcuts.



- Select the camera that you wish to define neighbors for from the track selection **(1)**. Alternatively, you can pull the desired camera over from the "Tracks" list **(2)** and into the middle camera preview area **(3)** with drag & drop.
- In order to now define the neighbors for the selected camera, simply use drag & drop to pull any camera from the "Tracks" list **(2)** to the desired neighboring field of the middle camera.
- You can also define a preset position **(4)** for every neighboring camera which will be used during a given track's display. The preset position must first be configured in the camera setup.
- The neighboring cameras can now be displayed using keyboard commands in the Live Image, Permanent Recording and Event List.
- You can reset all neighboring camera assignments you have made for a selected track with the "Reset All Neighboring Cameras" button **(5)**.
- Neighboring cameras can also be automatically assigned **(6)**. This occurs based on the layout configuration which must be prepared first. The neighboring cameras can be generated by means of the camera positions or the field of vision. Make sure to check the neighboring camera settings after an automatic configuration.

2.4.27 Code Conversions

It is possible for you to influence the image properties of your cameras in the Live Image and in the Permanent Recording. To apply these settings to one recording, for example, you must first create a profile with the desired settings.



- First select a profile template or an empty profile (1).
- In the "Basic Settings" section you can give your profile any name you wish (2). When you select this profile later this is the name that will be displayed.
- Select the codec type (3) for the code conversion (the first three profiles are reserved for JPEG settings).
- If you would like to change the scaling of the camera image, select the "Rescaling" checkbox (4) and enter the desired height and width.
- Under "JPEG Settings" (5) you can set the JPEG image quality manually in percent.

Please note: If the codec type H.264 is chosen, changes made to the JPEG quality only relate to the prealarm images. CamIQ 8 Satellite always displays and records pre-alarm images in the JPEG format.

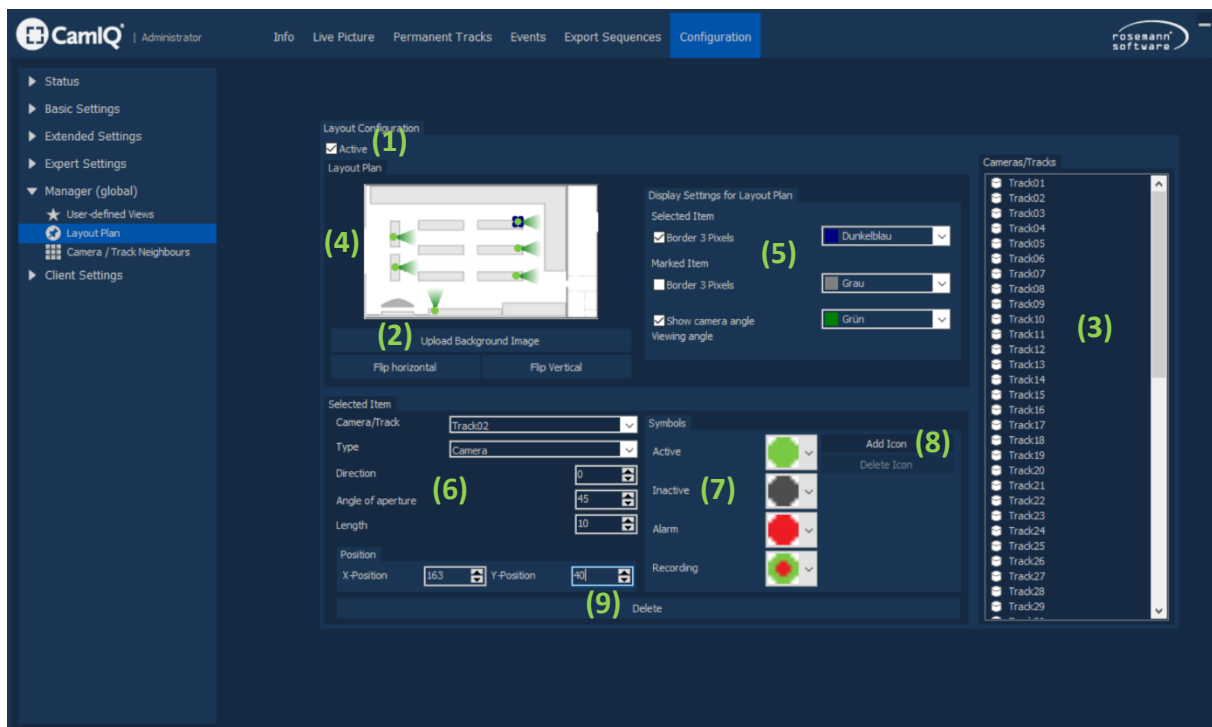
- Select the "Variable bitrate" checkbox (6) to deactivate the constant bit rate setting.

- Under "Kilobits per Second (at 25 fps)" **(6)** enter a set bit rate.
- Under "Key Frame Interval" **(6)** you can decide with which interval a key frame should be recorded.

2.4.28 Advanced Client

2.4.28.1 Site Plan

CamIQ 8 Satellite allows you to create a layout to enhance the general overview of your camera scenario.



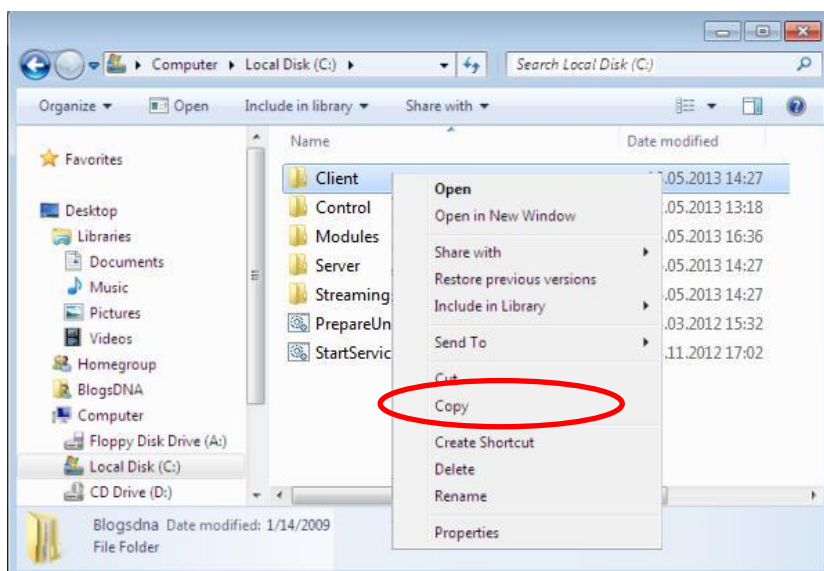
- To activate the layout for the Live Image, Permanent Recording or Event List, click on Active **(1)**.
- First select a background graphic. Click on "Upload Background Image" **(2)** (you will find a sample graphic in the configuration directory located under C:\\CamIQ\\Server\\Configuration\\Layoutplan).
- Now you can begin to order your cameras within the layout. Simply use drag & drop to pull the desired camera from the track list **(3)** into the desired position of the layout preview **(4)**.

- In the display section **(5)** you can adapt the colored settings to the display by interacting with the objects displayed on the layout.
 - **Marked Element:** Here you can set the color for the presently selected element.
 - **Highlighted Element:** Here you can set the color used to mark the element when the mouse hovers over it.
 - **Display Viewing Angle:** Here you can completely deactivate the CamIQ Server viewing angle.
 - **Display Bold:** If this checkbox is selected, the entry over it will be displayed in bold lettering.
- You can change the properties of the selected element **(6)** in the layout preview **(4)**.
 - **Track:** The track assigned to the element
 - **Type:** The type of assigned device
 - **Direction:** The direction of the displayed viewing angle
 - **Angle of aperture:** The viewing angle's aperture angle
 - **Length:** The length of the viewing angle
- In the "Symbols" section **(7)** you can adjust the element status symbols for the layout.
 - **Active:** The device is accessible.
 - **Inactive:** The device is inaccessible.
 - **Alarm:** An alarm has been triggered on the track.
 - **Recording:** The track is being recorded.
- It is also possible to display status icons you have created yourself. Simply click on "Add Icon" **(8)** and select the icon you have prepared. It can have a maximum size of 8x8 pixels and must be in bitmap (.bmp) format. Your icon will be added to the selection and can now be used.
- If you want to remove an icon from the list, select it and then click on "Delete Icon" **(8)**.
- With a click on "Delete" **(9)** you can reset the entire layout back to its original settings.

2.4.28.2 Multi-Start of the CamIQ Manager

CamIQ 8 Satellite allows you to open several instances of CamIQ Manager on the same system.

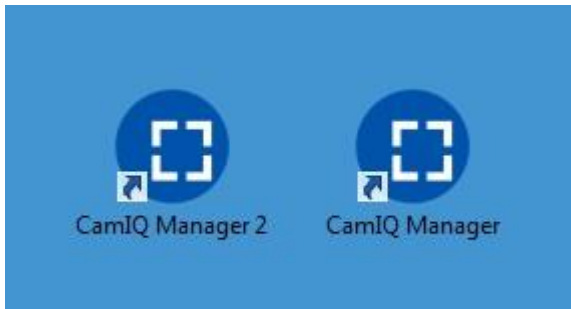
In order to smoothly run several CamIQ Manager clients at once, it will be necessary to make a copy of the client directory. Open your installation directory: (C:\CamIQ\), click with the right mouse key on the "Client" directory and select "Copy".



Now right click on the empty white area within the directory and select "Paste". Name the new directory "Client2" and then open it.

Name	Änderungsdatum
Client	19.05.2011 12:30
Client2	30.06.2011 12:09
Modules	30.03.2011 10:35
Server	30.03.2011 10:35
PrepareUninstall.cmd	06.12.2007 22:00

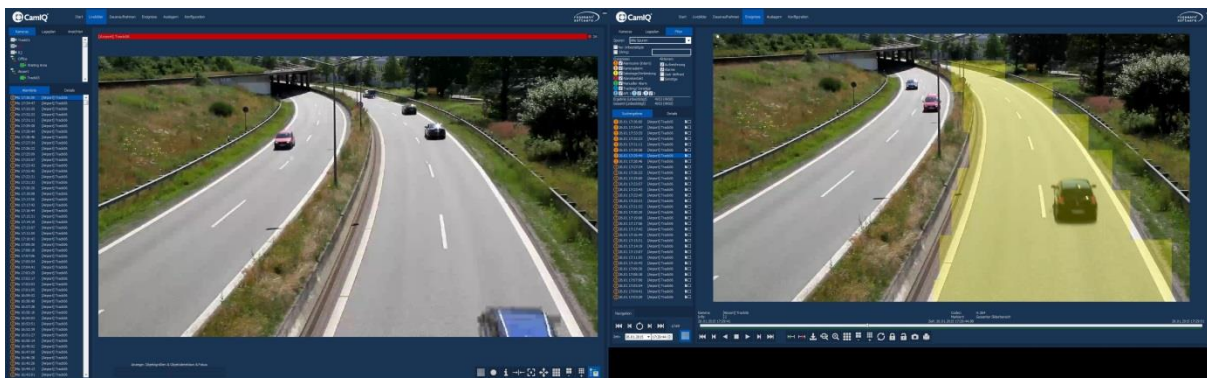
With a right click on "CamIQ Manager.exe" > "Send to"> "Desktop" you will create a desktop shortcut with which you can open your second CamIQ Manager client.



IMPORTANT:

Never start the CamIQ Manager more than once with the same shortcut because this will not allow for local settings to be saved correctly.

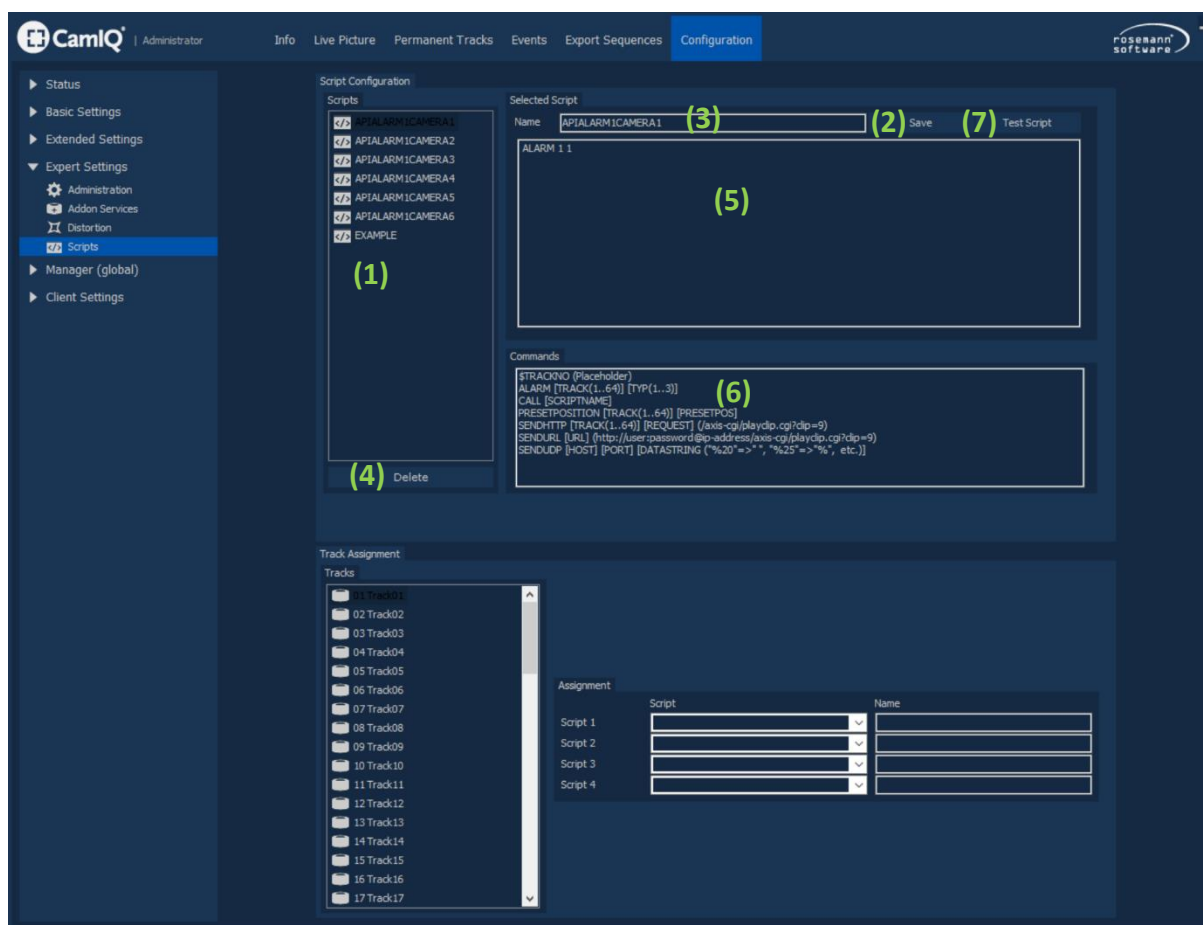
You can use the CamIQ Manager to log in as usual with the CamIQ Server. If you are logged in using two or more CamIQ Manager clients on the same CamIQ Server, it is possible to interact between the two managers using Drag & Drop.



2.4.29 Scripts

This menu allows you to create small macros, so-called scripts. These can be triggered by alarms or also manually in the Live Image.

- The Scripts List **(1)** displays all scripts that have already been created.
- With the Save button **(2)** you can create a new script under a designated name **(3)** or save subsequent changes.
- The Delete button **(4)** enables you to delete a selected script.
- The actual script is written in field **(5)**. Do this using a predefined syntax, which will be explained in detail later.
- The command field **(6)** shows the commands that are available. By double-clicking on a command, it can be selected. At this point, you only need to match the variables (in the brackets) to it.
- The Test Script button **(7)** enables you to test the selected script.



Syntax:

Please note: Each command must begin with a new line!

ALARM [TRACK(1..64)] [TYPE(1..3)]

Function: An alarm is triggered.

Parameters:

- TRACK: The track corresponds to the track number beginning at 1.
- TYPE: The alarm type serves to differentiate event handling. Here, "1-3" refers to alarm types "API-Event 1-3"

Example:

ALARM 5 1: CamIQ 8 Satellite signals a type 1 alarm on track 5.

CALL [SCRIPTNAME]

Function: Another script is started.

Parameters:

- SCRIPTNAME: The script name corresponds to the designation of the script to be called up in the script overview.

Example:

CALL ALARM: The script with the designation ALARM is invoked.

PRESETPOSITION [TRACK(1..64)] [PRESETPOS]

Function: Jumps to a preset position. This function can only be used if the desired camera has been configured as an PTZ camera.

Parameters:

- TRACK(1..64): The track corresponds to the track number beginning at 1.
- PRESETPOSITION: The preset position that will be jumped to. Numeration of the preset position begins at 0.

Example:

PRESETPOSITION 2 4: The camera on track 2 will jump to the preset position 4.

SENDHTTP [TRACK(1..64)] [REQUEST] (/axis-cgi/playclip.cgi?clip=9)

Function: Sends an http string to the assigned device.

Parameters:

- TRACK(1..64): The track corresponds to the track number beginning at 1.

- **REQUEST:** An http string must be entered here, which should subsequently be sent to a camera.

Example:

SENDHTTP 2 /axis-cgi/playclip.cgi?clip=9: The defined http string is sent to the camera on track 2 (the IP address, user and password of the assigned camera will be used).

SENDURL [URL] (<http://user:password@ip-address/axis-cgi/playclip.cgi?clip=9>)

Function: Sends an http string to a network address that can be defined.

Parameters:

- **URL:** An arbitrary http string can be entered here, which will be executed during activation.

Example:

SENDURL <http://192.168.0.23/axis-cgi/playclip.cgi?clip=9>:

The defined http string is executed.

SENDUDP [HOST] [PORT] [DATASTRING ("%20"=>" ", "%25"=>"%", etc.)]

Function: Sends a string via UDP to a destination address.

Parameters:

- **HOST:** Enter the destination address here.
- **PORT:** Enter the destination port here.
- **DATASTRING:** Define the string to be sent to the destination address here.

Example: „DATASTRING 192.168.0.1 8080 Hallo%20Welt“

LOCKLAST [TRACK(1..64)] [(hh:mm:ss)]

Function: Locks a range in the recording of a defined camera, starting backwards from the current time.

Parameter:

- **TRACK:** The track number corresponds to the track in question, starting at 1.
- **(hh:mm:ss):** Enter here - in hours, minutes and seconds - how far back from the current time the recording should be locked.

Example: "LOCKLAST 1 24:00:00": Locks the last 24 hours of video recording on the first track.

UNLOCKLAST [TRACK(1..64)] [OPTIONAL(hh:mm:ss)]

Function: Unlocks a range in the recording of a defined camera, starting backwards from the current time.

Parameters:

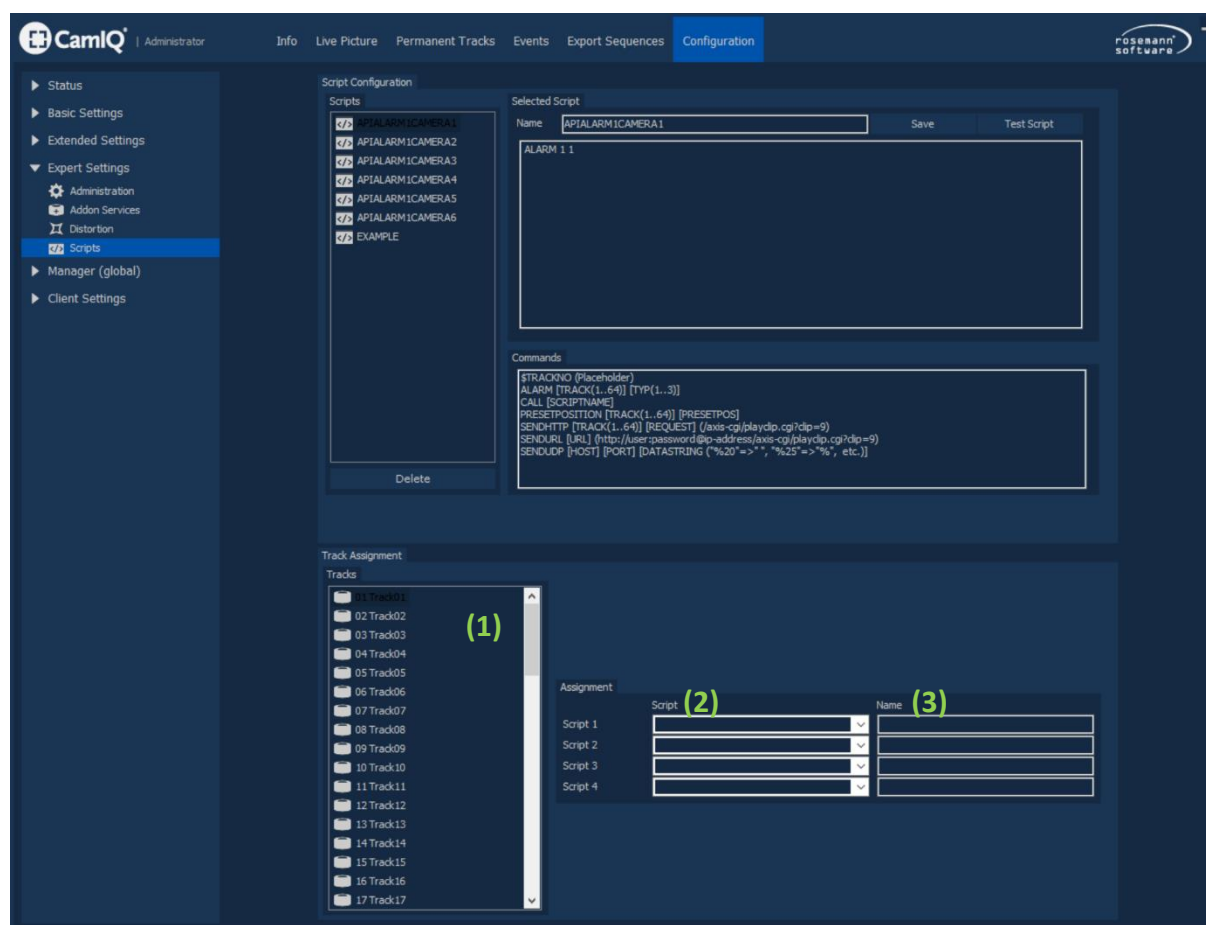
- TRACK: The track number corresponds to the number of the track starting at 1.
- OPTIONAL (hh:mm:ss): Enter here in hours, minutes and seconds how far back from the current time the recording should be unlocked. This parameter is optional. If no time is specified, the entire recording will be unlocked.

Example:

"UNLOCKLAST 1 24:00:00": Unlocks the last 24 hours of video recording on the first track.

Example 2:

"UNLOCKLAST 1": Unlocks the entire video recording on the first track.



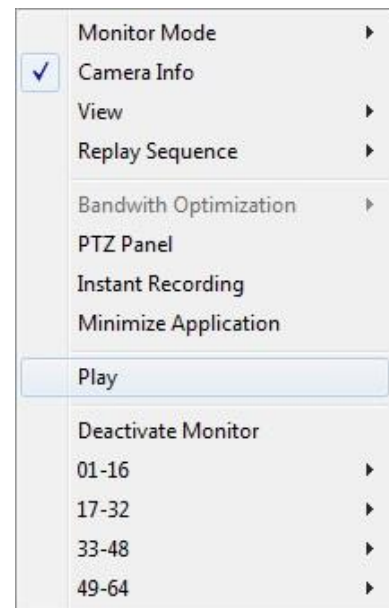
Each of the maximum of 64 tracks can be assigned up to 4 scripts, which can be executed with just a few clicks directly from the Live Image.

From the “Tracks” **(1)**, first select the track that you want to assign a script to. Select from the “Script” list **(2)** the script that should be executed. At “Name” **(3)**, enter an appropriate name for the command button.

Then, in the selected track’s Live Image, open the context menu.

The entered button with the designation specified will be visible in the context menu.

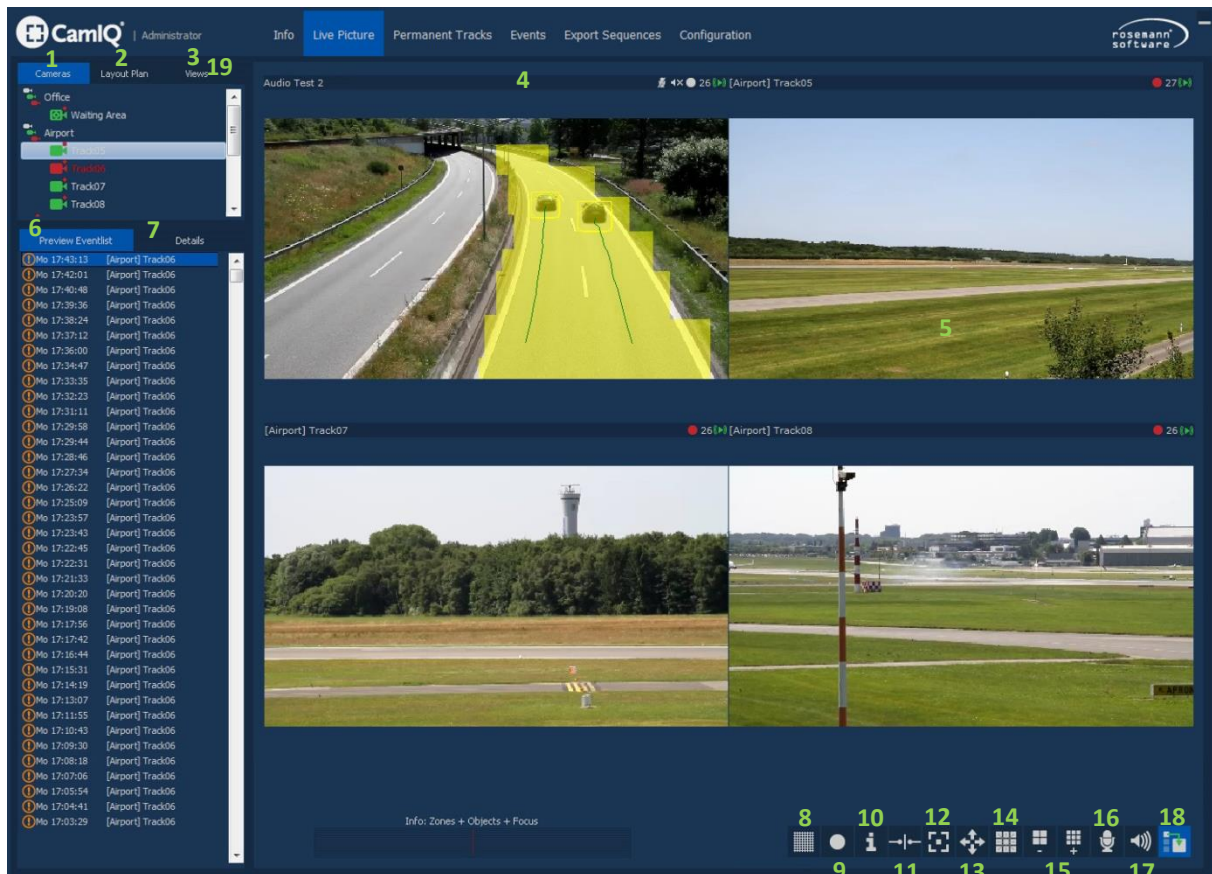
By left clicking on the button, the assigned script will be executed.



2.5 OPERATING THE MANAGERS (LIVE IMAGE)

The Live Image view is the standard interface with which a user operates the server. It is comprised of various components which enable operation on the one hand and provide information on the other.

2.5.1 General Overview








- 1 **Cameras**
A list of all the tracks, displayable on the monitor with drop & drag.
- 2 **Site Plan**
Displays the pre-configured Site Plan
- 3 **Views**
Displays a list with the preconfigured views
- 4 **Camera Information**
Displays the camera name and the buttons belonging to it
- 5 **Monitor**
Live images are displayed in the monitors

- 6 Alarms**
A list of all alarms, double-click to get to the alarm sequence
- 7 Details**
Shows preview images of the triggered alarms, provided image material is available
- 8 Alarm Zones**
A left click fades in or out alarm zones. Bars indicate the intensity of movement
- 9 Instant Recording**
Starts an instant recording of the selected camera
- 10 Info**
Fades in the info bar for the live images
- 11 Relays**
Pull to the monitor with drag & drop to switch the associated relay
- 12 PTZ Panel**
Pull to the monitor with drag & drop to open the Standard
- 13 Monitor Mode**
Switch to Full Screen / Monitor Mode
- 14 Neighboring Cameras**
Live images are displayed in the monitors
- 15 Multiple View**
1-, 4-, 9-, 13-, 16-, 33-, 36-, 64-fold Views
- 16 Microphone**
Activates the audio stream (send) for the current camera
- 17 Audio**
Activates the audio stream (receive) for the current camera
- 18 Alarm switching**
Switches alarms on the first monitor
- 19 Current User**
Shows the name of the currently logged user

2.5.2 Cameras

All cameras (or tracks) are displayed with symbols:

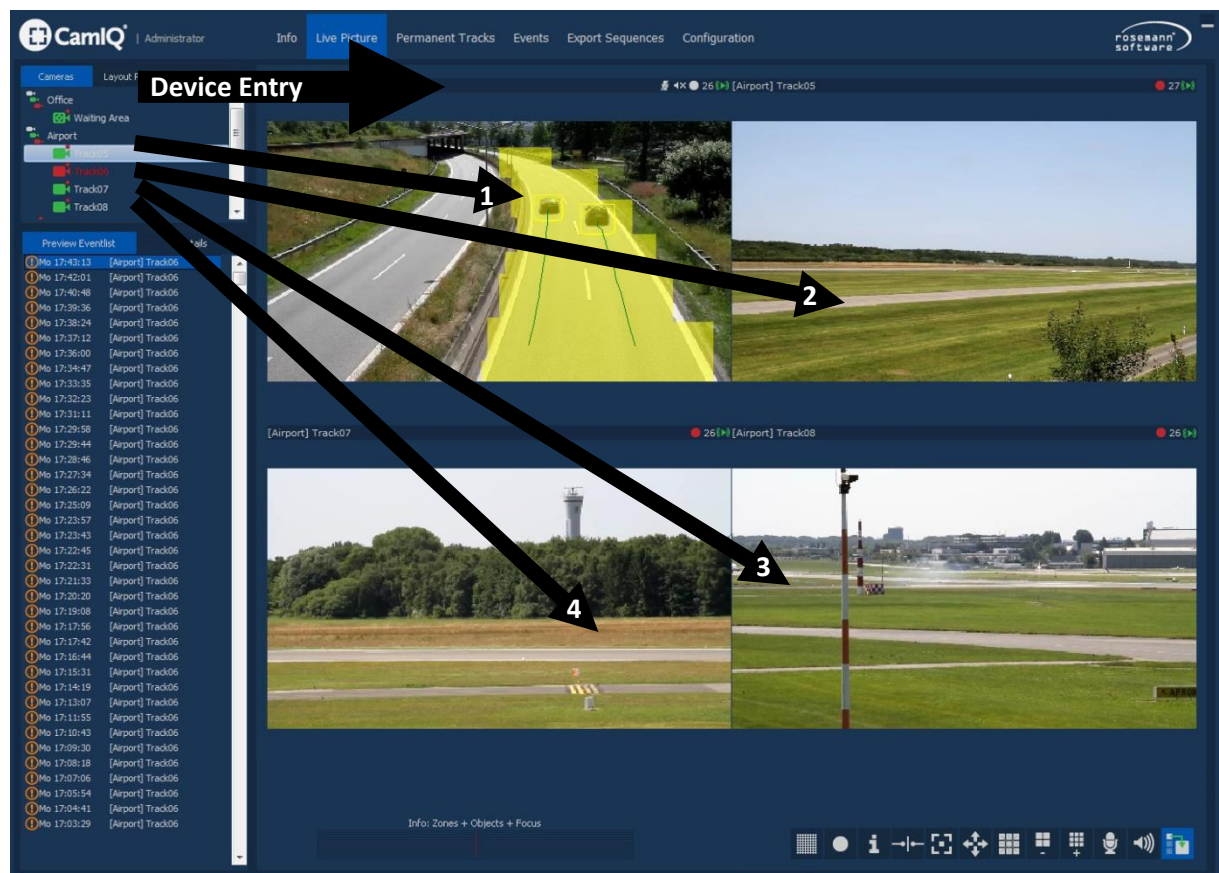
-  Camera is available (green)
-  Alarm in the track or a loss of camera signal (red)
-  Camera is a PTZ
-  Camera is recording (red dot)
-  No camera attached (gray)

Please note: Should a camera name appear in orange or red, this is an indication of a high degree of locking for the track (see chapter 2.4.8.4)

- You can display a camera image with a double-click or you can pull a camera symbol into the monitor with drag & drop.

When you activate "Camera Grouping Function in the Live Image" in the "Settings" menu, the cameras in the camera list will be displayed in groups. Cameras which are connected to a device like an AXIS Server are represented in respective groups.

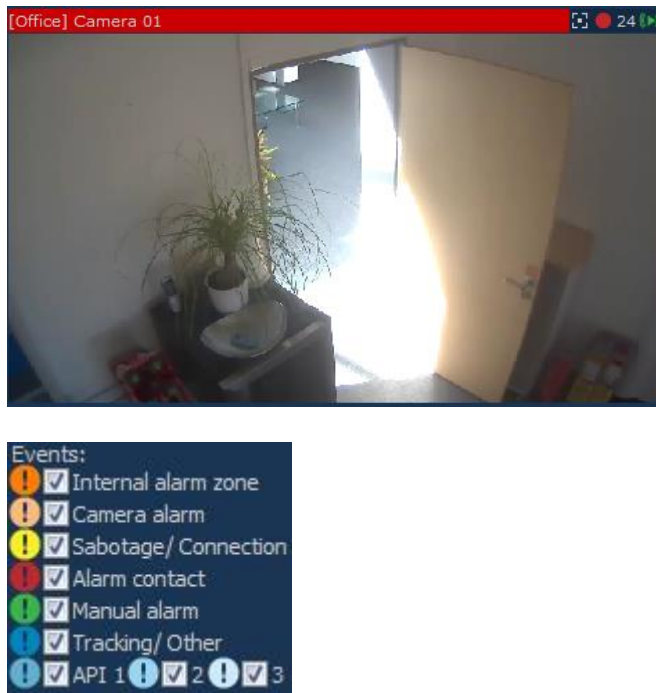
- You can also select a device entry and pull this into the monitor. The connected cameras will then be displayed - one after another - in the monitors that will then appear.



2.5.3 Alarms

The 16 most recent alarm alerts are displayed in the "Alarms" list. Image data is on hand for the alarms marked in color (this must be activated, see chapter 0). When you double-click on an alarm entry, you will be brought directly to the corresponding alarm record in the Event List.

The color coding for alarm alerts:



Current alarms (not events!) are displayed in the software by displaying the monitor of the alarm-triggering camera in red. The alarm can be acknowledged with a double-click on the red camera information bar.

The blue CamIQ taskbar symbol also turns red.

Optionally, an acoustic signal can be played.

2.5.4 Monitors



The individual camera images in the Live View are called "Monitors". A monitor consists of the camera's live image and – optionally - the camera information bar.



With a click on the adjoining buttons, you can change the views / the number of monitors from between 1, 4, 9, 13, 16, 33, 36 and 64.

A double-click on a monitor allows you to display it in the basic view.

Please note: The Manager notes the distribution of the tracks on the monitors separately for every view (number of monitors). In this way, you can assemble a collection of video signals for every view without affecting other collections from other sets of monitors.

Use the mouse wheel with any monitor to operate the zoom function. The zoomed area can also be shifted by holding down the left mouse button. Please note that this is a digital zoom which has no effect upon the recording or other configuration parameters.

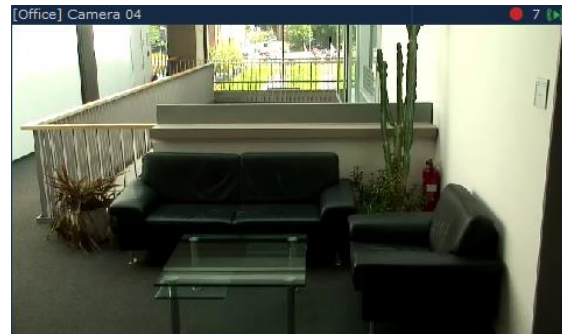
2.5.5 Camera Information



With a click on the "Camera Information" button, you can activate or deactivate the camera information bar - including the monitor symbols for the individual monitors in the upper margin.



Without camera information



With camera information

2.5.6 Monitor Symbols

Monitor symbols are embedded in the camera information bar. These are buttons that allow you to execute certain track functions and also status displays for the corresponding track.





Instant recording:

By clicking on this button, you start the camera recording immediately. As long as the recording is active, the symbol changes to the following state .



Relays:

Click on this button if you want to switch the relay associated with the camera. If the relay is open, the symbol looks like this: .

When the relay is closed, the symbol will look like this: .



Loudspeaker:

Click on this button to open the camera's audio channel and to play back the audio stream on your local output device. This button is only visible if the camera supports audio and has been correctly configured.



Microphone:

Click and hold the microphone button to send an audio stream from your local input device to the camera/intercom. (The standard 'Push to talk' setting can be adjusted in the general Manager Settings.)

This button is only visible if the assigned device supports this feature and has been correctly configured.



PTZ Panel:

By clicking on this symbol, the Standard Network Panel will be opened with which the tilt swivel camera can be operated. Of course, the button for the PTZ Panel will only appear when the camera in question is a PTZ.

There are several variations of this symbol:



– **Green Bottom Right:** The PTZ camera is being manually operated



– **Red Top Right:** The camera is tracking an object (tracking option)



– **Blue Top Left:** The camera is taking a preset tour



– **Red Bottom Left:** The PTZ camera is shifting position due to the occurrence of an event



Display image updates:

The image update symbol is not a button, but a display. The two green dots blink alternately when the camera image is being updated. The faster the dots blink, the more images are being transferred and displayed. If the dots no longer blink, this could indicate a problem with the image transmission.



Display image updates (activity):

The icon for the activity of the image updates is likewise merely a display. It visualizes whether the image data stream is currently running or not.

2.5.7 Instant Recording



Pull the "Instant Recording" button into a monitor with drag & drop. The server will immediately start a recording unless it is already performing a permanent recording of the track.

2.5.8 Relays



Pull over the "Relays" button with drag & drop in order to switch the relay associated with the track.

2.5.9 Displaying Detection Details



By clicking on the "Display Detection Details" button, you can overlay the current track's detection details in 5 different levels in Live Image.

1. No Detection Details
2. Object Sizes & Object Detection & Focus & Zones
3. Object Sizes & Object Detection & Focus
4. Object Sizes & Object Detection
5. Object Sizes & Focus



The intensity scale displays how much motion is currently taking place in the image. The vertical line represents the threshold beyond which an event is triggered.

Please note: This function is only available for single frame view.

2.5.10 PTZ Panel



Pull the "PTZ Panel" button into a monitor with drag & drop, opening the tilt swivel and dome camera PTZ Panel associated with the track.

- In section **(1)** you will find the directional pad. Click into the gray quadrant in the middle of the cross with the mouse pointer and keep the left mouse button pressed. Now when you move the mouse, the PTZ or dome camera will move in the same fashion. The further away you move from the center of the gray quadrant, the faster the attached camera will move.
- Under item **(2)** you can direct the camera zoom. Click on + or – and the lens will continue to zoom in or out for as long as you hold on to the mouse button.
- Under item **(3)** you can control the camera focus. Click on + or - and the lens will continue to focus for as long as you hold on to the mouse button. If the camera supports automatic focus, click on **Auto** to focus.
However, some dome cameras interpret this click on focus as the command to start the automatic tour.
- Click on "Focus" to switch the control to "Iris".
- In section **(4)** you can call up the camera's preset positions. To do this, left-click on any of the buttons between 1 and 8 and the camera will adjust itself to the relative preset position as described in chapter 2.4.20.

- As soon as the PTZ Panel has opened, you can operate the standard network or dome camera using an attached joystick.



2.5.11 Audio



With a click to this button, audio activation will be set to 'automatic mode'. If a camera with configured audio stream is switched to the main monitor, the audio stream will start automatically.

