

CamTrace

video surveillance

CamTrace Client Manual

v 2.6.4

25/01/2021

For further information :

www.camtrace.com

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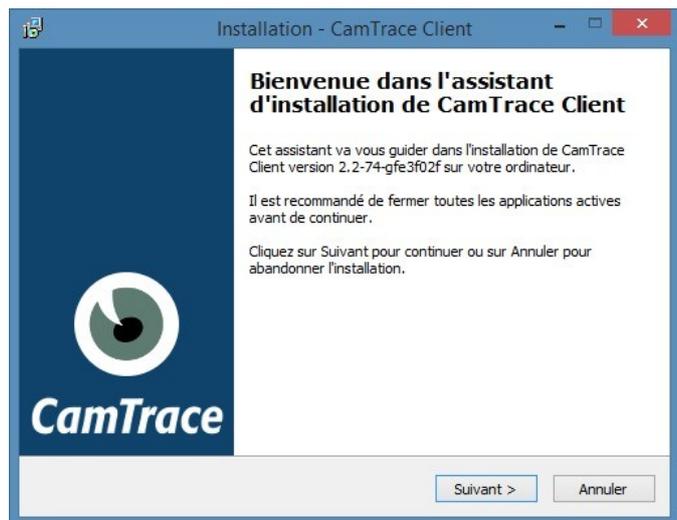
1.General description

The CamTrace Client is software designed to connect to a CamTrace recording server. It is a software dedicated to the display of video streams and the exploitation of recordings, stored on the server(s). It differs in this respect from web browsers, which were historically thin clients and are now only used for the administration of CamTrace servers.

1.1.Compatibility

The CamTrace Client is available for Windows, MAC and Linux platforms. Version 2.2 only works with Nova 13 and later.

Version 1.5.1 of the CamTrace Client works with older CamTrace servers in versions 11 and 12 (with some features removed).



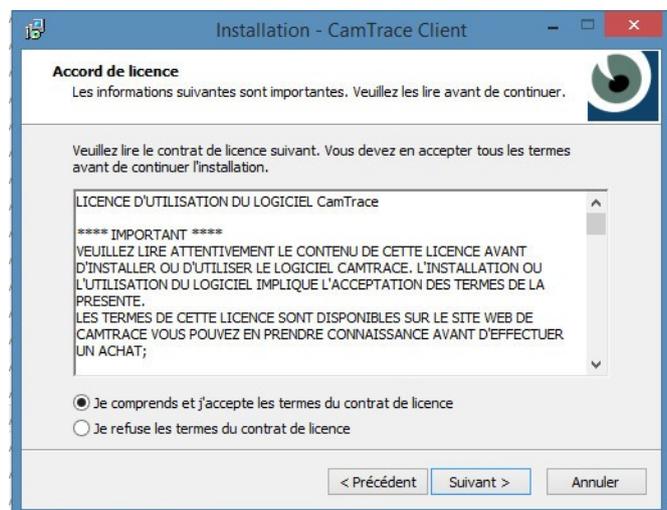
Important : In the case of using the client on the console of a Camtrace server, the settings (network, adding cameras, calendars, creation of groups, etc.) must be carried out from the system web interface of your Camtrace server (**Camtrace Admin** icon on the console desktop)

1.2.Customer installation

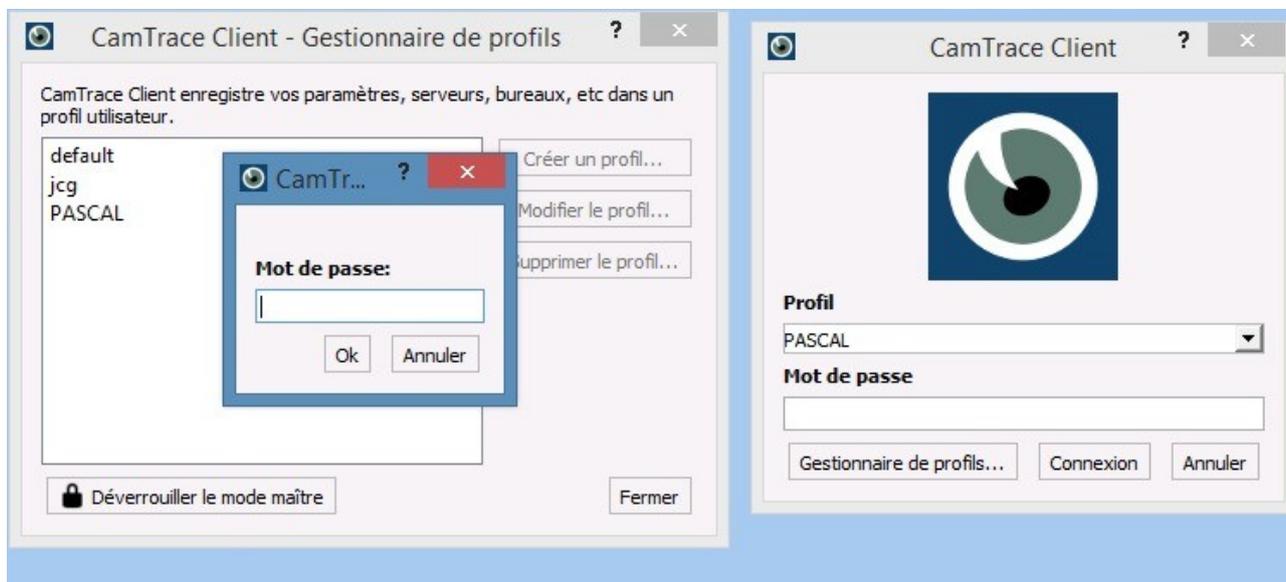
The installation file is available on the USB keys distributed with the new servers and on the Camtrace website in the **Downloads section**.

