



XProtect Enterprise 7.0 Product Features

SYSTEM & INTEGRATION

- **Multi-server and multi-site video surveillance solution:** Unlimited recording of video from IP cameras, IP video encoders and selected DVRs with analog cameras.
- **Optimized Recording Storage Management:** Unique data storage and archiving solution that combines superior performance and scalability and cost efficient long-term video storage,
- **Automatic camera model detection:** Supports more than 670 IP cameras, IP video encoders and selected DVR models from over 74 different vendors.
- **Automatic camera discovery:** Enables fast discovery of more than 670 IP cameras, IP video encoders and selected DVR models from over 74 different vendors. using methods such as Universal Plug And Play, Broadcast and IP Range scanning.
- **Unlimited number of recording servers:** Supporting unlimited cameras with up to 64 cameras per server. Continuously recording or 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.
- **Built-in Video Motion Detection:** Independent of camera model and supporting up to 64 cameras simultaneously per server.
- **Open Platform:** Open API/SDK, supports seamless integration with third party applications.

ADMINISTRATION

- **Single Management Application:** A new Management Application provides a consolidated single point management access to XProtect Enterprise Recording Servers.
- **System configuration wizards:** Guides the user through the process of adding cameras, configuring video and recording, adjustment of motion detection and user configuration.
- **Automated device discovery:** Enables fast discovery of camera devices using methods such as Universal Plug And Play, Broadcast and IP Range scanning.
- **Smart bulk configuration option:** Change settings across multiple devices simultaneously and in a very few clicks.
- **Adaptable application behavior:** Guides novice users, while expert users can optimize the application for efficient use.
- **Export/import of system and user configuration data:** System backup for reliable system operation and fast system recovery. System cloning for efficient rollout of multiple systems with the same, or similar, configuration.
- **Import of off-line configuration data:** Enabling off-line editing of configuration data, including camera and device definitions.
- **Automatic system restore points:** A 'Restore Point' is created each time a configuration change is confirmed. Enables easy rollback to previously defined system configuration points and enables cancelation of undesired configuration changes and restoration of earlier valid configurations.

Feature Summary

- **Open Platform:** Open API/SDK, supports seamless integration with third party applications.
- **Multi-server and multi-site video surveillance solution:** Unlimited recording of video from IP cameras, IP video encoders and selected DVRs with analog cameras.
- **Optimized Recording Storage Management:** Unique data storage and archiving solution that combines superior performance and scalability and cost efficient long-term video storage,
- **Automatic camera discovery:** Enables fast discovery of more than 670 IP cameras, IP video encoders and selected DVR models from over 74 different vendors. using methods such as Universal Plug And Play, Broadcast and IP Range scanning.
- **System configuration wizards:** Guides the user through the process of adding cameras, configuring video and recording, adjustment of motion detection and user configuration.
- **Built-in Video Motion Detection:** Independent of camera model and supporting up to 64 cameras simultaneously per server.
- **Multiple language support:** Let operators use the system in their native language with support for 19 different languages
- **Multi-channel, two-way audio:** Communicate with people at gates/entrances or broadcast messages to many people at once with multi-channel, two-way audio
- **Fast evidence export:** Quickly deliver authentic evidence to public authorities by exporting video to various formats, including video from multiple cameras with viewer, logs, and user notes included
- **Thorough audit logs:** Full awareness of the system and users with comprehensive audit logs
- **Configure access privileges:** Ensure system consistency and global user management with single sign-on Microsoft® Active Directory credentials and control privileges and allowed camera actions.
- **Intuitive connectivity:** Connect existing DVRs with the IP video management system and use them as devices similar to cameras



OPERATIONS

- **Live view and playback:** From PDA and access 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, absolute* and relative positioning, patrolling with multiple schemes, wipe and wash commands, 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, two-way audio:** Listen-in/recording with instant playback and transmit client microphone input to remote speakers.
- **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 recording time.

SEARCH, EXPORT & SECURE DATA

- **Post recording processing:** Smart Search, Digital PTZ with optional image smoothing (Viewer only), or IPIX post-recording PTZ.
- **Evidence export:** JPEG, AVI, WAV and native database formats with stand-alone Viewer, data encryption and logs, user notes and report printing.
- **Authentication:** Microsoft Active Directory user accounts, and XProtect user names and passwords.
- **Authorization:** Microsoft Active Directory 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 Enterprise 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, video encoders and selected DVRs supports MJPEG, MPEG4, MPEG4 ASP*, H.264* and MxPEG.
- Auto-detect camera models during setup.
- Flexible multi-site, multi-server license structure charged per camera.
- Unlimited number of installed cameras; simultaneous recording and live view of up to 64 cameras per server.
- 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 encoder capabilities: no software limitation.
- Start cameras on live view requests from clients.
- Unlimited recording capacity with multiple archives possible per day.
- 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 email or SMS.
- Start recording on event.
- Client initiated start of recording based on pre-defined recording time and access privileges.
- Pan Tilt Zoom (PTZ) preset positions, up to 50 per camera.
- Absolute* and relative PTZ positioning.
- 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 Wipe and Wash 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.
- Flexible online, sound, e-mail and SMS notification and patrolling scheduling per camera, triggered by time or event.
- Recording Server runs as a Windows Service.

