

Milestone XProtect Basis 4.0
Milestone XProtect Basis+ 4.0

Getting Started Guide 2005

PDF version



Dear Milestone Customer,

This Getting Started Guide explains how to install and use key features in Milestone XProtect Basis 4.0 and Basis+ 4.0.

Milestone Systems regularly release service updates for our products, offering improved functionality, support for new devices, and solutions for issues reported by our customers.

To make sure you install the most recent 4.0x version of our software, please check our website **www.milestonesys.com** for updates.

Guide Contents

Installing the Software.....	3
Retrieving Device License Keys.....	4
Administrator: Importing Device License Keys	5
Administrator: Adding a Device	5
Administrator: Configuring the Monitor Layout	6
Administrator: Archive Setup (Basis+ only)	6
Administrator: Configuring the Scheduler	7
Administrator: General Settings.....	8
Administrator: Configuring a Camera	8
Monitor: Introduction.....	10
Monitor: Controlling Moveable Cameras (PTZ).....	12
Viewer: Introduction.....	13
Viewer: Exporting Recordings.....	14
Remote Access Servers	16
Uninstalling the Software	17

Installing the Software

Please read the License Terms on the enclosed Product License Sheet before continuing installation of your Milestone software.

If upgrading, it is highly recommended that you uninstall (see page 17) any previous versions of Milestone XProtect before upgrading.

If the installation wizard does not start automatically when inserting the CD, run the following file from the CD:

- *MilestoneXProtectBasis.exe* if running XProtect Basis
- *MilestoneXProtectBasis+.exe* if running XProtect Basis+

Alternatively, if you are installing a version downloaded from the internet, run the .exe file from the location you have saved it to.

- ◆ When the installation wizard starts, click *Next* to continue the installation.
- ◆ Read and accept the License Agreement.
- ◆ Select required language version, and click *Next*.
- ◆ Select the *Licensed Version* option, and click *Next*.
- ◆ Type your Software License Code, as listed on your Product License Sheet.






- ◆ Follow the remaining steps in the installation wizard, and click *Finish* on the last step to complete the installation.


Retrieving Device License Keys

You must obtain a Device License Key (DLK) from Milestone for each device (IP network camera or IP video server) to be installed.


- ◆ Go to the Milestone website at www.milestonesys.com.
- ◆ Select the *Software Registration* link in the top menu.
- ◆ Log in to the online registration systems.
- ◆ If you do not have a login, click the *New To The System?* link, and follow the instructions. The DLKs are e-mailed to the specified e-mail address, so it is a good idea to use a single account for all persons who should be able to retrieve DLKs.

- ◆ If you have not yet registered your software, select *Add a new Software License Code to this list*, and complete the steps to claim your Software License Code (SLC) before proceeding.
- ◆ Click the key icon  next to the SLC to generate DLKs.
- ◆ Specify the MAC Address for the device. The MAC Address is a 12 digit hexadecimal (example: 0123456789AF), referred to as a 'Serial Number' by some vendors. For information about how to find the MAC address for a specific device, refer to the manual for the device in question.
- ◆ Click *Submit*; then check and confirm the MAC Address.
- ◆ Click  to register another MAC Address, or click  to have all the registered addresses for the SLC e-mailed to you.

- ◆ **Note:** You are allowed to install only the number of cameras listed on your license sheet, regardless of the number of available DLKs. For example, a fully used **four-port video server counts as four cameras** even if it requires only a single DLK to install.

- ◆ **When upgrading:** Register a new SLC, and simply click  next to the new SLC to receive an e-mail containing all the new DLKs.

Administrator: Importing Device License Keys

- ◆ The DLKs received in the e-mail when registering the device MAC addresses can be specified manually when adding each device in the Administrator application.
 - ◆ To avoid having to specify each DLK manually, save the .dlk file attached to the e-mail at a location accessible by the surveillance server – for example on a USB stick or on a network drive.
 - ◆ Open the Administrator by clicking the *Administrator* shortcut  on the desktop.
 - ◆ In the Administrator, click the *Import DLKs...* button.
 - ◆ Browse to the location where you have saved the .dlk file. Select the file, and click *Open*.
 - ◆ All Device License Keys from the file are now imported, and you do not need to specify each one manually.
-