This program requires ~100 Mb of disk space.

You must accept the terms of the licence, then follow the different steps of the installation. A shortcut can be created on the desktop, then launch the software.



1.3.Profils



When the software is launched, you can create a "profile" with a user name and password, allowing you to store a list of CamTrace servers, your settings and desktops with a specific identifier for each one, like a bunch of keys giving you access to different rooms. The profile manager is launched with the password "camtrace".

The "Default" profile launches without a password and stores the addresses and identifiers of the servers to which you have connected.

The "Master" mode allows an installer to supervise the different profiles with their list of servers declared in this client workstation.

As a reminder, the default login and password to connect to a CamTrace server is **"admin / camtrace"**.

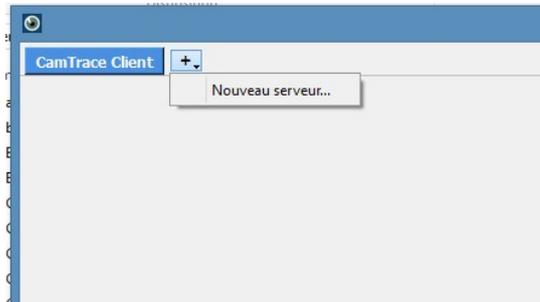
This is the ID of the video application administrator. It is strongly advised to create specific profiles for the users of the application, once the server is correctly configured.

For the interface with an LDAP directory, please refer to our specific documentation "HowTo-LDAP".

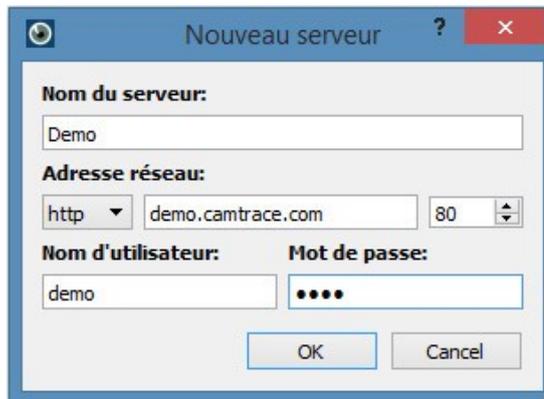
(<http://www.camtrace.com/wp-content/uploads/2018/01/HowTo-LDAP-.pdf>)

1.4.Declaration of a new server

The "+" button allows you to declare a new server :

