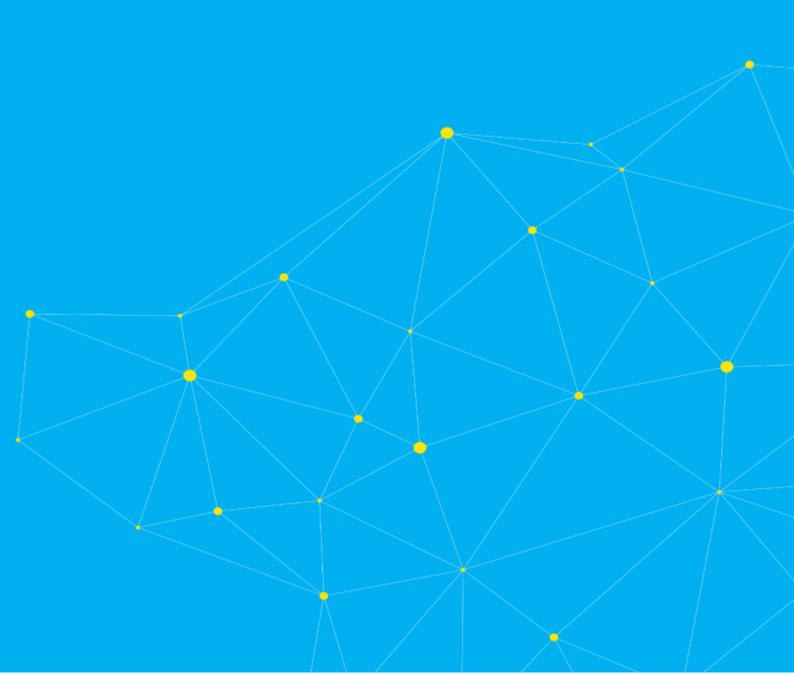


# Milestone Systems XProtect® Video Management Software Product Comparison Chart

#### XProtect 2019 R3

Available October 8, 2019



#### **Contents**

Introduction	2
High-level XProtect VMS product comparison	3
Detailed XProtect VMS products comparison chart	4
High-level XProtect client comparison	ç
Detailed XProtect client comparison	.10

#### Introduction

As the world's leading provider of open platform IP video management software (VMS), Milestone Systems offers a wide range of VMS products optimized for different types of deployment and usage. This document provides an in-depth comparable outline of Milestone's XProtect® VMS products and the associated clients.

This document is intended as a technical sales tool with two primary purposes:

- To provide an overview of the features that each XProtect product provides
- To support the selection of the optimal product by offering a visible comparison between the various products in the XProtect product range

This document contains several separate comparison charts, for XProtect VMS platform products and for XProtect clients, where each product category has an overview comparison chart, followed by a more detailed and comprehensive chart.

The following XProtect VMS platform products are covered:

- XProtect<sup>®</sup> Corporate
- XProtect<sup>®</sup> Expert
- XProtect<sup>®</sup> Professional+
- XProtect<sup>®</sup> Express+
- XProtect<sup>®</sup> Essential+

! XProtect Express and XProtect Professional are not part of the 2019 R3 comparison chart as these products entered maintenance mode with 2019 R2, where their final versions were released on June 19, 2019. **Click here** for more information about XProtect Express and XProtect Professional.

The following XProtect clients are covered:

- XProtect® Smart Client
- XProtect® Web Client
- XProtect<sup>®</sup> Mobile

The document does not cover XProtect add-on products or Milestone Utilities.

The information in this document only provides basic information. Refer to the individual product specification sheets for a complete listing of all features for a given XProtect product.

Milestone reserves the right to change the product specifications without prior notice.

# **High-level XProtect VMS product comparison**The table below gives an overview of Milestone's XProtect VMS products and their key capabilities.

