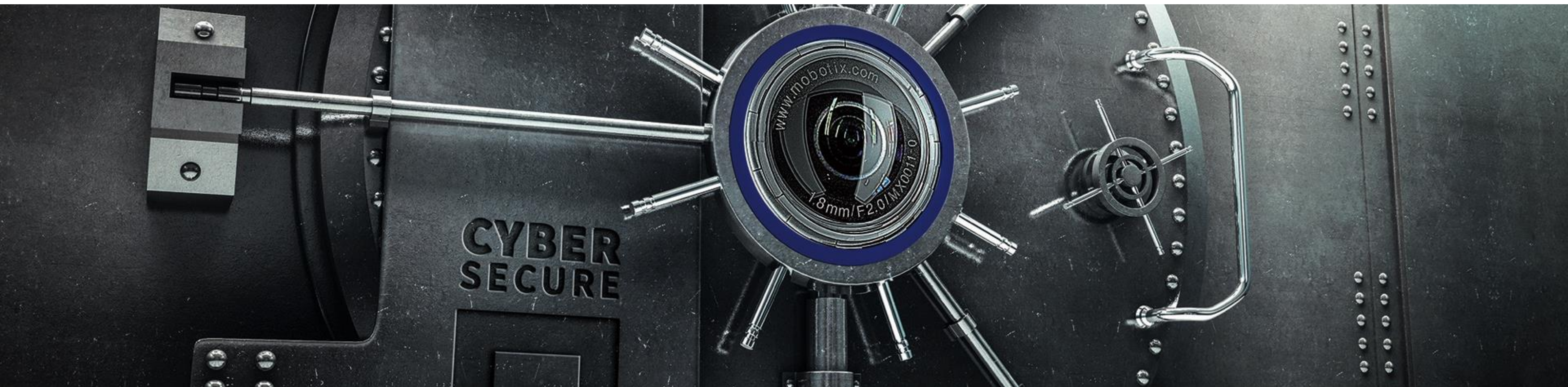


Cyber Security

John Lagogiannis - Business Development Manager South East Europe & Israel

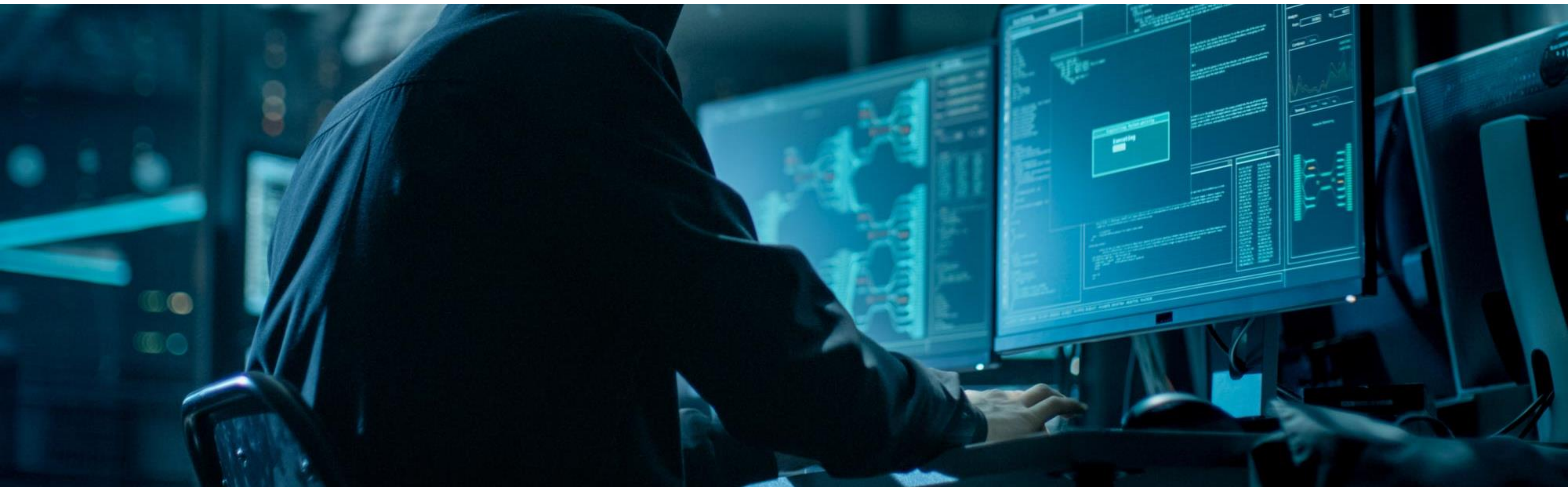


The Importance of Cyber Security

MOBOTIX Security Mechanisms

MOBOTIX Vision

Why Is Cyber Security So Important?





