Video Management Software

eocortex

www.eocortex.com

Eocortex is a global provider of an Open-Platform Video Management Software (VMS) with the added strong intelligence of video analytics and network video recorders (NVR)

About us

eocortex

2008
company founded

19
Video Analytics

5 000+
camera models compatible
+ ONVIF, + PSIA

10 min
time required
for installation
and configuration

23 000+
projects done

300 000+
cameras operating
on Eocortex VMS

5 000+
partners
in the world

30+
countries

$0
cost of technical support

$0
cost of personnel training
and certification

$0
pre-sale service cost
for your projects

$0
cost of all Eocortex
VMS updates

Eocortex in the World


Australia


Bahrain


Belgium


Canada


Czech Republic


Denmark


Egypt


France


Germany


Hungary


India


Iran


Italy


Kuwait

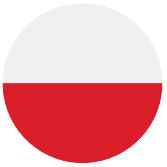

Luxembourg


Malaysia

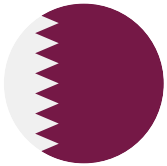

Netherlands


Oman


Pakistan


Poland


Portugal


Qatar


Saudi Arabia


Slovakia


South Africa


Spain


Tunisia


Turkey


UAE


UK


USA


Vietnam

Eocortex Big Projects

Thanks to the Eocortex software, 1062 IP cameras have been integrated into the VMS, which successfully operates at six prison sites in Izmir, Turkey.

Each system uses 26 to 304 cameras that are managed centrally. Each object includes security and fire alarm integrated with Eocortex.

Systems integration allows receiving information and setting up different responses to specific events within a single environment.

The video surveillance systems are installed at more than 100 retail premises in Bryansk and Bryansk region and consist of more than 1600 IP cameras and Eocortex software.

Retail chains involved in the project include “Cranes”, “Svenskaya Fair”, “Kalita”, “Canella”. IP cameras were mounted at the variety of premises: stores of different formats and areas, catering and food production buildings, warehouses and construction sites, housing estates and private properties.

The video surveillance system at ER-Telecom branches in 56 Russian cities consists of 5 000 IP cameras and Eocortex software.

ER-Telecom is the leading telecom services provider in the Russian regions. «ER-Telecom» is one of the TOP-2 biggest Russian internet providers and one of the TOP-3 largest cable TV operators.

2016

The VMS manages something that a lot strive for but often miss: it offers a high degree of flexibility and advanced operations in a simple-to-use package. The GUI for the installer is functional and well laid out, while the end user gets a clean and sleek display which offers intuitive operation. In the majority of applications, it delivers more than enough in terms of customization. For mainstream surveillance and management needs, it has to be recommended and is worth a closer look.

2017

The installation requires no intervention, and complete fairly rapidly. Some automated installers can take some time but the process was finished in approximately four or five minutes. The software installation process is very straightforward, there will be no challenges for any competent installer or integrator. Visually the interface is both intuitive and simple to follow. The functionality on offer is very good and allows the creation of a bespoke and proactive surveillance system.

2018

Recommended for: the installer or integrator who is new to VMS, Macroscop / Eocortex represents a flexible and efficient product that is simple to install and configure. The software installation is fully automated and works well. The functionality on offer from Macroscop / Eocortex is surveillance-focused and is ideal for mainstream applications.

Eocortex VMS Capabilities

Quick Installation

No special admin or programming skills are required.

Initial installation and setup regularly take no more than 10 minutes.

Simple Functional Interface

The Eocortex IP camera software is simple to use and easy to learn.

Its advanced functionality means the system can be configured in a bespoke way to answer individual operational needs.

Easy-to-use Navigation

Eocortex offers users several ways to view cameras on the system.

One of which is the flexible planning tools that allow users to move among cameras at multiple locations by uploading a map and placing cameras on to the plan.