Administrator: Adding a Device

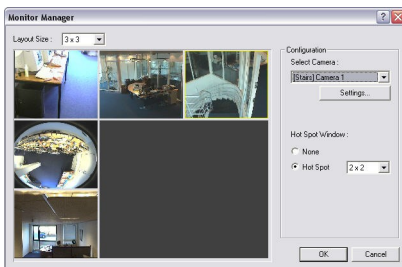
- ◆ Configure the IP address, password, etc. for the device as described by the manufacturer.
- ◆ Click the *Add Device...* button in the Administrator main window.
- ◆ Type the device IP address, and click *Next*.
- ◆ Type the password for the native (root) user, if applicable. Leave the *Autodetect Device* option selected.
- ◆ When the device is detected, type the Device License Key (DLK) for the device (if the DLKs have been imported, the field is pre-filled with the correct DLK), and click *Next*.
- ◆ Assign a descriptive name to the device, then click *Finish*.
- ◆ If the device is located behind a NAT-enabled router or a firewall, the port(s) used can be changed in the *Port Setup* dialog in the *Device Setup Wizard*. Remember to configure the router/firewall to map these ports to the ports and IP address used by the camera.

Administrator: Configuring the Monitor Layout

- ◆ To set up the Monitor application, click the *Monitor Manager...* button in the Administrator main window.
- ◆ Select a layout size for the Monitor. Options are 1×1, 2×2, 3×3, etc. up to an 8×8 grid camera layout.
- ◆ Click a camera position, and select a camera in the *Select Camera* list. Repeat until all required cameras are present in the Monitor layout. Images from cameras that are not included in the Monitor layout are not recorded.
- ◆ Select the required *Hot Spot Window* functionality. The Hot Spot displays a selected camera in a larger view, and can be used for point-and-click PTZ (Pan/Tilt/Zoom) operations on some cameras.

Possible *Hot Spot* options are:

- *None* (no use of Hot Spot; default).
 - *Hot Spot* (select layout size for the Hot Spot).
- ◆ To access settings for the camera selected in the Monitor layout, click the *Settings...* button.



Administrator: Archive Setup (Basis+ only)

The Archiving feature, available in Milestone XProtect Basis+ only, enables recordings to be kept for as long as required, limited only by the available hardware storage capacity.

- ◆ Click the *Archive Setup...* button in the Administrator main window to set up the Archiving features.
- ◆ Check the *Enable Archiving* box to enable Archiving, and specify the number of days to keep the databases (recordings).
- ◆ Specify a daily archiving time. Default is 12:00:00. To modify the archiving time, use the *Delete* and *Add* buttons.

- ◆ Select the cameras you want to include in the Archiving procedure. To quickly select all cameras, click the *Set all* button.

All archives are saved in an *Archives* folder located in the Milestone surveillance software folder, typically at:

- C:\Program Files\Milestone\Milestone Surveillance\Archives
-

Administrator: Configuring the Scheduler

The Scheduler's task is to start and stop camera activity in accordance with defined online periods. If connection to a camera is lost, the Scheduler will attempt to reconnect automatically.

By default, all cameras are online at all times. You will only need to modify Scheduler settings if you require cameras to be online at specific times, on specific events, or if you want to enable e-mail or PC audio alerts when motion is detected.

- ◆ Click the *Scheduler...* button in the Administrator main window to access the *Camera/Alert Scheduler* window.
- ◆ Select *Set* or *Clear* mode to set or clear online activity for the selected options (*Online, E-mail, Sound*) for the selected camera.
- ◆ To quickly apply settings from one camera to all cameras, select the required camera and use the *Copy and Paste to All* button.

Tip: If you are going to use e-mail alerts, you specify e-mail settings, such as addresses of recipients, intervals between e-mails, etc., by clicking the *General Settings...* button in the Administrator main window.

Administrator: General Settings

Clicking the *General Settings...* button in the Administrator main window lets you control a number of settings, such as user rights (Basis+ only), e-mail, logging, etc.

- ◆ To restrict user rights (Basis+ only), check the *Enable Protection* box. Change the Admin Password (default is <enter>), and select the features users should have access to. Typically, users would be allowed access to the following features:
 - *Application Startup*
 - *Browser*
 - *PTZ Control*
 - *Quick Browse*
 - ◆ If required, edit the *Days to log* in the *Logfile Settings* section, and the *Days to Keep* in the *Event Recording Settings* section. If archiving is used (Basis+ only, see page 6), the number of days must match the number of days set to archive.
 - ◆ If required, configure e-mail settings. E-mail should normally use the *Advanced SMTP* server option.
-

Administrator: Configuring a Camera

- ◆ In the Administrator main window, click the plus sign to expand the required device. Select the required camera, and click the *Settings...* button to open the *Camera Settings* window.
- ◆ In the *Framerate Settings* section, specify required frame rate.
- ◆ In the *Database Settings* section, specify where to store the camera database.