XProtect VMS Products	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate
Key Features					
Type of deployment	Single-server	Single-server	Centrally managed, multi-server	Centrally managed, multi-server	Centrally managed, distributed sites
Licensing	Free	Perpetual	Perpetual	Perpetual	Perpetual
Number of hardware devices <sup>1</sup> per software license	8	48	Unrestricted	Unrestricted	Unrestricted
Number of cameras <sup>2</sup> per recording server	8	48	Unrestricted	Unrestricted	Unrestricted
Number of recording servers per system	1	1	Unrestricted	Unrestricted	Unrestricted
Maximum numbers of users	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Customer Dashboard and Connected Services <sup>3</sup>	-	Supported	Supported	Supported	Supported
Alarm Manager	-	Yes	Yes	Yes	Yes
Video out via Milestone ONVIF Bridge	-	Yes	Yes	Yes	Yes
Dual authorization (Smart Client users)	-	Yes	Yes	Yes	Yes
Supports XProtect Smart Client, XProtect Web Client and XProtect Mobile	Yes	Yes	Yes	Yes	Yes
Secure HTTPS camera connectivity (on supported devices)	Yes	Yes	Yes	Yes	Yes
Map function	Yes	Yes	Yes	Yes	Yes
Third-party application integration and support for video analytics <sup>4</sup>	Yes	Yes	Yes	Yes	Yes
Built-in Video Motion Detection (VMD) with Auto adjustable VMD sensitivity	Yes	Yes	Yes	Yes	Yes
H.264, MJPEG, MPEG-4, MPEG-4 ASP & MxPEG	Yes	Yes	Yes	Yes	Yes
H.265 <sup>5</sup>	Yes	Yes	Yes	Yes	Yes
Adaptive streaming	-	-	-	Yes	Yes
Microsoft Active Directory support	Yes	Yes	Yes	Yes	Yes
Kerberos authentication	Yes	Yes	Yes	Yes	Yes
Metadata support	Yes	Yes	Yes	Yes	Yes
Centralized management	Yes	Yes	Yes	Yes	Yes
Flexible event rule engine	Yes	Yes	Yes	Yes	Yes
Hardware accelerated video decoding for Video Motion Detection (Quick sync)	Yes	Yes	Yes	Yes	Yes
Hardware accelerated video decoding for Video Motion Detection (NVIDIA)	-	-	-	Yes	Yes
Hardware accelerated video decoding in the Mobile Server	Yes	Yes	Yes	Yes	Yes
Support for live video play without recording storage	Yes	Yes	Yes	Yes	Yes
Edge Storage and Scalable Video Quality Recording™	-	-	Yes	Yes	Yes
Smart Map functions	-	-	-	Yes	Yes
Media database encryption and digital signing	-	-	-	Yes	Yes
Recording Server communication encryption	Yes	Yes	Yes	Yes	Yes
Management Server communication encryption  Mobile Server communication encryption	Yes	Yes	Yes	Yes	Yes
Hot- & cold-failover recording server	Yes -	Yes	Yes -	Yes Yes	Yes Yes
Evidence Lock	-	-	-	Yes -	Yes
Supports XProtect Smart Wall		-	-	Option	Included
Milestone Federated Architecture™	-	-	-	Remote site	Central/ Remote
Milestone Interconnect™	-	Remote site	Remote site	Remote site	Central/ Remote site

 $<sup>{</sup>f 1}$  A hardware device is the physical unit, server or system connected to the VMS' recording server

 $<sup>{</sup>f 2}$  A camera is the actual camera or video source on the hardware device connected to the VMS' recording server

**<sup>3</sup>** Requires active Milestone Care Plus coverage

<sup>4</sup> Using Milestone Integration Platform (MIP)

<sup>&</sup>lt;sup>5</sup> Please check <a href="https://www.milestonesys.com/support/resources/system-requirements/">https://www.milestonesys.com/support/resources/system-requirements/</a> for graphic cards and performance requirements

#### **Detailed XProtect VMS products comparison chart**

The table below gives a detailed listing of all major features in the different XProtect VMS products. The features are organized into categories for increased readability.

