



SCALABILITY OF VIDEO SURVEILLANCE SYSTEMS

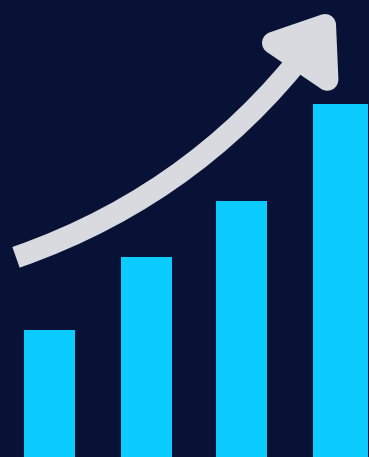
What you need to know and do



What scalability means

Scalability in video surveillance systems refers to a system's ability to adapt to growing data volumes, increasing numbers of cameras, and additional users without significant performance degradation or quality loss.

This is a **key factor** determining their long-term value and suitability for business expansion or evolving needs.





What video surveillance scalability includes

- Expanding coverage areas
- Adding new features
- Increasing the number of authorized users
- Adapting to new conditions, standards, and policies



Expanding coverage areas

As your business grows, you'll need to connect new spaces and branches to your security system.

Here's what to consider:

1 More cameras



More servers

Scaling Out

2

More powerful servers

Scaling Up



3 Network infrastructure expansion



4 Adding new users



5 Additional video surveillance licenses



01

Increasing the number of cameras

Expanding coverage requires more cameras. More cameras mean higher demands on equipment and infrastructure.

- For boxed solutions (DVRs/NVRs), purchase and add more ready-made kits.

- For modern "*cameras + computer + surveillance software*" setups, implement either:
scaling out (adding more servers)
or | *scaling up* | (upgrading existing server components).
Ensure your licensing model supports camera expansion.

In both cases, account for network architecture capacity and camera power requirements.

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Scaling your servers up or out

Processing more cameras inevitably increases:

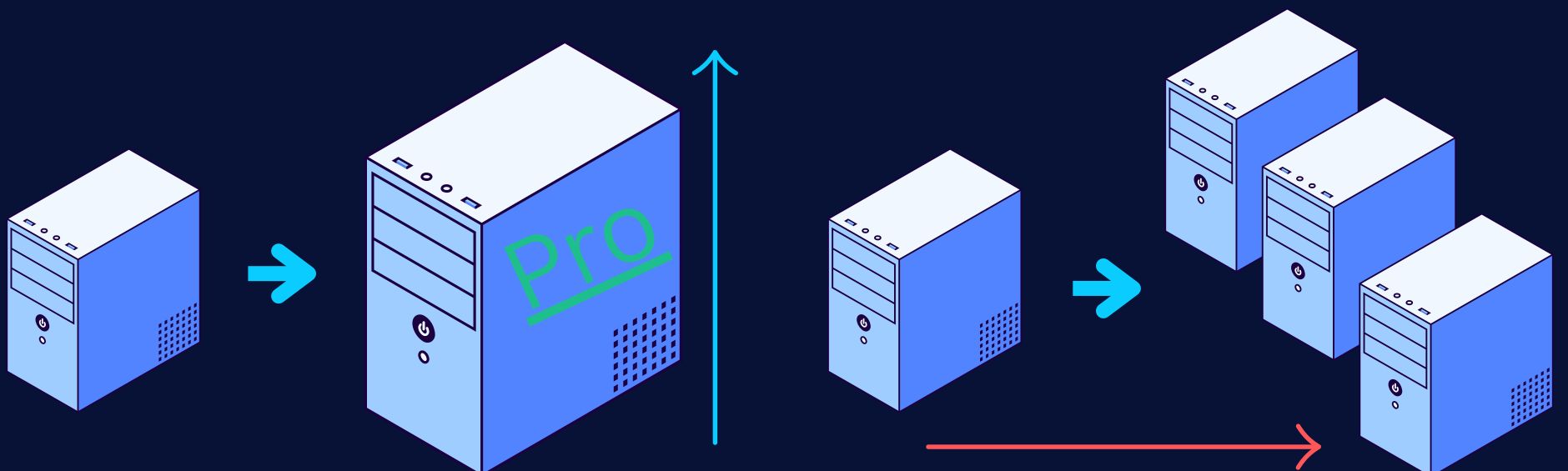
- CPU load,
- Storage requirements for recordings,
- GPU load (depending on features used)

Solutions:

Scaling *out*: add more servers

or

Scaling *up*: upgrade existing server components.