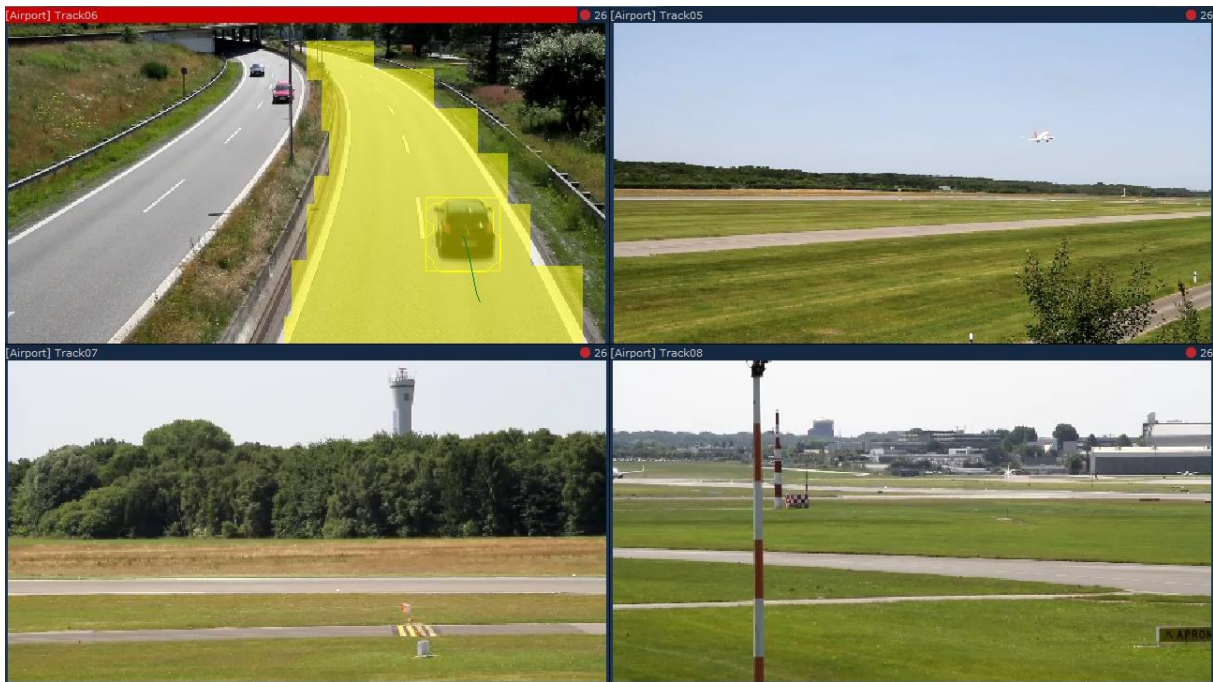


Click and keep the microphone button pressed to send an audio stream from your local input device to the camera/intercom. (The standard 'Push to talk' setting can be adjusted in the general Manager Settings.) This button is only visible if the assigned device supports this feature and has been correctly configured.

2.5.12 Monitor Mode



By clicking on this button you can change to "Monitor Mode". This is a full screen mode in which only the monitors are seen



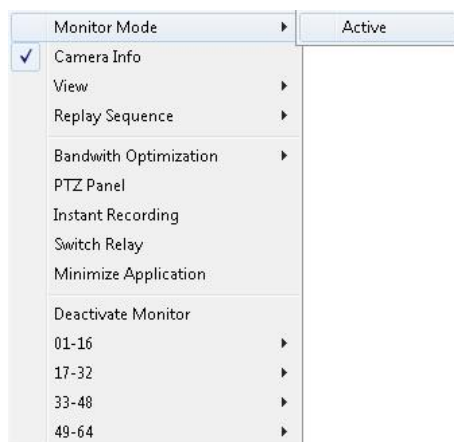
- The size of the Manager can be scaled as desired in this view. Just move the mouse pointer either along the border or in one of the window's corners. The mouse pointer changes into an arrow symbol with which the size of the window can be changed by clicking and holding on to the left mouse button. Video images are rescaled in the process.
- Using the right-click menu, you can switch back to the normal Manager view.

2.5.13 Right-Click Menu



When in Monitor Mode, the Manager can only be operated using the right-click menu. This menu is also available when using the normal Manager view.

2.5.13.1 Switching to Monitor Mode



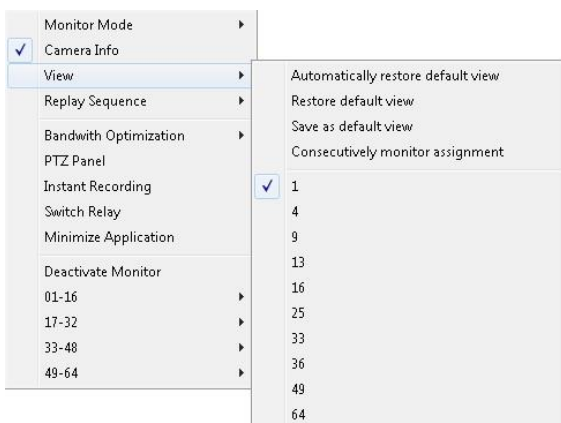
Right-click on any camera image in order to switch to Monitor Mode. In the menu that now opens, select the "Monitor Mode" entry and click on "Active" with the left mouse button. The view now changes to Monitor Mode. To switch back to the normal view, repeat the process.

2.5.13.2 Camera Information



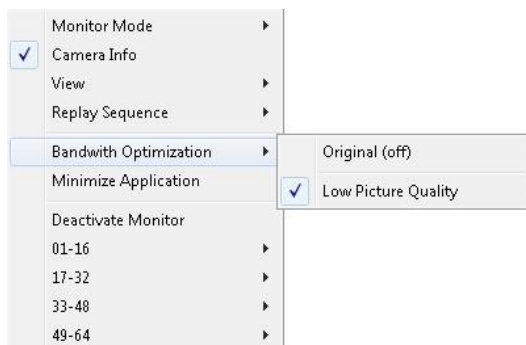
To display or block out the Camera Information Bar, open the right-click menu and click on "Camera Information" with the left mouse button.

2.5.13.3 Multiple View



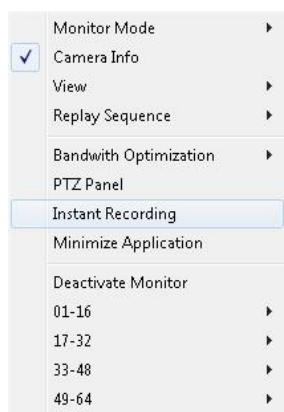
The number of monitors displayed can also be selected using the right-click menu. Open the menu and move the mouse pointer to the "View" entry. A list box opens from which you can choose the desired number of monitors to be displayed.

2.5.13.4 Bandwidth Optimization



If you activated bandwidth optimization during login, you may use the right-click menu to set the compression level for every individual track. Open the menu and move the mouse pointer to the „Bandwidth Optimization" entry. A list box will open from which you can select the desired code conversion profile.

2.5.13.5 Instant Recording



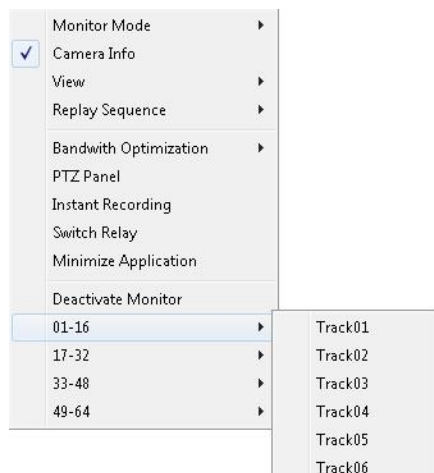
With the "Instant Recording" entry found in the right-click menu, you can manually start a recording. Right-click on the camera image you would like to record and then click on "Instant Recording" with the left mouse.

2.5.13.6 Switching Relays



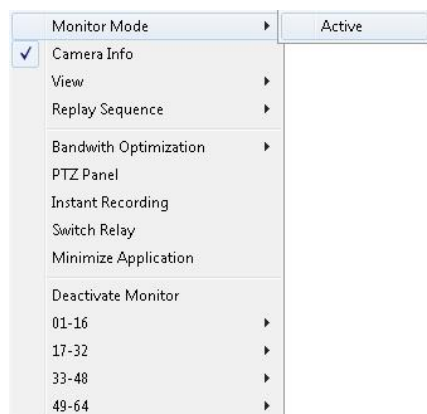
You can use the right-click menu to switch relays. Right-click on the image in the desired track to open the menu. Then click on the "Switch Relay" button.

2.5.13.7 Displaying Camera Images



In order to display a camera image, first click with the right mouse button on the monitor in which the camera image is to be displayed. As soon as the number of cameras increases, the cameras will be grouped in the right-click menu. If necessary, move the mouse pointer to a group and select the desired camera from the list box which will open.

2.5.13.8 Monitor Mode



The "Monitor Mode" menu item is further enhanced in monitor mode. In order to switch back to the normal view, click on the "Active" entry.

If you deactivate the "Retain Aspect Ratio" entry, the displayed video images will be arbitrarily scaled when the program window is rescaled; this can lead to images that look stretched or squeezed together.

When the "Display in Window" entry is active, a window bar like the one seen in the upper screen border of the normal view will be displayed around the video monitors. This bar lets you minimize the program window; maximize it to full screen size or

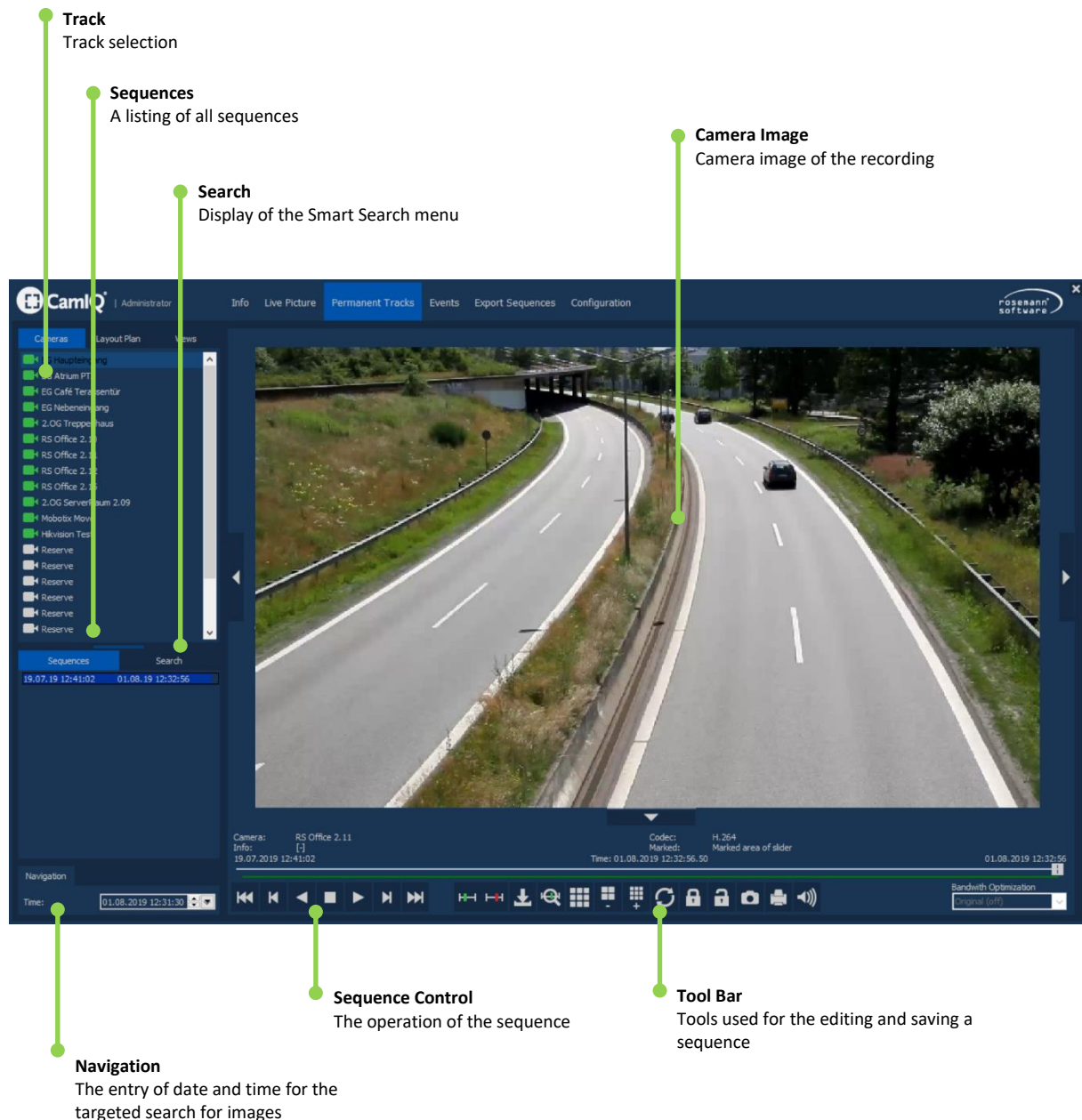
close it. If you deactivate this entry, these functions are no longer available and the video images can fill up the entire screen – and this without being able to see any menu structures or anything else.

If you activate the "Window Always in Foreground" entry, the current Manager view will always be visible in the screen foreground - even when other programs or tasks become active.

2.6 LONG-TERM ARCHIVING (PERMANENT TRACKS)

The server can permanently record on the hard drives available to it. It is possible to protect or save sequences from being overwritten by the cyclical rewriting process. The server also uses "Smart Search" technology which allows it to examine sequences in a freely definable area for any changes that have taken place in the images.

2.6.1 General Overview



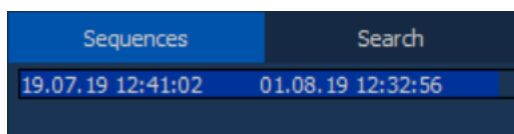
2.6.2 Track

You can select the track whose recordings you would like to see in the list box of the "Track" item.

2.6.3 Sequences

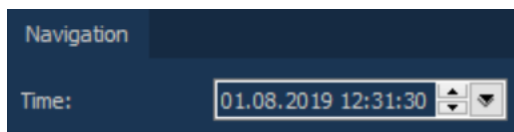
Sequences of the recording can be displayed with a click on the "Sequences" button. The starting point is always shown on the left and the end point on the right.

These permanent recordings are regularly overwritten through a cyclical process. In other words, as soon as the hard drives are full, the recording process begins overwriting the oldest images with the newest ones. In order to prevent this, parts of the permanent recording can be locked. Locked sequences are displayed in red.



2.6.4 Navigation

In the "Navigation" section you can enter an exact point in time. The currently selected sequence, which you can mark by clicking, will jump to the entered the point in time.



2.6.5 Camera Image

In the "Camera Image" section you will see the recording. An information area is located beneath the image which displays the following information:

- **Camera:** Name of the currently displayed track
- **Sequence:** Date and time of the first and the last image of the selected sequence
- **Time:** Date and time of the currently displayed image. If you have marked a section of the sequence, you will see behind it the date and time of the first and last image of the marked section in brackets.
- **Information:** Additional alarm data and comments

Use the mouse wheel with any camera image to operate the zoom function. The zoomed area can also be moved by holding down the left mouse button. Please note that this is a digital zoom; it has no effect upon the recording or other configuration parameters.

2.6.6 Sequence Control

You can control a displayed sequence with the following buttons (from left to right):



- Jump to the first image of the sequence
- Go backward one image
- Play backward (click repeatedly to increase the speed)
- Stop the playback
- Play forward (click repeatedly to increase the speed)
- Go forward one image
- Jump to the last image of the sequence



You can move forward and backward within the sequence using the regulator. Click on the gray vertical slider bar and hold the mouse button down, pulling it to the left or to the right. The bar also shows you where you are located within the sequence.

2.6.7 Tool Bar

The Manager offers a selection of tools with which the sequences can be evaluated:



Define Sequence Start: Go to the point of time in the sequence that you would like to establish as the start of the partial sequence and click on this button.



Define Sequence End: Go to the point of time in the sequence that you would like to establish as the end of the partial sequence and click on this button.
You have now marked a section of the sequence.



Regulator Zoom: For a finer gradation of the slider's movement, click on this button to zoom in on the slider's position. A 2-minute area on the slider is now distributed across the entire length of the bar. Alternatively, the sequence end and the sequence start can be defined, thus distributing this framed area across the bar's entire width. This makes it possible for you to meter the regulator's movement more exactly.



Repeat Sequence: By activating this button, the current sequence will be repeated continuously. Otherwise, the next sequence will be played once the current sequence's end has been reached.



Lock Sequence: The sequence - or the marked partial sequence - will be locked and thus protected from being overwritten. Locked sequences are displayed in red in the sequence list.



Unlock Sequence: If the currently selected sequence is locked, you can unlock it with this button and release it to be used for the cyclical recording process.

Warning: If the locked sequence is already so old that it would have normally been overwritten by the cyclical recording process, it will immediately be deleted as soon as it is unlocked. This will also be the case if you use the "Automatically Delete Image Data after X Days" function. If the sequence is older than the date entered here, it will automatically be deleted as soon as it is unlocked.



Save Sequence: Click on this button to save a sequence - or a marked partial sequence - to a hard drive or a mobile storage medium.

This sequence is provided to the Export Assistant for the final export of a sequence compilation. You can get more detailed information about the Export Assistant in Chapter 2.7.9.



Save Image: Click on this button to save the image just displayed as a bitmap graphic on the hard drive or on a mobile storage medium.

This image is provided to the Export Assistant for the final export of a compilation. You can get more detailed information about the Export Assistant in chapter 2.7.9.

A window opens in which you will be prompted to enter a location and file name for saving.



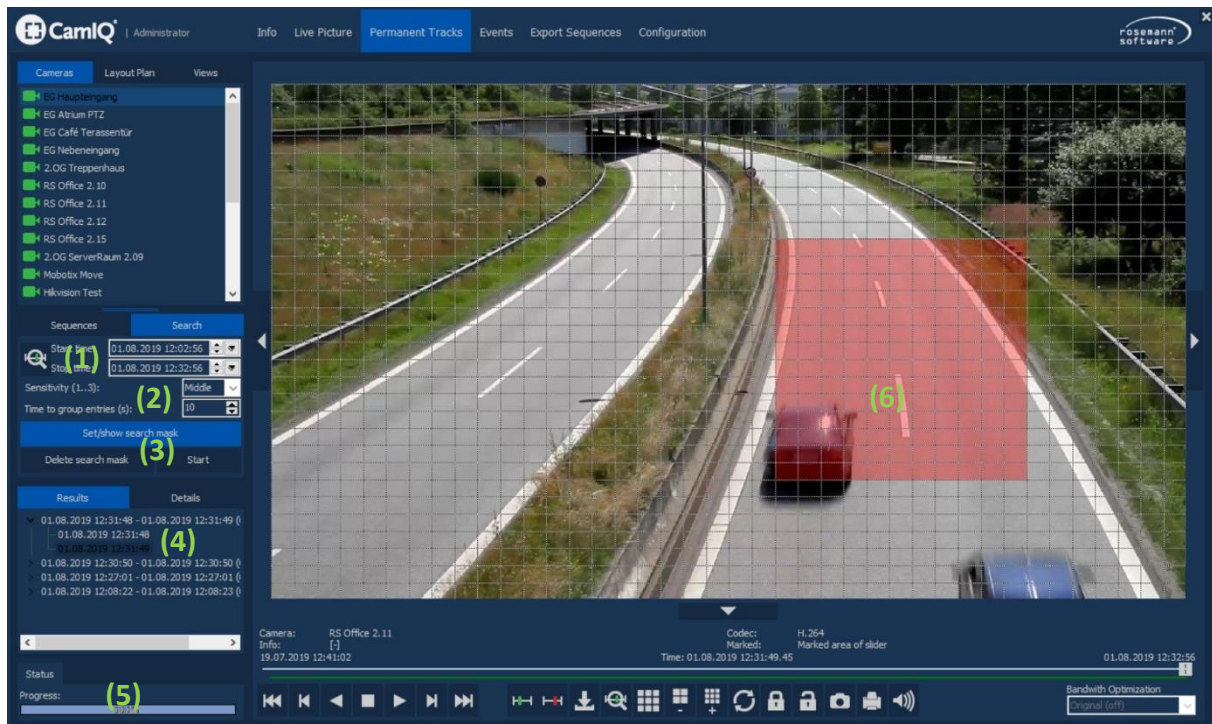
Print Image: Click on this button to print the current image. A printer must be connected for this, of course. First a window will appear in which you will be able to leave a comment. This comment will then appear below the image on the printout. After this, another window will open with the printing options - these varying with the type of printer installed.

The printout will include the following data displayed below the image:

- Server IP address
- The user who did the printing
- Track name
- Time and date of the printout
- The comment entered

2.6.8 Search

When the "Determine Image Change" function is active (see chapter 2.4.8.3) you can reach **Smart Search** using the "Search" tab. Here you can search through a given image detail of a permanent recording for motion.



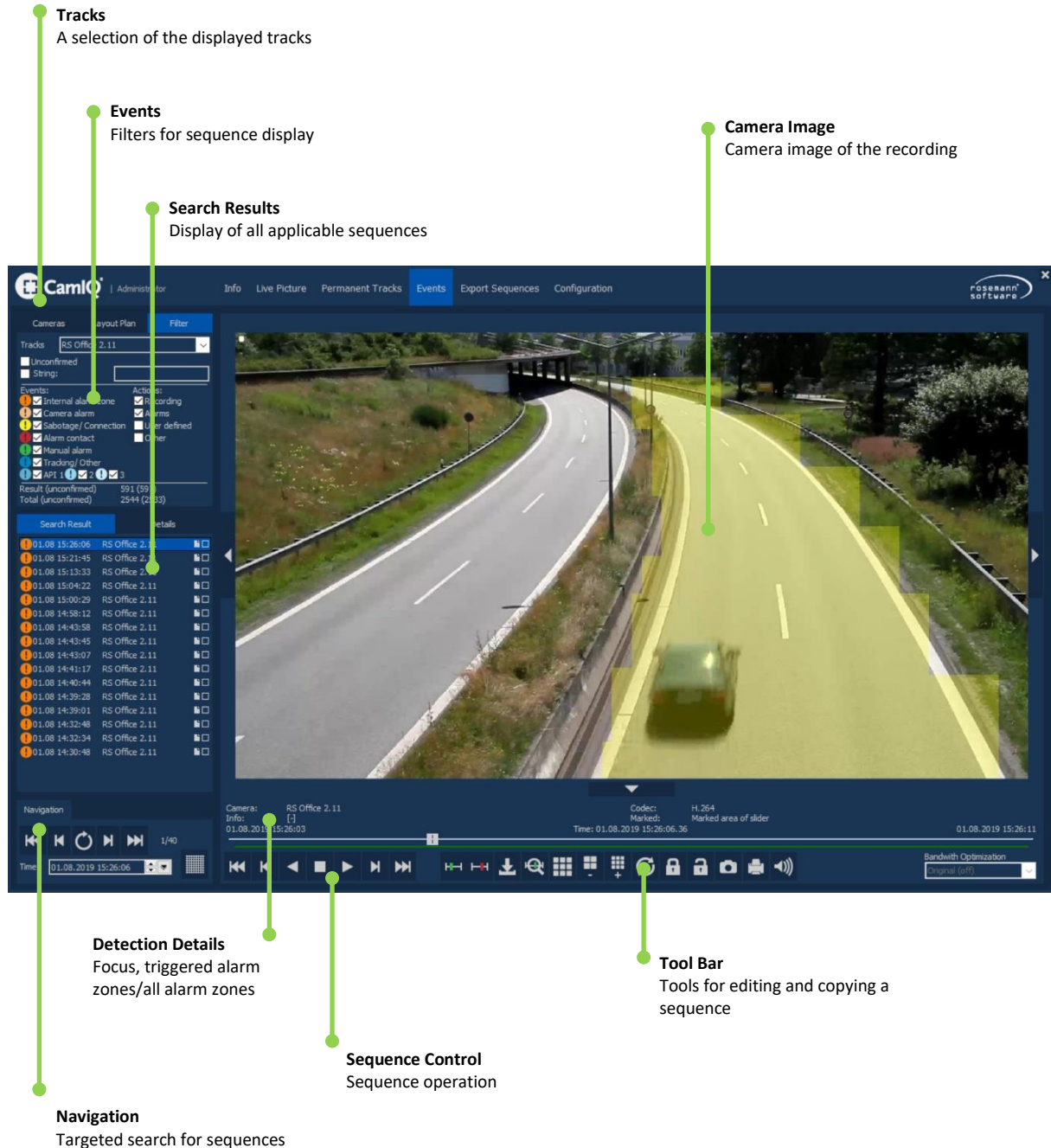
- In section **(1)** you can use the "Start" and "Stop" buttons to set the exact time periods within the permanent recording through which to search.
 - In section **(2)** you can further modify the search:
 - **Sensitivity:** Here you can set one of three sensitivity levels for recognizing change to images. The most sensitive level is level 3.
 - **Grouping Interval:** The search results will be pooled in groups. The groupings will depend on how far apart the results lie. You can indicate a time (in seconds) within which all results are to be collected for a particular group.
- Please note:** The grouping of search results is crucial for clarity. By grouping, a moving automobile, for example, or some other object in motion will be specified as a search result rather than every single image of their movement.
- There are several buttons at your disposal in section **(3)**. The "Set/Show Search Mask" button allows you to display or hide the grid and the delineated zones in the camera image. The "Delete Search Mask" button allows you to delete a delineated zone completely. You can start or stop a search by simply clicking on "Start" or "Stop".

- All results of the Smart Search will be displayed under the "Search Results" item **(4)**. Some will be pooled together in groups. You can recognize groups by way of the small + sign before the actual entry. By clicking on the " + ", you can open the group and call up the individual sequences.
- The "Status" section **(5)** contains a progress bar. If you have started a search, you can see here how much progress has been made in the search process and approximately how much longer it will take for the search to finish.
- In the camera image **(6)** you can delineate a zone through which changes to images can be searched. To do this, display the search mask and use the left mouse key to delineate a field; this will be shown in red. If you wish to delete parts of the field, you can do so with the right mouse button.

2.7 EVENT ANALYSIS (EVENT LIST)

Along with permanent recording, the server can also carry out event-based recording. Such event-based recordings can be triggered and evaluated separately. Specific events can be quickly found with the help of numerous filters.

2.7.1 General Overview



The screenshot shows the CamliQ 8.0 Event Analysis interface. The interface is divided into several sections:

- Tracks:** A selection of the displayed tracks. This section is located at the top left of the interface.
- Events:** Filters for sequence display. This section is located below the Tracks section.
- Search Results:** Display of all applicable sequences. This section is located below the Events section.
- Camera Image:** Camera image of the recording. This is the main video feed in the center of the interface.
- Detection Details:** Focus, triggered alarm zones/all alarm zones. This section is located at the bottom left of the interface.
- Sequence Control:** Sequence operation. This section is located at the bottom center of the interface.
- Tool Bar:** Tools for editing and copying a sequence. This section is located at the bottom right of the interface.
- Navigation:** Targeted search for sequences. This section is located at the bottom left of the interface, below the Detection Details.

The interface also includes a top menu bar with options like Info, Live Picture, Permanent Tracks, Events, Export Sequences, and Configuration. The bottom status bar shows the current camera (RS Office 2.11), time (01.08.2019 15:26:03), and other details.

2.7.2 Tracks

Select the tracks from which the sequences are to be displayed from the "Tracks" list box.

2.7.3 Events

The "Events" item enables you to filter events within the sequences. Simply deactivate all of the events which should not cause the display of a sequence. These sequences will then be hidden and only those which relate to the active filters will be displayed.










Sorting based on actions is also possible. Just activate or deactivate the "Recordings" and "Alarms" buttons. In event-handling, one differentiates between simple events like recording, for instance, and real alarms. Real alarms are only events which have the "Alarm" action activated in event-handling.

In addition, confirmed alarms (see chapter 2.7.3) can be specifically blocked out. If you use an API connection or have commented on events (see chapter 2.7.3), you can enter „string“ and „ext. ID“ search items as entries to find the events you are searching for.

2.7.4 Search Results

In the "Search Result" field you will see sequences displayed which apply to the active filter settings. The colors of the individual entries correspond to those of the event filter (see chapter 2.7.3).

Search Result	Details
19.02 11:42:51 [Camera01] Camera 1	
12.02 14:34:23 [Camera01] Camera 1	
12.02 13:47:36 [Camera01] Camera 1	
12.02 13:47:10 [Camera01] Camera 1	
12.02 13:45:59 [Camera01] Camera 1	
05.02 16:28:10 [Camera01] Camera 1	
05.02 16:26:35 [Camera01] Camera 1	
05.02 16:25:30 [Camera01] Camera 1	

Only the colored sequences contain image data. Sequences which have not been given a color do not contain any images data. This can come about either when no recording was configured or in cases where image data was overwritten due to the cyclical rewriting process. You can protect individual sequences from being overwritten by locking them.

Mark event as confirmed
Mark event as unconfirmed
Edit event attached string
Switch to permanent track

When you right-click on a sequence, an additional menu will open which offers you various functions.

You may, for example, select "Mark Alarm as Confirmed". Henceforth, the sequence will be denoted with a checkmark.

Therefore, it will be recognized by the "Confirmed" filter and no longer appears in the Live Image alarm list.

With a click on "Mark Alarm as Unconfirmed", you can reset the status and remove the checkmark.

You can also furnish a comment to the sequence. To do this, click on "Edit Alarm Data"; an input window opens in which you can enter your comment.

External Data

Please input the new data value:

OK

Abbrechen

This comment appears below the camera image in the "Info" field.

```

Camera:      [Camera01] Camera 1
Info:       UPS
19.02.2015 11:42:48

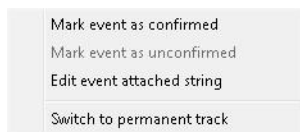
```


Directed searches can be undertaken for only for sequences denoted in this way. Just enter your search item in the "String" field and the server will display all sequences for which a comment entry applies.

For example, all deliveries from a particular supplier can be commented using his/her name. In this way, you only need to use this name as a search item to have all of this supplier's entries displayed.

Please note: After having entered a comment, you must select the "Update" button in order to bring the displayed view up-to-date.

The right-click menu offers you the option of jumping directly from the event sequence to the permanent track. The appropriate track and matching time are automatically selected in the process.



2.7.5 Navigation

In the "Navigation" section you can enter an exact point in time. If available, a sequence will automatically be chosen which matches this time. Additionally, you can page through the various sequence result pages should not all sequences found under "Search Result" be displayed at once on screen.



You can navigate within a sequence using the following buttons (from left to right):



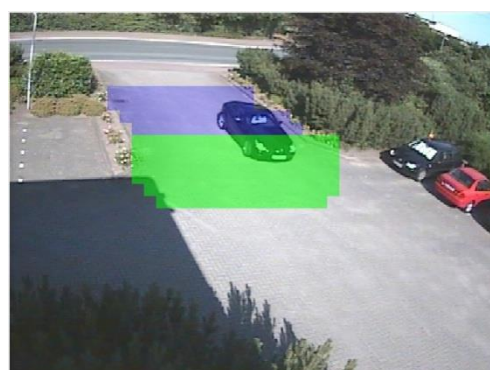
- Page one
- One page backward
- Update (after adding a comment, for instance)
- One page forward
- Last page

In addition, you can display the track's alarm zone, if available, using the "Display Detection Details" button in the camera image.

Please note: The current alarm zone will be displayed, not the one which was current at the time of the event!



Without alarm zones



With alarm zones

2.7.6 Camera Image

You will see the recording in the camera image section. Below the image is an information area in which the following data is displayed:

- **Camera:** Name of the currently displayed track
- **Sequence:** Date and time of the first and last image of the selected sequence
- **Time:** Date and time of the currently displayed image. If you have marked a section of the sequence (see chapter 2.7.8), you will see behind it the date and time of the first and last image of the marked section in brackets.
- **Information:** Additional alarm data and comments

Use the mouse wheel with any camera image to operate the zoom function. The zoomed area can also be moved by holding down the left mouse button. Please note that this is a digital zoom; it has no effect upon the recording or other configuration parameters.

2.7.7 Sequence Control

A displayed sequence can be controlled with the following buttons (from left to right):



- Jump to the first image in the sequence
- One image backward
- Play backward (click repeatedly to increase the speed)
- Stop the playback
- Play forward (click repeatedly to increase the speed)
- One image forward
- Jump to the last image in the sequence



You can move forward and backward within the sequence using the regulator. Click on the gray vertical slider bar and hold the mouse button down, pulling it to the left or to the right. The bar also shows you where you are located within the sequence.

Please note: If you click on a sequence that has been configured for a prealarm recording, the slider will not be positioned at the start but at the location where the prealarm and the actual alarm recording begins.

2.7.8 Tool Bar

The Manager offers a selection of tools with which the sequences can be evaluated:



Define Sequence Start: Go to the point of time in the sequence that you would like to establish as the start of the partial sequence and click on this button.



Define Sequence End: Go to the point of time in the sequence that you would like to establish as the end of the partial sequence and click on this button.
You have now marked a section of the sequence.



Regulator Zoom: For a finer gradation of the slider's movement, you can click on this button to zoom in on the slider's position. A 2- minute area on the slider is now distributed across the entire length of the bar. Alternatively, the sequence end and the sequence start can be defined, thus distributing this framed area across the bar's entire width. This makes it possible for you to meter the regulator's movement more exactly.



Repeat Sequence: If you activate this button, the current sequence will be repeated continuously. Otherwise, the next sequence will be played once the current sequence's end has been reached.



Lock Sequence: The sequence - or the marked partial sequence - will be locked and thus protected from being overwritten. Locked sequences are displayed in the search results list with a lock symbol.

15.08.2006 08:34:01	Mitarbeiterparkplatz	
15.08.2006 08:37:04	Mitarbeiterparkplatz	
15.08.2006 09:52:08	Einfahrt	



Unlock Sequence: If the currently selected sequence is locked, you can unlock it with this button and release it to be used for the cyclical recording process.

Warning: If the locked sequence is already so old that it would have normally been overwritten by the cyclical recording process, it will immediately be deleted as soon as it is unlocked. This will also be the case if you use the "Automatically Delete Image Data After X Days" function. If the sequence is older than the date entered here, it will automatically be deleted as soon as it is unlocked.



Save Sequence: Click on this button to save a sequence - or a marked partial sequence - to a hard drive or a mobile storage medium. This sequence is provided to the Export Assistant for the final export of a sequence compilation.



Save Image: Click on this button to save the image just displayed as a bitmap graphic on the hard drive or on a mobile storage medium.

This image is provided to the Export Assistant for the final export of a compilation. You can get more detailed information about the Export Assistant in Chapter 2.7.9.

A window opens in which you will be prompted to enter a location and file name for saving.





Print Image: Click on this button to print the current image. A printer must be connected for this, of course. First a window will appear in which you will be able to leave a comment. This comment will then appear below the image on the printout. After this, another window will open with the printing options - these varying with the type of printer installed.

The printout will include the following data below the image:

- Server IP address
- The user who did the printing
- Track name
- Time and date of the printout
- The comment entered

2.7.9 Export Sequences

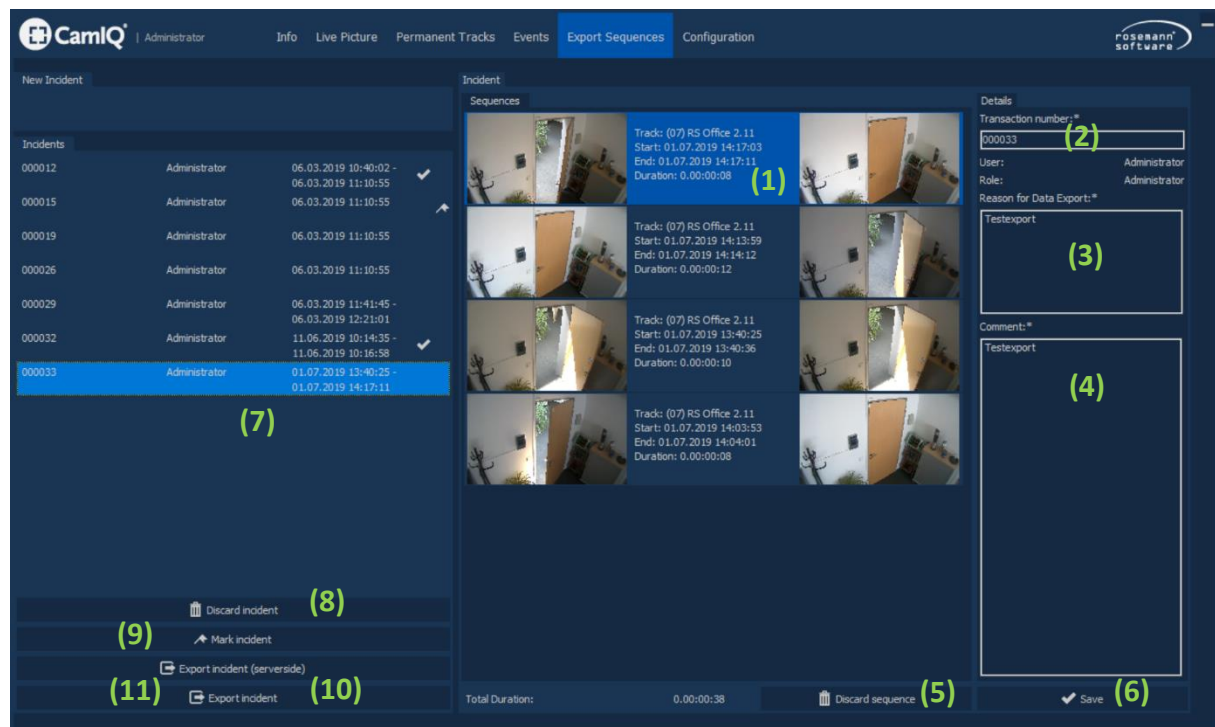
To secure image material, partial sequences can be backed up on a storage medium.

Use the start time (t1)  and stop time (t2)  buttons to mark an area in a permanent recording or event sequence. Then select the "Export Sequence" button.

The time range of the marked area will now be displayed over the tabs.

Starting point Ending point
Marked: 19.02.2015 11:43:04 - 19.02.2015 11:43:05

Then change to the "Storage" tab. In this tab, all of the marked partial sequences to be saved will be made available to you.



- On the right side you have the option of grouping together several sequences and corresponding commentary into an export operation or process.
- Under Sequences (1), you will find all of the sequences that have been grouped to form the given export operation. On the left you will find the first, on the right the last image of the prepared partial sequence. In the middle you will find further sequence information:
 - Track:** The name of the track from which the partial sequence originates
 - Start:** The starting time of the partial sequence
 - Finish:** The finishing time of the partial sequence
 - Duration:** The length of the partial sequence

- Other information can be assigned to the export operation in addition to the partial sequences:
 - **Transaction number:** A unique transaction number **(2)**
 - **Reason for Data Export:** The reason **(3)** for its export
 - **Comment:** Additional commentary **(4)**
 - The name and role of the logged-in user are automatically recorded
- Using the “Discard sequence” button **(5)** you can remove the selected entry from the operation.
- When the operation’s composition is complete confirm this with the help of the “Save” button **(6)**.
- You can find all of the prepared export processes in the “Incidents” list **(7)**.
- Use the mouse to select an entry in the operations list in order to enable additional options:
 - **Discard incident (8):** This irrevocably deletes the entire operation.
 - **Mark incident (9):** This selects or deselects a given entry.
 - **Export incident (serverside) (10):** This exports the selected operation to the video server (to the “C:\\CamIQ\\Server\\Exports” directory)
 - **Export incident (11):** This opens the “Export incident” window to allow the export to a desired directory.

Please note:

If an operation has been selected the list will be annotated with the following icon: 

If an operation has been exported the list will be annotated with the following icon: 

Export incident (11)

Additional options are available for the final step of the swapping process:

- (1) Click the folder icon to select a destination directory for the swap.
- (2) Select here whether you want to store the swaps as password encrypted or whether you want to export them unencrypted.
- (3) Enter a desired password for the encrypted swap twice.
- (4) Use the "generate random password" button to generate a random 12-digit password and to have it entered in the appropriate fields.
- (5) Select "Copy password to clipboard" to copy the entered password to clipboard memory.
- (6) Click the "Start" button to carry out the swapping operation.
- (7) Use the "Cancel" button to cancel the swapping process.

Please note:

Exports are automatically saved in the protected RSX format. The RSX Player for the sequences is also stored in the "Sequence Viewer" folder.