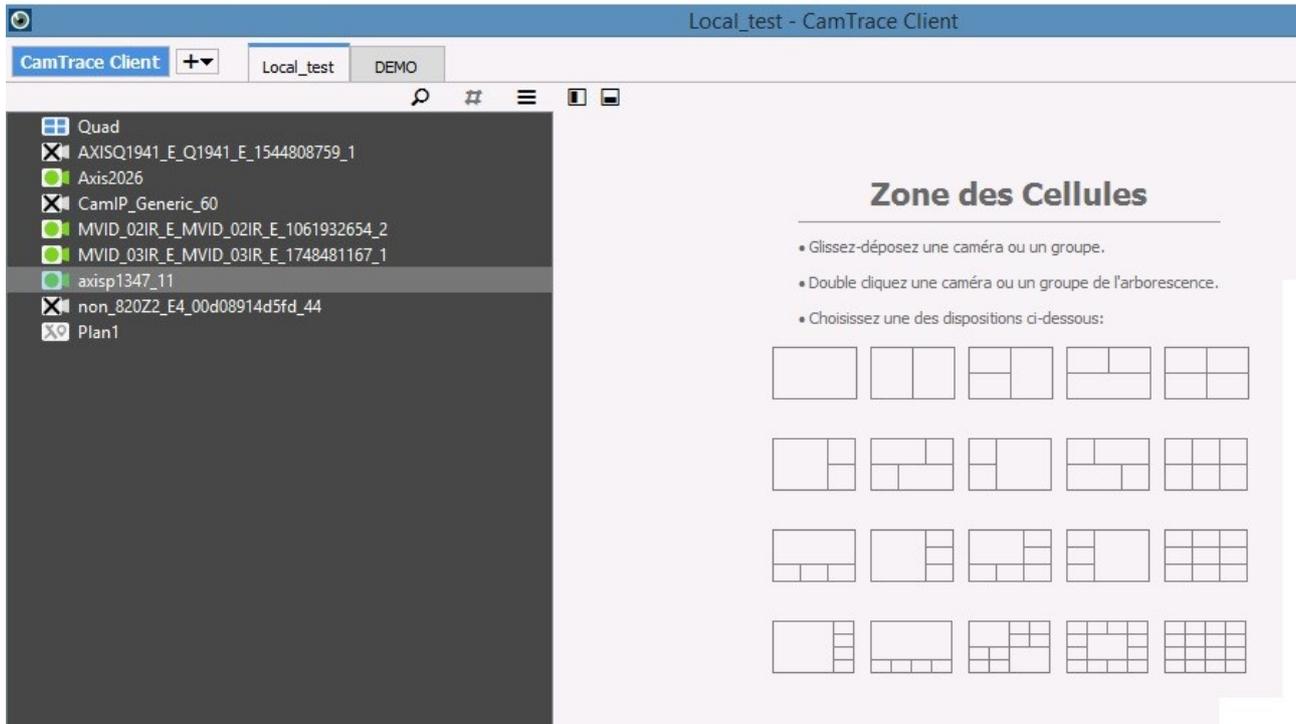


If you do not know the network address of your server, please contact your installer. If your server is accessible via the Internet, and you are connecting to a remote computer, make sure you do not confuse the "local" address of your server (e.g. 192.168.0.100) and its "public" address (e.g. <http://myserver.dyndns.org>) :



1.5. Displaying a mosaic

If you declare a new server, it will appear in a separate tab.



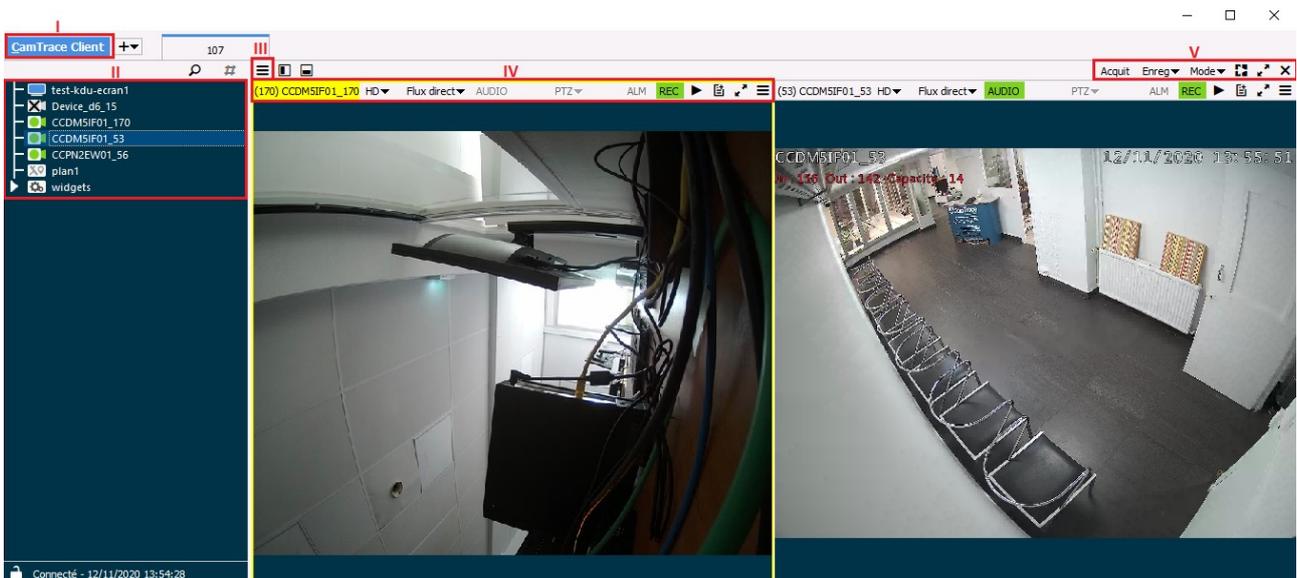
Once connected to a server, the CamTrace Client displays a list of cameras, groups and passive screens on the left, and in the central window a choice of twenty ready-to-use mosaic shapes. You can double-click on one of the objects in the left-hand side menu to display the view in the centre, or choose one of the mosaics and drag and drop objects into the cells.