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Network infrastructure expansion

Network bandwidth (wired or wireless) must match data transmission volumes. Overloaded networks cause delays and frame loss.

For remote access, sufficient internet bandwidth is crucial — especially for operators, managers, and directors accessing the system remotely.

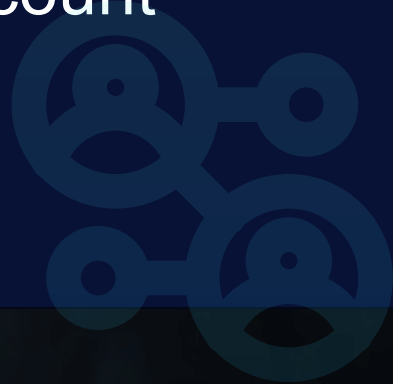




Expanding system access

New branches, workshops, stores, delivery points, and other sites that require connection to a common video surveillance system typically have their own responsible personnel.

The surveillance system administrator should remember they will need to grant access to new users and account for their traffic in network planning.



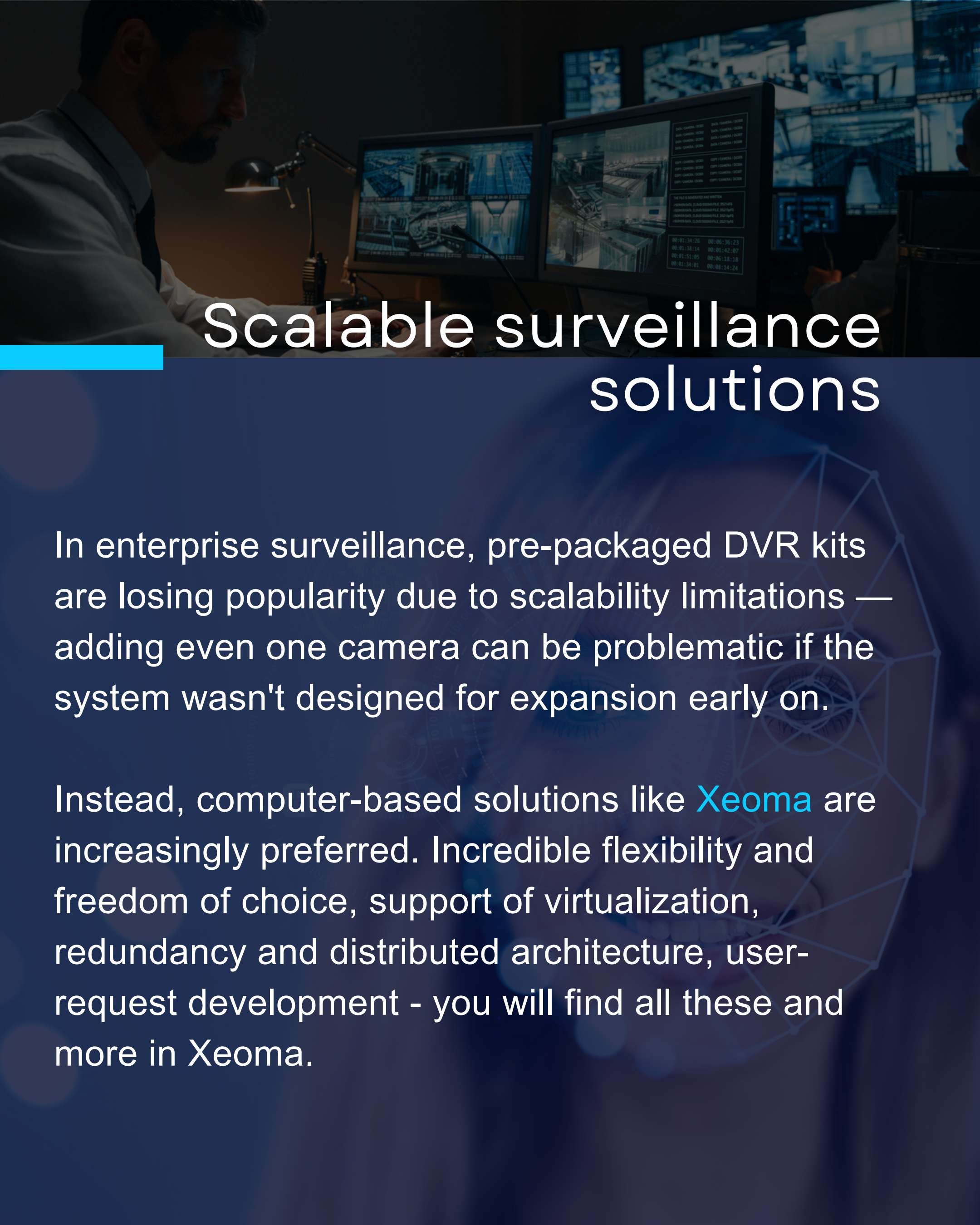
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How scalability is supported by video surveillance

