

Interactive multi-layered map function

- Operational hub for situational awareness and control

Milestone XProtect VMS products include an interactive map function that provides operators with real-time situational overview, and the ability to instantly access any camera or control any security peripheral connected to the VMS surveillance system.

Large security installations may contain several thousand cameras, detectors, audio devices, doors and other access points. It is not only the sheer number of cameras and other security peripherals in the system that makes it difficult to efficiently manage larger installations. The physical distribution across different building floors, buildings and across different premises, can make it challenging for operators to get a complete overview.



The map function is an interactive operational security hub providing operators situational overview and instant access to cameras and other security peripherals

The operational hub

Providing control room operators with an easy-to-navigate system overview of all cameras and other security devices, and a wealth of control functions, the map is a true operational hub. This makes the operation of even large installations easy and efficient.

Key benefits

- Provides operational overview of large and complex systems
- Operational hub enabling status reporting from, and control of all connected devices
- Increased efficiency and faster response to incidents

Key features

- Map images can be in standard graphic file formats including JPG, GIF, PNG and TIF
- Supports any number of layered maps such as city, street, building and room
- Instant camera preview on "mouseover" and one-click shows all cameras on map (max. 25 cameras)
- Integrated control of speakers, microphones, and events and output I/O control including: doors, gates, light and access control systems
- Real-time status monitoring indication from all system components including cameras, I/O devices and system servers
- Graphical visualization of the system status through color coding
- Hierarchical propagation of status indications to higher ordered maps

Instant access to live video and audio

Operators have instant access to live video from any camera on a map through a simple no-click mouseover or multi-camera selection. In the event of an incident, all cameras on the map (maximum 25) can open with a single mouse click. Operators can likewise listen to audio from any microphone object placed on the map.

Full control at the operators' fingertips

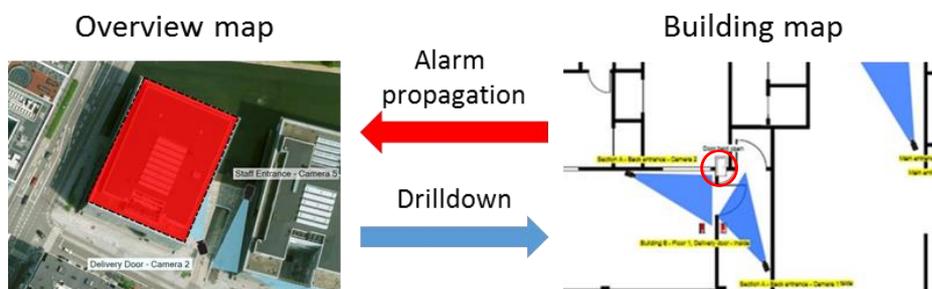
As the true operational hub, the map function enables operators to control any security device connected to the system. This means that the operator can control everything from lights to doors and gates directly from the map. It is also possible to make announcements via speakers and PA systems directly via the map.

Multi-layered maps – easy navigation

The map function operates with a hierarchy of static maps, each including a set of cameras and other security devices. The individual maps are linked together through *hot zones*. The primary purpose of hot zones is to facilitate navigation and drilldown to the next level in the map hierarchy. This would, for example, be used when navigating from an overview map to a specific building. An unlimited number of maps may be used in an installation.

Alarm and status propagation

The map also plays an important role in improving efficiency when handling alarms and incidents. In the event of an alarm, operators are notified instantly, where flashing indications in the map guide the operator to locate the device triggering the alarm. Alarms may be picked and acknowledged directly from the map without using the alarm list. It is also possible to suppress alarm notifications for a given interval, or until a predefined date/time.



Example of alarm propagation: a door is held open too long in a building, which causes an alarm. The alarm is propagated to the overview map via the hot zone that is blinking to notify the operator. Drilling down to the building map, the individual door is easily located by the alarm circle.

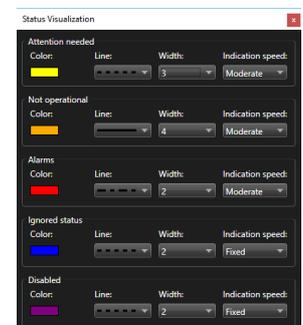
Supported map objects

The following devices can be operated and controlled via the map function:

- Cameras
- Microphones
- Speakers and PA systems
- Detectors/input devices
- Output devices for control of any external equipment
- Doors and other access points (when used with XProtect Access)
- Integrated third-party applications
- Recording servers
- Interconnected systems

