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

22
Video Analytics

6 000+
camera models compatible
+ ONVIF, + PSIA

10 min
time required
for installation
and configuration

30 000+
projects done

300 000+
cameras operating
on Eocortex VMS

5 000+
partners
in the world

55+
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

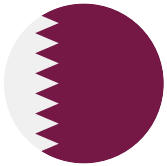
Netherlands

Oman

Pakistan

Poland

Portugal



Qatar

Saudi Arabia

Slovakia

South Africa

Spain

Tunisia

Turkey

UAE

UK

USA

Vietnam

Eocortex Big Projects

Prison in Izmir, Turkey

> 1000 IP cameras / ULTRA

CCTV tasks

- to create the centralized control system of 6 prison sites
- to control the objects 24/7 with remote access
- to arrange timely notification of threats of smoke and fire
- to provide accurate perimeter control
- ability to locate prison officers and inmates within premises

Eocortex advantages

- Alarms upon detection of the loss of signal from cameras and abnormal system functioning
- Free integration of Eocortex with Fire Alarm System
- Possibility to work with all brands and models of cameras installed on sites with opportunity to expand the system
- Intuitive and friendly interface comprehensive for numerous stuff members
- Video wall for managing number of locations at once

Modifications

- Integration with the Fire Alarm system

Police Departments of Ieper, Belgium

> 500 IP cameras / ULTRA

CCTV tasks

- to detect and prevent of crime, potential and real incidents
- to renovate CCTV system with professional VMS and video analytics while remaining existing Mobotix cameras
- to arrange the centralized control system of the united police departments
- to provide efficient investigations through quick access to relevant video and video quality that's valid in court

Eocortex advantages

- Functionality of Video Analytics modules
- Possibility to integrate Mobotix cameras in order to use video analytics by Eocortex
- Support of varies brands of cameras with encoders and hybrid NVRs
- Easy to use interface convenient for various police employee
- Centrally managed video surveillance with automatic failover and server health monitoring

Modifications

- Integration with Mobotix cameras (MxPEG)

Hulamin aluminium factory, South Africa

> 450 IP cameras with subsequent expansion to
> 1000 IP cameras / ST license

CCTV tasks

- to secure safe working environment at the factory including operations in hazardous areas
- to control the objects 24/7 to ensure production line is functioning correctly and prevent unauthorized access
- to monitor personnel activity and employees attendance in order to evaluate the efficiency of staff
- to provide continuous system upscaling on demand

Eocortex advantages

- Functionality of Video Analytics modules
- System Health Check to monitor the status of all the components of the surveillance systems
- Possibility to expand the system by adding any number of cameras and servers when required
- Free of charge and lifetime technical support and regular updates

Euroshop Retail Chain, Belgium

>200 IP cameras / ST license

CCTV tasks

- to reduce losses from shopliftings and prevent further thefts
- to control perimeter including to avoid thefts by breaking in through the roof
- to count unique visitors and analyze customer's demography
- to organize automated and controlled access of people and cars in the areas

Eocortex advantages

- Functionality of Video Analytics modules
- Unlimited possibilities to scale the system
- Immediate access to live and recorded video to control distributed shops from any authorized computer or mobile device
- Video wall to manage number of locations at once
- Failover and archive replication

"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."

"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."

"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.

Lifetime licensing

Eocortex licensing policy is simple, you just buy the amount of the required licenses for the needed number of channels and that's it, you can use it. Licenses are for life. Maintenance and updates with no ongoing charges.

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

7 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
- Messenger notifications

5 ways to access the system remotely

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

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

Archive export

Simultaneous viewing of archive on various channels

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

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, MxPEG, H.264, H.265 and any versions of operating systems.

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

Unique Visitor Counting

To generate unique visitor counting reports based on detecting and recognizing faces

Tracking

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

Audio Stream Processing

To record and transmit sound in both directions

Face Mask Detection

To detect people not wearing medical face masks in the frame

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

Shelf Fullness Check

To monitor the fullness of shelves in a store in order to fill them with merchandize in time

Eocortex Compatibility

And other 100+ manufacturers

Vertical Solutions

Retail, casinos, cafes and restaurants

- Theft prevention,
- unique visitor counting with ability to control the number of people in the premises even with two or more entrances,
- queue management that helps to measure peak times and deploy additional staff as necessary to reduce waiting time and queue length,
- analysis of customer's demography for understanding trends in customer's behavior and to ensure customer satisfaction,
- effectiveness of marketing campaigns and product positioning etc.

