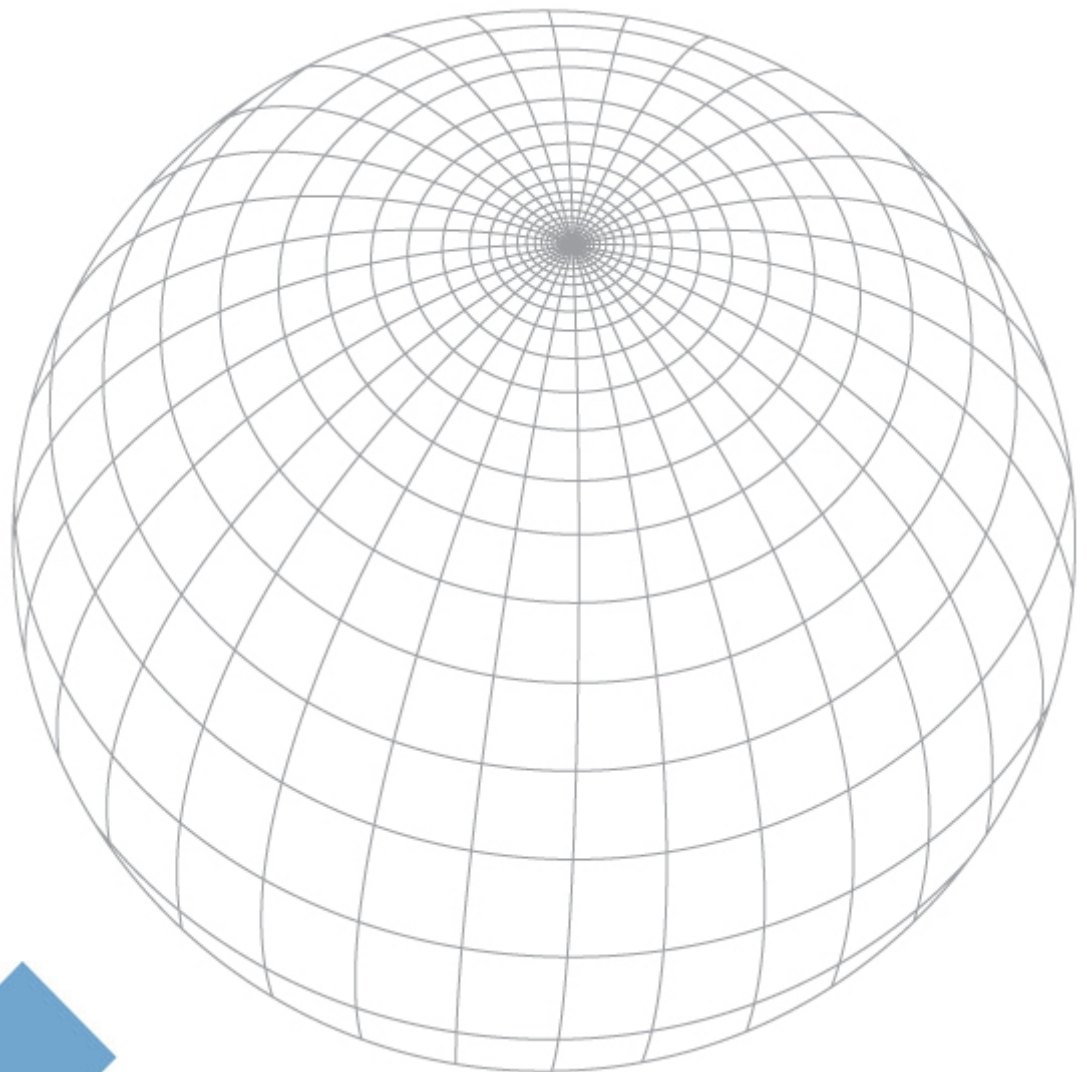


milestone
XProtect

Remote Client 3.5
User's Manual





Target Audience for this Document

This document is aimed at users of the Milestone XProtect Remote Client.

This document provides users with detailed descriptions of Milestone XProtect Remote Client features. It furthermore provides a considerable number of targeted "how-to" examples, guiding users through completing common tasks in Milestone XProtect Remote Client.

Note that depending on your user rights and your role in your organization, some features in the Milestone XProtect Remote Client may not be available to you. Ask your surveillance system administrator if in doubt.



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All names of people and organizations used in this document's examples are fictitious. Any resemblance to any actual organization or person, living or dead, is purely coincidental and unintended.



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Introduction

The Remote Client provides users with access to the surveillance system. It lets users access multiple servers at a time, allowing user access across systems.

The Remote Client does not offer nearly as many features as the Smart Client (see separate manual). However, the Remote Client is accessed through a browser, and run from the surveillance system server; this eliminates the need for installing any client software.



Example of the Remote Client, displaying video from 16 cameras

System Requirements

Operating System Microsoft® Windows® XP Professional (32 bit or 64 bit*) and Windows Server 2003 (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*). If using Windows Vista, the server on which the Remote Client is running must be added as a trusted site in your browser.

CPU Intel® Pentium®, 2.4 GHz or higher.

RAM Minimum 256 MB (512 MB recommended for larger views, 1 GB recommended on Microsoft Windows Vista).

Network Ethernet (100 Mbit or higher recommended).

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

Hard Disk Space Minimum 10 MB free.

Software DirectX 9.0 or newer.

* Running as a 32 bit service/application.

i Tip: To check which DirectX version is installed on a computer, click *Start*, select *Run...*, and type dxdiag. When you click *OK*, the *DirectX Diagnostic Tool* window will open; version information is displayed near the bottom of its *System* tab. Should the server require a DirectX update, the latest versions of DirectX are available from <http://www.microsoft.com/downloads/>.



What are You Able to Do with the Remote Client?

With the Remote Client, you are able to:

- View live video from cameras on the surveillance system.
- Browse recordings from cameras on the surveillance system.
- Create and switch between an unlimited number of views, each able to display video from up to 16 cameras from multiple servers at a time*. Views can be placed in *private* groups (only accessible by the user who created them) or *shared* groups (accessible by all Remote Client users connected to the surveillance system).
* Depending on Milestone XProtect surveillance system used
- Control PTZ (Pan/Tilt/Zoom) and fisheye (360° view) cameras.
- Activate external outputs.
- Get quick overviews of sequences with detected motion.
- Print images.
- Generate and export evidence in AVI (movie clip) and JPEG (still image) formats.
- View HTML pages and static images.

How Can User Rights Affect Your Use of the Remote Client?

The rights of individual remote users are specified centrally by the surveillance system administrator. The rights of an individual user will determine the user's ability to use the Remote Client's features.

Basically, the surveillance system administrator is able to restrict a user's rights to the following:

- Access to the Remote Client
- Access to each of the Remote Client's tabs: *Live*, *Browse* and *Setup*
- Ability to use features on the Remote Client's tabs
- Ability to create views (views determine the way in which video from one or more cameras is displayed)
- Ability to view video from specific cameras

The ability to use various features of the Remote Client may therefore vary considerably from user to user. Ask your surveillance system administrator if in doubt about your user rights.

