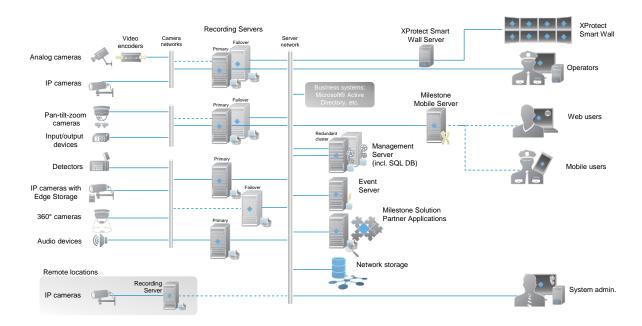
# XProtect® Expert





XProtect Expert is advanced open platform IP video management software (VMS) for medium and large installations. Its powerful central management helps simplify the installation and daily operation of larger systems with multiple recording servers. XProtect Expert offers reliable video access through failover recording servers, and uninterrupted video recording when complemented with camera associated edge storage. Using scheduled and event-driven rules, it is easy to automate security actions and control external systems, reducing the amount of manual tasks. Three unique viewing clients provide seamless access to live and recorded video for different personnel responsibilities. With Smart Maps maps, alarm handling and the option of adding XProtect® Smart Wall, XProtect Expert is ideal for installations with active situational live monitoring.

#### • Limitless multi-server and multi-site solution:

Supports an unlimited number of cameras, servers, sites and users, allowing you to grow your installation according to your needs

# • High performance recording server:

Building on a native 64-bit windows implementation and an highly optimized database technology with RAM-based prebuffering, the recording server supports minimum 3.1 Gbit/s recording rate

## • Centralized management:

Full configuration of all devices, recording servers and users from a central Management Client connected to the Management Server, which holds all configuration settings in a Microsoft SQL database

### • High availability - Failover Recording Servers:

Redundancy option ensures maximum system uptime while minimizing video interruption. Operates in two failover modes: cold stand-by and hot stand-by

#### Milestone Interconnect™:

A unique system concept that enables individual XProtect Expert systems to be connected with a central XProtect® Corporate system for central surveillance operation across geographically dispersed sites

#### Milestone Federated Architecture™:

System concept that enables multiple individual XProtect Expert systems to be interconnected with a central XProtect Corporate system in a hierarchical architecture for infinite scalability and central management

#### Bookmarking:

Allows users to mark video sections of particular interest and add descriptive notes for later analysis or sharing with other users

#### · Alarm Manager:

Single-point alarm function that provides a consolidated and clear overview of security and system-related alarms

#### Smart Map:

Seamless geo-navigation supporting map services such as Bing, Google and OpenStreetMaps as well as geo-referenced GIS maps and CAD drawings, with drilldown possibilities to the classic maps

#### • Intuitive map function:

Multi-layered map provides interactive access and control of the complete surveillance system and seamless drag-anddrop integration with XProtect Smart Wall

# • Metadata support:

Supports reception, storage and export of video metadata, including metadata from camera-resided video analytics and location data in Video Push from Milestone Mobile

# Edge Storage:

Uses camera-based storage as a complement to the central storage in the recording servers, with flexible video retrieval based on time schedules, events or manual requests, including the ability to combine centrally and remotely stored video using Scalable Video Quality Recording  $^{\text{TM}}$  (SVQR).

#### Versatile rule system:

Versatile rule engine makes it easy to automate different aspects of the system, including the control of cameras, system behavior and external devices, such as lights and doors, based on events or time schedules, eliminating the need for manual control

# Multicast support:

Sends only one video stream per camera to multiple XProtect Smart Clients. Optimize the network load in systems with many users viewing the same camera(s) live

# System Monitor

Customizable real-time system monitoring dashboard and report function for proactive maintenance of the VMS installation



# Main product components

# **Recording Server / Failover Recording Server**

- Records and stores video, audio and metadata, and provides operators and other users access to live and recorded streams
- Enables fast discovery of more than 5,000 IP cameras, IP video encoders and digital video recorder (DVR) models from close to 150 different manufacturers
- Manages the operation of and events from cameras and other connected security devices
- Full system scalability because an unlimited number of recording servers can be added to one system
- High-availability option where failover recording servers act as a backup to primary recording servers

#### **Management Server**

- Central coordination and repository for all system configuration data that is stored in an internal or external SQL database
- User authentication and user rights management with support for basic users, local Widows users or via Windows<sup>®</sup> Active Directory
- Maintains an array of system and audit logs
- May be clustered for high-availability deployments

# **Management Client**

 Single-point system administration interface for centralized management of all system configuration aspects

#### **Event Server**

- Provides advanced multi-layered map giving operators interactive access and control of the complete surveillance system
- Hosts features for the alarm function to provide a consolidated and clear overview of security and system-related alarms
- Hosts possible Milestone Integration Platform Software Development Kit (MIP SDK) solution plug-ins
- May be clustered for high-availability deployments

#### **XProtect Smart Wall**

- Add-on option that offers flexible and hardware independent video wall support
- Automatic or manual control of content
- Supports a rich set of content types, including live and playback video, maps, alarms, bookmarks, HTML pages, text messages, etc.

# XProtect clients

# **XProtect Smart Client**

XProtect Smart Client is the primary user interface for security operators and other daily users. Its adaptable user interface provides an extremely efficient working environment that can be optimized for different tasks and operator requirements

# **XProtect® Web Client**

Simplified web-based client interface for Milestone VMS that allows users to view, play back and share video from all the most common operating systems and web browsers

# **Milestone Mobile**

Milestone Mobile is a free application for smartphones and tablets specially designed for Milestone VMS solutions, enabling users to effectively monitor their video from anywhere, at any time

# **New features in XProtect Expert 2016 R3**

#### Scalable Video Quality Recording - SVQR

- Explores the synergy between edge and server based storage
- Enables seamless combination of centrally recorded (low quality) video and (high quality) video recorded in camera edge storage or in an interconnected system

#### Pre-recoding buffer in RAM

- Pre-recording buffer (used for event/motion based recording) in RAM minimizes the disk read/write operations when no video is recorded
- Optimizes recording server performance and reduces wear and tear on disk drives

#### H.265 - emerging encoding standard

 Support for the optimized video encoding standard enables savings on network infrastructure, video storage and hardware costs

#### **Smart Maps**

- New map function providing seamless geo-navigation and drilldown to existing classic maps
- Supports Bing, Google and OpenStreetMap map services, GIS maps and CAD drawings

#### **Kerberos**

 Support for Kerberos authentication protocol enables deployment of XProtect Expert in high security Kerberos IT environments

# Extended localization

 Additional localized language versions introduced for Swedish and Turkish

#### Integration options

- The Milestone Integration Platform Software
   Development Kit (MIP SDK) enables seamless
   integration of video analytics algorithms and other thirdparty applications in XProtect Smart Client and
   Management Client
- Compatible with XProtect® Transact and XProtect®
  Retail, which integrate video surveillance with ATMs,
  point-of-sale (POS) and enterprise resource planning
  (ERP) systems for managing loss prevention and fraud
- Compatible with XProtect® Access for video enabled physical security, which integrates with access control and intrusion systems
- Compatible with XProtect<sup>®</sup> LPR for automatic reading and tracking of vehicle license plates
- Generic event integration enables easy and fast integration of third-party applications and systems via a simple message-based socket communication interface
- Supports Milestone ONVIF Bridge that enables full video interoperability in multivendor installations using a standardized ONVIF compliant video-out interface
- System configuration API enables external applications to make changes to the system's configuration