Banks & Finance

- High level of security, fight against fraudsters, crime deterrence,
- unobtrusive, round-the-clock monitoring for ATM machines,
- detection suspicious behavior such as loitering, objects left unattended,
- detector of sabotage of cameras such as covering or spraying the camera lens,
- turning away the camera or damaging the cable etc.

Airports, museums and stadiums

- High level of security to reduce the risk of terrorist attacks,
- detection of specific activities and scan for suspicious individuals,
- recognition of persons in a crowd, searching for missing children,
- face mask detection with mass people gatherings,
- traffic and parking area management etc.

Safe city & police

- Detection and prevention of crime, potential and real incidents,
- search for a person from a police database,
- remote monitoring from a unified control center,
- efficient investigations through quick access to relevant video and image quality that's valid in court,
- accumulation of data in order to manage infrastructure, resources and urban planning etc.

Constructing and manufacturing

- Automated and controlled access of people and cars in the areas,
- violation detection,
- securing safe working environment,
- control of the objects 24/7 to ensure production line is functioning correctly,
- prevention of unauthorized access, hard hat detection etc.

Offices

- Time attendance control,
- monitoring of personnel activity in order to assess and optimize staff efficiency,
- possibility to operate with multiple access groups etc.

Features and functions

Watch online	Android / iOS	Web-client	Messengers
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	Messengers
Control PTZ cameras	+	+	-

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

Work with the video archive	Android / iOS	Web-client	Messengers
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	Enterprise	ULTRA
Number of IP cameras per system	1 – 20	1 – 400	unlimited	unlimited	unlimited
Number of IP cameras per 1 server	up to 20	up to 80	unlimited	unlimited	unlimited
Number of servers	1	up to 5	unlimited	unlimited	unlimited
Number of workstations	up to 2	up to 10	unlimited	unlimited	unlimited
	Software for creating small systems. The ML version does not support Video Analytics.	LS is suitable to create middle size- and small IP video surveillance systems with the limitation of cameras, servers and client workplaces. It is possible to buy all the variety of intelligent Video Analytics.	The most functional version for middle size– and small systems among the Eocortex software products with an unlimited number of IP cameras, servers and client workstations. This version is compatible with all video analysis modules, some of which are free of charge. Additional Video Analytics are available at extra charge.	Enterprise is designed for building professional middle size+ video surveillance systems with a range of most important features such as Active Directory, Video Wall, Chat Messaging, Rest API, Redundancy, Floating Licensing, Monitoring etc. 9 video analytics modules are provided free of charge with the possibility to add other modules or features for additional charge.	The high-end solution by Eocortex is represented by ULTRA license that allows to create large, scalable video surveillance systems with the enhanced list of features. The software package supports all video analysis modules, 21 of which including Face Recognition are supplied free of charge.

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).

Hardware & basic licenses

	Eocortex ML	Eocortex LS	Eocortex ST	Enterprise	ULTRA
	Pack of 5 channels	1 license per 1 channel	1 license per 1 channel	1 license per 1 channel	1 license per 1 channel
IP cameras	up to 20	up to 400 (up to 80 per server)	unlimited	unlimited	from 50
Servers	up to 1	up to 5	unlimited	unlimited	unlimited
Abandoned Object Detection	up to 2	up to 10	unlimited	unlimited	unlimited

Video Analytics

	Eocortex ML	Eocortex LS	Eocortex ST	Enterprise	ULTRA
Face Mask Detection	–	●	●	●	●
Face Detection	–	○	●	●	●
Abandoned Object Detection	–	○	●	●	●
Tracking	–	○	●	●	●
Suspect Search	–	○	●	●	●
Personnel Monitoring	–	○	○	○	●
Smoke & Fire Detection	–	○	○	○	●
Loud Sound Detection	–	○	○	○	●
Fisheye Dewarping	–	○	○	○	●
Heat Map	–	○	○	○	●
Crowd Monitoring	–	○	○	○	●
People Counting	–	○	○	○	●
People Counting in Queue	–	○	○	○	●
Hard Hats Detection	–	○	○	○	●
Shelf Fullness Check	–	○	○	○	●
Unique Visitor's Counting	–	○	○	○	●
License Plate Recognition	–	○	○	○	○
Face Recognition	–	○	○	○	●

● Free ○ $ – Not supported

Additional Options	Eocortex ML	Eocortex LS	Eocortex ST	Enterprise	ULTRA
Audio Stream Processing	●	●	●	●	●
Sabotage Detection	●	●	●	●	●
PTZ Camera Control	●	●	●	●	●
Web Client	●	●	●	●	●
Mobile Client	●	●	●	●	●
System Health Check	●	●	●	●	●
Failover	–	○	○	●	●
Video Wall	–	–	–	●	●
Operator Chat	–	–	–	●	●
Active Directory	–	–	–	●	●
Archive Redundancy and Decimation	–	–	–	●	●
REST API	–	–	–	●	●
Multi-Level Administration (Rights)	–	–	–	●	●
System monitoring	–	–	–	●	●

● Free ○ $ – Not supported

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.

