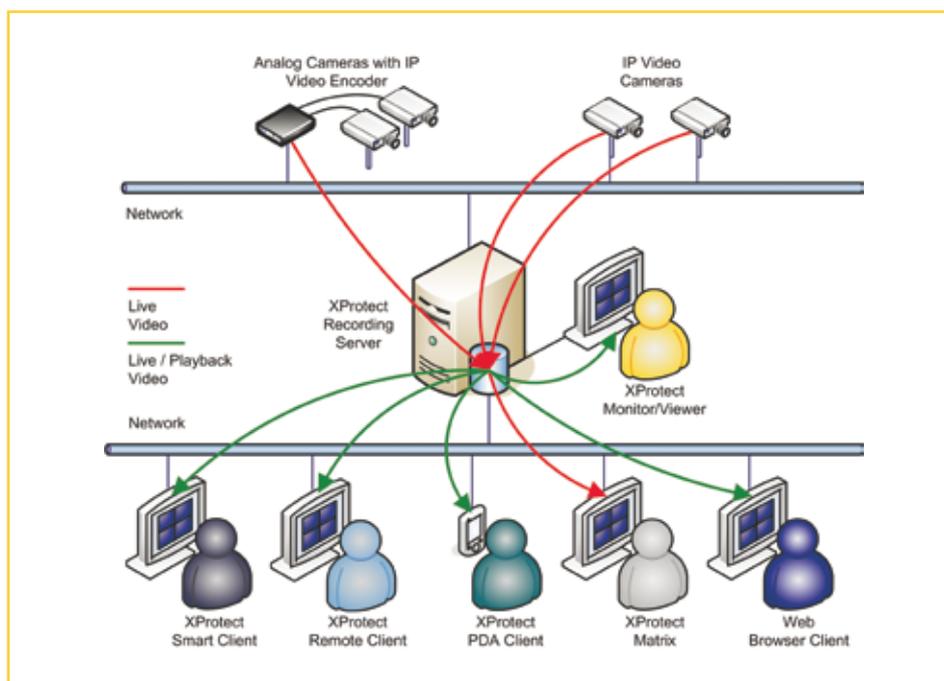# Milestone XProtect™ Professional

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 260 different IP-based video camera and encoder products (MJPEG and MPEG4) from over 30 different vendors.

◆ **Dependable, robust and stable:** Proven in daily operation in more than 25,000 customer installations worldwide.

◆ **High performance:** Achieved on standard computer equipment by utilizing powerful multi-threaded technology.

◆ **Flexible remote access:** Reach your video surveillance data from any location at any time using a desktop computer, laptop or PDA.

◆ **Tailored for IT enviroments:** Integrates with windows authentication and authorization. Runs as a Windows® service or as an application.

◆ **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.

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Key Product Features
Advanced video management tools

SYSTEM, ADMINISTRATION & INTEGRATION

- **Single-server video surveillance solution:** Unlimited recording of MJPEG and MPEG-4 video from IP cameras and IP video encoders with analog cameras.

- **Automatic camera model detection:** Supports more than 260 IP cameras and IP video encoder models from over 30 different vendors.

- **Single-server:** Supporting up to 64 cameras and continuously recording up to 64 cameras activated by motion or event with speed up functionality.

- **Scheduled archiving:** Move video data once a day to a local or a networked drive.

- **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 remote web-based, PDA and full client, or local clients supporting up to 64 cameras from multiple servers at the same time.

- **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.

- **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 audio:** Listen-in and recording with instant playback.

"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

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.

RECORDING SERVER

- Simultaneous digital multi-channel video and audio recording.

- Connectivity to cameras and video encoders supports both MJPEG and MPEG4.

- 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 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.

- 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 email or SMS.

- 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.

- 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.

- 'On-the-fly' configuration changes per server while recording is in operation.

- Flexible online, sound, e-mail and SMS notification and patrolling scheduling per camera, triggered by clock or event.

- Run the Recording Server as a Windows Service or as an integrated part of the Live View Monitor application described as follows.

LIVE VIEW MONITOR

- The Live View Monitor includes all the features of the Recording Server plus more:

- Local live video viewing.

- Multi-channel audio listen-in with mute function.

- Dual or triple computer monitor viewing with Hotspot window and Carousel display.

- View up to 64 cameras simultaneously with optional update on motion only.

- Viewing speed: 30+ frames per second per camera, limited only by hardware.

- Quick Browse function to playback latest recorded video.

- Start and stop one or all cameras manually.

- Activate up to 8 pre-defined event buttons per camera, globally (all cameras) or camera-specific.

- Activate output signals on camera or dedicated devices.