The quality of the flow chosen in the cells is very important in order not to saturate your network or your client workstation. When you drag a camera from the list on the left into a cell, the stream displayed will have the quality that you defined for this cell when creating the mosaic (refer to the server installation guide). **Be careful not to choose a high quality stream on a mosaic with many camera views.**

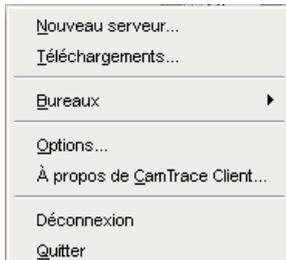
2. Description of the menus

On the screenshot below, for a description of the menu :

- **I** : refer to Menu specific to the CamTrace Client,
- **II** : refer to Side menu,
- **III** : refer to Server-specific menu,
- **IV** : refer to Cell specific menu,
- **V** : refer to Group specific menu.

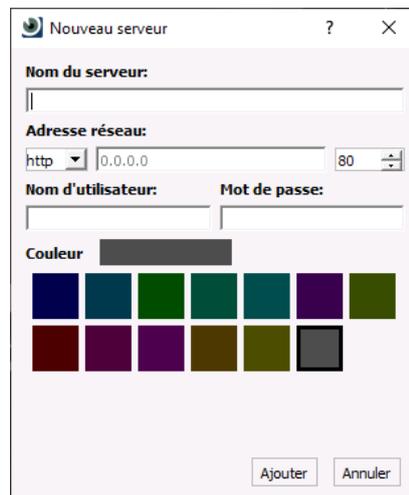


2.1. Menu specific to the CamTrace Client



2.1.1. New Server

Connects the CamTrace Client to a new server. It is possible, via a single CamTrace Client, to connect to several different Camtrace servers :



After entering the information about the new server, it is possible to assign a colour to it so that it can be easily distinguished if you are connected to several servers.

2.1.2. Download History

View a history of downloaded sequences. These sequences have been downloaded via the Export sequence menu.

2.1.3.Desktop

2.1.3.1 Register Desktop

Saves the CamTrace Client's desktop, storing the position of all windows. A desktop can be called up at any time, and windows will appear where they were when you saved them.

When the desktop is registered, it appears below the link [Create a shortcut to one of the offices](#).

2.1.3.2 Create a shortcut to one of the offices

Allows you to create a shortcut on the desktop (here we are talking about the desktop of your operating system) to a pre-recorded desktop of the CamTrace Client (see [Register Desktop](#)).

2.1.4.Import/Export config

2.1.4.1 Import

Allows you to import a configuration (see [Export](#)), in ".zip" format.

2.1.4.2 Export

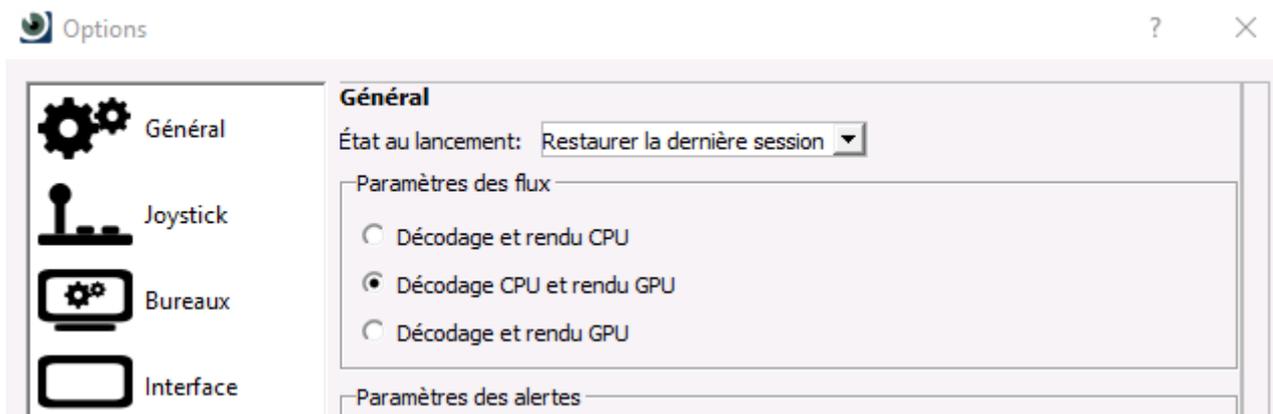
Allows you to export the entire CamTrace Client configuration (including the different servers to which the CamTrace Client is connected), in order to import it to another CamTrace Client. The export creates a ".zip" file.

2.1.5.Options

Opens a pop-up window to define settings. Focus on the following options :

"General" → **"Stream settings"**: Choose the decoding mode (CPU, CPU & GPU, GPU) according to the technical characteristics of your computer.