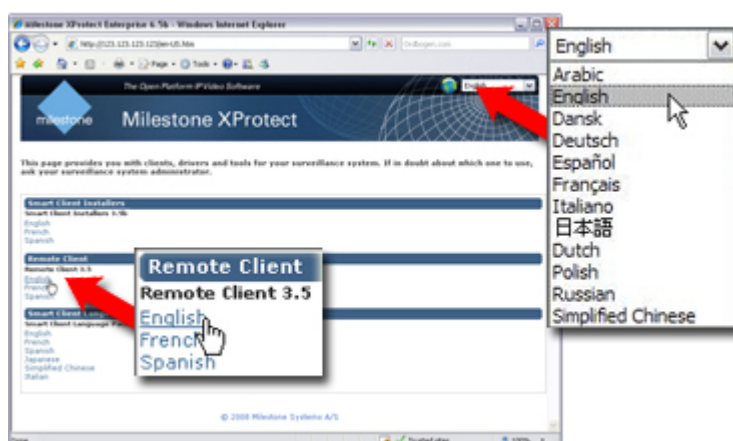
Accessing the Remote Client

No download or installation of the Remote Client is necessary. The Remote Client is run directly from the surveillance system server; you simply access it through a browser:

1. Open an Internet Explorer browser (version 6.0 or later), and connect to the surveillance system server at the URL or IP address specified by your system administrator. When you connect to the surveillance system server, you will see a welcome page.

If using Windows Vista, the server on which the Remote Client is running must be added as a trusted site in your browser (from your browser's *Tools* menu, select *Internet Options* > *Security* > *Trusted sites*).

2. On the welcome page, select your required language in the menu in the top right corner. Then go to the welcome page's *Remote Client* section, and click the required Remote Client language version link.



Example: Selecting welcome page language and required Remote Client language version. Number of available languages may be different in your organization.

? **My welcome page is different, why?** The illustration shows the type of welcome page that most users are likely to see. Other versions of the welcome page also exist:



If you see this type of welcome page, go to the welcome page's *XProtect Remote Client* section, and click the *Run XProtect Remote Client in Browser Mode* link.



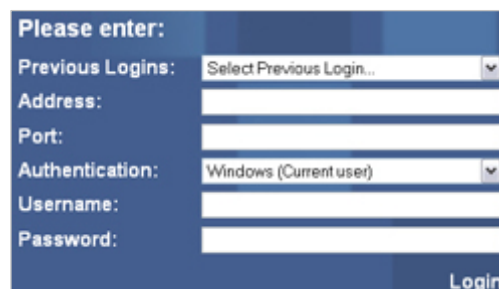
If you see this type of welcome page, click the *Run the XProtect Remote Client from server* link.

? **I already have a locally installed version of the Remote Client, will it work?** In some previous surveillance system versions it was possible to download and install the Remote Client locally; this option is now available through the Smart Client only. If you already have a locally installed Remote Client, your Remote Client will still work.

Logging In

When accessing the Remote Client you will be asked to log in:

- Specify your login information in the following fields:
 - Previous Logins:** Only available if you have logged in before. Lets you reuse previously specified login details (except any password, which you must always type yourself). This can greatly speed up the login process.
 - Address:** Type the URL or IP address specified by your system administrator. This will typically be the same URL or IP address you used if connecting to the Remote Client through a browser, although it may occasionally be a different one.
 - Port:** Internet connections may use different ports for different purposes. Specify the port number, your system administrator has asked you to use when logging in to the Remote Client. In most circumstances, port 80 is used.
 - Authentication:** Select between different methods of authentication (i.e. the process of verifying that you are who you claim you are). Consult your surveillance system administrator if in doubt about which authentication method to use.
 - Windows (current user)*, with which you will be authenticated through your current Windows login, and do not have to specify any user name or password. This is the default authentication method, i.e. the method which is automatically used unless you select another method.
 - Windows*, with which you will be authenticated through your Windows login, but you will need to type your Windows user name and password.
 - Basic*, with which you will be authenticated through a user/password combination defined on the surveillance system server.
 - Username:** Type your user name as specified by your system administrator. The user name is case-sensitive, i.e. there is a difference between typing, for example, *amanda* and *Amanda*.
 - Password:** Type your password as specified by your system administrator. The password is case-sensitive.



- i Tip:** The vast majority of Remote Client users will always log in to the same address and port number. However, if you occasionally log in to different addresses and ports, or log in with different user names, the *Previous Logins* list lets you select your previously specified logins, in which case all you have to do is specify your password.
- Click the *Login* link. After a short wait, the Remote Client window will open. The Remote Client window has three tabs: *Live*, *Browse* and *Setup*. The *Live* tab is used for viewing live video from cameras, the *Browse* tab is used for browsing recorded video from cameras, and the *Setup* tab is used for configuring the Remote Client.



Note: Depending on your user rights, you may not be able to access all three tabs.



? **Is this the first time you log in?** If you have logged in for the first time, you need to determine whether any *views* exist. Views determine how video from various cameras is displayed in the Remote Client. Views are thus essential in order to be able to use the Remote Client. One or more views may already have been created for you, or you may need to create views yourself. Read more about views, including how to determine if any views have already been created for you, in *Creating Views* on page 12.

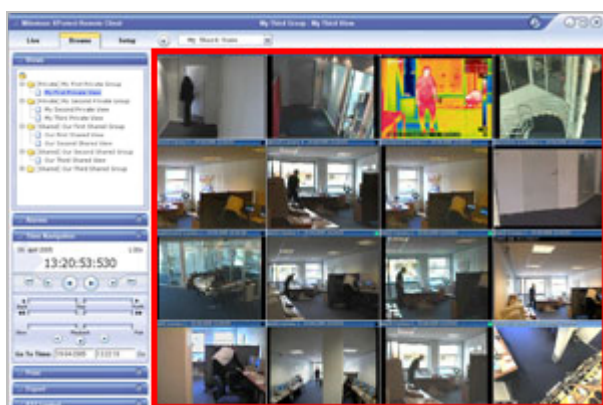
Logging in from Different Computers

Your user settings are stored on the surveillance system server. This means that your login can be used from any computer.

Creating Views

The way in which video from one or more cameras is displayed in the Remote Client is called a *view*. A view may contain video from up to 16* cameras. A Remote Client can handle an unlimited number of views, allowing you to switch between various collections of cameras.

* Depending on Milestone XProtect surveillance system used



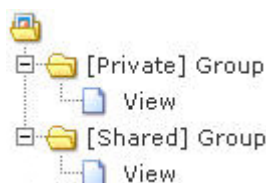
Example of a Remote Client displaying a view with video from 16 different cameras; the view is highlighted in red frame

Views/Groups Concept

In order to help you maintain an easy overview when you navigate between various views in your Remote Client, all views are placed in folders called *groups*. A group can contain any number of views.

Private and Shared Groups

Groups, in turn, can be *private* or *shared*. Views placed in private groups can only be accessed by the user who created them, whereas views placed in shared groups can be accessed by all Remote Client users connected to the surveillance system.



Simplified example of *views* in private and shared *groups*

Before you create any views, it is important that you know the difference between views placed in *shared* and *private* groups—not least because a number of views may already have been created and placed in shared groups for Remote Client users in your organization.

If views in shared groups already exist, you can start using your Remote Client straight away; creating further views in your Remote Client will not be necessary unless you want to supplement the views in the shared groups with views of your own, placed in private groups.

If you want to create views yourself, for example if no views in shared groups are available in your organization, the Remote Client's *Setup* tab lets you create groups and views, and specify which cameras should be included in each view.

Note: Particular user rights may be required in order to access the *Setup* tab. Your ability to create groups and views also depends on your user rights. From time to time your surveillance system administrator may make changes to camera or user properties on the surveillance system server. When this is the case, such changes will take effect in the Remote Client the first time you log in after the changes were made. Such changes may require you to re-create your views. Ask your surveillance system administrator if in doubt.