- Option to hide Administrator button from other users.

- Pause PTZ patrolling and control the movement manually; after a timeout with no activity the camera reverts to its scheduled patrolling.

- 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.

- Send Matrix remote commands to display live video remotely on computers running the Matrix Monitor or the Smart Client with Matrix Plug-in.

- Joystick functionality for supported cameras.

- IPIX technology for PTZ in 360° recorded images.

Detailed Product Features

XProtect Professional server modules

RECORDING VIEWER

- Playback recorded video and audio locally on the Recording Server.
- View up to 16 cameras time-synched 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 highlighted image zones and objects.
- 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 & password protection option for exported recordings and files.
- Ability to add comments to exported evidence, also encrypted.
- Option to send email.
- 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.

HTTP SERVER / REAL-TIME FEED SERVER

- Remote access for web browser without installing any client software.
- View live video or playback 1-4 cameras' recordings.
- Export video as AVI files.
- Authenticate access based on user name and password.
- Authorize access either as 'Anonymous', 'Predefined user only' with full access to all cameras, or 'Restrict user access by camera'.
- Restrict access to playback and AVI export.
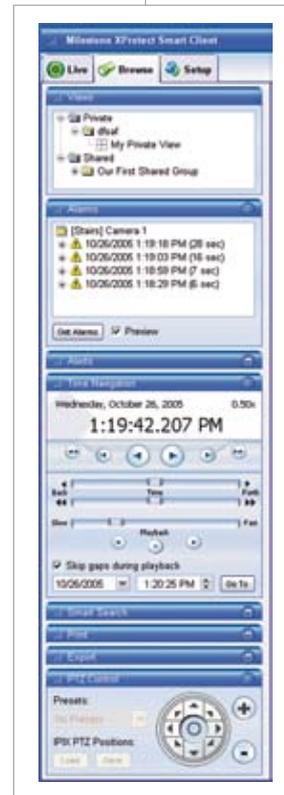- Audit logs of client user activity by time and cameras.

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.

◆ Individual views can be user-defined in various layouts: view or playback camera images from multiple servers simultaneously in the same view.

◆ 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: Smart Search finds activity in marked areas

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:

- 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 not necessarily present in the view at the same time.

- 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 live and in playback.

- Goto PTZ preset positions directly from camera menu.

- Goto 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 also available in playback mode.

- Many features for printing images.

- Export 'Evidence CD' containing native database and Recording Viewer for instant, easy viewing by authorities.

- Encryption & password protection option for exported recordings and files.

- Assign keyboard shortcuts to common actions.

- Assign common actions to joystick buttons.

- System logon using NTLM challenge handshake with local Microsoft Windows user account database.

The Floating Window option in the XProtect Smart Client enables you to watch a potentially large number of cameras at the same time. Create as many floating views as you want in different groups like buildings, locations, or departments. For instant views of chosen time periods, browse through recordings by adjustable time spans with the Timeline Browser.

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 FIFO (first-in-first-out)

◆ Multiple events can control a single Matrix monitor and single events can control multiple monitors.

◆ Manually confirm or auto-accept Matrix remote commands.

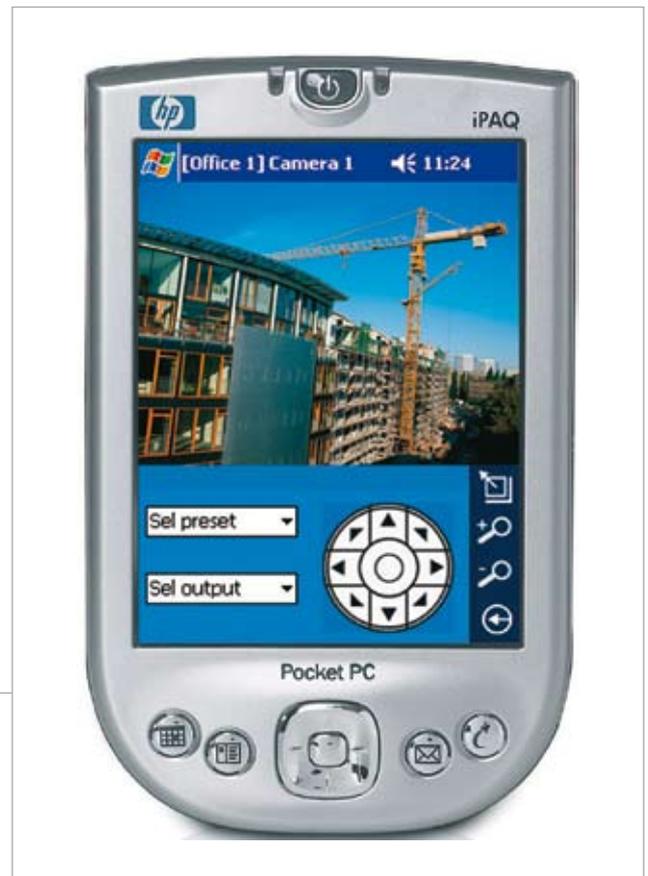◆ Show live video at the maximum speed (frame rate) allowed by your cameras.