The general options of the software allow you to choose the stream decoding options. This can be useful to solve a decompression problem or to improve the fluidity of the videos.



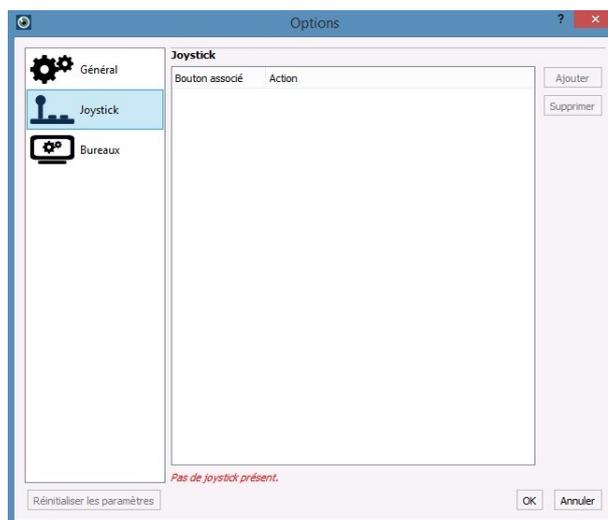
By default, CamTrace Client uses software decompression (CPU decoding and rendering). That is, the CPU decompresses the video, regardless of the capabilities of the graphics card.

If you have a recent graphics card (NVIDIA) with up-to-date drivers, you can choose to use your card partially (CPU decoding and GPU rendering) or use your graphics card completely, both to decode the H264 stream and to smooth the graphics rendering (GPU decoding and rendering). CamTrace uses the CUDA compatible drivers specific to Nvidia graphics cards.

"General" → "Enable alarm popups": Allows popups to appear when an alarm is triggered (if the alarm is set to generate a popup, on the Camtrace server side).

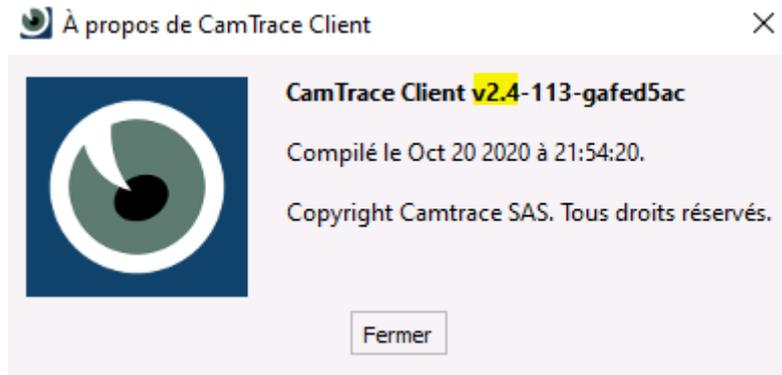
"Joystick" :

If you use a joystick, the configuration of the buttons is also done in the options, once the hardware is connected and the drivers installed. Simply choose the desired action by pressing the corresponding button. The joystick wheel will allow you to use the Player for playback (see the joystick label).



2.1.6.About CamTrace Client

Displays the version number of the CamTrace Client :



In the example above: CamTrace Client version "v**2.4**".

2.1.7.Changing profiles

Allows the CamTrace Client to be disconnected and then reconnected to another profile.

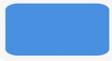
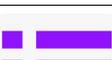
=> More explanation on the specific note on profile management.

2.1.8.Exit

Closes the application.

2.2.Side menu

Objects (cameras, screens, widgets...) specific to the current server are displayed.

	Passive screen available
	Group
	Active camera in regular recording
	Active camera without recording
	Camera disconnected
	Camera in alarm
	Camera in forced recording
	Disk write error for this camera
	Access to metadata flows
	Displays the list of widgets

2.3.Server-specific menu

2.3.1.Go to the web interface

Opens the web browser to connect to the Camtrace server administration web interface. It is strongly recommended to use Firefox (some functionalities are not compatible with other browsers).

2.3.2.Create a shortcut to passive screen

Important : The declaration of a passive screen is done beforehand on the web interface of the Camtrace server, in the menu Administration -> Screen.

You can use the CamTrace Client as a passive screen: it is a PC without a keyboard or mouse, controlled via the network from another computer. Passive screens are subject to licensing.

To send a camera or group image to this screen from another computer, simply grab the camera or group and drag and drop it onto the passive screen icon.

The screen numbers correspond to the number of physical screens connected to this passive screen (a single "passive" PC can manage several physical screens, which are then given a number).

=> More explanations on the note specific to passive screens.

2.3.3.Browse the videos generated on the server

These videos were generated in the Export sequence menu.

2.3.4.Browse protected videos

These videos were generated in the Export sequence menu.