Are any Views in Shared Groups Available?

Especially if you are a first-time user of the Remote Client, you will want to know whether any views have already been created and placed in *shared* groups for your organization's Remote Client users.

Typically, your surveillance system administrator will have told you if shared groups are used in your organization. Alternatively, to quickly determine whether any views have already been created and placed in shared groups, do the following:

Note: This method requires that your user rights permit you to access the Remote Client's *Live* tab and/or *Browse* tab. Most users will have access to at least one of these tabs.

1. Go to the Remote Client's *Live* or *Browse* tab.
2. On the *Live* or *Browse* tab, look at the *Views* section:
 - If the *Views* section contains any expandable folders labeled *[Shared] ...*, shared groups are available, and you may—your user rights permitting—begin using the views in the shared groups for viewing live and recorded video. See *Viewing Live Video* on page 28 and *Viewing Recorded Video* on page 32. Only if you want to add more views, e.g. customize your Remote Client with views in private groups, do you need to create further views on the *Setup* tab.



Example of *Views* section containing shared groups with views

- If the *Views* section contains no expandable folders at all, no views are available, and you must create at least one view on the *Setup* tab before you can begin using the Remote Client.



Example of *Views* section containing no expandable folders

- If the *Views* section contains one or more expandable folders labeled *[Private] ...*, you have already created one or more views in private groups.

Which Types of Groups Can You Create Views in?

Depending on your user rights, you may be able to create and edit views in the following types of groups:

- Private and shared
- Private, but not shared
- Shared, but not private
- None at all (in which case you simply rely on views created by others and placed in shared groups)

Typically, only a few people in an organization are able to create and edit views in shared groups. For example, the surveillance system administrator may create and maintain a number of views and place them in shared groups: When Remote Client users log in, the views placed in the shared groups will automatically be available to them, and the users will basically not need to create further views unless they want their own views in *private* groups.

To quickly determine which types of groups your user rights permit you to create and edit views in, do the following:

1. Select the Remote Client's *Setup* tab.

Note: Particular user rights may be required in order to access the *Setup* tab. If you are not able to access the *Setup* tab, you are not able to create views.

2. On the *Setup* tab, look at the *Views* section. Group folders to which you do **not** have access will be indicated by padlock icons.



Example: The user is able to create and edit views in private groups, but not in shared groups. Note the padlock icon on the shared group folder.

Consult your system administrator if in doubt about your user rights.

Creating Views in Private Groups

To create your first view in a private group, you first create a group, and then create the required view within the group.

If you have created views in private groups before, you may create new views in existing private groups, or you may create a new private group for the view.

Note: Views are created on the Remote Client's *Setup* tab. Particular user rights may be required in order to access the *Setup* tab.

Creating a Private Group

To create a private group, do the following on the *Setup* tab:

1. In the *Setup* tab's *Views* section, select the *[Private]* folder, or—if you have created private groups before—any folder labeled *[Private]*.
2. In the *Setup* tab's *Group Control* section, type a name for the group in the *Group Name* field, then click the *New* button.



Typing a name in *Setup* tab's *Group Control* section

Your new group will now appear in the *Setup* tab's *Views* section, with the name you have specified, and labeled as *[Private]*:



Newly created group appearing in *Views* section

You are now able to create a view within the group.

Creating a View in a Private Group

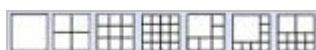
To create a view in a private group, make sure the group in which you want to create the view is selected in the *Setup* tab's *Views* section, and do the following:

1. In the *Setup* tab's *View Control* section, type a name for the view in the *View Name* field.



Typing a name in *Setup* tab's *View Control* section

2. Click one of the *View Control* section's seven available *New View* layouts:



Your new view is automatically added to the selected group:



Newly created view appearing under group

Tip: A group, whether private or shared, can contain an unlimited number of views. More than one private and shared group can exist.

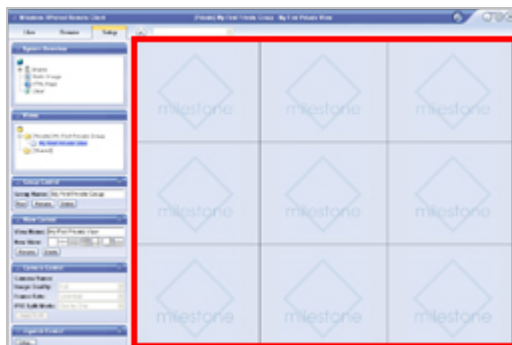
Adding Cameras to the View

Having created a view within a group, you are able to specify which cameras should be included in the view.

To add cameras to a view, do the following:

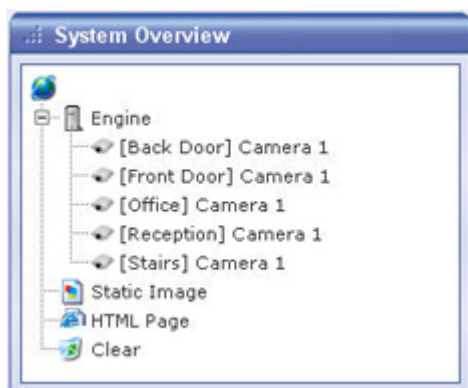
1. In the *Setup* tab's *Views* section, select the required view.

When you select a view, the layout of the selected view is outlined in the main section of the Remote Client window.



Layout of selected view is outlined in main section (indicated in red frame in this example)

2. In the *Setup* tab's *System Overview* section, click the plus sign \oplus next to the required engine (server) to view a list of available cameras.



Example: Engine with five available cameras

3. In the list, select a camera and drag the camera to the required position in the view.

When you have dragged a camera to a position in the view, the name of the camera will appear in the selected position. You will not see video from the camera yet, as the *Setup* tab is only for configuration, not for viewing video.

Repeat for each camera required in the view.

i Tip: If you want to use all of the cameras under an engine, you may simply drag the required engine to the view; this will automatically place all of the engine's cameras in the view, beginning at the selected position. Remember to have sufficient positions available in the view.

i Tip: You can always change the cameras in your view: Either drag the *System Overview* section's *Clear* link to a position in the view to clear the position, or simply overwrite a position by dragging a different camera to the position.

4. You are now able to use your view: You may—your user rights permitting—select the view on the *Live* tab (see *Viewing Live Video* on page 28) and on the *Browse* tab (see *Viewing Recorded Video* on page 32).

i Tip: In addition to cameras, you are able to add static images and HTML pages to views. See *Further Configuration* on page 21.

Creating Views in Shared Groups

To create view in a shared group, you first create a group, then create the required view within the group.

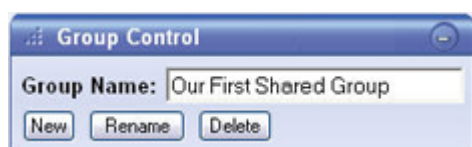
If you have created views in shared groups before, you may create new views in existing shared groups, or you may create a new shared group for the view.

Note: Views are created on the Remote Client's *Setup* tab. Particular user rights may be required in order to access the *Setup* tab and in order to be able to create shared views. When creating a shared view, bear in mind that depending on their user rights not all users may have access to all cameras on the surveillance system.