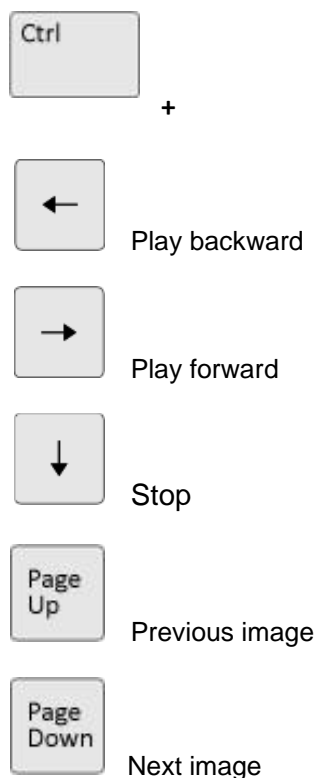
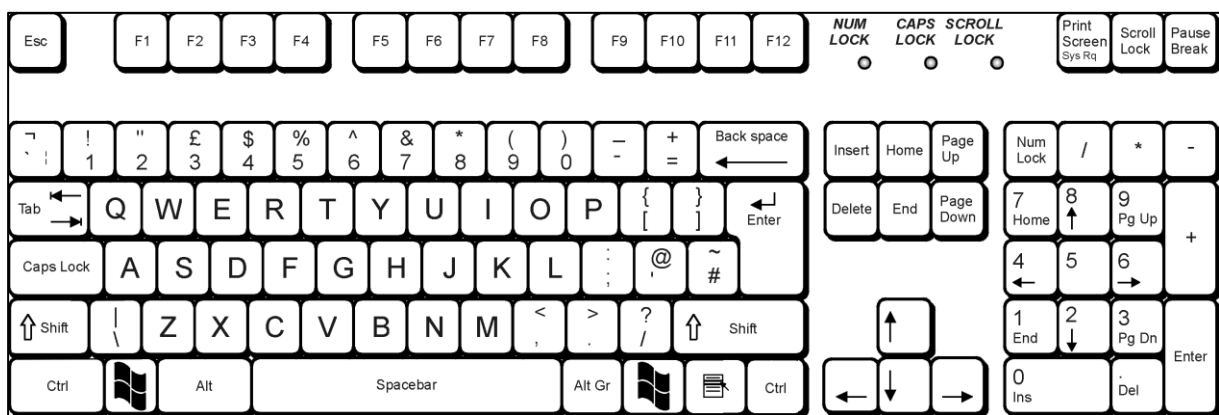
If the exported operations are to be made available to third parties, you must share the entire folder to include the "Sequence Viewer."

2.8 ADVANCED OPERATION

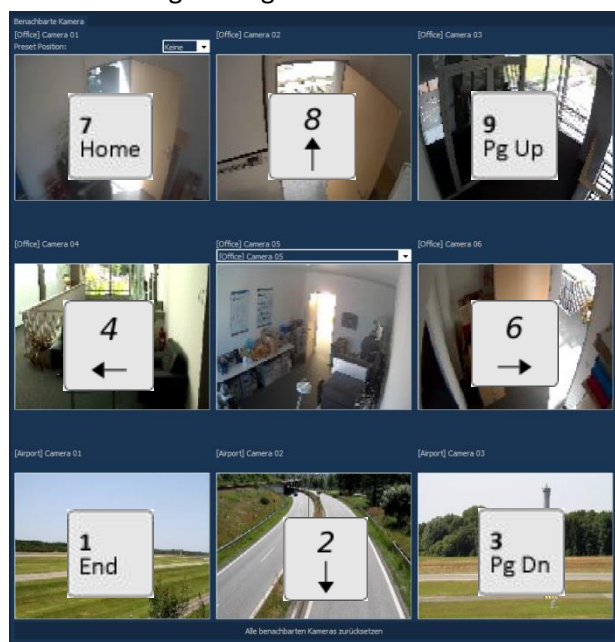
In addition to the conventional operating method of using a mouse or by simply starting the software, there are also other ways to operate the program as described below:

2.8.1 Keyboard Control

Shortcuts are key combinations pressed simultaneously to carry out certain functions. The Manager offers a series of shortcuts that help to operate the software quickly and easily without the mouse. The shortcuts are always a combination of the CTRL ("Control") key and a key from the number pad (NUM).



Neighboring cameras



Home	First image
End	Last image
Insert	Minimize CamIQ 8 Satellite
Delete	Maximize CamIQ 8 Satellite
5	Change to 9-fold view
0 Ins	Change to full-screen mode

2.8.2 Program Startup Parameters

When you start the Manager from the command line, you can pass parameters to the software. By passing parameters, the Manager can be started by external software with an automatic login. There are three ways in which parameters can be passed:

- **Simple Login:** Use "-login" as your first parameter to log in automatically. For the login to be successful, the following parameters will have to follow in this order:
 - IP address
 - User name

For example: "Manager -login 10.1.1.152 Administrator"

Please note: No user password may be passed for automatic login.

- **Alarm Login:** Enter "-alarm" as the first parameter to log in automatically and have a track number's Live Image displayed in the Manager. For the login to be successful, the following parameters will have to follow in this order:
 - Track number
 - IP address
 - User name

For example: "Manager -alarm 4 10.1.1.152 Administrator"

Please note: No user password may be passed for automatic login.

- **Pre-assign Login Fields:** Enter "-fill" as the first parameter to start the Manager with the passed parameters in the login fields. An automatic login does not take place here. Further parameters can be passed:
 - IP address
 - User name

For example: "Manager -fill 4 10.1.1.152 Administrator"

2.9 EXTERNAL PROGRAMS

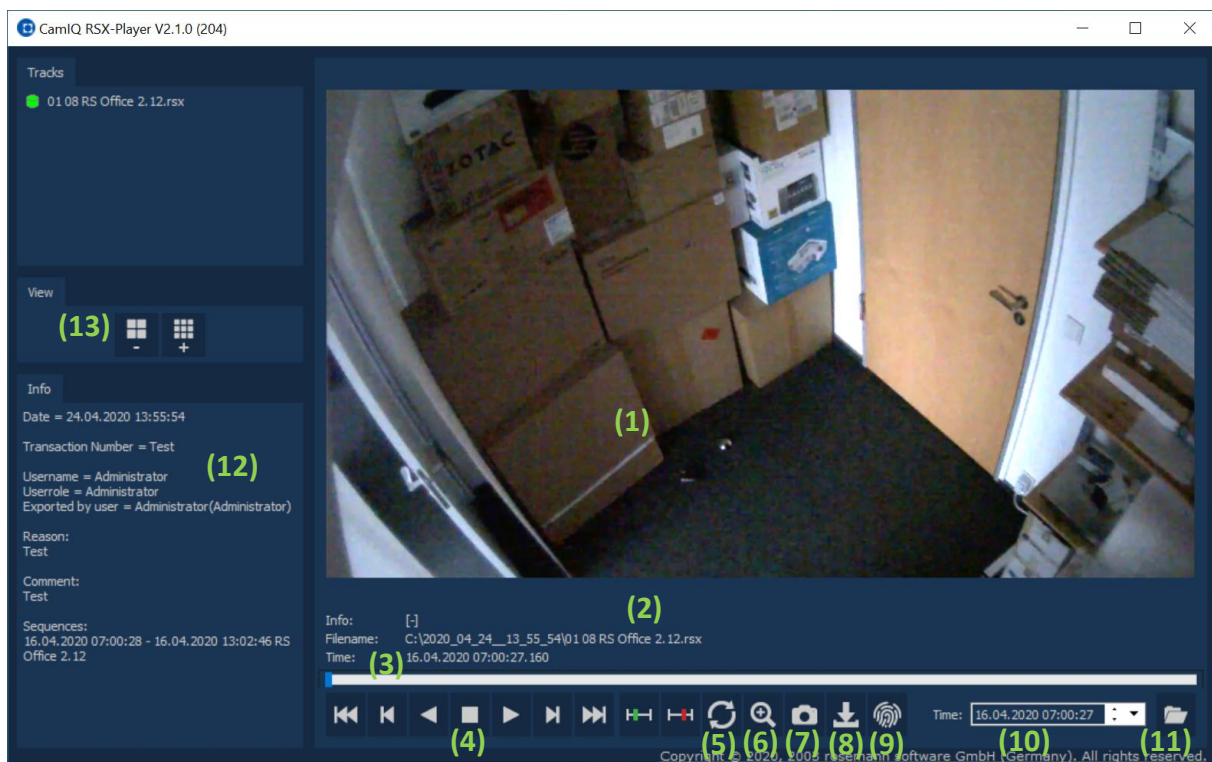
In addition to the server applications and the Manager, there are also other programs which run independently and offer various functions.

2.9.1 RSX Player

When you backup a sequence you are furnished with two files. One is the RSX file and the other is a folder with the designation "Sequence Viewer".

The RSX file is the actual sequence. The RSX player is located in the "Sequence Viewer".

- In order to play the sequence, open the "Sequence Viewer" folder and double-click on the "RSXPlayer.exe" file.
- Click on the "Open sequence" button **(11)** and select one of your RSX sequences in the following dialog box to open. In the case of an encrypted sequence, enter the password and confirm with "OK." Subsequently, all sequences in the selected folder will be opened in the RSX analyzer.



The recorded image can be seen in section **(1)**.

Sequence information is displayed under item **(2)**:



- **Information:** The name of the track
- **File Name:** The path and the file name of the file being displayed
- **Time:** Time and date of the current image

- You can navigate within the sequence with the help of the slider **(3)** by clicking on the gray vertical bar and moving the mouse pointer left or right while holding down on the mouse key.
- In section **(4)** there are other buttons with which the sequence can be controlled (from left to right):



- Jump to the first image of the sequence
 - One image backward
 - Play backward (click repeatedly to increase the speed)
 - Stop the playback
 - Play forward (click repeatedly to increase the speed)
 - One image forward
 - Jump to the last image of the sequence
- When the repeat button **(5)** is active, the open sequence will automatically repeat in a loop.
 - The magnifying glass symbol **(6)** allows marked clip images to be enlarged in the display. After you have activated this button, the mouse pointer changes into a small crosshairs symbol. You can now select a clip from the camera image by clicking on it and moving the mouse with the button held down. A square frame appears. When you let go of the mouse button, the image cutout will now be seen in full-screen view. With a right-click of the mouse, you can return to the normal view.

With this button **(7)** you can swap the current graphic to the hard drive or to a mobile storage medium.

- A window opens in which you can enter a location and a file name under which the file will be saved.
- Use the starting time (t1)  and stopping time (t2)  button to mark an area in the sequence. Then click on the “Export” button.
- Use the “Export” button **(8)** to make a copy of the .RSX file that was selected beforehand to create a copy in the unprotected .AVI format. This copy can then be played by ordinary player programs (Windows Media Player, for instance).
- With this button **(9)** you can calculate and display the checksum of the selected RSX file. Compare this with the checksum that was logged by the server when the file was swapped out in order to rule out any manipulation.
- Using the button **(10)** allows you to set a date and time to which the sequence will jump directly.
- With the open symbol **(11)** you can open another sequence to be played.
- In this area **(12)** you can see the export information concerning the swapped sequence/s.

- Use the Views button **(13)** to increase or decrease the number of displayed video images.

2.9.2 CamIQ Web Client

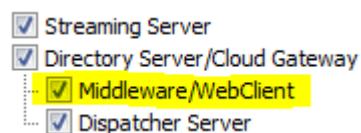
CamIQ comes with an easy-to-use web/mobile client. It can be used to operate CamIQ servers employing standard web browsers* as well as on mobile devices.*

*Please observe the compatibility list **(8.2.8 Compatibility)**

2.9.2.1 Installation

In order to use CamIQ Web Client, the CamIQ Middleware Service must be installed and running. These processes are automatic procedures of the CamIQ setup process.

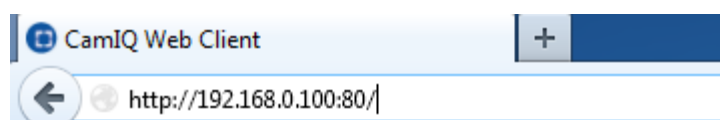
The “WebClient” must be manual selected for the insatallation process. It will not be installed by the standard installation.



2.9.2.2 Operation

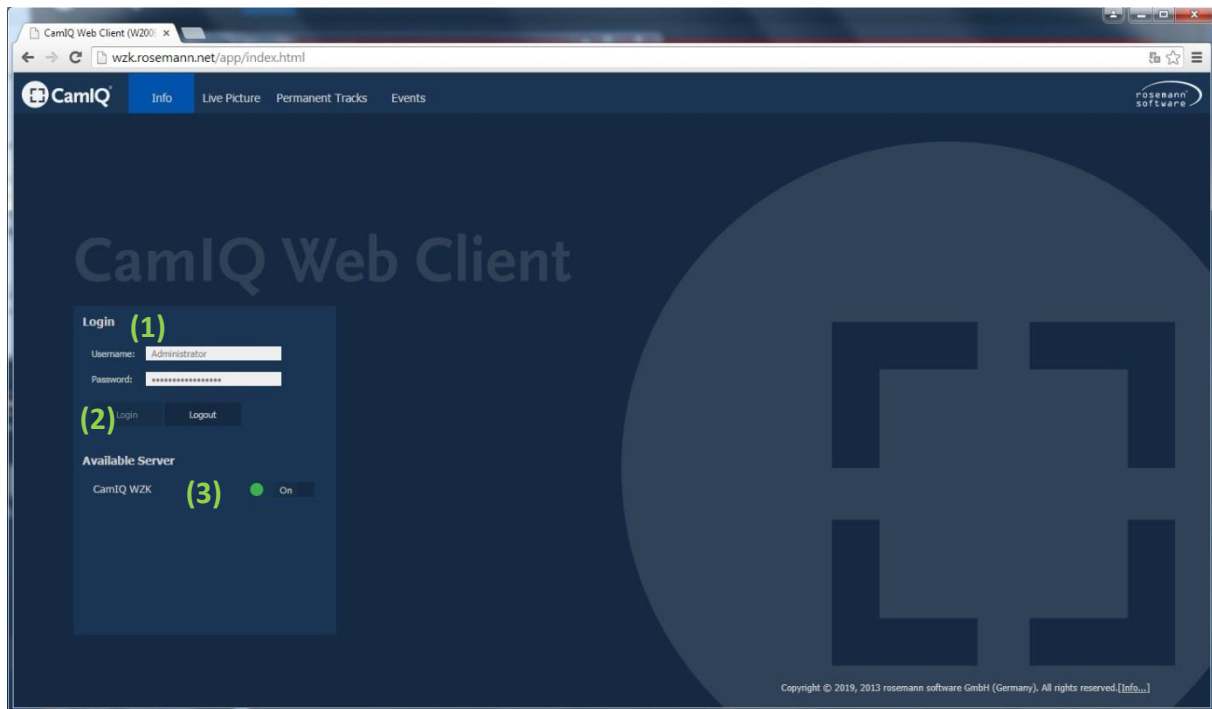
Operating the CamIQ Web Client is comparable to operating the CamIQ Manager.

To start CamIQ Web Client, open your web browser and enter the IP address of the CamIQ Middleware in the address bar (some browsers require that the complete URL [http://\[IP-ADDRESS\]:80/](http://[IP-ADDRESS]:80/) be entered).



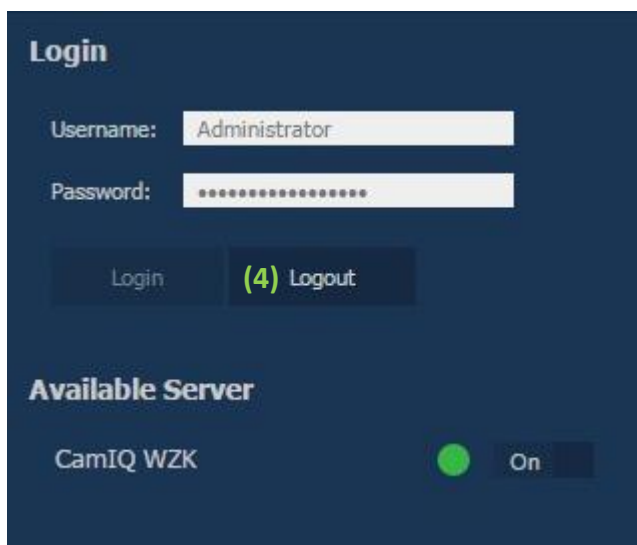
2.9.2.3 Login

To log in, enter the user name and password of a valid CamIQ Server user account **(1)**. Thereupon, all CamIQ Servers available over the middleware will be listed on which this account can login to **(3)**. To now connect to a specific server, click on the on/off toggle button.



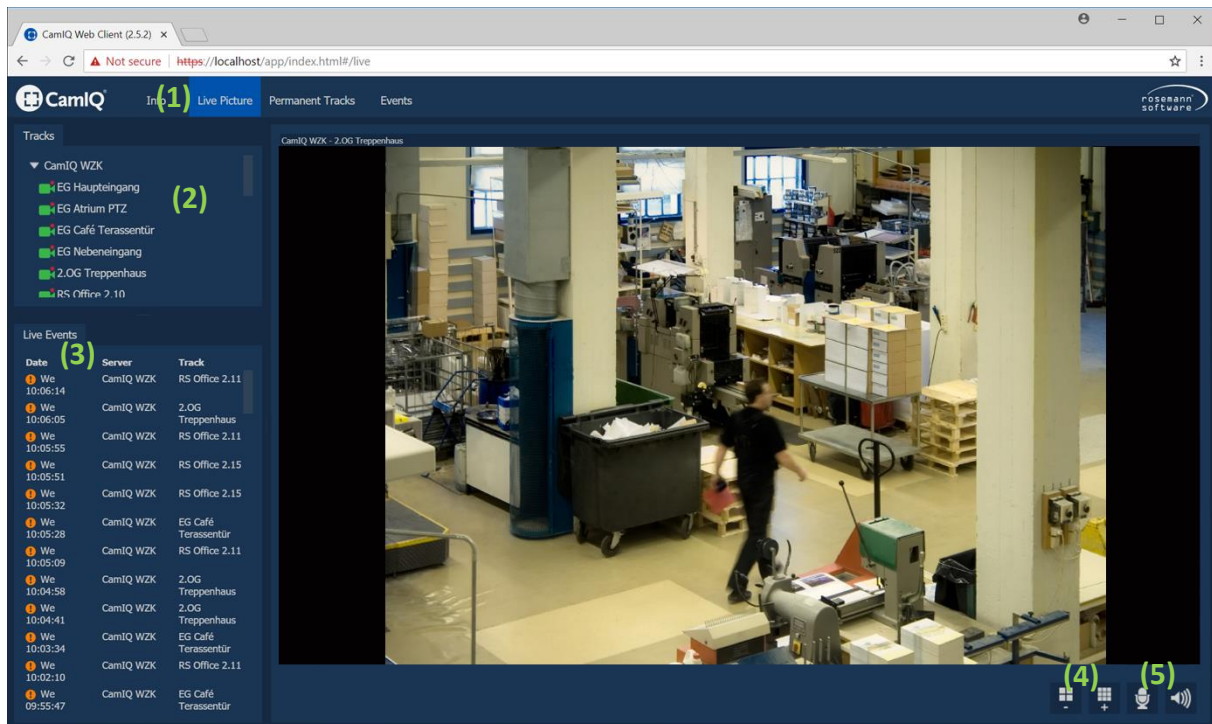
To disconnect from a CamIQ Server, select the entry in the server list and then click on the on/off toggle button. The connection status is represented by a colored circle: Green means connected, red means disconnected.

To disconnect from all servers select the “Logout” **(4)** button.





2.9.2.4 Live Image

You can access the Live Image View with one click on the “Live Picture” button **(1)**.
In the “Tracks” **(2)** list, you will find a list of all available cameras of connected CamIQ Servers.



All cameras are displayed with symbols in the track list **(2)**:

-  - The camera is available (green)
-  - No camera connected (gray)

To display the live image you can pull a camera into the Live Image Monitor using drag & drop.

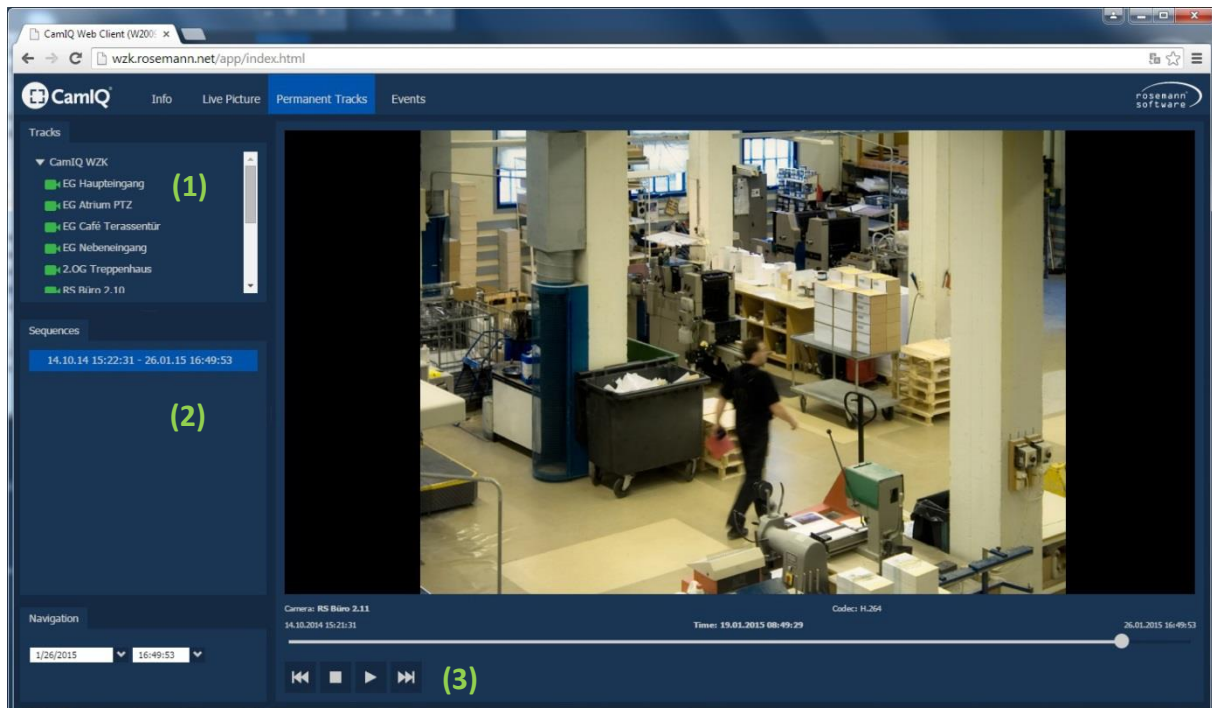
You will find the event list **(3)** under the camera list. The most recent 100 events from all connected servers are displayed here. Provided that image material is available for an event entry, you can click on the entry to land directly at the recorded event.

Change to view **(4)** to allow up to 16 live images in your web client simultaneously.

Use the microphone & loudspeaker **(5)** buttons to establish an audio channel to the stored device. An audio transmission is only possible if this feature has been correctly installed and licensed.

2.9.2.5 Permanent Tracks

The complete available recording of a device can be analyzed in the “Permanent Tracks” view.

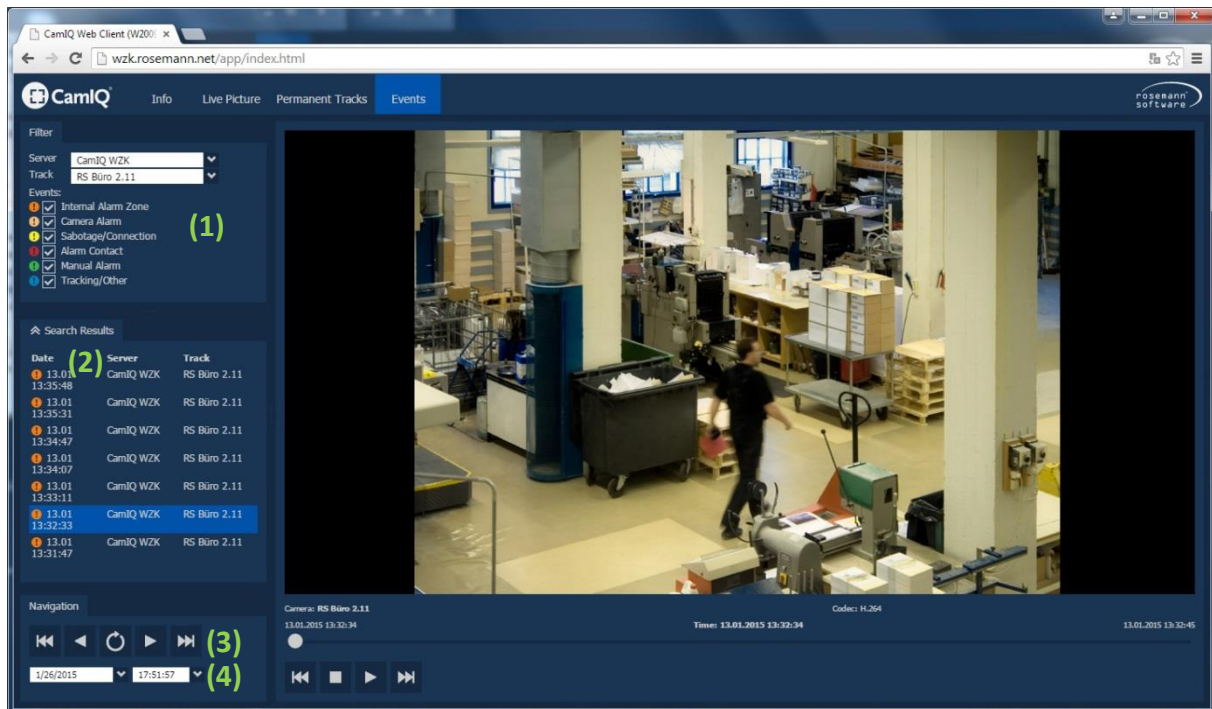


Select the camera in the device list **(1)**. The recorded time ranges are listed in the sequence overview **(2)**. Select the desired sequence.

Use the Navigation Bar **(3)** or the slider in the recording to navigate back and forth.

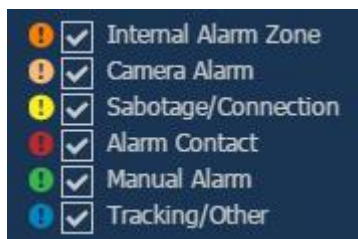
2.9.2.6 Events

On the “Events” page you can filter and evaluate specific events relating to cameras or servers. Select the desired server and track **(1)**.



Change the filter setting **(2)**. When a filter has a checkmark, the alarms of this type are displayed.

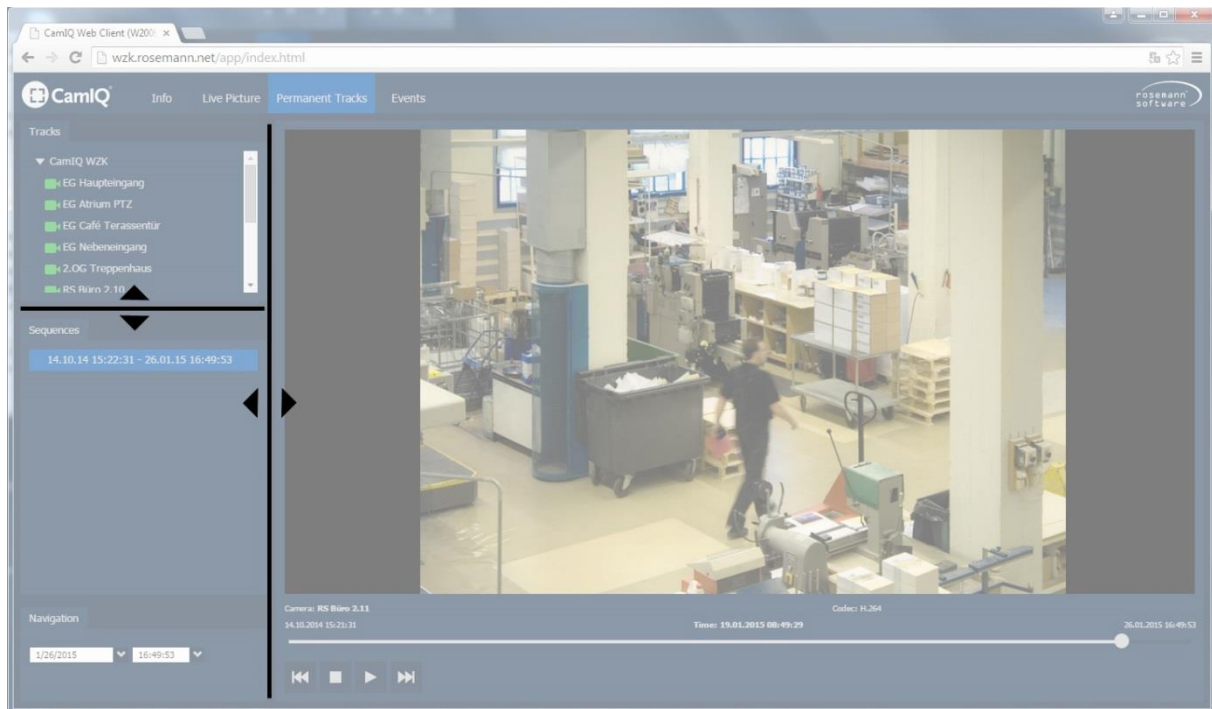
The colors of the alarm entries correspond to those of the the CamIQ Manager.



Use the navigation elements **(3)** to browse through the events page by page or to restart your search on a specific date and time **(4)**.

2.9.2.7 Interface

The elements in the Web Client interface can be set to scale as needed. You will find a dividing line between two scalable elements. Take hold of this line with your mouse in order to change the size of these objects.



Please note: To optimize interface resolution, it is recommended that you use the web browser in full screen mode. This can be launched using the “F11” key with standard browsers.

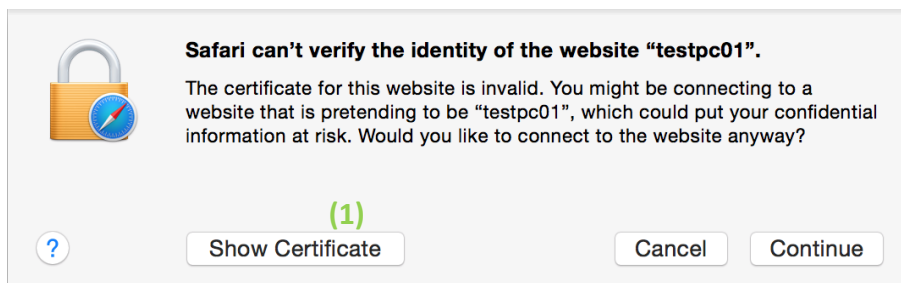
2.9.2.8 Compatibility

The browsers listed below have shown the following limitations/errors in testing:

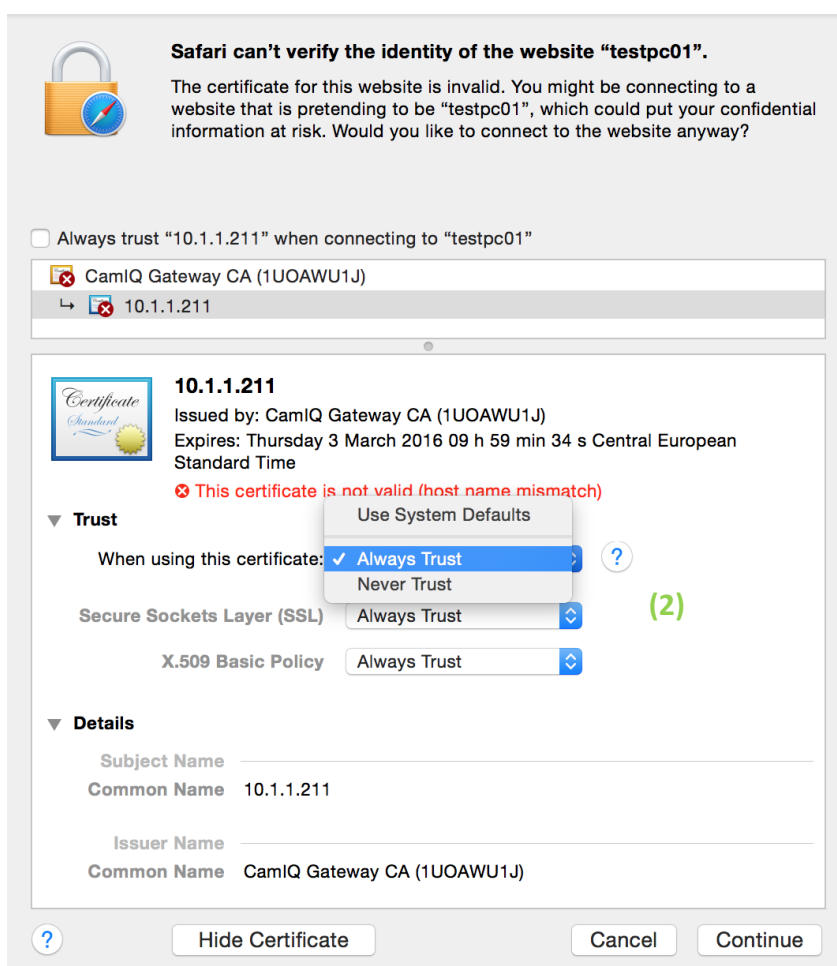
- **All browsers**
No playback of recorded MPEG4 and MJPEG files. Only H.264 can be played back at this time.
- **Opera (Desktop/Windows)**
The Adobe Flash plugin is needed for H.264 playback.
- **Safari (Desktop/Windows)**
Is not supported because the browser has not been developed further since version 5.
- **Safari (iOS)**
Is not supported. Please use the CamIQ app for iPhone and iPad here.

- Safari (Mac OS)

For encrypted connections to the middleware over HTTPS and self-signed certificates, the middleware's root certificate must be accepted and entered in the private key ring, otherwise no live images or recordings can be displayed in the browser.



When connecting to middleware with a self-signed certificate for the first time, an error appears indicating that Safari cannot verify the identity of the website. Click now on the "Display Certificate" (1).



Now select "Always Trust" (2) and click on the "Continue" button to add the root certificate to your personal key chain.

2.9.3 CamIQ Dispatcher Server

2.9.3.1 Failover

2.9.3.1.1 Initial Operation

At least 2 CamIQ systems will be needed to safeguard a CamIQ server with the failover concept. The CamIQ dispatcher server is responsible for the administration of the systems. This can be installed on a system as part of the CamIQ setup.

Please note: *The CamIQ dispatcher server may only be installed on ONE system within the entire video network. For the installation of additional servers you can select the “additional server” set-up type.*

IMPORTANT: *For an environment with 2 CamIQ systems the dispatcher server must be installed on the “failover server” (standby server) in order to initiate failover operation in case of a failure.*

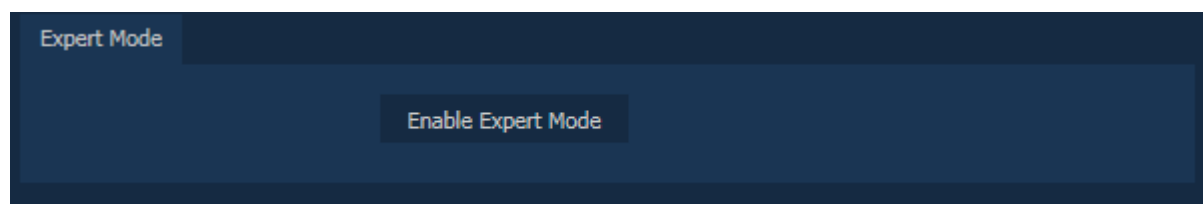
If several failover systems are administered by the dispatcher it is recommended that installation be done on a stand-alone system.

It is recommended that the dispatcher’s operating status be monitored by an independent system (via API queries, for instance).

2.9.3.1.2 Configuration

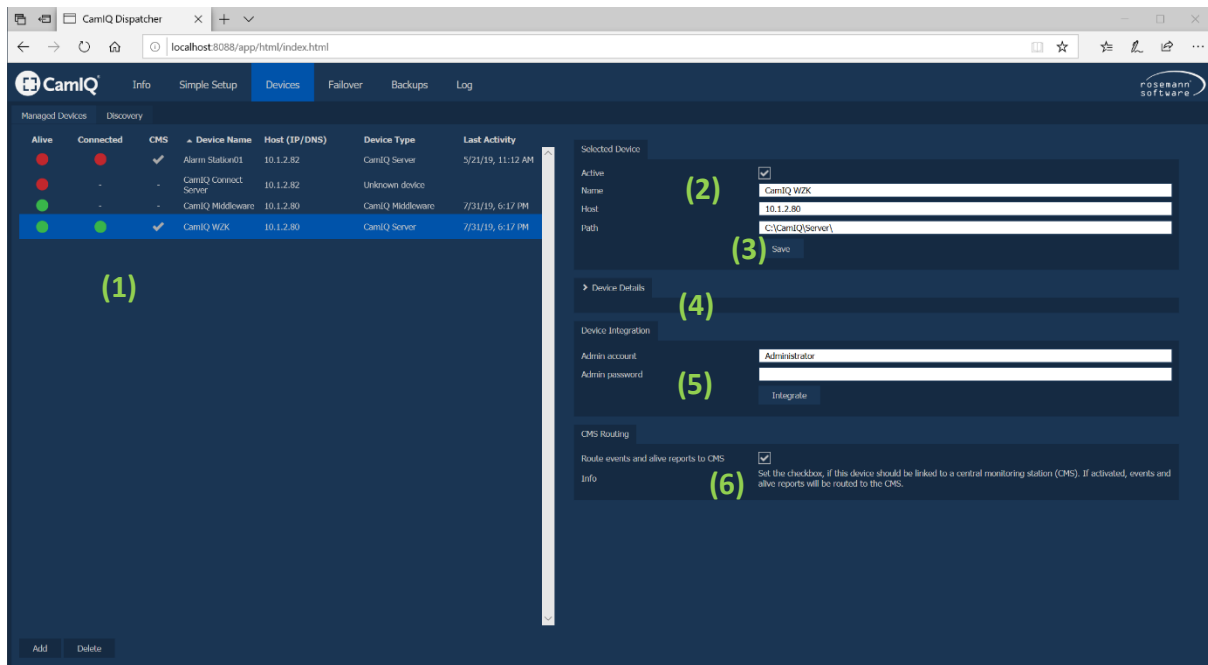
The failover configuration is done using the dispatcher web interface. You can open it in the Internet Explorer using the address [http://\[Dispatcher-IP\]:8088](http://[Dispatcher-IP]:8088)

Log in on the dispatcher (using the standard credentials: User “Administrator”, password “(empty)”) and enable expert mode.



2.9.3.1.3 Devices

All CamIQ servers and enterprise installations can be managed in the device list. Each system in the local network will automatically be registered and permanently connected with the dispatcher. All connected systems will be displayed in the “Managed Devices” **(1)** list.



The following information will be displayed in the list for every registered device:

- Alive:** indicates the accessibility of the device
Green = the device is accessible
Red = the device is not accessible
- Connected:** indicates the connection status (necessary for failover and backup)
Green = the connection is up
Red = the connection is down
- Device Name:** the name of the device
- Host:** the IP address of the device
- Device Type:** the type of device (CamIQ server, enterprise, middleware)
- Last Activity:** the time the last signal from the device was received

You can change the properties of the device in the “Selected Device” box **(2)**. Confirm the changes by clicking on “Save” **(3)**.

In the “Device Details” **(4)** tab you can display detailed information about the remote station selected, such as dongle number or version, for instance.

If the backup or failover function is to be used, the dispatcher will need administrative access to the CamIQ server. For this it will be necessary to allow the dispatcher server one-time access to the user account with administrator privileges.

Enter the user data in the “Device Integration” field **(5)** and click on “Integrate.”

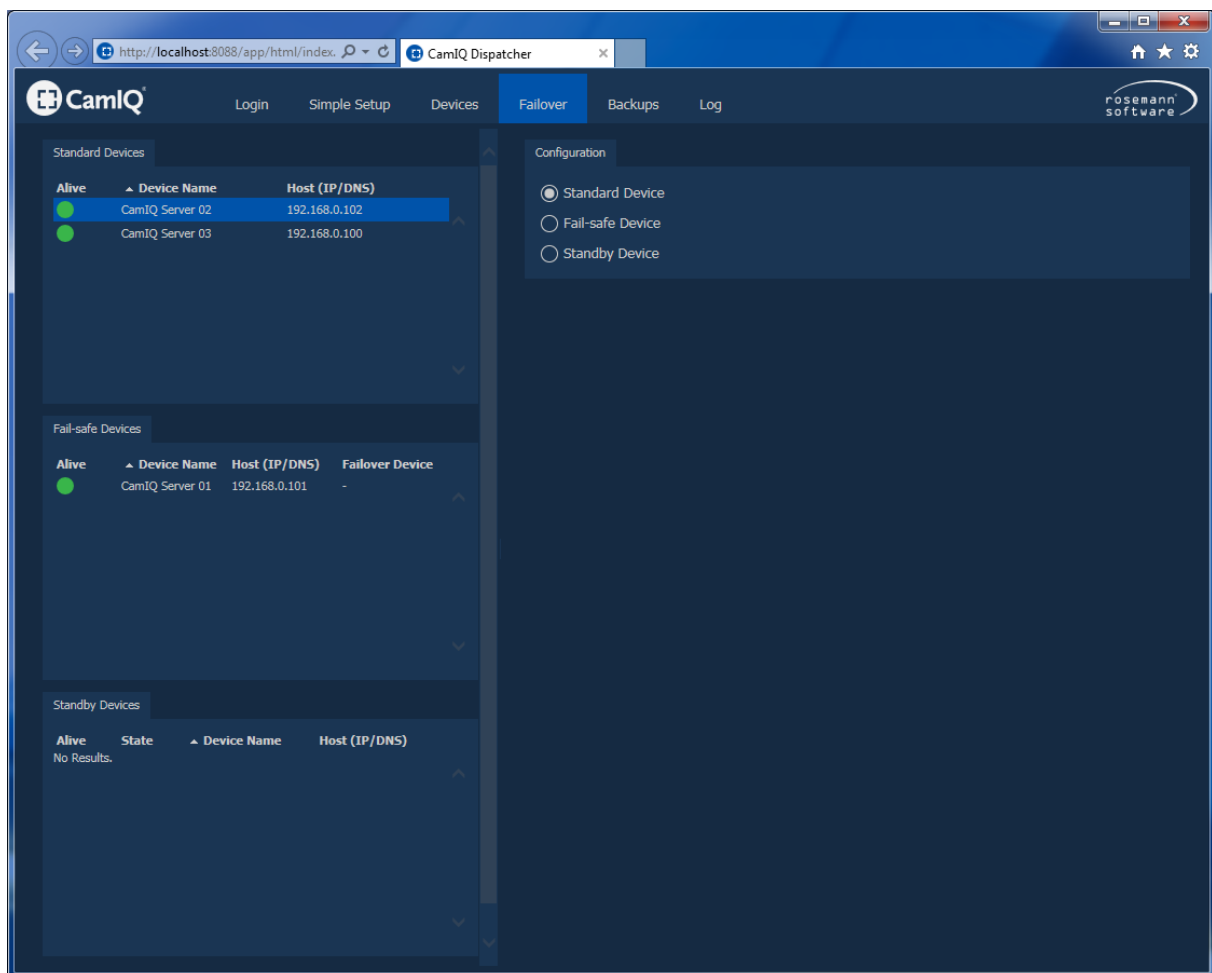
Once this process is successfully completed the “Connected Status” in the “Device List” **(1)** will change to **green**.

