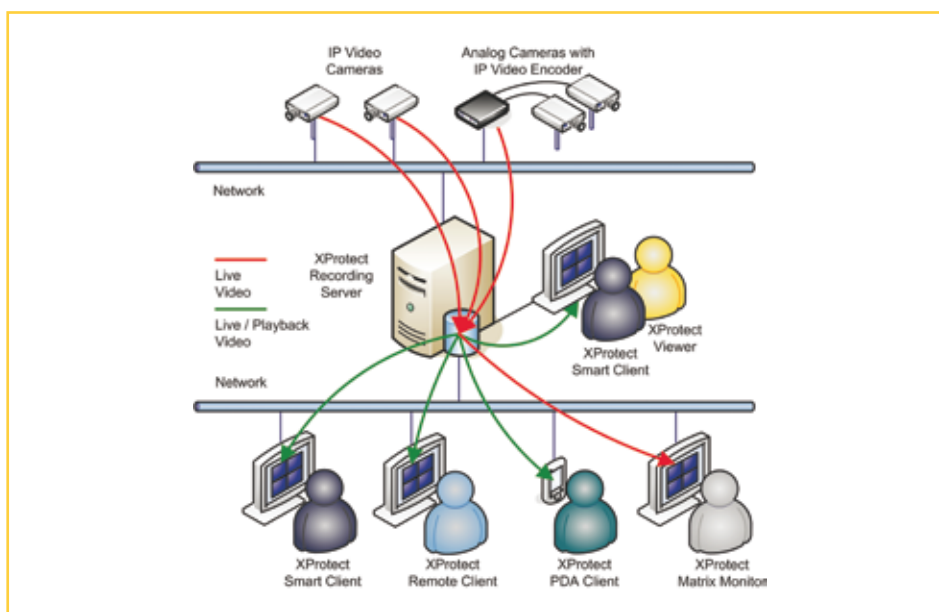




Milestone XProtect™ Professional

Top performance IP video surveillance with an advanced feature set.

XProtect Professional is the right product for small to mid-sized installations that need robust single-server surveillance software with the full functionality of advanced management, flexible scheduling, fast searching and analysis. XProtect Professional supports up to 64 cameras simultaneously with the widest choice of network video and computer hardware equipment.



KEY BENEFITS:

- ◆ **Freedom to choose:** Compatible with more than 500 different IP-based video camera and encoder products (MJPEG, MPEG4, H.264, MPEG4 ASP, MxPEG) from more than 50 different vendors.
- ◆ **Dependable, robust and stable:** Proven in daily operation in more than 45,000 customer installations worldwide.
- ◆ **Use existing IP networks effectively:** Use effective video compression (MJPEG, MPEG4, MPEG4 ASP, H.264 and MxPEG) and bandwidth-optimized multi-streaming to leverage existing IP networks effectively.
- ◆ **Cost-optimized archiving:** Move your video data to more cost-effective storage media either locally or on the network.
- ◆ **High performance:** Achieved on standard computer equipment by utilizing powerful multi-threaded technology.
- ◆ **Flexible remote access:** Access your video surveillance data from any location at any time using a desktop computer, laptop or PDA.
- ◆ **Tailored for IT environments:** Integrates with windows authentication and authorization. Runs as a Windows® service.
- ◆ **Export evidence material fast:** Deliver authentic video proof to public authorities or for internal investigations.
- ◆ **Future-safe:** The IP approach is the foundation of tomorrow – available today. Ongoing product enhancements give you long-term returns on your surveillance investment.



Key Product Features

Advanced video management tools

SYSTEM, ADMINISTRATION & INTEGRATION

- ◆ **Single-server video surveillance solution:** Unlimited recording of MJPEG, MPEG4, H.264, MPEG4 ASP, MxPEG video from IP cameras and IP video encoders with analog cameras.
- ◆ **Automatic camera model detection:** Supports more than 500 IP cameras and IP video encoder models from over 50 different vendors.
- ◆ **Single-server:** Supporting up to 64 cameras and continuously recording from up to 64 cameras activated by motion or event with speed-up functionality.
- ◆ **Network- and storage-optimized:** Bandwidth-optimized multi-streaming with new compression methods; MPEG4 ASP, MxPEG and H.264, besides MJPEG and MPEG4. Move recorded video data to more cost-effective storage media locally or on the network.
- ◆ **Scheduled archiving:** Move video data hourly to a local or a networked drive.
- ◆ **User-initiated start and stop of recording:** Based on access privileges set by the administrator, client users can manually start recording for a pre-defined span of time.
- ◆ **Built-in Video Motion Detection:** Independent of camera model and supporting up to 64 cameras simultaneously per server.

