Perception Beyond
the Limits of Senses

SeeTec Cayuga – Software for Video Management
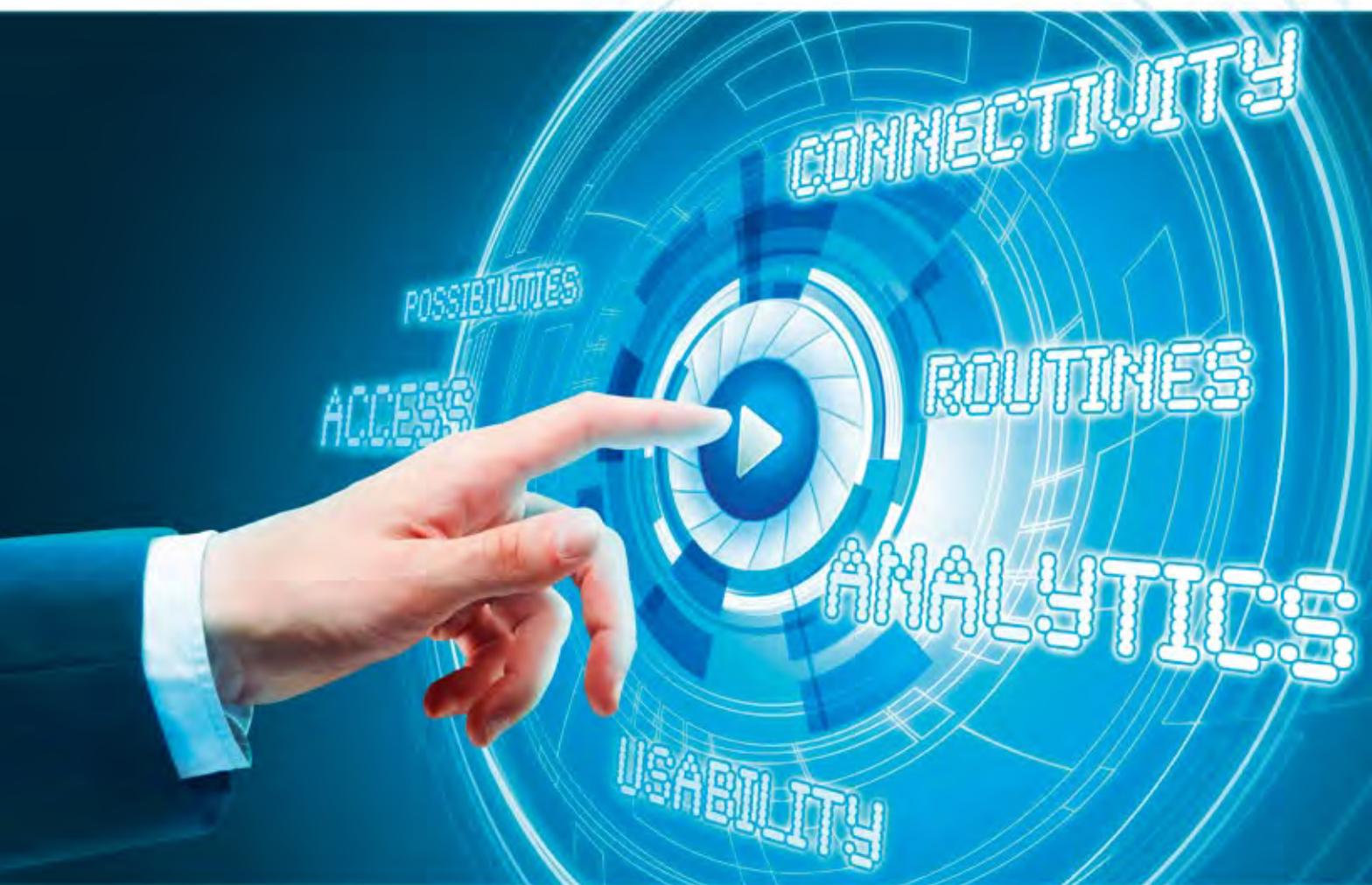
SEETEC CAYUGA – THE NEXT GENERATION OF VIDEO MANAGEMENT SOFTWARE:
ALL NEW FEATURES AT A GLANCE.