If a control center has been assigned with the surveillance of the system, and should alarm signals be transmitted to this control center, set the 'Route events and live reports to CMS' check mark **(6)**.

Please note: This process is only necessary one time. After this procedure the user data is no longer relevant for the dispatcher server and can be changed.

2.9.3.1.4 Failover

The configuration of the failover scenario is done in the Failover tab **(1)**.

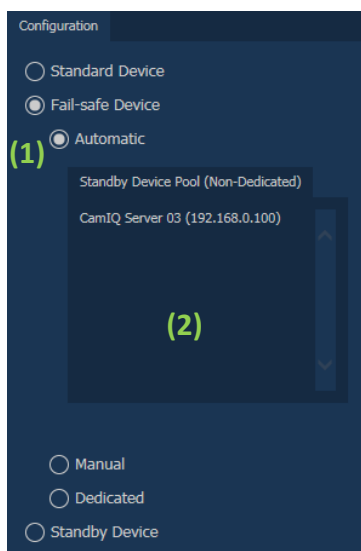


All registered CamIQ servers that have not yet been given a function in the failover operation are listed in the “Standard Devices” list **(2)**.

CamIQ servers that are secured through the failover concept are listed in the “Fail-safe Devices” list **(3)**. If one of these CamIQ servers fails, another server fills in.

All CamIQ servers that are used to secure failed servers are listed in the “Standby Devices” list **(4)**. The group to which the selected server should belong is defined in the configuration area. After the setting is changed the server is automatically moved to the corresponding list. The failover option can be run in 3 various modes.

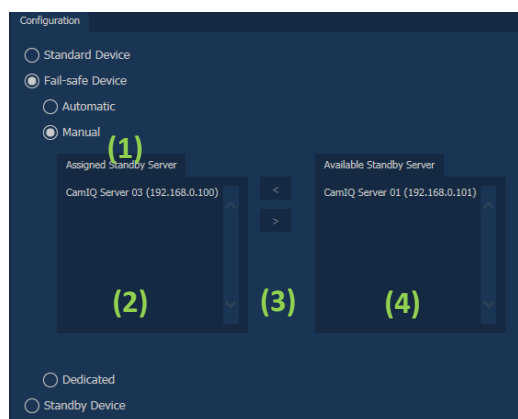
1. Automatic



If the “Automatic” failsafe mode **(1)** is selected, any available standby device can fill in for the failed server.

All available standby devices are listed in the “Standby Device Pool” **(2)**.

2. Manual

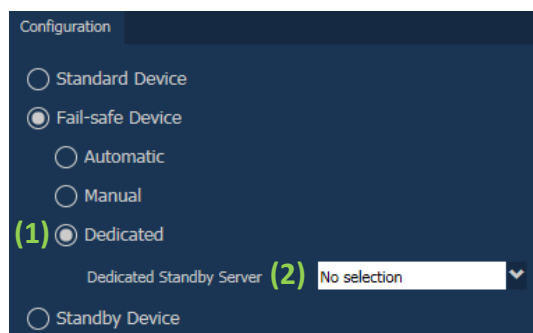


If the manual failsafe mode **(1)** is used, several standby devices can be assigned to the server. If the server fails, one of the designated servers will fill in.

Select a server from the “Available Standby Server” list **(2)** and use the buttons **(3)** to assign the server or cancel its assignment.

All servers that can safeguard the selected server are listed in the “Assigned Standby Server” list **(4)**.

3. Dedicated



In “Dedicated” mode **(1)**, one device is exclusively defined to safeguard a system.

The standby server to be used exclusively to secure the given system can be selected in the “Dedicated Standby Server” list **(2)**.

Please note: Within the “Dedicated” modus the configuration of the system will not be sent to the standby server as in the “Automatic” and “Manual” modus. The standby system will be permanently held

on the configuration status. The configuration of the Fail-Safe-Device will be synchronized 5 minutes after the last change. Live images, recordings and all other configured functions are active and usable on both systems.

Information about the current status is displayed in the failsafe device’s info area **(1)**.

Failover active: **Grey** = failover is currently inactive
Green = failover is active

Failover configuration backup time: Displays the state of the configuration that was saved.

The 'Reset Failover' button **(2)** can be used to reset the current failover operation. In doing so, all of the data on the failover device will be deleted.

By clicking the 'Reactivate Fail-safe Device' button **(3)**, the device originally used will be reactivated. The failover device is taken out of service and subsequently this device is in 'Review Mode'.

IMPORTANT: As long as the device is in 'Review Mode' it cannot act as a standby device and safeguard other devices.



Fail-safe Device

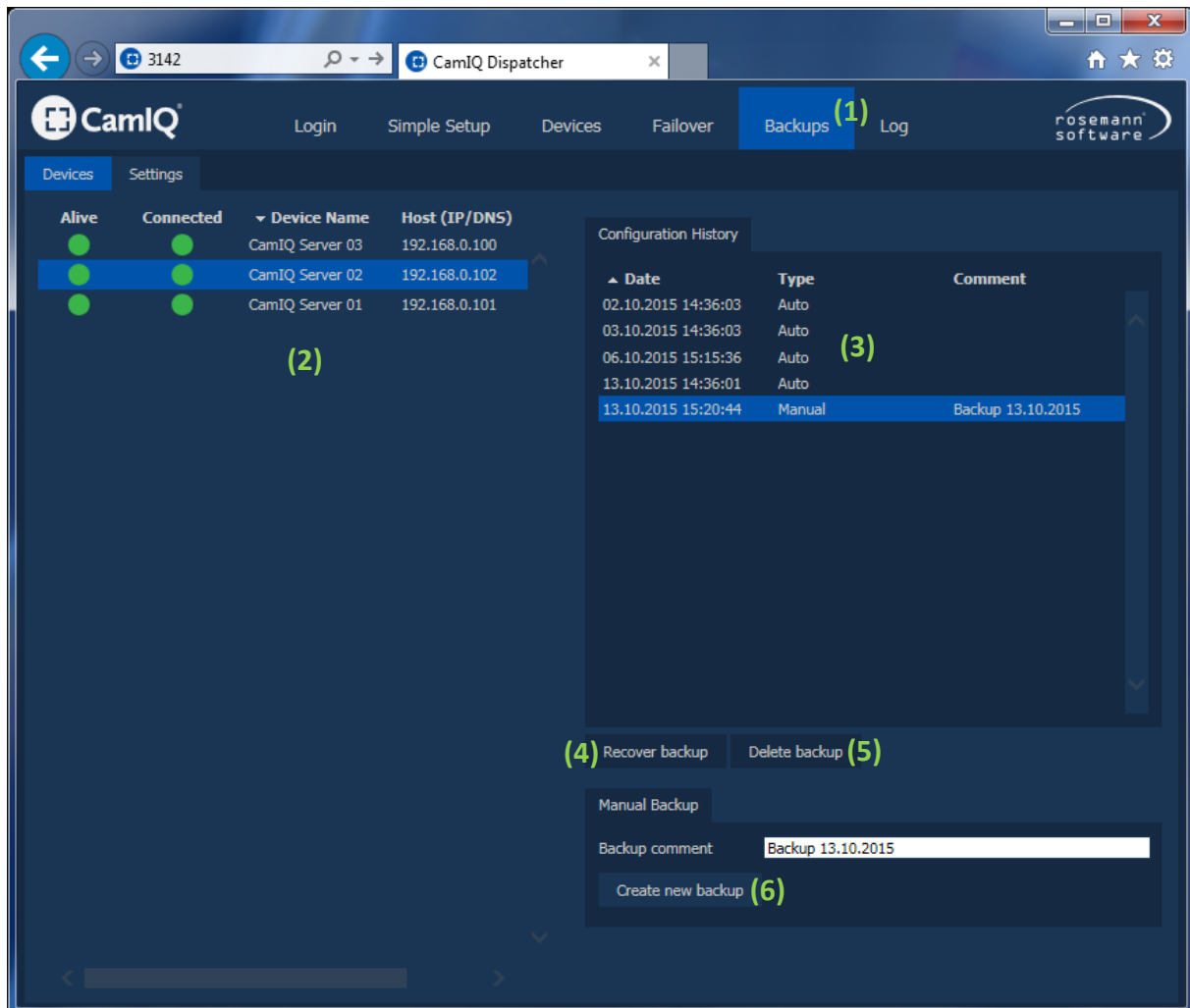
Click on the 'Reset to Standby Configuration' button **(4)** to irrevocably reset the failover device and delete all data on the system.



Failover Device

2.9.3.2 Backup

Automatic and manual backups for all systems can be managed in the “Backup” tab (1).



All registered devices are displayed in the device list (2).

The following information is displayed for every registered device:

- Alive:** indicates the accessibility states of the device
Green = the device is accessible
Red = the device is not accessible
- Connected:** indicates the connection status (necessary for failover and backup)
Green = the connection is up
Red = the connection is down
- Device Name:** name of the device
- Host:** IP address of the device

Select one of the devices in order to display its configuration history **(3)**.

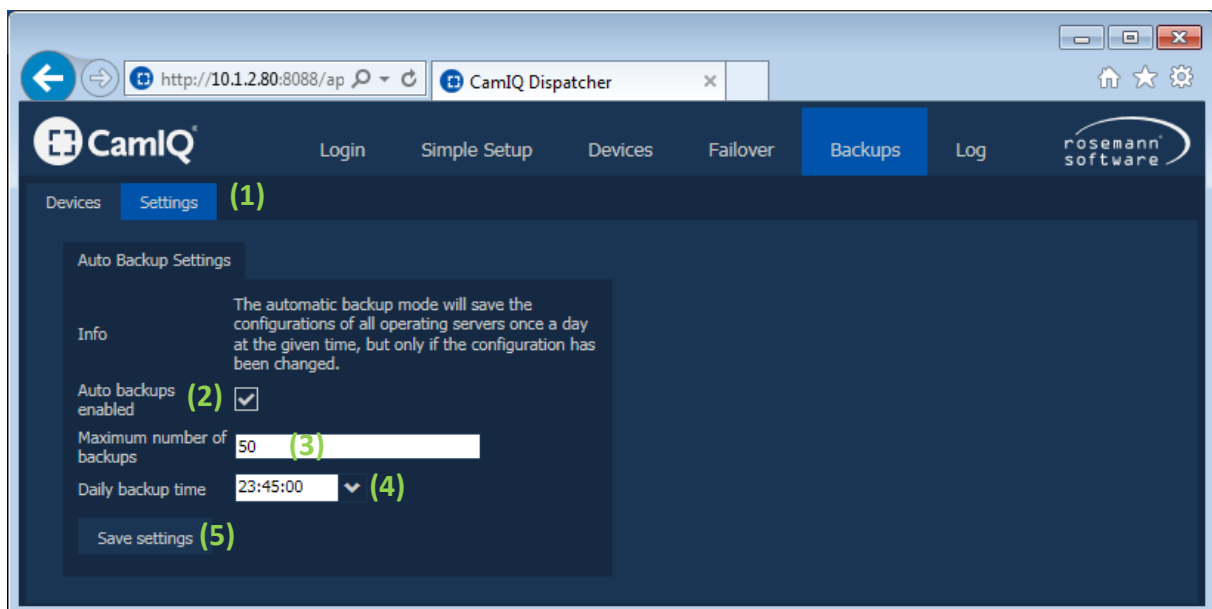
Click on “Recover Backup” **(4)** to restore the selected backup to the selected device.

Click on “Delete Backup” **(5)** to irrevocably delete the selected backup.

IMPORTANT NOTICE! When you restore a backup to a system, the current configuration is irrevocably overwritten!

Enter a designation under “Manual backup” and click on “Create new Backup” **(6)** to create a new backup.

Settings for automatic backups can be made in the “Settings” **(1)** tab.



Select the checkbox “Auto backups enabled” **(2)** to enable the automatic backup function.

To limit the maximum number of automatic backups that can be created, change the value under “Maximum number of backups” **(3)**.

Set the time at which the backups should be made under “Daily backup time” **(4)**.

IMPORTANT! An automatic backup will only be created if a change has been made to the CamIQ system’s configuration.

Click on “Save settings” **(5)** to save any changes made to the settings.

2.9.4 CamIQ Connect Server

The CamIQ Connect Server is used to forward events to a control center by using standard protocols.

Supported protocols:

- DLS 4000
- SIA IP Reporting (TCP-2013) by using SIA-DCS, (SIA DC-09)

Depending on which protocol you want to use, you can adjust the configuration parameters in the configuration file in the default directory (C:\\CamIQ\\Connect Server\\config\\).

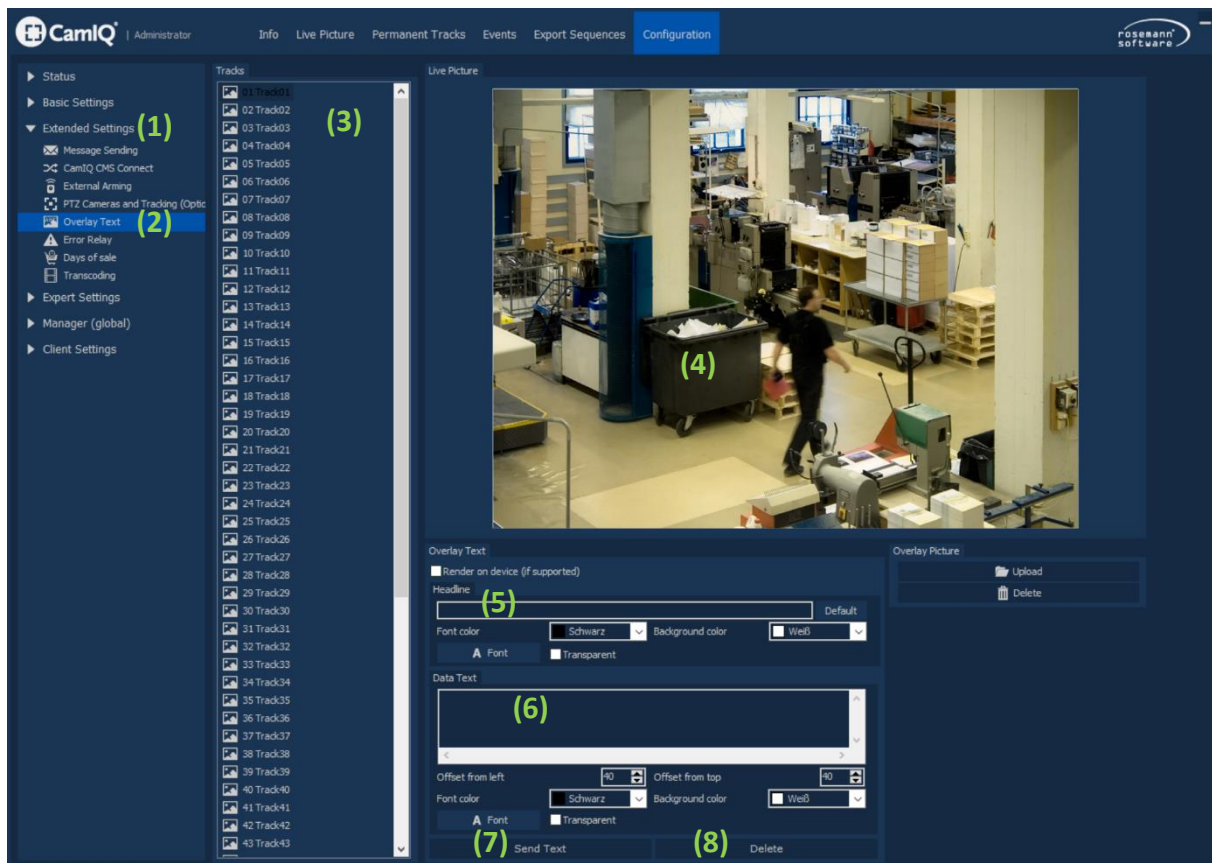
Additional informations and a configuration example can be found on our website in the FAQ section.

2.10 APPENDIX

As an owner of the original software, you have the privilege of enjoying additional functions which are described below.

2.10.1 Text Overlay

In the "Extended Settings" menu group **(1)**, you will find the "Text Overlay" menu **(2)**. This is where screen overlays for every track can be configured.



- First select the camera image from the "Tracks" list **(3)** in which the overlay should be configured.
- You can see the image in the "Live Image" field **(4)**.
- In the "Headline" field **(5)** you can configure an overlay for the first line of the image. Enter the desired text or click on "Default" for a text suggestion. The "Font Color" and "Background Color" list boxes allow you to change the font appearance. You can also select another font by clicking on the "Font Type" button. If you do not wish to have a colored background for the overlay, you can activate the "Transparent" button. But please note that the readability of the font overlay can be affected by this.

Please note: The "[DATE]" and "[TIME]" texts have a special function. [DATE] will be replaced by the actual date and [TIME] by the actual time when the overlay appears.

- Under "Text in Data Section" **(6)**, you can enter additional text which will be displayed below the title. You can define the position of the text in the camera image by entering values in "Space from the Left" and "Space from Above". As with the title, you can select the "Font Color", "Background Color" and "Font Type" as desired and also turn off the background with the "Transparent" button as needed.
- To finish, click on "Apply Text" **(7)** to save the settings or "Delete" **(8)** to remove the text from the image.

3 CAMIQ 8 ENTERPRISE

3.1 PRODUCT DESCRIPTION

By selecting a CamIQ product you have chosen professional software that guarantees highest quality and reliability. We would like to thank you very much for your confidence and kindly ask you to read the following instructions carefully before commissioning and operating in order to take full advantage of all the quality features in this product.

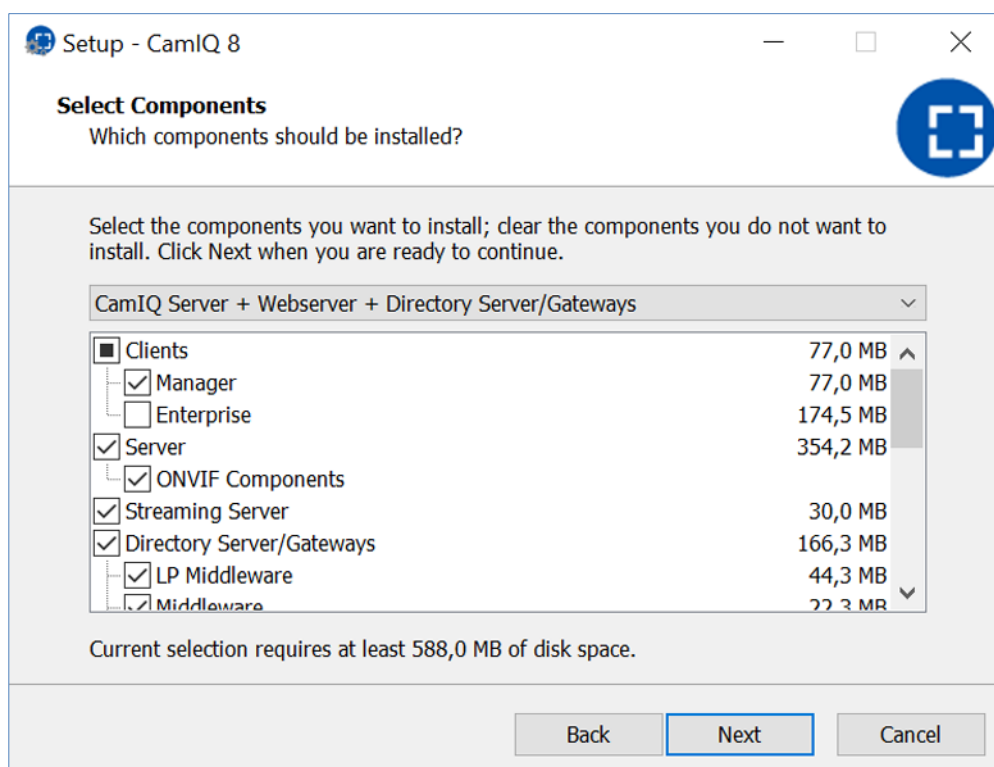
On the first few pages the manual will display the installation and commission of the CamIQ 8 Enterprise software. After that each configuration menu will be explained to you one by one. If you process the buttons and input fields in the same order as they are explained in this manual, you will get your CamIQ 8 Enterprise configured in a fast and easy way. It is not necessary to work with every single configuration menu. Just pick those functions you really need and want to work with.

In the next section of the operating instructions you will find a guide that explains how to use CamIQ 8 Enterprise in daily duty. All buttons and operating elements of the Management will be explained to you and you can learn more about their characteristic attributes. After that you will find some documentation about tools, which make working with CamIQ 8 Enterprise much comfortable and offer additional functions that you may want to use.

3.2 OPERATING

3.2.1 Installation

- Please download the current CamIQ Version from our website (www.camiq.net) and start the "Setup.exe". This is a typical Windows installation procedure similar to those that you are most likely already familiar with. Simply follow the installation instructions presented on the screen.
- Before the data is written to your hard drive, you can select the type of installation desired from the menu.
Please select the type of installation.

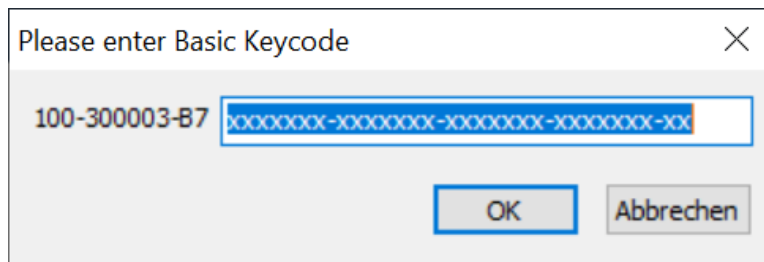


- In the following window click on the button **Next** and follow the instructions on the screen.
- If you want to cut the installation short click on the button **Abort**.
- After a successful installation click on the button **Finish** and close the installation wizard.

3.2.2 Run Software

Please note: The use of a CamIQ dongle is not absolutely necessary to use the software. Provided you do not wish to use additional modules such as “CamIQ Enterprise Monitor Wall / Decoder Interface,” “CamIQ Enterprise TCP/IP (ABI/SDK) Interface,” or “CamIQ Enterprise RS232 (API/SDK) Interface,” you can operate CamIQ Enterprise without a dongle and skip the license activation section completely.

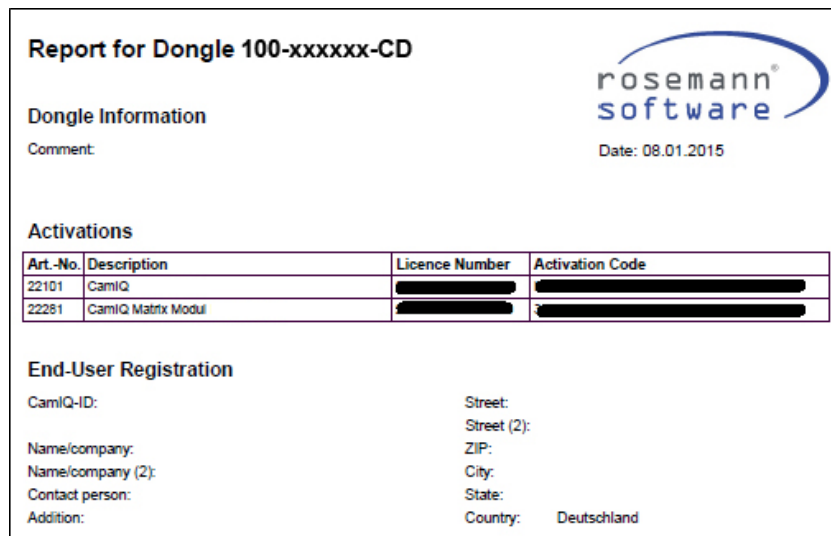
- Start the CamIQ 8 Enterprise software by performing a double click on the CamIQ 8 Enterprise icon on your desktop.



- After starting the software a window will appear that invites you to enter the so called basis licence. In the window there is also row of numbers. This is the so called **Request Code**. This corresponds to the dongle number.

3.2.3 Licence Activation

Licence activation automatically takes place in CamIQ during the order process. As part of the delivery you will receive a listing of everything that has been activated in .pdf and .xml form.



Art.-No.	Description	Licence Number	Activation Code
22101	CamIQ		
22261	CamIQ Matrix Modul		

3.2.4 Login

The login is performed in the **Info screen**. Here you can see the software version. The sections **Management** and **Configuration** are available after a successful login.

- Choose your language from the selective list **Select Language**.
- Enter your password in the text field **Password**.

Note: As factory default setting there is **NO PASSWORD**. You simply have to click on the button **Login** to enter the software as administrator.

Attention: Please change the password for the administrator account very soon to protect your software from unauthorised access.

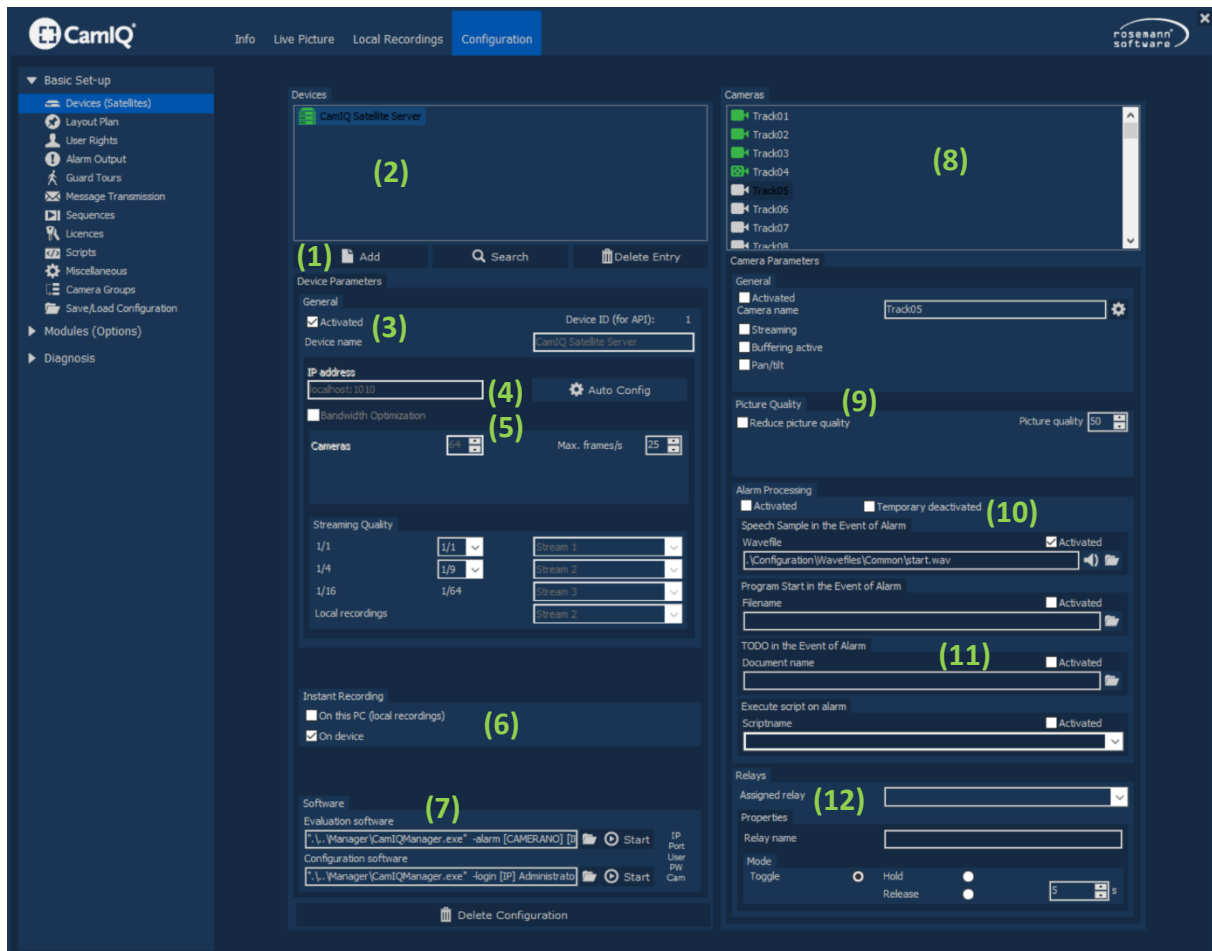
- If you want to logout, e.g. for changing the user, click on the button **Logout**.

3.3 CONFIGURATION BASIC SET-UP

3.3.1 Basic Set-up – Devices (CamIQ Server)

This is the core chapter of the CamIQ 8 Enterprise configuration. Start your configuration here. Add CamIQ net devices and network devices to the software and configure their management and operation.

Adding an CamIQ net device (CamIQ Server)



- Click on **Add new device (1)** to include a CamIQ Server in the installation. The newly-added device is now visible in the list **Devices (2)**.
- In the text field **Device Name (3)** you can enter a text, which will be the name for the device in the software.
- Enter the network address of the device in the text field **IP-address (4)**. You can look up the address in the configuration of the device if necessary.

- Next you can click on the checkbox **Activated (3)**. CamIQ 8 Enterprise will try to establish a connection to the device. If the connection attempt was successful the device icon will turn green. If it was not successful it will turn red. In this case please check your entries.
- When a connection is established you can click on the button **Auto Config (4)** to let CamIQ 8 Enterprise configure the device automatically. CamIQ 8 Enterprise recognizes the number of cameras copies their names and makes settings according to the device configuration. Use this button if you have no special requests and just want to add your device with minimum effort. This button can save a lot of time.

If you don't want to use **Auto Config**, you have to make the next settings manually:

- Use the button **Cameras (5)** to define how many camera inputs the device has.
- Use the button **Max. frames/s (5)** to define how many frames per second CamIQ 8 Enterprise receives from that device. This way you can adapt the bandwidth use of CamIQ 8 Enterprise to your needs.

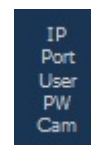
In the menu **Instant Recording (6)** you can configure the manual recording, which can be executed in the **Management** section:

- Activate the checkbox **On this PC (6)**, if you want to save your recordings of this device on the CamIQ 8 Enterprise computer.
- Activate the checkbox **On device (6)**, if you want to save the recordings on the device itself. Recording simultaneously on the computer and the device is possible.

In the menu **Software (7)** you can enter different login data for the login into the device, than you have entered in the menu **Device Parameters** (see above). The CamIQ 8 Enterprise user will log in to the device with these data.

If you do not change anything, the user will log in with the data entered in the menu **Device Parameters**.


- At the end of the path of the **Evaluation software (7)** is the entry **[User]**. Remove the brackets add a user name for the login instead. Add this data without **[]** and leave a space character between **user name** and **[PW]**.
- At the end of the path of the **Configuration software (7)** there is the entry **Administrator**. If you want to do the configuration with another user, delete Administrator and enter the desired **user name**.
- By clicking the button **Start (7)** you can load the **evaluation-** and **configuration software**.
- The buttons on the right side are only required, if you use the **CamIQ TCP/IP (API/SDK) Interface** or **CamIQ RS232 (API/SDK) Interface**. In this case you can additionally define **IP**, **Port**, **User**, **PW** and **Camera**.



In the menu **Cameras (8)** all cameras that are connected to the device are shown to you. They can be configured in the menu **Camera Parameters (9)**.

- By clicking on the checkbox **Activated (9)** you can either activate or deactivate the selected camera. It won't be displayed any longer in the **Live picture**.
- Enter a name for the camera in the text field **Camera Name (9)**. Use the button next to the text field to adopt the name the camera has in the configuration of the CamIQ net device itself.
- The boxes **Streaming (9)** and **Tracking (9)** show, if the functions **Streaming** and **Tracking** (tracing of objects or persons with Pan/Tilt-Cameras) are available for the selected camera.
- Using the checkbox **Pan/Tilt (9)** you can define, whether the selected camera is a Pan/Tilt-Camera or not. If the checkbox is activated and the camera is really a Pan/Tilt-Camera, it can be steered in the **Live picture**.
- Use the checkbox **Suppress PTZ commands (9)** (appears when **Pan/Tilt** is checked) to suppress any steering of the selected Pan/Tilt-Camera.
- Use the button **Picture quality (9)** to adjust the quality of the transferred pictures. Poor quality needs less bandwidth in your network. If your system has a bottleneck in that area, you may try to optimize the operation of CamIQ 8 Enterprise.

In the menu **Alarm Processing (10)** you can enable or disable the general alarm processing of the selected camera by checking or unchecking the checkbox **Activated**. If **Activated** is not checked, there will be no alarm notification for this camera in the **Management**.

- By clicking the checkbox **Temporary deactivated (10)** you can disable the alarm processing temporarily. But in the Management you can enable the processing at any time. **Temporary deactivation** will be indicated by this symbol: 
- You can enable **Speech Sample in the Event of Alarm (11)** by using the checkbox **Activated**. When the camera sends an alarm, a sound file will be played. In the text field **Wavefile** you can see where this file is stored on your system.
- Click on the **Speaker (11)** to hear the sound file.
- Click on the **Folder (11)**, if you want to choose another sound file. Note that this file must be a wave file (*.wav).
- You can enable **Program Start in the Event of Alarm (11)** by using the checkbox **Activated**. When the camera sends an alarm, a program will be started.
- Click on the **Folder (11)** to choose the *.exe file of the desired program. The path will be shown in the text field **Filename**.
- You can enable **TODO in the Event of Alarm (11)** by using the checkbox **Activated**. When the camera sends an alarm, the content of a text file will appear in the **Live picture**. This may be e.g.

orders for the security men.

- Click on the **Folder** to choose the *.txt file, which has been written by you before. The path will be shown in the text field **Document name**.
- Within the field **Execute script on alarm (11)** you can choose a script, which should be triggered in case of an alarm. This script has to be created in the menu Script (see chapter 3.3.10) before.
- By clicking the checkbox **Activated (11)** you can active this function.

In the menu **Relays (12)** you can assign a relay to the camera. It must be a relay of the CamIQ net device the camera is connected to. You can operate this relay directly in the camera picture.

- Choose a relay from the list **Assigned relay (12)**. This is a relay of the CamIQ net device.
- You may enter a name in the text field **Relay name (12)**. This name will be displayed in the **Live picture**, e.g., “Main Entrance Door” or “North Gate”.
- Then choose in the field **Mode (12)** how the relay shall work:
Either it toggles its state, or holds for a defined period of time and releases after that, or it opens for a defined period of time and holds again after that.

Once you have checked off these points the component has been fully configured and perfectly integrated in CamIQ 8 Enterprise. Repeat this process with all the other devices.

- If you would like to remove a device from the configuration, use the **Delete Entry (13)** button.
- If you would like to delete the entire device configuration, use the **Delete Configuration (14)** button. Press on this button only when if are absolutely sure that you want to delete ALL devices from the configuration!
- The “Streaming fps” entry defines the number of images that will be transferred after activating the streaming function.

The remaining adjustments correspond to those from the CamIQ net devices. Please turn a few pages back for more information.

3.3.2 Streaming Server

Streaming Quality

1/1	1/1 ▼	Stream 1 ▼
1/4	1/9 ▼	Stream 2 ▼
1/16	1/64	Stream 3 ▼
Local recordings		Stream 2 ▼

The CamIQ 8 Enterprise configuration is handled just like the CamIQ Manager configuration. One of the three streams with a view can be linked to a CamIQ Server in the device configuration.

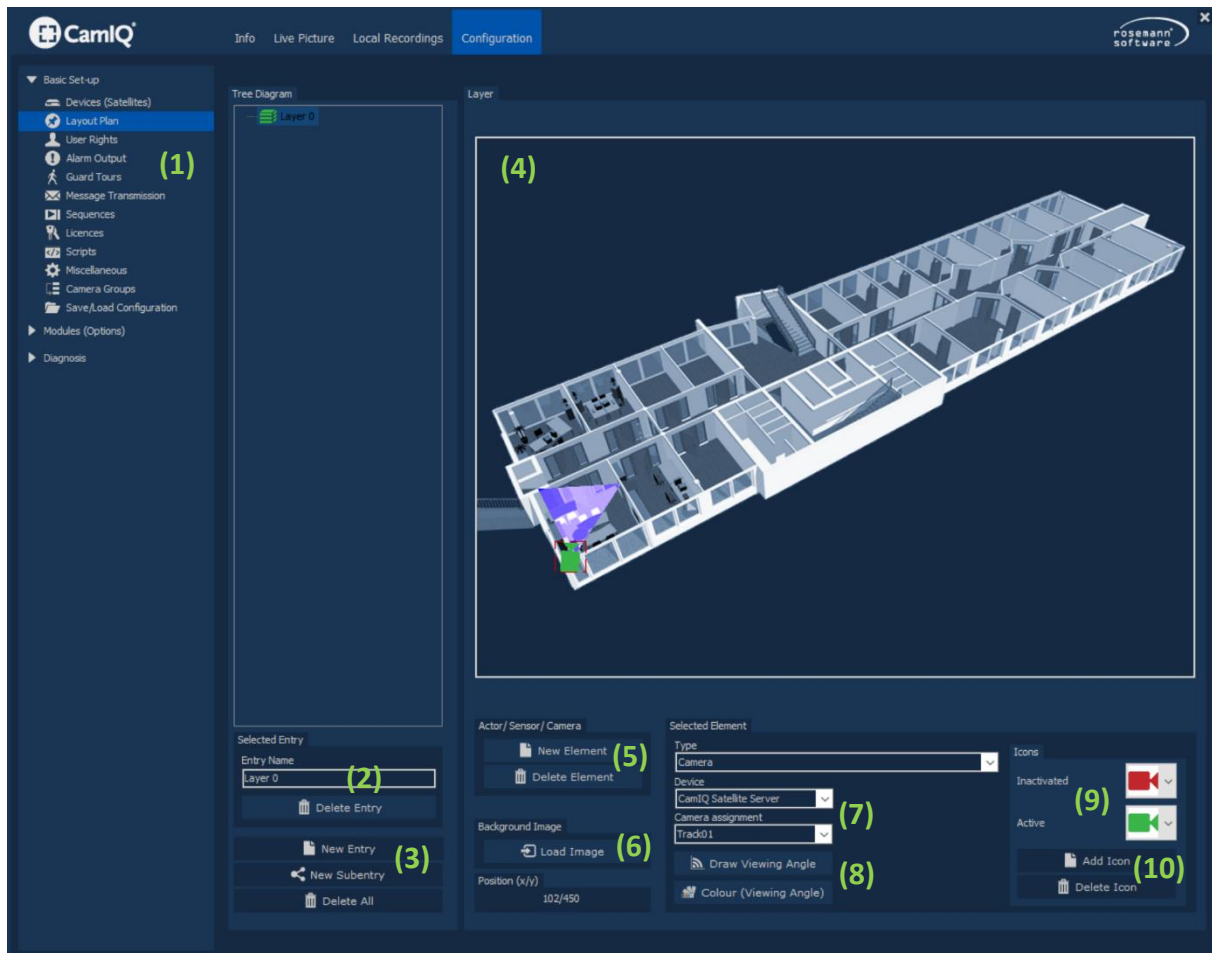
In addition to the views, CamIQ 8 Enterprise also gives you the option of defining a stream for “local recordings”.

Please note: This configuration is always valid only for a particular selected CamIQ Server.

The stream configuration can only be changed on inactive devices.

3.3.3 Site Plan

To support the security guards and to guarantee clarity you can customize a **Site Plan (1)**. In order to receive a realistic overview all cameras can be arranged the way they are actually placed on the property.



- Click on the button **New Entry (3)** to add a new layer.
- Enter a name for the layer in the text field **Entry name (2)**.
- Click on the button **Load Image (6)** to add a picture of the building or a map of the property.

