Version Comparison Report

VERSION COMPARISON REPORT

On a recurring cadence, we make the XProtect® products better, safer and more powerful. In this report you will see which features and capabilities we have added to XProtect

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Comparing XProtect Express+ 2019 R3 with XProtect Express+ 2025 R2

Divided into overall categories, the report summarizes the additional functionality and enhancements we have added since XProtect Express+ 2019 R3

Integration

XProtect is built on an open platform that brings you endless flexibility and possibilities. This category shows the results of our efforts to enable you to add custom, best-in-class security solutions to your surveillance - and video-enable your security and business systems.

East European generic country module for XProtect LPR profiles

Reduce license costs, improve system performance and refine your scope by using only one XProtect License Plate Recognition Country Module license while covering nine countries* at the same time. *The Eastern European Generic Country Module includes Albania, Belarus, Bosnia-Herzegovina, Kosovo, Macedonia, Moldova, Montenegro, Russia, Serbia.

Added in 2021 R2

H265 support in Milestone Open network Bridge

The Milestone Open Network Bridge enables frictionless communication between XProtect and other IP video surveillance products. Easily share video streams between different VMS systems and applications, and access and retrieve H.264 and H.265 video streams simultaneously. Explore new opportunities and win business.

Added in 2021 R2

Milestone Integration Platform VMS API

The Milestone Integration Platform VMS API is a new generation of our existing suite of APIs that was created to streamline the development process. Overall, it is based on industry standards and a modernized architecture and allows for robust and secure integrations that will meet your evolving needs.

Added in 2022 R1

Webhooks

Receive events from XProtect® through Webhooks. With Webhooks support, you can easily connect XProtect events to your existing systems. You can use using Webhooks to create a ticket in your support system, send an SMS or a call, etc.

Added in 2023 R1

Hospital Assist

Designed exclusively for hospital units caring for patients in need of 24/7 or situational observation. XProtect Hospital Assist is a dedicated remote patient monitoring solution that allows the hospital to increase staff efficiency, react to incidents rapidly and provide high-quality patient care.

Added in 2023 R1

License plate style recognition (XProtect LPR)

XProtect LPR now can identify vehicles based on their license plate style. Depending on the country's plate style strategy, LPR users can now recognize, sort and bundle license plate types - and thereby analyze traffic structures more efficiently.

Added in 2022 R2

Generic 360-degree dewarping

Extended device support includes all 360-degree cameras, regardless of manufacturer or model providing customers with freedom of choice when building or expanding their installation. The support is hardware-agnostic and ensures that all the 360-degree images received into the XProtect VMS are delivered into a standard, operator-friendly format.

Added in 2020 R3

Raised number of supported driver channels

The cap on supported channels has raised to 512, giving professionals more freedom of choice. This is a vast improvement from the 16-channel limit for ONVIF and the 64-channel limit for the Universal Driver. Partners building their own integrations with the Milestone Driver API/SDK can now enjoy complete freedom, going from a 1-channel limit support for an unlimited number of channels.

Added in 2021 R1

Expanded 360-degree camera support

Adjust each camera's field of view (FOV) to optimize the dewarping algorithm and allow XProtect to support dewarping in even more 360-degree cameras. A new view layout control plug-in also allows for improved management of how the dewarped images are displayed in the XProtect Smart Client. The new plug-in is named Milestone XProtect 360° Split View plugin and is available on Milestone Marketplace

Added in 2021 R1

Video Processing Service Toolkit

The MIP SDK is extended with functionality enabling integration with advanced video processing services utilizing the GStreamer framework. This enables Milestone Technology Partners to combine the XProtect VMS products with the powerful and versatile open-source GStreamer framework to create advanced and efficient hardware-accelerated video processing integrations utilizing the newest video processing technologies.

Added in 2020 R1

Ease of use

Ease of use is at the heart of everything we do. This category shows the results of our efforts to provide you with a solution that is easy to work with in every aspect - from the initial installation and configuration through to the final everyday usage.

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View groups in XProtect Mobile

The ability to gather different camera views into view groups, including floor, building, or location. This capability gives a more direct path toward finding specific cameras and footage and is especially useful for large installations with multiple cameras and sites. The "group view" feature also includes a group search function that allows users to search for views and cameras across the range. This significantly improves the operator's ability to find relevant footage.

