XProtect® Expert 2016 R3

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.

XProtect Expert 2016 R3 in short

Milestone XProtect Advanced VMS is the market's highest performing VMS software. With the 2016 R3 release Milestone continues the effort to push this limit; which results in a better performing video surveillance solution with a lower total cost of ownership for Milestone's end-customers.

As a part of this XProtect Expert 2016 R3 takes the use of edge storage to a new level with the patented Scalable Video Quality Recording™ (SVQR) technology, which fully explores the synergies between edge and central server based storage, resulting in a more efficient and cheaper video storage.

The 2016 R3 release also includes an optimization of the video storage handling, by introducing RAM based pre-recording buffering. This technology dramatically reduces the disk read/write operations when using event driven recording with pre-buffering. The result is significantly improved disk utilization and reduced wear and tear on the disks, which extends the disk lifetime while reducing cost of maintenance and disk replacement.

Continuing the theme of reducing storage costs and balancing hardware needs with the desire for high quality video recording, XProtect Expert 2016 R3 introduces support for the emerging video encoding standard: H.265, which due to a higher compression rate reduce the cost for network and storage infrastructure.

With the 2016 R3 release, Milestone continues building on the award-winning usability. In this particular release we introduce Smart Maps, providing seamless geo-navigation with map services such as Bing, Google and OpenStreetMaps. It is also possible to use GIS maps and CAD drawings, which makes it easier to navigate large and distributed installations.

To further underpin that Milestone is the safe choice with regards to IT and cybersecurity, Milestone introduce support for Kerberos as an alternative authentication standard. The 2016 R3 release also includes a system hardening guide, that provides stepwise advice on how to secure all layers in the VMS installation from network, servers, operating system and Milestone VMS software level.

New key features in XProtect Expert 2016 R3

Scalable Video Quality Recording – utilizing the synergy between edge and server based storage

XProtect 2016 R3 introduces Scalable Video Quality Recording (SVQR). This new, patent-pending capability helps end-customers make the most of camera-based edge storage, enabling recording of high quality video to the edge storage while recording a low quality reference video centrally in the VMS recording servers. In the event of an incident or investigation, the initial assessment can be made using the reference images, while the high quality video can be retrieved when and as needed. The retrieval can be event-driven, scheduled, or manual initiated. In terms of cost reduction, SVQR significantly reduces the network traffic and central storage costs, as customers can store the high quality video using edge storage and decide when they want to retrieve it. This also provides a cost efficient way of capturing high-quality, pre-event recordings.

Pre-recoding buffer in RAM – reduced storage and maintenance cost

As an additional means of optimizing system performance, XProtect Expert 2016 R3 includes a major enhancement to the internal video recording process. XProtect Expert 2016 R3 introduces the possibility to keep the video pre-buffer (used for event- and motion-triggered recording) in RAM, instead of writing it to the hard drive. By keeping the video in RAM until it actually is to be recorded, gives a dramatic reduction in the read/write operations to the disks used for video storage. It significantly reduces the wear and tear on the hard drives, extends their lifetime, reduces energy consumption and increases the number of cameras that can be connected per recording server and storage system.

The reduction in the number of disk operations also means that lower specification disk can be used for the live database, which also reduce the initial system cost. All of this translates into increased system performance and a dramatic reduction in both the initial and maintenance costs of the storage system in installations using event driven recording with video pre-buffering.

H.265 – Supporting the emerging video encoding standard

Continuing the theme of reducing storage costs and balancing hardware needs with the desire for high quality video recording, XProtect® 2016 R3 introduces support for H.265, a video compression standard that potentially will prove to be 50% more efficient than H.264. This increased efficiency translates into concrete savings for XProtect customers, including up to 50% savings on network infrastructure, video storage and hardware costs. This means increased performance where more cameras can be connected to each XProtect recording server, when no server based motion detection is used.

Smart Maps - increasing operational efficiency

XProtect 2016 R3 includes Smart Maps, a brand new map function that supports seamless geo-navigation and navigation across different locations. It offers native support for GIS maps (Shapefiles) and CAD drawings, as well as support for online map services like Google, Bing and OpenStreetMap. Smart Maps provides operators with instant access to any camera in the XProtect Expert system. Smart Maps complements the existing map functionality and operators can seamlessly drilldown into detailed geo-referenced GIS maps or CAD drawings, or the existing XProtect Smart Client maps using quick links.

Kerberos - increasing system security

With increasing concerns about cybersecurity, we are pleased to announce support for Kerberos, which is an open standard providing secure user authentication via encrypted

communication protocol. Kerberos can be used as an alternative to the existing Windows NT LAN Manager (NTLM) authentication protocol.

System hardening guide

In addition to Kerberos support, we have also produced a system hardening guide to help our partners and customers optimize Milestone installations based on XProtect Expert to meet end-customers' cybersecurity needs. The guide outlines best practices for system design, operating system configuration, servers and workstations and the Milestone Advanced VMS software. It also contains input on cybersecurity policies, risk evaluation and mitigation.

XProtect Clients

XProtect Expert 2016 R3 is shipped with new versions of all viewing clients:
- XProtect® Smart Client 2016 R3
- XProtect® Web Client 2016 R3
- Milestone Mobile 2016 R3

XProtect Smart Client 2016

As a further refinement of the simplified operation mode in the Smart Client, the 2016 R3 version offers an optimized and simplified user interface for video export. Access to the simplified interface can be controlled by the Smart Client profiles and used as an alternative to the fully featured interface. The simplified mode is disabled by default in XProtect Expert.

XProtect Web Client 2016 R3

No major changes.

Milestone Mobile 2016 R3

The Android version of the Milestone Mobile interface for smartphones and tables has been refreshed and aligned with the latest design guidelines for Android applications. Although no additional functionality has been added the 2016 R3 version offers a more user-friendly interface.

Localization

With the 2016 R3 release, the XProtect Expert management client is available in the following two additional localized versions: Swedish and Turkish

With the added support for Farsi, the XProtect clients are now available in 30 different localized versions in total.

Please refer to: http://www.milestonesys.com/support/supported-languages/, for a complete list of supported languages.

System requirements

For details on system and operating system requirements, please refer to:
https://www.milestonesys.com/support/product-system-requirements/

Product licensing

The 2016 R3 edition of XProtect Expert is licensed with a new license series, which means that licenses for existing XProtect Expert installations must be upgraded or traded-in to be able to install and run the 2016 R3 version of the XProtect Expert software. There are no changes to the licensing structure of XProtect Expert 2016 R3, compared to earlier versions.

Product availability

XProtect Expert 2016 R3 and associated XProtect clients are generally available per **October 10, 2016**.