IMPORTANT: If Archiving is used (Basis+ only, see page 6), the path should be identical to the archive path set for the selected camera.
- ◆ Specify action in case of database failure. Default action is *Repair, Scan, Delete if fails*. The number of actions available depends on whether Archiving (Basis+ only, see page 6) is

enabled for the selected camera. If Archiving is enabled, the action *Repair, Archive if fails* is recommended.

- ◆ Click the *Image Quality...* button to set up image resolution and compression.

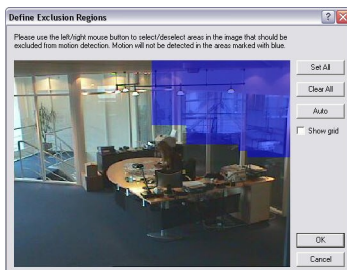
Video Motion Detection Settings

- ◆ In the *Camera Settings* window, click the *Motion Detection...* button to adjust VMD (Video Motion Detection) sensitivity.
- ◆ The *Noise Sensitivity* slider determines how much each pixel can change before it is regarded as motion. Areas in which motion is detected are highlighted in the preview image. Select a slider position where only detections you consider motion are highlighted.
- ◆ The *Motion Sensitivity* slider determines how many pixels must change in the image before it is detected as a motion. The sensitivity is indicated by the black vertical bar in the VMD bar below the preview image. When the detected motion is above this setting, the VMD bar changes color from green to red to indicate a positive detection.



If there are image areas that should be ignored by Motion Detection (e.g. a tree swaying in the wind), such areas can be excluded in the *Define Exclusion Regions* window, accessed by clicking the *Exclude Regions...* button in the *Camera Settings* window:

- ◆ Mark the area(s) to be excluded from the VMD. Left mouse button marks a grid section; right mouse button clears a grid section.
- ◆ Motion Detection settings should **always** be re-adjusted after Exclusion Regions have been defined or changed. VMD settings should be verified under different conditions applying for the camera's physical position (such as day/night, wind, etc.).



Monitor: Introduction

Milestone XProtect Professional's Monitor application handles recording and presentation of camera images, as set up in the Administrator application.

The Administrator **must** be closed before the Monitor can start.

- ◆ Click the *Monitor* shortcut  on the desktop to start the Monitor.

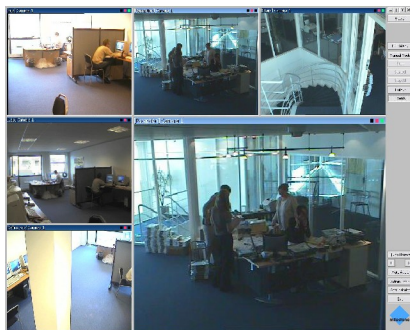
Image Bar

Device and camera names are displayed in the Image Bar in the top of each of the Monitor's camera windows for easy navigation.

- ◆ In the right side of the *Image Bar*, three indicators are shown:
 - *Event Indicator* (solid yellow): Lights up when events specified in the Administrator occur. Click in the image to reset.
 - *Motion Indicator* (solid red): Lights up when motion is detected in the image. Click in the image to reset.
 - *Online Indicator* (blinking green): Changes state every time an image is received from the camera.

Hot Spot

- ◆ If enabled in the Administrator, the Monitor's Hot Spot provides you with an enlarged view of a selected camera.
- ◆ You are able to quickly switch between cameras viewed in the Hot Spot simply by clicking the required camera image.



Admin Login (Basis+ only)

If access to certain features has been restricted in the Administrator, corresponding buttons in the Monitor may appear unavailable.

- ◆ To get access to restricted features, click the Monitor's *Admin Login* button, and type the Administrator password. When you are logged in as Administrator, the *Admin Login* button changes to *Admin Logout*.

Quick Access to Administrator Application (Basis+ only)

With Basis+ you are able to access the Administrator directly from the Monitor.

- ◆ To access the Administrator from the Monitor, click the *Administrator* button.
- ◆ Some features in the Administrator may be unavailable when the Administrator is accessed this way. To enable such features, simply close the Monitor.

Manual Mode

Cameras in the Monitor are normally online as specified in a schedule defined in the Administrator.

- ◆ Click the Monitor's *Manual Mode* button if you want to be able to start or stop cameras manually. When in *Manual Mode*, the Monitor will not reconnect if a camera connection fails. Release the *Manual Mode* button to return to scheduled operation.

Quick Browse

- ◆ Click the *Quick Browse* button to browse recent recordings from a selected camera in the *Hot Spot*. The *Quick Browse* button is only visible if a Hot Spot is enabled.

