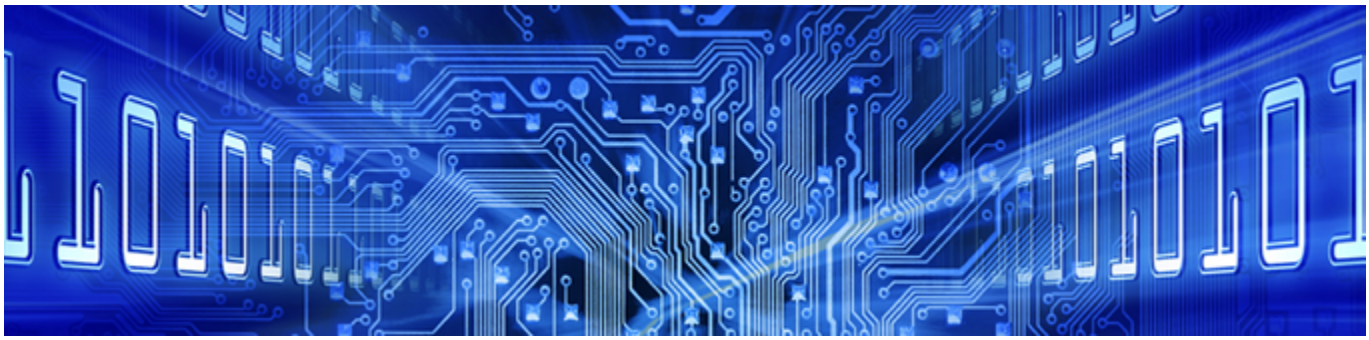
# CamIQ® API/SDK



**The CamIQ API/SDK interface lets developers conveniently add their own functions to the CamIQ net and integrate the CamIQ net into other systems.**

The CamIQ API/SDK interface gives you as developer a powerful programming interface for the CamIQ net.

This interface is based on TCP/IP as transmission medium. The interface lets you use numerous functions of the CamIQ applications / modules.

For example, you can use the interface to integrate CamIQ 7 Enterprise into existing facility management systems and operate them from there via remote control.

Or the interface can assign a camera to a specific monitor or trigger an event. It's also possible to initiate scripts that can be edited directly in CamIQ 7 Enterprise.

The possibilities are almost limitless in connection with the CamIQ 7 interface. Basic functions such as triggering an alarm or retrieving a live image are conveniently grouped together via the interface and allow CamIQ 7 to be integrated quickly as a backend system for custom solutions.

Appropriate triggers/events can link the video surveillance system with other monitoring systems. The basic architecture of the interface even provides a link to external database systems.
This way even data from production processes, merchandise management, shipping, barcodes, access control or other external data sources can be linked with the video surveillance data.

Complementary to the classic interface (CamIQ API/SDK), a web interface (CamIQ Web API) will be available starting with CamIQ 7. The web interface is based on the HTTP transmission protocol and thus makes numerous functions of the CamIQ applications accessible for web-based clients, such as web applications and apps.

HTTPS-based streams are also provided over the web interface with which live images as well as recorded images from CamIQ 7 servers can be accessed. The usage of own HTTPS-Certificates is possible.

## Highlights

- A powerful, uniform interface for CamIQ 6 Satellite, CamIQ 7 Enterprise and other CamIQ net modules
- Extensive documentation and useful example applications
- Solutions based on the interface (CamIQ API/SDK) remain updateable within a major version
- Direct manufacturer support is possible for project-oriented business - we speak your language, e.g., C++, C#, C, Java, Delphi

# CamIQ® API/SDK

**Overview of functions (excerpt)**

## Interface for CamIQ Middleware

The interface (CamIQ Web API) is an addition to the CamIQ Server API for web-based clients (HTTP client). The communication takes place over JSON-RPC/HTTP.

For communication with one or more CamIQ Servers/ CamIQ Streaming Servers the HTTP client will only need a middleware component.

Encrypted HTTPS communication between client and middleware applies to image data and control channels.

There are various streaming procedures possible such as, for example, HTTP Live Streaming (HLS), RTSP over HTTP, HTTP Multipart (H.264 raw streaming), fragment streaming (MP4).

Here are a few command examples:

New Session, Login, Logout, Get Track Names, Get Track Status, Get Alarm List, Has New Alarm, Get New Alarm Count, Get Track Index List, Generate MP4 From Sequence, New Steam Session, Get User Rights

A client can retrieve information like camera name or alarm signal from CamIQ Server over the web API. Furthermore it is possible to view the live images and recordings of a server.

## Interface for CamIQ 7.x Enterprise

Romote control through access to numerous CamIQ 7 Enterprise commands is possible with the interface (CamIQ API/SDK).

Here are some of the script commands available for operating the system:

ALARM, DELETEALARM, ACKNOWLEDGEALARM, CALL [script], CHANGECAMERA, MONITORMODE, PRESETPOSITION, RELAY, STARTRECORDING, SENDRS232, SETICONSTATUS ,SETVIEW, MONITORPAGE STOPNVDSTREAM, PLAY, STOP, CONFIRMLATESTALARM, CONFIRMALLALARMS, CONFIRMCAMERA, EXECUTE, GUARDTOUR, MONITORPAGE, SETMONITORALARM, RESETMONITORALARM, RESETALLMONTORALARMS

Script commands can be tested conveniently in CamIQ 7 Enterprise.
The time and effort needed to make adaptations can be reduced considerably in practice by maintaining the scripts directly in CamIQ 7 Enterprise (and not in the interface developed by the user).

## Interface for CamIQ 7.x Server

Windows© DLL for combining communications components and utilizing Interface (CamIQ API/SDK) functions provided with the individual CamIQ components.

When used in connection with CamIQ 7, the Interface basically acts like a client. Various commands can be used e.g., to trigger events or retrieve video data from the system (live or from the database). Commands are available for linking external data with the system and later searching for an externally assigned dataset.

Here are a few command examples:

Login, Logout, InitializeSession, Connect, Disconnect, IsConnected, GetLivepicture, SearchPicByTime, GetPicByOffset, GetAlarmList, SetAlarmChecked, GetStatus, GetAlarmCounterList, LockUnlockSequence, SwitchRelay, PTZMoveCamera, PTZControlLens, PTZPresetPosition, TriggerAlarm, GetAlarmByID, GetExternalAcivationStatus, SetOverlayText

You can easily understand the functionality of the individual commands by using the test application that comes with the Interface.

## Integration

- Integration based on HHTP protocol possible (CamIQ Middleware) - recommended
- Integration based on the SDK (CamIQ Server & Enterprise) for backward compability

## Compatibility (SDK)

- The SDK for TCP/IP API supports the following operating systems: Microsoft® Windows 10, Windows Server 2019
- Header for the intragtion in C#, C++ and Delphi

## Requirements

The Interface (CamIQ API/SDK) is released only upon conclusion of a non-disclosure agreements. The release of information is subject to a review of whether this is consistent with the interests of rosemann software GmbH.

Currently, rosemann software GmbH does not bill for supplying the Interface. Supplying the Interface does not include free support. The CamIQ API/SDK support is part of project contracts or will be invoiced based on conditions defined in our price list. Use of the Interface in connection with CamIQ 7 Enterprise requires a corresponding license for each workstation.
Each connection via the CamIQ API/SDK interface to CamIQ 7.x Server counts as a client connection and requires a corresponding CamIQ Client Connection+x licence.

rosemann software

rosemann software GmbH • Fraunhoferstr. 13 • D-24118 Kiel
http://www.rosemann-software.de • info@rosemann-software.de