Ensures security of people, buildings and property

Monitoring, managing and controlling complex processes

Image analysis for alarm calls and traceable findings





Increasing numbers of IP devices creates more targets

Deactivation and remote control

Collecting data

Takeover and misuse of devices

Industrial and government-sponsored espionage

Access blocked by ransomware attacks





Source: <https://ipvm.com/reports/hik-hack-map>

Financial losses and reputation damage

Regulatory measures, fines and prosecution for negligence

Breaches of contract, damage claims

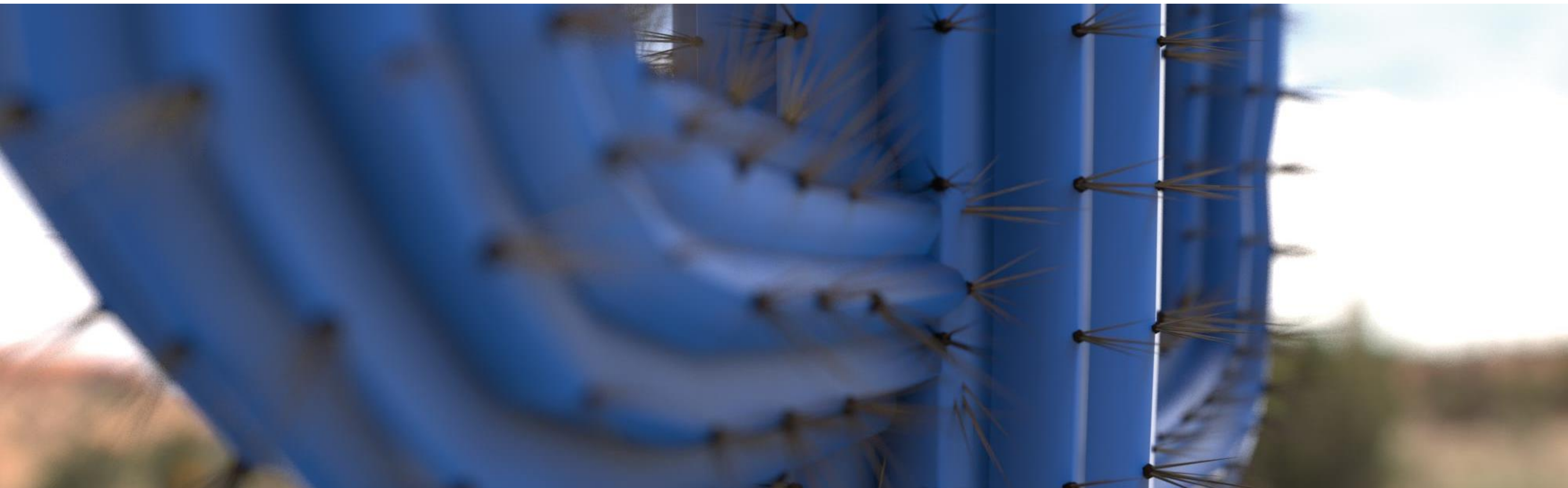
Undetected damage leads to APTs*

Loss of human life through targeted terrorist attacks

* advanced persistent threat



Built-in MOBOTIX Security Mechanisms







Security functions	Standard IP cameras	MOBOTIX
HTTPS (SSL/TLS) and certificates	Y	Y
Digest authentication for HTTP	Y	Y
Access control list	Y	Y
Modified user and group rights	P	Y
Intrusion detection	P	Y
Protection against bots (web crawling)	N	Y
Encrypted recordings	N	Y
Encrypted videos and messaging	N	Y
VPN client	N	Y
External cyber security tests	P	Y
Secure software development	P	Y
Secure, optional connection (MxBus)	N	Y

