

# Milestone Systems XProtect® Video Management Software Product Comparison Chart

February 15, 2017



## Contents

Introduction	3
XProtect VMS products	4
High-level XProtect VMS product comparison .....	5
Detailed XProtect VMS products comparison chart .....	6
Clients for XProtect VMS products	12
High level XProtect client comparison .....	12
Detailed XProtect client comparison .....	13

## Introduction

As the world's leading provider of open platform IP video management software (VMS), Milestone Systems offers a wider 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.

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

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

The document presents separate comparison charts for the XProtect VMS platform products and the 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:

### **Business-ready VMS products:**

- XProtect® Essential
- XProtect® Express
- XProtect® Professional

### **Advanced VMS products:**

- *XProtect® Enterprise (please see note below)*
- XProtect® Expert
- XProtect® Corporate

### XProtect Enterprise – end-of-development notification

Please note that Milestone per June 1, 2016 announces end-of-development of XProtect Enterprise. This implies that the 2016 R2 version of XProtect Enterprise is the last version of the product. The product will remain available for purchase until June 1, 2020, but Milestone recommends new customers to consider XProtect Expert or XProtect Professional.

The following XProtect clients are covered:

- XProtect® Smart Client
- XProtect® Web Client
- Milestone 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.

## **XProtect VMS products**

Milestone offers the market's widest portfolio of IP VMS solutions spanning from easy-to-use small, single-server solutions to fully scalable advanced solutions for high-security surveillance and alarm centers. All products in the XProtect portfolio are designed based on the same powerful open architecture, which makes the XProtect products compatible with more IP cameras and video encoders than any other VMS manufacturers.

Each of the XProtect VMS products has been optimized to meet the specific needs in the different market segments in terms of:

- Ease of deployment
- Ease of use
- Scalability (number of cameras and single server to fully distributed deployment)
- Functionality level
- Integration of third-party applications

# Product Comparison Chart



## 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/ Version	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Key Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Type of deployment	Single-server	Single-server	Multi-server	Multi-site	Centrally managed, multi-server	Centrally managed, distributed sites
Licensing	Free	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual
Number of hardware devices <sup>(1)</sup> per software license	8	48	Unlimited <sup>(2)</sup>	Unlimited <sup>(2)</sup>	Unlimited	Unlimited
Number of cameras <sup>(3)</sup> per recording server	8	48	320	320	Unlimited	Unlimited
Number of recording servers per system	1	1	Unlimited	Unlimited	Unlimited	Unlimited
Maximum numbers of users	5	5	Unlimited	Unlimited	Unlimited	Unlimited
Multiple video export formats	Yes	Yes	Yes	Yes	Yes	Yes
Supports XProtect Smart Client, XProtect Web Client and Milestone Mobile	Yes	Yes	Yes	Yes	Yes	Yes
Alarm Manager	Yes <sup>(4)</sup>	Yes <sup>(4)</sup>	Yes	Yes	Yes	Yes
Map function	Yes <sup>(5)</sup>	Yes <sup>(5)</sup>	Yes	Yes	Yes	Yes
Smart Map function	-	-	-	-	Yes	Yes
Archiving to network storage	-	Yes	Yes	Yes	Yes	Yes
Third-party application integration and support for video analytics <sup>(6)</sup>	-	Yes	Yes	Yes	Yes	Yes
Video out via Milestone ONVIF Bridge	-	Yes	Yes	Yes	Yes	Yes
Microsoft Active Directory support	-	-	Yes	Yes	Yes	Yes
Metadata support	-	-	-	-	Yes	Yes
Centralized management	-	-	-	-	Yes	Yes
Flexible event rule engine	-	-	-	-	Yes	Yes
Edge Storage	-	-	-	-	Yes	Yes
Hardware accelerated video decoding for Video Motion Detection (VMD)	-	-	-	-	Yes	Yes
Failover Recording Servers	-	-	-	-	Yes	Yes
Evidence Lock	-	-	-	-	-	Yes
Supports XProtect Smart Wall	-	-	-	-	Option	Included
Two-step verification	-	-	-	-	-	Yes
Milestone Interconnect™	-	Remote site	Remote site	Remote site	Remote site	Central/Remote site
Milestone Federated Architecture™	-	-	-	-	Remote site	Central/Remote site
Customer Dashboard <sup>(7)</sup>	Supported	Supported	Supported	Supported	Supported	Supported
Connected Services <sup>(7)</sup>	Supported	Supported	Supported	Supported	Supported	Supported

Notes:

- (\*) Please note that Milestone per June 1, 2016 announces end-of-development of XProtect Enterprise. This implies that the 2016 R2 version of XProtect Enterprise is the last version of the product. The product will remain available for purchase until June 1, 2020, but Milestone recommends new customers to consider XProtect Expert or XProtect Professional
- (1) A hardware devices is the physical unit, server or system connected to the VMS' recording server.
- (2) For most installations larger than 250 cameras, Milestone recommends using XProtect Expert or XProtect Corporate
- (3) A camera is the actual camera or video source on the hardware device connected to the VMS' recording server

# Product Comparison Chart



- (4) Not full alarm management functionality
- (5) Supports a single-layer, interactive map, without alarm integration
- (6) Using Milestone Integration Platform (MIP)
- (7) Requires active Milestone Care Plus coverage, for XProtect Essential minimum one subscription pack is required.

## 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 in to categories for increased readability.

XProtect VMS Products	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
<b>System components (software modules)</b>						
Recording Server	✓	✓	✓	✓	✓	✓
Failover Recording Server	-	-	-	-	✓	✓
Hot-standby Failover Recording Server	-	-	-	-	✓	✓
Maximum number of hardware devices <sup>(1)</sup> per recording server	8	48	320	320	Unlimited	Unlimited
Maximum number of cameras <sup>(2)</sup> per recording server	8	48	320 <sup>(1)</sup>	320 <sup>(1)</sup>	Unlimited	Unlimited
Maximum number of recording servers per system	1	1	Unlimited	Unlimited	Unlimited	Unlimited
Recording Server manager	✓	✓	✓	✓	✓	✓
Management Server	-	-	-	-	✓	✓
Management Failover Server (redundant cluster)	-	-	-	-	✓	✓
Management Application (local management)	✓	✓	✓	✓	-	-
Management Client (dedicated client application for local or remote management)	-	-	-	-	✓	✓
Event Server (for handling of events and alarms)	✓	✓	✓	✓	✓	✓
Failover Event Server (redundant cluster)	-	-	-	-	✓	✓
Milestone Mobile (server and client)	✓	✓	✓	✓	✓	✓
XProtect Smart Client	✓	✓	✓	✓	✓	✓
XProtect Web Client	✓	✓	✓	✓	✓	✓
XProtect Smart Client - Player (local playback/export)	✓	✓	✓	✓	✓	✓
<b>Licensing</b>						
Licensing	8 devices free	Perpetual	Perpetual	Perpetual	Perpetual	Perpetual
<b>Distributed operation</b>						
Milestone Interconnect™	-	Remote site	Remote site	Remote site	Remote site	Central/ Remote site
Milestone Federated Architecture™	-	-	-	-	Remote site	Central/ Remote site
Remote camera connection via Remote Connection Service	-	-	-	-	-	✓
<b>Device support</b>						
Support for ONVIF™ compliant devices	✓	✓	✓	✓	✓	✓
Support for PSIA compliant devices	✓	✓	✓	✓	✓	✓
Generic device support via Milestone universal driver	✓	✓	✓	✓	✓	✓
Metadata from camera embedded analytics	-	-	-	-	✓	✓
Number of IP device brands supported via dedicated device integration <sup>(4)</sup>	152	152	152	152	134	134
Number of supported IP camera models <sup>(4)</sup>	5136	5136	5136	5136	4844	4866
Number of supported video encoder models <sup>(4)</sup>	363	363	363	363	313	313
Number of dedicated IP input/output models <sup>(4)</sup>	14	14	14	14	14	14
Number of supported DVRs <sup>(4)</sup>	76	76	76	76	72	72
Number of supported IP audio devices <sup>(4)</sup>	10	10	10	10	10	10
Number of supported perimeter detectors <sup>(4)</sup>	18	18	18	18	18	18
Secure HTTPS camera connectivity (on supported devices)	✓	✓	✓	✓	✓	✓