2.3.5.Browse the handrail

These videos were generated in the Export sequence menu.

2.3.6. Adding a plan

Allows you to add a plan on which the cameras will be placed.
With a right-click on the cell of the plan, it is possible to **add a background map**.



By clicking on Mode (see -1- above), it is possible to switch to Object modification in order to drag & drop objects (e.g. cameras) on the map.
Do not forget to save the modifications (see -2- above).

More explanations in the section Plans.

2.3.7. Adding a Widget

Allows you to add a Widget (e.g. website, date and time...).

2.3.8. Connect

Connects to the selected Camtrace server, if you have been disconnected.

2.3.9. Disconnect

Disconnects to the selected Camtrace server.

2.3.10. Server info

Displays information (address, user...) about the current Camtrace server.

2.3.11. Modify the server.

Allows you to change the configuration of the Camtrace server (name, address, user...).

2.3.12. Close the tab

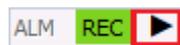
Closes the tab of the current server. It is possible to reconnect via the "+" icon

located to the right of the "CamTrace Client" icon (see Menu specific to the CamTrace Client).

2.4.Cell specific menu

The options in this menu differ depending on whether you are in "Live" mode (to view the camera's live video stream) or "Player" mode (to browse through the camera's recordings).

The choice between Live mode and Player mode is made via the button (see in red below) :



2.4.1.Live mode

Selecting the Live mode (via the icon) brings up the following menu:



Each menu option (referenced by a number, above in red) is detailed (below, by the same number in red):

2.4.1.1 Camera name (1)

Shows the **view code** in brackets, then the camera name (view code setting is on the CamTrace Server side).

By default, the view code is the last 2-3 digits of the camera's IP address. The view code must be unique: no two view codes can be identical.

Note: A Group also has a view code.

2.4.1.2 Flow quality (2)

Indicates the quality of the stream: **HD** (high definition), **SD** (standard definition), **LD** (low definition). When creating mosaics with many views, it is important to choose an LD or SD (not HD) stream.

2.4.1.3 Direct flow (3)

Vidéo en temps réel. Un menu déroulant permet de choisir le flux d'alarme et le flux de dernière alarme.

2.4.1.4 Audio (4)

Displays green if audio is active on the stream. Otherwise, "AUDIO" is greyed out.

2.4.1.5 PTZ (5)

"PTZ" is displayed in red if PTZ is active, otherwise greyed out. If inactive, check on the CamTrace Server whether "PTZ" has been enabled for the camera.

Using PTZ mode

A click in the video stream moves the camera: the further away from the centre of the video stream, the faster the click is moved.

On some compatible cameras, it is possible to perform a clipping: i.e. to select an area (left-click with the mouse) directly in the video stream (see below) :



The camera will then position itself and zoom in on the selected area.

PTZ drop-down menu

Clicking on the "PTZ" button displays several options:

- "**Continuous zoom**" : If ticked, allows you to avoid a jerky zoom when using a

joystick.

- "**Preset positions**" : Allows access to the preset positions (or "preset") of the camera. This option is only available (i.e. not greyed out) if presets have been synchronised to the CamTrace Server.
- "**Shifts**" : Allows access to the shifts (also known as *guard tours*) of the camera.

2.4.1.6 ALM (6)

"ALM" is displayed in red when a real-time alarm is received.

2.4.1.7 Registration indication (7)

NOREC : no registration,

REC: regular recording,

REC: Alarm recording,

REC: forced recording. Click on the button (when in NOREC state) to start recording.

2.4.1.8 Player mode (8)

Allows you to switch to Player Mode.

2.4.1.9 Snapshot (9)

This is a user-created event log: an image capture associated with a comment, named Snapshots.

2.4.1.10 Switching to full screen mode (10)

2.4.1.11 Live mode drop-down menu (11)

The previously detailed options are present in this menu. Other options are also available, including :

- "Keep proportions": allows you to keep or not keep the proportions of the native image,

- "Magnifying glass": makes the magnifying glass appear in the bottom right corner of the image (use the mouse wheel to zoom into the magnifying glass). This is a digital enlargement of the video.

2.4.2. Player Mode

Selecting Player mode (via the  icon) brings up the Timeline (time bar) at the bottom of each video stream.

A vertical orange cursor represents the current position in time of the video stream.

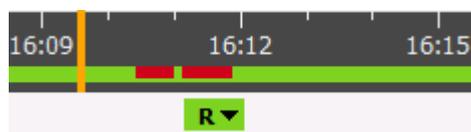
2.4.2.1 Playback of regular/alarm recordings and index search

The default playback interval can be set according to your needs (from one minute to all recordings). The scrolling frequency can be set from 1 frame per second up to 50 frames per second. **WARNING: the real time will correspond to the frequency at which the video was recorded.**

It is possible to "skip" images, and to display, during playback, only 1 image out of 2, 1 image out of 4, etc. up to 1 image out of 256. In H264 and Mpeg4 only I-frames are played back.