Creating a Shared Group

To create a shared group, do the following on the *Setup* tab:

1. In the *Setup* tab's *Views* section, select the *[Shared]* folder, or—if you have created shared groups before—any folder labeled *[Shared]*.
2. In the *Setup* tab's *Group Control* section, type a name for the group in the *Group Name* field, then click the *New* button.



Typing a name in *Setup* tab's *Group Control* section

i Tip: Bear in mind that since the group is shared, it will also appear in other users' Remote Clients; therefore use a name which other users will immediately be able to understand.

Your new group will now appear in the *Setup* tab's *Views* section, with the name you have specified, and labeled as *[Shared]*:



Newly created group appearing in *Views* section

You are now able to create a view within the group.

Creating a View in a Shared Group

To create a view in a shared group, make sure the group in which you want to create the view is selected in the *Setup* tab's *Views* section, and do the following:

1. In the *Setup* tab's *View Control* section, type a name for the view in the *View Name* field.



Typing a name in *Setup* tab's *View Control* section

i Tip: Bear in mind that since the view will appear in a shared group, it will also appear in other users' Remote Clients; therefore use a name which other users will immediately be able to understand.

2. Click one of the *View Control* section's seven available *New View* layouts:



Your new view is automatically added to the selected group:



Newly created shared view appearing under group

i Tip: A group, whether private or shared, can contain an unlimited number of views. More than one private and shared group can exist.

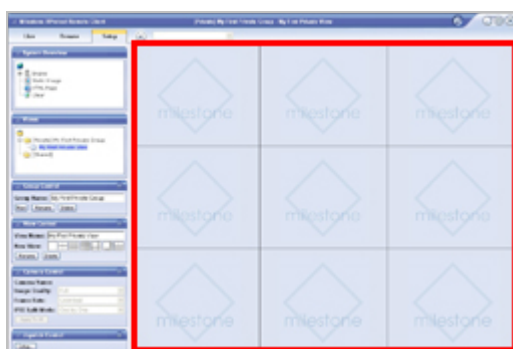
Adding Cameras to the View

Having created a view within a group, you are able to specify which cameras should be included in the view.

Note: Bear in mind that depending on their user rights not all users may have access to all cameras on the surveillance system. Thus, even though you may be able to view video from all cameras in a shared view, other users may not necessarily be able to view video from all the cameras. Consult your system administrator if in doubt.

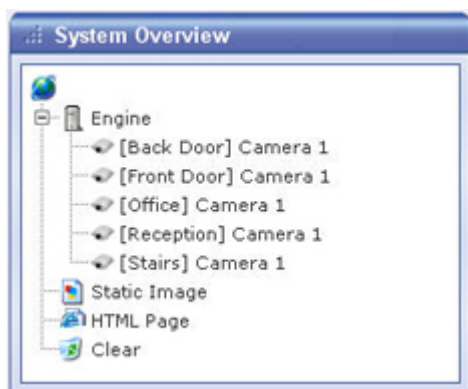
To add cameras to a view, do the following:

1. In the *Setup* tab's *Views* section, select the required view. When you select a view, the layout of the selected view is outlined in the main section of the Remote Client window.



Layout of selected view is outlined in main section (indicated in red frame in this example)

2. In the *Setup* tab's *System Overview* section, click the plus sign \oplus next to the required engine (server) to view a list of available cameras.



Example: Engine with five available cameras

3. In the list, select a camera and drag the camera to the required position in the view.

When you have dragged a camera to a position in the view, the name of the camera will appear in the selected position. You will not see video from the camera yet, as the *Setup* tab is only for configuration, not for viewing video.

Repeat for each camera required in the view.

Tip: If you want to use all of the cameras under an engine, you may simply drag the required engine to the view; this will automatically place all of the engine's cameras in the view, beginning at the selected position. Remember to have sufficient positions available in the view.



i **Tip:** You can always change the cameras in the view: Either drag the *System Overview* section's *Clear* link to a position in the view to clear the position, or simply overwrite a position by dragging a different camera to the position.

4. Remote Client users on your surveillance system will now be able to access the view in the shared group as from their next login.

i **Tip:** In addition to cameras, you are able to add static images and HTML pages to views. See *Further Configuration* on page 21.

Using Your Views on Different Computers

All your user settings, including any private views, are stored on the surveillance system server. This means that you are able to use your private views from any computer, provided you log in to the Remote Client with your own user name and password.

Further Configuration

In addition to creation of groups and views, the Remote Client's *Setup* tab lets you edit existing groups and views. The *Setup* tab furthermore lets you adjust camera settings, and set up joystick control for PTZ (Pan/Tilt/Zoom) cameras.

Note: Particular user rights may be required in order to access the *Setup* tab. Your ability to edit groups and views also depends on your user rights. Basically, if you are able to create groups and views, you are also able to edit them. From time to time your surveillance system administrator may make changes to camera or user properties on the surveillance system. When this is the case, such changes will take effect in the Remote Client the first time you log in after the changes were made. Such changes may require you to re-create your views. Ask your surveillance system administrator if in doubt.

Which Type of Groups Can You Edit Views in?

Depending on your user rights, you may be able to create and edit views in the following types of groups:

- Private and shared
- Private, but not shared
- Shared, but not private
- None at all (in which case you simply rely on views created by others and placed in shared groups)

To quickly determine which types of groups your user rights permit you to create and edit views in, do the following:

1. Select the Remote Client's *Setup* tab.

Note: Particular user rights may be required in order to access the *Setup* tab. If you are not able to access the *Setup* tab, you are not able to create views.

2. On the *Setup* tab, look at the *Views* section. Group folders to which you do **not** have access will be indicated by padlock icons.

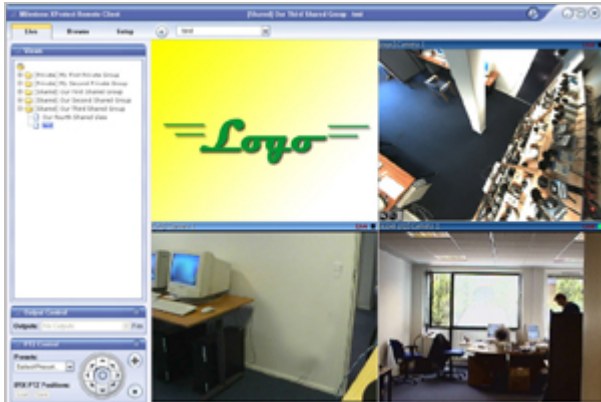


Example: The user is able to create and edit views in private groups, but not in shared groups. Note the padlock icon on the shared group folder.

Consult your system administrator if in doubt about your user rights.

Using Static Images in Views

You are not limited to viewing video in a view; you are able to view static images (such as GIF or JPEG) as well.



Example: A company logo inserted as a static image (in this case viewed on the *Live* tab). The feature could equally well be used for inserting maps, floor plans, photos of wanted persons, etc.

To use a static image in a view, do the following on the *Setup* tab:

1. Drag the *System Overview* section's *Static Image* link to the required position in the view.
2. Release the mouse button over the required position. When you release the mouse button, the *Choose File* window opens, letting you select the required static image file.

Using HTML Pages in Views

In addition to viewing video and static images in a view, you are able to import HTML pages and display them in the view. This way, you are able to include company web pages, intranet pages, navigation pages, link collections, etc. together with the video in the view.