XProtect VMS Products Features	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate
System components (software modules)					
Recording server	<b>√</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>
Hot- & cold-failover recording server	-	-	-	<b>√</b>	✓
Maximum number of hardware devices <sup>1</sup> or cameras <sup>2</sup> per recording server	8	48	Unrestricted	Unrestricted	Unrestricted
Maximum number of recording servers per system	1	1	Unrestricted	Unrestricted	Unrestricted
Recording server manager	✓	✓	√	✓	✓
Management server	✓	✓	√	✓	✓
Management failover server (redundant cluster)	✓	✓	<b>√</b>	<b>√</b>	✓
Management client (dedicated client application for local or remote management)	✓	✓	<b>√</b>	<b>√</b>	✓
Event server (for handling of events and alarms)	✓	✓	<b>√</b>	<b>√</b>	✓
Failover event server (redundant cluster)	✓	✓	<b>√</b>	<b>√</b>	✓
XProtect Mobile (server and client)	✓	✓	<b>√</b>	<b>√</b>	✓
DLNA (Digital Living Network Alliance) server	-	✓	<b>√</b>	<b>√</b>	✓
XProtect Smart Client	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
XProtect Web Client	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
XProtect Smart Client - Player (local playback/export)	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Run servers as Windows Services	✓	<b>✓</b>	✓	✓	<b>√</b>
Licensing					
Licensing	8 devices free	Perpetual	Perpetual	Perpetual	Perpetual
Distributed operation					
Milestone Interconnect™	-	Remote site	Remote site	Remote site	Central/ Remote site
Milestone Federated Architecture™	-	-	-	Remote site	Central/ Remote site
Remote camera connection via Remote Connection Service	-	-	-	-	✓
Device support					
Support for ONVIF™ & PSIA compliant devices	✓	✓	✓	✓	✓
Generic device support via Milestone universal driver	✓	✓	✓	✓	✓
Metadata from camera embedded analytics	✓	✓	✓	✓	✓
Number of supported IP devices <sup>3</sup>	+0008	+0008	+0008	+0008	+0008
Secure HTTPS camera connectivity (on supported devices)	✓	✓	<b>√</b>	✓	✓
Video processing					
H.264, MJPEG, MPEG-4, MPEG-4 ASP and MxPEG	✓	✓	✓	✓	✓
H.265 <sup>4</sup>	✓	✓	✓	✓	✓
Metadata support	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓
Dual stream (live and recording) per camera	✓	<b>√</b>	<b>√</b>	<b>√</b>	✓
	_	-	-	✓	✓
Multi-live streaming					
Multi-live streaming Adaptive streaming	-	-	-	✓	✓
•	- ✓	- ✓	- ✓	√ √	√ √
Adaptive streaming Client video stream down sampling (resolution and					
Adaptive streaming Client video stream down sampling (resolution and FPS) option	<b>√</b>	✓	✓	<b>√</b>	✓
Adaptive streaming Client video stream down sampling (resolution and FPS) option Adjustable GOP size (MPEG4/H.264/H.265) Send camera pre-alarm images (pre-recording buffer)	√ √	√ √	√ √	√ √	√ √
Adaptive streaming  Client video stream down sampling (resolution and FPS) option  Adjustable GOP size (MPEG4/H.264/H.265)  Send camera pre-alarm images (pre-recording buffer) to recording server  Video recording speed up on motion, event or time	√ √ √	\frac{1}{\sqrt{1}}	\frac{1}{\sqrt{1}}	\frac{1}{\sqrt{1}}	\frac{1}{\sqrt{1}}
Adaptive streaming  Client video stream down sampling (resolution and FPS) option  Adjustable GOP size (MPEG4/H.264/H.265)  Send camera pre-alarm images (pre-recording buffer) to recording server  Video recording speed up on motion, event or time schedule	√ √ √	\frac{1}{\sqrt{1}}	\frac{1}{4}	\frac{1}{4}	\frac{1}{}

XProtect VMS Products	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate
Hardware accelerated video decoding for VMD	_	_	_	√	√
(NVIDIA) Hardware accelerated video decoding in the Mobile				*	,
Server	✓	✓	✓	✓	✓
Motion metadata generated during VMD analysis	✓	<b>√</b>	✓	✓	✓
VMD exclusion zones	✓	✓	<b>√</b>	✓	<b>√</b>
Video motion detections per server  Audio			All connected cameras		
One-way audio - live and recording support	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Two-way audio - live support		<b>√</b>	<b>√</b>	<i>y</i>	<b>V</b>
Two-way audio – recording support			· ✓	· ✓	· ✓
Two-way AAC Audio support	-	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Maximum number of supported audio channels	8	48	Unrestricted	Unrestricted	Unrestricted
Playback of audio files on rule	√	✓	√	✓	√
Pan-tilt-zoom (PTZ)					
Preset positions per camera	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Go-to preset on event	√ √	√ √	<b>√</b>	✓ ✓	√ √
Preset patrolling	✓	<b>√</b>	✓ ✓	✓ ✓	<b>√</b>
Combine patrolling and go-to preset on event  Scanning/transition speed	✓	✓ ✓	√ ✓	<b>√</b>	✓ ✓
Number of PTZ priority levels for prioritized PTZ		1	3	32,000	32,000
control  I/O and events	-	1	3	32,000	32,000
Hardware configurable events (such as I/O input, motion, tampering, temperature, communication failure)	✓	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Motion detection events (VMD in recording server)	✓	✓	✓	✓	✓
System error events (for example disk full)	✓	✓	✓	✓	✓
Manual / User defined events	✓	✓	✓	✓	✓
Generic events from external systems	✓	✓	<b>√</b>	✓	<b>√</b>
Event-based device configuration	✓	<b>√</b>	✓	✓	<b>√</b>
Event-based notification	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Event-based output control	✓ 	√ √	<b>√</b>	<b>√</b>	√ √
Event-based device start/stop  Event-based matrix control	✓	<b>√</b>	√ √	✓ ✓	✓ ✓
Flexible event rule engine for definition of actions on		<b>√</b>	√ √	<b>√</b>	<b>√</b>
Bookmark function					
Manual bookmarking (quick bookmarking and bookmarking with details)		-	<b>√</b>	<b>√</b>	<b>√</b>
Rule-based bookmarking		_	_	<b>√</b>	
Evidence Lock				•	,
Lock video for one or multiple cameras	-	-	-	-	✓
Retrieve overview of locked video sequences	-	-	-	-	<b>√</b>
Define available retention times	-	-	-	-	<b>√</b>
Alarm Manager					
Alarm description with work instructions and optional initial owner of alarm	-	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Time profiles for alarms	-	<b>√</b>	<b>√</b>	✓	<b>√</b>
View triggered alarms	-	✓	✓	✓	✓
Manage alarms (reassign, change status, comment)	-	✓	✓	✓	✓
Push alarms to users of XProtect Mobile <sup>5</sup>	-	<b>√</b>	✓	✓	✓
Maximum number of related cameras in alarm preview window	-	15	15	15	15
Number of alarm priority levels	-	32,000	32,000	32,000	32,000
Customizable alarm priority levels, categories, statuses and result codes	-	<b>√</b>	✓	<b>√</b>	<b>√</b>
Customizable sound notification	-	<b>√</b>	√	<b>√</b>	√
Alarm handling reporting	-	<b>√</b>	√	<b>√</b>	<b>√</b>
Alarm logging	-	<b>√</b>	✓	✓	√
Recording server, storage and archiving	,	,	,	,	
Pre-recording buffer in RAM	✓	✓	✓	✓	✓