Playback of regular recording

By selecting , then clicking on the play button  :
the Player will play the regular recordings (shown in green on the Timeline). If there have been alarms (shown in red on the capture below), they will not be played back.



(The other buttons are hidden in order not to overload the capture)

Playback of alarm recordings

By selecting , then clicking on the play button  :
the Player will only play back alarm recordings (shown in red on the Timeline).



(The other buttons are hidden in order not to overload the capture)

Search on indexing

The indexing process consists of analysing regular records. This makes it possible, afterwards, to carry out searches on a specific area in a video: the player then only displays the events that have taken place in that area, during a given period. It is thus possible to view a whole day in a few minutes, focusing on the important area of the image.

Continuous indexing of recordings can be scheduled from the Camtrace Server administration interface. If this is not the case, it is possible to launch one from the Camtrace Client by doing so:

Click on the gear button :



Then select "Start indexing" to index the current time interval.

A blue border appears in the Timeline, indicating that the sequence has been indexed:



Then select **R**, you can then trace directly in the video stream (using the left click of the mouse - the right click allows you to erase -) to search for the events that took place in the traced area.

Then click on the play button **▶** to play these events.

Blue peaks appear in the Timeline to mark these events:



(The other buttons are hidden in order not to overload the capture)

2.4.2.2 Timeline buttons

The shortcut "**CTRL + mousewheel**" on the Timeline allows you to enlarge/shorten the current time interval.



Each menu option (referenced by a number, above in red) is detailed (below, by the same number in red):

- **1** : Date and time of the beginning of the current time interval.
 - **2** : Displays the previous image.
 - **3** : Plays backward.
 - **4** : Displays additional options to choose its time interval, and allows you to start indexing on the current time interval.
 - **5** : Toggles between regular recording, alarm recording and event search.
 - **6** : Set playback speed.
 - **7** : Forward playback.
 - **8** : Displays the next image.
 - **9** : Search backward (after starting dichotomous search).
 - **10** : Start dichotomous search.
- More explanations in the section Dichotomous research.
- **11** : Search forward (after starting the dichotomous search).
 - **12** : Date and time of the end of the current time interval.

2.4.2.3 Player mode menu

Selecting the Player mode brings up the following menu:

Export sequence

There is an option to download and/or protect the sequence: the current sequence, i.e. the one displayed in the current time interval of the Player mode.

When protecting sequences, it is recommended that short periods are preferred: **protection means that the recording (regular or on alarm) will not disappear from the server, even after the normal storage retention period.**

Switching to Live mode

Allows you to switch to the Live mode.

Creating a Snapshot

This is a user-created event log: an image capture associated with a comment.

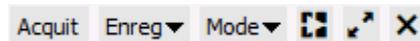
Player mode drop-down menu

The previously detailed options are present in this menu. Other options are also available, including :

- "Keep proportions": allows you to keep or not keep the proportions of the native image,
- "Magnifying glass": makes the magnifying glass appear in the bottom right corner of the image (use the mouse wheel to zoom into the magnifying glass). This is a digital enlargement of the video.

2.5.Group specific menu

This menu only appears if you are viewing more than one camera:



2.5.1. Acknowledge :

Ends all current alarms.

Alarms are set up (CamTrace Server side) with either :

- a predefined duration of X seconds or
- indefinitely until there is an acquittal (on the CamTrace Client side). As long as there is no acknowledgement, the alarm continues indefinitely.

2.5.2. Recording :

Enables you to forcibly/stopping recordings from all cameras.

2.5.3. Mode :

2.5.3.1 - Direct feeds :

Displays Live streams on all cameras.

2.5.3.2 - Alarm streams :

Cells with cameras are put on hold (icon ) until an alarm is triggered.

If an alarm is triggered on one of the cells, the video stream corresponding to the alarm is displayed.)

2.5.3.3 - Latest alarm stream :

Plays, in loop, the video stream corresponding to the alarms.