Added in 2021 R2

PTZ icons in XProtect Smart Client

Operators can instantly differentiate between fixed cameras and moveable cameras, so they can quickly identify the camera they need.

Added in 2021 R2

Vietnamese Language Support

Vietnamese language support has now been added in our XProtect Clients – Smart Client, Mobile Clients and Web Client.

Added in 2024 R2

Mobile Client – New Layout for video grid in Mobile Clients for Tablets

A new layout for the video grid to maximize space when there are one, two or three cameras. The new layout switches to one column in the portrait mode and two columns in landscape mode to allow for a better overview of the video grid.

Added in 2024 R2

Map Migration Tool

To assist administrators and operators we are now providing a feature to help migrate maps to Smart Maps. The tool will calculate real world GPS locations for devices based on the relative position from the legacy maps.

Added in 2024 R2

Extended Smart Map Availability

Smart Map has so far only been available in XProtect Expert and XProtect Corporate and now, from 2024 R2, Smart Map will be available in XProtect Professional+ and XProtect Express+ as well.

Added in 2024 R2

Smart Client – Roles/groups on alarms format

Role-based alarm notifications direct alarms to specific users or user groups. It ensures that alarms can be configured according to the specific needs, i.e., read-only or admin rights can be assigned.

Added in 2023 R3

Web Client – Onboarding Feature Guide

The Onboarding Feature Guide in the Web Client presents the operator with information about how the Web Client is structured.

Added in 2023 R3

Mobile Clients – Emergency Alert

The Emergency Alert consists of a flow where an event from a camera triggers a critical alarm in XProtect, which sends a push notification* to a Mobile Client user. Opening the notification, the user can view the video associated with the alarm and then either confirm or decline the alarm. (*For this functionality to work, it requires push notifications. Push notifications are only available to customers that have Milestone Care).

Added in 2023 R3

Smart Client - Multiple view tabs

Multiple view tabs in the Smart Client allow the operator to work with views simultaneously on multiple video tabs.

Added in 2023 R3

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Management Client – Care reminder

When logging on to the Management Client, a notification pops up twice before the Care subscription expires – triggered 120 days before and again 20 days before. The notification helps create awareness about the Care subscription expiring and empowers system integrators or administrators to act proactively.

Added in 2024 R1

XProtect Update Manager

XProtect Update Manager deploys hotfixes to various servers centrally from one location. A single operation can list and patch all servers that don't have the latest hotfixes. If the VMS installation is online, it can fetch the latest hotfixes directly from Milestone.

Added in 2024 R1

Smart Client – Combined media player format

The new combined media player format allows the user to export in a new format. This format creates a combined file containing all exported video sequences, one after the other, in a format playable in a normal media player application on most platforms.

Added in 2024 R1

Web Client – Timeline in full-screen mode

A full-screen timeline across the Views and Investigation tabs streamlines the user experience. Switch between Live and Playback and interact with the Timeline controls without exiting the full-screen mode.

Added in 2024 R1

XProtect Hospital Assist, Multi-room Audio

With the combination of live video and Multiroom Audio, medical staff can watch and listen to several patient rooms simultaneously to quickly spot if a particular patient needs help, is in distress, has a heavy cough, or is simply just sleeping. This remote overview can help reduce the number of nighttime patient room visits.

Added in 2024 R1

Refresh of hardware information in the Management Client

With this update, you can view your firmware version, status information, and current capabilities. You can also see if there are any updates available, view previous updates, and see when devices were first added to your system. Instead of replacing hardware, you can refresh this information as often as needed from directly within the management client.

Added in 2022 R1

New export tab and workflow - XProtect Smart Client

An improved export workflow in the XProtect Smart Client gives operators access to a dedicated "Export tab" to create an easy-to-navigate interface and a more straightforward overview of the task at hand. The dedicated export tab is designed to allow for a more flexible workflow and include improvements such as an enlarged preview, more feedback to the operator and in general less clutter.

Added in 2022 R1

User Experience Refreshment

Enhanced user experience and ease of use through the refreshment of the Smart Client and Web Client.