# Product Comparison Chart



XProtect VMS Products	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
<b>Video processing</b>						
MJPEG, MPEG-4, MPEG-4 ASP and MxPEG support	✓	✓	✓	✓	✓	✓
H.264 support	✓	✓	✓	✓	✓	✓
H.265 support	-	-	-	-	✓	✓
Metadata support	-	-	-	-	✓	✓
Dual stream (live and recording) per camera	✓	✓	✓	✓	✓	✓
Multi-live streaming	-	-	-	-	✓	✓
Client video stream down sampling (resolution and FPS) option	✓	✓	✓	✓	✓	✓
Adjustable GOP size (MPEG4/H.264)	-	-	-	-	✓	✓
Send camera pre-alarm images (pre-recording buffer) to recording server	✓	✓	✓	✓	✓	✓
Video recording speed up on <i>motion</i> , <i>event</i> or <i>time schedule</i>	✓	✓	✓	✓	✓	✓
Built-in Video Motion Detection (VMD)	✓	✓	✓	✓	✓	✓
Auto adjustable VMD sensitivity	✓	✓	✓	✓	✓	✓
Hardware accelerated video decoding for VMD	-	-	-	-	✓	✓
Motion metadata generated during VMD analysis	-	-	-	-	✓	✓
VMD exclusion zones	✓	✓	✓	✓	✓	✓
Video motion detections per server	All connected cameras					
<b>Audio</b>						
One-way audio support	✓	✓	✓	✓	✓	✓
Two-way audio support	-	-	✓	✓	✓	✓
One-way audio recording	✓	✓	✓	✓	✓	✓
Two-way audio recording	-	-	-	-	✓	✓
Maximum number of supported audio channels	8	48	Unlimited	Unlimited	Unlimited	Unlimited
<b>Pan-tilt-zoom (PTZ)</b>						
Preset positions per camera	260	260	260	260	Unlimited	Unlimited
Go-to preset on event	✓	✓	✓	✓	✓	✓
Preset patrolling	-	✓	✓	✓	✓	✓
Combine patrolling and go-to preset on event	-	-	✓	✓	✓	✓
Scanning/transition speed	-	✓	✓	✓	✓	✓
Number of PTZ priority levels for prioritized PTZ control	1	1	1	1	32,000	32,000
<b>I/O and events</b>						
Hardware configurable events (such as I/O input, motion, tampering, temperature, communication failure)	✓	✓	✓	✓	✓	✓
Motion detection events (VMD in XProtect Recording Server)	✓	✓	✓	✓	✓	✓
System error events (for example disk full)	✓	✓	✓	✓	✓	✓
Manual / User defined events	✓	✓	✓	✓	✓	✓
Generic events from external systems	-	✓	✓	✓	✓	✓
Event-based device configuration	-	-	-	-	✓	✓
Event-based notification	✓	✓	✓	✓	✓	✓
Event-based output control	✓	✓	✓	✓	✓	✓
Event-based device start/stop	✓	✓	✓	✓	✓	✓
Event-based matrix control	-	-	✓	✓	✓	✓
Flexible event rule engine for definition of actions on events	-	-	-	-	✓	✓
<b>Bookmark function</b>						
Manual bookmarking (quick bookmarking and bookmarking with details)	-	-	-	-	✓	✓
Rule-based bookmarking	-	-	-	-	-	✓
<b>Evidence Lock</b>						
Lock video for on or multiple cameras	-	-	-	-	-	✓

# Product Comparison Chart



XProtect VMS Products	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Retrieve overview of locked video sequences	-	-	-	-	-	✓
Define available retention times	-	-	-	-	-	✓
<b>Alarm Manager</b>						
Alarm description and work instructions	-	-	✓	✓	✓	✓
Ability to assign initial owner of an alarm	-	-	✓	✓	✓	✓
Time profiles for alarms	-	-	-	-	✓	✓
View triggered alarms	✓	✓	✓	✓	✓	✓
Manage alarms (reassign, change status, comment)	-	-	✓	✓	✓	✓
Push alarms to users of Milestone Mobile <sup>(5)</sup>	✓	✓	✓	✓	✓	✓
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	32,000	32,000
Customizable alarm priority levels	✓	✓	✓	✓	✓	✓
Customizable sound notification	-	-	✓	✓	✓	✓
Customizable alarm categories	✓	✓	✓	✓	✓	✓
Customizable alarm statuses	-	-	✓	✓	✓	✓
Customizable alarm result codes	-	-	✓	✓	✓	✓
Alarm handling reporting	-	-	✓	✓	✓	✓
Alarm logging	✓	✓	✓	✓	✓	✓
Redundancy option for high availability	-	-	-	-	✓	✓
<b>Storage and archiving</b>						
Pre-recording buffer in RAM	-	-	-	-	✓	✓
Video retention time	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited
Recording capacity per device/day	>1 TB <sup>(6)</sup>	>1 TB <sup>(6)</sup>	>1 TB <sup>(6)</sup>	>1 TB <sup>(6)</sup>	Unlimited	Unlimited
Archiving of recordings	✓	✓	✓	✓	✓	✓
Archiving to network drives	-	✓	✓	✓	✓	✓
Dynamic archiving (disk spanning)	✓	✓	✓	✓	-	-
Online access to archives	✓	✓	✓	✓	✓	✓
Archiving schedules	Hourly	Hourly	Hourly	Hourly	Hourly	Hourly
Automatic storage distribution	✓	✓	✓	✓	-	-
Storage definition and retention time per device	✓	✓	✓	✓	✓	✓
Storage definition and retention time that can be applied to individual cameras or common for multiple devices	-	-	-	-	✓	✓
Multi-stage video storage and data grooming	-	-	-	-	-	✓
Storage overview (used vs. available space) of available storage drives	✓	✓	✓	✓	✓	✓
Event on premature deletion of video due to insufficient physical storage	-	-	-	-	✓	✓
Edge Storage support with flexible retrieval	-	-	-	-	✓	✓
Scalable Video Quality Storage™ (merging centrally and edge stored video recordings)	-	-	-	-	✓	✓
Evidence Lock	-	-	-	-	-	✓
Video data encryption	-	-	-	-	-	✓
Digital video database signing	-	-	-	-	-	✓
<b>Integration</b>						
Plug-in, Protocol, Component integration via MIP SDK	-	✓	✓	✓	✓	✓
System Configuration via MIP SDK	-	-	-	-	✓	✓
Metadata integration	-	-	-	-	✓	✓
Event integration	-	✓	✓	✓	✓	✓
Event and action rule engine integration via MIP SDK	-	-	-	-	✓	✓
<b>Support for XProtect Add-on products</b>						
Supports XProtect Access	-	✓	✓	✓	✓	✓