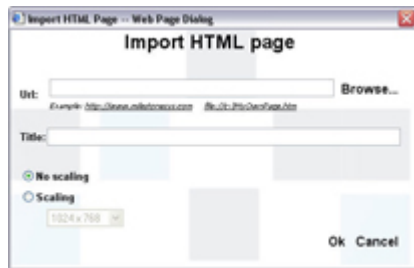
Example: A company web page inserted in a view (in this case viewed on the *Live* tab). The feature could equally well be used for inserting clickable maps, etc.

i Tip: When your imported HTML pages contain links, it is recommended that links have the `target='blank'` attribute. Example: `Link`. This will make the links open in separate windows, which will help you avoid losing view of the

Remote Client window itself due to a link opening a web page in the same browser window as the Remote Client.

To include an HTML page in a view, do the following:

1. Drag the *System Overview* section's *HTML Page* link to the required position in the view. When you release the mouse button over the required position, the *Import HTML Page* window opens:



Import HTML Page window

2. In the *Import HTML Page* window's *Url* field, type the URL of the required HTML page (example: `http://www.mywebsite.com/mywebpage.htm`). Always include the `http://` prefix.

- or -

If the HTML page is stored locally on your computer, specify its location on your computer (example: `C:\myfiles\mywebpage.htm`), or click the *Browse...* link to browse for the required HTML page.

3. In the *Title* field, you are able to specify a title for the HTML page. The title will appear in blue title bar above the HTML page itself when it is displayed in the view.
4. Select scaling for the HTML page, either *No scaling* (default) or the required scaling (640×480, 800×600, 1024×768 or 1280×1024).
5. Click the *OK* link.

Renaming Groups

To rename a group, do the following:

1. Select the required group in the *Views* section.
2. In the *Group Control* section, overwrite the existing name in the *Group Name* field.
3. Click the *Rename* button.

Deleting Groups

Note: Deleting a group will delete all views within the group as well.

To delete a group, do the following:

1. Select the required group in the *Views* section.

2. In the *Group Control* section, click the *Delete* button. You will be asked to confirm that you want to delete the group and all of its views.

Renaming Views

To rename a view, do the following:

1. Select the required view in the *Views* section.
2. In the *View Control* section, overwrite the existing name in the *View Name* field.
3. Click the *Rename* button.

Deleting Views

To delete a view, do the following:


1. Select the required view in the *Views* section.
2. In the *View Control* section, click the *Delete* button. You will be asked to confirm that you want to delete the view.


Adjusting Camera Settings

In the *Setup* tab's *Camera Control* section, you are able to adjust camera settings. To adjust camera settings, select the position of the required camera in the view. The position you select will be indicated by a bold border.

Image Quality

The *Image Quality* setting determines the quality of the video when viewed, but also affects bandwidth usage. If the Remote Client is used over the internet, over a slow network connection, or if for other reasons you need to limit the bandwidth used by the Remote Client, image quality can be reduced on the server side by selecting e.g. *Low* or *Medium*.

 **Tip:** You can quickly reduce the bandwidth usage for all cameras in the view by reducing the image quality for a single camera, then clicking the *Apply To All* button.

 **Tip:** If you have selected reduced image quality for a camera, video from the camera will be displayed in full quality when viewed enlarged (see *Enlarging Images from a Particular Camera* on page 28 and 32).

Frame Rate

The *Frame Rate* setting lets you select a frame rate for the selected camera. Default is *Unlimited*.

IPIX Split Mode for Fisheye Cameras

Available only if the selected camera is a fisheye camera. Fisheye is a technology that allows creation and viewing of 360-degree panoramic images. The Remote Client supports up to four different viewpoints from a single fisheye camera. The *IPIX Split Mode* list lets you select the required split mode:

- *One by One* lets you view a single viewpoint.
- *Two by Two* lets you view four different viewpoints at a time.

When viewed on the *Live* and *Browse* tabs, the fisheye camera will appear as specified, with either one or four viewpoints from the same image:



Two by Two: Live tab displaying four different viewpoints from a single fisheye camera; in this example, the fisheye camera's four viewpoints are enlarged for clarity.

i **Tip:** When viewing different viewpoints from a fisheye camera on the *Live* or *Browse* tabs, you are able to navigate each viewpoint independently by clicking inside each viewpoint, or by using the buttons in the *PTZ Control* section.

Apply to All

The *Apply To All* button lets you quickly apply the camera settings for the selected camera to all cameras in the view.

Configuring Joystick Control

The *Joystick Control* section lets you configure joystick control of PTZ (Pan/Tilt/Zoom) cameras.

Joystick configuration control requires that a joystick is attached to the computer running the Remote Client.

Note: Even though joystick control is supported for a large number of PTZ cameras, not all PTZ cameras may be joystick-controlled. Consult your surveillance system administrator if in doubt about joystick support for cameras; your surveillance system administrator will be able to find information about joystick support for cameras in the release note for your organization's Milestone XProtect surveillance system.

Click the *Joystick Control* section's *Setup...* button to access the *Joystick Setup* window.

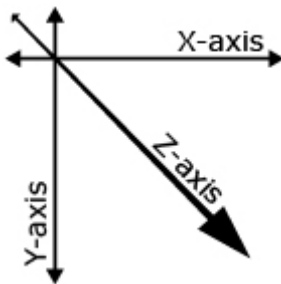


The *Joystick Setup* window

The *Joystick Setup* window's *Joystick Axes* section lets you configure the axes used for the joystick.

With a joystick, you are typically able to navigate images three-dimensionally, along three axes: an X-axis, a Y-axis, and a Z-axis.

The Z-axis typically refers to the depth (zoom) level.



Example: X-, Y-, and Z-axes

The *Joystick Axes* section contains the following buttons and check boxes:

Button, Check Box	Description
Invert y-axis	Lets you invert the Y-axis. This way, you are able to select whether the camera should move up or down when you move the joystick towards you and away from you respectively.
z-axis uses a relative positioning scheme	Lets you specify whether the Z-axis should use a relative or an absolute positioning scheme. This will affect the way you zoom in and out with camera.
Default values	Resets axes settings, letting you use the joystick's default axes settings.

The *Joystick Setup* window's *Joystick Buttons* section lets you specify which joystick buttons should be used for particular actions:

To assign an action to a particular joystick button, select the required action in the list, then click the required joystick button.



When a button is assigned to an action, the name of the button will be listed together with the name of the action.

To stop using a particular joystick button for a particular action, select the button/action in the list, then click the *Unselect* button.

To free all joystick buttons from their associated actions, click the *Unselect All* button.

Viewing Live Video

You view live video on the Remote Client's *Live* tab.

Note: Particular user rights may be required in order to access the *Live* tab. In order to view live video in the Remote Client, the surveillance system's recording server must be running; consult your surveillance system administrator if in doubt. Depending on your user rights, access to viewing live videos from some cameras may be restricted.



The *Live* tab, in this example displaying a view with video from eight cameras

Selecting a View

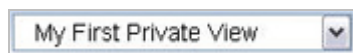
You are able to select a view for display on the *Live* tab in two ways:

- By selecting the required view in the *Live* tab's *Views* section:



Detail from *Live* tab's *Views* section

- By selecting the required view from the *Views* list located in the upper part of the window:

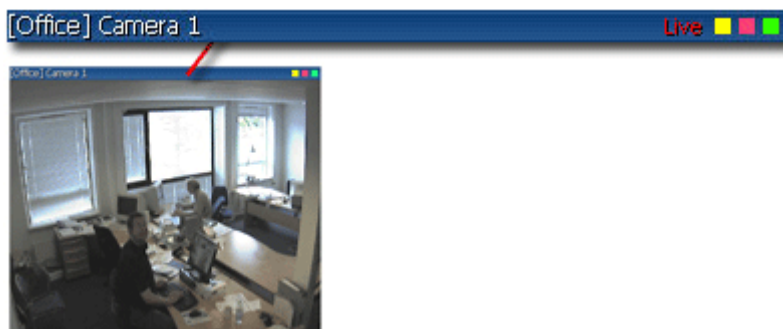


Views list

Image Bars

Each camera in the view is identified by an image bar, located in the top of each camera image.