Added in 2023 R1

Web Client Timeline

An improved experience when working with the Web Client due to the availability of the Web Client Timeline with the switch between Live and Playback within a View or single camera, the ability to adjust Playback speed, Timeline ruler scale, play forward and backward, scrub between sequences once at a time, and a simplified flow for working with Bookmarks from the Timeline.

Added in 2023 R1

Desktop notification for alarms

To ensure operators don't miss an important alarm, alarm notifications will appear in the XProtect Smart Client, even when the client is minimized, or the operator is working on another screen. Users can click on the notification and gain instant access to the Alarm Manager – for related video, bookmarking and further investigation.

Added in 2020 R1

Improved bookmark search (XProtect Smart Client)

With XProtect 2022 R2, users are now able to improve their bookmark searches by choosing to look for keywords within the headline, description or both. This feature allows users to have a faster search experience by narrowing down the search results and increasing the findability of the bookmarks.

Added in 2022 R2

Navigation improvements (XProtect Web Client)

As part of the XProtect Web Client renewal, the top pane is redesigned, and the navigation is moved to the left. This alignment allows for an easier transition between XProtect Clients and ensures that users are confident working with any viewing interface of XProtect.

Added in 2022 R2

Audio Synchronization (XProtect Web Client)

Users of XProtect Web Client no longer have to keep enabling audio when they switch between single camera view and grid view. The audio will remain enabled when the user enables the speaker on a camera.

Added in 2022 R2

Smart Client Player - Adaptive View

Improve viewing of video exports in the Smart Client Player. Adaptive View gives users an easier overview of video exports in XProtect format - by focusing on cameras with recorded video at the right time and place. The view will adapt to the number of cameras playing simultaneously. If only one camera is active, it will be a full-screen view, thus enhancing the ease of use of XProtect format exports when needed, as evidence.

Added in 2023 R2

XProtect Rapid REVIEW

Improve the deployment experience with Rapid REVIEW version 6.4, which offers a new and improved installer. For support purposes; replacement of the camera on the same Rapid REVIEW license is now easier.

Added in 2023 R2

Better XProtect Web Client investigations experience

Operators can rest assure that they are moving the correct video, thanks to a new thumbnail preview that pops up when dragging and dropping video streams into a new investigation window.

Added in 2020 R3

Recording timeline in XProtect Mobile

With the inclusion of a new recording timeline in XProtect® Mobile, finding the right video is as easy as using YouTube. On-the-go users can now scroll through a timeline of recordings and quickly switch amongst them when searching for specific events. Users can also pinch to zoom in the timeline and see more details or scroll through it to find specific recordings quickly and intuitively.

Added in 2020 R3

Device Firmware Update (single device)

Allows system administrators with supported device brands* to complete firmware updates directly within XProtect Management Client, saving thus time and energy. *This feature supports devices from AXIS, Bosch, and Hanwha. It also supports devices connected through the ONVIF driver.

Added in 2021 R1

XProtect Mobile Refreshment

Bringing the mobile user interface up to date to create a more intuitive and easier way to work with XProtect Mobile. The refreshment includes an updated interface for Live and Playback, buttons, placement of buttons, and icons and the Picture in Picture preview showing live video while you are in playback, is updated to be freely movable so that it does not obstruct the view

Added in 2020 R2

Device search filter (XProtect Management Client)

It is now possible to search for devices in the recording server tree. Searches can be made on device name and IP address. In addition, all disabled devices are by default not shown in the device tree, but they can be displayed by ticking the checkbox in the search bar.

Added in 2022 R3

Independent Playback modification (XProtect Smart Client)

Now when entering Independent Playback from Live mode, the video will skip back 10 seconds and automatically start playing. If Independent playback is entered from playback mode, while the video is playing forward, the video will similarly skip back 10 seconds, while if the video is playing backward, the video will skip forward 10 seconds. If the video is stopped when the Independent playback mode is entered, no skip will take place.

Added in 2022 R3

Multi-category Search

Allows users to combine and search across multiple Search categories to quickly find what is needed. The Search categories include people, vehicle, and location as well as any Search agents developed and integrated into XProtect by third-party technology partners. As an example, an operator can narrow his search only to contain video sequences that include blue vehicles AND male person and work more efficiently.