Easy to use for efficient working:

- Virtual cockpit interface with 3D look
- Full touch-compatibility with intuitive operation
- Optimized ergonomics
- Clear user interface via a fixed layout of the elements
- PTZ control element with advanced functions
- Completely new video player with shuttle wheel

Advanced applications in Live & Archive mode:

- Parallel Live and Archive views possible (mixed operation)
- Alarm-related information at a glance with multi-way view (Pre-Alarm / Live / Archive / Trigger)
- Camera selection via lasso in layout plan for rapid evaluation of the situation

Redundancy concept:

- Guarantee of image recording if a recording server fails
- System access even if the central administration server fails
- Support for Windows Cluster and virtualization

Practical system administration:

- Multi-level administration – compatible with any organizational structure
- Multi camera configuration for rapid setup and modification of camera functions

Comprehensive Integration:

- Analytics interface for linking up video analysis systems from third party suppliers

INSPIRED SENSE:

SEETEC CAYUGA – SEE MORE, UNDERSTAND MORE, PERFORM FASTER.

In 1999 SeeTec developed the world's first network-based video management software. SeeTec Cayuga is yet another demonstration from SeeTec of its innovative creativity: Inspired by experience from many thousands of projects, and as the market leader in the German-speaking world, we have developed the next generation of video management software.

Profit from limitless networking – for seamless integration of old and new systems. Discover simple, flexible administration – optimized specifically for your organizational structure. And look forward to the latest, intuitive operation – for user-friendly handling to meet every need.

With SeeTec Cayuga you experience video management in a whole new dimension: We call it: "inspired sense".

SeeTec
Cayuga
Inspired sense

SEETEC CAYUGA:

THE HEART OF THE MULTI SOLUTION PLATFORM, UP FOR EVERY CHALLENGE.

SeeTec Cayuga is at the core of the SeeTec Multi Solution Platform. With this modular system concept, SeeTec Cayuga offers a range of application options extending far beyond the traditional security sector. Thanks to a variety of many different modules and interfaces that can be docked onto the SeeTec Cayuga core software, individual, scalable video management solutions are produced for every conceivable application and purpose – solutions that are as unique as a fingerprint.

Sector Specific Applications:

The extension with our Business Suites means that SeeTec Cayuga is also able to support and optimize business processes in the areas of logistics, wholesale and retail trading, transportation and finance. To achieve this, video data are linked to process and business related company data to generate new sector and customer specific insights. The Business Suites include a range of different interfaces, such as to PoS, RFID or warehousing systems, as well as analysis tools such as object and people counting.

Image Analysis Modules:

SeeTec Cayuga has powerful modules for evaluating video data from different sources, including video analysis, license plate detection as well as object and people counting. These modules provide targeted support for the user in recognizing relevant events.

Interfaces for System Integration:

SeeTec Cayuga can be optimally integrated into the architecture of your security system. Third party systems such as PSIM systems (Physical Security Information Management), alarm centers and access control solutions can be linked up and controlled via a variety of interfaces.

Varied Access Routes:

SeeTec Cayuga can be accessed securely from anywhere – including via web & mobile clients. The Display Agent allows image data to be visualized on large screen systems.

The Multi Solution Platform
Individual software solutions following a modular design pattern

The Multi Solution Platform can be extended as required and scaled without limit, thus offering maximum investment protection. This means it provides cost-effective solutions for the long term, too.

- SEETEC CAYUGA CORE SOFTWARE
- PROCESS INTEGRATION
- ANALYTICS
- INTERFACES
- ACCESS OPTIONS

SEETEC CAYUGA:

LIMITLESS NETWORKING FOR THE PERFECT INTERACTION OF ALL COMPONENTS.

Made-to-measure solutions can be implemented with the greatest possible level of networking. The high degree of openness and interoperability of SeeTec Cayuga permits existing and new systems to be linked in individually. SeeTec Cayuga can meet every possible requirement here. A variety of hardware and software components can be integrated via interfaces and protocols – this also makes SeeTec Cayuga ideal as a solution for large and complex projects.