Working with Cameras and Displays

5 options for working with cameras

ONVIF UPnP

Automatic search of the cameras which support ONVIF or UPnP search protocol in the local network

IPv6

Connection of cameras with IPv6 addresses, including automatic search for such cameras in the network

Diagnostics of cameras from the Menu (Configurator) to detect possible issues with their connection and functioning

IP cameras group setup

Pluggable driver package ensures backwards compatibility of camera drivers and devices and allows to connect new integrated cameras and devices without the need to update the software

2 modes of working with PTZ camera presets

Toggling between turning camera's presets

Creation of user-defined routes for toggling between presets

2 modes of working with audio

Broadcasting and recording IP camera audio to archive

Transmitting the sound from operator workstation to camera loudspeaker or audio output

2 options for large-scale video surveillance systems

Creating a video wall from a combination of multiple screens

Internal chat for messaging between system operators

User Scenarios and System Access

6 ways of site plan support

- Visualization of two-dimensional site plans
- Displaying cameras, sensors, and relays on site plans
- Binding external sensors to camera signal inputs
- Binding of external devices to camera signal outputs
- Camera field of view visualization
- Visualization of data of separate intellectual Video Analytics on camera fields of view

6 user scenarios for response to events

- E-mail notifications
- SMS notifications
- Push notifications
- Recording to archive control
- Sending signals to camera outputs
- Launching external applications

4 ways to access the system remotely

- Via desktop application
- Via web interface
- Via mobile application
- Via API

Working with Archive

8 scenarios for recording to archive

1. Continuous recording
2. Recording by operator's command
3. Recording by camera motion sensor
4. Recording by Eocortex software detector
5. Scheduled recording with the ability to combine recording modes
6. Recording by system event / scenario
7. Simultaneous viewing of archive form SD cards of various cameras
8. Synchronization of video server archive with camera SD card (if the camera worked offline) or with video recorder

4 archive viewing modes

- Viewing of archive via a separate channel
- Simultaneous viewing of archive on various channels
- Archive export
- Reverse playback

4 ways to protect your archives

1. Automatic archive replication on a specially designated replication server
2. Archive backup – recording to the backup archive within the same server
3. Hot server standby: in case of failure of one of the servers, recording of video archive and broadcasting video from its assigned cameras is performed by other servers
4. Automatic creation of database backup copies and automatic database recovery in case of failure

3 archive management options

Creating reports regarding depth of archive for each camera, visualization of archive presence by days

Decimation of archive while recording, allowing to record lower resolution video to archive

Time-based decimation of archive, allowing to reduce quantity of frames in the archive on expiration of a set period of time

Monitoring, diagnostics, and automatic update

3 monitoring and system diagnostics options

Self-diagnostics, reporting problems in subsystems, troubleshooting recommendations

Automatic diagnostics and recovery of archive and event data base

Monitoring system components' status:
• availability of hosts
• central processor, RAM, host network adapter load ratio
• availability of cameras
• archive recording subsystems status
• client connections to servers

2 automatic update options

Automatic update of client software when connecting to server

Update from server software configurator for integrated servers

Video Analytics

Smoke and Fire Detection
To detect smoke and fire in camera field of view

Face Recognition
To arrange for controlled automated access of persons to the premises

PTZ camera control
To pan, tilt, zoom, and control a camera

People Counting
To perform visitor counting

License Plate Recognition
To arrange for controlled automated access of cars to the premises

Heat Map
To monitor routes of moving and stopping of visitors, evaluate people flow intensity

Crowd Monitoring
To count people in a crowd, to notify about crossing of a preset threshold

People Counting in Queue
To count people in a line, to notify about crossing of a preset threshold

Fisheye dewarping
To view expanded panorama or panorama split into 2 or 4 frames

Face Detection
To detect a face and enter it into a database

Suspect Search
To track movement of a person among the cameras, to search for a suspect in the archive

Sabotage detection
To detect camera sabotage or faults

Personnel Monitoring
To monitor presence and activity of personnel on their workplace

Failover
To ensure uninterrupted video stream and recording to archive, notwithstanding force majeur factors

Tracking
To perform perimeter control of selected area, border, or line

Audio Stream Processing
To record and transmit sound in both directions

Abandoned Object Detection
To detect an abandoned object and find a person who left it

Loud Sound Detection
To register noise level surpassing the preset limit

Hard Hats Detection
To detect, register and notify presence of people not wearing hard hats