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 playback 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:

XProtect Professional Server 6.0:
CPU: Intel® Pentium® 4 or higher (Xeon® recommended), minimum 2.4 GHz
RAM: Minimum 1GB (2 GB or more recommended)
Network: Ethernet (1 Gbit recommended)
Graphics Card: AGP or PCI-Express, minimum 1024 x 768, 16 bit colors
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)
OS: Microsoft® Windows® 2000 Professional, Windows 2000 Server and Advanced Server, Windows XP Professional (32 and 64 bit) or Windows Server 2003 (32 and 64 bit), Windows Vista® Business (32 bit), Windows Vista Enterprise (32 bit) and Windows Vista Ultimate (32 bit)
Software: DirectX 9.0 or newer required to run Live View Monitor application, and Microsoft .NET 1.1 Framework and Internet Information Server (IIS) 5.0 or newer to run PDA Server (not supported on Windows Vista)

XProtect Smart Client 3.0:
CPU: Intel Pentium 4 or higher (Xeon recommended for large views), minimum 2.4 GHz
RAM: Minimum 512 Mbyte (1 GB recommended for larger views)
Network: Ethernet (100 Mbit or higher recommended)
Graphics Card: AGP or PCI-Express, minimum 1024 x 768 (1280 x 1024 recommended), 16 bit colors
Hard disk space: Minimum 50 Mbyte free
OS: Microsoft Windows 2000 Professional, Windows 2000 Server and Advanced Server, Windows XP Professional (32 and 64 bit) or Windows Server 2003 (32 and 64 bit), Windows Vista Business (32 bit), Windows Vista Enterprise (32 bit) and Windows Vista Ultimate (32 bit)
Software: Microsoft .NET 2.0 Framework and DirectX 9.0 or newer

XProtect Remote Client 3.0:
CPU: Intel Pentium 4 or higher, minimum 2.4 GHz
RAM: Minimum 256 Mbyte (512 MB recommended for larger views)
Network: Ethernet (100 Mbit or higher recommended)
Graphics Card: AGP or PCI-Express, minimum 1024 x 768 (1280 x 1024 recommended), 16 bit colors
Hard disk space: Minimum 10 Mbyte free
OS: Microsoft Windows 2000 Professional, Windows 2000 Server and Advanced Server, Windows XP Professional (32 and 64 bit) or Windows Server 2003 (32 and 64 bit), Windows Vista Business (32 bit), Windows Vista Enterprise (32 bit) and Windows Vista Ultimate (32 bit)

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

XProtect Matrix Monitor 2.2:
CPU: Intel Pentium 3 or higher, minimum 1.0 GHz
RAM: Minimum 256 Mbyte
Network: Ethernet (100 Mbit or higher recommended)
Graphics Card: AGP or PCI-Express, minimum 1024 x 768, 16 bit colors
Hard disk space: Minimum 50 Mbyte free
OS: Microsoft Windows 2000 Professional, Windows 2000 Server and Advanced Server, Windows XP Professional (32 and 64 bit) or Windows Server 2003 (32 and 64 bit)

COMPANY PROFILE:
Milestone is the world market leader for open platform IP video management software. The XProtect products are easy to use, robust and proven in operation at 25,000 customer installations. Supporting the widest choice in network hardware and integration with other systems provides best-of-breed solutions to video enable your business, reduce costs, optimize processes, protect assets and ultimately increase value in your company's products and services. Milestone solutions are sold through authorized partners in 62 countries.

PRODUCT RANGE:
XProtect Corporate is a premium multi-server video surveillance system with centralized management of unlimited cameras in numerous locations including full-fledged remote access.

XProtect Enterprise is a comprehensive multi-server video management system running unlimited cameras and including full-featured remote access clients.

XProtect Professional is an advanced single server video management system running up to 64 cameras per server including extended remote access clients.

XProtect Basis+ is an expanded single server video management system running up to 25 cameras per server including a basic remote access client.

XProtect Transact is an add-on product that handles loss prevention through video evidence combined with time-linked POS or ATM transaction data, integrated with XProtect Corporate, Enterprise, Professional or Basis+.

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