Note: Example graphics are already stored in the folder **C:\CamIQ\Enterprise\Configuration\Graphics**. You may use them for demonstration purposes.

- Click on the button **New Element (5)** to add a new object to the layer. This will be displayed on the layer graphic (4) as a free movable object.
- Choose from the list **Type (7)** what kind of object it is. It can be a camera, an actor (relay output) or a sensor (alarm input).

- Choose from the list **Device (7)** the device the object belongs to.
- Then choose a camera from the list **Camera assignment (7)**. The object will be adapted to this camera.
If you have added a camera then simply choose the camera directly which the symbol in the site plan stands for.
But if you have chosen an actor or a sensor instead, the camera stands for the number of the relay or alarm input. So the first camera stands for relay 1 or alarm input one, the second camera for relay 2 or alarm input 2 and so on.
- After you have added a camera you have to draw its **viewing angle**. First click on the button **Draw Viewing Angle (8)**. Now there is a line between camera symbol and mouse pointer. This is one arm of the angle. Move the pointer to the desired position and perform a left click. The first arm is now fixed between the camera symbol and that point.
Move the pointer to a second point. Again there is a line between the mouse pointer and the camera symbol. This is the second arm of the viewing angle. Perform a left click to finish the angle. The angle is now emphasised by a colour.
- You can change the colour of the viewing angle by clicking on the button **Colour (Viewing Angle) (8)**. Select the desired colour from the palette.

CamIQ 8 Enterprise provides symbols for all types of site plan objects. You can also add your own symbols.

- If you want to choose another graphic for the object click on the symbol in the site plan and then choose the desired symbols from the lists **Inactivated (9)** and **Activated (9)**.

Inactivated means that there is no signal coming from the camera, the alarm input is not operated or the relay is in dormancy.

Activated means that there is a signal coming from a camera, the alarm input is operated or the relay is switched at the moment.

- Please note the following lines when you create your own symbols:

It is recommended to use square graphics. The usual size is 32 x 32 pixels, but it may differ.

CamIQ 8 Enterprise does not scale the graphics afterwards.

Furthermore one colour is always defined as transparent. This way it is possible to create e.g. a transparent background. The colour of the very first pixel in the upper left corner is always defined as transparent. E.g. if this pixel yellow, all other yellow pixels will be transparent as well. Besides this the graphic must be in bitmap format (*.bmp).

Note that CamIQ 8 Enterprise makes a copy of the graphic into the folder

C:\CamIQ\Enterprise\Resources\Common\BuildingPlanIcons. Please do not copy graphics into this directory by yourself, otherwise the graphic will be loaded twice into the list.

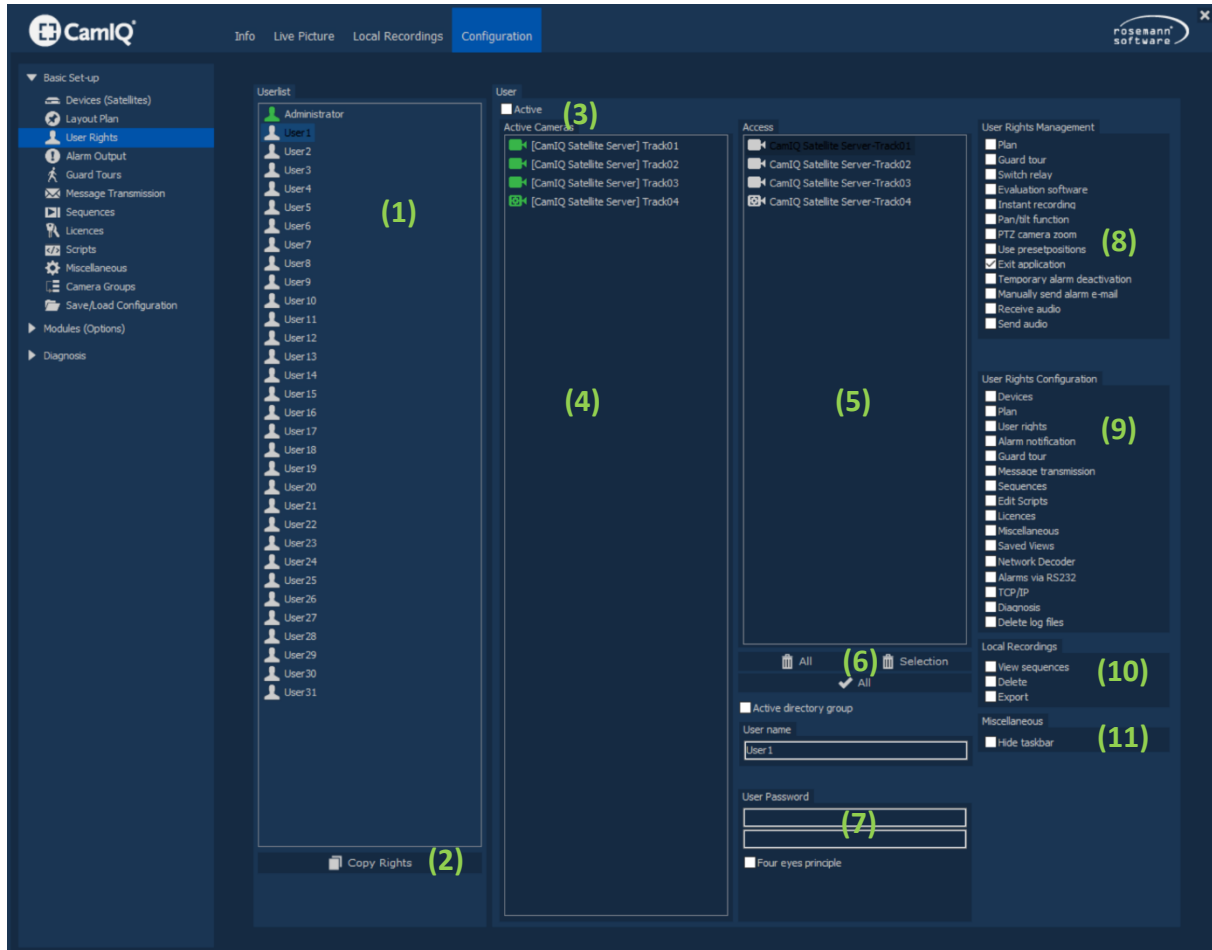
- Click on the button **Add Icon (10)** and choose the desired symbol.
- If you want to delete a graphic click on the button **Delete Icon (10)**. Before that choose the symbol from the list **Activated (9)**.
- If you want to delete a whole object from the site plan click on the symbol to mark it. Then click the button **Delete Element (5)**.
- Repeat these steps for every layer you add. You can arrange the layers in a tree-like structure. This will provide more clarity.
- Use the button **New Subentry (3)** to create a new layer which will be subordinated to the marked one. This subordination can be continued.
- Use the button **New Entry (3)** to add a new layer. This layer will appear in the same level of the tree as the one which is actually marked. So if you have just marked a subordinated layer and click on **New Entry**. The new layer will appear next to the marked one; same level and in the same way subordinated.

This kind of arrangement is especially recommended if you have to monitor a high number of buildings and floors.

- If you want to delete a marked layer, click on the button **Delete Entry (3)**. Note that you first have to delete all subordinated layers before you can delete the subordinated one.
- If you want to delete the whole site plan configuration, click on the button **Delete All (3)**. Click this button only if you are absolutely sure that you want to delete ALL layers! This step can't be undone!

3.3.4 User Rights

CamIQ 8 Enterprise can manage up to 32 users, each freely configurable.



- All user accounts are displayed in the **Userlist (1)**. To configure one, mark it.
- With the **Activate (3)** button you can activate and deactivate user accounts. Deactivated users can no longer log in.
- You can give each user individual access rights to cameras. To do this, use drag & drop to pull the cameras the user should have access to from the **Camera Assignment (4)** list into the **Camera Access Rights (5)** field.
- If the user should have access to all cameras, simply click on the **Select All (6)** button.
- If you wish to remove all cameras from the field, click on the **Delete All (6)** button.
- If you wish to remove only the currently selected camera, use the **Selection (6)** button.

- In the **Rights Management (8)** menu you can specify which functions the user can access in **Live Image**. To find out what the individual items represent, take a look at this manual's Chapter 3.6.
- In the **Rights Configuration (9)** menu you can either allow or deny access to individual menu items for a given user.

Attention: If you give the user access to the **User Rights** menu, the user can alter his or her rights at will! In a worst case scenario, this can undermine your security policy!

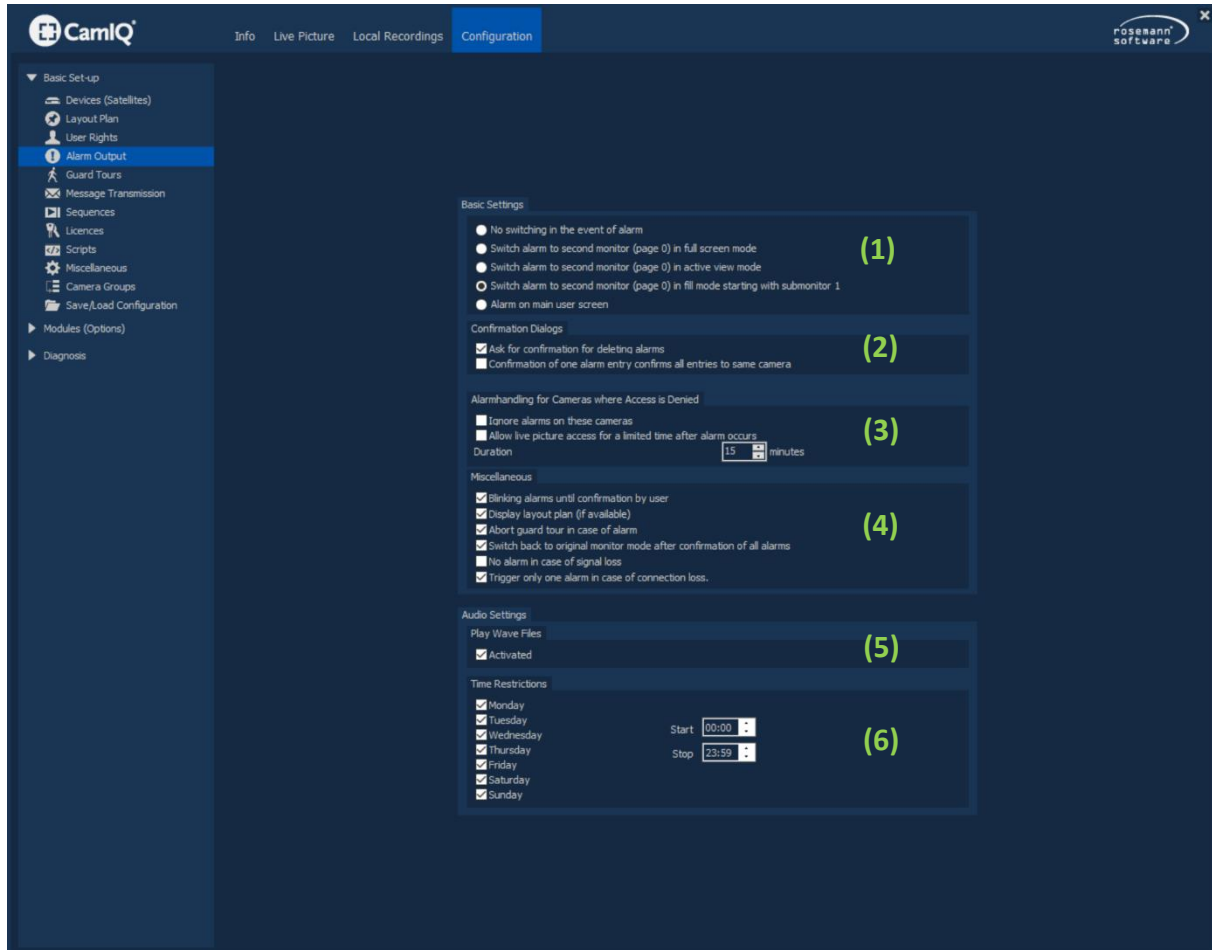
- In the **Local Recordings (10)** menu, you can determine to what degree the user has access to local recording functions and which functions he or she will be allowed to use in this context.
- In the **Miscellaneous (11)** menu, you can activate the **Block Taskbar** item for the respective user. In this case, the taskbar (the gray bar at the lower margin of the screen) will disappear as soon as the user logs on. The user will no longer have access to programs or system settings. In addition to this, access to the task manager (displays and allows access to all active system processes) will also be blocked.
This will only work if the **taskbar set** and **display taskbar in foreground** taskbar property settings have been activated.
- Give the user a password using the **User Password (7)** field. Enter the password in the upper white field. It will appear in red, which is normal.
Confirm your password by entering the password a second time in the second white field below. As soon as the two entries match, the red will change to white again. If this does not happen, it means that the two lines are not identical. In this case, please check your entries.
- By activating the **Four Eyes Principle (7)** button, you can issue such a password for a given user.
- The software is delivered without a password for the administrator account. Please enter a password now to protect your security software from abuse.

Please note: It is recommended that the password have a length of at least 8 characters and contain both letters and numbers. Avoid the use of such names as company names, pet names or the names of close relatives.

Should you have problems remembering your password, write it down and place it in a safe location. Should you forget your administrator password without having allowed anyone access to the user rights you will, unfortunately, have to completely de-install and subsequently reinstall CamIQ 8 Enterprise again. Unfortunately, this would result in the loss of all of your configuration settings as well.

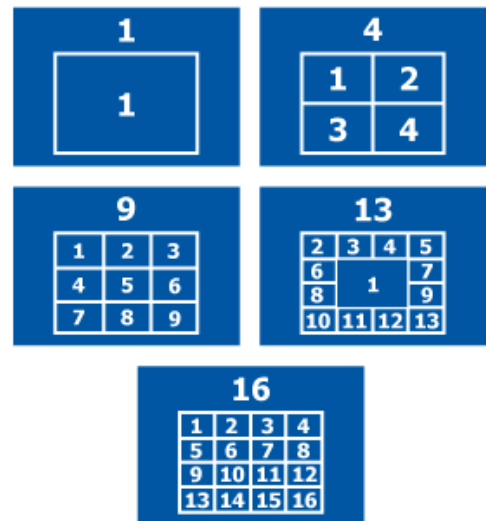
3.3.5 Alarm Output

This chapter is about how CamIQ 8 Enterprise announces an alarm event visually and acoustically.



In the menu **Basic Settings (1)** you can adjust how CamIQ 8 Enterprise shall display the pictures of alarm cameras. Note in this context the method of counting the monitors.

- If you choose **No switching in the event of alarm** CamIQ 8 Enterprise will announce the alarm, but won't show the pictures of the alarm camera automatically.
- **Switch alarm to monitor 1 (full screen)** means that the alarm will be shown on monitor 1 (see picture on the right) in single view.
- If you choose **Switch alarm to monitor 1 (actual view)** the alarm picture will be shown in monitor 1 in the actual multiple view.
- **Switch alarm to monitor 1...16** means that the actual multiple view will be used and extended on demand. CamIQ 8 Enterprise fills one after another the monitors with alarm pictures.
- If the function **Alarm on monitor 0** is chosen CamIQ 8 Enterprise won't display the alarm on one of the monitors as described above, but in the monitor which is surrounded by the buttons and fields of the **Management**.



In the menu **Confirmation Dialogs (2)** you can define how easy it is to confirm an alarm notification.

- If **Ask for confirmation for deleting alarms** is activated, a window will appear that asks the user to confirm the erasure of the alarm. (How the erasure is done in detail can be looked up in the chapter 3.6)
- The function **Confirmation of one alarm confirms all alarm entries of a camera** makes it much more comfortable for the user to confirm many alarms. If one camera sends several alarms every single alarm event will be registered in the alarm list of the **Live Picture**. If this function is activated not every single alarm has to be confirmed individually. Instead the confirmation of one alarm will confirm all alarms of the same camera.

In the menu **Alarmhandling for Cameras where Access is Denied (3)** you can configure how CamIQ 8 Enterprise shall behave when an alarm occurs on a camera where the user has no rights (see chapter 0) for. Something should be configured in this menu.

- If **Ignore Alarms on these Cameras** is activated, the user will not get any notification when an alarm occurs on a camera that he has no rights for.
- If **Allow live picture access for a limited time after alarm occurs** is activated, the user will be able to see the picture of a camera where an alarm occurs, although he has no rights for it. He can also use all other camera related functions (*e.g. open the viewer software).

- Use the buttons **Duration** to adjust how long after the alarm event the user shall be able to see the camera. After that period of time the user will lose its temporary rights for the camera and won't be able to see the picture anymore.

In the menu **Miscellaneous (4)** you can activate the function **Blinking alarms until confirmation by user**. If this function is activated the camera with the alarm will blink in the site plan until the user has confirmed the alarm.

- This is very effective collaboration with the function **Display site plan (if available)**. If this function is enabled, the site plan containing the alarm camera will be displayed in monitor 0 (so don't use it together with the function **Alarm on monitor 0**). The user can see immediately where the alarm has happened and which camera has caused the alarm.

The site plan will only appear if the active user has the right to see the site plan in the **Management** (see chapter 0).

- The function **Abort guard tour in case of alarm** means that a guard tour (see chapter 3.3.6) will be aborted immediately if an alarm occurs. The user doesn't need to stop the guard tour manually and can see the alarm pictures right away.
- If **Switch back to original monitor mode after confirmation of all alarms** is activated the monitors will be arranged the same way as they were before the alarms occurred. If you have configured in this menu that the alarm events shall be displayed, your monitor arrangement will be changed. This function helps to get back the original order.
- If the **No Alarm during Signal Loss** function is activated, the software will not automatically generate an alarm when the camera signal is interrupted. However, should the device issuing the signal automatically send signal loss messages when a signal is interrupted, an alarm will nevertheless be visible in the **Live Image**. In order to shut down these signal loss messages completely, you must activate this function in the software once while simultaneously deactivating all signal loss messages on the connected device.

In the menu **Audio Settings (5)** you can choose if CamIQ 8 Enterprise shall make any acoustical notifications in case of alarm at all. This adjustment here maybe overwrites the configurations you have made in the configuration menu **Devices (CamIQ Server)**.

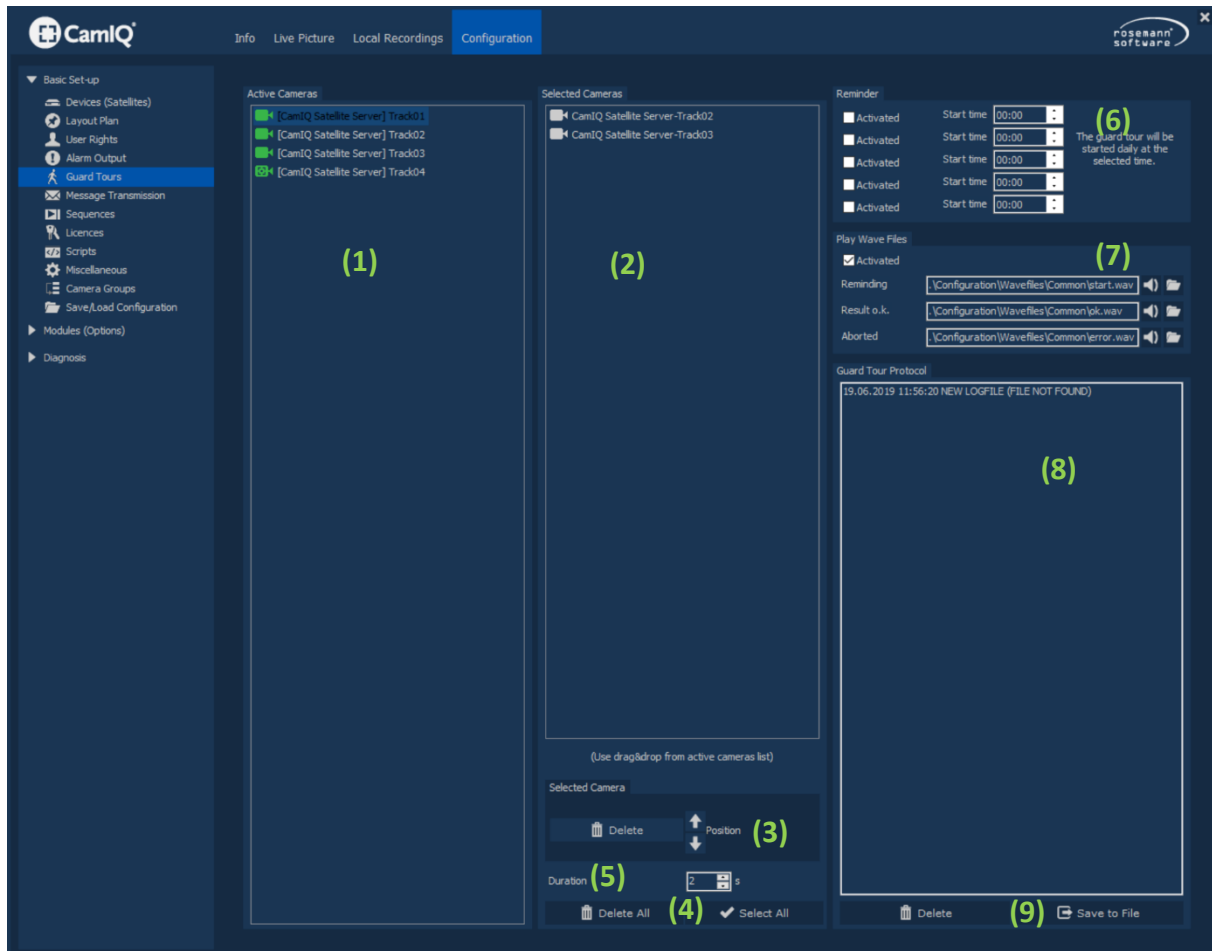
If the acoustical output is activated, you can select **Times Restrictions (6)** when this activation shall have affect.

- Activate **weekdays** when the acoustical output shall be performed.
- Enter **Start** and **Stop** times to define in which space of time the output shall be activated. An individual time schedule for each day is not possible.

3.3.6 Guard Tours

As an option you can configure **Guard Tours** which on the one hand will support the conscientiousness of the security guards and on the other hand can make sure that all camera pictures are watched regularly.

On a guard tour all selected cameras will be shown successively whereas the user has to acknowledge every single camera. If and how the guard tour ended will be documented in an own protocol.

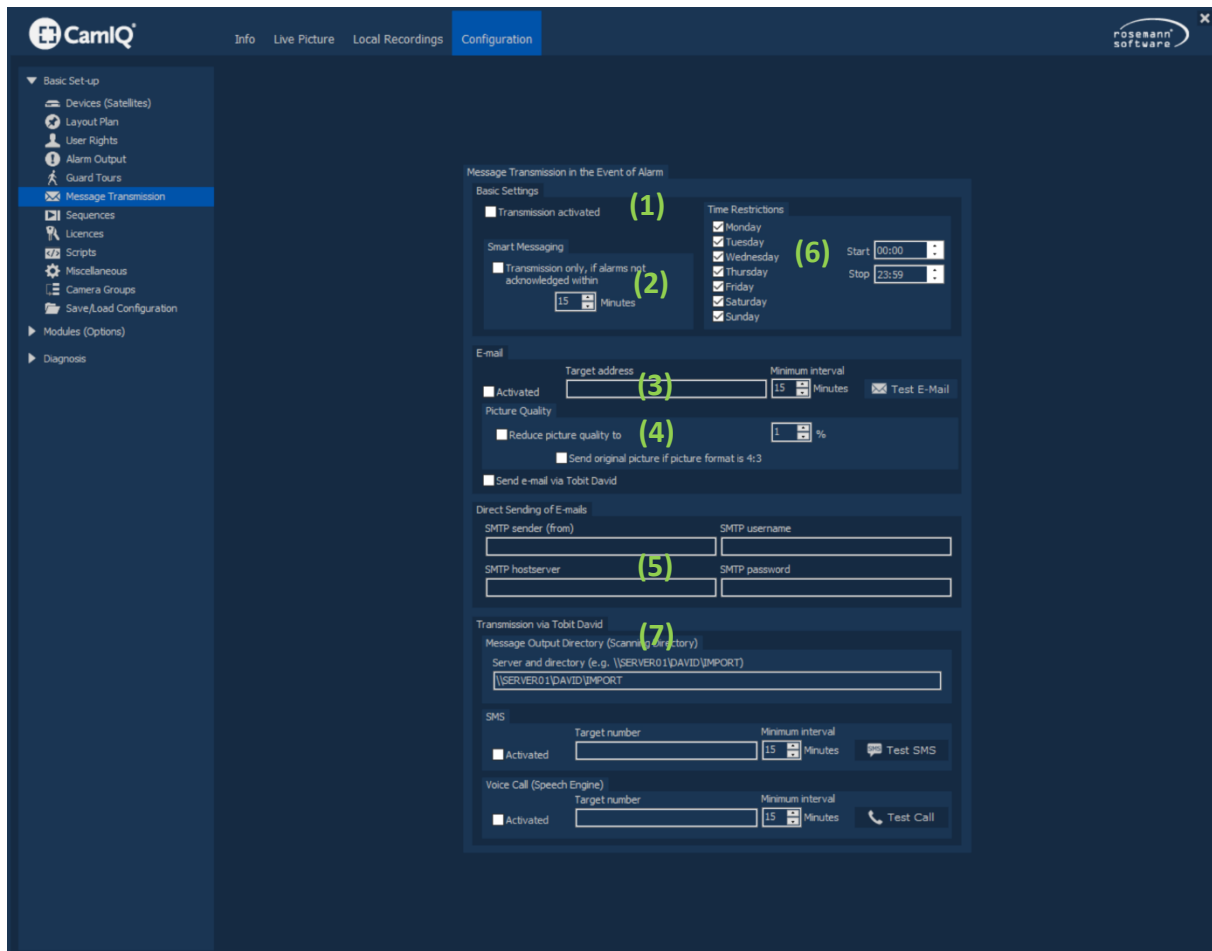


- To select cameras for the guard tour Drag & Drop them from the list **Active Cameras (1)** to the field **Selected Cameras (2)**. You can select cameras several times.
- If you want to select all cameras simply click on the button **Select All (4)**
- If you want to remove all cameras from the field Selected Cameras simply click on **Delete All (4)**
- Single cameras can be removed by marking them and then clicking on the button **Delete (3)**
- The order in the field **Selected Cameras (2)** illustrates the order of the cameras which will be displayed on a guard tour. You can change the order by marking one camera and moving it up and down within the list with the two **Position (3)** arrows.

- You can adjust how long a camera picture will be shown before the user is asked for acknowledgement with the button **Duration (5)**. This time applies to all cameras.
- You can define up to 5 times in the menu **Reminder (6)** when a guard tour will be started automatically. Enter the time and activate it by clicking on the checkbox **Activated (6)**.
- In the menu **Play Wave Files (7)** you can configure the acoustical signals of the guard tour.
 - Click on the checkbox **Activated** to enable the audio output.
 - In the text field **Reminding** you can see the source of the sound file, which will be played when a time-controlled guard tour starts.
 - Click on the **Speaker** symbol to hear that sound.
 - Click on the **Folder** to choose another sound file. Note that this file must be a wave file (*.wav).
 - In the text field **Aborted** you can see the source of the sound file, which will be played when a guard tour was aborted. Speaker and Folder have the same functions as stated above.
 - In the text field **Result o.k.** you can see the source of the sound file, which will be played when a guard tour was completed successfully. **Speaker** and **Folder** have the same functions as stated above.
- You can see a protocol of all guard tours in the field **Guard Tour Protocol (8)**. Here you can see when a guard tour took place, if it was completed successfully or was aborted by the user.
- Click on the button **Delete (9)**, if you want to delete all protocol entries. Note that the erasure will be the first record in the new protocol and can be traced back.
- Click on the button **Save to File (9)** to export the protocol as a *.rtf document. So you can save it e.g. on a mobile storage media.

3.3.7 Message Transmission

CamIQ 8 Enterprise is able to send E-mails or SMS in the event of alarm. In addition to that a phone call can be made. If you want to use these functions you have to configure them in this menu.



In the menu **Basic Settings** you can configure the **Message Transmission** in general and activate it.

- To activate the **Message Transmission** at all click on the checkbox **Transmission activated** (1).
- In the menu **Time Restrictions** (6) you can define when the **Message Transmission** shall be enabled. Activate the desired **week days** and adjust the **Start** and **Stop** times.
- To activate **Smart Messaging** (2) click on the corresponding checkbox and enter a time. If Smart Messaging is activated, the Message Transmission will only be initiated when an alarm event has not been acknowledged by the user before the preconfigured time has expired. This might prevent a flow of transmission although an able and conscientious guard is on duty and has an eye on the software.

Note: The PC must be connected to the internet if the functions E-mail, SMS and Voice call shall be used!

In the menu **E-mail (3)** you can define the recipient of the E-mails and how it shall be sent.

- Use the checkbox **Activated** to enable the E-mail function.
- Enter the recipients address in the text field **Target address**.
- You can define a time which must have expired before a second E-mail will be sent in the field **Minimum interval**.
This might protect the recipient's mailbox from a flow of E-mails.
- Use the button **Test E-Mail** at the end of the configuration to check if the sending of E-mails works.
- Activate the checkbox **Send e-mail via Tobit David** if the CamIQ 8 Enterprise PC has the software David from Tobit and shall use it for sending E-mails.

Alarm images will automatically be attached to the e-mails. In order to save memory, these images can be more thoroughly compressed. You can set this in the **Image Quality (4)** menu.

- Activate the **Reduce Image Quality to** button and enter the desired quality in percent.

Please note: Should the attached images appear to be very squeezed together, please use this function. Recompression will restore the images to their original format.
- The **Send Original Images when Aspect Ratio is 4:3** function indicates that images naturally having a page ratio of 4:3 can be sent without any formatting changes. Images with other formats (half screen, for instance) will normally be reformatted.

You only need the menu **Direct sending of E-Mails (5)** if you don't want to send your E-mails with Tobit David. Instead you need an E-mail account from an public service provider.

- Enter in the text field **SMTP sender (from)** from which E-mail adress the message shall be sent.
- Enter in the text field **SMTP username** the user name of your E-mail account at your public service provider.
- Enter in the text field **SMTP hostserver** the name of mail server of your public service provider.
- Enter in the text field **SMTP password** the password of your E-mail account.

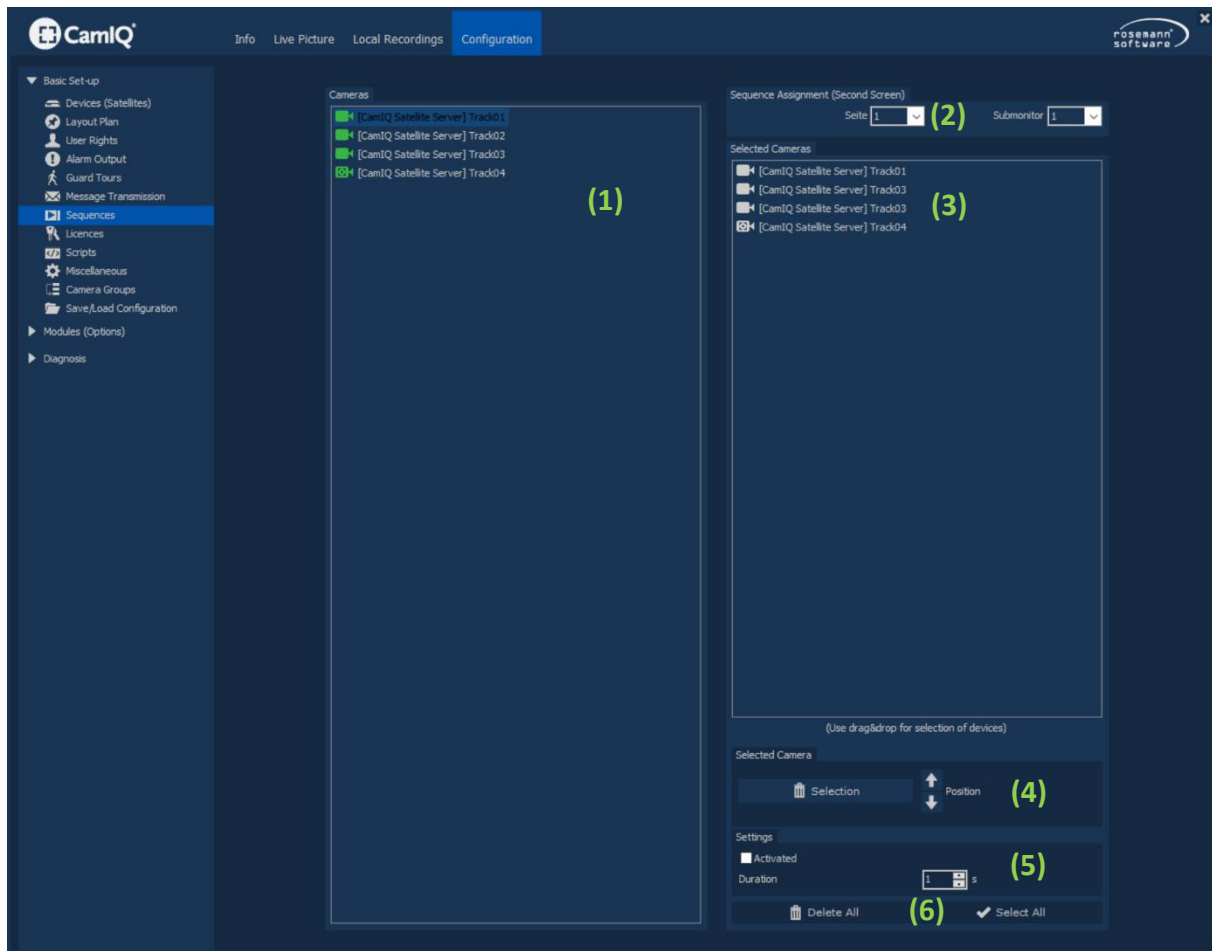
Note: The following functions in the menu **Transmission via Tobit David (7)** are only available if the computer is equipped with the software Tobit David.

- Enter in the text field **Server and directory** your own Tobit server and its output folder.

- You can activate the sending of sms by clicking on the checkbox **Activated** in the menu **SMS**.
- Enter the target number in the text field **Target number**.
- You can define a **Minimum interval** the same way as with E-mails.
- Use the button **Test SMS** to send a sms manually to check if your configuration works.
- You can activate the voice call by clicking on the checkbox **Activated** in the menu **Voice call**.
- Enter the target number in the text field **Target number**.
- You can define a **Minimum interval** the same way as with E-mails.
- Use the button **Test Call** to send a sms manually to check if your configuration works.

3.3.8 Sequences

In this menu you can define **Sequences**. Sequences show selected cameras in a single monitor one after another. Maybe you know this function from analogue cross bars.



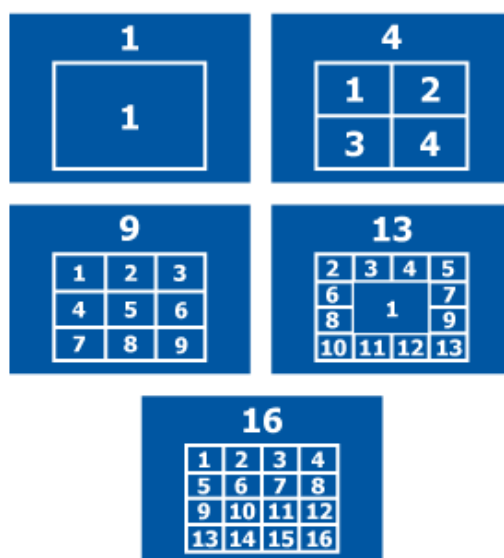
- First choose a monitor from the list **Monitor (2)**. The counting of the monitors can be seen in the graphic on the right.
- Then Drag & Drop a camera from the list **Cameras (1)** to the field **Selected cameras (3)**. You can choose a camera several times.
- Use the button **Select All (6)** to add all cameras at once.
- Use the button **Delete All (6)** to remove all cameras at once.
- Remove single cameras by marking them and clicking on the button **selection (4)**.
- The order in the field **Selected Cameras (3)** illustrates the order of the cameras which will be displayed. You can change the order by marking one camera and moving it up and down within the list with the two **Position (4)** arrows.

- Then adjust the time how long a camera will be shown in the menu **Settings (5)** with the buttons **Duration (5)**.

If a specific camera shall be shown longer than others, simply add this camera one more time to the list and place it directly under its first entry. By doing so the camera will be shown twice and can so be seen twice the time.

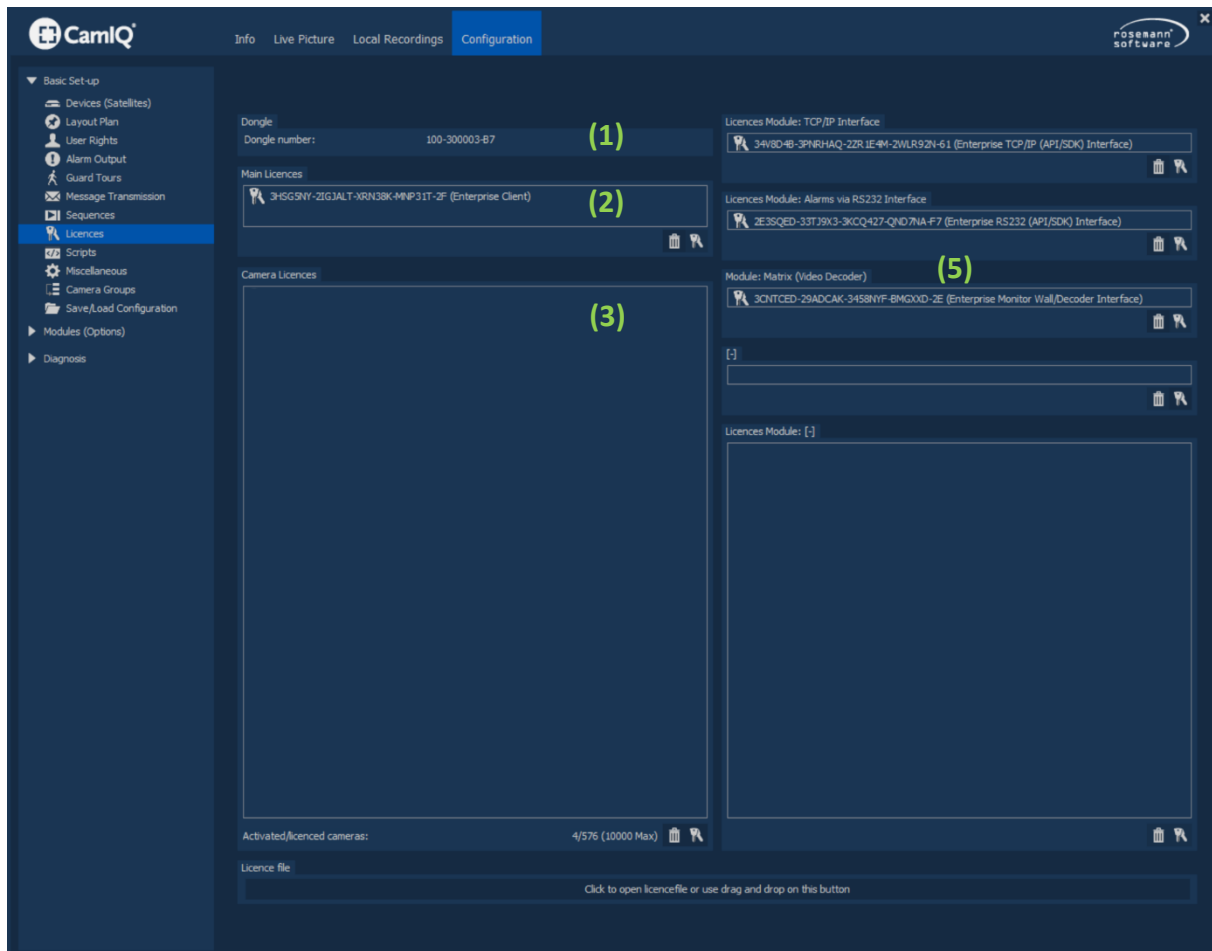
- Finish the configuration by clicking on the checkbox **Activated (5)** to start the sequence.

You can configure a separate sequence for every single monitor, which works independently from the other sequences.



3.3.9 Licences

You can manage your licences in this configuration menu. You can enter or delete extended licences (for more camera signals or options, for instance).