XProtect VMS Products	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect
Recording capacity per device/day	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Archiving of recordings with network drive support	✓	✓	✓	<b>√</b>	✓
Dynamic archiving (disk spanning)	-	-	-	-	-
Online access to archives	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Archiving schedules	Hourly	Hourly	Hourly	Hourly	Hourly
Automatic storage distribution	-	-	-	-	-
Storage definition and retention time per device	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Storage definition and retention time that can be applied to individual cameras or common for multiple devices	<b>√</b>	√	√	<b>√</b>	√
Multi-stage video storage and data grooming	-	-	-	<b>√</b>	<b>√</b>
Storage overview (used vs. available space) of	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	
available storage drives	<b>V</b>	<b>V</b>	<b>V</b>	<b>V</b>	V
Support for live video play without recording storage	✓	✓	✓	✓	✓
Event on premature deletion of video due to insufficient physical storage	✓	✓	✓	✓	✓
Edge Storage support with flexible retrieval	-	-	√	✓	✓
Scalable Video Quality Recording™	-	-	✓	✓	✓
Evidence Lock	-	-	-	-	✓
Media database encryption and digital signing	-	-	-	✓	✓
Encryption of communication with connected servers/clients/integrations	<b>√</b>	✓	✓	✓	✓
Multicast support	-	-	-	✓	✓
Integration					
Plug-in, Protocol, Component integration via MIP SDK	✓	✓	✓	✓	✓
System Configuration via MIP SDK	✓	✓	✓	✓	✓
Device integration through Driver Framework	✓	✓	✓	<b>√</b>	✓
Metadata integration	✓	✓	✓	<b>√</b>	✓
Event integration	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Event and action rule engine integration via MIP SDK	<b>√</b>	J	<b>√</b>	1	
Support for XProtect Add-on products					
XProtect Access	-	✓	<b>√</b>	✓	<b>√</b>
XProtect LPR	_	· √	· √	· √	
XProtect Smart Wall	_	-	-	Option	Included
XProtect Transact	_	<b>√</b>	<b>√</b>	√	<b>✓</b>
XProtect Retail	_	<b>√</b>	<b>√</b>	<b>√</b>	
XProtect Screen Recorder	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	
Milestone ONVIF Bridge			/		<b>√</b>
DLNA server		✓ ✓	<b>√</b>	✓ ✓	<b>V</b>
	-			<u> </u>	
Management					
Maximum number of clients	Unrestricted	Unrestricted	Unrestricted	Unrestricted	Unrestricted
Automatic initial configuration wizard	-	-	-	-	-
Configuration wizards for aided system setup	✓	<b>√</b>	<b>√</b>	✓	<b>√</b>
Automatic camera discovery	-	-	-	-	-
Device scanning with device model detection	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Device replacement wizard  Move device wizard for moving hardware devices	- -	-	✓ ✓	√ √	√ √
(e.g. cameras) between recording servers		<b>√</b>	<b>√</b>	<b>√</b>	
Centralized recording server & device management		√ √			
Device group support	- -	-	✓	√	<b>√</b>
Management Client profiles Centralized management of XProtect Smart Client application options (Number of supported XProtect	-	-	3	3	√ Unrestricted
Smart Client profiles)	<b>√</b>	<b>√</b>	,	<b>√</b>	,
	✓		<b>√</b>		√
Smart Client profiles)  Day length time profile			✓	✓	<b>√</b>
Day length time profile On-the-fly configuration changes	✓	<b>√</b>			
Day length time profile On-the-fly configuration changes Scheduled start/stop of devices	√ √	<b>√</b>	✓	✓	<b>√</b>
Day length time profile On-the-fly configuration changes Scheduled start/stop of devices Device Password Management	√ √ -	-	√ √	✓	<b>√</b>
Day length time profile On-the-fly configuration changes Scheduled start/stop of devices Device Password Management	√ √	<b>√</b>	✓		
Day length time profile On-the-fly configuration changes Scheduled start/stop of devices Device Password Management Configuration reporting	√ √ -	- - - -	√ √	✓	<b>√</b>
	√ √ - √	- - -	\frac{1}{\sqrt{1}}	√ √	√ √