The outlay is low for new installations because SeeTec Cayuga can be quickly and easily integrated into your existing system environment. Connectivity also means that old systems can be retained and can continue to be used. All this ensures that SeeTec Cayuga delivers cost-effective and sustainable solutions.

Hardware Integration:

- SeeTec Cayuga is not manufacturer-dependent, meaning it supports a wide variety of camera models from many different manufacturers.

- Many additional camera models can also be integrated via the ONVIF standard.

- Analog cameras and systems are integrated via video encoders.

- Analog system components are connected via I/O modules.

Software Integration:

- Analysis applications (server or camera based) from other suppliers can be integrated flexibly via the Analytics Interface.

System Integration:

- Sector-specific solutions such as PoS and ERP systems are integrated quickly and easily via Business Application Interface (driver-based concept).

- Security systems such as building management and PSIM systems, access control systems, intruder and fire alarm systems as well as alarm centers and control room solutions are integrated via interfaces.

- Other third party systems can be integrated via network I/Os and TCP triggers.

- VoIP-compatible devices are linked up via the integration of SIP servers.

> **Naturally SeeTec Cayuga can itself also be integrated into third party systems.**
> **An SDK (Software Development Kit) documented in detail is available for this purpose.**

Unlimited Integration

**SeeTec Cayuga connects
existing and new components**

Analog Camera
over Video Encoder

Mobile Client

Management
Server

Monitor Wall   Client

Web Client

Fixed
IP-Camera

Fixed
IP-Camera

Recording
Server

IP-Camera

Client

RFID

Warehouse
Management

Intercom   Access
Control

Intruder
Alarm

Fire
Alarm

Building
Management

ERP System

■ 3rd Party Systems

■ Business Application Interface

■ Company Network
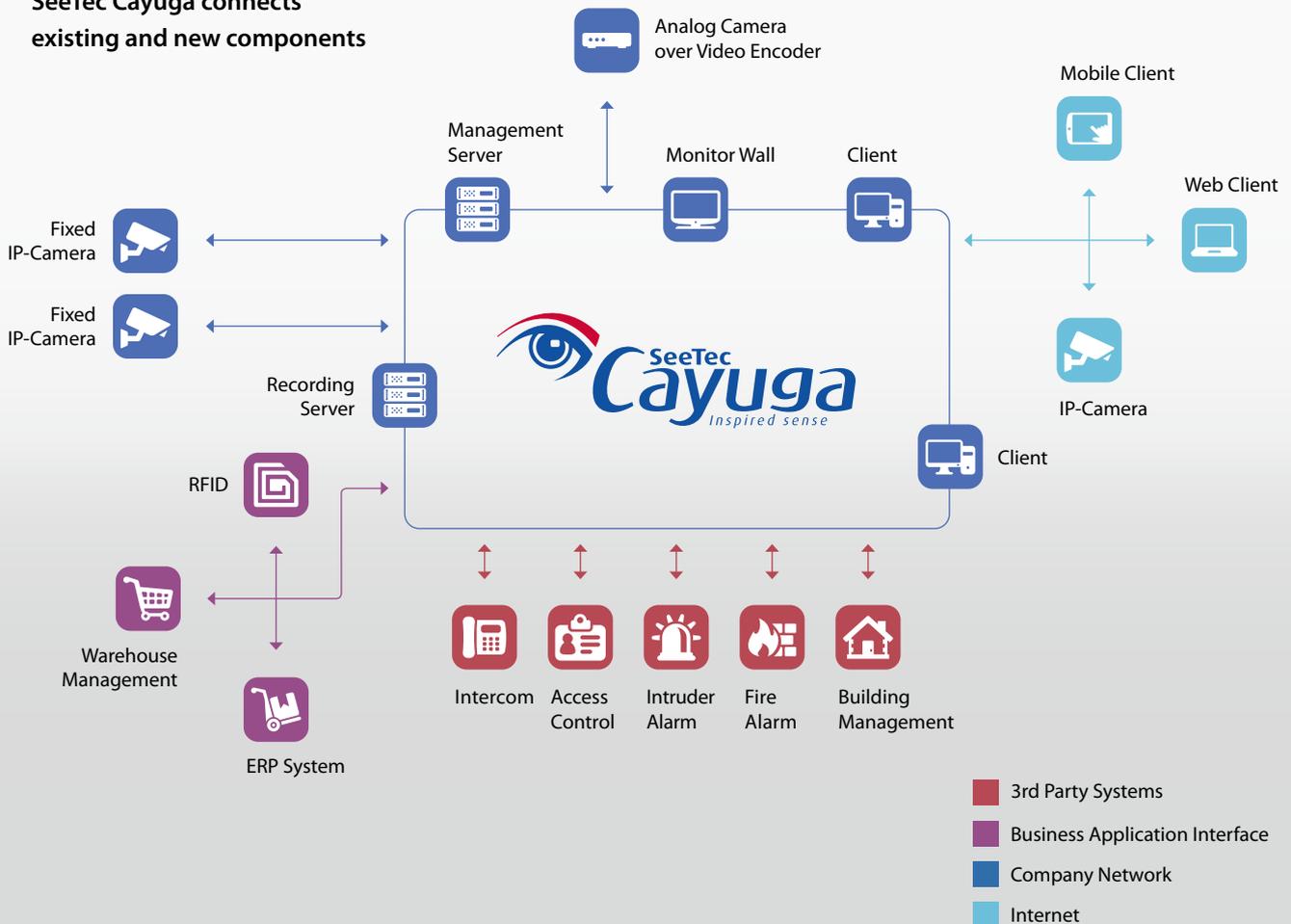
■ Internet

SeeTec Cayuga can integrate a variety of different systems via internet, interfaces, and protocols.

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SEETEC CAYUGA:

INTELLIGENT ANALYSIS SO THAT YOU CAN MAKE THE RIGHT DECISIONS.

The highly specialized evaluation and analysis tools in SeeTec Cayuga qualify the image data received and filter out all relevant information – either directly or in combination with existing business data. A custom compiled set of analysis tools is used to issue specific information that is important to you. Targeted analysis routines allow you to record and evaluate results more quickly – and make the right decisions as a result.