# Product Comparison Chart



XProtect VMS Products	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Supports XProtect LPR	-	✓	✓	✓	✓	✓
Supports XProtect Smart Wall	-	-	-	-	Option	Included
Supports XProtect Transact	-	✓	✓	✓	✓	✓
Supports XProtect Retail	-	✓	✓	✓	✓	✓
Supports XProtect Screen Recorder	✓	✓	✓	✓	✓	✓
Supports Milestone ONVIF Bridge	-	✓	✓	✓	✓	✓
<b>Management</b>						
Automatic initial configuration wizard	✓	✓	✓	✓	-	-
Configuration wizards for aided system setup	✓	✓	✓	✓	✓	✓
Automatic camera discovery	✓	✓	✓	✓	-	-
Device scanning with device model detection	✓	✓	✓	✓	✓	✓
Automatic camera IP address assignment <sup>(7)</sup>	✓	✓	✓	✓	-	-
Automatic camera time synchronization	✓	✓	✓	✓	-	-
Device replacement wizard	✓	✓	✓	✓	✓	✓
Move device wizard for moving hardware devices (e.g. cameras) between recording servers in runtime	-	-	-	-	✓	✓
Centralized device management	-	-	-	-	✓	✓
Device group support	-	-	-	-	✓	✓
Centralized recording server management	-	-	-	-	✓	✓
Management Client profiles	-	-	-	-	-	✓
Centralized management of XProtect Smart Client application options (Number of supported XProtect Smart Client profiles)	-	-	-	-	3	Unlimited
Day length time profile	-	-	-	-	✓	✓
On-the-fly configuration changes	-	-	-	-	✓	✓
Run servers as Windows Services	✓	✓	✓	✓	✓	✓
Scheduled start/stop of devices	✓	✓	✓	✓	✓	✓
Configuration reporting	-	-	-	-	✓	✓
System configuration restore points	✓	✓	✓	✓	-	-
Export and import of configuration data	✓	✓	✓	✓	-	-
Built-in backup-restore support	-	-	-	-	✓	✓
Automatic license activation of online systems	✓	✓	✓	✓	✓	✓
Offline license activation	✓	✓	✓	✓	✓	✓
Add/replace devices without reactivation in offline systems <sup>(8)</sup>	✓	✓	✓	✓	✓	✓
<b>System Monitoring</b>						
Customizable dashboard for task or component specific live monitoring	-	-	-	-	✓	✓
Customizable event trigger thresholds for Normal, Warning and Critical levels	-	-	-	-	✓	✓
Real-time and historical system status of Management Server	-	-	-	-	✓	✓
Real-time and historical system status of Recording Servers	-	-	-	-	✓	✓
Real-time and historical system status of other XProtect servers	-	-	-	-	✓	✓
Real-time and historical system status of individual cameras	-	-	-	-	✓	✓
Dedicated System Monitor tab that can be displayed as floating window	-	-	-	-	✓	✓
<b>Viewing clients</b>						
Maximum number of clients	5	5	Unlimited	Unlimited	Unlimited	Unlimited
Customizable access port with NAT support	✓	✓	✓	✓	✓	✓
Multicast support	-	-	-	-	✓	✓
Single step installer (installs XProtect Smart Client together with server)	✓	✓	✓	✓	✓	✓