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. Electronic activation key is generated and sent to the user by an e-mail.

Floating licensing

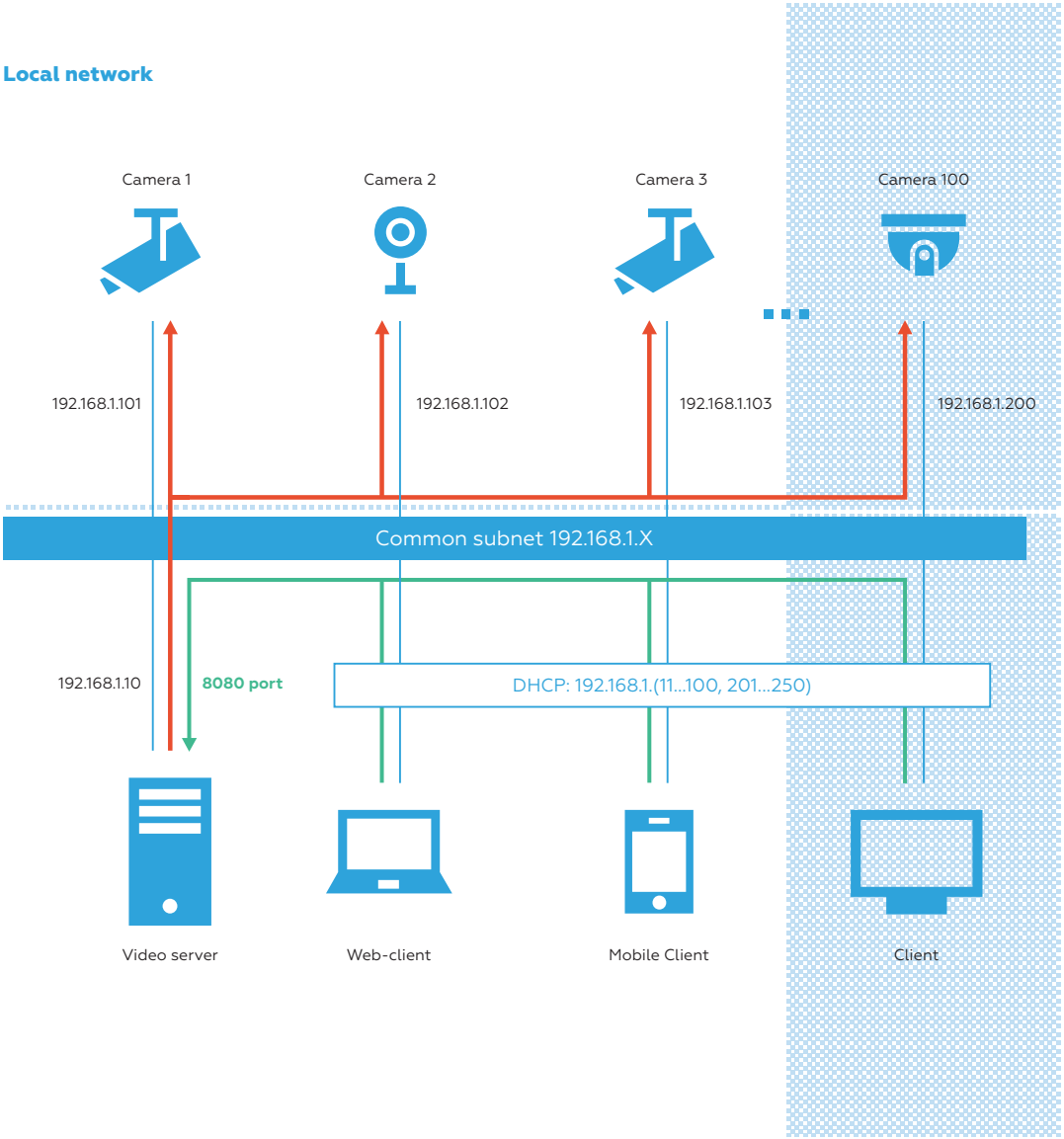
The Floating licensing implemented in Eocortex allows to use a single license key on several Eocortex servers. It provides flexible licensing when it is possible to switch camera licenses from one server to another at any time.
The floating licenses can be used on any HASP keys, be it software or USB ones.