Comprehensive Video Analysis:

SeeTec video analysis uses individually defined rules to automatically direct your attention to risks and hazards, achieving targeted alarm handling. The analysis algorithms are configured directly in the SeeTec Cayuga user interface. SeeTec video analysis can differentiate reliably between different object types (persons, vehicles, etc.). There are numerous detection rules available, based on virtual tripwires or detection areas in the camera image.

Fields of application: Perimeter security, monitoring of safety-critical areas such as stations, airports, power stations and companies, theft protection in wholesale and retail, and much more.

Additional Analysis Modules:

License Plate Recognition
The LPR module (License Plate Recognition) can automatically read license plate formats from numerous countries, including even formats with Cyrillic and Arabic fonts. It can cover multiple road lanes simultaneously.

Fields of application: Traffic monitoring, vehicle access control, barrier control, allocation of parking spaces and much more. The license plate detection function is also ideal for marketing purposes, e.g. to determine the geographic origin of customers.

Counting
The Counting module counts persons and objects that have passed defined points.

Fields of application: For the management of flows of people in the transport and traffic sectors, and at large events, for example. The Counting function can also be used in retail to analyze customer flows, e.g. as the basis for optimizing product placement in stores.

Analytics Interface:

The range of functions in SeeTec Cayuga also allows you to use the SeeTec Analytics Interface to integrate camera and server-based analysis functions from other manufacturers. This means: With SeeTec Cayuga you can utilize all the latest analysis functions for your company – for optimum video management.

Other Analysis Functions:

• Server-based motion detection – can be quickly and easily activated via the "record on motion" function

• Support for camera-based motion detection

• ISearch: Ex-post search function in archive image material for faster tracking of events

Function	Basic	Premium	Enterprise
Area of Interest	✕	✓	✓
Object Classification	✓	✓	✓
Tripwire (also non-linear)	✓	✓	✓
Multi-Line Tripwire	✓	✕	✓
Area of Interest "Inside"	✓	✕	✓
"Entering"	✕	✓	✓
"Leaving"	✕	✓	✓
"Appearing"	✕	✓	✓
"Disappearing"	✕	✓	✓
Loiterers	✕	✕	✓
Left Objects	✕	✕	✓
Removed Objects	✕	✕	✓

Comprehensive Video Analysis Functions

ISEARCH

Intelligent archive research:
By masking an object in the
camera view you are able to
understand within seconds
what happened to it.