Advanced video surveillance solutions not only support, but also encourage gradual scaling. For example, the following types of scaling support are available in the Xeoma video surveillance program:

- Compatibility with cameras of various brands/models
- Seamless licensing for additional cameras
- Distributed architecture and centralized management
- Cost-effective feature upgrades



Scalable surveillance solutions

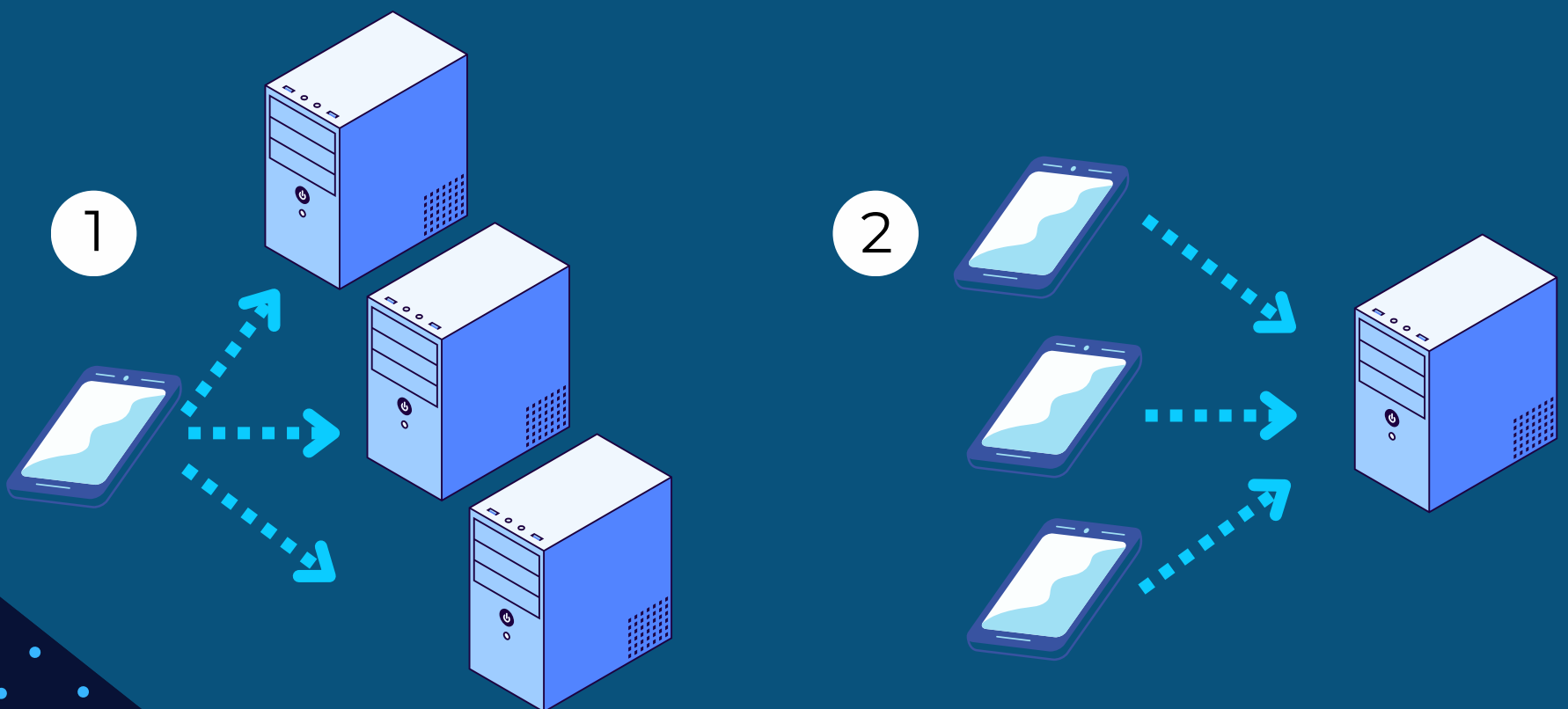
In enterprise surveillance, pre-packaged DVR kits are losing popularity due to scalability limitations — adding even one camera can be problematic if the system wasn't designed for expansion early on.