3D People Counting
To perform precision visitor counting

Eocortex Compatibility

avigilon

AXIS COMMUNICATIONS

BOSCH

dahua TECHNOLOGY

Dallmeier

D-Link

Hanwha

HIKVISION

Honeywell

LILIN

Panasonic

PELCO

VIVOTEK

ZAVIO

Onvif

Brickcom

CISCO

GANZ

GeoVision inc

IDIS

LG

And other 100+ manufacturers

SONY

uniview

PSIA

MOBOTIX

Vertical Solutions

Intellectual Video Analytics	Business Facilities				Leisure & Entertainment	Safe & Smart City			Public Transport & Parking		
	Banking	Retail	Hotels	Buildings & Offices	Stadiums	Hospitals	Education	Streets	Airports	Railway Stations	Parking
Smoke and Fire Detection	●	●	●	●	●	●	●	●	●	●	●
Tracking	●	●	●	●	●	●	●		●	●	●
Abandoned Object Detection	●	●	●	●	●	●	●		●	●	●
Face Detection	●	●	●	●	●	●	●		●	●	●
Suspect Search	●	●	●	●	●	●	●	●	●	●	●
Loud Sound Detection	●	●	●	●		●	●	●	●	●	●
Crowd Monitoring							●	●	●	●	
Face Recognition	●	●	●	●	●	●	●		●	●	
License Plate Recognition	●	●	●	●	●		●	●	●	●	●
People Counting	●	●	●	●	●	●	●	●	●	●	
Audio Stream Processing	●	●	●	●		●	●	●	●	●	●
Personnel Monitoring	●	●	●	●		●	●		●	●	●
Heat Map	●	●					●				
People Counting in Queue	●	●					●		●	●	
Hard Hats Detection											
Failover	●	●	●	●	●	●	●	●	●	●	●
Sabotage Detection	●	●	●	●	●	●	●	●	●	●	●
PTZ Camera Control	●	●	●	●	●	●	●	●	●	●	●
Fisheye Dewarping	●	●	●	●		●	●		●	●	●

Intellectual Video Analytics	Public Transport & Parking		Industrial		Government Facilities		Logistics	
	Underground	City Transport	Manufacturing	Constructing Manufacturing	Government Facilities	Prisons & Correctional Facilities	Ports	Warehouses
Smoke and Fire Detection	●	●	●	●	●	●	●	●
Tracking	●		●	●	●	●	●	●
Abandoned Object Detection	●	●			●			
Face Detection	●	●			●		●	●
Suspect Search	●				●	●	●	●
Loud Sound Detection	●		●	●	●	●	●	●
Crowd Monitoring					●			
Face Recognition			●	●	●	●	●	●
License Plate Recognition			●	●	●	●	●	●
People Counting	●				●			
Audio Stream Processing	●				●	●		
Personnel Monitoring			●		●	●		●
Heat Map								
People Counting in Queue								
Hard Hats Detection			●	●			●	
Failover	●	●	●	●	●	●	●	●
Sabotage Detection	●	●	●	●	●	●	●	●
PTZ Camera Control	●	●	●	●	●	●	●	●
Fisheye Dewarping	●		●	●	●	●	●	●

Remote access to your CCTV system

To get mobile access to your video surveillance system, you can use mobile applications on iOS, Android and through web client via the browser.

Video stream formats supported by mobile clients: MJPEG, MPEG-4, H.264, H.265 and any versions of operating systems.

Features and functions

Watch online	Android / iOS	Web-client
View images from cameras online	+	+
Configure the frame rate for viewing	+	+
Adjust the number of IP cameras in a multipicture	up to 15	up to 5
Scale the image	+	+
Drag a channel in a multipicture grid	+	+
Take screenshots	+	+
Listen to the sound from cameras	+	+

Manage online	Android / iOS	Web-client
Control PTZ cameras	+	+

Receive notifications online	Android / iOS	Web-client
Receive push-notifications about events that are configured in video analytics	+	+

Work with the video archive	Android / iOS	Web-client
Play the archive, search for frames by date and time	+	+
Speed up archive viewing 20-fold and slow down 10-fold	+	+