TRIPWIRE

To protect high security areas,
virtual tripwires can be defined
that cause an alarm in case
of trespassing.

COUNTING

Object and people counting
generates a continuous flow of
information to support decisions.

+ 680

LPR

License plates are read out with
complex algorithms. The acquired
data can be automatically pro-
vided for further applications.

SEETEC CAYUGA:

INTUITIVE OPERATION SO YOU CAN
FOCUS ON WHAT'S REALLY IMPORTANT.

SeeTec Cayuga combines maximum functionality and maximum user-friendliness. The user interface impresses with an exceptionally clear layout, offers intuitive user guidance and is fully touch-compatible. SeeTec Cayuga exploits the benefits of modern operating concepts and combines them with ingenious functionality and optimum ergonomics – right down to a glare-free night mode.

This gives you a clear overview at all times so that you can respond quickly – in Live, Archive and Configuration mode. SeeTec Cayuga is easy, fast and effective in operation, even with just a short familiarization phase – an advantage that becomes all the more important for company installations, the more complex they are and the more facets they include.

Time-Saving Functionalities:

- Multi camera configuration for rapid setup and modi-fication of camera functions

- Camera selection via lasso directly in the layout plan – for rapid interpretation of situations

- Positioning views by "lassoing" onto video walls

Efficient Alarm Management:

- Alarm counter and toast messages – this gives you all the current alarms "on one screen" in Archive mode

- Color definition – classifies alarms for improved clarity of layout

- Four-way display with Pre-Alarm/Live/Archive/Trigger view – for improved understanding of events
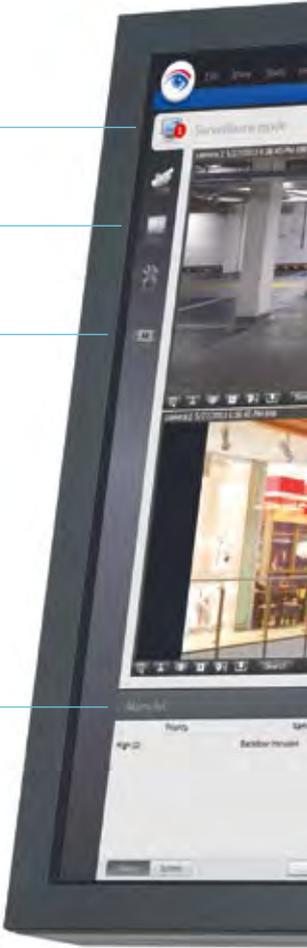
Alarm counter

Practical tabs for switching between Live and Archive modes and for changing views

Icons for the direct selection of expansion modules

Alarm list

Completely New Player:
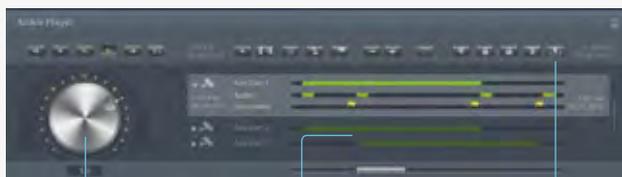
Shuttle wheel

Bookmarking and export with selection pins

Export overview

- Shuttle wheel for rapid navigation in Archive mode

- Bookmarking makes it easier to find events in the archive

- Easy export of sequences in one step via selection pins (export procedures in the background are displayed via counters and progress bars)

Archive and live image possible in a mixed view: You have everything in your sights at all times

Change of view

Day/night mode

Clearly laid out, fully touch-compatible cockpit interface with 3D look with clear user guidance via the fixed layout of the operating elements

Hideable controls

PTZ control for effortless navigation

Camera presets

All audio functions (e. g. voice over IP) in one location

Toast messages

SEETEC CAYUGA:

FLEXIBLE ACCESS OPTIONS
SO THAT YOU HAVE EVERYTHING
UNDER CONTROL AT ALL TIMES.