Instead, computer-based solutions like [Xeoma](#) are increasingly preferred. Incredible flexibility and freedom of choice, support of virtualization, redundancy and distributed architecture, user-request development - you will find all these and more in Xeoma.

Xeoma's multi-server configuration

For easy security system scaling, Xeoma supports multi-server and multi-client clustering:

- 1 Multi-server architecture: one client can connect to multiple servers simultaneously.
- 2 Multi-client architecture: multiple clients can connect to a single server.



Scaling Xeoma's capabilities

Ready to add smart video analytics to your video surveillance system?

With Xeoma, it's as **easy** as building blocks!

Basic license

Xeoma
Standard,
Xeoma Pro



Emotions recognition

Eye tracking

New visitors counter

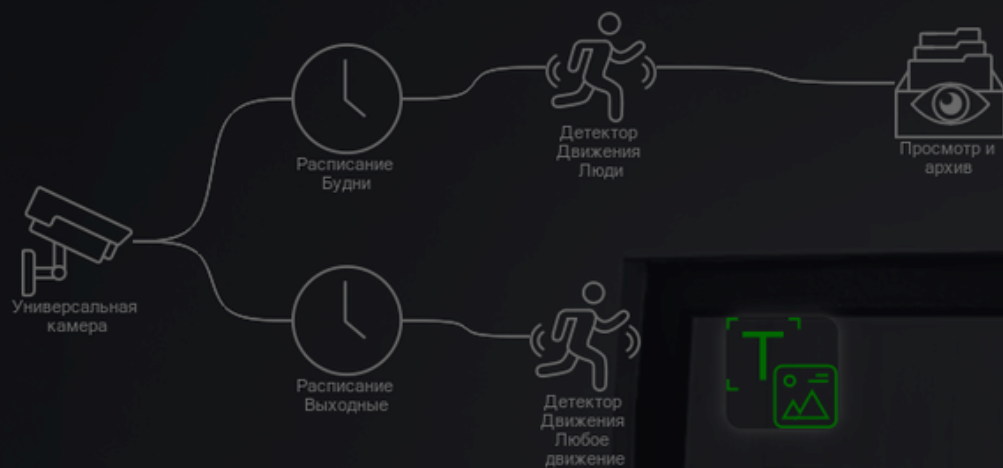
Sound recognition

and many
more!

Effortless scaling for any industry with Xeoma

Xeoma is suitable for any spheres:





Xeoma

advantages

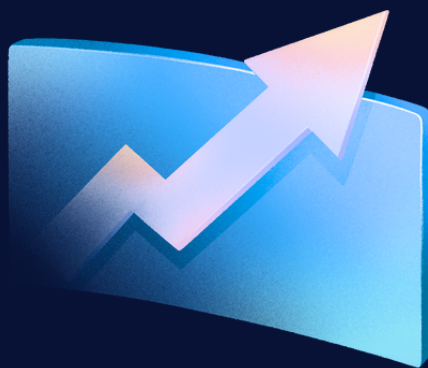
- ▶ 14+ years on the market, developed by a company with 20 years of expertise in video surveillance and development
- ▶ Flexible licensing for any budget
- ▶ Free support and testing
- ▶ Support for virtualization, edge computing, and possibility of Cloud-based processing, storage
- ▶ 100+ features, including 30+ video analytics tools:





*FREE
TESTING
AVAILABLE*

Any
questions?
Contact us!



xeoma.com