XProtect VMS Products	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate
Add/replace devices without reactivation in offline systems <sup>6</sup>	✓	<b>√</b>	✓	<b>√</b>	<b>√</b>
Customizable access port with NAT support	✓	✓	✓	✓	✓
System Monitoring					
Customizable dashboard for task or component specific live monitoring	-	-	-	✓	<b>√</b>
Customizable event trigger thresholds for Normal, Warning and Critical levels	-	-	-	✓	✓
Real-time and historical system status of management server, event server, recording servers and other XProtect servers	-	-	-	✓	✓
Real-time and historical system status of individual cameras	-	-	-	√	✓
Dedicated System Monitor tab that can be displayed as floating window	-	-	-	✓	<b>√</b>
XProtect Smart Wall					
Supports XProtect Smart Wall video wall add-on Number of XProtect Smart Walls and XProtect Smart	-	-	-	Option Unrestricted	Included Unrestricted
Wall displays					
Number of concurrent video streams	-	-	-	Unrestricted 100	Unrestricted 100
Maximum number of content positions per display  Presets for display layouts and camera content		-	-		
Live video stream content		-	_	<b>√</b>	<b>√</b>
XProtect Smart Client controlled playback of video		_		<b>√</b>	<b>√</b>
Support for rich video wall content, including: maps, still images, http pages, alarms, texts, bookmarks, system monitor, etc.	-	-	-	✓	✓ <b>/</b>
Rule-based control of layout and content (including text messages)	-	-	-	<b>√</b>	<b>√</b>
System alarms and notification					
Email notification	✓	✓	✓	✓	✓
Multiple notification profiles	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
SNMP trap	_	-	_		· √
System Watch support	_	-	_	-	-
Customer Dashboard <sup>5</sup>	-	✓	<b>√</b>	✓	<b>√</b>
User authentication and rights management					
Centralized user management	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Tiered management rights	-	-	-	-	<b>√</b>
Inheritance of user rights	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Time schedule-controlled user access to devices and functions	-	-	-	-	√
Restrict user access by client type (Web Client, XProtect Mobile and Smart Client)	✓	<b>√</b>	✓	✓	✓
Basic User (XProtect application accounts)	✓	✓	✓	✓	✓
Windows User (local Windows accounts)  Microsoft Active Directory User (central Active	√ √	✓ ✓	√ √	√ √	√ √
Directory accounts)  Dual authorization (Smart Client users)	_	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Dual authorization (Smart Client users)  Dual authorization (Management Client users)		√ √	✓ ✓	✓ ✓	✓ ✓
Two-step verification (Web and Mobile Client users)	-	-	-	-	✓ ✓
Windows NTLM (NT LAN Manager) authentication	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Kerberos authentication	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Logging					
System and audit logging	✓	✓	✓	✓	✓
Rule logging	<b>√</b>	✓	<b>√</b>	✓	✓
Languages (Management Interface)					
Chinese (Simplified)	✓	✓	✓	✓	✓
Chinese (Traditional)	√7	√7	√7	√7	√7
Danish	√7	√7	√7	√7	√7
English	✓	✓	✓	✓	✓
French	✓	✓	✓	✓	<b>√</b>
German	√7	√7	√7	√7	√7
Italian	√7	√7	√7	√7	√7

XProtect VMS Products	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate
Japanese	✓	✓	✓	✓	✓
Korean	✓	✓	✓	✓	✓
Portuguese (Brazilian)	✓	✓	✓	✓	✓
Russian	√7	√7	√7	√7	√7
Spanish	√7	√7	√7	√7	√7
Swedish	√7	√7	√7	√7	√7
Turkish	√7	√7	√7	√7	√7

 $<sup>^{\</sup>mathbf{1}}$  A hardware device is the physical unit, server or system connected to the VMS' recording server.

 $<sup>^{\</sup>mathbf{2}}$  A camera is the actual camera or video source on the hardware device connected to the VMS' recording server

<sup>&</sup>lt;sup>3</sup> For an overview of supported devices please refer to: <a href="https://www.milestonesys.com/community/business-partner-tools/supported-devices/">https://www.milestonesys.com/community/business-partner-tools/supported-devices/</a>

<sup>&</sup>lt;sup>5</sup> Requires Milestone Care Plus service coverage

<sup>&</sup>lt;sup>6</sup> For details on actual allowed number of device changes without activation, please refer to: https://www.milestonesys.com/device-change-calculation/

 $<sup>^{7}</sup>$  Installation and user interface localized. Help system and manuals in English only

#### **High-level XProtect client comparison**

The table below gives an overview of the different XProtect clients that can be used together with Milestone's XProtect VMS products.