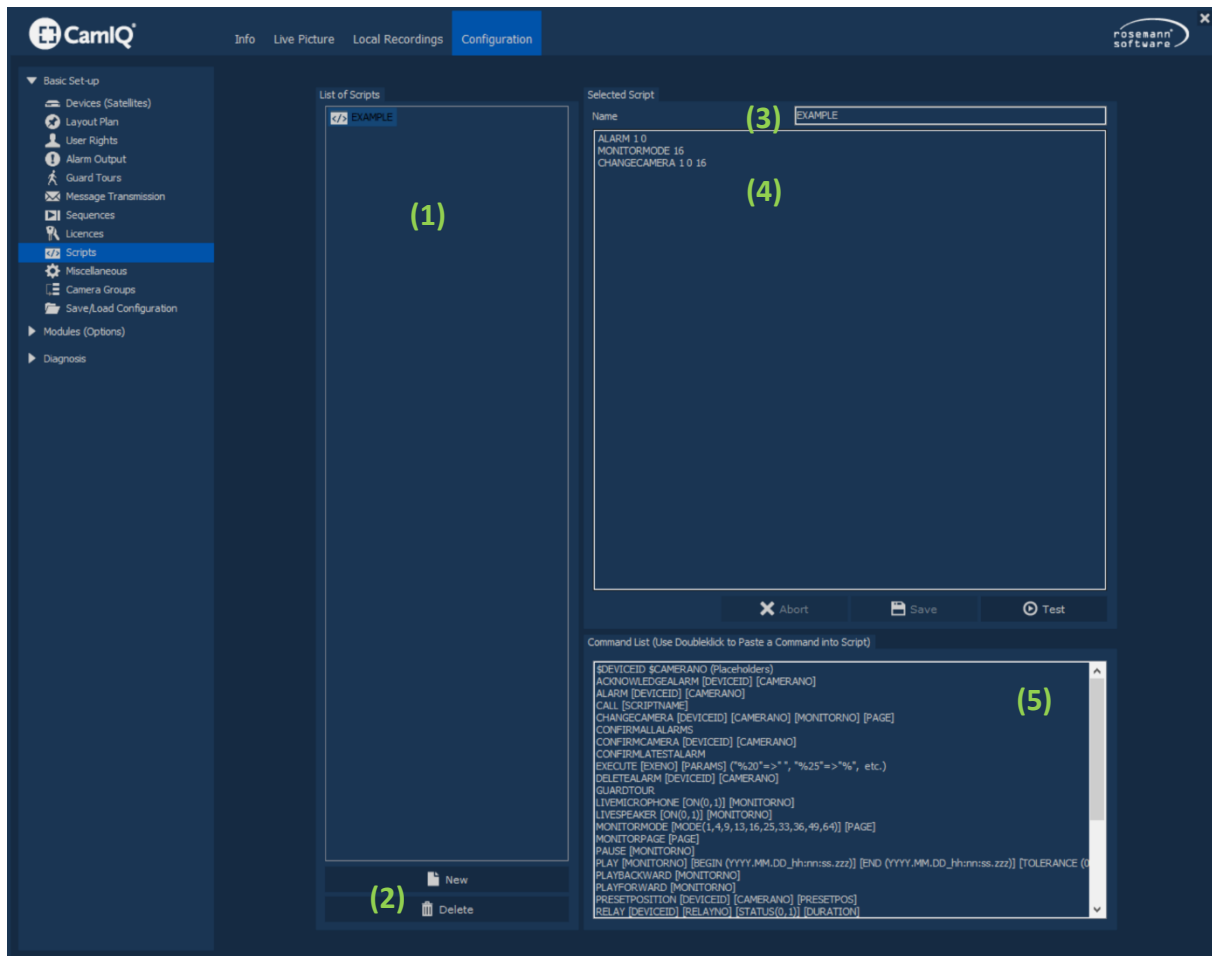


- In the Dongle Number **(1)** field, you can see the number of your dongle. It can also be found directly on the dongle and in the CamIQ ESD Package.
- In the field **Main Licence (2)** you can see your main licence.
- When you click on the **Key** button the request code / dongle number will be shown to you and you are asked to enter the main licence again.
- Click on the **Trashcan** to delete your basic licence. Click on this button only, if you know very well what you are doing and you have good reasons for that!
- In the field **Camera Licences (3)** you can see which additional licences you have activated.
- The remaining licence fields **(5)** all function in the same manner. By clicking on the **Key**, a dongle number will be displayed. Enter your **activation code** for the respective option in the window

and confirm the entry with a click on **OK**. The entered licence now appears in the corresponding licence field. A click on **Trash Can** allows you to delete the licence from CamIQ 8 Enterprise.

3.3.10 Scripts

This menu enables you to create small macros - referred to as scripts. These can be triggered either by alarms or manually in **Live Image**.



- The **Available Scripts (1)** list displays all scripts that have already been created.
- The **New (2)** button allows you to create a new script.
- The **Delete (2)** button allows you to delete a script that has already been selected.
- In the **Name (3)** field, you can give a selected script a designation.
- The actual script is written in field **(4)**. A specific syntax will be necessary for this and will be explained in detail below.

The **Commands (5)** field displays the available commands. With a double click on a command, you can enter it into your script and will then only need to adjust the variables (in the brackets).

Syntax:

Please note: Every command must begin on a new line!

ALARM [DEVICEID] [CAMERANO]

Function: An alarm will be triggered.

Parameters:

- **DEVICEID:** The device ID is generated automatically. You will find the device ID in the general device parameter configuration under **Devices (CamIQ Server)** (see Chapter 3.3.1).
- **CAMERANO:** The camera number corresponds to the camera entry of the device's camera list with the heading "**Devices (CamIQ Server)**" (see Chapter 3.3.1).

Example: **ALARM 1 0:** CamIQ 8 Enterprise displays an alarm for device ID 1 on the first camera (the numbering begins with 0!).

DELETEALARM [DEVICEID] [CAMERANO]

Function: Deleting the alarm of an image source.

Parameters:

- **DEVICEID:** The device ID is generated automatically. You will find the device ID in the general device parameter configuration under **Devices (CamIQ Server)** (see Chapter 3.3.1).
- **CAMERANO:** The camera number corresponds to the camera entry of the device's camera list with the heading "**Devices (CamIQ Server)**" (see Chapter 3.3.1).

Example: **DELETEALARM 1 0:** The alarms from the first camera - with device ID 1 - will be deleted from the alarm list.

ACKNOWLEDGEALARM [DEVICEID] [CAMERANO]

Function: The alarm of an image source will be confirmed.

Parameters:

- **DEVICEID:** The device ID is generated automatically. You will find the device ID in the general device parameter configuration under **Devices (CamIQ Server)** (see Chapter 3.3.1).
- **CAMERANO:** The camera number corresponds to the camera entry of the device's camera list with the heading "**Devices (CamIQ Server)**" (see Chapter 3.3.1).

Example: **DELETEALARM 1 0:** The alarms of the first camera - with device ID 1 - will be confirmed in the alarm list.

CALL [SCRIPTNAME]

Function: An additional script will be executed.

Parameters:

- **SCRIPTNAME**: The name of an additional script found in the menu.

Example: **CALL 16_fold_view**: The script with the name "16_fold_view" will be executed.

CHANGECAMERA [DEVICEID] [CAMERANO] [MONITORNO][PAGE]

Function: Switches a camera on a particular page of a monitor.

Parameters:

- **DEVICEID**: See above ("ALARM [DEVICEID] [CAMERANO]").
- **CAMERANO**: See above ("ALARM [DEVICEID] [CAMERANO]").
- **MONITORNO**: The monitor number identifies the monitor. Monitor 0 represents the main window. Monitor 1 is the multi-view at the far upper left, monitor 2 is to the right of that, and so on.
- **PAGE**: When the CamIQ Monitor Wall option is used (see Chapter 3.7), more than just two screens will be used. For this reason, it is important to define the screen (or the page). The additional screen is page 0. The first screen of the CamIQ Monitor Wall is 1. The numbering continues in this manner as is visible in **Live Image**.

Example: "CHANGECAMERA 1 1 5 1": On monitor 5 of page 1, the device with ID 1 will be displayed on the second camera.

MONITORMODE [MODE(1,4,9,13,16,25,33,36,49,64)][PAGE]

Function: The monitor mode will be switched.

Parameters:

- **MODE(1,4,9,13,16,25,33,36,49,64)**: Enter the number of monitors on the screen.
- **PAGE**: If the CamIQ Monitor Wall option is used (see Chapter 3.7), more than two screens will be used. For this reason, it is important to define the screen (or the page). The additional screen is page 0. The first screen of the CamIQ Monitor Wall is 1. The numbering continues in this manner as visible in **Live Image**.

Example: "MONITORMODE 25 2": Switches the second page (in other words, third video screen) to the 25-fold view.

PRESETPOSITION [DEVICEID] [CAMERANO] [PRESETPOS]

Function: Moves to a preset position. This function can only be used if the desired camera has been configured as a standard network camera.

Parameter:

- **DEVICEID:** See above ("ALARM [DEVICEID] [CAMERANO]").
- **CAMERANO:** See above ("ALARM [DEVICEID] [CAMERANO]").
- **PRESETPOS:** The preset position that is to be moved to. The numbering of the preset positions begins with 0.

Example: "PRESETPOSITION 2 0 0": The first camera of the device with ID 2 will be moved to preset position 1.

RELAY [DEVICEID] [RELAYNO] [STATUS(0,1)] [DURATION]

Function: Switches or opens a relay.

Parameters:

- **DEVICEID:** See above ("ALARM [DEVICEID] [CAMERANO]").
- **RELAYNO:** The relay number corresponds to the position in the dropdown list of the relays for the respective device (see Chapter 3.3.1). Relay numbering begins with 0.
- **STATUS(0,1):** Enter the status the relay is to be switched to. "1" will switch the relay, "0" will open the relay.
- **DURATION:** Enter the time - in seconds - for which the relay is set to a new status

Example: "RELAY 1 0 1 5": Switches the first relay of the device with ID 1 for five seconds.

STARTRECORDING [DEVICEID] [CAMERANO] [DEVICE(0,1)] [LOCAL(0,1)] [DURATION(s)]

Function: Starts an image recording.

Parameters:

- **DEVICEID:** See above („ALARM [DEVICEID] [CAMERANO]").
- **CAMERANO:** See above („ALARM [DEVICEID] [CAMERANO]").
- **DEVICE(0,1):** With this value you determine whether an image recording should take place with the device. A "0" setting means that no images will be recorded with the device, a "1" means that that the device will record images. This option corresponds to the "On Device" setting possibility in the **Devices (CamIQ Server)** menu (see chapter 3.3.1).
- **LOCAL(0,1):** With this value you determine if a local image recording should take place. An „0" setting means that no images will be recorded locally, a „1" means that that the device will record images locally. This option corresponds to the „On Device" setting possibility in the **Devices (CamIQ Server)** menu (see Chapter 3.3.1).
- **DURATION(s):** Enter the duration of the recording in seconds.

Example: "STARTRECORDING 1 0 0 1 8": Starts a local recording for eight seconds on the device with ID "1" using the first camera. No images will be recorded on the device.

SENDRS232 [String] („%20“=„ “, „%25“ = „%“, etc.)

Function: A defined string will be sent over an RS232 port. Here, the "%20" corresponds to "space", "%25" corresponds to "%," etc.

Parameters:

- **STRING:** You define here the string that is to be sent over the RS232 port.

Example: "SENDRS232 open%20barriers": Sends the string "open barriers" to the RS232 port.

SETICONSTATUS [ICONID] [STATUS(0,1)]

Function: Changes the status of a defined symbol to either 0 or 1.

Parameters:

- **ICONID:** Enter the icon ID here. You will find the icon ID in the site plan configuration (see chapter 3.3.3).
- **STATUS(0,1):** Enter a "1" to activate the "Active" icon. Enter a "0" to activate the "Inactive" icon.

Example: "SETICONSTATUS 1701277287 1": Sets the icon status with the icon ID 1701277287 to active.

SETVIEW [PAGE] [VIEWNO]

Function: Switches-on the defined view onto the defined page.

Parameters:

- **PAGE:** Enter the page here (0 corresponds to the additional screen).
 - **VIEWNO:** Enter the defined view here (you can learn more about views in Chapter 3.4.1).
- Example: "SETVIEW 0 1": Switches on the 1st predefined view onto the additional screen.

MONITORPAGE [PAGE]

Function: Switches the denoted monitor onto the additional screen.

Parameters:

- **PAGE:** Enter the page here (0 corresponds to the additional screen).

Example: "MONITORPAGE 1": Switches the current view of the 3rd monitor of the CamIQ Monitor Wall to the additional screen.

STOPNVDSTREAM [MONITORNO] [PAGE]

Function: Stops the stream on the indicated monitor of the given page.

Parameters:

- **MONITORNO:** Enter the monitor number here (you will learn more about numbering in Chapter 0 - Sequences.)
- **PAGE:** Enter the page here (0 corresponds to the additional screen).

Example: "STOPNVDSTREAM 3 0": Stops the stream on the CamIQ Monitor Wall screen of the additional screen.

RECSPEAKER [ON(0,1)] [MONITORNO]

Function: Activates/deactivates the audio channel for the specified monitor.

- **ON:** Enter 0 or 1 to disable or enable the audio channel.
- **MONITORNO:** Enter the monitor number here. More about numbering can be found in the chapter on **Sequences**.

Example: "RECSPEAKER 1 2": Activates the audio channel on Monitor 2.

SETMONITORALARM [MONITORNO] [PAGE] [BORDER-COLOR] [BORDER-WIDTH-PIXELS]

Function: Displays a colored frame around a defined live image monitor.

Parameters:

- **MONITORNO:** Enter the monitor number here. More about numbering can be found in the chapter on **Sequences**.
- **PAGE:** Enter the page here. (0 corresponds to the additional screen).
- **BORDER-COLOR:** Enter the color code with which the frame should be displayed here. (Use the RGB value in hexadecimal. For example, "A83232" for the color red).
- **BORDER-WIDTH-PIXEL:** Enter the desired width of the frame in pixels here.

Example: "SETMONITORALARM 1 0 A83232 10": Switches a red, 10-pixel-wide frame around the 1st camera visible in the overview monitor.

RESETMONITORALARM [MONITORNO] [PAGE]

Function: Hides the previously set colored frame of the defined monitor.

- **MONITORNO:** Enter the monitor number here. More about numbering can be found in the chapter on **Sequences**.
- **PAGE:** Enter the page here. (0 corresponds to the additional screen).

Example: "RESETMONITORALARM 1 0:" Again deactivates the previously set frame on the first camera of the overview monitor.

RESETALLMONITORALARMS

Function: Hides all previously set colored monitor frames.

LOCKLAST [DEVICEID] [CAMERANO] [(hh:mm:ss)]

Function: Locks a range – backwards starting from the current time – of the recording of a defined camera.

Parameters:

- **DEVICEID:** See above ("ALARM [DEVICEID] [CAMERANO]").
- **CAMERANO:** The camera number corresponds to the camera entry that can be found in the camera list for the particular device. Refer to the **Devices** section. (**CamIQ Server**). (Chapter on **Basic Setup - Devices (CamIQ Server)**).
- **(hh:mm:ss):** Enter here in hours, minutes and seconds how far back in time the recording should be locked starting from the current time.

Example: "LOCKLAST 1 1 24:00:00": Locks the last 24 hours of video recording on Camera 1 of Device 1.

UNLOCKLAST [DEVICEID] [CAMERANO] [OPTIONAL(hh:mm:ss)]

Function: Unlocks a range – backwards starting from the current time – of the recording in a defined camera.

Parameters:

- **DEVICEID:** See above ("ALARM [DEVICEID] [CAMERANO]").
- **CAMERANO:** The camera number corresponds to the camera entry that can be found in the camera list for the particular device. Refer to the **Devices** section. (**CamIQ Server**). (Chapter on **Basic Setup - Devices (CamIQ Server)**).
- **OPTIONAL(hh:mm:ss):** Enter here in hours, minutes and seconds how far back in time the recording should be unlocked starting from the current time. This parameter is optional. If no time is specified, the entire recording will be unlocked.

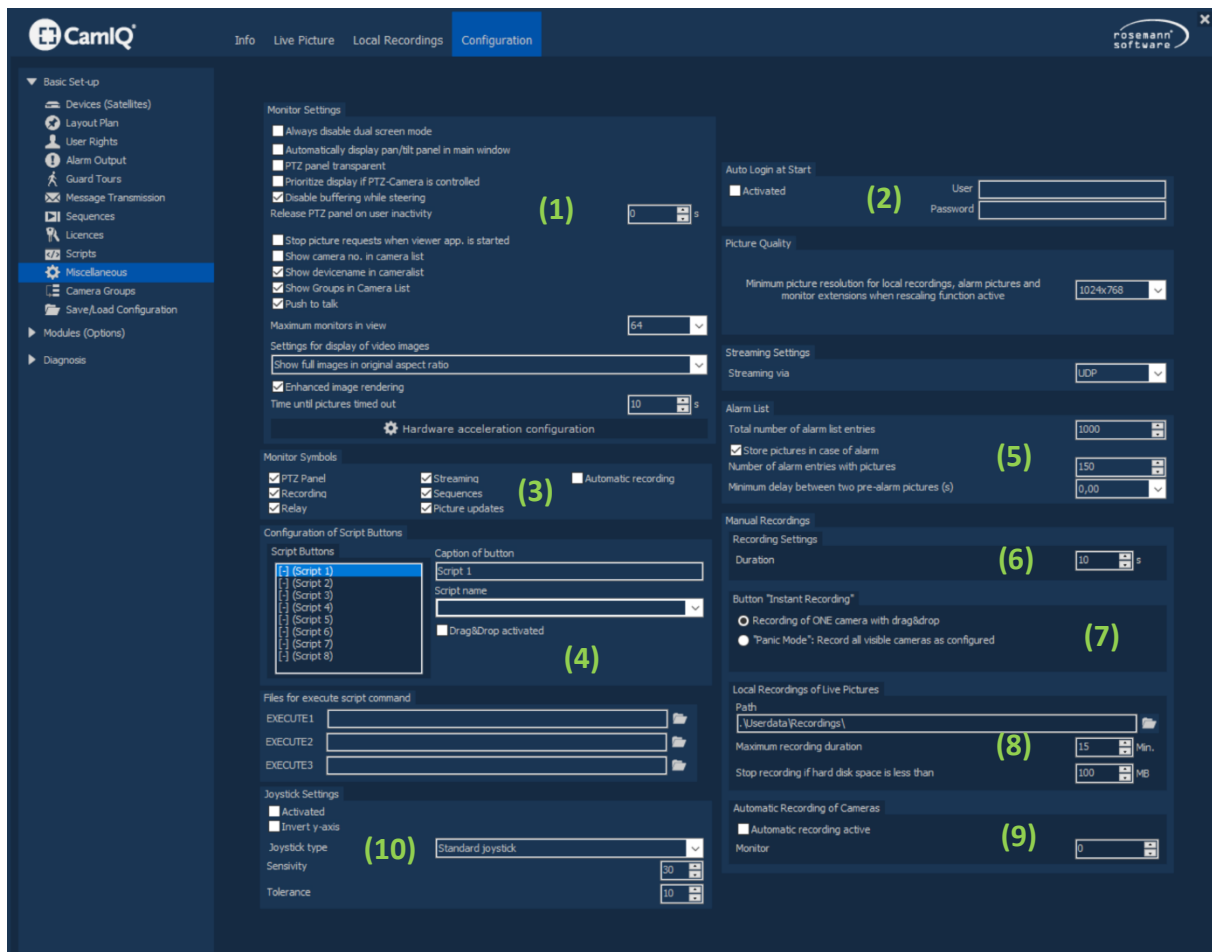
Example: "UNLOCKLAST 1 1 24:00:00": Unlocks the last 24 hours of video recording on Camera 1 of Device 1.

Example 2: "UNLOCKLAST 1 1": Unlocks the entire video recording on Camera 1 of Device 2.

3.3.11 Miscellaneous

You can use this menu to make many individual adjustments, which will improve your work with CamIQ 8 Enterprise and make it comply with your wishes.

Further adjustments can be conducted which may improve the performance of CamIQ 8 Enterprise on your computer.



In the menu **Monitor Settings** you can define how CamIQ 8 Enterprise will be displayed. The deactivation of some of these functions will save system resources and should come into consideration, if CamIQ 8 Enterprise shows any performance problems.

- Use the checkbox **Always disable dual screen mode** if you have only one screen. Of course, this is less comfortable than the use of two screens, but it offers the possibility to use CamIQ 8 Enterprise even if one of your screens is broken.
The multiple view will become the primary screen and will be laid over the **Live picture**. CamIQ 8 Enterprise will be controlled with the right mouse button then (find more information about this in the chapter 3.6).
- Use the checkbox **Soft fading of screens** to define if menus and views will fade in and out softly or not.

If your computer has any performance problems, you should disable this function.

- Activate the checkbox **Activate streaming mode in single view**, if you want streaming (rise of the refresh rate which rises also the network load) to be activated automatically as soon as the camera is shown in the single view.
- Activate the checkbox **Activate streaming mode in quad view**.
- If you activate the checkbox **Automatically display pan/tilt panel in main window**, the **Move Control Panel** (control field for PTZ cameras) will appear automatically when a PTZ camera is shown on monitor 0.
- If you activate the checkbox **PTZ panel transparent**, the **Move Control Panel** will be half transparent. This is an advantage when you use the panel in the multiple view, because you can steer the PTZ camera and see all camera pictures at the same time.
If your computer has any performance problems, you should disable this function.
- If you activate the **Stop Acquisition When Viewer Software Starts** function, you reduce network load. Indeed, when you then start the viewer software for one of the devices, its image acquisition will be stopped by CamIQ 8 Enterprise, otherwise the device's images would be processed twice; once by CamIQ 8 Enterprise and once by the viewer software.
- Activate the **4: 3 Aspect Ratio for 2nd Screen** function if you wish to display the monitors on the second screen at an aspect ratio of 4:3. Images in the 4:3 format will otherwise be displayed in a slightly distorted manner because when the function is deactivated, the image sizes are made to fit the screen's aspect ratio.
- If the **Display Camera Number in Camera List** function is activated, the corresponding camera number will be displayed next to every camera listed in **Live Image**. This can simplify the camera switching process.
- Enter a time in the field **Time until pictures timed out**. If a camera picture is not updated within that period of time CamIQ 8 Enterprise will show the message **NO SIGNAL** instead of the picture. Vary the time if CamIQ 8 Enterprise shows you that message without any reason.

In the menu **Auto Login at Start** you can define that no password has to be entered when CamIQ 8 Enterprise gets started.

- Activate this function by clicking on the checkbox **Activated**.
- Enter the password in the text field **Password** of the user that shall log in automatically.

Attention: Note that the use of this function may be a security risk! Unauthorised persons might get access to your security system!

In the menu **Monitor Symbols** you can configure the symbols of the camera info (see chapter 3.6).

- Activate the following checkboxes if you want to use the adapted functions by a single click on the button in the camera info:
 - **PTZ panel** (opens the Move Control Panel)
 - **Streaming** (rise of the refresh rate which rises also the network load)
 - **Automatic Recording** (shows if the camera is actually recorded automatically)
 - **Recording** (starts a manual recording of the camera)
 - **Sequences** (the buttons for operating the preconfigured sequence of the monitor)
 - **Relay** (switches the relay which is adapted to the camera)
 - **Picture updates** (two green dots that twinkle every picture update)

In the **Script Button Configuration (4)** menu you can associate script buttons in **Live Image** with scripts, enabling you to execute given scripts with a simple click.

- Select a button from the **Script Buttons** list. The numbering of the list entries corresponds to the script button numbering in the Live Image view.
- In the **Button Designation** field you can enter a short name for the button which will also be displayed in **Live Image**.
- From the **Script to be Performed** selection list you can then select the script that is supposed to be executed.

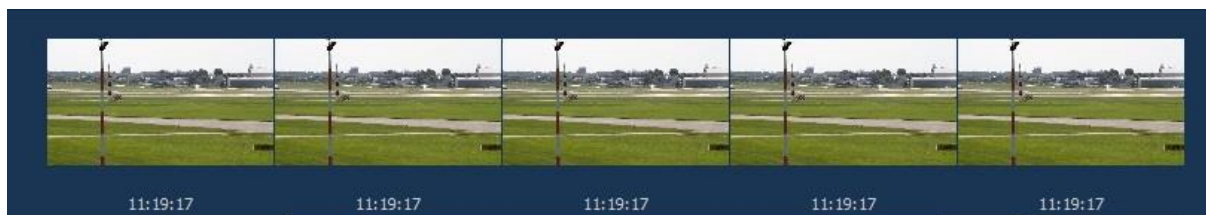
Example: You want to switch two relays at arbitrary times and also display the corresponding camera signals. The functions which switch the relays and change the camera signals are configured in a script. Associate this script with desired script button. When the user clicks on the script button, the relays will be set and the camera signals displayed.

Please note: You can find out more about scripts in Chapter 3.3.10.

In the menu **Alarm List** you can configure the Alarm List of the **Management**.

- Use the buttons **Maximum Number of Alarm Entries in List** to define how many alarm events will be stored in the alarm list. If the list is full, every new alarm will delete the oldest one.
- Activate the checkbox **Store pictures in case of alarm** to make CamIQ 8 Enterprise save three alarm pictures per list entry.
- Define how many alarm pictures shall be saved in the alarm list with the buttons **Number of alarm entries with pictures**.
- With the **Minimum Interval between Preview Images** button you can determine how large the spacing between two consecutive alarm images should be.

Example: If a value of 5 seconds is entered, you will cover a total of 20 seconds because a period of 5 seconds will pass between each alarm image.



In the menu **Manual Recordings** you can adjust the parameters for manually started recordings.

- Define with the buttons **Duration** how long a manual recording shall be.

In the menu **Button “Instant Recording”** you can configure how the button **Instant Recording** in the **Management** shall work. The two modes you can choose from are:

- **Recording of ONE camera with Drag & Drop:** Use this mode start a manual recording of a single camera by clicking on the button **Instant Recording** and Drag & Drop it into the picture of the desired camera.
- **Panic Mode:** In this mode you only have to click on the button **Instant Recording** once. Immediately **all** visible cameras will be recorded.

In the menu **Local Recordings of Live Pictures** you can configure the recording of pictures on the CamIQ 8 Enterprise computer.

- In the text field **Path** you can see where on your computer the local recordings are saved.
- Click on the **Folder** button to change the directory.
- Use the buttons **Maximum recording duration** to define how long a recording shall be. This is for the **Automatic recording of Cameras** (see below).
- Enter a value with the buttons **Stop recording if hard disk space is less than**. This value is the hard disk space which will be manumitted by CamIQ 8 Enterprise. If only this value of hard disk space is left, the recording will stop.
The purpose of this function is that the hard disk must not be filled to the last byte, because many programs (like Windows®) need a certain amount of space to work. If the hard disk has too little free space the programs can run unstable or do not start at all. Especially in case of Windows® this would be a very bad situation.

In the menu **Automatic recording of Cameras** you can adjust that any camera will be recorded automatically, if it is shown in a specific monitor.

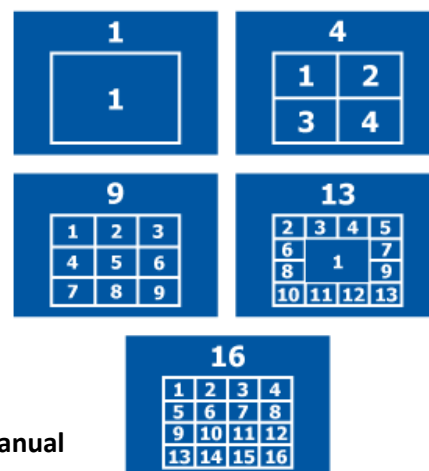
- Click on the checkbox **Automatic recording active** to enable this function.

- Use the buttons **Monitor** to define in which monitor the recording shall take place. How the monitors are counted can be seen in the picture to the right.

Attention: Don't use **Automatic Recording** and **Sequences** in the same monitor. If you do so, CamIQ 8 Enterprise will produce a real flood of short recordings.

Please note: If, however, you use this function with the automatic alarm activation function, you can configure CamIQ 8 Enterprise in such a way that the automatic alarm recording takes place on the CamIQ 8 Enterprise PC itself. You could set the alarm activation as well as the automatic recording to monitor 0, for instance.

Please note: You can set the length of the recording in the **Manual Recordings (6)** menu.



In the menu **Joystick Settings** you can configure the steering of PTZ cameras via joystick. The joysticks or joypads can be plugged into the gameport or the USB port. You can use usual devices as known from computer games.

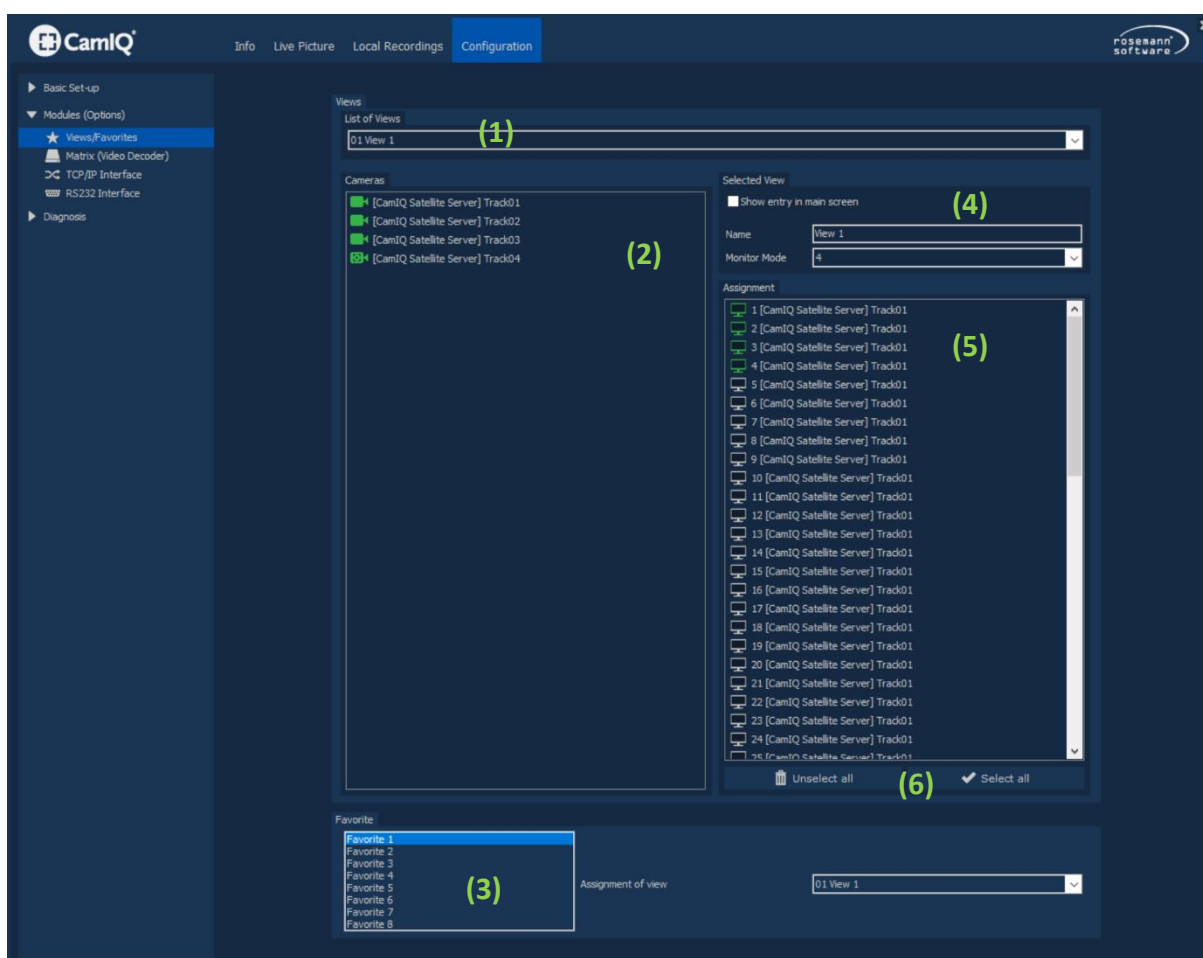
We recommend analogue joysticks, because they can be moved into 360 directions and can recognize the intenseness of the movement. Four fire buttons are needed and have the following functions:

- **Fire 1:** Zoom in
 - **Fire 2:** Zoom out
 - **Fire 3:** Focus near
 - **Fire 4:** Focus far
- Click on the button **Activated** to enable the steering via joystick.
 - Click on the checkbox **Invert y Axis** to invert the directions of the y axis. This means that the camera will pan down when you press the joystick up and vice versa. Just like an airplane.
 - Use the buttons **Sensitivity** to adjust how sensitive the camera reacts to the movement of the joystick. Maybe you have to test a few settings before it suits you perfectly.
 - Use the buttons **Tolerance** to avoid unwanted sending of steering signals. Analogue joysticks show signs of abrasion when they are used very often. Then the stick itself does not sit very tight anymore and begins to lean to one side. So it can happen that steering signals are sent unintentionally. This happens also if the joystick is poorly calibrated. (calibration is done in the control panel of Windows®)
If you should notice such behaviour of your joystick just rise the **Tolerance**. Doing this compensates for the "false" control signals sent out and will not influence the moveable cameras.

3.4 MODULES (OPTIONS)

3.4.1 Views/Favorites

The CamIQ 8 Enterprise offers you the possibility of saving preferred views, thus making them available to you per mouse click. In this way, you can put together your own personal view and call it any time you wish.



- First select one of the view profiles available in the **Views List (1)** you would like to edit.

In the **Selected View (4)** menu you can further define the view profile as desired.

- When you activate the **Display in Main Screen** function, this view can be called up directly from **Live Image**. It is otherwise not available.
- In the **Designation** field you can give your view a name.
- You can determine which multi-view should be used with the **Monitor Mode** selection list. You can also decide here how many cameras can be displayed with this view.

- Now just pull over the cameras to be switched from the **Camera List (2)** field and drop them into their positions in the **Switching (5)** field. The green-marked positions will be the only ones used by the view.

Please note: Also position cameras in the gray zones in order to enable a good view should the multi-view in **Live Image** be increased. This is necessary because when there is a multi-view increase, additional cameras will be displayed along with those selected for this view profile. You can determine these by also allocate cameras to the gray positions.

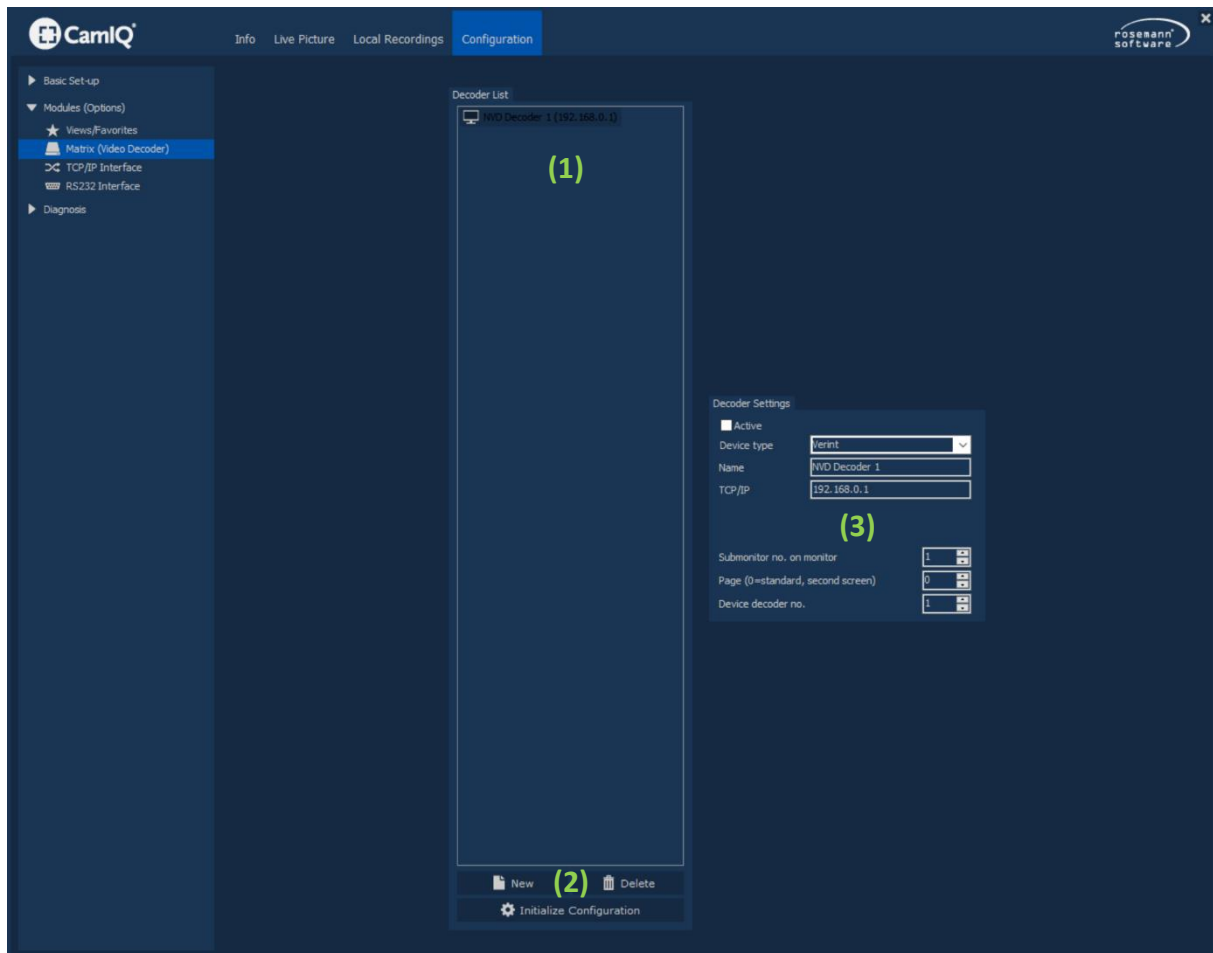
- In order to switch all the cameras in their current order, click on the **Select All (6)** button.
- To delete the current positions, click on the **Select none (6)** button.

In the **Favorites (4)** field, you can associate each of the six view buttons available in **Live Image** with a corresponding view profile to give quick access to them through **Live Image**.

- To do this, first mark a view button in the **Favorites (3)** list and then select a view profile from the **View Assignment (3)** selection list.

3.4.2 Video Decoder

CamIQ 8 Enterprise allows to connect up to 16 AXIS Network Video Decoder and to forward these video signals to up to 16 analogue monitors.



Click on button **New (2)** to add a new decoder. He will be displayed within the **Decoder List (1)**.

- You can name the decoder by clicking in the field **Name (3)** and entering the name.
- Type the TCP/IP address of the decoder in the field **TCP/IP (3)**.
- In the Fields “Username” and “Password” you can enter the login data you have defined earlier in the configuration menu of the AXIS decoder.

Note: The authentication is device-dependent and not always visible.

- In the menu **Submonitor no. on monitor (3)** you can define which monitor shall be combined with the actual decoder.
- In addition, select the page from the **Monitor Page (3)** button on which the monitor just selected is located. Page 0 will serve here as the additional screen allowing multi-view, page 1 is the first

screen of the CamIQ Monitor Wall, etc.

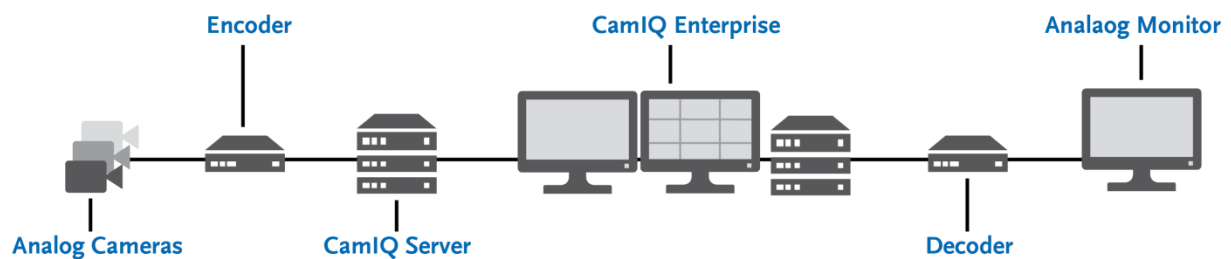
- Using the **Decoder No. (3)** button, you can issue a device number to every decoder.
- Activate the decoder by clicking on the checkbox **Active (3)**.
- To remove the decoder click on the button **Delete (2)**.

3.4.3 Video Decoder in the Application

The decoder is set to work with a specific monitor. Each camera signal that is pulled into this monitor will also be processed by the decoder at the same time so that it can issue this signal over its analog output. In this way, you can remotely control the switching of video signals on analog monitors.