Added in 2022 R3

Toast notifications for alarms (XProtect Web Client)

When an alarm or other event is raised, now the user is prompted to go to the alarms page with a toast notification within the Web Client. Similar events are grouped in the same toast message, to preserve screen real estate. Clicking on the toast message will bring the user to the Alarms tab in the Web Client, so they can see the alarm details and respond to it.

Added in 2022 R3

Greek Language Support

Greek language support has now been added in our XProtect Clients – Smart Client, Mobile Clients, and Web Client.

Added in 2025 R1

Mobile Clients – Show Notification Badge on the Alarms Tab

The notification badge is now added when there's a new alarm on the alarm icon. This is visible in the alarm tab on both IOS and Android. Allowing the operator to get an indication of when to check alarms and act accordingly when on the go.

Added in 2025 R1

Mobile Client – New Navigation in Android

The navigation switches from top to bottom to enable users to act quickly. This creates better accessibility on mobile as the navigation is closer to the thumb than having top navigation.

Added in 2025 R1

Smart Client – Extensions to Combined media player format

The extensions to the media player export format now include export in an Adaptive View in media player format, Time Stamps, and Camera Names.

Added in 2025 R1

Smart Client - Access Control on the Smart Map

Smart Maps now supports Access Control Devices, empowering operators to control access to specific areas in real time. This enhances visibility and enables operators to easily visualize and monitor access points across different locations.

Added in 2025 R2

Smart Client - Option to add Date/Timestamp and Camera Name in Snapshot

Operators now have the option to add a date/timestamp and/or camera name to the resulting image file when creating a snapshot in the Smart Client.

Added in 2025 R2

Milestone Integration Platform Enhancements

Among the enhancements is the way the MIP SDK can be leveraged to tailor the Smart Map functionalities to specific needs. This ensures that developers can precisely map and manage the access control units.

Added in 2025 R2

Notification Manager in Customer Dashboard

A new Notification manager that lets you customize when and how you want to receive Milestone Care renewal reminders and system health error notifications. Amongst others, users can control who receives which notifications and can assign notifications to others, rather than just themselves.

Added in 2020 R1

Milestone Documentation Portal

New online portal for technical documentation - Now, all manuals and guides are available in an online format for easy search. Users can search for documentation by product, release, language, or topic across all manuals and guides removing the hassle of looking through numerous manuals to find the answer. Milestone's Documentation Portal can be found at www.doc.milstonesys.com, or by pressing F1 when XProtect is open and online.

Added in 2020 R1

Performance and scalability

Expect the best from us when it comes to performance, scalability and reliability. This category shows the results of our efforts to continually offer you scalable, high-performing video recording software - so that you can count on getting the industry's best performance.

Recording Server stability and resilience

XProtect 2021 R2 focuses on increasing the performance, resilience, and stability of the Recording Server. When the Recording Server has to be restarted, XProtect 2021 R2 minimizes the amount of data that needs to be rebuilt, which as a direct result, significantly speeds up the startup process and gets you to work quicker. With no additional hardware, a more stable Recording Server means fewer service disruptions, shorter downtimes when inevitable, and a continuous and smooth workflow.

Added in 2021 R2

ONVIF Profile M Metadata Support

The ONVIF standard is under frequent change. The built in Metadata Search functionality of the Smart Client has for some years supported People and Vehicle search capabilities based on the ONVIF compliant metadata. As the specifications evolve and camera capabilities enhance, we are now extending the supported metadata search filtering to match.

Added in 2024 R2

XProtect Remote Manager

XProtect Remote Manager allows XProtect administrators to securely connect their on-prem installations to the XProtect Remote Manager cloud application and get real time health status of their devices and servers. It is offered and included as part of the Milestone Care Plus.

Added in 2024 R2

Managed XProtect SQL Database

Managed databases enable the replacement of the XProtect SQL server with either AWS RDS or Azure SQL (Azure SQL or Azure SQL Managed Instance and Entra ID (formerly known as Azure Active Directory) authentication).

Added in 2023 R3

XProtect Rapid REVIEW 2024 M1

XProtect Rapid REVIEW 2024 M1 brings a new plug-in for an optimized user role management experience, a Fast Track feature to speed up investigations, and multiple user experience enhancements to ensure an intuitive interface and operator navigation.