REMOTE OPERATIONS

- ◆ **Live view and playback:** From PDA and access clients supporting up to 64 cameras simultaneously.
- ◆ **Advanced views layout:** Work with private and shared server-stored camera views containing up to 8x8 layouts, Hotspot, Matrix and Carousel elements, static and active HTML maps, all distributed across multiple computer monitors and windows.
- ◆ **Intelligent PTZ:** Manual control, presets, go to preset on event, patrolling with multiple schemes and pausing option, joystick control and scanning.

"With 7 different locations in the UK, this micro-brewery, bar and restaurant chain requires that the managers can have remote access to their video surveillance for keeping on top of activities when they are in another city. Managers can view live or recorded images, anytime from anywhere. With the networks already in place, new cameras can be added or moved around, if needed. Local police like the system, too, for its ability to deliver evidence."

Nick Desai, co-owner of ZERODEGREES

- ◆ **Virtual Matrix:** Control live camera views on remote computers for distributed viewing.
- ◆ **Input/Output Event Control:** Via cameras or networked I/O devices for event control, manual event buttons and event list in recordings.
- ◆ **Multi-channel, two-way audio:** Listen-in/recording with instant playback and transmit client microphone input to remote speakers.

SEARCH, EXPORT & SECURE DATA

- ◆ **Post-recording processing:** Smart Search, Digital PTZ with optional image smoothing, or IPIX post-recording PTZ.
- ◆ **Evidence export:** JPEG, AVI, WAV and native database formats with stand-alone recording viewer, data encryption and logs, user notes and report printing.
- ◆ **Authentication:** Local Microsoft Windows User Account and Groups, and XProtect user names and passwords.
- ◆ **Authorization:** Local Microsoft Windows User Accounts and Groups, and XProtect user profiles, all controlling access privileges and allowed actions at camera level.
- ◆ **Logging:** Stores user actions by time, locations and cameras, and full system operation.
- ◆ **Alerting:** Notify users on event or motion detection by sound, e-mail and SMS.



Detailed Product Features

XProtect Professional server modules

RECORDING SERVER

- ◆ Simultaneous digital multi-channel video and audio recording and relaying.
- ◆ Two-way audio transmitting client microphone input to remote speakers attached to IP devices.
- ◆ Bandwidth-optimized multi-streaming by splitting the single video stream from camera to differentiated streams for live view and recording. Client can request live view at a different frame rate and at lower resolution than the recording settings.
- ◆ Connectivity to cameras and video encoders supports MJPEG, MPEG4, MPEG4 ASP, H.264 and MxPEG.
- ◆ Auto-detect camera models during setup.
- ◆ Up to 64 installed cameras; simultaneous recording and live view of up to 64 cameras.
- ◆ Recording technology: secure high speed database holding JPEG images or MPEG4 and MxPEG streams including audio.
- ◆ Recording speed: 30+ frames per second per camera, limited only by hardware.
- ◆ Recording quality depends entirely on camera and video server capabilities: no software limitation.
- ◆ Start cameras on live view requests from clients.
- ◆ Unlimited recording capacity with daily archiving possible.
- ◆ Hourly to daily database archiving with optional automatic move to network drive saves storage capacity on the local server – with images still available transparently for playback.
- ◆ Built-in, real-time, camera-independent motion detection (VMD); fully adjustable sensitivity, zone exclusions, recording activation with frame rate speed up, and alert activation through e-mail or SMS.
- ◆ Client-initiated start of recording based on pre-defined recording time and access privileges.
- ◆ Pan-Tilt-Zoom preset positions, up to 50 per camera.
- ◆ PTZ go-to preset position on events.
- ◆ Combine PTZ patrolling and go-to positions on events.
- ◆ Set multiple patrolling schedules per camera per day: i.e. different for day/night/weekend.
- ◆ PTZ scanning on supported devices: viewing or recording while moving slowly from one position to another.
- ◆ VMD-sensitive PTZ patrolling among selected presets.
- ◆ Send Wash and Wipe commands to supported PTZ models.
- ◆ On pre-defined events Matrix remote commands are automatically sent to display live video remotely on computers running the Matrix Monitor or the Smart Client with Matrix Plug-in.
- ◆ Recording Server runs as a Windows Service.