In a mobile world with global business relationships, video management is required to work properly regardless of location. SeeTec Cayuga offers practical and time-critical access options and transmission solutions that allow you to keep your eye on your company from anywhere in the world. Naturally your data is secure at all times.

Web & Mobile Clients:

for rapid and flexible system access. No additional video plug-ins are required as all image streams are converted to a standardized format via the SeeTec Transcoding Gateway. Web & Mobile Clients are available for various mobile devices such as tablets and smartphones (iOS and Android).

Access to archive recordings via Mobile Client

Display Agent/Virtual Matrix:

integration of large screen systems and video walls from different manufacturers; the video walls can be controlled via a standard SeeTec client.

Multi-Installation Login:

allows a user (e.g. in an alarm center) to connect to multiple installations simultaneously and to access all connected cameras.

SeeTec Anywhere:

allows you to run SeeTec Cayuga on any computer with no prior software installation required. Depending on user rights, SeeTec Anywhere offers all the functions of the installed version, such as live and archive view, administration and system configuration.

Data Security:

in two different ways: selected screen areas are hidden via masking; moving objects are pixelated and thus anonymized via scrambling. System access can also be secured via the four-eye principle (input of a second password).

Transcoding:

for optimal image transmission: By transcoding video streams, images can be bandwidth optimized by the server for transmission to the terminal. For example, images are recorded in full HD and streamed to iPad via 3G in low resolution.

Multi Streaming:

SeeTec Cayuga can transmit, save and display multiple camera streams with different parameters for different applications.

Encryption:

data transmission between SeeTec modules as well as between server and client is carried out using encryption based on an AES-encrypted connection communication connection.

Privacy Protection
Masking out persons or image areas

PRIVACY MASKING

Sensitive image areas (e.g. break and recreation rooms, public areas) are masked by a freely definable area and hidden in the live and archive images, depending on rights.

MOTION SCRAMBLING

Moving objects or objects that differ from a reference image defined in advance are displayed pixelated in the live image and thus anonymized.

SEETEC CAYUGA:

FLEXIBLE CONFIGURATION OPTIONS FOR PERFECT CUSTOMIZATION FOR YOUR COMPANY.

SeeTec Cayuga is optimally customizable for the organizational structures of your company – up to any conceivable size. Thanks to the distributed installation of the software across multiple servers, any level of scaling is possible. This means that the servers can be located in different locations if required (e.g. stores).

All users of the software are included individually in line with their various rights. This means that even large systems distributed worldwide with several thousand cameras can be managed and controlled centrally using SeeTec Cayuga.

The overall system architecture physically separates the clients from the server. As saving image data and communication with the cameras are integrated as system services, it is not necessary to launch a separate program on the server and no local login is required. Very complex applications are possible using this structure.

User Management With Different Administrator Levels

SeeTec Cayuga permits the management of over a thousand users. Every user can be individually allocated detailed rights to cameras with control elements (e.g. PTZ control) and additional SeeTec Cayuga components such as buttons or layout plans. The rights matrix follows the organigram of your company.

Multi-Configuration Tool
Simplifies and accelerates the setup of cameras and camera groups.

Wizards
Offer user-guidance dialogs to simplify the processes when creating new system elements, e.g. cameras and alarm scenarios.

Update Server
This means that your version of SeeTec Cayuga is always up to date – even automatically with the SeeTec Software Maintenance Agreement.

Redundancy Concept
If a recording server fails, a hot-standby server automatically takes over and recording continues reliably. If the central administration server is unavailable, a proxy server comes into play and permits error-free operation of the system with the existing user rights (island operation). Windows Cluster and virtualization are supported.

Advanced Alarm Scenarios
SeeTec Cayuga means that you can define and specify any complex alarm scenarios as to how to respond to specific events in case of an alarm, or which third party systems are actuated.