The image bar is blue. When you select a particular camera in the view, the image bar of the selected camera image becomes a lighter blue.



Camera image; enlarged detail shows image bar

The image bar displays the name of the camera as well as the name of the device to which the camera is connected. The device name is displayed first, in square brackets, followed by the camera name.

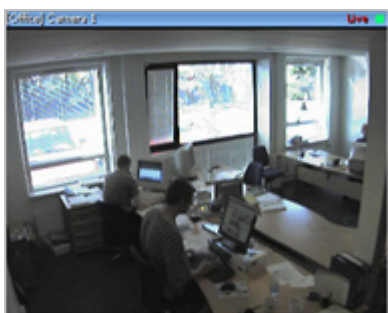
Each image bar will display the word *Live* when live video is displayed, and the word *Stopped* if the camera is stopped.

Each image bar features three colored indicators:

- *Event indicator (the leftmost of the three indicators, solid yellow)*: Lights up when specific events, defined by the surveillance system administrator, occur. Click anywhere inside the image to reset the event indicator. This indicator may appear black if event indication has not been specified for the camera in question, or if no specified events have occurred. Consult your surveillance system administrator if in doubt.
- *Motion indicator (the indicator in the middle, solid red)*: Lights up when motion is detected in the image. Click anywhere inside the image to reset the motion indicator.
- *Online indicator (the rightmost of the three indicators, blinking green)*: Changes state every time an image is received from the camera.

Enlarging Images from a Particular Camera

To enlarge images from a particular camera in a view, double-click the blue image bar above the image.



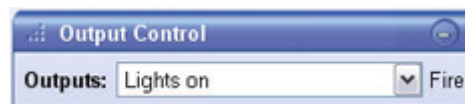
Double-clicking blue bar above image enlarges view

To return to normal view, simply double-click the blue image bar again.

i **Tip:** If you have selected reduced image quality for the camera (on the *Setup* tab), images from the camera will be displayed in full quality when viewed enlarged.

Output Control

If the selected camera has external outputs defined, for example for switching on lights or sounding a siren, such outputs can be triggered from the Remote Client. To trigger an output, first select the required camera in the view, then select the required output in the *Output Control* section, and click the *Fire* link.



Note: Depending on your user rights, access to triggering outputs for some cameras may be restricted.

PTZ Control

PTZ (Pan/Tilt/Zoom) and fisheye (technology allowing creation and viewing of 360-degree panoramic images) cameras can be controlled from the Remote Client.

Note: Depending on your user rights, access to PTZ controls from some cameras may be restricted.

Point-and-Click Control

Many PTZ cameras may be controlled simply by pointing and clicking inside the images from the camera. If you see a set of crosshairs when placing your mouse pointer over the images from a PTZ camera, point-and-click control is supported for the camera.



Crosshairs indicate point-and-click control. For some cameras, crosshairs may look different.

For some cameras, crosshairs surrounded by a square may be displayed. When this is the case, you are able to zoom in on an area by dragging a square around the required area in the image. For such cameras, zoom level is controlled by holding down the SHIFT key on your keyboard while moving the mouse up or down; this will display a zoom level slider inside the image.

PTZ Navigation Buttons

As an alternative to point-and-click PTZ control, use the navigation buttons in the *PTZ Control* section to move the selected PTZ or fisheye camera.

The round middle button lets you quickly move the camera to its home (i.e. default) position. The *plus* and *minus* buttons lets you zoom in and out respectively.



PTZ Preset Positions

If preset positions have been defined for the selected PTZ camera, you are able to select such positions from the *Presets* list. Selecting a preset position from the list will make the PTZ camera move to the specified position.



Preset positions are defined by the system administrator; the *Presets* list will be empty if no preset positions have been defined for the selected PTZ camera.

i Tip: You may be able to use a joystick for controlling your PTZ cameras. Joystick control is configured on the Remote Client's *Setup* tab. See *Further Configuration* on page 21.

Note: Even though joystick and point-and-click control is supported for a large number of PTZ cameras, not all PTZ cameras may be controlled this way. Consult your surveillance system administrator if in doubt about joystick support for cameras; your surveillance system administrator will be able to find information about joystick support for cameras in the release note for your organization's Milestone XProtect surveillance system.

IPIX PTZ Positions for Fisheye Cameras

You are able to move to a specific position in a fisheye camera image, and then save that position by clicking the *Save* button.

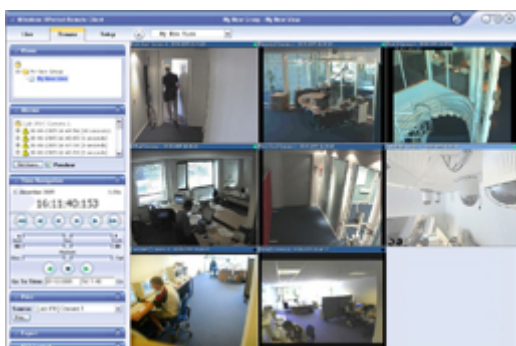
When you later want to return to the saved position, click the *Load* button.

Viewing Recorded Video

You view recorded video on the Remote Client's *Browse* tab.

Note: Particular user rights may be required in order to access the *Browse* tab. Depending on your user rights, access to browsing video from some cameras may be restricted. Date and time formats used when browsing recorded video may vary depending on your computer's regional settings. Illustrations in this help topic, and date and time formats used in these illustrations, are thus for guidance only.

The *Browse* tab provides you with a number of advanced features for browsing recorded video. In addition to image browsing features, the *Browse* tab also lets you print images, and export AVIs (movie clips) and JPEGs (still images).

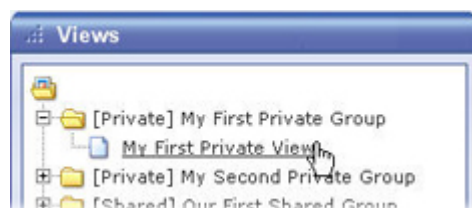


The *Browse* tab, in this example displaying a view with video from eight cameras

Selecting a View

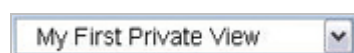
You are able to select a view for display on the *Browse* tab in two ways:

- By selecting the required view in the *Browse* tab's *Views* section:



Detail from *Live* tab's *Views* section

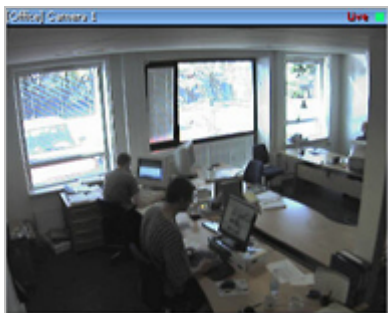
- By selecting the required view from the *Views* list located in the upper part of the window:



Views list

Enlarging Images from a Particular Camera

To enlarge images from a particular camera in a view, double-click the blue title bar above the image.



