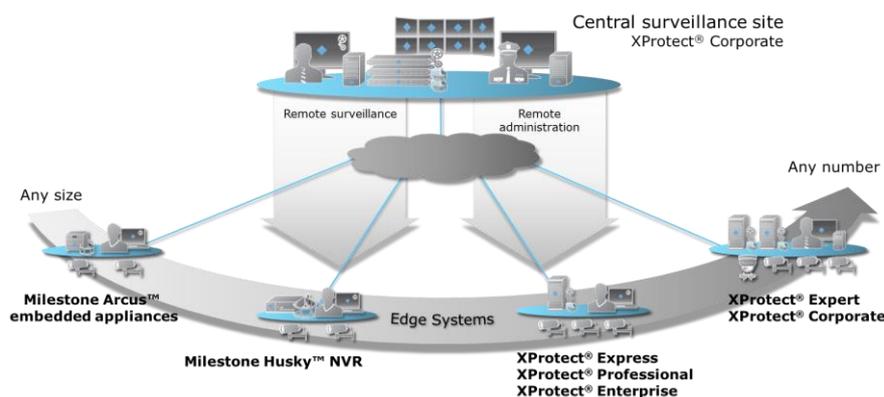


# Cost-efficient coordination of security operations across multiple locations

- Secure locally. Connect seamlessly. Manage centrally.

**Milestone Interconnect is a unique solution that makes it possible for organizations with distributed Milestone surveillance installations to unite their individual systems into a single, centrally operated and managed system. With XProtect Corporate as the central hub, Milestone Interconnect connects any\* Milestone XProtect® VMS product, Milestone Husky™ NVR unit and Milestone Arcus™ based appliance. Customers can select the optimum solution for securing each local site, while benefiting from the comprehensive functions of XProtect Corporate.**

In today's connected world, business, organizations and institutions often operate across multiple locations. This is common, for instance, for retail chains, financial institutions, corporations with different manufacturing sites, educational institutions and government bodies. With geographical distribution comes the challenge of efficiently coordinating security operation across individual locations, which often proves to be both costly and difficult.



*Milestone Interconnect enables cost-efficient coordination of security operations across multiple locations*

Milestone Interconnect is the ideal solution for organizations that want to coordinate their security operations across many sites. It is a powerful and flexible way of integrating cost-efficient Milestone surveillance solutions at the local edge site, in one cohesive and powerful security solution, based on the advanced surveillance functions in XProtect Corporate.

## Key benefits

- Manage unlimited number of local edge systems as one coherent security solution
- Optimize the security operations across multiple sites
- Enable proactive and efficient system administration of remote edge systems
- Optimize network and video storage costs

## Key features

- Use any\* Milestone XProtect VMS products, Milestone Husky NVR units and Milestone Arcus-based appliances
- Unlimited number of interconnected edge sites
- Full VMS functionality in the central system on interconnected cameras
- Choice of three video storage architectures
- Manual, event-driven or time-scheduled video retrieval
- Enables connection across intermitted connections
- Connection management with time and bandwidth control for video retrieval
- Scalable Video Quality Recording enables revival of high-quality recordings as a complement to existing centrally stored low-quality video

\*Except XProtect Essential 2016 R3 and later versions

## Secure locally

Designed for geographically dispersed installations with many smaller locations, Milestone Interconnect builds on the idea of a tiered surveillance architecture. In this setup the local premises and branch offices are covered by their own dedicated Milestone surveillance solution.

The particular solution selected depends on the size and operational needs in the specific location. Local sites can be optimized for available budget and local security needs. The local edge systems can be operated and administrated by local staff, as if they were independent standalone systems.

## Connect seamlessly

Local edge systems can easily be connected to a central monitoring hub based on XProtect Corporate. Once connected, cameras, audio devices and other security components in the local edge system are seamlessly available to security personnel in the central operation hub, as if they had been connected directly to the central system. This offers central XProtect Corporate system users seamless access to live and recorded video and audio, regardless of the type of interconnected system.

## Manage centrally

The primary motivation for centralizing security operation across geographically dispersed sites is operation gains and savings. Milestone Interconnect boosts the operational efficiency in two areas:

- Optimized security operation
- Optimized system administration

## Optimized security operation

Staging a full 24/7/365 manned security operation across a large number of locations can be a very costly, unless it can be centralized. The result of this is often a compromise between security level and costs.

With Milestone Interconnect real-time monitoring, virtual patrolling and incident responses can be centralized covering all interconnected locations. Drawing upon the advanced security tools in XProtect Corporate such as maps, alarm manager and bookmarks, security operators have instant and full control of interconnected systems.

## Supported products

Using Milestone Interconnect, local systems based on the following Milestone products may be interconnected to a central XProtect Corporate system.

Milestone XProtect VMS:

- XProtect Essential\*
- XProtect Express
- XProtect Express+
- XProtect Professional
- XProtect Professional+
- XProtect Expert
- XProtect Corporate

Milestone Husky NVR:

- Husky M10
- Husky M20
- Husky M30
- Husky M50
- Husky M500 Advanced
- Husky M550 Advanced

Milestone Arcus appliances:

- Different types of appliances with embedded Milestone Arcus VMS software

For detailed compatibility information, refer to the Milestone website:



## Multi-tier deployments

The most common use of Milestone Interconnect has two layers; the local edge systems covering individual premises, stores and offices, and a central hub location. Milestone Interconnect can also be used in a multi-tiered installation, with for example local-regional-central levels.

In addition, Milestone Interconnect can be used in combination with Milestone Federated Architecture for unlimited scalability.