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**
- 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

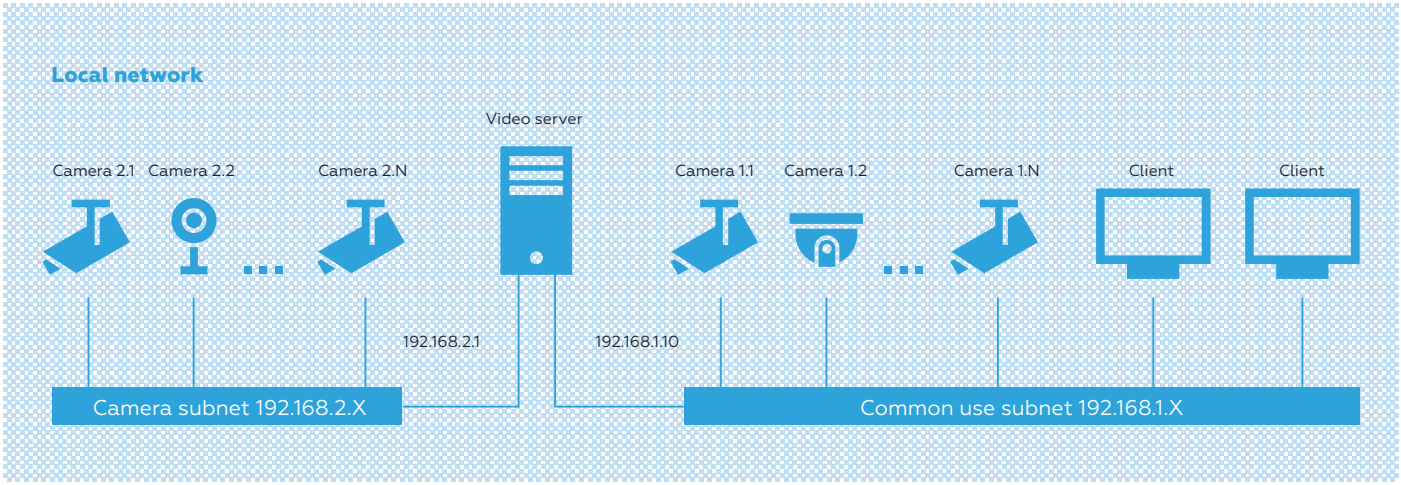


All cameras and server must have static IP-address

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

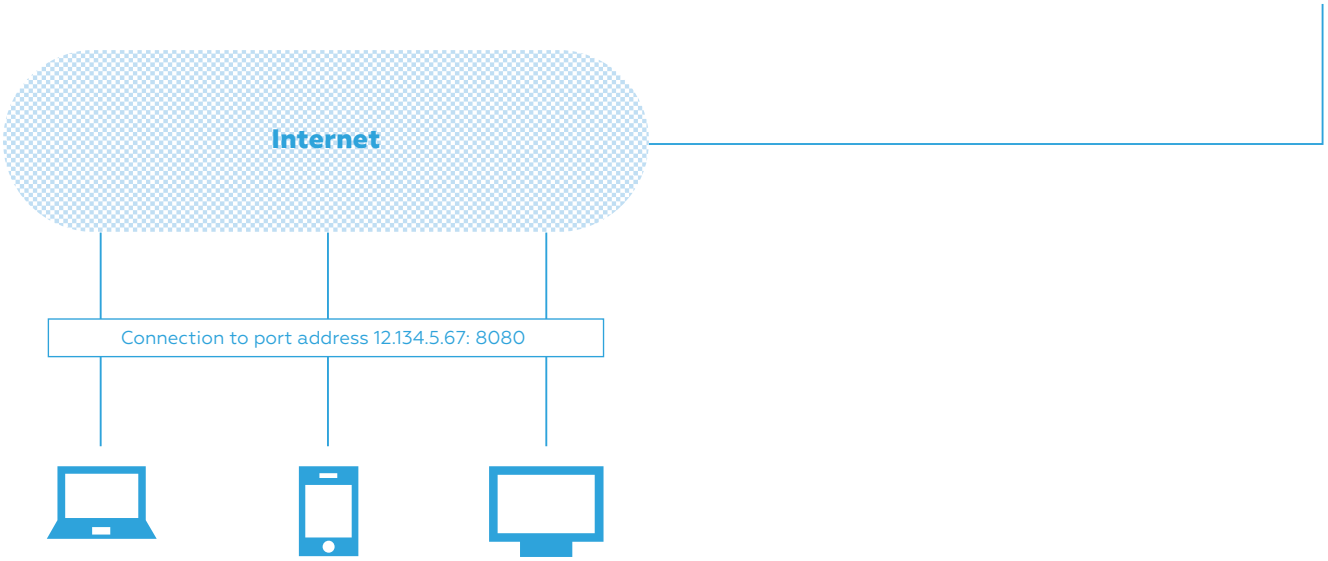
Server connection to cameras for real-time video viewing