Double-clicking blue bar above image enlarges view

To return to normal view, simply double-click the blue title bar again.

i **Tip:** If you have selected reduced image quality for the camera (on the *Setup* tab), images from the camera will be displayed in full quality when viewed enlarged.

Time Navigation

The *Browse* tab's *Time Navigation* section provides you with controls for browsing and playing back recorded video from the camera selected in the view.



Time Navigation section.

Master Time

The *Time Navigation* section's *Master Time* area shows the master time and date of the recordings viewed. The master time is the time to which all the cameras viewed are tied. This means that when you browse recordings, all the images you see in the view will, in principle, be from exactly the same point in time.

Some cameras, however, may only record if motion is detected. Also, there may be no recorded images from one or more cameras in the view matching the specified point in time. When this is the case, the last image in the camera's database prior to the specified point in time will be displayed in the view.



Master Time area.

The *Master Time* area also displays the current playback speed (example: 1.00x, indicating real-time).

Browse Buttons

The *Time Navigation* section's browse buttons lets you manually navigate through recordings from the camera selected in the view.



Browse buttons



Previous image: Moves to the image just before the one currently viewed



Next image: Moves to the image just after the one currently viewed



Previous sequence: Moves to the first image in the previous sequence



Next sequence: Moves to the first image in the following sequence



First image: Moves to the first image in the database for the selected camera

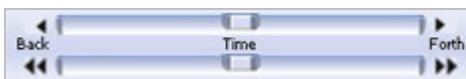


Last image: Moves to the last image in the database for the selected camera

Time Sliders

The *Time Navigation* section's time sliders let you browse recordings simply by dragging the sliders' handles. Drag to the left to move backwards in time; drag to the right to move forward in time.

Use the upper times slider for fine browsing within a limited period of time; use the lower slider for coarser browsing within longer time spans.



Time sliders

Playback Slider and Buttons

The *Time Navigation* section's playback slider lets you specify the required playback speed. In the slider's middle position, playback speed is real-time (1.00x). Drag the slider to the left for a slower playback speed; drag to the right for a faster playback speed.

An indication of the exact playback speed is displayed in the upper right corner of the *Time Navigation* section's *Master Time* area.



Playback slider and buttons

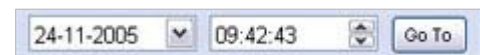
Use the playback buttons to play back recordings:

- ◀
Play reverse: Plays back recordings backwards in time
- ▶
Play forward: Plays back recordings forward in time
- *Stop:* Stops playback

i **Tip:** Dragging the playback slider to its leftmost position pauses playback.

Go To Time

The *Time Navigation* section's *Go To Time* fields let you quickly jump to a specific point in time. Specify required date in the first field and required time in the second field, then click the *Go To* link.



Sequences


The *Browse* tab's *Sequences* section provides you with an overview of recorded sequences for the camera selected in the view. To use the *Sequences* section, select the required camera in the view, then click the *Sequences* section's *Get Sequences* button.

Clicking the *Get Sequences* button will retrieve a list of up to 40 sequences: 20 sequences prior to the point in time displayed in the view, and 20 sequences following the point in time displayed in the view. Each sequence will be listed with date and time as well as the length of the sequence. Clicking a sequence in the list will move all images in the view to the time the sequence.

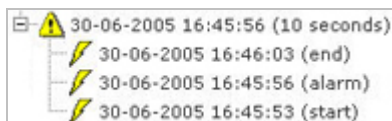
If the *Preview* check box is selected, you are able to quickly view each sequence by placing the mouse pointer over the required sequence in the list:



Sequences section; placing mouse pointer over a sequence indication lets you quickly view the incident.

Clicking the *expand* icon  next to a sequence in the list will show you the exact date and time of the first and last image in the sequence as well as the exact date and time of the motion detection, event, etc. triggering the recording.

Sequences may often begin some seconds before a motion detection, event, etc. and end some seconds after. This so-called buffer allows you to be able to see what happens immediately before and after an incident; the buffer length is determined by the surveillance system administrator.



Detail from *Sequences* section, showing expanded sequence indication.


PTZ Control

The Browse tab's PTZ Control section lets you navigate recorded images from fisheye cameras (fisheye is a technology allowing creation and viewing of 360-degree panoramic images).

Note: The *Browse tab's PTZ Control section* cannot be used for controlling PTZ (Pan/Tilt/Zoom) cameras, as the *Browse tab* is used for viewing already recorded video.

Navigation by Dragging Inside Fisheye Images

Many fisheye images may be navigated simply by dragging inside the images.

If your mouse pointer changes to  or similar when placed over an image from a fisheye camera, navigation by dragging is supported for the camera.

Navigation Buttons

As an alternative to navigation by dragging inside fisheye images, use the navigation buttons in the *PTZ Control* section to move around the image from the selected fisheye camera.

The round middle button lets you quickly move the camera to its home (i.e. default) position.

The *plus* and *minus* buttons lets you zoom in and out respectively.



PTZ Control section

Presets

The *Presets* list does not apply for navigating recorded video from fisheye cameras.

IPIX PTZ Positions for Fisheye Cameras

You are able to move to a specific position in the fisheye image, and then save that position by clicking the *Save* button. When you later want to return to the saved position, click the *Load* button.

Printing Images

With the *Browse* section's *Print* section, you are able to print recorded images.



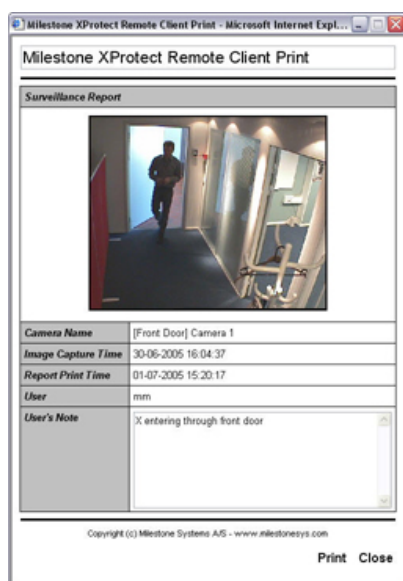
Print section

To print an image, do the following:

1. Select the required camera from the *Print* section's *Source* list. Alternatively, you may select the camera in the view.
2. Select the required date and time by using the controls in the *Time Navigation* section.
3. Click the *Print* section's *Print* button.

This will open a separate window with a preview of the image to be printed as well as information about camera name, image capture time, print time and user name of the user printing the image.

You also have the option of including a user's note, for example a description of the recording.



Window with preview and information about printed image

4. Click the separate window's *Print* link to print the image and associated details.

Troubleshooting

If the image is missing from the preview window, and from the printed report itself, it may be due to a security setting in Microsoft Internet Explorer:

- If you run a locally installed version of the Remote Client, a notice bar prompting you to accept the running of a script/ActiveX control may appear when you attempt to print an image. When this is the case, simply accept the running of the script/ActiveX control.
- If you run the Remote Client from the surveillance system server, you must define the surveillance system server as a trusted site in Internet Explorer: Open Internet Explorer, and select *Tools > Internet Options*. In the *Internet Options* window, select the *Security* tab. Now select the *Trusted sites* zone (the one with the green check mark), click the *Sites* button, and add the surveillance system server's address (including the *http://* prefix) to the list of trusted websites. Log in to the Remote Client again, and you will be able to see the required image.

Exporting Video

With the *Browse* section's *Export* section, you are able to export recorded video in the AVI (movie clip) and JPEG (still image) formats.