Detailed Product Features

XProtect Professional server modules

RECORDING VIEWER

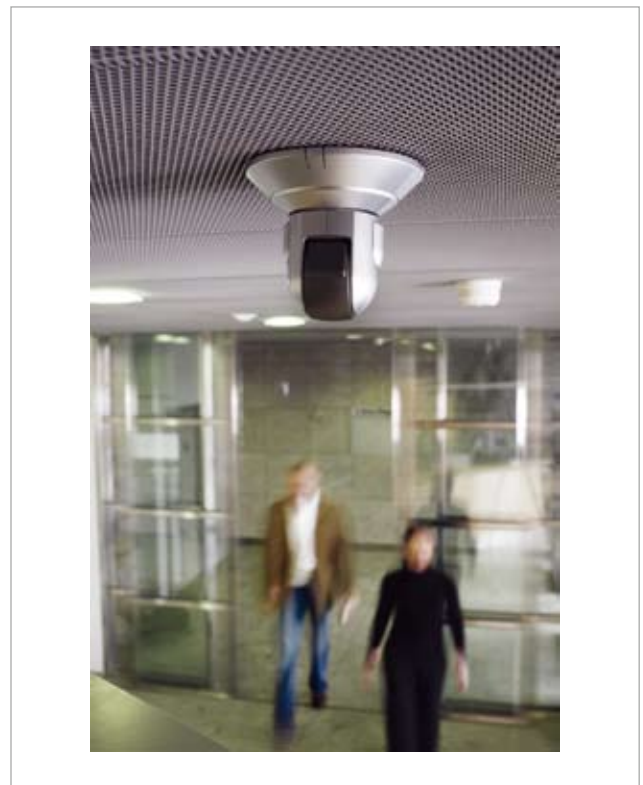
- ◆ Play back recorded video and audio locally on the Recording Server.
- ◆ View up to 16 cameras time-synchronized during playback.
- ◆ Scrollable activity timeline with magnifying feature.
- ◆ Instant search on recordings based on date/time and activity/ alarm (Video Motion Detection).
- ◆ 'Smart Search' for searching for sequences with motion.
- ◆ Evidence can be generated as a printed report with time and date stamp, as a JPEG image, or in AVI film.
- ◆ Export audio recordings in WAV or AVI format.
- ◆ Export video, digitally zoomed to view area of interest only and to minimize export footprint size.
- ◆ Export 'Evidence CD' containing native database and Recording Viewer for instant, easy viewing by authorities.
- ◆ Encryption and password protection option for exported recordings and files.
- ◆ Ability to add comments to exported evidence, also encrypted.
- ◆ Option to send e-mail.
- ◆ De-interlacing of video from analog cameras.
- ◆ IPIX technology for PTZ in 360° recorded images.

IMAGE SERVER

- ◆ Remote access for Smart and Remote Clients.
- ◆ Built-in web server for download and launch of clients and plug-ins.
- ◆ Authenticate access based on local Microsoft Windows account database, or XProtect user name and password.
- ◆ Authorize access privileges per local Microsoft Windows user accounts and groups, XProtect user profile or grant full access.
- ◆ User profiles control access to: Live view, PTZ, PTZ presets, output control, events and audio; Playback, AVI export, JPG export, DB export, Sequences, Smart Search and Audio.
- ◆ Setup, Edit private views, Edit public views.
- ◆ Audit logs of exported evidence by user and file.
- ◆ Audit logs of client user activity by time, locations and cameras.