2.5.3.4 Synchronized Players mode :

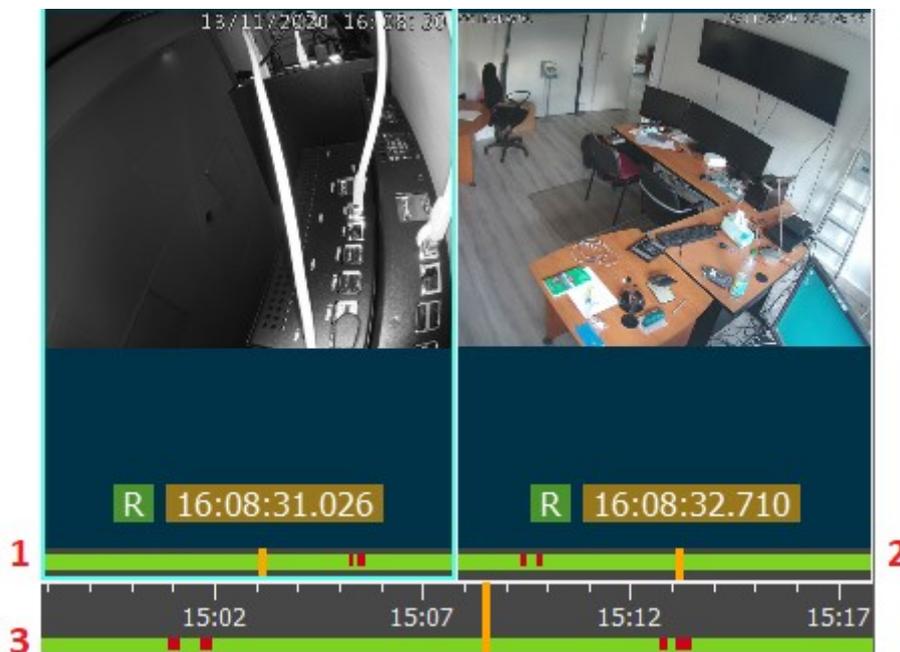
It is possible to play back recordings from several cameras simultaneously over the same period of time: this is the Synchronised Player.

To launch it, click the button : 

All cameras are displayed at the time corresponding to the cursor.

A Timeline appears for each camera (see **-1-** and **-2-** on the capture below): this is a Display Timeline (it is impossible to act on them).

To act on the Timeline, use the Main Timeline (see **-3-** below) :

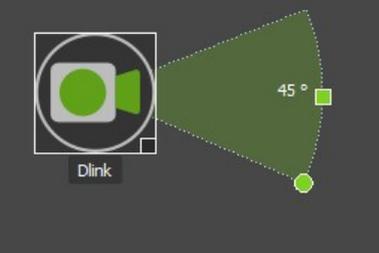


3.Details on some features

3.1.Plans

In the Side Menu, on the left, choose "Add Map" to switch to "Edit Background" mode. You have to choose an image ("Add a background map") in order to switch to the "Change background map" mode. To add elements to the map, switch to "object modification" mode.

It is possible to add the following elements to a map via *drag & drop*:

 Boulogne	 AllCamera	 ecran2	 Dlink
Link to another map	Camera group	Passive screen	A camera (you can adjust its orientation)

Click on the red diskette to save: the map is now available at any time. Cameras in alarm appear in red, just double-click on them to display the view.

It is also possible to add a PTZ position preset or a "command" (a set of *http* url allowing, for example, interaction with network equipment: dry contact, barrier control, siren or loudspeaker triggering). To place the icon of the control on the map, click on it in the top right-hand corner of the menu.

3.2.Dichotomous research

Dichotomous search consists in finding a key moment in recordings with low bandwidth. Instead of playing the video normally, one jumps from one still image to another (forward or backward) by observing an element of that image.

For example, one can search for the moment of disappearance of an object lying on the ground. Simply start the dichotomous search by clicking on the central button; then click on the right arrow until the object disappears. At this point, you click backwards until it reappears. As the time gaps get smaller and smaller, we

find the key moment when the object has disappeared.



When the time interval with the searched item is less than 10 seconds, the symbol changes to yellow.



When the time interval is less than 5 seconds, the symbol turns red, and playback starts automatically.

4.Keyboard shortcuts

Important : Respect the lower/upper case of the shortcut.

The "SHIFT" key, shown below, refers to the "SHIFT" key:



Press the shortcut key again to cancel the action of the shortcut key.

"**h**" key: Displays keyboard shortcuts (non-exhaustive list)

Touche "**i**" key: Displays information about the video stream (size, bit rate, encoding...)

"**Shift+i**" keys: Displays information relative to the video stream for all cells.

"**0**" key: Zooms out (only in PTZ mode)

/VIEWCODE/ : Displays the video stream from the camera (camera identified by its view code). See the section Camera name (1) for the view code of a camera. This command is typed by starting with a "slash" (slash), followed by the camera view code, followed by a second "slash".

/+VIEWCODE/ : Displays the camera's video stream in full screen.

/VIEWCODECAMERA-PASSIVESCREEN/ : Displays the video stream (identified by its view code) to the passive screen (also identified by its view code). Example of a command to push the video stream from camera 40 to the passive screen whose view code is 555 :

/40-555/

"**5**" key: Activates cell movement via the **directional keys** on the **numeric keypad** (keys 4, 8, 6, 2). Press the Enter key to enlarge the selected cell.