Rights Matrix
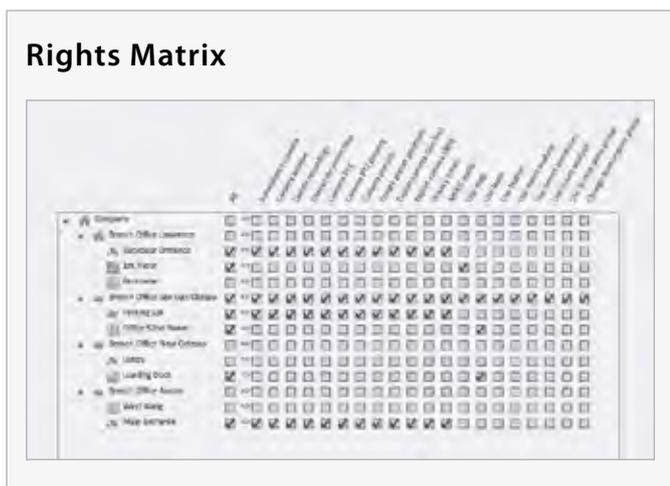
Fail-safe redundancy concept

For management and recording servers

Redundant
Recording
Server

Central
Administration
Server

**Failure of Central
Administration
Server**

**Failure of
Recording
Server**

Cameras

Active
Recording
Server

Redundant
Administration
Server

Client

Head Office | Branch Office
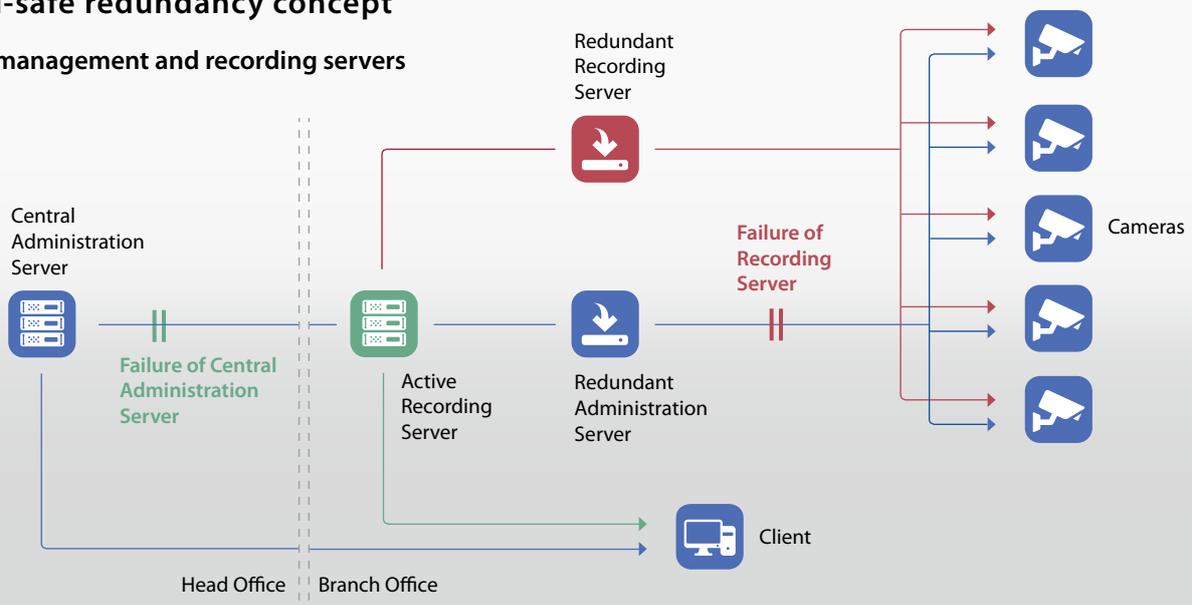
You can count on that: With a consistent redundancy concept SeeTec Cayuga
guarantees maximum operational reliability.

TECHNICAL INFORMATION:
LICENSE MODEL AND RANGE OF SERVICES.

SeeTec Cayuga is available in license packages for three sizes – up to 50, up to 100 and for an unlimited number of cameras. As well as the basic package, there are options packages with an advanced range of functions for several different sizes. All details are given on the right in the adjacent table.