Eocortex server internet access

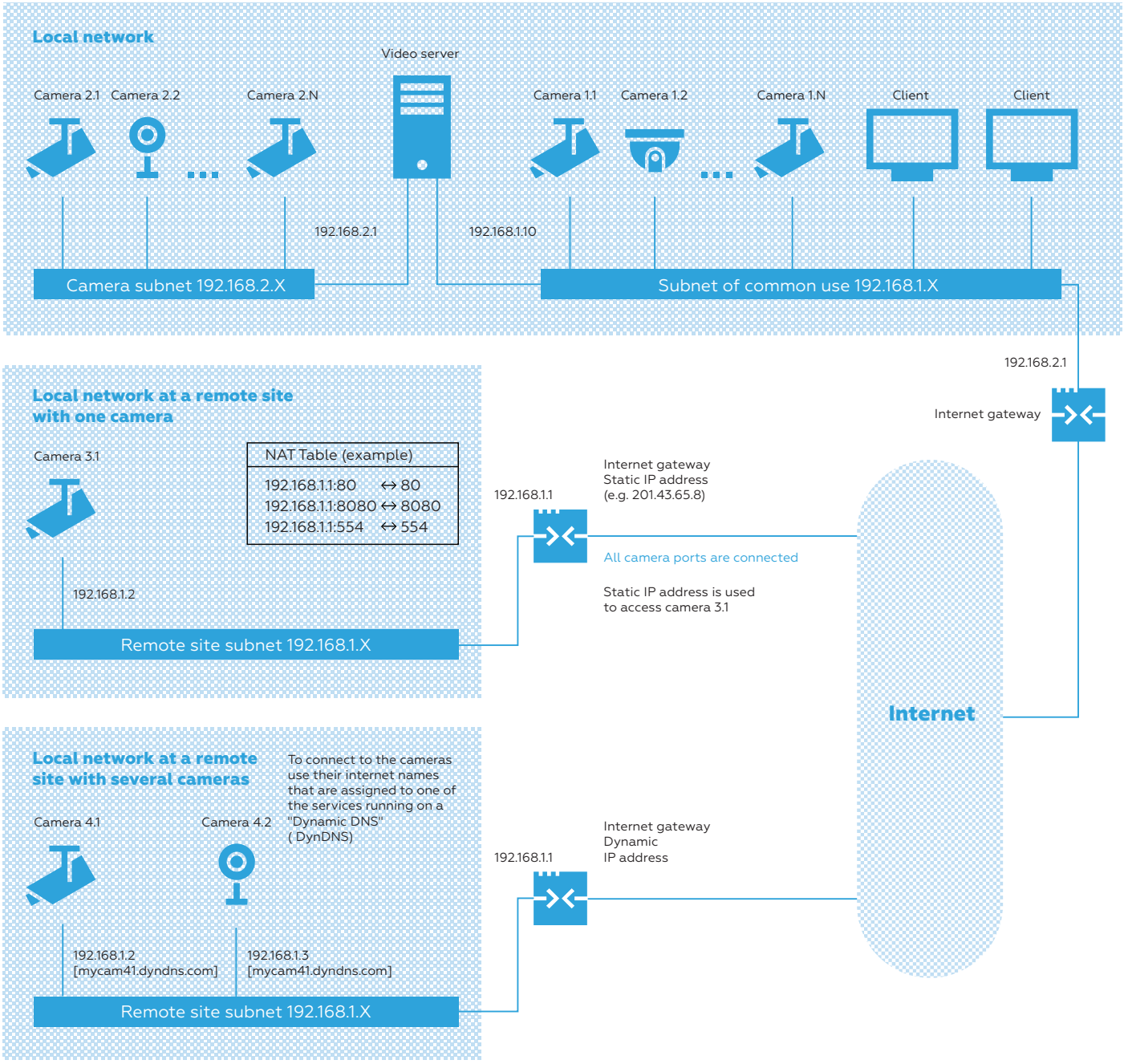


Static IP-addresses are recommended for all cameras, servers and gateways. The above devices should be accessed with the domain name in case the use of dynamic IP-address.