Please note:

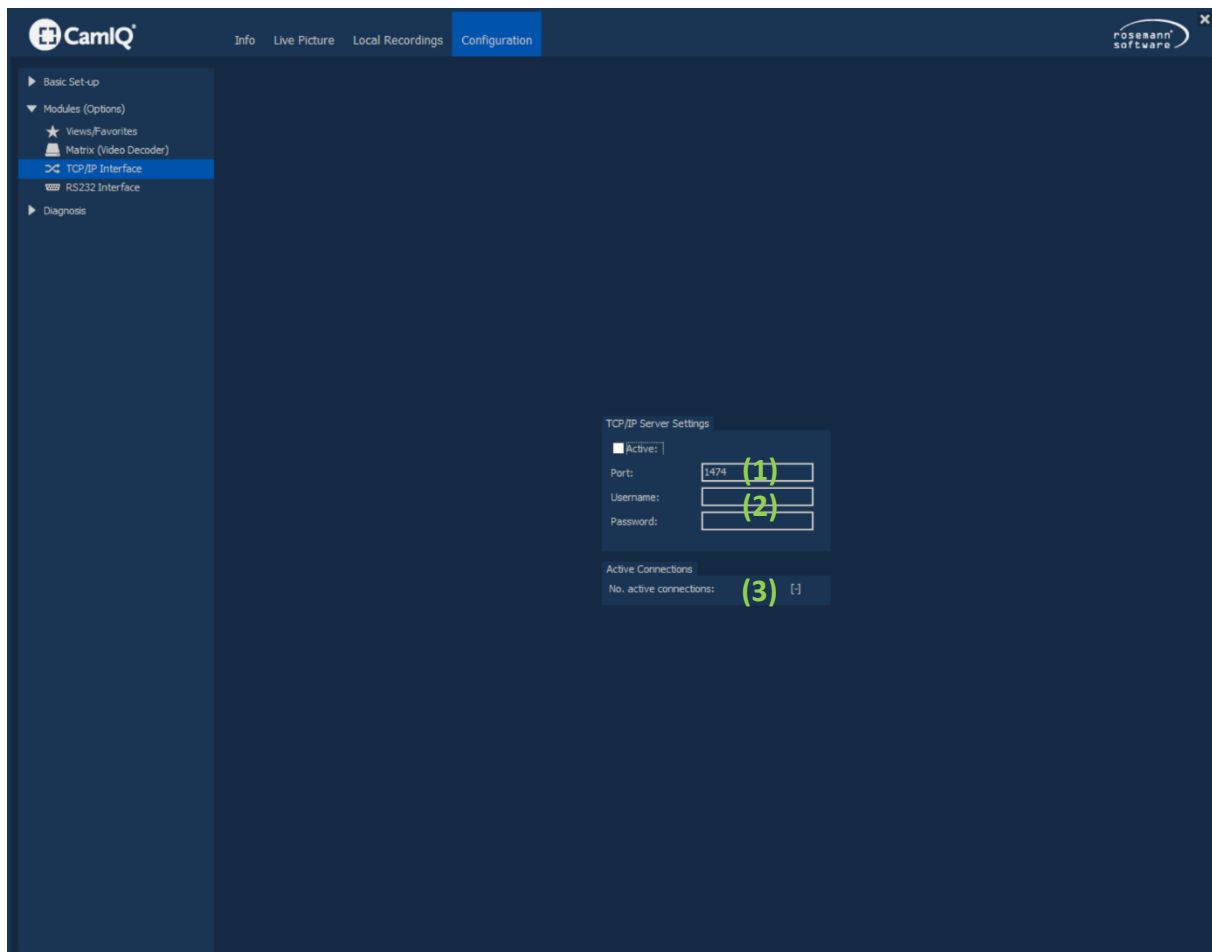
- The encoder must be connected to CamIQ 8.0.
- The decoder uses encoder #2 of the given video source.



3.4.4 CamIQ TCP/IP (API/SDK) Interface

The CamIQ TCP/IP (API/SDK) Interface provides an interface, which can be used for connecting CamIQ 8 Enterprise with other individual programmings. API connections are supported.

CamIQ 8 Enterprise stages as an TCP/IP server. In order to use this interface, you will need an additional licence.



In order to open a connection with CamIQ 8 Enterprise you basically have two possibilities to choose from:

1.) You can send commands directly to CamIQ 8 Enterprise using third party software. To do this you will need the interface (CamIQ API/SDK) with the necessary instruction set. In order to get the interface (CamIQ API/SDK), please contact your distributor.

2.) Alternatively, you can send commands to the CamIQ TCP/IP (API/SDK) interface module (see Chapter 3.4.5). The module parses the commands as you have configured them and then sends them on to CamIQ 8 Enterprise.

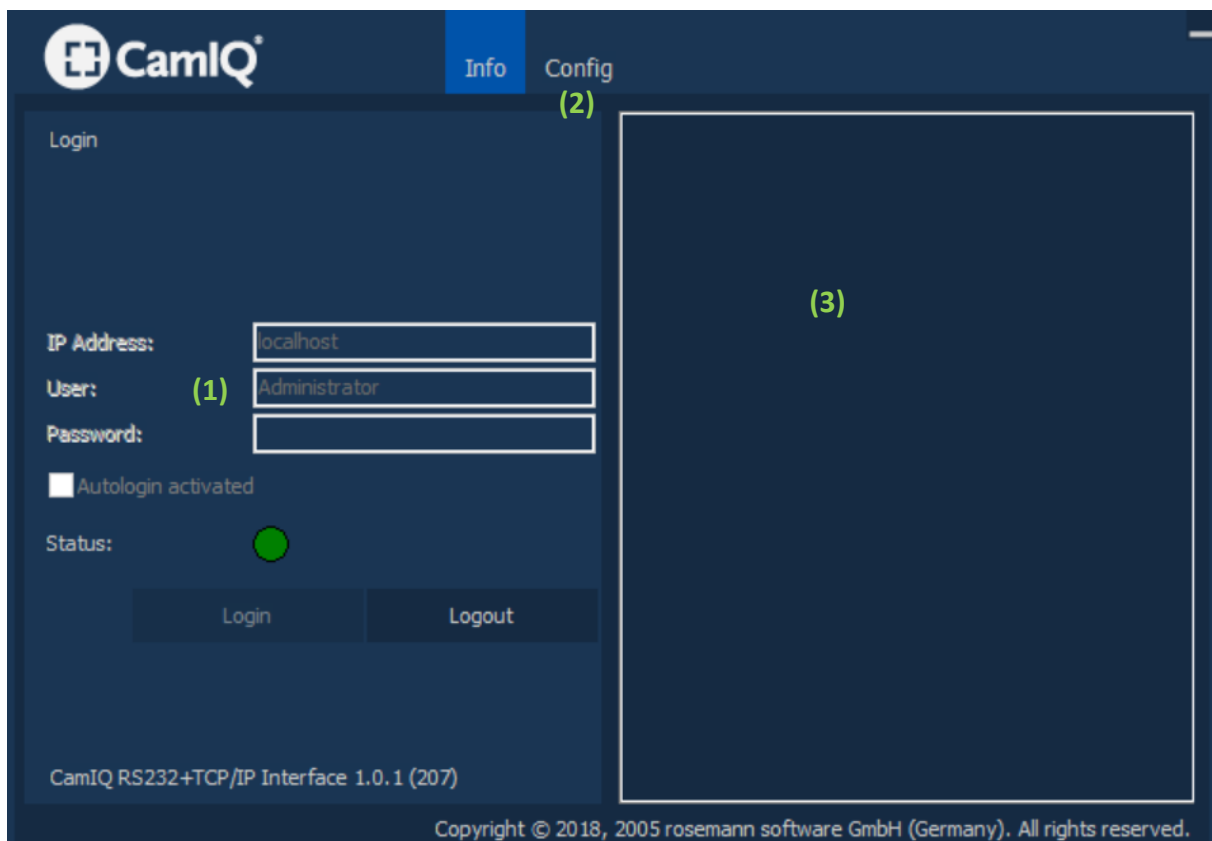
- In the field **Port (1)** you can assign a port for the communication between CamIQ 8 Enterprise and the individual programming. Port 1474 is recommended.

- If you want to protect the connection between CamIQ 8 Enterprise and your programming you can enter a **User name** and a **Password**.
- You can activate the TCP/IP server with the **Active (1)** button.
- In the **Active Connections (3)** field, you can see how many connections are currently open over the interface.

Please note: After configuration, restart 5 Enterprise to initiate the changes you have made.

3.4.5 CamIQ TCP/IP (API/SDK) Interface Module

The module connects the alarms issued by a given system with 5 Enterprise.



- (1) Enter the server's IP address along with a user name and password. Click on the "Login" button to open a connection. When a successful connection has been established the status indicator will turn green.

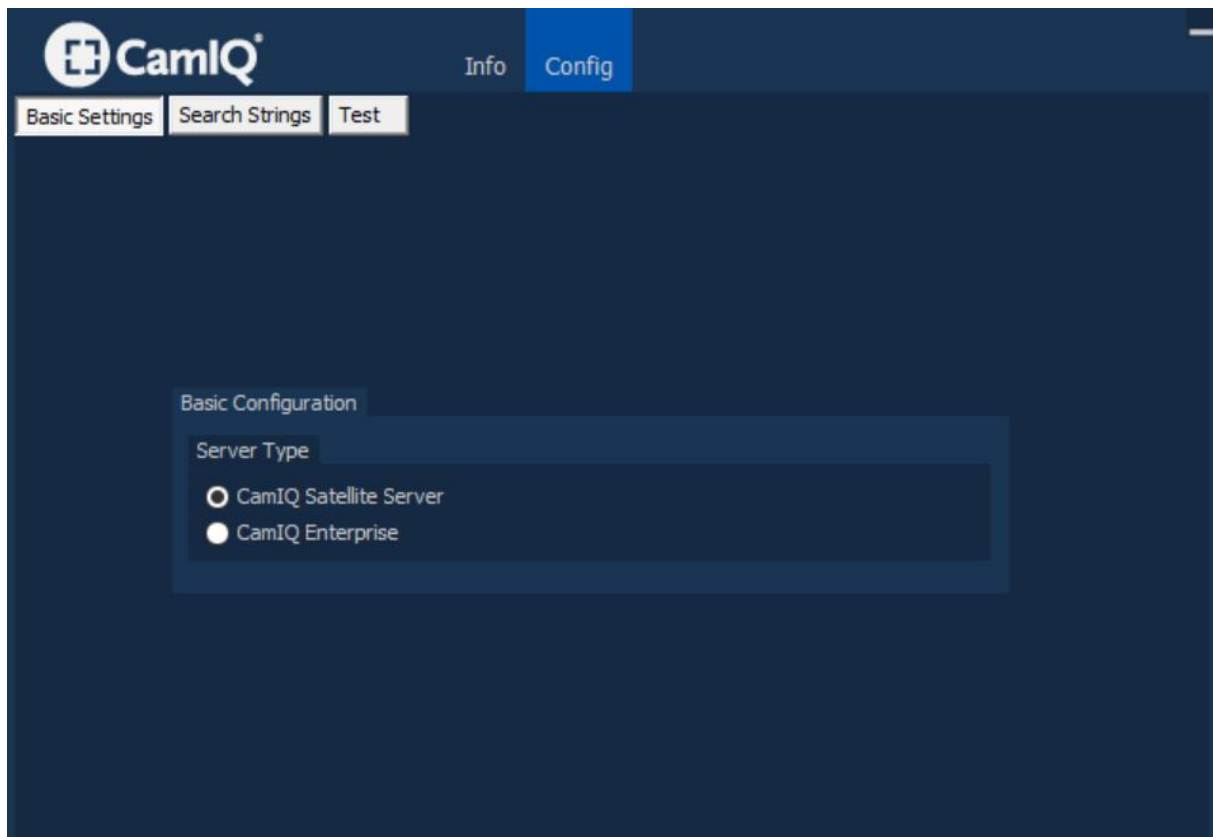
Please note: Activate "Autologin activated" if you wish to have the current account log in automatically when the software is started.

- Incoming alarm messages are displayed in the text field (3).

- For the **Configuration (2)** of incoming alarm messages, you have the choice from among the following three categories:
 1. Basic Settings
 2. Search Strings
 3. Test

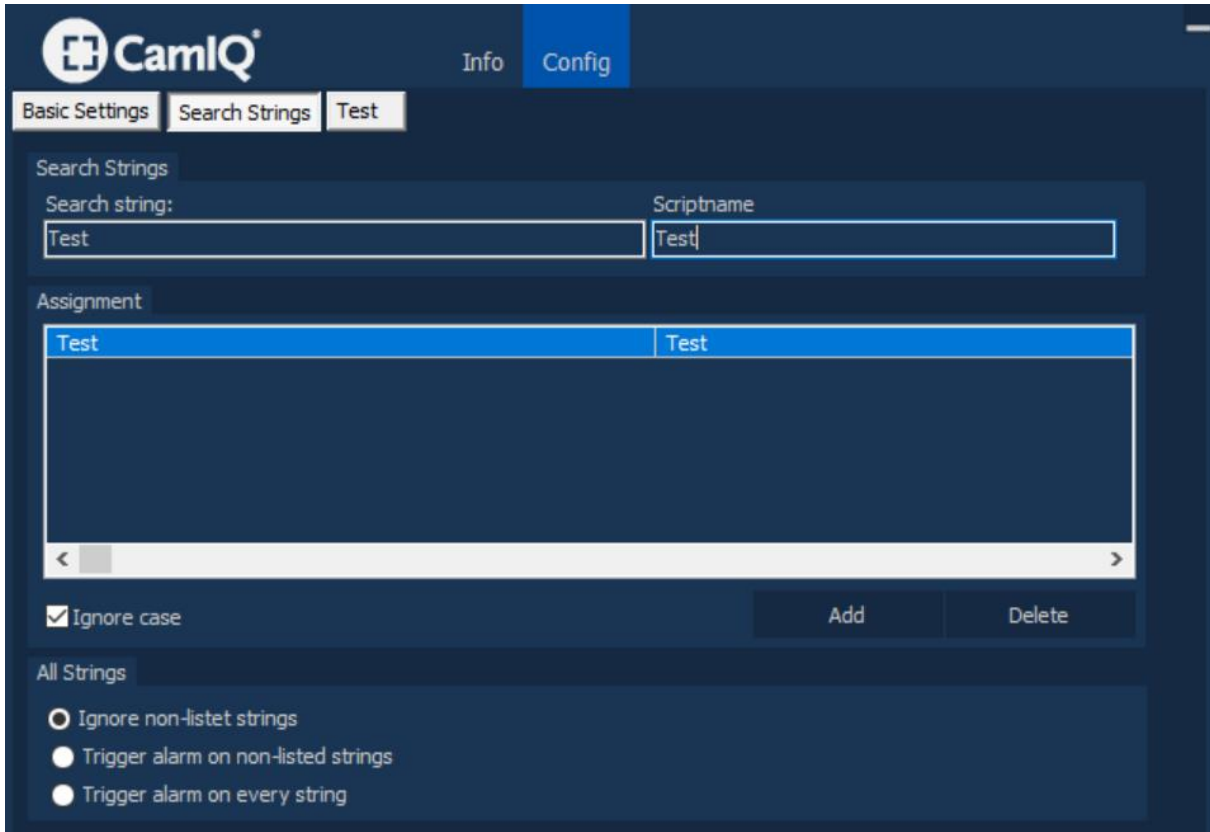
1. Basic Settings

First select the type of server.



2. Search Strings

Determine the incoming (received) strings in the "Search Strings" category.



- To add an alarm message, select the **Add** button. In **Search string**, add the alarm designation that will be sent from the third-party system.

Under **Scriptname**, enter the name of the script on your server. This script will be executed in response to the recognized string.

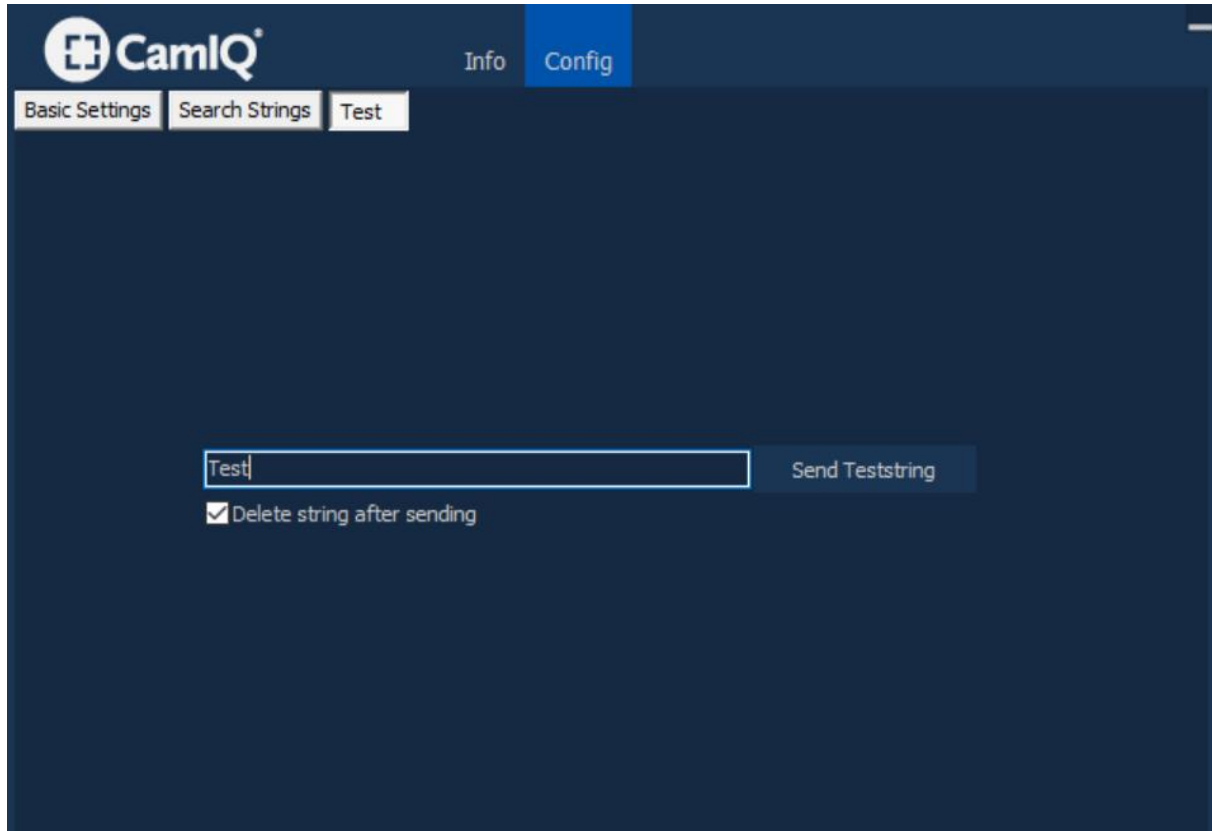
- In order to delete an entry again, select it and click on **Delete**. Activate **Ignore case** to override questions about the capitalization of initial letters.

How the module should react to non-listed messages, can be configured in the **All Strings** box:

- **Ignore non-listed strings:** Messages received that are not defined on the list will be ignored.
- **Trigger alarm on non-listed strings:** Enter a scriptname. This script will be executed for all incoming strings, which can not be found in the search string list.
- **Trigger alarm on every string:** An incoming message leads to execution of the specified script, independent of the Search string list.

3. Test

Test your configuration by entering a test string ("ExtAlarm1", for instance) in the text field and clicking on "Send Teststring".

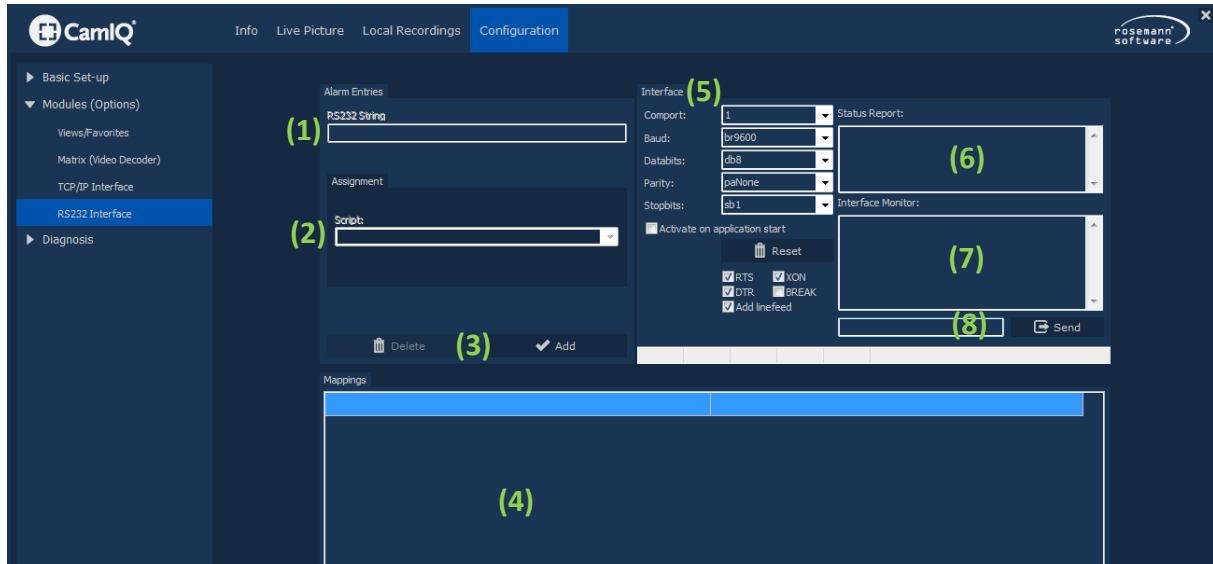


Please note: Select "Delete string after sending" if you wish to delete the string after you have sent the alarm to CamIQ 8.

Please note: To close the module, click with the right mouse key on the icon in the Windows taskbar (lower right in the screen) and select "Close" from the open menu.

3.4.6 CamIQ RS232 (API/SDK) Interface

The interface allows to trigger alarms in the CamIQ 8 Enterprise software by RS232 strings.



- In the field **RS232-String** (1) you can enter a string with max. 30 characters.
- You can associate this interface to a script. To do this, select a script from the **Script** (2) list.
- Click the button **Add** (3) for saving the configurations. A new entry will be added in the field **Assignment** (4).
- Click the button **Delete** (3), if you want to delete the current configurations.

The **interface** (5) can be configured individually:

- Choose the **COM-port** you want to configure. This can be a local COM-Port (COM 1-4) or a TCP/IP – RS232 converter. But the converter is just supported conditionally.
- Select the speed at which the communication is done from the list **Baudrate**.
- Configure the size of the data bits blocks in the list **Databits**.
- Configure the function **Parity** for making disturbances in communication visible.
- Choose the amount of Stopbits which follow every data bits block from the list **Stopbits**.
- Activate the function **Activate when started**, so that the interface will be started automatically when you start CamIQ 8 Enterprise.

- Configure the data flow by activating or deactivating the functions **RTS**, **XON**, **DTR**, **BREAK** and **Line Break**.
- Reset the settings by clicking on the button **Reset**.
- In the menu **Interface Monitor (7)** you can send RS232 strings via the **command line (8)**.

The feedback will be shown in the menu **Status Report (6)**.

3.5 DIAGNOSIS

3.5.1 Chart

In the menu **Chart** you can see the CPU usage of the CamIQ 8 Enterprise computer and how many pictures are transferred.



The **CPU Usage (1)** is shown in the upper diagram. A varying usage near 100% is no problem! But it shouldn't be stable at 100%.

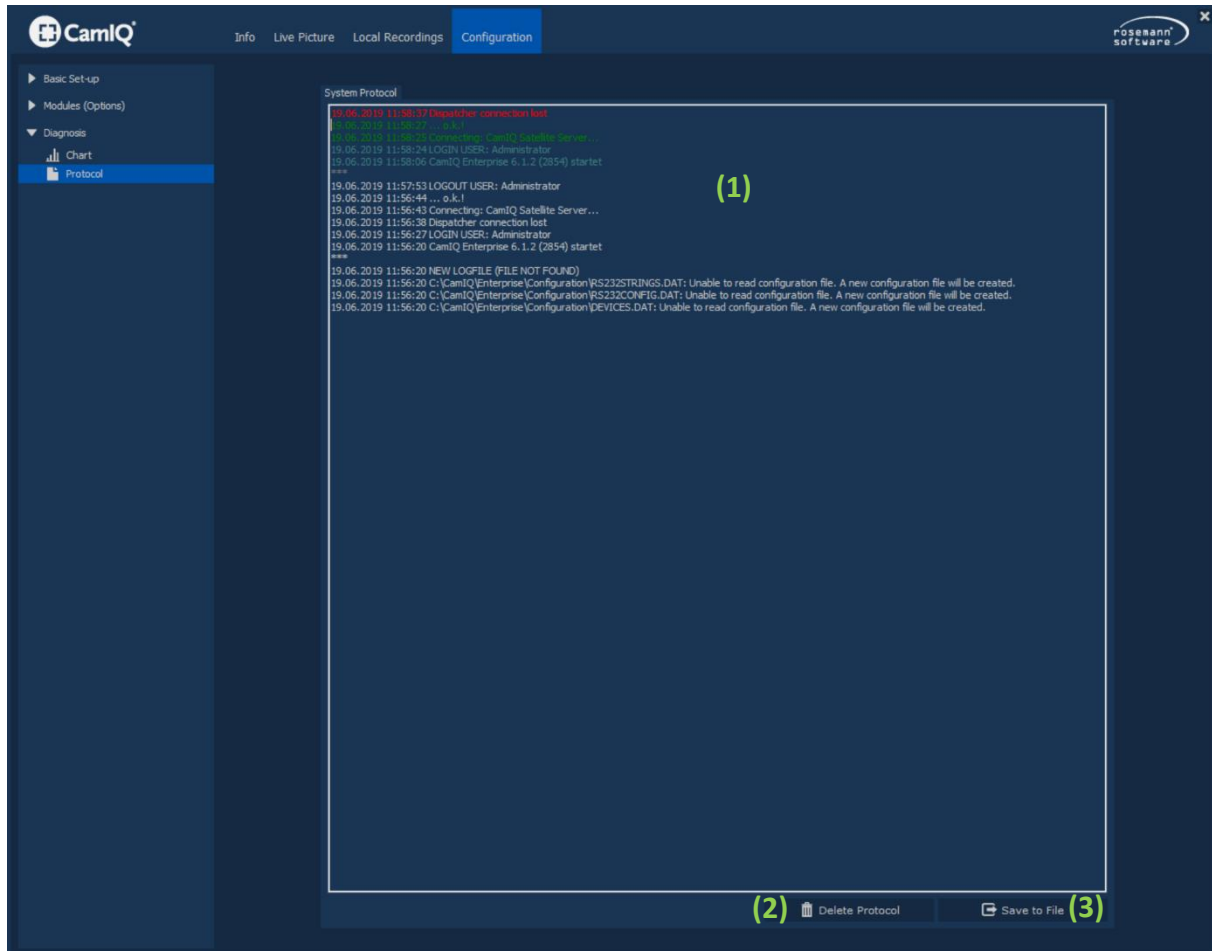
In this case you should check if your computer has enough computing power (see the System **Requirements** in chapter 1.1) and if other applications are running in the background which need too much computing power.

The lower diagram shows the **data flow (2)** of the single devices and how many **frames per second** are transmitted. When you move the mouse pointer over a bar the name of the device will be shown above.

- Activate the checkbox **Show fps (3)** to display the frames transmission. A yellow field will appear above every bar where you can see the FPS. Below this there are two more values. But they are displayed for service purposes only.

- If you wish an overview for every single camera just double click on a bar. Now all connected cameras are shown to you with their individual data.

3.5.2 Protocol



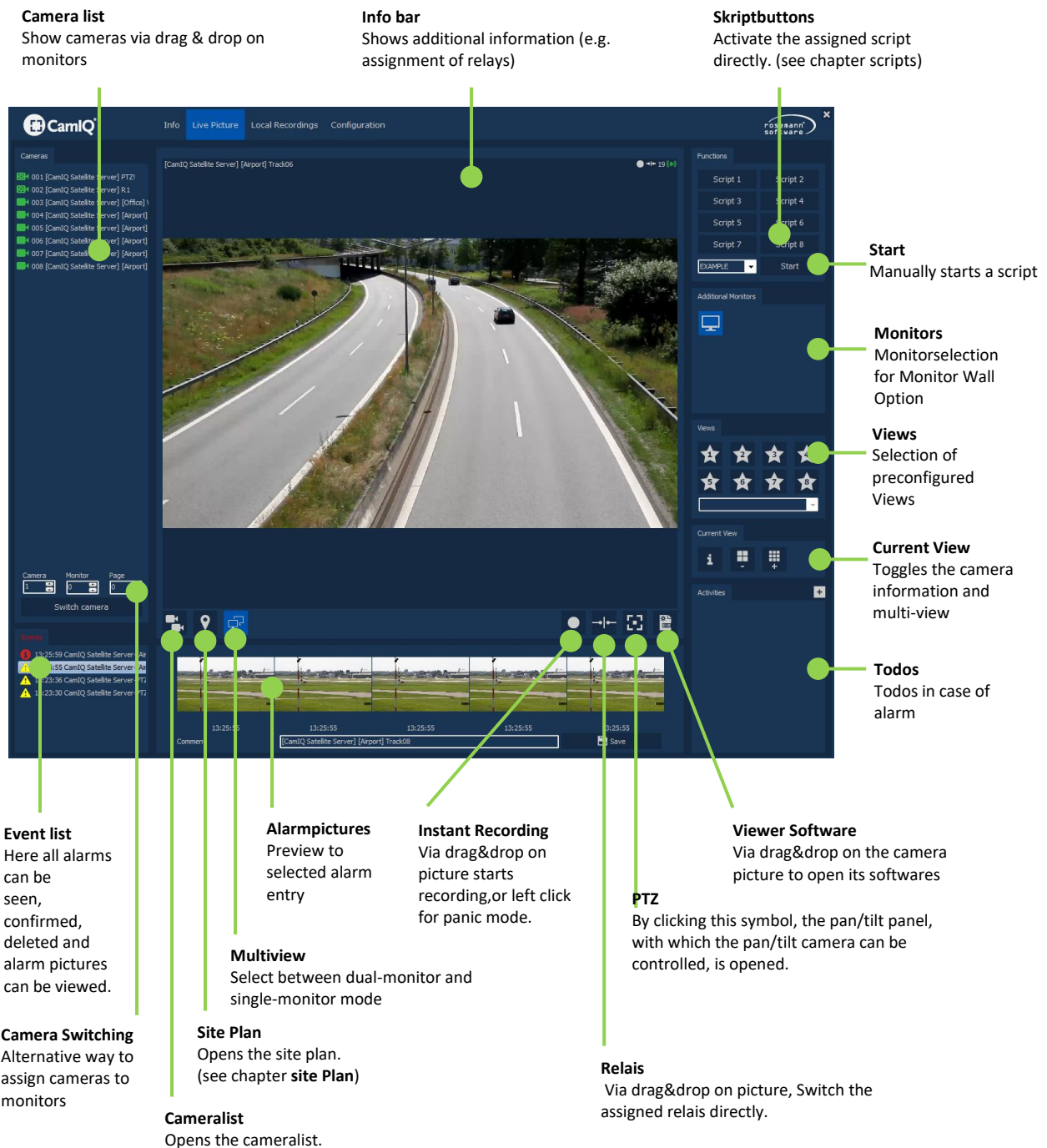
All incidents (e.g. logins, alarms, program starts) are documented in the **protocol (1)** of CamIQ 8 Enterprise.

- Use the button **Delete Protocol (2)** to delete the entire protocol. Keep in mind that this erasure will be documented!
- Use the button **Save to File (3)** to export the protocol as a *.rtf file. This way you can save the protocol on your system or a mobile storage media.

3.6 LIVE PICTURE

3.6.1 General Overview

The **Live Picture** is the user interface of CamIQ 8 Enterprise. It consists of many different parts which on the one hand offer operation possibilities and on the other hand provide information to the user. On the next pages all parts and their functions will be explained one by one. But first a general overview of the user interface:



Camera list
Show cameras via drag & drop on monitors

Info bar
Shows additional information (e.g. assignment of relays)

Skriptbuttons
Activate the assigned script directly. (see chapter scripts)

Start
Manually starts a script

Monitors
Monitorselection for Monitor Wall Option

Views
Selection of preconfigured Views

Current View
Toggles the camera information and multi-view

Todos
Todos in case of alarm

Event list
Here all alarms can be seen, confirmed, deleted and alarm pictures can be viewed.

Alarmpictures
Preview to selected alarm entry

Multiview
Select between dual-monitor and single-monitor mode

Site Plan
Opens the site plan. (see chapter **site Plan**)

Relais
Via drag&drop on picture, Switch the assigned relais directly.

Instant Recording
Via drag&drop on picture starts recording, or left click for panic mode.

Viewer Software
Via drag&drop on the camera picture to open its softwares

PTZ
By clicking this symbol, the pan/tilt panel, with which the pan/tilt camera can be controlled, is opened.





Camera Switching
Alternative way to assign cameras to monitors


Cameralist
Opens the cameralist.

3.6.2 Camera List

The **Camera List** shows all cameras that you can access. These cameras were configured in the menu **Devices (CamIQ Server)**.

The different **camera symbols** have the following meanings:

-  - camera is accessible
-  - camera is a PTZ camera
-  - camera's alarm processing is temporarily deactivated
-  - camera is not working! Please check the camera or the connected device.

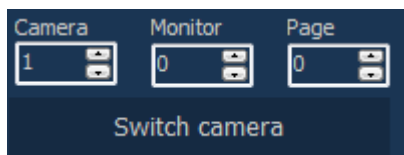
- You can see a **camera picture** by clicking on the camera symbol and then moving it via drag & drop to a monitor. The camera picture will then be shown on the monitor.
- You can enable the **temporary deactivation of alarm processing** not only in the configuration menu **Devices (CamIQ Server)**, but also by performing a right click on the desired camera. A little popup menu will appear where you can choose to enable or to disable the **temporary deactivation**.
If **temporary deactivation** is enabled, the camera symbol will change to  and the camera won't send any alarms to CamIQ 8 Enterprise anymore.
The alarm processing of the connected device itself continues as usual. But there is no notification about this in CamIQ 8 Enterprise.

That a camera shows **no picture** can happen because of two reasons:

1. The user wants to see a picture from a camera he has no rights for (see configuration menu **User Rights**). In this case there will be a blue screen instead showing the message **"- access denied -"**.
2. The camera sends no video signal to CamIQ 8 Enterprise anymore. Either the connection to the device got cancelled or the camera itself is broken. In this case there will be a blue screen instead showing the message **"- no signal -"**.

3.6.3 Displaying Cameras

As an alternative to the camera switching possibility described above, you can also use this small console.







- First select a camera from the camera list in the **Camera** field. The number corresponds to the number displayed in front of the camera name. If no number is visible, it can be activated in the **Miscellaneous** menu (see Chapter 3.3.11).
- Then select a monitor. Monitor 1 is always upper left, Monitor 2 next to it, etc.
- Finally, select a page. Pages are only available using the CamIQ Monitor Wall option which provides titles (designations) to additionally connected screens. Without the CamIQ Monitor Wall option, only page 0 is available.
- Then just click on **Display**.

3.6.4 Event List

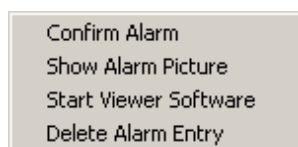
In the **Event List** all incoming alarm events are listed with their camera names and time. The actual alarm is always in position one.

Four symbols are used in the alarm list:

-  Alarm that is not acknowledged yet with available alarm pictures
-  Alarm that is already acknowledged with available alarm pictures
-  The device is no longer accessible.
-  The device is no longer accessible, this message was already confirmed.

When an alarm occurs it will on the one hand be listed in the **Event List** and on the other hand the picture of that cameras gains a red border.

- You can see the picture of the alarm camera by moving the camera symbol from the **Event List** to the desired monitor via Drag & Drop.
- Do a right click on an alarm to open the **alarm popup menu**:



- Click on **Confirm Alarm** or do a left click on the alarm entry to **acknowledge the alarm**. The alarm symbol will turn grey and the red border around the camera picture will disappear.
- Click on **Show Alarm Picture** to view the five pictures that caused the alarm.
Move the mouse pointer on one of the little pictures and it will be shown above in original size.
In the text field **Comment** you can enter a comment for the RSV Player and then click on the button **Save** to save this three-picture-recording in the folder of your local recordings.



- Click on **Start Viewer Software** to **open the viewer software** of the camera. You are logged in the device with the login data you have entered in the configuration menu **Devices (CamIQ Server)**. There you can see the recording of the alarm for example.
- Click on **Delete Alarm Entry** or do a double click on the alarm to **delete** it from the **alarm list**.
According to your adjustments in the configuration menu **Alarm Output** it may happen that a message window will appear and asks you to **approve the erasure of the alarm**.
In this case click on the button **OK** to delete the alarm.
- Click on **Send Alarm E-Mail** in order to send the alarm as an e-mail according to the configuration in the **Message Transmission** menu.

3.6.5 Info Task Bar

If you hover the mouse pointer over the various items of the **Live Image** control element, various pieces of information become visible in the gray bar over Live Image - information concerning a script currently being executed, for instance.

3.6.6 Script Buttons

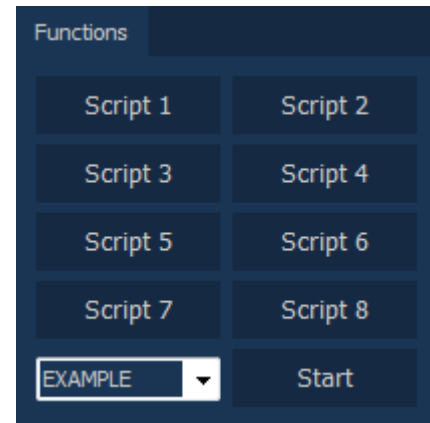
These eight **Script Buttons** offer the advantage that they are always available and can be operated by a single mouse click. You have associated these buttons to scripts in the **Miscellaneous** configuration menu (see Chapter 3.3.11).

- Do a left click on the relay button you want to operate.

The operation mode of the relay has to be configured in the menu **Devices (CamIQ Server)** in the configuration of the adapted camera.

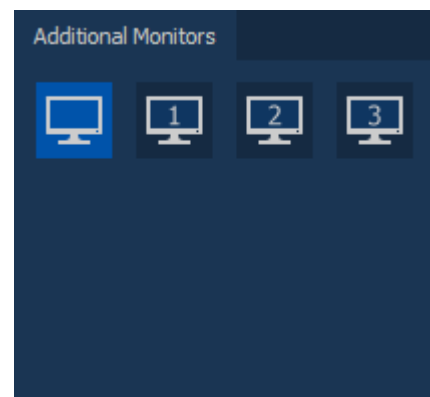
- Move the mouse pointer above a Script button. The assignment of the button will be shown in the **info bar** (above the camera picture).

Please note: More information about scripts is available in Chapter 3.3.11.



3.6.7 Monitors

The monitor symbols displayed here represent the screens otherwise referred to as **Pages** by the software and the scripts. In the basic version of CamIQ 8 Enterprise, this operating element is meaningless. This, however, changes dramatically once the CamIQ Monitor Wall option is in use. For this reason, this operating item is covered more thoroughly in the chapter



CAMIQ MONITOR WALL.

3.6.8 Views

You can configure various views in the **Views/Favorites** menu (see Chapter 3.4.1). They can be opened using these buttons.

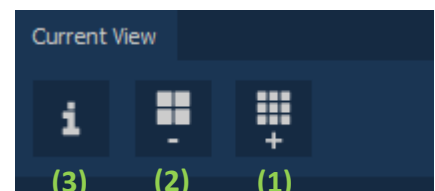
- You can open views that you have added to Favorites with a simple click on symbols 1 through 8.
- You can open all other views having the **Display in Main Screen** option activated by choosing them from the selection list. To do this, open the list and click on the desired entry. Now you have access to the selection list and can use drag & drop to pull a selected view into the desired monitor.



3.6.9 Current Views

This view allows you to modify the multi-view in the second monitor.

- Click on the button **(1)** to display more monitors.
- Click on the button **(2)** in order to display fewer monitors.
- With the **Camera Information (3)** button you can add or remove both the name and the **Expanded Titel Bar** for the cameras displayed. Please note that the **Camera Information** will be placed above the top of the image and that the upper border of the image will not be visible.
- Click with the left mouse key on the **Camera Information** button to activate or deactivate this bar.



Without Camera Information

With Camera Information



A part of **Camera Information** is the **Expanded Titel Bar**. These are buttons and status displays that enable you to have quick access to every individual camera's information and functions.


3.6.10 Monitor Symbols

Which symbols will be appear in the camera info can be configured in the configuration menu **Miscellaneous**.

The following symbols can be shown:





Instant Recording:

Clicking on this button starts an **Instant Recording**. As long as the recording is active, the button will turn into .



Relays:

Click on this button to switch the relay which is assigned to the camera. If the relay is released the symbol will look like this . When the relay is holding at the moment the button will look like this .

Note: Some devices (e.g. AXIS) don't give a feedback about the actual state of the relays. That's why CamIQ 8 Enterprise can only display the last state caused by a user. This doesn't need to be the real one.








PTZ Panel:

Clicking on this button will open the **PTZ Panel** that can control PTZ cameras. Of course the panel is only accessible if the actual camera is a PTZ camera.



Sequences:

If a monitor is configured to show a **Sequence** (see configuration menu **Sequences**) it can be started by clicking on this button. The symbol will turn into  and the sequence can be stopped by it. Besides that there are also the symbols  and .

Use the button  to go to the next camera of the **Sequence** and the button  to go the last camera.