Eocortex Licenses

	Eocortex ML	Eocortex LS	Eocortex ST	ULTRA
Number of IP cameras per system	1 – 20	1 – 400	unlimited	unlimited
Number of IP cameras per 1 server	up to 20	up to 80	unlimited	unlimited
Number of servers	1	up to 5	unlimited	unlimited
Number of workstations	up to 2	up to 10	unlimited	unlimited
	Software for creating smaller systems. The ML version does not support Video Analytics, but may be upgraded to LS or ST version.	The version aimed at creating middle size IP video surveillance systems and to connect the variety of intelligent Video Analytics. Additional Video Analytics. for the LS version are available at extra charge. The LS version may be upgraded to ST version.	The most powerful and functional version among the Eocortex software products. The ST version comes with the number of free intelligent Video Analytics. Additional Video Analytics are available at extra charge.	The high-end solution by Eocortex is represented by ULTRA license that allows to build a video surveillance system of any size. All the analytics are included into one license along with the in-build solution for video wall, archive mirroring, backup drives and internal cha between operators.

The licenses can be upgraded at any time with payment for difference in prices of licenses or Video Analytics if you would like to add.

Downgrade of licenses is not possible (including downgrade from bigger to smaller number of licenses per one license key).

Video Analytics

● Free of charge ○ Available at additional charge – Not supported

	Eocortex ML	Eocortex LS	Eocortex ST	ULTRA
Sabotage Detection	●	●	●	●
Face detection	–	○	●	●
Suspect search	–	○	●	●
Tracking	–	○	●	●
Abandoned object detection	–	○	●	●
Audio Stream Processing	●	○	○	●
PTZ camera control	●	○	○	●
People counting	–	○	○	●
Crowd monitoring	–	○	○	●
Heat map	–	○	○	●
People counting in queue	–	○	○	●
Personnel monitoring	–	○	○	●
Smoke and fire detection	–	○	○	●
Loud sound detection	–	○	○	●
Fisheye dewarping	–	○	○	●
Hard Hats Detection	–	○	○	●
Failover	–	○	○	●
Face recognition	–	○	○	○
License plate recognition	–	○	○	○
3D People Counting	–	○	○	○

Eocortex Licensing Features

Single Eocortex license permits the connection of one IP camera. Only the server side software is subject for licensing.

All client applications are provided free of charge. Eocortex user may select one of two options to access the software: USB key or Soft key.

USB key

A physical security key and an electronic license file installed on the server. It can be moved from one server to another, without additional payments for the new keys during the system migration.

Installation package

- USB security key.
- CD with software installation package and license file (available on the web site).

Installation

1. Connect USB key to the server.
2. Install Eocortex software package on the server.
3. Install the security key by connecting to license server or requesting it via email from Eocortex representative.

Soft key

The user should supply Eocortex with file containing parameters of the server where the software is going to be installed. Configuration file is processed with Eocortex server software. Electronic activation key is generated and sent to the user.

Installation package

- Soft key is sent by an email.
- Software installation package can be download from website.