PDA SERVER

- ◆ Remote access for PDA Client.
- ◆ Handle login and session requests between PDA clients and Image Server.
- ◆ Resize video surveillance images to fit the screen layout of PDA Client.



Detailed Product Features

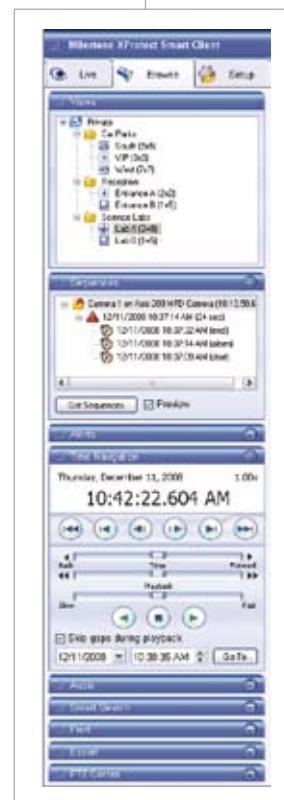
XProtect Professional client modules

REMOTE CLIENT

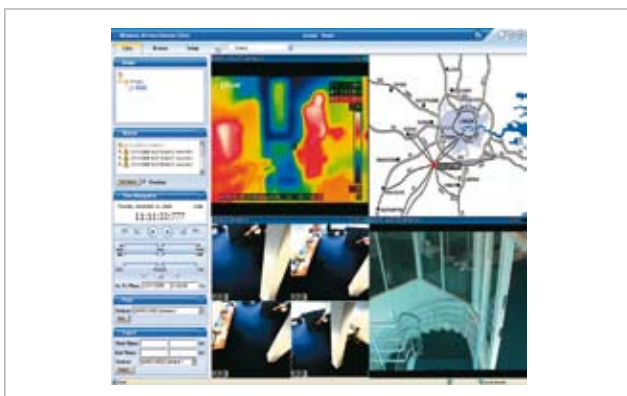
- ◆ View live video or playback 1-16 cameras' recordings from the server simultaneously.
- ◆ Advanced video navigation including fast/slow playback, jump to date/time, single step and video motion search.
- ◆ Shared views can be managed centrally via the server with admin/user rights and user groups.
- ◆ Import static or active HTML maps for fast navigation to cameras and good premise overviews.
- ◆ Activate Matrix via graphical premise maps using JavaScript or integrate with centralized access control systems.
- ◆ Control output port relay operation, like control of gates.
- ◆ Quick overview of sequences with detected motion and preview window.
- ◆ Quick overview of events/alerts.
- ◆ Control PTZ cameras remotely, also using preset positions.
- ◆ Remote PTZ Point-and-Click control.
- ◆ Remote PTZ zoom to a marked rectangle.
- ◆ Take manual control over a PTZ camera that runs a patrolling scheme; after a timeout with no activity the camera reverts to its scheduled patrolling.
- ◆ IPIX 1x2 or 2x2 'Quad View' for viewing all 360° at once.
- ◆ Optional video compression in streaming from server to client gives better use of bandwidth.
- ◆ Create AVI files or save JPEG images.
- ◆ Print incident reports with free-text user comments.
- ◆ System logon using XProtect user name and password.



XProtect Smart Client:
text



Enlarged view of
user friendly interface



With XProtect Remote Client you can import static or active HTML maps for good premise overviews and quick navigation to cameras in multiple locations.