Added in 2024 R1

Adaptive Streaming

Cut down on unnecessary hardware costs by using the video stream that fits your needs best. Adaptive Streaming makes it possible to receive a lower resolution stream from the recording server when a high-resolution one is not required. This gives users who receive large amount of video streams to their XProtect Smart Clients and XProtect Smart Walls a smoother viewing experience with less lagging while cutting down hardware costs currently needed to decode high-resolution video streams

Added in 2022 R1

Adaptive streaming (XProtect Mobile)

Adaptive streaming allows users to receive lower resolution streams when a higher one is not necessary. With adaptive streaming in XProtect Mobile, users get: - A smoother and seamless viewing experience - Reduced load on the Mobile server when sending and receiving low resolution streams - Reduced resource consumption on their mobile device

Added in 2022 R1

Multi-live streaming

Optimizes the XProtect Smart Client viewing performance according to the available bandwidth and view layouts, which is ideal for deployments with remote viewing.

Added in 2022 R1

Direct streaming (Mobile)

Say goodbye to the usual resource-heavy video transcoding taking place in the Mobile Server with the new direct streaming feature. With direct streaming, live video is streamed directly to XProtect Mobile and the XProtect Web Client, which drastically reduces the load on the Mobile Server. Benefits include a Mobile Server that is capable of handling more users and an improved viewing experience for mobile and web client users.

Added in 2022 R1

Deploying XProtect with a managed SQL service (on-prem)

Utilize the organization's existing managed SQL database without any admin access needed. This functionality leads to improved reliability, security, and measures for redundancy as well as higher peace of mind for your IT department.

Added in 2023 R1

Improved installation experience

Improved installation experience through the availability of a system prerequisite check, and the backup of the SQL Database(s) before updating your current installation to any currently supported version of XProtect.

Added in 2023 R1

Smart Client - Adaptive Playback

Adaptive playback switches between a high- and low-resolution stream, reducing system load. This lowers the bandwidth consumption for playback, lightening the corporate network load and simplifying connecting remote sites to a central security center. It reduces the load on viewing clients, giving users a smoother user experience, and it also frees up power for additional cameras on the same Recording Server by running motion detection on low-resolution streams when possible.

Added in 2023 R2

Smart Client performance improvements

A new and optimized video processing engine introduced in the XProtect Smart Client, which allows it to sustain a high frame rate, even when zooming ultra HD/4K or 360-degree cameras. This previously put a heavy load on the central processor, causing the frame rate to drop. Please note that only users with hardware acceleration enabled will experience the benefits from these improvements. Either using NVIDIA cards or Intel Quick Sync.

Added in 2020 R3

Direct streaming (Mobile)

Say goodbye to the usual resource-heavy video transcoding taking place in the Mobile Server with the new direct streaming feature. With direct streaming, live video is streamed directly to XProtect Mobile and the XProtect Web Client, which drastically reduces the load on the Mobile Server. Benefits include a Mobile Server that is capable of handling more users and an improved viewing experience for mobile and web client users.

Added in 2022 R1

XProtect LPR server scalability

XProtect LPR now only runs on 64bit Windows systems supporting AVX2 (Intel Gen4 or later). The rescaling improvement is done for increased performance and to enable higher numbers of LPR cameras per server.

Added in 2022 R3

XProtect LPR Vehicle Analytics

XProtect LPR has now added enhanced Vehicle Analytics. This goes beyond simple license plate recognition with added features such as Vehicle Class, Vehicle Color, Vehicle Model/Make, and Vehicle Angle to further assist law enforcement and security personnel to quickly and easily locate and identify vehicles of interest.

Added in 2025 R1

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Cybersecurity and user rights

Ensuring the security and integrity of your installation is always a top priority for us. This category shows the results of our efforts to protect the system from theft and damage to the hardware or software - as well as from disruption or misdirection.

Web & Mobile Client – Audit log of the logout system

Increased audibility and traceability of logout actions performed by operators or that occur when, e.g., a Mobile server closes the connection to either a Mobile Client or Web Client due to inactivity. This provides a clear trace of which users were logged out on their own versus due to a system logout.

Added in 2024 R1

Support for external identity providers - **Critical Update**

XProtect now supports external identity providers (IDP) allowing you to log in to your VMS using your preferred corporate identity provider and to enjoy stronger security, less manual work, and a smoother user experience.