Monitoring Audio (Basis+ only)

XProtect Basis+ supports audio on a single channel. If the camera selected in the Monitor is recording audio, live audio can be played back on the PC speakers. If using a multi-port IP Video Server, audio will always be attached to the first video input on the device.




To mute live audio, click the Monitor's *Mute Audio* button. Recording is not affected by muting audio in the Monitor.

Monitor: Controlling Moveable Cameras (PTZ)

The Monitor's *PTZ Menu* button gives you access to the PTZ Menu with PTZ Preset Positions (requires Basis+, and that preset positions have been defined in the Administrator), and enables point-and-click PTZ control in the Hot Spot.

Using the PTZ Menu

You are able to control the position of a PTZ camera with the buttons in the Monitor's PTZ Menu:


- ◆ Click the arrow buttons to move the PTZ camera.
- ◆ Click the **H** button to move the camera to its home position.
- ◆ Click the *Zoom* buttons   to control the zoom level of the camera. The zoom level can also be controlled by the *Zoom Slider* . Note that the *Zoom Slider* is supported only with Absolute Positioning PTZ Devices.

Using PTZ Presets (Basis+ only)

If PTZ Preset Positions have been defined for a camera in the Administrator, these positions can be controlled using the PTZ Preset Buttons. PTZ Preset Buttons are displayed in the lower part of the PTZ Control Panel, and are divided into five PTZ Preset Banks (A-E) with up to five positions in each.

- ◆ Click a PTZ Preset Bank button (A-E) to display the PTZ Preset Positions in required bank.
- ◆ Click a PTZ Preset Button to move the PTZ camera to the required preset position.

Point-and-Click PTZ Control

If the mouse pointer changes to cross hairs  when positioned over the Hot Spot, the position of the PTZ camera can be controlled by clicking in the Hot Spot window (point-and-click).










- ◆ Point-and-click controls are supported only with Absolute Positioning (Type 1) PTZ Devices, and only when the Monitor's PTZ Menu is activated.

Viewer: Introduction

The Monitor's Viewer feature is used to play back and export recorded material from the databases. The Viewer lets you handle up to four cameras simultaneously with XProtect Basis+, and a single camera with XProtect Basis. The Viewer is launched from the Monitor by clicking the *Viewer* button.



In the left side of the Viewer window, a toolbar provides easy access to many of the Viewer's features:


- ◆ Click the *Settings* icon to open the *Settings* control panel. Control panels are displayed in the lower part of the Viewer window. In the control panel, configure the Viewer's layout and the time span to use in the Timeline in the Viewer's right side. 
- ◆ Click the *Database Information* icon to open the *Database Information* control panel. Click a camera window, then select a camera from the *Video Feed* list. If audio is available, an audio source for the video feed can be selected in the *Audio Feed* list. If using the 2x2 view in Basis+, repeat the procedure until all required cameras are displayed. 
- ◆ If using the 2x2 view in Basis+, double-click an image, or click the *Single View* and *Multi View* icons to switch between viewing single and multiple images. Each view can be saved and retrieved via the *Views* menu found in the Viewer's top menu bar. 

- ◆ Click the *Motion View* icon for a graph displaying motion sequences. Drag the graph to browse images in the sequences. 
- ◆ Click the *Alarm Overview* icon to view a list of the most recent motion alarms. Clicking an alarm in the list lets you browse recordings from the alarm time. Clicking the *Get All* button updates the list with alarms from archived databases. 
- ◆ Click the *Image Controls* icon to get access to digital zoom controls for viewing an image area in greater magnification. 
- ◆ Click the *Print* icon to print evidence of a selected camera view on the default Windows printer. 
- ◆ Click the *Help* icon, then click the item of interest to read the Viewer's built-in help texts. 

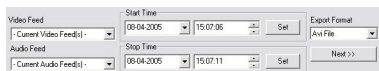
Use the vertical Timeline in the right side of the Viewer window to navigate to a required recording. The Timeline's horizontal white line indicates the current position.

The area between the Timeline's two horizontal blue lines is a magnification of the recordings from the preceding and following 30 seconds.

- ◆ Click the Timeline and move the mouse up or down without releasing the mouse button to browse through recordings. Browsing is fast when clicking outside the magnifying area, and slow when clicking inside the magnifying area.
- ◆ The Timeline uses the following colors:
 - Red: Recordings with motion.
 - Green: Recordings without motion.
 - Black: Periods without recordings.
 - Yellow: Audio recordings.