XProtect client	XProtect Mobile	XProtect Web Client	XProtect Smart Client
Key Features			
User platform	Smartphones and tablets	Web browsers	Windows PC
User mobility	High	Medium	Low
Installation required	Yes	No	Yes
User authentication	Yes	Yes	Yes
Dual authorization	-	-	Yes
Two-step verification	Yes	Yes	-
Secure (HTTPS) client-server connection	Yes	Yes	-
Camera search	Yes	Yes	Yes
View live video	Yes	Yes	Yes
Control PTZ cameras	Yes	Yes	Yes
Advanced PTZ camera control	-	-	Yes
Alarm handling	Yes	Yes	Yes
Push Notification <sup>1</sup>	Yes	-	-
Interactive maps	-	-	Yes
Smart Map	-	-	Yes
Trigger I/O events	Yes	Yes	Yes
Playback	Single camera	Multi camera	Multi camera
Dedicated Search tab (Centralized Search)	-	-	Yes
Advanced video motion search (Smart Search)	-	-	Yes
Evidence Lock	-	-	Yes
Export/share video from one camera	Yes	Yes	Yes
Export video from multiple cameras	-	Yes	Yes
Storyboard function in export	-	-	Yes
Include XProtect Smart Client – Player in export	-	-	Yes
Video Push with audio support	Yes	-	-
Dynamic bandwidth adaptation	Yes	Yes	-
Adaptive streaming	-	-	Yes
Hardware accelerated video decoding	-	-	Yes
Manage access control	Yes	-	Yes

<sup>&</sup>lt;sup>1</sup> Requires Milestone Care Plus service coverage

#### **Detailed XProtect client comparison**

This section provides a detailed comparison between the different XProtect clients, both in relation to each other, and the particular XProtect VMS platforms. The latter is important because some functionality and support of the clients are determined by the specific XProtect product or product version. The features are organized into categories for increased readability.

XProtect Client		XPr	otect Mc	bile			XProt	ect Web	Client			XProte	ct Smar	t Client		
Feature set when used with specific XProtect VMS platform	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate  XProtect Essential+  XProtect Express+  XProtect Expert  XProtect Corporate							XProtect Express+	XProtect Professional+	XProtect Expert  XProtect Corporate		
General view handling																
Number of view layouts			2					2					41			
Maximum view items per view			100					100					100			
Optimized view layouts for 4:3 and 16:9 display ratios			-			-					✓					
Corridor optimized view layouts			-					-					✓			
Optimized view layouts for landscape and portrait displays			✓					-					✓			
Cameras from multiple XProtect servers	-			✓			-		✓			-		✓		
Support for Shared Views and Private Views			-			✓							✓			
XProtect Smart Wall views			-			-					- ✓				/	
Images and active HTML pages in views			-			-					✓					
Hotspot and Carousel in views			-			-					✓					
Virtual Matrix in views			-			-					-		,	/		
Display bounding boxes based on metadata			-			-							✓			
Full screen mode			<b>√</b>					✓					✓			
Multi-window functionality with support for full screen or floating windows with synchronized or independent operation			-					-					<b>√</b>			
Switch to view by number			-					-					✓			
Initial default view			√ <b>1</b>					√ <b>1</b>					√ <b>1</b>			
Camera Navigator			-					-					<b>√</b>			
Camera search	-							<b>√</b>					<b>√</b>			
Automatic restore views and windows at login	√ √					<b>√</b>						<b>√</b>				
Live view	V															
Update on motion only			-					-					<b>√</b>			

XProtect Client		XPr	otect Mc	bile			XProt	ect Web	Client			XProtect Smart Client				
Feature set when used with specific XProtect VMS platform	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	
One-way audio support			✓					✓					✓			
Two-way audio support			✓					✓					✓			
Broadcasting audio	-							✓					✓			
Start/stop recording in view			-					-					✓			
Independent playback in live mode			-					-					✓			
Replace cameras in view without changing view setup			-					-					✓			
Send camera to Virtual Matrix	-						-					- ✓				
Share video image	Via locally using installed communication applications (such as email)						-					Print, copy to clip-board and save to file				
Switch to camera by number			-					-					✓			
PTZ support																
Define presets in the client application			-			<del>-</del>					<b>√</b>					
Define and control patrolling schemes in the client application			-			-					-				✓	
View who has PTZ control and time to automatic release			-			-					✓					
Lock PTZ control			-			-					- ~				✓	
Go to preset positions			✓			✓					✓					
Pause patrolling at manual operation			✓			✓							✓			
Immervision Enables® panomorph lens support			-			-							✓			
Joystick support			-					-					✓			
Assign commands to keyboard shortcuts and joystick buttons			-					-					✓			
Auxiliary commands (wash and wipe)			-					-					✓			
I/O and events control																
Camera overlay buttons			-					-					<b>√</b>			
Manually activate events and trigger outputs			<b>√</b>					<b>√</b>					<b>√</b>			
Audio and Playback	1		-			Dive	:- 4 10 -			-14:	1		100			
Maximum view items per view	Single camera							Multi came	n screen reso	DIUTION		,	100 Multi camera	a		
Playback mode  Recording search	Single camera							√ ✓	i u				vuiti camera √	-		
Recent history of recording sequences per camera	✓ ✓						· ·									
Time/date search	√ √					-				√ ✓						
Independent playback in playback mode			-			-				√ √						
Event/alert list in recording			_					-			√ √					
Everigater fist in recording											✓					