Added in 2022 R1

XProtect Log Server - Use certificates and Server Configurator to encrypt communication

Improve security by using a certificate from a Certification Authority. The Log Server now uses the Server Configurator to ensure the proper use of certificates. Change the certificate used for the Log Server during the installation flow, and the Log Server will use the server certificate applicable for server-to-server communication and used by all other server components.

Added in 2023 R2

Stronger data encryption and FIPS compliance

XProtect 2020 R3 uses the latest encryption technology provided by Microsoft, making sure user information such as usernames, passwords, and devices are encrypted end-to-end, so you can rest assure that your personal information is always secure and protected. This next level of encryption also allows federal customers in US and Canada to run XProtect in a FIPS compliant mode.

Added in 2020 R3

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Server Configurator Utility for the Mobile Server

XProtect uses security certificates to validate the identity, authenticity, and reliability of the system's locally installed servers. XProtect 2020 R3 takes that capability on-the-go with the ability to handle security certificates on the Mobile Server – all from one place.

Added in 2020 R3

Server Configurator Utility

A new Server Configurator Utility makes it easier to work with certificate-based encryption. The XProtect installer now includes one single page to handle all certificate administration on all connected servers for reduced complexity when ensuring the integrity of the system

Added in 2020 R2

Adding devices on HTTPS

Support for connecting new devices to the system on HTTPS, which is a secure protocol for ensuring encrypted communication between system components

Added in 2020 R2

Mobile Device Management (XProtect Mobile) - Critical Update

XProtect Mobile now supports mobile device management (MDM). Through MDM, organizations can manage and secure devices, apps, and data from a unified console. Large enterprises that already own MDM can now add XProtect Mobile to their list of approved apps, making it easier to deploy across the organization and more secure.

Added in 2022 R3

Biometry support (XProtect Mobile) - Critical Update

Users can now use biometrics or device credentials to verify their identity to access XProtect Mobile. Available for both Android and iOS users. This feature improves user experience and product security simultaneously by allowing quicker and more secure access to XProtect Mobile.

Added in 2022 R3

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External IDP support (XProtect Web Client and XProtect Mobile) - Critical Update

Users can now log in to XProtect Web and Mobile Client with their preferred identity provider service. Extending SSO support to XProtect Web and Mobile allows organizations to enhance the security of their installation by avoiding unauthorized access, implementing cybersecurity measures in alignment with their security protocols , and improving user experience via the use of one strong password across all platforms.

Added in 2022 R3

Interoperability

This category shows the results of our efforts to ensure that your products and equipment can work with other systems or products, bringing you the best possible value – now and in the future.

New Search categories based on ONVIF-compliant metadata

The three new Search categories are people, vehicles and location, providing the user with even more filtering options to quickly home in on the video he is looking for. With the new Search categories users can optimize and target their searches to quickly and efficiently find the relevant video. The three new built-in Search categories appear as an embedded part of the XProtect Smart Client. It works with any device that generates ONVIF-compliant metadata.

Added in 2021 R1

Extended ONVIF Profile-M metadata support

Extended support for ONVIF Profile-M metadata in Vehicle and People categories. The "color" attribute is added to the Vehicle category. The "gender" and "height" attributes are added to the People category.

Added in 2022 R3

New Search categories based on ONVIF-compliant metadata

The three new Search categories are people, vehicles and location, providing the user with even more filtering options to quickly home in on the video he is looking for. With the new Search categories users can optimize and target their searches to quickly and efficiently find the relevant video. The three new built-in Search categories appear as an embedded part of the XProtect Smart Client. It works with any device that generates ONVIF-compliant metadata.

Added in 2021 R1

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Next Step

Already have Care Plus?

You have instant access to new product updates. Contact your reseller to update and safeguard your system to benefit from Milestone's continues innovative product development

Don't have Care Plus yet?

Care Plus gives you instant access to soft-ware updates three times a year. They make your product better, safer and more power-ful. Contact your reseller to join the Care Plus program.

Milestone Systems is a leading provider of open platform video management software technology that helps the world see how to ensure safety, protect assets and increase business efficiency. Milestone enables an open platform community that drives collaboration and innovation in the development and use of network video technology, with reliable and scalable solutions that are proven in more than 150,000 sites worldwide. Founded in 1998, Milestone is a stand-alone company in the Canon Group.