# Product Comparison Chart



XProtect VMS Products	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
<b>XProtect® Smart Wall</b>						
Supports XProtect Smart Wall video wall add-on	-	-	-	-	Option	Included
Number of XProtect Smart Walls and XProtect Smart Wall displays	-	-	-	-	Unlimited	Unlimited
Number of concurrent video streams	-	-	-	-	Unlimited	Unlimited
Maximum number of content positions per display	-	-	-	-	100	100
Presets for display layouts and camera content	-	-	-	-	✓	✓
Live video stream content	-	-	-	-	✓	✓
XProtect Smart Client controlled playback of video	-	-	-	-	✓	✓
Support for rich video wall content, including: maps, still images, http pages, alarms, texts, bookmarks, system monitor, etc.	-	-	-	-	✓	✓
Rule-based control of layout and content (including text messages)	-	-	-	-	✓	✓
<b>System alarms and notification</b>						
Email notification	✓	✓	✓	✓	✓	✓
SMS notification	✓	✓	✓	✓	-	-
Multiple notification profiles	-	-	-	-	✓	✓
SNMP trap	-	-	-	-	✓	✓
System Watch support	✓	✓	✓	✓	-	-
Customer Dashboard	✓	✓	✓	✓	✓	✓
<b>User authentication and rights management</b>						
Centralized user management	-	-	-	-	✓	✓
Tiered management rights	-	-	-	-	-	✓
Inheritance of user rights	-	-	-	-	-	✓
Time schedule controlled user access to devices and functions	-	-	-	-	-	✓
Restrict user access by client type (Web, Mobile and Smart Client)	-	-	-	-	✓	✓
Basic User (XProtect application accounts)	✓	✓	✓	✓	✓	✓
Windows User (local Windows accounts)	✓	✓	✓	✓	✓	✓
Microsoft Active Directory User (central Active Directory accounts)	-	-	✓	✓	✓	✓
Dual authorization (Smart Client users)	✓	✓	✓	✓	✓	✓
Dual authorization (Management Client users)	-	-	-	-	✓	✓
Two-step verification (Web and Mobile Client users)	-	-	-	-	-	✓
Windows NTLM (NT LAN Manager) authentication	-	-	✓	✓	✓	✓
Kerberos authentication	-	-	-	-	✓	✓
<b>Logging</b>						
System logging	✓	✓	✓	✓	✓	✓
Event logging	✓	✓	✓	✓	- (9)	- (9)
Audit logging	✓	✓	✓	✓	✓	✓
Rule logging	-	-	-	-	✓	✓
<b>Languages (Management Interface)</b>						
Chinese (Simplified)	✓	✓	✓	✓	✓	✓
Chinese (Traditional)	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)
Danish	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)
English	✓	✓	✓	✓	✓	✓
French	✓	✓	✓	✓	✓	✓
German	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)
Italian	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)
Japanese	✓	✓	✓	✓	✓	✓
Korean	✓	✓	✓	✓	✓	✓
Portuguese (Brazilian)	✓	✓	✓	✓	✓	✓
Russian	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)	✓ (10)

# Product Comparison Chart



XProtect VMS Products	Business ready VMS solutions			Advanced VMS solutions		
	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Features	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Spanish	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>
Swedish	-	-	-	-	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>
Turkish	-	-	-	-	✓ <sup>(10)</sup>	✓ <sup>(10)</sup>

Notes:

- (\*) Please note that Milestone per June 1, 2016 announces end-of-development of XProtect Enterprise. This implies that the 2016 R2 version of XProtect Enterprise is the last version of the product. The product will remain available for purchase until June 1, 2020, but Milestone recommends new customers to consider XProtect Expert or XProtect Professional
- (1) A hardware devices is the physical unit, server or system connected to the VMS' recording server.
- (2) A camera is the actual camera or video source on the hardware device connected to the VMS' recording server
- (3) For most installations larger than 250 cameras, Milestone recommends using XProtect Expert or XProtect Corporate
- (4) Supported via dedicated device integration. The figure does not include different device variations in vendor's device series and non-listed OEM devices, or devices that are supported via ONVIF and PSIA drivers and Milestone's universal driver. Information is based on the support in Device Pack 8.7. Please refer to Milestone's website ([www.milestonesys.com](http://www.milestonesys.com)) for latest figures  
Includes various devices in series and non-listed OEM devices.
- (5) Requires Milestone Care Plus service coverage
- (6) Actual effective storage available will vary dependent on the bitrate generated by the connected devices
- (7) On supported devices only, please refer to: <https://www.milestonesys.com/solution-partners/supported-hardware/>
- (8) For details on actual allowed number device changes without activation, please refer to: <https://www.milestonesys.com/device-change-calculation/>
- (9) It is possible to create a rule log entry for events that shall be logged
- (10) Installation and user interface localized. Help system and manuals in English only

## Clients for XProtect VMS products

For easy access to video surveillance, Milestone offers three flexible user interfaces: XProtect Smart Client, XProtect Web Client and Milestone Mobile. Compatible with all XProtect VMS products, the clients enable users to access live and recorded video to gain real-time situational awareness and investigate incidents. XProtect clients share common design and basic functionalities so users can seamlessly switch between the interfaces as needs require.