Language Versions:

SeeTec Cayuga is available in six different languages: English, German, French, Russian, Turkish and Dutch.

Manufacturer-Independence:

There is a wide variety of camera models available on the market from a large number of camera manufacturers – each with advantages and disadvantages that need to be carefully weighed up at the project planning phase. SeeTec has therefore used a manufacturer-independent design concept: With SeeTec Cayuga you can operate network cameras and video servers from all well-known manufacturers as well as numerous I/O and SIP modules, alarm triggers and video sensors. Standard server systems from all leading manufacturers can also be used for SeeTec Cayuga server hardware. The free selection of IT and camera hardware makes it easy to achieve the optimal price/performance ratio.

Network cameras, encoders and hardware I/O		
ACTi	Ganz	PCS Convision
Acutvista	Grundig	Pelco
Advantech ADAM	Hikvision	Riva
American Dynamics	iDS	Samsung
Aper	Interlogix	Santec
Arecont Vision	IQinVision	Sanyo
ARH	IQLE	Schneider Intercom
Axis	JVC	Siemens
Basler	LG	Siqura
Behnke	LTV	Sony
Bosch	Lumenera	UDP
Commend	Mobotix	Vista
Convision	Oncam	Vivotek
Dallmeier	Panasonic	Wago
Etrovision		

Free Download:

Try out SeeTec Cayuga free of charge, with no strings!

At **www.seetec.eu** you can request a fully functional 30-day test version for download.

THE SEETEC CAYUGA PRODUCT PACKAGES:
VARIABLE AND SCALEABLE.

Product Packages	S50 [1]	S50 X [1]	S100	Infinity	Infinity X
Live View	✓	✓	✓	✓	✓
Archive View	✓	✓	✓	✓	✓
Alarm Recording	✓	✓	✓	✓	✓
PTZ Control	✓	✓	✓	✓	✓
Maximum No. of Camera Channels	50	50	100	unlimited	unlimited
Maximum No. of Users (Simultaneous Access)	5	5	10	unlimited	unlimited
Maximum No. of Recording Servers	1	1	2	unlimited	unlimited
Central System Administration	✓	✓	✓	✓	✓
Maximum No. of I/O Devices	5	5	10	unlimited	unlimited
Web Client	✗	✓	✓	✓	✓
Mobile Client	✗	✓	✓	✓	✓
Remote Client	✗	✓	✓	✓	✓
Anywhere (Viewer, Client)	✓	✓	✓	✓	✓
Redundant System Management	✗	✗	✓	✓	✓
Redundant Recording	✗	✗	✗	✗	✓
Multi-level Administration	✗	✗	✗	✓	✓
Display Agent	✗	✗	✓	✓	✓
SDK	✗	✗	✓	✓	✓
Active Directory Support	✗	✗	✗	✓	✓
Layout Plans	✗	✓	✓	✓	✓
Advanced Alarm Scenarios	✗	✗	✓	✓	✓
Encrypted Transmission	✓	✓	✓	✓	✓
Motion Scrambling	✗	✗	✓	✓	✓
Multi Installation Login	✗	✗	✓	✓	✓
VoIP support	✗	✗	✗	✓	✓
Virtualization/Windows Cluster	✓	✓	✓	✓	✓
Server-based Movement Detection	✗	✓	✓	✓	✓
Video Analysis (optional)	✗	✗	Basic	Basic, Premium, Enterprise	Basic, Premium, Enterprise
Person and object counting (optional)	✗	✗	✓	✓	✓
LPR (optional)	✗	✗	✓	✓	✓
Analytics Interface	✗	✗	✓ [2]	✓ [2]	✓ [2]
Access Control Integration	✗	✗	✓ [2]	✓ [2]	✓ [2]
Alarm	✗	✓ [2]	✓ [2]	✓ [2]	✓ [2]
Voice Station Integration	✗	✗	✓ [2]	✓ [2]	✓ [2]

[1] SeeTec Cayuga S50 and S50X are sold exclusively via distribution partners. An overview of our distribution partners can be found on our website.

[2] We would be happy to provide a list of supported solutions/devices on request.

SeeTec