RECORDING SERVER MANAGER

- Local console management of the Recording Server accessible from the notification area.
- Start and stop Recording Server service.
- Access to Recording Server configuration settings.
- Access to Recording Server help system.
- View system status and log information.

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, a JPEG image, an AVI film or in the native database format.
- 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.
- Set up one Master and multiple Slave Servers.
- Authenticate access based on Microsoft Active Directory user account, or XProtect user name and password.
- Authorize access privileges per Microsoft Active Directory user account/group, XProtect user profile or grant full access.
- User profiles control access to: Live view, PTZ, PTZ presets, Output control, Events, Listen to microphone, Talk to speaker, Manual recording; Playback, AVI export, JPG export, DB export, Sequences, Smart Search and audio. As well as Set up views, Edit private views and Edit shared 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 Enterprise Client modules

REMOTE CLIENT

- View live video or playback recordings for 1-16 cameras simultaneously; from the same or different servers.
- 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.
- 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.
- System logon using Microsoft Active Directory user accounts.

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 Enterprise 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.

Detailed Product Features

XProtect Enterprise 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 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 10x10 layouts in addition to asymmetric views.
- Views optimized for both 4:3 and 16:9 screen ratios.
- 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 Smart Clients or Recording Servers 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 wipe and wash commands to supported PTZ by programming keyboard shortcuts or joystick buttons.
- 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 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 & password protection option for exported recordings and files when exporting to database format.
- Assign outputs, PTZ presets, events and views as actions to joystick buttons and as keyboard shortcuts.
- Hide HTML page toolbar in HTML page views.
- Current camera state is displayed as text in title bar of live view item window as green (live), red (recording) or yellow (stopped).
- Video quality is optimized when maximizing live and playback windows.
- Context sensitive help function

INTEGRATION OPTIONS

- Compatible with XProtect Transact that integrates video surveillance with ATM or POS cash register systems for managing loss prevention and fraud.
- Compatible with XProtect Central for alarm overviews and operational status in larger video surveillance installations.
- Integrate with access control systems, alarms, gates, building management systems, etc. using hardware I/O, internal events and TCP/IP events or the OPC Data Access.
- With the Milestone Software Development Kit (SDK) you can integrate video into other software products by using the API to view live images, playback recorded activities, 'go to' specific times, and search for motion.
- Create, import and use HTML pages for navigation between views or to trigger a virtual matrix in XProtect Smart and Remote Clients. Develop third party plug-ins for the Smart Client to expand with new functionality

SUPPORTED LANGUAGES:

Enterprise Management Application 7.0: English, German*, French*, Spanish*, Italian*, Danish*, and Japanese*.

Smart Client 4.0: • English, Arabic, Simplified Chinese, Traditional Chinese, Czech, German, Danish, Spanish, French, Hungarian, Italian, Japanese, Korean, Dutch, Polish, Russian, Swedish, Turkish, Slovak.

Remote Client 3.6: English, German, French, Spanish, Simplified Chinese, Japanese, Italian, Danish, and Swedish.

Matrix Monitor 2.3: English.

PDA Client 1.0: English.

OPC Server and Client: English.

1) Marked languages will be available in service release 7.0b.

Detailed Product Specifications

LICENSE INFORMATION:

Base Server License:

Mandatory for installing the product and covers installation on an unlimited number of computers using the same Software License Code and designated as Master Servers or Slave Servers.

The Base Server License includes the Enterprise 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 or DVR. Camera Licenses can be purchased in any numbers.

Client License:

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

MINIMUM SYSTEM REQUIREMENTS:

XProtect Enterprise Recording Server 7.0:

HW Platform: Minimum 2.4 GHz CPU and 1 GB RAM (2.4 MHz dual core processor and 2 GB RAM or more recommended).

Minimum 1 GB disk space available, excluding space needed for recordings.

OS: Microsoft® Windows® XP Professional (32 bit or 64 bit*), Windows Server 2003 (32 bit or 64 bit*), Windows Server 2008 (32 bit or 64 bit*), Microsoft® 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*).

Software: Microsoft .NET 3.5 Framework SP1, or newer.

Internet Information Server (IIS) 5.1 or newer required running PDA Server. DirectX 9.0 or newer required to run Playback Viewer application.

XProtect Smart Client 4.0:

HW Platform: Minimum 2,4 GHz CPU, 1 GB RAM (more powerful CPU and higher RAM recommended for Smart Clients running high number of cameras and multiple views and displays).

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

OS: Microsoft Windows XP Professional (32 bit or 64 bit*), 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*).

Software: Microsoft .NET 3.5 Framework SP 1 and DirectX 9.0, or newer.

XProtect Remote Client 3.6:

HW Platform: Minimum 2,4 GHz CPU, 1 GB RAM (2 GB or higher recommended on Microsoft Windows Vista).

OS: Microsoft Windows XP Professional (32 bit or 64 bit*), 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*).

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).

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

XProtect Matrix Monitor 2.3:

HW Platform: Minimum 2,4 GHz CPU, 1 GB RAM (2 GB or higher recommended on Microsoft Windows Vista).

OS: Microsoft Windows XP Professional (32 bit or 64 bit*), 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*).

Software: DirectX 9.0, or newer.

* Running as a 32 bit application.