Detailed Product Features

XProtect Professional client modules

SMART CLIENT

- ◆ Smart Client includes all the features of XProtect Remote Client plus more:
- ◆ Installed per default on Recording Server for local viewing and playback of video and audio.
- ◆ Start recording on cameras for a pre-defined span of time (default 5 minutes). Subject to privileges set by administrator.
- ◆ Live-view digital zoom allows zoomed-out recordings while the operator digitally can zoom in to see details.
- ◆ 'Update On Motion Only' optimizes CPU usage by letting motion detection control whether the image should be decoded and displayed or not. The visual effect is a still image in the view until motion is detected.
- ◆ Shared and private camera views offer 1x1 up to 8x8 layouts in addition to asymmetric views.
- ◆ Multiple computer monitor support with a main window and any number of either windowed or full screen views.
- ◆ Hotspot function for working in details with a camera selected from a view containing multiple cameras.
- ◆ Carousel function allows a specified view to rotate between pre-defined cameras with individual timing and order with multiple appearances. Carousel function can be controlled allowing the operator to pause carousel function and to switch to previous or next camera.
- ◆ Matrix function to view live video from multiple cameras through the Image Server in any view layout with customizable rotation path, remotely controlled by computers sending Matrix remote commands.
- ◆ Send Matrix remote commands to display live video remotely on computers running the Matrix Monitor or the Smart Client with Matrix Plug-in.
- ◆ Cameras' built-in audio sources available in live and in playback.
- ◆ Transmit client microphone input to one or all remote speakers attached to IP devices.
- ◆ Goto PTZ preset positions directly from camera menu.
- ◆ Send wash and wipe commands to supported PTZ by programming keyboard shortcuts or joystick buttons.
- ◆ Go to a specific camera directly from camera menu.
- ◆ Copy camera images to clipboard.
- ◆ Manually trigger events by activating an administrator defined event from a list.
- ◆ Audible alerts activated by motion detection or event occurrence per camera.
- ◆ Smart Search lets you quickly search selected areas of camera images for motion. Within a camera image you can mark a specific area, multiple areas or overlapping areas for detecting motion sequences.
- ◆ Graphical timeline displays scrollable view of recorded sequences by adjustable time spans for an excellent graphical overview of when images have been recorded.
- ◆ Digital zoom function is enabled per default for fixed cameras in live view and for fixed and PTZ cameras in playback mode.
- ◆ Features for printing images.
- ◆ Export 'Evidence CD' containing native database and Recording Viewer for instant, easy viewing by authorities.
- ◆ AVI export automatically includes assigned audio source.
- ◆ Encryption and password protection option for exported recordings and files.
- ◆ Assign outputs, PTZ presets, events and views as actions to joystick buttons and as keyboard shortcuts.
- ◆ Current camera state is displayed as text in title bar of live view window as green (live), red (recording) or yellow (stopped).
- ◆ Video quality is optimized when maximizing live and playback windows.
- ◆ Context-sensitive help function.
- ◆ System logon using NTLM challenge handshake with local Microsoft Windows user account database.

Detailed Product Features

XProtect Professional client modules

MATRIX MONITOR

- ◆ Virtual Matrix showing live video directly from up to 4 cameras at a time triggered remotely by Matrix remote commands.
- ◆ Camera view shifts by first-in-first-out (FIFO).
- ◆ Multiple events can control a single Matrix monitor and single events can control multiple monitors.
- ◆ Manually confirm or auto-accept Matrix remote commands.
- ◆ Show live video at the maximum speed (frame rate) allowed by your cameras.

PDA CLIENT

- ◆ View live or playback video from a single server or from multiple servers in half-screen or full-screen formats.
- ◆ In live view you can control Pan-Tilt-Zoom cameras manually or use preset positions, and control the cameras' output relays to trigger external actions like opening doors or gates, turning on lights, etc.
- ◆ To find recordings you can jump to specific time/date or to next detected motion, or use motion detection sequence overviews.
- ◆ When viewing recordings, you can play back at variable speed or single-step-image-by-image.
- ◆ The PDA client connects to the XProtect Professional server using any IP connection; typically wireless LAN, GPRS, etc.
- ◆ Video compression from the server to PDA optimizes bandwidth usage.
- ◆ System logon using XProtect user name and password.

Using a PDA Client you can select a camera. View a live video with PTZ, or play back recordings in single step or instant motion search.

INTEGRATION OPTIONS

- ◆ Compatible with XProtect Transact that integrates video surveillance with ATM or POS cash register systems for managing loss prevention and fraud.
- ◆ Integrate with access control systems, alarms, gates, building management systems, etc. using hardware I/O, internal events and TCP/IP events.
- ◆ Create, import and use HTML pages for navigation between views or to trigger a virtual matrix in XProtect Smart and Remote Clients.