Noteworthy savings can also be made in the investigation and video evidence collection of incidents, which can be done centrally, without the need to go on-site to do video exports.

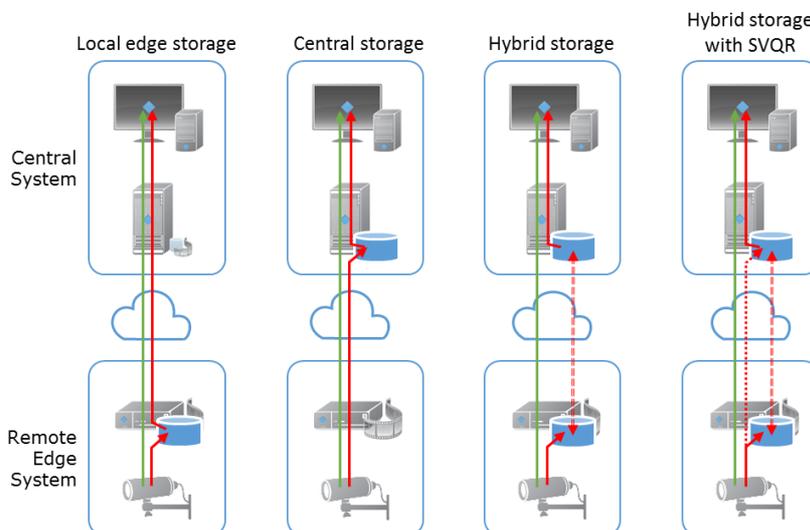
### Optimized system operation and maintenance

System administrators responsible for administration of the distributed surveillance solution also benefit from Milestone Interconnect. Propagation of system and camera error events from the edge systems to the central hub system makes it possible to proactively manage distributed installations consisting of hundreds of interconnected sites.

The ability to manage and configure local edge systems remotely from the central operations hub reduces the need for on-site visits and local personnel with system administration skills.

### Manage video recordings across locations

A distinct advantage with Milestone Interconnect is the possibility to choose where video is stored. Milestone Interconnect offers the following principal video storage architectures:



*Milestone Interconnect enables three principal storage architectures, where the hybrid option offers the ultimate combination of flexibility and optimum use of available storage and network resources*

A number of factors influence which storage architecture is most suitable. It is beneficial for installations with fast and stable network connections to use either local storage or centralized storage, only. Using local edge-based storage has the benefit of not loading the network with traffic unless the recorded video is needed, while central storage can be the better solution when the recorded video is used often for investigations and video exports.

### Secure system access

To protect the local edge systems it is possible to manage which functions and individual devices (cameras, IO and audio units) the central system has access to in the interconnected edge system.

### Partial interconnection

When interconnecting a local edge system, it is possible to decide whether all, or a subset of the cameras in the local system, shall be enabled in the central system. When setting up the interconnection the system administrator in the central system can simply select which of the accessible cameras in the edge system shall be enabled.

### Video retrieval management

A special function makes it possible to manage the video retrieval in hybrid storage solutions from a bandwidth and network use perspective. This function makes it possible to control when recordings are retrieved from the remote edge system and the maximum allowed bandwidth for video retrieval

This is a critical function in all installations with limited bandwidth where the video surveillance communication must not interfere with business critical applications such as point-of-sales systems, credit card validation or other business systems.

### Hybrid - the flexible storage architecture

The hybrid storage architecture builds on the principle that video is stored in the remote edge system initially. The central system can subsequently retrieve specific video recordings via manual requests, as a part of an investigation, or automatically, initiated by events and time schedules.

The hybrid architecture offers flexible storage handling with a number of significant advantages. The most obvious advantage with the two-tiered storage architecture is the ability to use the central system as a backup and long-term storage for the remote edge systems. Another advantage is the ability to optimize network use, by controlling if and when recordings are sent across the network and uploaded to the central system. This is of particular importance when the remote edge systems are connected via slow and intermittent connections.

### Connection across intermittent connections

One of the main challenges linking video operations together across larger distances is network connectivity, which needs to be both plentiful and reliable. This is, for example, the case when connecting remote retail stores across consumer-grade broadband connections, or when connecting mobile on-board vehicle systems for public transportation, ferries, police or military vehicles across wireless cellular networks.

Milestone Interconnect architecture is reliable during planned or unplanned interruptions in the connectivity between the central and remote edge systems. Any interconnected system will automatically reconnect to the central system once the connectivity is re-established after an interruption. Therefore, there is no need for operators to take any manual action.

Any scheduled, or ongoing, video retrieval is similarly resumed automatically when the system is reconnected. This makes Milestone Interconnect an ideal solution in installations where interruptions are planned and expected.

### Scalable Video Quality Recording™

Scalable Video Quality Recording (SVQR) is a technology that extends the advantages of the hybrid storage architecture by offering a combination of centralized stored video and remotely edge stored video. SVQR enables recording of high-quality video in the remote edge system, while a low-quality reference video stream can be recorded in the central system. In the event of an incident or investigation, the initial assessment can be made using the centrally stored reference video, while the high-quality video can be retrieved from the local edge system when and as needed.

### Want to know more?

Read more about Milestone Interconnect on the Milestone website:



The Milestone Interconnect white paper contains further details on how to best use the solution in specific solution scenarios:



Milestone Systems is a global industry leader in open platform IP video management software, founded in 1998 and now operating as a standalone company in the Canon Group. Milestone technology is easy to manage, reliable and proven in thousands of customer installations, providing flexible choices in network hardware and integrations with other systems. Sold through partners in more than 100 countries, Milestone solutions help organizations to manage risks, protect people and assets, optimize processes and reduce costs.