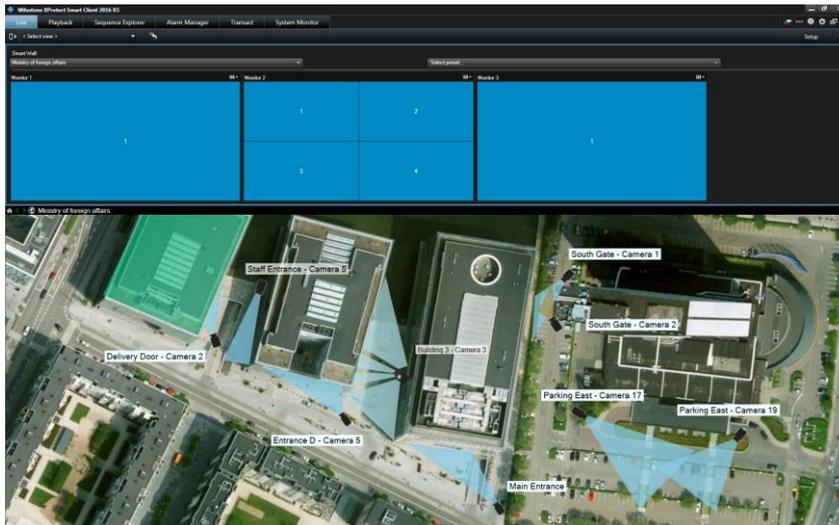
Customizing the visualization

The map uses a customizable color scheme to indicate the status of individual items in the map. This makes it easy to adapt the map to specific operational conditions.



Control room collaboration

To facilitate efficient collaboration and information exchange in command and control centers, maps can be shared on Milestone's video wall solution, XProtect Smart Wall. Operators simply send cameras to the XProtect Smart Wall through a drag-and-drop operation into the Smart Wall control.



Operators can send cameras to the Smart Wall through a simple drag-and-drop operation using the Smart Wall controller

A tool for system administrators

In the same way as the map function is an efficient operational tool for security operators, system administrators also benefit from using the map for monitoring operational system status. When activated, the status notification indicates when cameras, recording servers and interconnected systems require attention, or are not operational. Different status level indications (alarm, warning and errors) clearly indicate the severity of a system issue, allowing the administrator to take prompt action on critical matters.

In addition to the warning and status notifications in the map, it is possible to view performance details for a system object (recording server and cameras) through a simple mouse click.

Recording Server			Camera		
DKTS-PM-06-V7			Building 3 - Camera 3		
Name	Value	Unit	Name	Value	Unit
CPU Peak %	12	%	Resolution	720x576	
CPU Usage %	7	%	FPS	25.00	
Memory Free	1.413	GB	Configured FPS	25.00	
Memory Used	4.446	GB	Image Size	58	KB
Virtual Memory Free	3.013	GB	Video Format	JPEG	
Virtual Memory Used	5.846	GB	Network bit rate	12	Mbit/s
Network usage per second - isatap	0	B/s	Offline Times	27-09-2016 06:36:25	
Network utilization % - isatap.miles	0.00	%	Offline Times	27-09-2016 06:36:23	
Network usage per second - Micros	6	MB/s	Offline Times	27-09-2016 06:07:50	
Network utilization % - Microsoft.H	0.00	%			
Recording server disk free - Local D	1.892	GB			
Recording server disk free - Text	5.001	GB			

Status details for recording servers and cameras available via the map

Controlling PTZ cameras

PTZ cameras can be controlled directly from the map by clicking the view zone representing the pre-set position to which the camera shall be moved.



Suppression of alarms and status

For efficient operation, users can avoid repetitive alarms and continuous status indications on system devices known to be out of order by suppressing indications and alarms from a given map object. The ability to suppress system indications *until* a specific time, or *for* a specific time period, makes it easy to manage. Map objects with applied suppression is clearly indicated on the map.

Spanning federated and interconnected systems

In large or distributed installations using either Milestone Federated Architecture™ or Milestone Interconnect™, the map function provides a consolidated view of the entire system.

When using Milestone Federated Architecture, it is possible to use a high-level map for easy navigation across different sites, where hot zones are defined for drilldown into the individual federated systems.

Operators with distributed systems based on Milestone Interconnect can use the map function in the central XProtect Corporate system to access all enabled devices in the local edge system (subject to access rights in the remote edge system).

Creating and configuring maps

The map function is based on static background images to provide the widest possible flexibility. Any standard graphic file formats including JPG, GIF, PNG and TIF may be used. Thanks to an easy drag-and-drop and point-and-click definition of cameras, access points, audio devices and other security peripherals, the map function is easy to set up and configure. The ability to edit maps is subject to user rights.

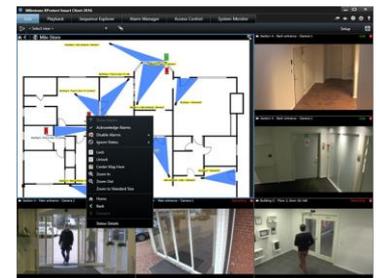
Content subject to user rights

The devices and functions available to individual operators via the map are controlled via the normal rights definitions for the users' respective roles.

Extended functions for access control

When using the XProtect Access add-on product, the map application provides extended status information for each access point (door, gate, etc.):

- Open/close status
- Lock status



It is also possible to remotely open/close and lock/unlock access points via the map.

Feature availability

The capabilities described in this brief are fully available in XProtect Corporate and XProtect Expert, and partially available in the rest of the VMS products. For details please refer to the specification sheets of the individual products.

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.