Y = implemented

N = not implemented

P = only partially implemented

Secure operating system and application software

Secure in-house development

Protection against network and local attacks

Secure communication and access

External tests and audits

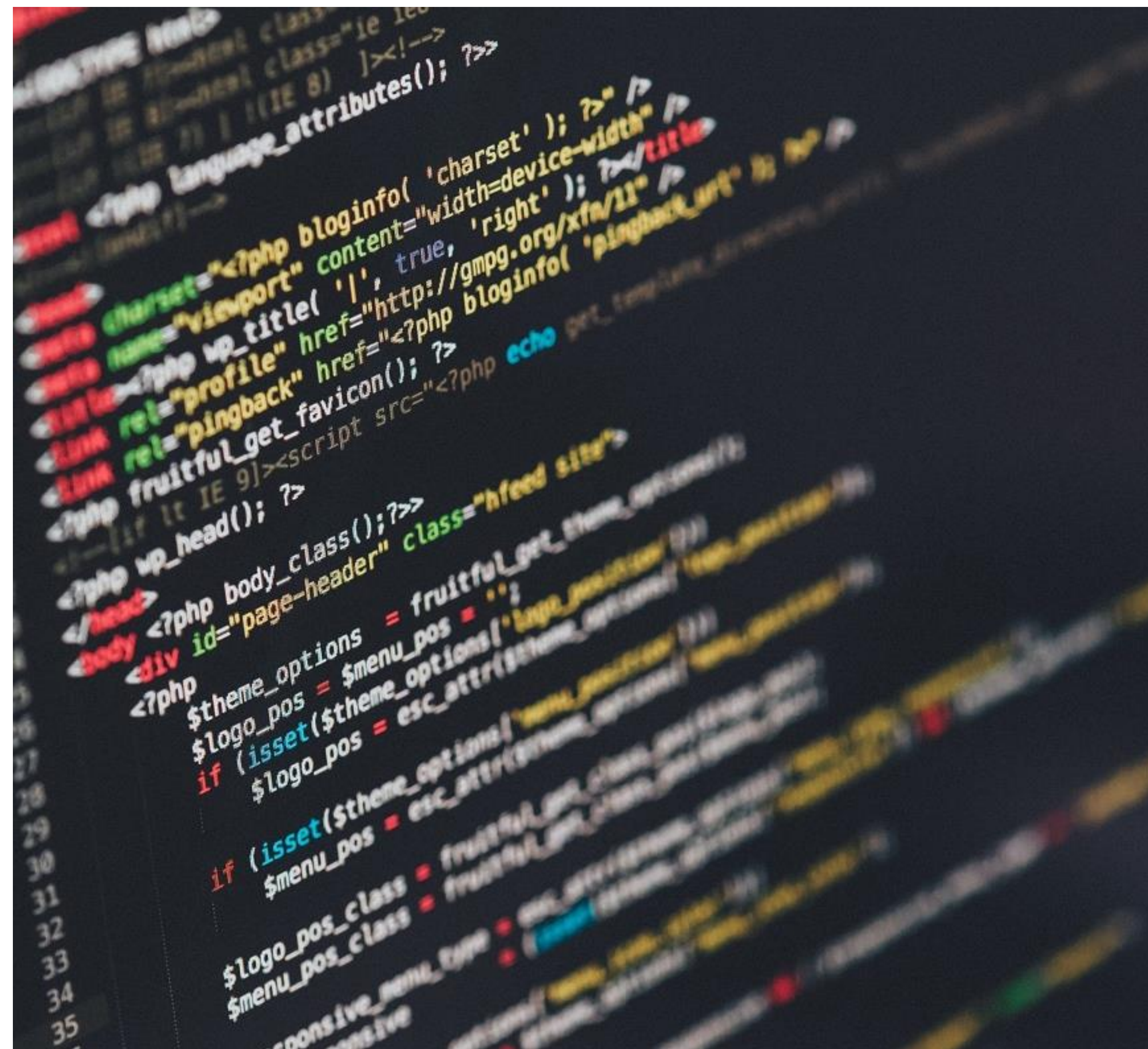




Secure and modified Linux operating system without unnecessary services