See *Exporting Evidence in AVI and JPEG Formats* in the following for detailed information about exporting recorded video.



Exporting Evidence in AVI and JPEG Formats

With the Remote Client you are able to quickly generate and export video evidence in the AVI (movie clip) and JPEG (still image) formats.

Note: Depending on your user rights, access to generating AVI or JPEG evidence from some cameras may be restricted. Date and time formats used when browsing recorded video may vary depending on your computer's regional settings. Illustrations in this help topic, and date and time formats used in the illustrations, are thus for guidance only.

To export video evidence, do the following:

1. Select the Remote Client's *Browse* tab.
2. In the *Browse* tab's *Export* section, specify start date and time for the export by typing the date in the first *Start Time* field and the time in the second field.



Export section.

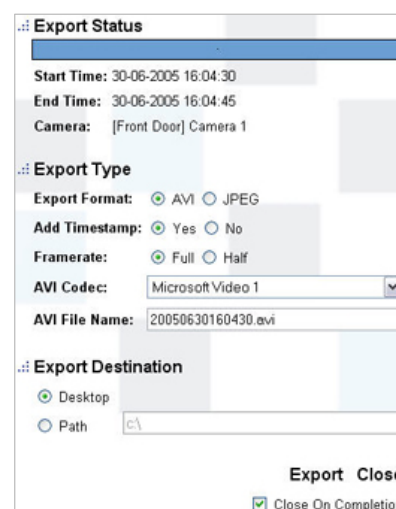
Tip: Instead of manually specifying date and time, you may use the *Browse* tab's *Time Navigation* features to move to the required start point, then click the upper of the *Export* section's *Set* links. This will automatically set the date and time of the viewed image into the *Start Time* fields.

3. In the *End Time* fields, specify end date and time for the export.

As was the case with the start date and time, end date and time must be in the correct format if specified manually.

Alternatively, use the *Set* link as described above.

4. Select the required camera from the *Source* list.
5. Click the *Export* button. This will open an export dialog, listing the specified start time, end time, and camera.
6. In the export dialog, select the required export format: *AVI* (movie clip) or *JPEG* (still images).
7. Select whether to add timestamps from the surveillance system to the exported images. If selected, timestamps will appear in the corner of the images.





Timestamps; arrow indicates actual position.

8. ***This step applies for export in the AVI format only; if using the JPEG format, go to step 11***

Select required frame rate for the export. With the *Full* option, all images between the start and end times will be included in the export; with the *Half* option, only every second image will be included, yet still play back in real-time.

9. ***This step applies for export in the AVI format only; if using the JPEG format, go to step 11***

In the *AVI Codec* list, select required AVI codec. The list will contain the video codecs available on your computer.

A video codec is a particular compression/decompression technology used when generating video files. Your choice of codec will affect the quality and size of the AVI file.

i **Tip:** The Indeo® video 5.10 codec, if available on your computer, generally provides a very good compromise between quality and file size.

10. ***This step applies for export in the AVI format only; if using the JPEG format, go to step 11***

By default, the AVI file will get a file name based on the export start time, along the structure *yyyymmddhhmmss.avi* (year, month, day, hour, minute, second; example: 20050630160430 for a file with a start time of 16:04:30 on 30th June 2005). The name will automatically appear in the *AVI File Name* field.

The default file name format is independent of regional settings on your computer.

You are always able to change the default file name to a name of your choice, simply by overwriting the default file name. Remember that the file name *must* include the *.avi* file extension.

11. Specify export destination.

If you select *Desktop*, your exported file will be saved in an automatically created *Exported Images* folder on the desktop of your computer.

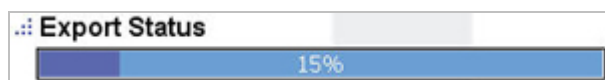
If you select *Path*, you are able to specify a path yourself. The exported file will be saved in an automatically created *Exported Images* folder under the path you specify (example: If you specify a path like *C:\My Stuff\My Files*, the exported file will be saved in *C:\My Stuff\My Files\Exported Images*).

When specifying a path this way, the folders you specify do not have to be existing ones; if

they do not already exist, they will be created automatically.

12. Click the *Export* link to begin the export.

The status bar in the upper part of the export dialog will display the status of the export:



Export status bar

i Tip: If you are exporting very long sequences, export may—depending on your selected export settings—take a while. You can continue to use the Remote Client for other purposes while the export process is underway.

If the *Close On Completion* check box is selected (default), the export dialog will automatically close when the export is finished.

Upon completion, you are able to view and distribute the exported file.

Keyboard Shortcuts

You are able to use the following keyboard shortcuts in the Remote Client:

On All Tabs

CTRL+1	Go to <i>Live</i> tab
CTRL+2	Go to <i>Browse</i> tab
CTRL+3	Go to <i>Setup</i> tab
CTRL+DOWN ARROW	Go to the next view in the <i>Views</i> list (located in the upper part of the window)
CTRL+UP ARROW	Go to the previous view in the <i>Views</i> list (located in the upper part of the window)

On Live Tab Only

PLUS SIGN	PTZ camera, zoom in
MINUS SIGN	PTZ camera, zoom out
UP ARROW	PTZ camera, move up
DOWN ARROW	PTZ camera, move down
LEFT ARROW	PTZ camera, move left
RIGHT ARROW	PTZ camera, move right
HOME (numeric keypad only)	PTZ camera, move up and left
END (numeric keypad only)	PTZ camera, move down and left
PAGE UP (numeric keypad only)	PTZ camera, move up and right
PAGE DOWN (numeric keypad only)	PTZ camera, move down and right
5 (numeric keypad only)	PTZ camera, move to default position

On Browse Tab Only

RIGHT ARROW	Move to next image
LEFT ARROW	Move to previous image
PAGE DOWN	Move to next sequence



PAGE UP	Move to previous sequence
HOME	Move to first image
END	Move to last image

Logging Out of the Remote Client

To log out of the Remote Client, simply click the *Log Out* button in the Remote Client's top bar:



Glossary

A

AVI: A popular file format for video. Files in this format carry the .avi file extension.

C

Codec: A technology for compressing and decompressing audio and video data, for example in an exported AVI file. MPEG and Indeo® are examples of frequently used codecs.

D

DirectX: A Windows extension providing advanced multimedia capabilities.

F

Frame Rate: A measure indicating the amount of information contained in motion video. Frame rate is typically measured in FPS (Frames Per second). The higher frame rate, the smoother motion in video sequence will appear.

H

HTTP: HyperText Transfer Protocol, a standard for exchanging files across the internet. HTTP is the standard used for formatting and transmission of data on the world wide web.

I

IP Address: Internet Protocol address; the identifier for a computer or device on a network. Used by the TCP/IP protocol for routing data traffic to the intended destination. An IP address consists of four numbers, each between 0 and 256, separated by full stops (example: 192.168.212.2).

IPIX: A technology that allows creation and viewing of 360-degree panoramic "fisheye" images.

J

JPEG: An image compression technology, named after the Joint Photographic Experts Group. Files created with JPEG compression usually carry the .jpg file extension.

P

PTZ: Pan/Tilt/Zoom; a highly movable and flexible type of camera.

U

URL: Uniform Resource Locator; an address of a resource on the world wide web. The first part of a URL specifies which protocol (i.e. data communication standard) to use when accessing the resource, whereas the second part of the URL specifies the domain or IP address at which the resource is located. Example: <http://www.milestonesys.com>.

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