Installation

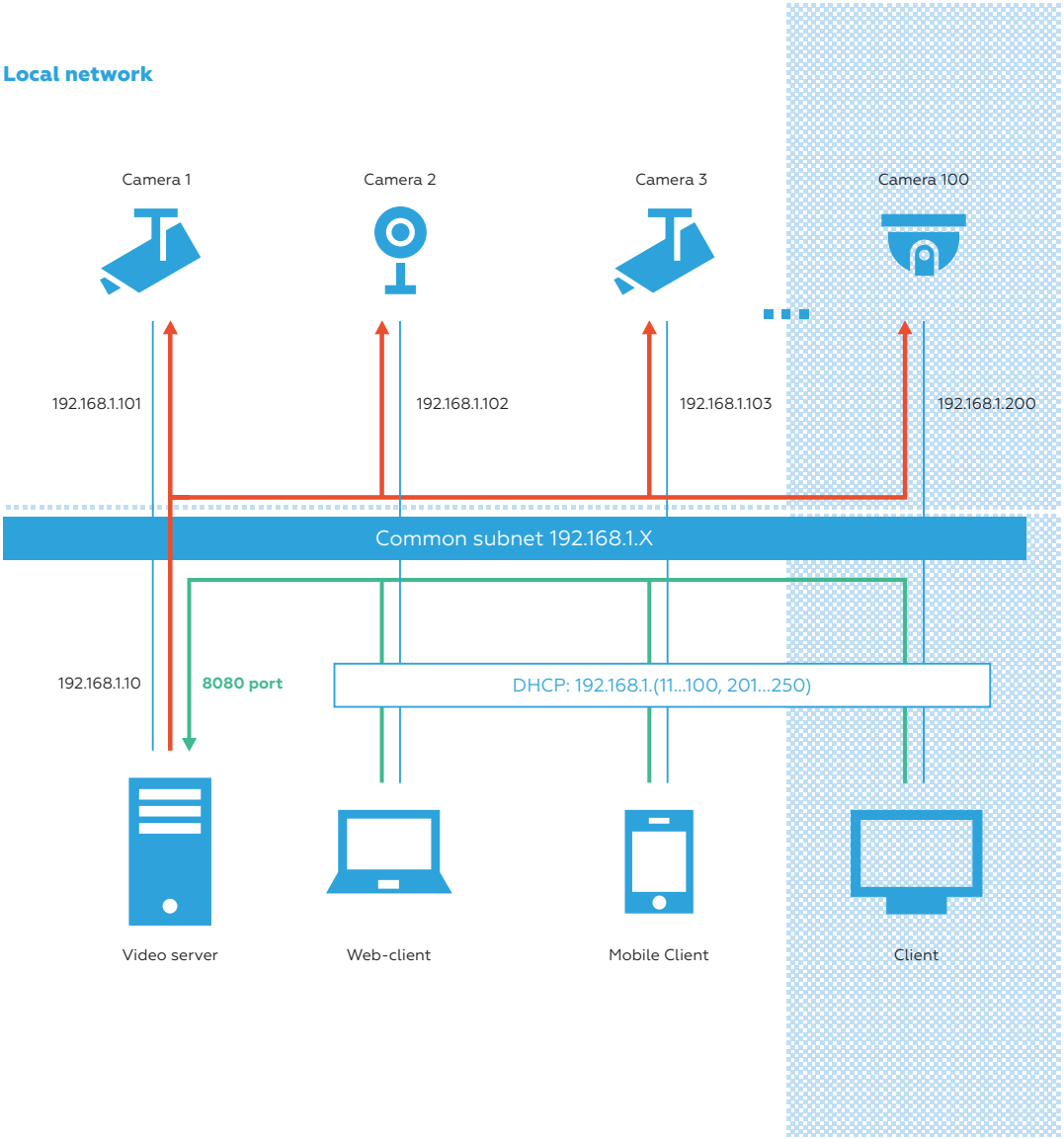
1. Download software installation package from website and install to the server.
2. Obtain key ID from Eocortex representative.
3. Activate automatically the soft key using the configuration tool.

Eocortex Trial version

- Test licenses are ST or ULTRA version, full-function (including LPR and FaceRec), time-limited by 30 days from the date of issuance.
- For projects with 50+ cameras it's possible to order 60–90 days test license.
- If End-user is happy with Eocortex testing, it's possible to extend test-license to commercial after paying for it, generation of separate license key is not necessary.
- Test licenses can be ordered in USB or soft-key version, it should be negotiated with Eocortex sales manager beforehand.
- Test license key can be extended only once, after that it will be possible to extend it only after paying for licenses.