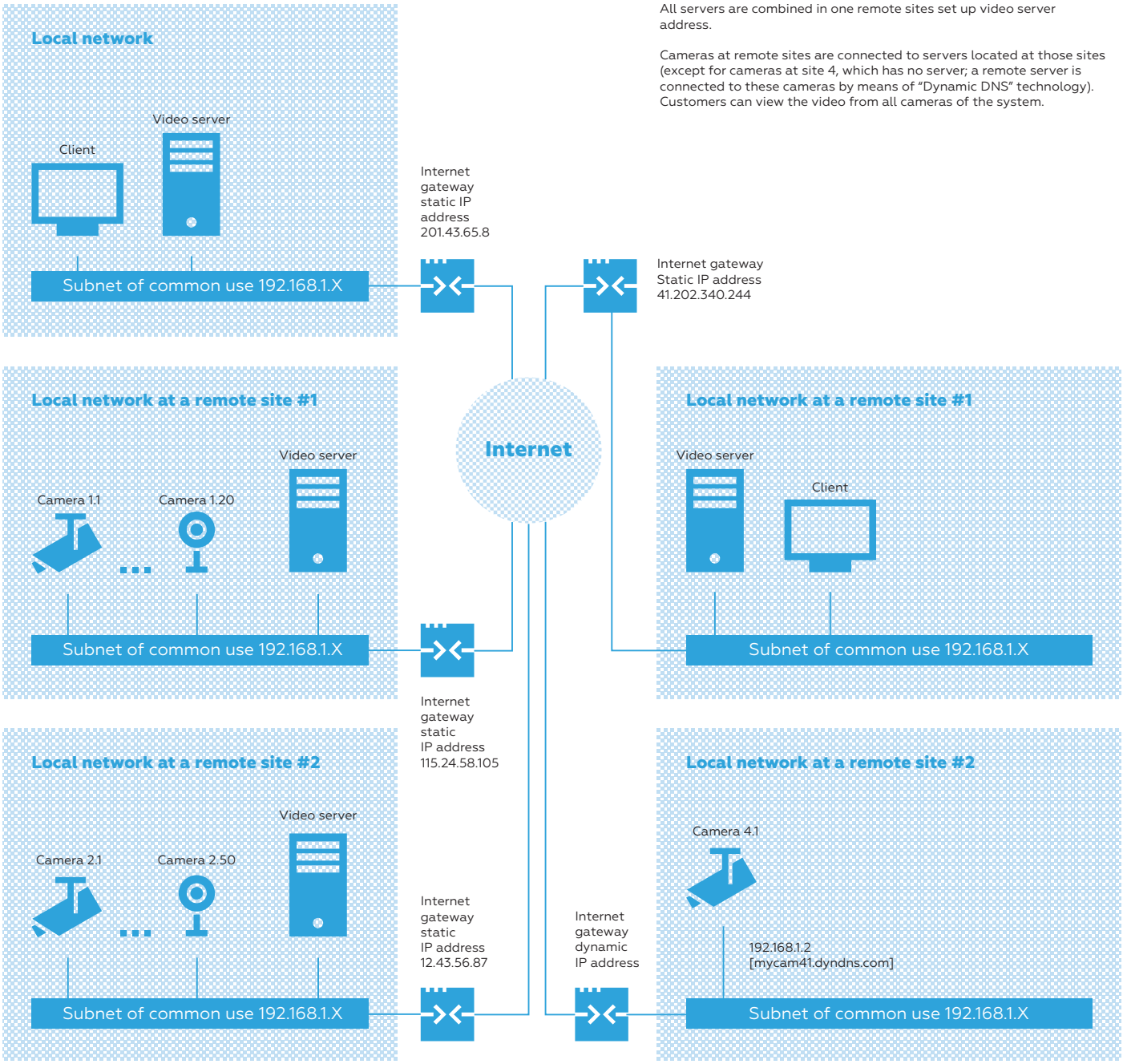
NAT Table (example)	
192.168.1.10:	8080 ⟷ 8080



Camera access at remote sites



Eocortex in a multi-server distributed system



You are welcome with your questions and projects

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