XProtect Client		XPr	otect Mc	bile			XProt	ect Web	Client			XProtect Smart Client			
Feature set when used with specific XProtect VMS platform	XProtect Essential+ XProtect Express+ XProtect Expert XProtect Corporate XProtect Corporate							XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate
Graphical timeline	-							✓					✓		
Adjust playback speed			✓					✓					✓		
Single frame step (forward/backward)	✓							✓					✓		
One-way audio support			✓					✓					✓		
Two-way audio support			✓					✓					✓		
Broadcasting audio			-					✓					✓		
Digital zoom			✓					✓					✓		
Share video image	Via locally installed communication applications (such as email)					Single JPG image export					Print, copy to clip-board and save to file				ile
Print report with comments			-					-					✓		
Privacy masking	-		✓			-		✓			-		✓		
Search															
Dedicated Search tab (Centralized Search)			-			-					<b>√</b>				
Sequence search			-			-					<b>√</b>				
Motion search			-			-					✓				
Bookmark search			-			-					- ✓				
Save search templates			-			-					- ✓				
Alarm search			-			-					- ✓				
Event search			-			-					- ✓				
3 <sup>rd</sup> party search support			-			-						-		✓	
Bookmark function															
Manual bookmarking (quick bookmarking and bookmarking with details)			-					-			-			<b>√</b>	
Instant preview of bookmarks in timeline			-					-			-			✓	
Listing and previewing of bookmarks in recording search			-					-			-			<b>√</b>	
Print bookmark report			-					-			-			<b>√</b>	
Direct video export of bookmark			-					-			-			<b>√</b>	
Alarm Manager  Dedicated Alarm Manager tab that can be displayed as fleating window.	_							-			-		,	/	
as floating window  Alarm list and alarm preview view items in normal camera views								-					<b>√</b>		
Sort and filtering functions	✓					-				<b>√</b>					
Instant preview of primary and related cameras					-				<i>\</i>						
Manage alarms (reassign & change status)	-			/		-			<b>√</b>		-				

XProtect Client		XPr	otect Mc	bile			XProt	ect Web	Client		XProtect Smart Client					
Feature set when used with specific XProtect VMS platform	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional + XProtect Expert XProtect Corporate			XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert  XProtect Corporate		
Manage alarms (comment)	- ✓					-			✓		-			/		
Integration with map function			-					-			-			/		
Alarm description/work instructions	-		_	/		-			<b>√</b>		-			/		
Escalation and forwarding handling			-					-			-			/		
Alarm handing reports with print function			-					-			-			/		
Alarm location maps in alarm list			-					-			-			/		
Combined access to live and playback video			-					-			-			/		
Audio notification at new alarm (configurable per priority level)	-						-								/	
Push Notification	- ✓							-					-			
Map function																
Standard graphical file formats supported for maps			-					-					✓			
Number of linked map layers supported			-			-							Unrestricted	l		
Video preview			-			-					✓					
Integrated control of speakers, microphones and I/O devices			-			-					✓					
Drag-and-drop and point-and-click definition of map elements			-			-					✓					
Integrated PTZ control			-			-					✓					
Real-time system integrity overview and system performance			-			-							✓			
Smart Map function																
CAD and GIS maps support			-					-				-		~	/	
Online map services support for Bing, Google and OpenStreetMap			-					-				-		٧	<b>′</b>	
Offline map services supported for OpenStreetMap			-					-				-		V	/	
Video preview			-					-				-		V	′	
Support for Milestone Federated Architecture			-					-				-		V	′	
Auto-place devices on map via positioning and direction settings			-					-				-		٧	′	
Link to standard maps	-							-				-		V	′	
Building support	-							-				-		V	′	
XProtect Smart Wall																
Supports XProtect Smart Wall video wall add-on			-			-					-		Option	Included		
User control of layout and content			-			-					- ✓			′		
User control playback of video in XProtect Smart Wall			-					-			- ✓				′	