Typical options of video surveillance system based on Eocortex

Eocortex in a local network with one common subnetwork

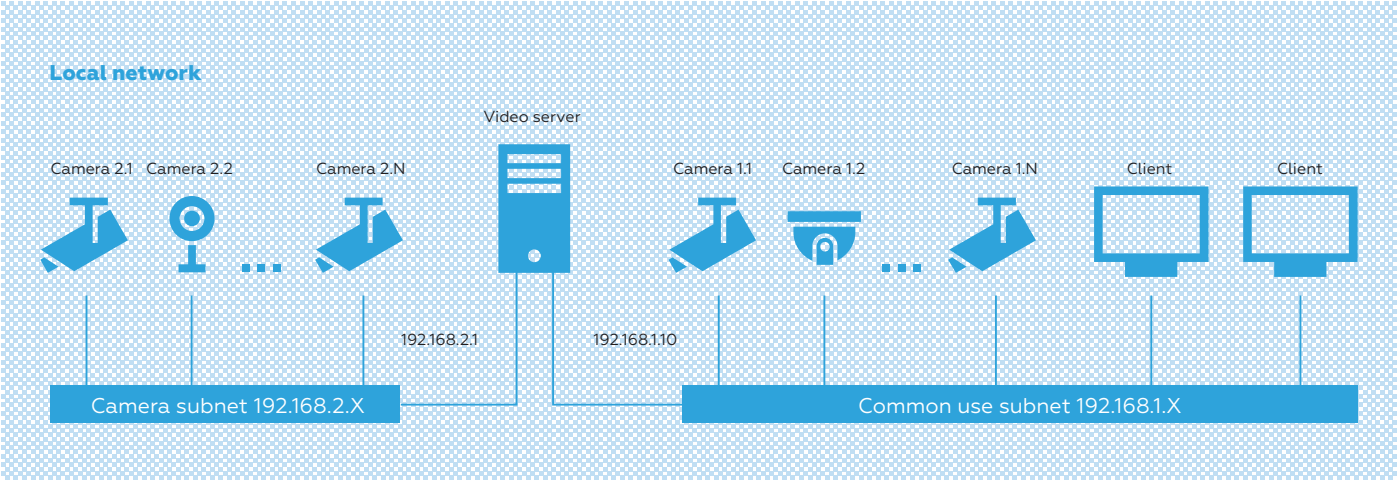


All cameras and server must have static IP-address

Client connection to server for real-time video viewing and viewing of video archives

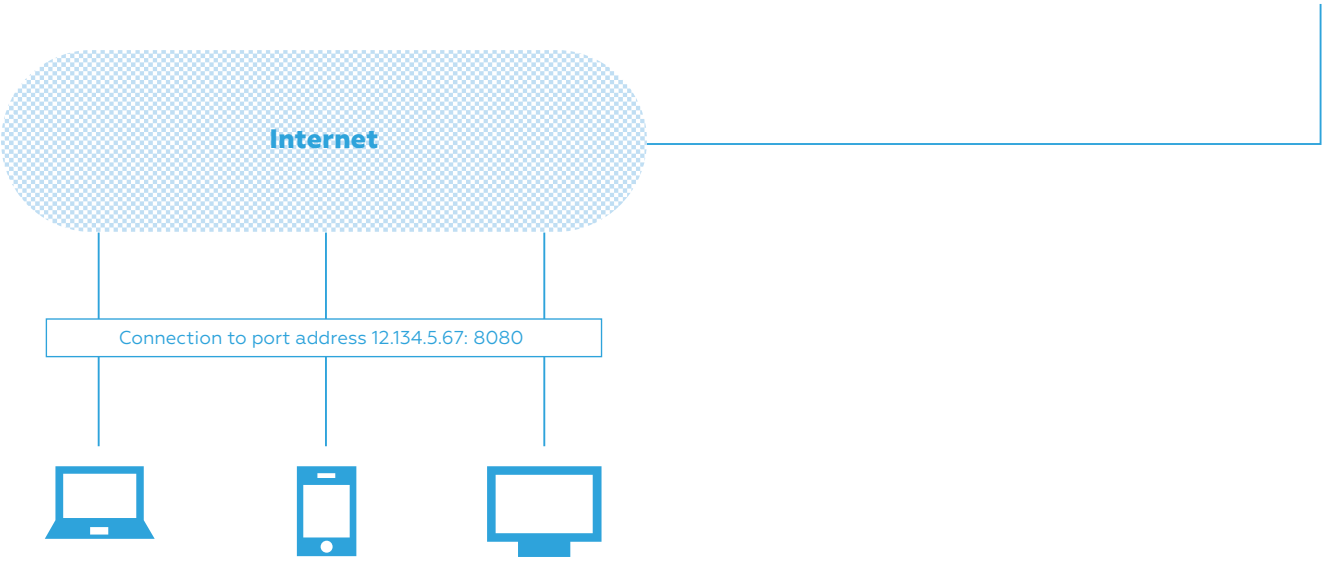
Server connection to cameras for real-time video viewing