Security-critical components are mainly developed in-house

Software and firmware updates are encrypted and have digital signatures



In-house, specially trained team of developers

Digitally signed and encrypted software and firmware updates

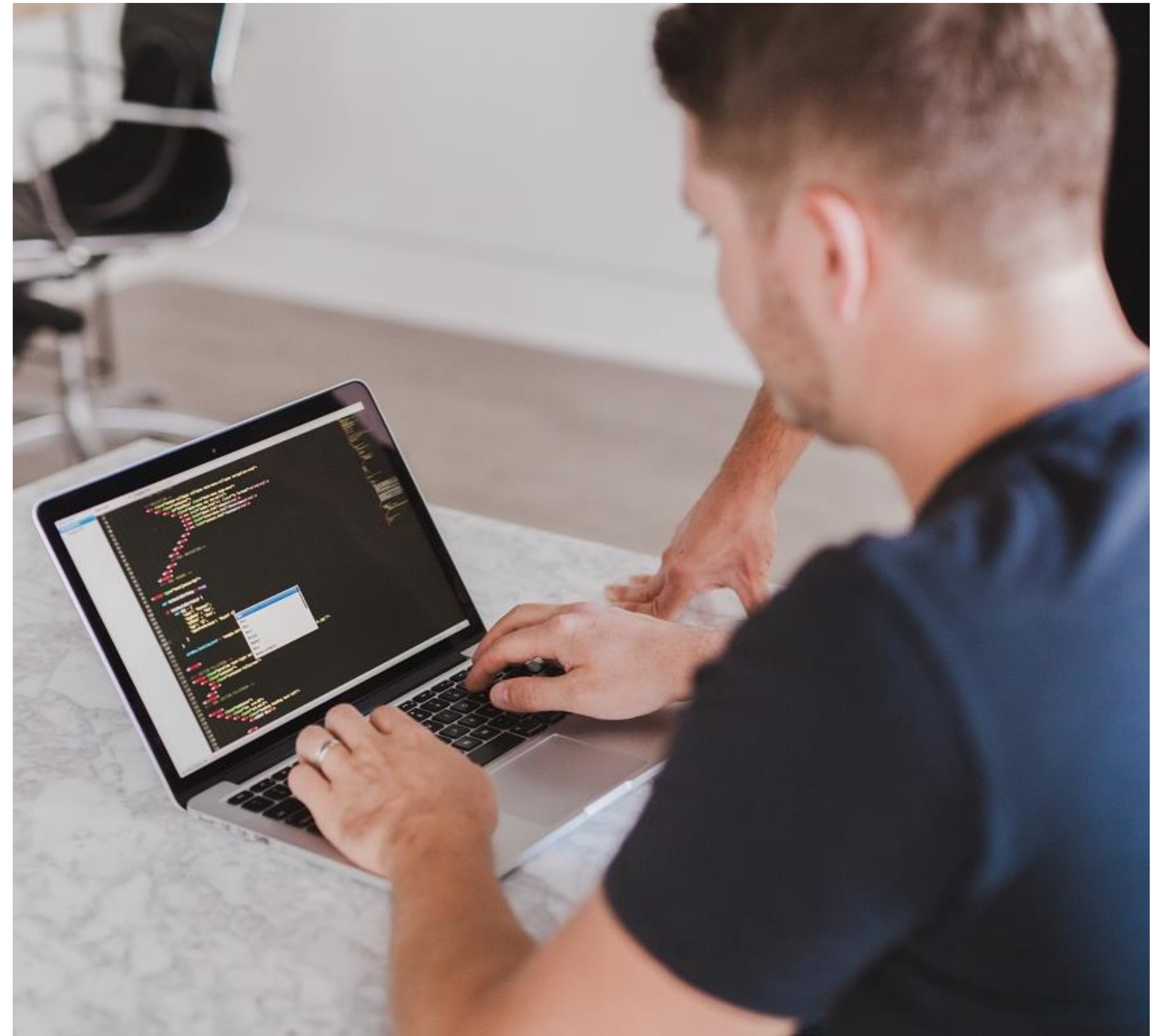
Independent code validation of security aspects by experts