XProtect Client		XPr	otect Mc	bile			XProt	ect Web	Client		XProtect Smart Client						
Feature set when used with specific XProtect VMS platform	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate		
Local subscription to XProtect Smart Wall views for local display			-					-				-		<b>~</b>	,		
Push rich content to XProtect Smart Wall, such as maps, still images, http pages, alarms, bookmarks, system monitor, etc.	-						-					-			✓		
Send manual text messages to XProtect Smart Wall			-						-				′				
Evidence Lock																	
Lock video for one or multiple cameras	-							-		-							
Retrieve overview of locked video sequences	-							-			- ✓						
Export																	
Export in still image format (JPEG)	✓							✓			✓						
Export with audio support in media player format (AVI & MKV)	✓							✓			✓						
Export in XProtect format	-							✓					✓				
Server-side export	✓							✓		-							
Storyboard function in export	-							-		√							
Encrypted export with password protection and digital signing <sup>2</sup>			-					-			✓						
Verification of digital video signatures in XProtect Smart Client – Player <sup>2</sup>			-			-					✓						
Re-export prevention option <sup>2</sup>			-					-			✓						
Auto-export of XProtect Smart Client – Player <sup>2</sup>			-					-			✓						
Preserve system defined privacy masks	-		✓			-		✓			- 🗸						
Additional export specific privacy masks			-					-			- ✓						
Liftable user-right protected privacy masks			-					-			- 🗸						
Direct export to optical media			-					-			✓						
Flexible camera selection for export			-					-			<b>√</b>						
Bulk export to multiple media formats	-											✓					
General and camera specific export comments <sup>2</sup>	-						-					√					
Pre/post comment slides (media player format only)	-							-			J						
Video Push																	
Video Push			<b>√</b>					-			-						
Include location metadata with Video Push	✓						-					-					
Audio support	✓							-			-						

XProtect Client	XProtect Mobile						XProt	ect Web	Client		XProtect Smart Client						
Feature set when used with specific XProtect VMS platform	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate		
System Monitoring																	
Access real-time and historical system performance information (refer to System Monitor section for the VMS for details)	-					-						- ✓					
Installation																	
Run without installation			-					✓			-						
Single step installer (installs client together with server)	-								✓								
Initial and update installations from management Server	-									✓							
Notify about new updates	<b>√</b>								-								
Smart Connect (Automatic server setup)	-			✓				-				_	-				
System access			,					_					<b>√</b>				
Auto-login	<b>√</b>											- /					
Dual authorization			-		,	-											
Two-step verification		•	·		✓						_						
Secure (HTTPS) client-server connection  Dynamic bandwidth adaptation with threshold setting			✓ ✓			<b>√</b>					-						
Authorization																	
Restrict user access by client type (Web Client, XProtect Mobile and Smart Client)	✓								✓								
Time schedule controlled user access to devices and functions		-	-		<b>√</b>	- ✓				<b>√</b>	- ✓						
Restrict user access by devices (cameras, microphones, I/O devices, etc.)			✓			✓					✓						
Restrict access to live, PTZ control, playback and export			<b>√</b>			✓					✓						
Restrict access to setup			-			-						✓					
Personalization																	
Toggle between Advanced mode + Simplified mode	-						-					✓					
Application options	✓						-					✓					
Centralized management of application options	-						-					- ✓					
Application theme support	-						-					✓					
Task-oriented tabs	-						✓					✓					
System																	
Hardware accelerated video decoding	-						-					<b>√</b>					
Adaptive streaming	-							-			- ✓						

XProtect Client	XProtect Mobile						XProt	ect Web	Client		XProtect Smart Client						
Feature set when used with specific XProtect VMS platform	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate	XProtect Essential+	XProtect Express+	XProtect Professional+	XProtect Expert	XProtect Corporate		
Languages (Installation, UI and help function)																	
Arabic	√3							√3				✓					
Bulgarian	√3					√3						√4					
Croatian		√3								√4							
Chinese (Simplified)			√3			√3						✓					
Chinese (Traditional)			√3			√3						✓					
Czech	√3							√3			✓						
Danish			√3					√3			✓						
Dutch			√3			√3					✓						
English			✓			✓					✓						
Farsi			√3			√3					√4						
Finnish			√3					√3			√4						
French			√3			√3							✓				
German			√3					√3			√						
Hebrew			√3					√3			√ <b>4</b>						
Hindi			√3			√3						√4					
Hungarian			√3			√3						√4					
Icelandic			√3			√3						√4					
Italian			√3			√3						✓					
Japanese			√3					√3			✓						
Korean			√3					√3			✓						
Norwegian (Bokmål)			√3					√3			√4						
Polish			√3					√3			✓						
Portuguese (Brazilian)	√3							√3			✓						
Russian	√3							√3			✓						
Serbian	√3							√3			<b>√</b> 4						
Slovak	√3						√3					√4					
Spanish	√3							√3			✓						
Swedish	√3							√3			✓						
Thai		√3						√3			√4						
Turkish	√3							√3			✓						

<sup>&</sup>lt;sup>1</sup> Initial views created when using the "single computer" installation option

<sup>&</sup>lt;sup>2</sup> Feature only applicable to exports in XProtect format

<sup>&</sup>lt;sup>3</sup> XProtect Mobile server localized to same languages as the management interface and documentation is only available in English

<sup>&</sup>lt;sup>4</sup> Only the user interface is localized; user's manual and online help is not localized