XProtect Smart Client is the primary user interface for security operators and other daily users. Its adaptable user interface provides both basic and advanced users with an interface optimized for their particular tasks. XProtect Web Client provides flexible access to video surveillance from any browser and can be used as the simplified daily viewing client for users with basic needs. Users can access surveillance on-the-go with Milestone Mobile, an application for viewing, playing back and exporting video from smartphones and tablets. Available for download on the App Store<sup>SM</sup> and Google Play<sup>TM</sup>, the application gives instantaneous access to XProtect systems via Wi-Fi, 3G or 4G connections.

## 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/ Version	Milestone Mobile	XProtect Web Client	XProtect Smart Client
Key Features	2017 R1	2017 R1	2017 R1
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	Yes	-	-
Interactive maps	-	-	Yes
Smart Map	-	-	Yes
Trigger I/O events	Yes	Yes	Yes
Playback	Single camera	Multi camera	Multi camera
Sequence Explorer	-	-	Yes
Advanced video 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	Yes	-	-
Dynamic bandwidth adaptation	Yes	Yes	-
Hardware accelerated video decoding	-	-	Yes

# Product Comparison Chart



## 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	Milestone Mobile						XProtect Web Client						XProtect Smart Client					
	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Current client version	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Feature set when used with specific XProtect VMS platform																		
<b>General view handling</b>																		
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 <i>Shared Views</i> and <i>Private Views</i>				✓						✓								✓
XProtect Smart Wall views				-						-								✓
Images in views				-						-								✓
Active HTML pages in views				-						-								✓
Hotspot in views				-						-								✓
Carousel in views (controllable)				-						-								✓
Virtual Matrix in views				-						-			-					✓
Display bounding boxes based on metadata				-						-								✓
Full screen mode				✓						✓								✓
Display views as floating window				-						-								✓
Display views on multiple monitors				-						-								✓
Advanced multi window support with synchronized or independent operation				-						-								✓
Switch to view by number				-						-								✓
Initial default view				✓						✓								✓ <sup>(1)</sup>
Camera Navigator				-						-			-					✓
Camera search				✓						✓								✓
Automatic restore views and windows at login				✓						✓								✓
<b>Live view</b>																		
Update on motion only				-						-								✓
One-way audio support				-						-								✓
Two-way audio support				-						-			-					✓
Start recording in view				-						-					✓			-
Start/stop recording in view				-						-					-			✓
Independent playback in live mode				-						-								✓
Replace cameras in view without changing view setup				-						-								✓
Send camera to Virtual Matrix				-						-								✓

# Product Comparison Chart



XProtect Client	Milestone Mobile						XProtect Web Client						XProtect Smart Client					
	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	
Current client version	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Feature set when used with specific XProtect VMS platform	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Share video image	Via locally installed communication applications (such as email)						-						Print, copy to clip-board and save to file					
Switch to camera by number	-						-						✓					
<b>PTZ support</b>																		
Define presets in the client application	-						-						✓					
Define and control patrolling schemes in the client application													✓					
View who have PTZ control and time to automatic release													✓					
Lock PTZ control													✓					
Go to preset positions	✓						✓						✓					
Pause patrolling at manual operation	-			✓			-			✓			-			✓		
Immersion Enables® panomorph lens support	-						-						✓					
Joystick support	-						-						✓					
Assign commands to keyboard shortcuts and joystick buttons	-						-						✓					
Auxiliary commands (wash and wipe)	-						-						✓					
<b>I/O and events control</b>																		
Camera overlay buttons	-						-						✓					
Manually activate events and trigger outputs	✓						✓						✓					
<b>Playback</b>																		
Maximum view items per view	1						1 <sup>(2)</sup>						100					
Playback mode	Single camera						Multi camera						Multi camera					
Recording search	✓						✓						✓					
Recent history of recording sequences per camera	✓						-						✓					
Time/date search	✓						✓						✓					
Independent playback in playback mode	-						-						✓					
Event/alert list in recording	-						-						✓					
Graphical timeline	-						✓						✓					
Adjust playback speed	✓						✓						✓					
Single frame step (forward/backward)	✓						✓						✓					
One-way audio support	-						-						✓					
Two-way audio support	-						-						- ✓					
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					
Print report with comments	-						-						✓					
Privacy masking	✓						✓						✓					
<b>Smart Search</b>																		
Smart Search based on VMD analysis	-						-						✓					
Smart Search based on VMD metadata <sup>(3)</sup>	-						-						- ✓					
<b>Sequence Explorer</b>																		
Listing of sequences	-						-						✓					