Viewer: Exporting Recordings

- ◆ Select the View containing the camera(s) and/or microphone(s) to be exported.
- ◆ Click the *Export* icon  to open the *Export* control panel.



The screenshot shows the 'Export' control panel. It has two main sections: 'Video Feed' and 'Audio Feed'. Each section contains a dropdown menu for the feed name (both set to 'Current Video Feed(s)' and 'Current Audio Feed(s)') and a 'Start Time' section. The 'Start Time' section includes a date field (08-04-2005), a time field (15:07:05), and a 'Set' button. The 'Audio Feed' section also includes a 'Stop Time' section with a date field (08-04-2005), a time field (15:07:11), and a 'Set' button. On the right side, there is an 'Export Format' dropdown menu (set to 'Avi File') and a 'Next >>' button.

- ◆ Select the video feed and, if applicable, audio feed you want to export.
 - The *Current video feed(s)* and *Current audio feed(s)* options will perform a batch export of **all** cameras and microphones in the View.
- ◆ Browse to required start time of the export, and click the *Start Time* section's *Set* button, or specify the time directly in the *Start Time* section's date and time fields.
- ◆ Browse to required stop time of the export, and click the *Stop Time* section's *Set* button, or specify the time directly in the *Stop Time* section's date and time fields.

- ◆ Select required export format, click *Next*, and follow one of the procedures described in the following. Procedures vary depending on the selected export format: *AVI File* or *Jpg/Wav Files*.

Export Format: AVI File (Movie Clip)

- ◆ Select required export path (default exports to desktop).
- ◆ Select required frame rate. *Full* will export all images to the AVI file; *Half* will export only every second image, yet still play back in real-time speed.
- ◆ Select if timestamps from the surveillance system should be added to the AVI file.
- ◆ Select the video codec (compression/decompression technology) to be used for generating the AVI file, and click *Next*.
- ◆ The Progress Bar shows the progress of your export.


Export Format: JPG/WAV Files (Image/Audio Clip)

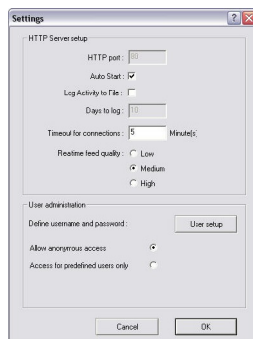
- ◆ Select required export path (default exports to desktop).
- ◆ Select if timestamps from the surveillance system should be added to the exported JPGs. The JPG images are exported as received from the camera (unmodified) when the *Include Timestamp* option is cleared.
- ◆ Click *Next* to start the export.
- ◆ The Progress Bar shows the progress of your export.

Remote Access Servers

The Milestone XProtect Basis and Basis+ remote access servers—the *Milestone Web Server* and the *Milestone RealtimeFeed Server*—allow remote access to live views, playback, and alarms from the surveillance system. Both are included in the standard software package.

Both servers can be started from Windows' *Start* menu if they have not been added to the Startup Folder during installation.

- ◆ The *Web Server* handles navigation and still image viewing.
 - Click the  icon in the system tray to open the Web Server configuration dialog.
 - Click the *Settings* button to start configuration.
 - By default, the Web Server is set to allow access without specifying a password (*Allow Anonymous Access*).
 - Select *Access for predefined users only* if you want to allow access for known users only, and click the *User Setup* button to define the users.
 - To restrict which cameras each predefined user will be able to access, select the *Restrict user access by camera* option, and click the *User Access* button to set up which cameras and options each user will have access to.
- ◆ The *RealtimeFeed Server* handles all moving picture feeds. Once started, it does not need any configuration. Default port is 9513.



To test remote access servers, open Internet Explorer on the Milestone XProtect Professional server PC, and go to the following address:

http://localhost

To view live pictures, note that Microsoft™ Internet Explorer 6.0 or newer is required, and that the *ActiveX Support* option on the login page must be selected.

Uninstalling the Software

Milestone XProtect Basis and Basis+ can be uninstalled the following way:

- ◆ Shut down all Milestone applications, including the HTTP and RealtimeFeed Servers if they are running.
- ◆ Open the *Add or Remove Programs* feature in Windows' *Control Panel*.
- ◆ Select the *Milestone XProtect Basis(+)* entry, and click the *Change/Remove* button.
- ◆ If you want to keep your existing configuration and/or databases, make sure the *Remove Database Files* and *Remove Registry Settings* options are **cleared**.
- ◆ Click *OK*.
- ◆ Click *Finish* and close the *Add or Remove Programs* dialog and the *Control Panel*.