Eocortex server internet access

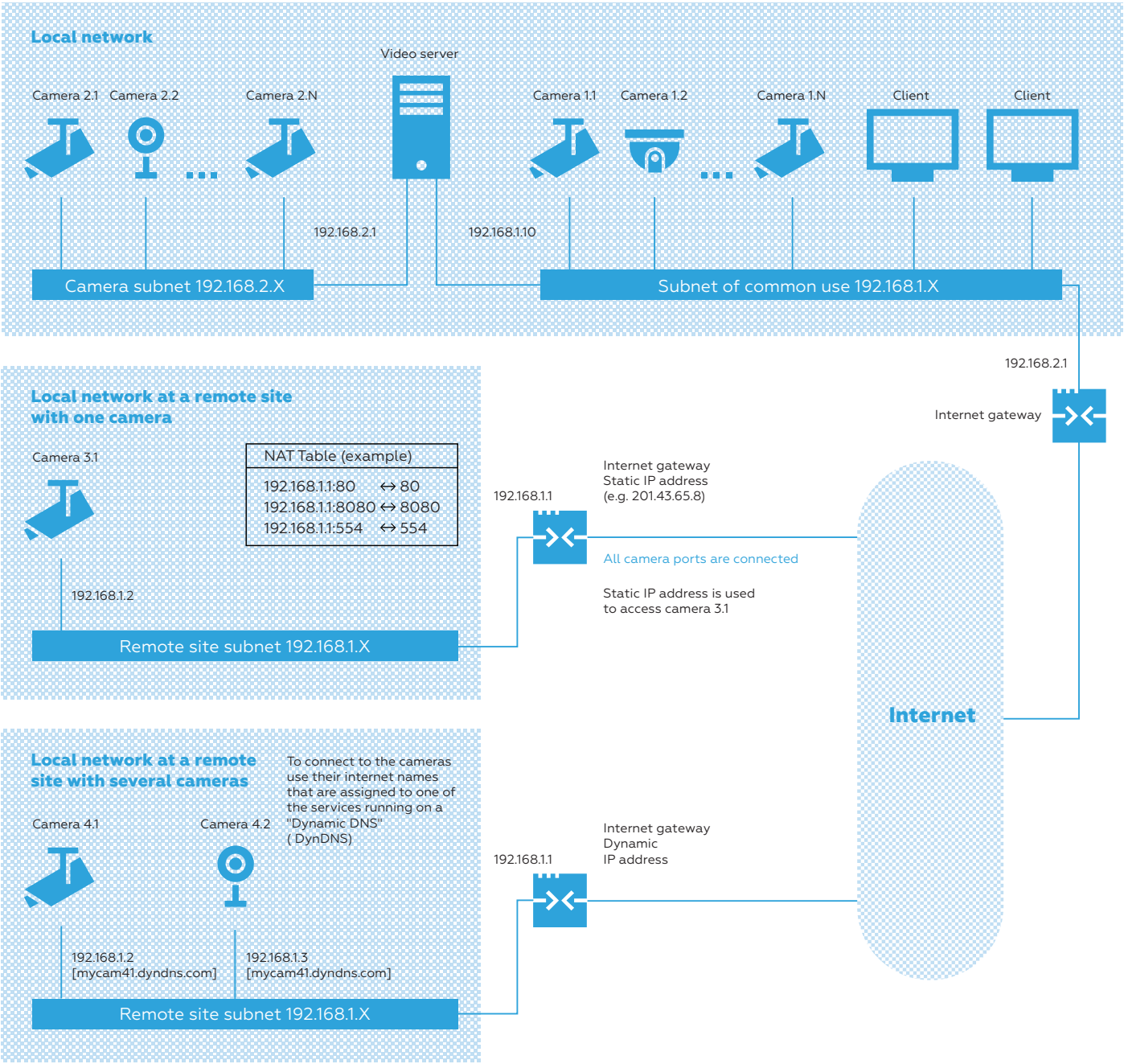


Static IP-addresses are recommended for all cameras, servers and gateways. The above devices should be accessed with the domain name in case the use of dynamic IP-address.