Automatic Recording:


The symbol for **Automatic Recording** is a button for activating and deactivating this function and an index. It shows that the monitor has been configured in the menu **Miscellaneous** for **Automatic Recording**. As long as the recording is active the symbol will look like this .

Image Update Display: This includes several pieces of information. The number in the middle shows the current image rate of the live image. The number's color provides information about the type of live image:

Gray: Streaming (H.264/MP4 from the streaming server) – recommended
 Orange: Polling (motion JPEG directly from the camera)
 Red: No image updates

3.6.11 PTZ Panel



In the **Live picture** you can steer PTZ cameras with the **PTZ Panel**.

Note: If you want to steer the **Tracking Camera** you have to disable the checkbox **Auto Tracking** first! After 1-2 seconds you can steer the PTZ camera.

You have to wait these 1-2 seconds, because after the deactivation has to confirm to CamIQ 8 Enterprise.


This deactivation also has to be done when you want to steer the PTZ camera via joystick.

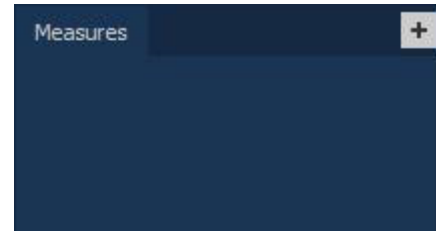
- To steer the PTZ camera click with the left mouse button into the grey square in the middle of the cross and hold it.
Now move the mouse pointer inside the steering field. Note that the farther away the grey square is from the centre of the steering field, the faster the camera will move.
If you use an analogue joystick the camera will move faster when you press the stick stronger to one direction.
- **Zoom** near and far by clicking the buttons + and –.
- Use the buttons + and – to **focus**. But you can also use the button **Auto** to let the objective focus itself.
- Click on "Focus" to switch control to the "Iris" settings.
- Use the buttons **1, 2, 3, 4, 5, 6, 7** and **8** to let the camera move to preset positions. You can define the positions for each camera in the configuration of its viewing software. You can't define any positions in CamIQ 8 Enterprise.
- Close the **PTZ Panel** by clicking on the button **X**.



3.6.12 Measures

The **Measures** field displays the pre-set immediate actions to be taken in the case of an alarm, as well as further information. The field's content corresponds to the content in the text file that you have created in the **Devices (CamIQ Server)** menu.

Click on the  button to open the Measures window. This allows you to view the full text should the content comprising the measures to be taken be too large for the small **Measures** field.



3.6.13 Camera List



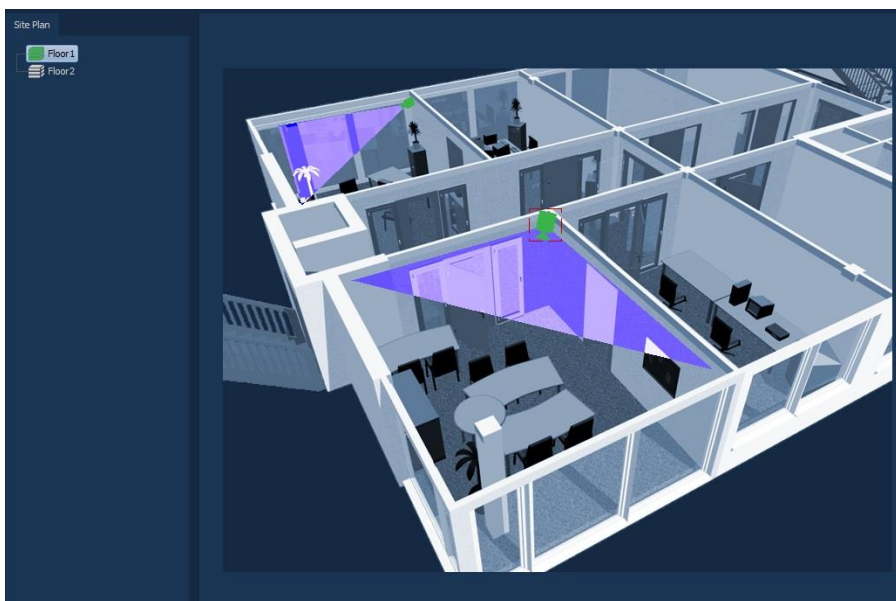
Click on the button **Camera List** to open the camera list. You can leave the **Management Site Plan** view this way. The functions of the Camera List can be found in the chapter 3.6.2.

3.6.14 Site Plan



The **Site Plan** allows an overview and operation of the entire object. It offers a visual overview of all cameras, sensors and actors. When an alarm occurs you can identify immediately where it comes from and react to it.

Open the **Site Plan** by clicking on the button **Site Plan**.



- On the left side you can find the **Layer List**. There are all layers which you have configured in the menu **Site Plan** (see chapter 3.3.3) before. Click on a layer to display it in the centre of the screen.
- Move the mouse pointer over an icon of the site plan. The name of the device will be shown in the **Info Bar**. In addition to that a small **yellow message** will appear which provides further information.
- You can **display a camera picture** from the site plan. Simply move a camera icon via Drag & Drop to a monitor.
- You can also **switch a Relay in the Site Plan**. Simply do a double click on a relay icon. The relay switches according to its configuration in the menu **Devices (CamIQ Server)**.
- Additionally you can double-click and run a **script** that has been saved in the site plan.
- When an **alarm** occurs the viewing angle of the alarm camera changes the colour according to your adjustments in the configuration menu **Site Plan**. You can immediately see which camera has sent the alarm.
- When a camera **loses its signal** the icon of the camera changes according to your adjustments.
- If an alarm is **caused by a sensor (alarm input)** the sensor icon will change according to your configuration.

3.6.15 Instant Recording



The button **Instant Recording** enables you to start the recording of one camera or the parallel recording of all visible cameras with only one mouse click (panic mode).

How the button works must be defined in the configuration menu **Miscellaneous**.

- If the **Panic Mode** is activated do a left click on the button **Instant Recording**. All visible cameras will be recorded according to their configuration.
- Otherwise place the button **Instant Recording** via Drag & Drop on the camera picture you want to record.

3.6.16 Relay



Use the button **Relay** to operate the relay of every camera.

- You can operate a relay by placing the button **Relay** via Drag & Drop on a camera picture. The operation mode of the relay can be defined in the configuration menu **Devices (CamIQ Server)**.

3.6.17 Viewing Software



Use the button **Viewing Software** to start the **Software** of the selected device.

- Place the button **Viewing Software** via Drag & Drop on the camera picture. The **Software** of the device the camera belongs to will open and you are logged in with the login data you have entered in the menu **Devices (CamIQ Server)**.

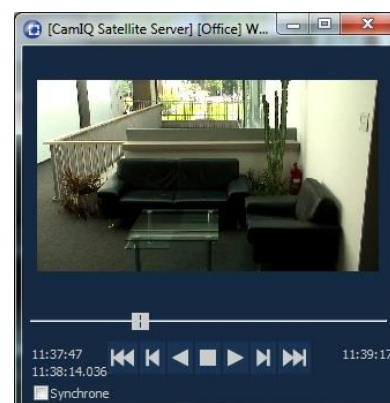
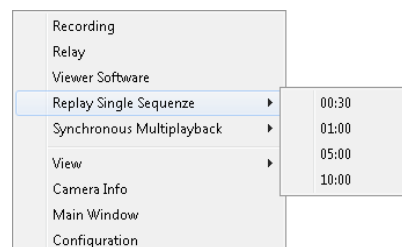
3.6.18 PopUp Menu

Extensive sections of the software can be operated using a pop-up menu. This is especially useful when you operate CamIQ 8 Enterprise with only one monitor.

- Open** the pop-up menu by clicking onto the multi-view screen with the right mouse key.
- If you want to start a camera for an **instant recording**, switch a **relay**, or execute the corresponding **viewer software**, first right click to open the pop-up menu in the image of the desired camera and then select the corresponding buttons.
- You can also play back a simple sequence from the camera in the monitor you right clicked on. A view opens from which you can select how far back the sequence should run.

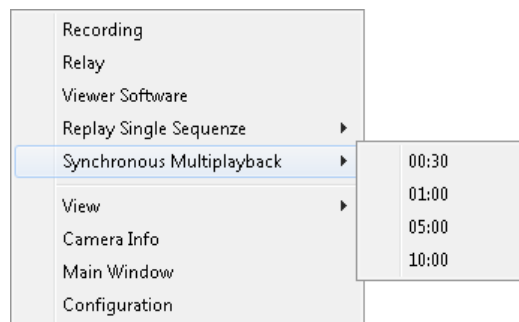
A small player window will open which you can move freely and resize on the user interface.

If you place a check in the "Multi-Playback" checkbox, the recording time of every other open sequence will become synchronized to yours. Each sequence will display the same point in time.



To close a player window, simply click on the X in the upper right.

- The "Synchronous Multi-Playback" option will open a synchronized individual sequence for each switched monitor.
- Activate or deactivate the **Camera Information** by clicking on the corresponding button.
- You can switch between the **Live Image (Main Screen)** and the **Configuration Menu** by clicking on the corresponding button in the pop-up menu.
- You can **Display a Camera** by right clicking on the monitor in which the camera signal should be displayed. Subsequently use the mouse pointer to select the device and then click on the desired camera.



3.6.19 Multi View



With the multi-view button, you can toggle between the “dual-monitor” and “single-monitor” mode. If you select this button the second monitor is deactivated and displayed in your main screen. You can operate this monitor as usual. A further click on the button toggles back to the usual dual-monitor mode.

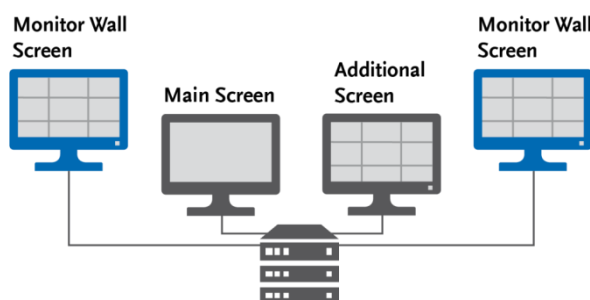
3.7 CAMIQ MONITOR WALL

CamIQ 8 Enterprise offers the possibility of operating more than just two screens. Up to seven monitors can be used, whereby one of these will serve as the main screen with the operating menus. The second screen serves - like before – as the main screen and additional screen. Ultimately, up to 21 additional matrix screens can be used purely as Monitor Wall screens.

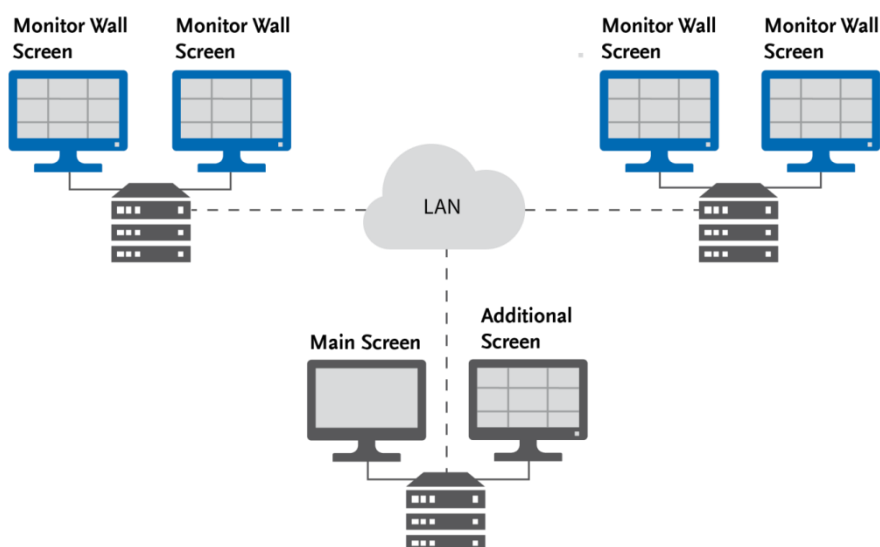
Monitors that are to be used as a part of the CamIQ Monitor Wall must be connected to a PC. PCs do not normally have more than two monitor outlets, which is perfectly adequate for the normal operation of CamIQ 8 Enterprise. So, in order to connect the additional CamIQ Monitor Wall screens you will either need an additional PC that also has the appropriate monitor outlets or more outlets on the existing CamIQ 8 Enterprise PC. In the meantime, it is possible to install and use a second video card with two additional connections or even a single video card with four monitor outlets.

Here is a description of possible system configurations:

One PC with a video card offering four monitor connections



Three PCs, each with a video card offering two monitor connections



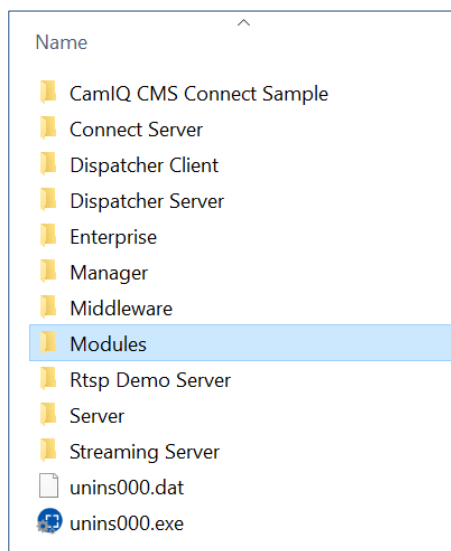
3.7.1 Installation

In order to use the CamIQ Monitor Wall, you must first acquire and activate a CamIQ Monitor Wall licence (see Chapter 3.3.9). The number of monitors you wish to use is immaterial as the licence must be registered only once.

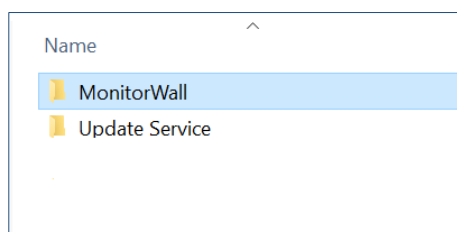
In order for Monitor Wall clients to connect to CamIQ 8 Enterprise, it is necessary to open the **TCP/IP Interface** menu (see Chapter 3.4.4) and first activate the interface there while also entering a user name and a password.

Thereafter, each PC that will be operating a CamIQ Monitor Wall screen must have the module installed on it. This module must be installed one time for each individual monitor. In other words, the following steps must be carried out four times for a PC to which four monitors are connected. The following steps are not necessary for the operation of the main and additional screen, they function as is. They refer strictly to the CamIQ Monitor Wall screens.

- Open the software installation directory. This is normally found under the C:\Programs path.
- Open the **Modules** directory.



- You will find there the **MonitorWall** directory.

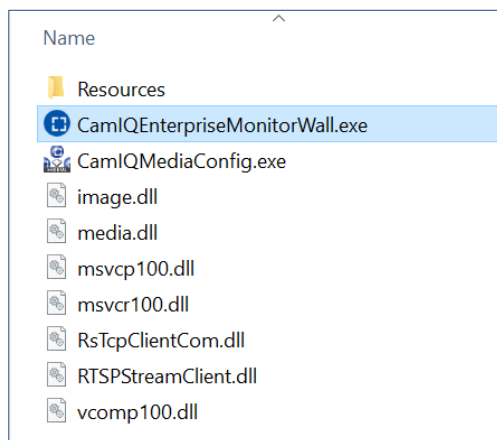


- Make a copy of the **MonitorWall** directory.

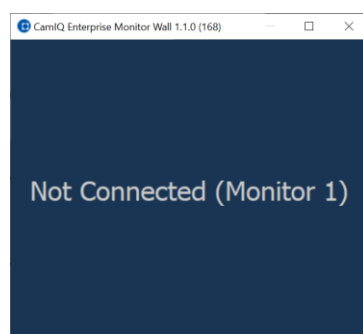
If you plan to use additional CamIQ Monitor Wall screens on the CamIQ 8 Enterprise PC, place the copy somewhere on this PC.

If, however, you plan to use other PCs as connection points for the CamIQ Monitor Wall screens, store your copy on a portable data medium and then on the hard drive of the respective PC or PCs.

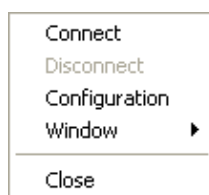
- For every CamIQ Monitor Wall screen that you wish to install on a given PC, you will need one directory copy. If you will be using a PC to which two CamIQ Monitor Wall screens will be connected, for instance, and then you would create one copy of the directory with the name **MonitorWall_1** and a second copy of the directory with the name **MonitorWall_2**. The name you choose for the directories is up to you as it has no influence on functionality.



- After enough directory copies have been created, they must then be configured. Open the first directory and execute the **CamIQEnterpriseMonitorWall.exe** file.
- The CamIQ Monitor Wall client will open. At first you will see a large gray screen indicating that no connection could be made. This is to be expected.



- Right click to open the CamIQ Monitor Wall client's pop-up menu.

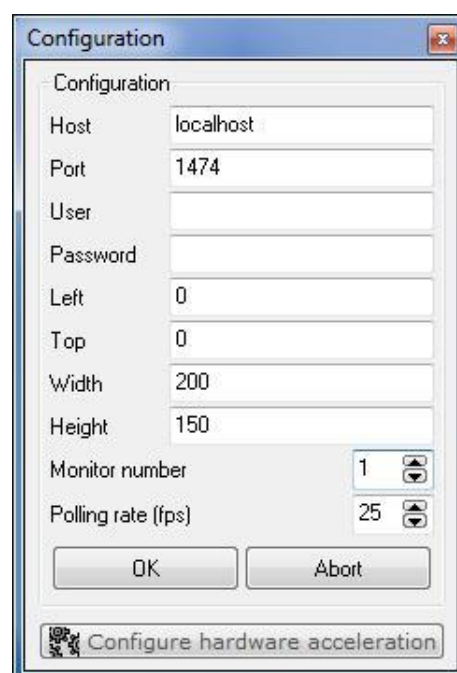


- Select **Configuration**. Should this item not be available, it will be because the client is now trying to connect to CamIQ 8 Enterprise. In this case, first click on **Disconnect** in order to break off this connection attempt. Thereafter you will be able to open **Configuration** with the pop-up menu.
- When the small configuration menu opens, please enter the IP address of the PC in the **Host** field. Then you can enter the **Port** information over which the communication should take place. This setting must match the port setting entered in the **TCP/IP Interface** menu.

Please note: Should connection problems occur - and before calling hotline support - please make sure that the port entered is not being blocked by the PC's firewall or through the network.

Enter a user name and password in the **User** and **Password** fields. These entries must match those entered previously in the **TCP/IP Interface** menu.

Equally important is the **Monitor number**. Here is where you will enter which of the 21 possible CamIQ Monitor Wall screens is to be displayed with this PC. The first monitor receives the number 1, the second receives the number 2, etc.



As already noted, this configuration process must be made for each directory copy. The configuration fields will all have the same entries concerning the Control PC, only the **Monitor number** will be different for each directory. If you enter the same number twice, you will see the same image twice. If this is so desired then this configuration is fine. Generally, however, the preferred configuration is to allow for as many independent monitor views as possible; this will require a different monitor number for each directory.

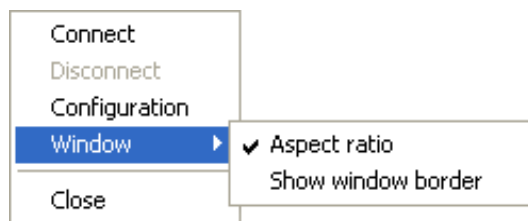
Finally, you can enter the **Polling rate**. This indicates the maximum number of images per second this CamIQ Monitor Wall client can call from CamIQ 8 Enterprise. If you want to save bandwidth in a network you should set this value lower.

When finished, click on **OK** to apply the configuration.

- You will now find yourself back at that empty gray screen. Right click once more and – this time - select **Connect** from the pop-up menu. The client will now attempt to open a connection to CamIQ 8 Enterprise.

Please note: A connection can only be made when, on the one hand, CamIQ 8 Enterprise has been started and a user is logged in and, on the other hand, firewalls or similar software do not block the port to be used.

- You will be able to see the first live images as soon as a connection has been made. The CamIQ Monitor Wall will also now be visible in the **Monitors** field of the CamIQ 8 Enterprise user interface.
- The pop-up menu also offers you the possibility of opening the CamIQ Monitor Wall client either in full screen mode or in a program window that can be moved and resized as desired.

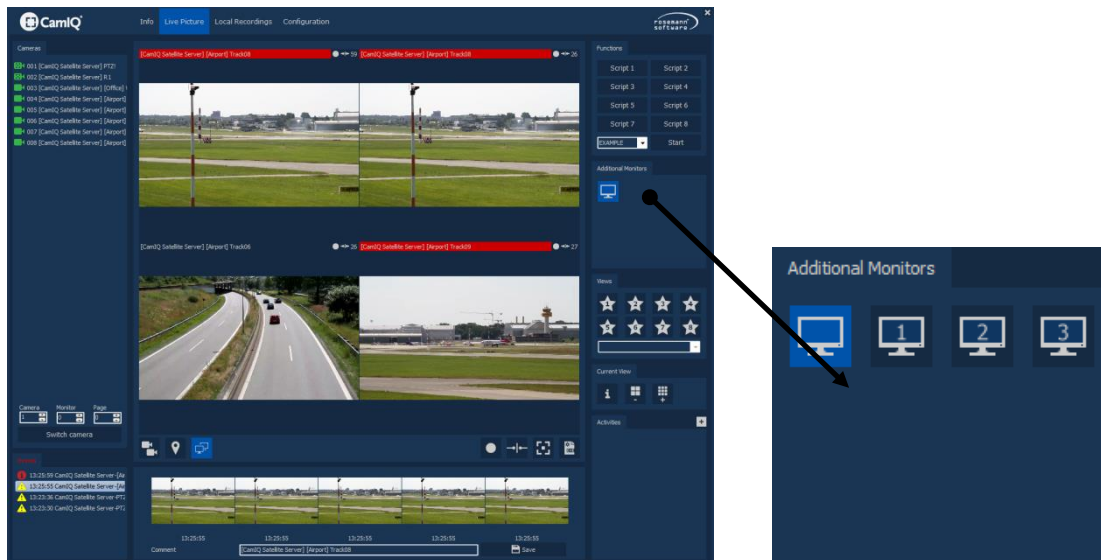


- Activate the **Aspect Ratio** button so that the video images retain their aspect ratio whenever the size of the client window is changed. With the **Show window border** button you can determine if the program window border around the client should be visible or not. This function must be activated if you want to change the size of the window.

Make these configuration changes for every directory copy and CamIQ Monitor Wall screen. As you do this, the CamIQ Monitor Wall screens will slowly begin to fill up **Live Image** and they can then be operated.

3.7.2 Operation

Once the CamIQ Monitor Wall has been installed and activated, the operating possibilities of Control change in **Live Image**. You now have access to all activated CamIQ Monitor Wall screens from the main screen.

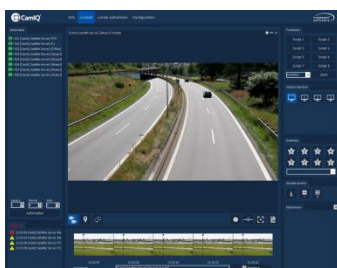


The **Monitors** field will display all the monitors to which you have access. Normally you only have access to the screen on the upper left, without a number. This is the working and video screen. But when the CamIQ Monitor Wall is in use, all connected clients appear here as well. The number seen in this graphic corresponds to the **Monitor number** you previously entered in the CamIQ Monitor Wall client configurations.

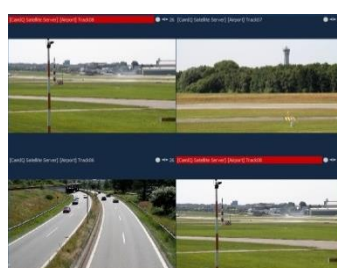
As described in Chapter 3.6, you can adjust the image display in CamIQ 8 Enterprise completely as you wish. You can determine how many camera signals on one screen should be displayed, which cameras these should be and which predefined views you wish to use. All of this can be carried out now with the matrix monitors as well.

CamIQ 8 Enterprise offers three types of monitors:

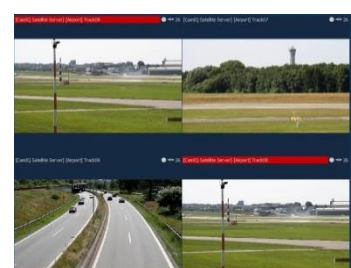
1. Main Screen



2. Additional Screen

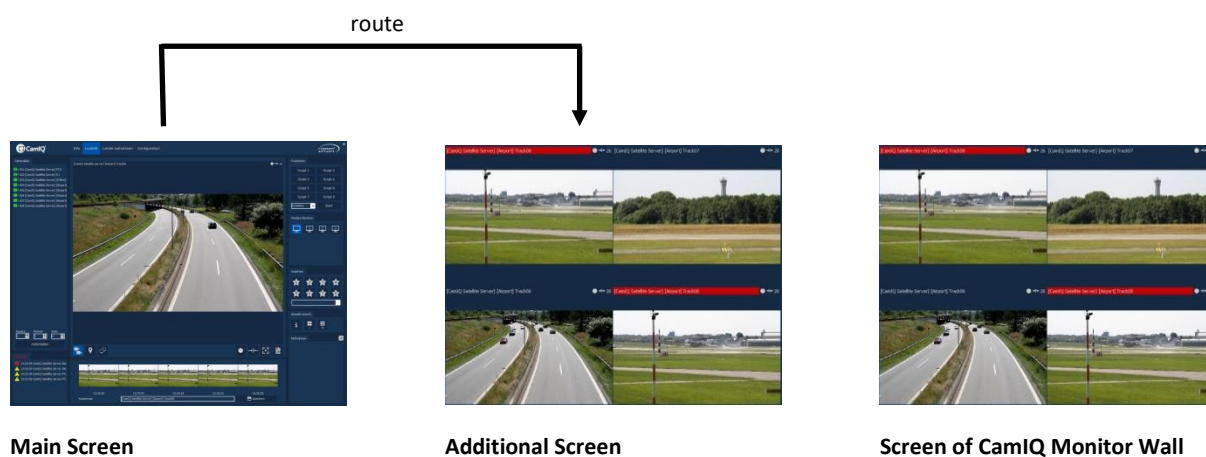


3. Screen of CamIQ Monitor Wall

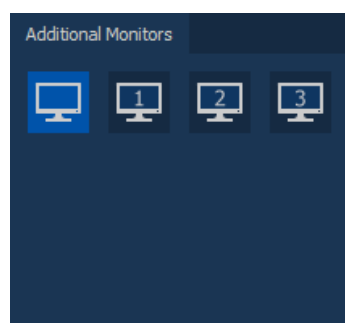


CamIQ 8.0

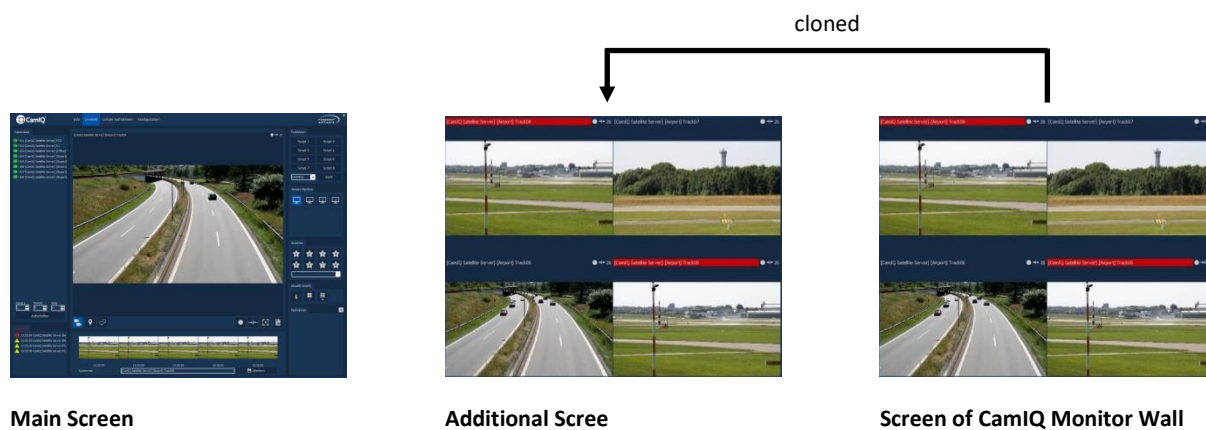
There are two working monitors: One that has all of the menu interfaces (Main Screen) and one that only displays video images (Additional Screen). All of the buttons and functions used on the main screen only affect the additional screen. Any other CamIQ Monitor Wall screens that may have been installed will not be affected by this - for now.



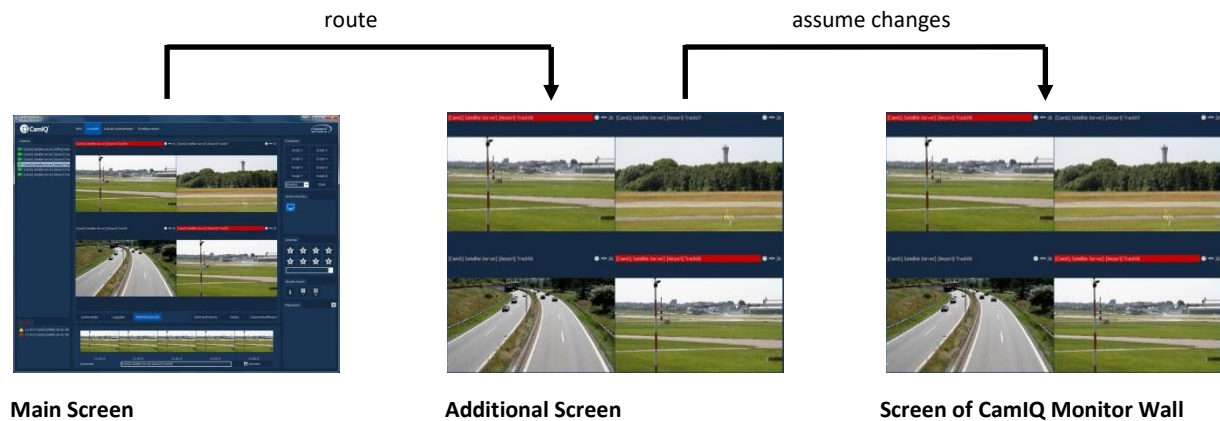
When wanting to work on one of the CamIQ Monitor Wall screens, it must first be selected from the **Monitors** field.



By doing so the CamIQ Monitor screen will be cloned into the additional screen.



Now the view can be altered as desired. You can manually change the view and the cameras or you can also use preconfigured views. All of the functions described in Chapter 3.6 are available. From now on, every change made at the additional screen will also be applied to the Screen of CamIQ Monitor Wall and will immediately become visible there.



Once the monitor has been configured as desired, you can click once again on the icon without a number in the **Monitors** field thus switching the display back to the working and video screen.



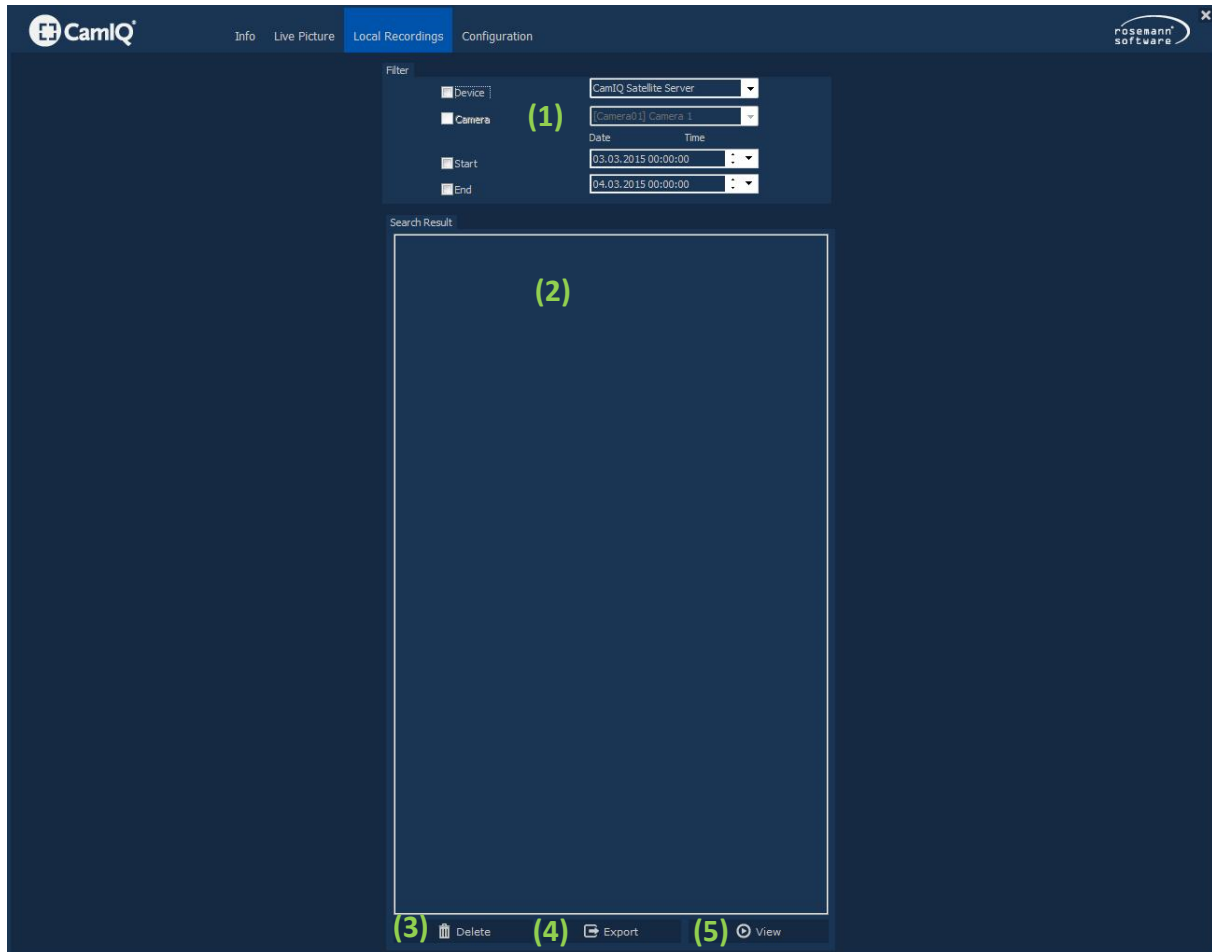
Please note: Although the CamIQ Monitor Wall screens are connected to a PC to which input devices like a keyboard and a mouse are also attached, it is not possible to alter the view or the display of the video signals here. This can only be done at the CamIQ 8 Enterprise PC!

Note: You can also activate the hardware-supported decoding of live images in the CamIQ Monitor Wall. You can find more detailed information concerning hardware acceleration in Chapter **Fehler! Verweisquelle konnte nicht gefunden werden.**

3.8 RECORDING

3.8.1 Local Recordings

In the menu **Local Recordings** you can organize the recordings that were saved on your CamIQ 8 Enterprise computer.



In the field **Search Results (2)** all recordings are shown to you that are saved in the folder for **Local Recordings**.

You can change this folder in the configuration menu **Miscellaneous**.

Use the menu **Filter (1)** to narrow the range of displayed recordings by defining filters.

- Furthermore you can select a **Device**. As a result CamIQ 8 Enterprise will only display recordings of one device.
- If you have set the filter **Device** you can also activate the filter **Camera** by clicking on its checkbox. Now you can see recordings of a specific camera only.

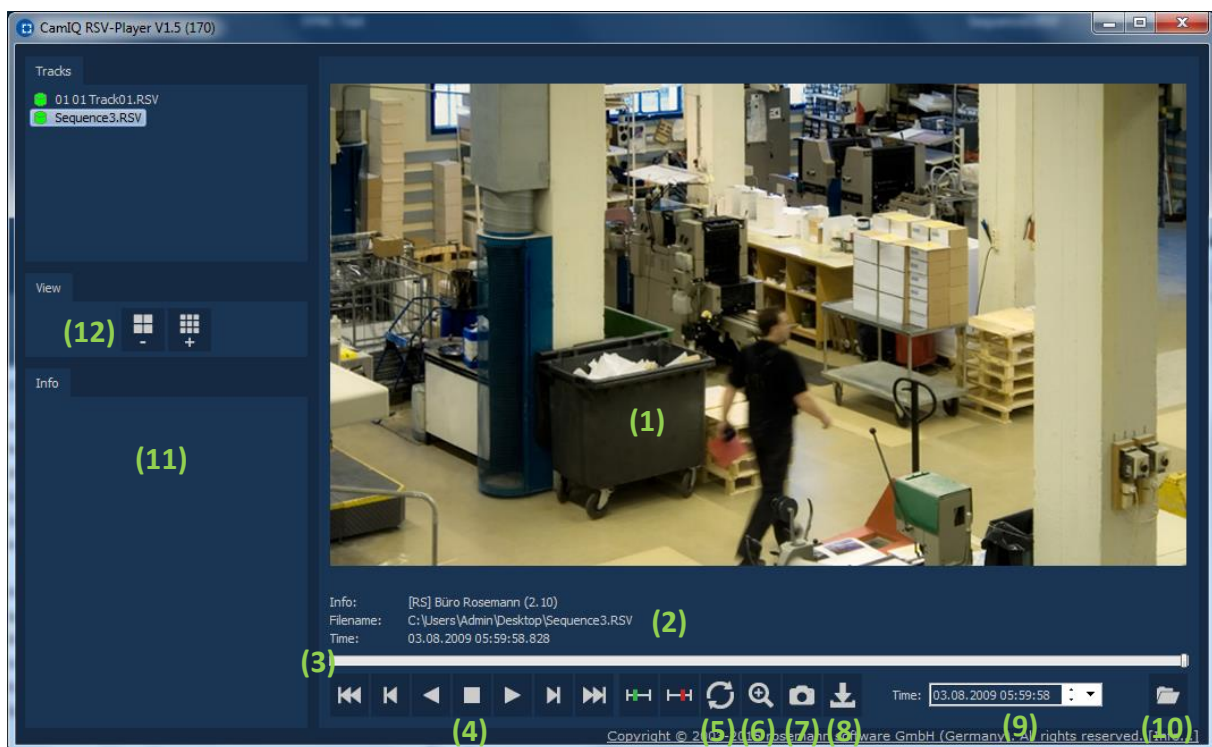
- You can define a time when the showing of recordings shall start by activating the checkbox **Start** and then enter **Date** and **Time**.
- In addition to that you can define a time when the showing of recordings shall end by activating the checkbox **End** and then enter **Date** and **Time**.

Whenever you activate a filter the new selection of recordings will automatically be shown in the field **Search Results (2)**. You can mark them via mouse click.

- Use the button **Delete (3)** to remove the selected recording from your system. It is then irretrievably lost.
- Use the button **Export (4)** to save the selected recording in another folder or on another storage media. The recording will be saved in the protected **RSV Format** together with the **RSV Player**. In this way, one can write the recording to mobile memory media, for instance, and play it on other computers.
- Click on the button **View (5)** to open the **RSV Player** and play the recording.

3.8.2 RSV Player

With the RSV Player you can play the recordings that were recorded on the CamIQ 8 Enterprise computer.



- The recorded image can be seen in section (1).
- Sequence information is displayed under item (2):
 - **Information:** The name of the track
 - **File Name:** The path and the file name of the file being displayed
 - **Time:** Time and date of the current image
- You can navigate within the sequence with the help of the slider (3) by clicking on the gray vertical bar and moving the mouse pointer left or right while holding down on the mouse key. In section (4) there are other buttons with which the sequence can be controlled (from left to right):



Jump to the first image of the sequence

One image backward

Play backward (click repeatedly to increase the speed)

Stop the playback



Play forward (click repeatedly to increase the speed)

One image forward

Jump to the last image of the sequence

- When the repeat button (5) is active, the open sequence will automatically repeat in a loop.
- The magnifying glass symbol (6) allows marked clip images to be enlarged in the display. After you have activated this button, the mouse pointer changes into a small crosshairs symbol. You can now select a clip from the camera image by clicking on it and moving the mouse with the button held down. A square frame appears. When you let go of the mouse button, the image cutout will now be seen in full-screen view. With a right-click of the mouse, you can return to the normal view.

With this button (7) you can swap the current graphic to the hard drive or to a mobile storage medium.

- A window opens in which you can enter a location and a file name under which the file will be saved.
- Use the starting time (t1)  and stopping time (t2)  button to mark an area in the sequence. Then click on the "Export" button.
- Use the "Export" button (8) to make a copy of the .RSV file that was selected beforehand to create a copy in the unprotected .AVI format. This copy can then be played by ordinary player programs (Windows Media Player, for instance).
- Using the button (9) allows you to set a date and time to which the sequence will jump directly.

- With the open symbol **(10)** you can open another sequence to be played.
- In this area **(11)** you can see the export information concerning the swapped sequence/s.
- Use the Views button **(12)** to increase or decrease the number of displayed video images.

4 NOTES