# Product Comparison Chart



XProtect Client	Milestone Mobile						XProtect Web Client						XProtect Smart Client					
	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Current client version	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Feature set when used with specific XProtect VMS platform	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
Listing of time intervals				-						-								✓
Listing of bookmarks				-						-								✓
Smart Search integrated with Sequence Explorer				-						-								✓
Dedicated Sequence Explorer tab that can be displayed as floating window				-						-								✓
<b>Bookmark function</b>																		
Manual bookmarking (quick bookmarking and bookmarking with details)				-						-								✓
Instant preview of bookmarks in timeline				-						-								✓
Listing and previewing of bookmarks in recording search				-						-								✓
Print bookmark report				-						-								✓
Direct video export of bookmark				-						-								✓
<b>Alarm Manager</b>																		
Alarm list and alarm preview view items in normal camera views				-						-								✓
Sort and filtering functions				✓						-								✓
Instant preview of primary and related cameras				-						-								✓
Manage alarms (reassign & change status)	-			✓			-	✓	-	✓			-					✓
Manage alarms (comment)	-			✓			-		-				-					✓
Integration with map function				-					-				-					✓
Alarm description/work instructions	-			✓			-	✓	-	✓			-					✓
Escalation and forwarding handling				-					-				-					✓
Print alarm report				-					-				-					✓
Alarm location maps in alarm list				-					-				-					✓
Combined access to live and playback video				-					-				-					✓
Audio notification at new alarm (configurable per priority level)				-					-				-					✓
Alarm handling reporting				-					-				-					✓
Dedicated Alarm Manager tab that can be displayed as floating window				-					-				-					✓
Push Notification	-			✓			-		-				-					-
<b>Map function</b>																		
Standard graphical file formats supported for maps				-					-									✓
Number of linked map layers supported				-					-				1					Unlimited
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				-					-				-					✓
<b>Smart Map function</b>																		
CAD maps supported				-					-									✓

# Product Comparison Chart



XProtect Client	Milestone Mobile						XProtect Web Client						XProtect Smart Client					
	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	
Current client version	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1		
Feature set when used with specific XProtect VMS platform	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
GIS maps supported				-					-									✓
Online map services supported: Bing, Google and OpenStreetMap				-					-									✓
Offline map services supported: OpenStreetMap				-					-									✓
Video preview				-					-									✓
Link to standard maps				-					-									✓
<b>XProtect Smart Wall support <sup>(4)</sup></b>																		
User control of layout and content				-					-									✓
User control playback of video in XProtect Smart Wall				-					-									✓
Local subscription to XProtect Smart Wall views for local display				-					-									✓
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				-					-									✓
<b>Evidence Lock</b>																		
Lock video for one or multiple cameras				-					-					-				✓
Retrieve overview of locked video sequences				-					-					-				✓
<b>Export</b>																		
Export in still image format (JPEG)				✓					✓					✓				
Export in media player format (AVI)				✓					✓					✓				
Export with audio in media player format (AVI)				-					-					✓				
Export with audio in media player format (MKV)				-					-					✓				
Export in XProtect format				-					✓					✓				
Server side export				✓					✓					-				
Storyboard function in export				-					-					✓				
Encrypted export with password <sup>(5)</sup>				-					-					✓				
Digital signing of exported video <sup>(5)</sup>				-					-					✓				
Re-export prevention <sup>(5)</sup>				-					-					✓				
Auto-export of XProtect Smart Client – Player <sup>(5)</sup>				-					-					✓				
Preserve system defined privacy masks				✓					✓					✓				
Additional export specific privacy masks				-					-					✓				
Direct export to optical media				-					-					✓				
Flexible camera selection for export				-					-					✓				
Bulk export to multiple media formats				-					-					✓				
General and camera specific export comments <sup>(5)</sup>				-					-					✓				
Pre/post comment slides (media player format only)				-					-					✓				
Verification of digital video signatures in XProtect Smart Client – Player <sup>(5)</sup>				-					-					✓				