NAT Table (example)	
192.168.1.10:	8080 ⟷ 8080



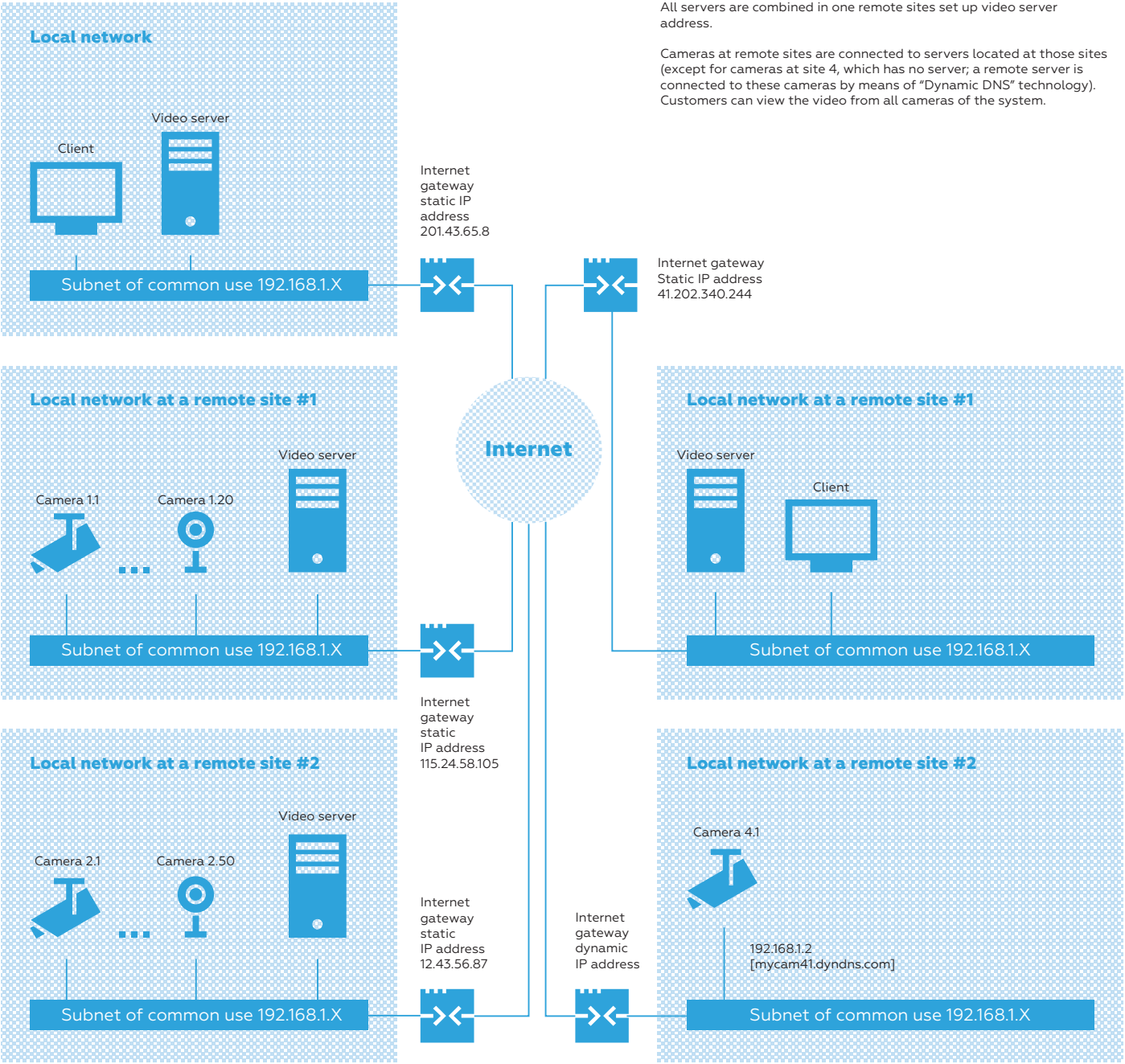
Camera access at remote sites



Eocortex in a multi-server distributed system

All servers are combined in one remote sites set up video server address.

Cameras at remote sites are connected to servers located at those sites (except for cameras at site 4, which has no server; a remote server is connected to these cameras by means of "Dynamic DNS" technology). Customers can view the video from all cameras of the system.



You are welcome
with your questions
and projects

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