Encryption on internal and external recordings

Digitally signed images for use in prosecution

If admin password unknown (theft), reset only via MOBOTIX possible



Integrated HTTPS (SSL/TLS) for encrypted communication

Integrated support for managing unique X.509 certificates

Integrated VPN, authorization and access management

Replace the X.509 certificate and private key cu

Delete the X.509 certificate

Upload the X.509 certificate and private key

Encrypted communication and certificates



Access control lists only permit the camera to accept specific connections

User and group rights management

Built-in break-in detection as well as integrated VPN client

Access Control Enabled

Access Rules for Allow

Mode Allow IP Address/Subnet/Domain 192.168.1.163

Access Rights	Guest	Live	Player	MultiView	PDA	Event Stream
Public Access	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Groups						
admins	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

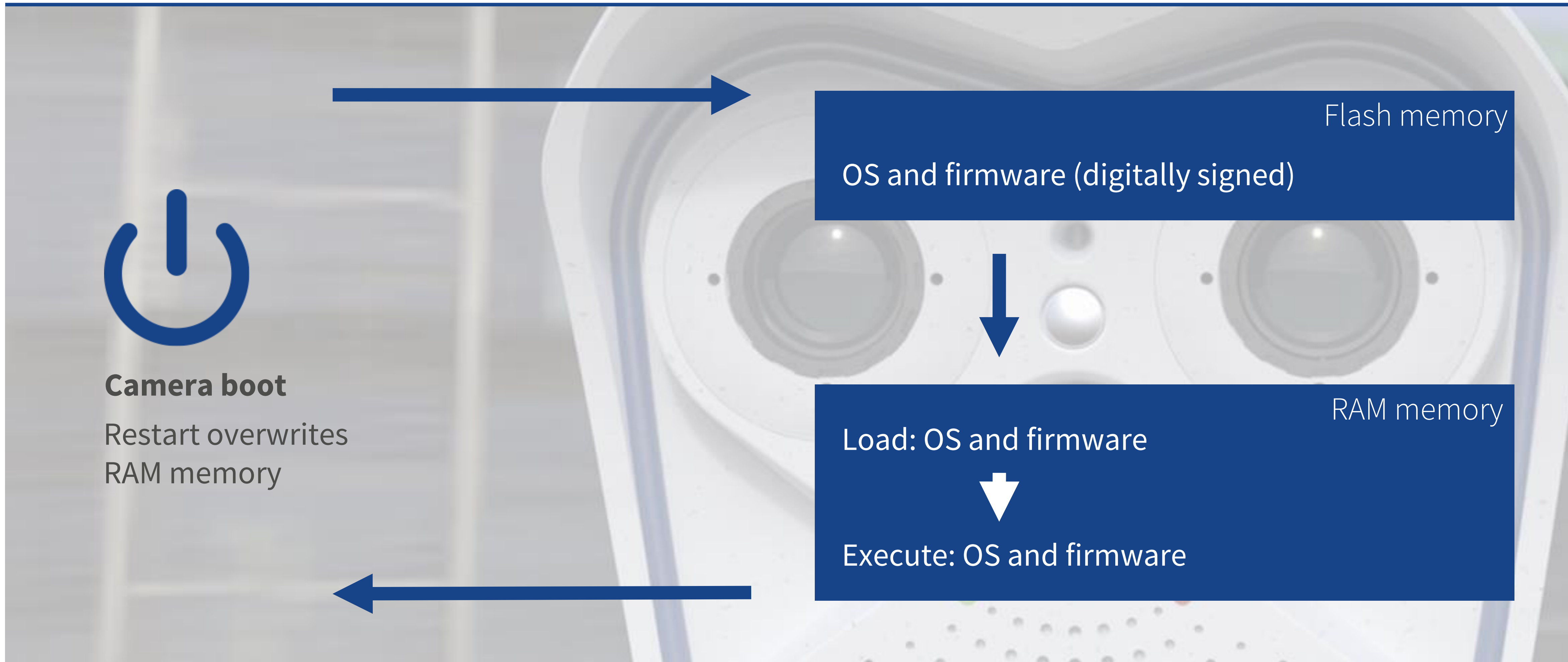
Intrusion Detection Settings

Enable intrusion detection Send alert

Notification threshold Number of triggers

Timeout Minutes Idle default client with

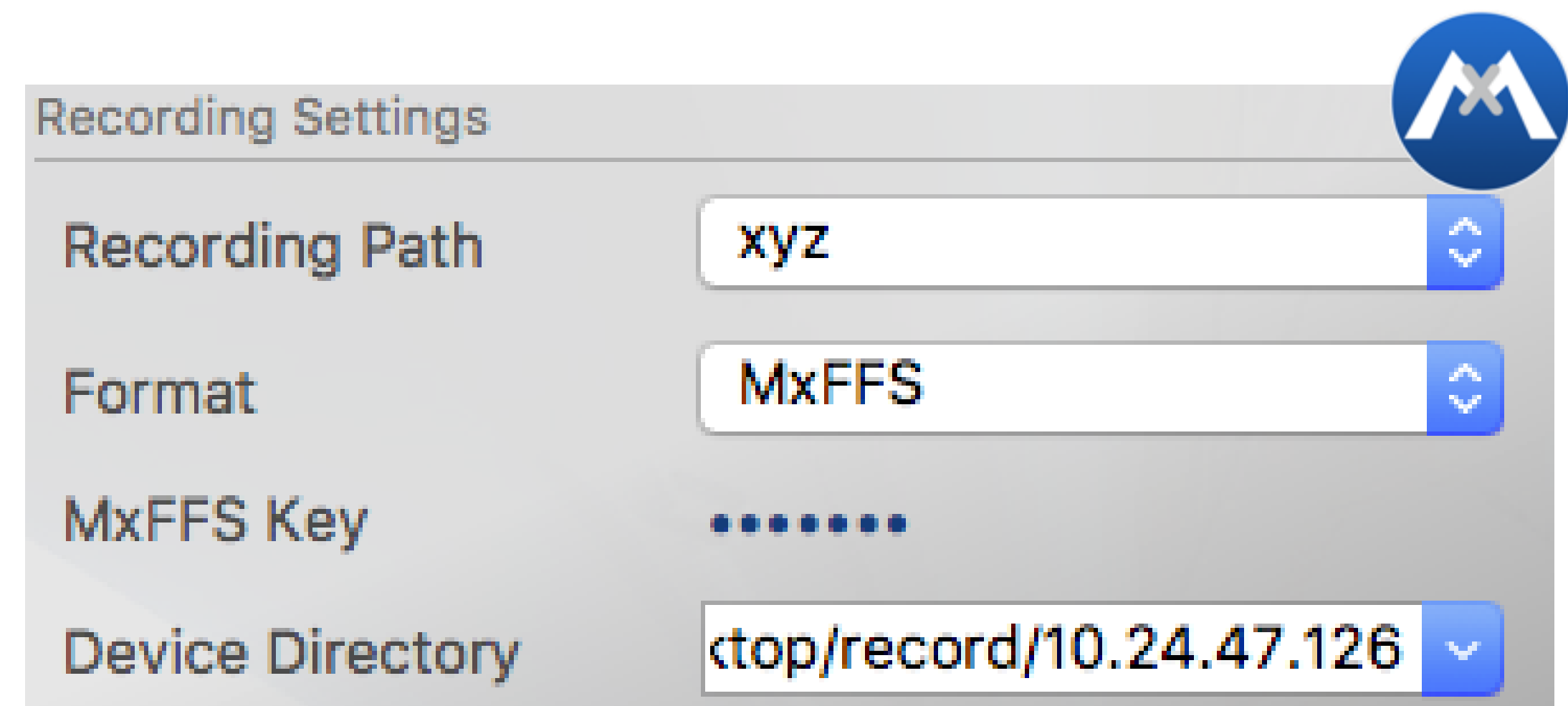
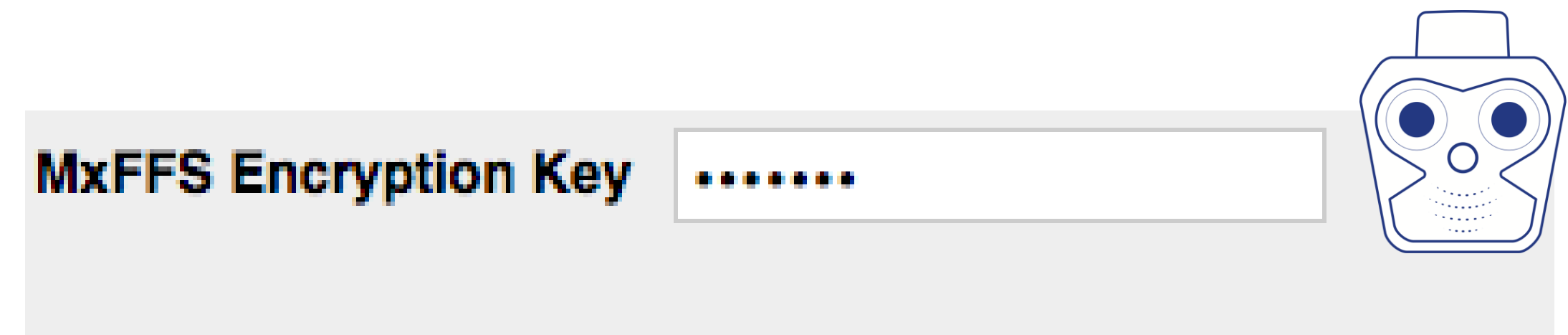
Secure administrator and user access



No opportunity for malware or viruses to infiltrate the camera

The camera features a **defined MxFFS encryption password**

MxMC (VMS) uses MxFFS encryption password of the camera and **thereby guarantees end-to-end encryption**



Because of this, the SD card content of a stolen camera cannot be used



Hardware, including all critical components such as flash memory, to prevent data from being read out

Entire software (operating system and firmware) is **validated** by an external security organization

Supported by an **internal threat analysis and reaction team** for continuous risk minimization



Continuous process guarantees data security above and beyond the standard

Beyond Human Vision

We offer you more than just video security.

We produce intelligent, intuitive application solutions.

We develop reliable technologies for the requirements of today and those of the future.

MOBOTIX

Thank You

Beyond Human Vision

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