# Product Comparison Chart



XProtect Client	Milestone Mobile						XProtect Web Client						XProtect Smart Client					
Current client version	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1
Feature set when used with specific XProtect VMS platform	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
<b>Video Push</b>																		
Video Push				✓						-								-
Include location metadata with Video Push			-			✓				-								-
<b>System Monitoring</b>																		
Access real-time and historical system performance information (refer to System Monitor section for the VMS for details)																		✓
<b>Installation</b>																		
Run without installation				-						✓								-
Optional browser plug-ins for enhance viewing performance				-						✓								-
Single step installer (installs client together with server)				-						-								✓
Initial and update installations from Management Server (6)				-						-								✓
Notify about new updates				✓						-							✓	-
Interactive splash screens				-						✓			✓					-
Smart Connect (Automatic server setup)				✓						-								-
<b>System access</b>																		
Auto-login				✓						-								✓
Dual authorization				-						-								✓
Two-step verification				-		✓				-		✓						-
Secure (HTTPS) client-server connection				✓						✓								-
Dynamic bandwidth adaptation				✓						✓								-
Bandwidth threshold				✓						✓								-
<b>Authorization</b>																		
Restrict user access by devices (cameras, microphones, I/O devices, etc.)				✓						✓								✓
Restrict user access by client				-		✓				-		✓						✓
Time schedule controlled user access to devices and functions				-		✓				-		✓						✓
Restrict access to live view				✓						✓								✓
Restrict access to PTZ				✓						✓								✓
Restrict access to playback				✓						✓								✓
Restrict access to export				✓						✓								✓
Restrict access to setup				-						-								✓
<b>Personalization</b>																		
Toggle between Advanced mode and Simplified mode.				-						-				Yes, simplified mode default				Yes, advanced mode default
Application options				✓						-								✓
Centralized management of application options				-						-								✓
Application theme support				-						-								✓
Task oriented tabs				-						✓								✓

# Product Comparison Chart



XProtect Client	Milestone Mobile						XProtect Web Client						XProtect Smart Client					
Current client version	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	2017 R1	2017 R1	2016 R2	2017 R1	2017 R1	
Feature set when used with specific XProtect VMS platform	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate	XProtect Essential	XProtect Express	XProtect Professional	XProtect Enterprise*	XProtect Expert	XProtect Corporate
<b>System</b>																		
Hardware accelerated video decoding	-						-						✓					
<b>Languages (Installation, UI and help function)</b>																		
Arabic							✓ <sup>(1)</sup>						✓					
Bulgarian							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Croatian							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Chinese (Simplified)							✓ <sup>(1)</sup>						✓					
Chinese (Traditional)							✓ <sup>(1)</sup>						✓					
Czech							✓ <sup>(1)</sup>						✓					
Danish							✓ <sup>(1)</sup>						✓					
Dutch							✓ <sup>(1)</sup>						✓					
English							✓						✓					
Farsi							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Finnish							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
French							✓ <sup>(1)</sup>						✓					
German							✓ <sup>(1)</sup>						✓					
Hebrew							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Hindi							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Hungarian							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Icelandic							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Italian							✓ <sup>(1)</sup>						✓					
Japanese							✓ <sup>(1)</sup>						✓					
Korean							✓ <sup>(1)</sup>						✓					
Norwegian (Bokmål)							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Polish							✓ <sup>(1)</sup>						✓					
Portuguese (Brazilian)							✓ <sup>(1)</sup>						✓					
Russian							✓ <sup>(1)</sup>						✓					
Serbian							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Slovak							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Spanish							✓ <sup>(1)</sup>						✓					
Swedish							✓ <sup>(1)</sup>						✓					
Thai							✓ <sup>(1)</sup>						✓ <sup>(8)</sup>					
Turkish							✓ <sup>(1)</sup>						✓					

**Notes:**

- (\*) Please note that Milestone per June 1, 2016 announces end-of-development of XProtect Enterprise. This implies that the 2016 R2 version of XProtect Enterprise is the last version of the product. The product will remain available for purchase until June 1, 2020, but Milestone recommends new customers to consider XProtect Expert or XProtect Professional
- (1) Initial views created when using the “single computer” installation option
- (2) One camera available as main view item, additional view items available as thumbnails
- (3) Smart Search require motion detection to be enabled and configured to generate VMD metadata per camera. Furthermore, it will only be available on recordings made by the local system’s recording server – i.e. Smart Search is not available for Milestone Interconnect cameras if the remote system’s recordings are either retrieved or played back directly from the remote system. Likewise, Smart Search is not available for recordings retrieved from cameras using Edge Storage
- (4) XProtect Smart Wall is included in XProtect Corporate 2014 and newer versions, and subject to separate application license when used with XProtect Expert 2014 and newer versions

# Product Comparison Chart

---



- (5) Feature only applicable to exports in XProtect format
- (6) Image Server in XProtect Essential, XProtect Express, XProtect Professional and XProtect Enterprise
- (7) Milestone Mobile server localized to same languages as the management interface and documentation is only available in English
- (8) Only the user interface is localized; user's manual and online help is not localized