Milestone Systems

The Open Platform IP Video Software

MINIMUM SYSTEM REQUIREMENTS:

Common requirements:

CPU: Intel® Pentium® 4 or higher (Intel® Core™2 Duo recommended for Professional Server 6.5 and Smart Client 3.6), min. 2.4 GHz

OS: Microsoft Windows XP Professional (32 bit or 64 bit**) and Windows Server 2003 (32 bit or 64 bit**), Windows Server 2008 (32 bit or 64 bit**), Windows Vista Business (32 bit or 64 bit**), Windows Vista Enterprise (32 bit or 64 bit**) and Windows Vista Ultimate (32 bit or 64 bit**)

Graphics Card: AGP or PCI-Express, minimum 1024 x 768 (1280 x 1024 recommended), 16 bit colors

Network: Ethernet (100 Mbit or higher for Smart Client 3.6, Remote Client 3.5, and Matrix Monitor 2.3; 1 Gbit for Server 6.5 recommended)

** Running as a 32 bit application

XProtect Professional Server 6.5:

RAM: Minimum 1 GB (2 GB or more recommended)

Hard disk type: E-IDE, PATA, SATA, SCSI, SAS (7200 RPM or faster)

Hard disk space: Minimum 80 Gbyte free (depends on number of cameras and recording settings)

Software: DirectX 9.0 or newer required to run Playback Viewer application, and Microsoft .NET 1.1 Framework required to run Recording Server Manager plus PDA Server, and Internet Information Server (IIS) 5.1 or newer to run PDA Server

XProtect Smart Client 3.6:

RAM: Minimum 512 Mbyte (1 GB recommended for larger views, 1 GB recommended on Vista)

Hard disk space: Minimum 100 Mbyte free

Software: Microsoft .NET 2.0 Framework and DirectX 9.0 or newer

XProtect Remote Client 3.5:

RAM: Minimum 256 Mbyte (512 MB recommended for larger views, 1 GB recommended on Vista)

Hard disk space: Minimum 10 Mbyte free

Software: DirectX 9.0 or newer

XProtect Matrix Monitor 2.3:

RAM: Minimum 512 Mbyte (1 GB recommended on Windows Vista)

Hard disk space: Minimum 50 Mbyte free

Software: DirectX 9.0 or newer

XProtect PDA Client 1.0:

CPU: Intel StrongARM® or 100% compatible

RAM: Minimum 32 Mbyte

Network: Ethernet (256 Kbit or higher recommended)

Graphics Card: minimum 320 x 200, 16 bit colors

OS: Microsoft Windows Pocket PC 2003/2003 SE/Mobile 5.0

SUPPORTED LANGUAGES:

Professional Server 6.5: English, German, French, Spanish, Italian, Danish, and Japanese. Help system and Recording Server Manager in English only.

Smart Client 3.6: Arabic, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, French, German, Italian, Japanese, Korean, Polish, Russian, Spanish, Swedish and Turkish.

Remote Client 3.5: Simplified Chinese, Danish, English, French, German, Italian, Japanese, Spanish, and Swedish.

Matrix Monitor 2.3 and PDA Client 1.0: English.

LICENSE INFORMATION:

Server License:

Mandatory for installing the product and covers installation on a dedicated computer using the Software License Code. The Server license includes the Professional Server modules: Recording Server, Recording Viewer, Recording Server Manager, Image Server, PDA Server, Smart Client, Remote Client, PDA Client, and Matrix Monitor.

Camera License:

A camera license is required for each connected camera, either directly or per video channel through a video encoder. Camera Licenses can be purchased in packages of 4, 6, 9, 16, 25, 36, 50 or 64 cameras.

Client License:

All client modules are not licensed and can be installed and used on any number of computers.

COMPANY PROFILE:

Milestone Systems is the leading developer of open platform IP video management software. The XProtect solutions are easy to use, robust and proven in more than 45,000 customer installations. With support for the widest choice in network hardware and integration with other systems, XProtect provides best-of-breed solutions to "video enable" organizations - reducing costs, optimizing processes, protecting people and assets. Milestone software is sold through authorized partners in 90 countries.

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Milestone Systems reserves the right to change the specification without prior notice.

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