






# Operation Guide for CatVision 2014

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<sup>1</sup> While Cathexis has made every effort to ensure the accuracy of this document, there is no guarantee of accuracy, neither explicit, nor implied. Specifications are subject to change without notice.

# Procedures

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# 1 Live Camera Controls

All actions that relate to changes made to the cameras tab interface, and that involve the live viewing and control of cameras.

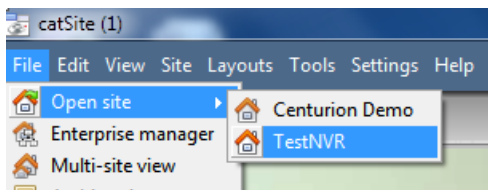
## a. Open or close a Cameras desktop

- *To open a Cameras desktop*

Option 1:

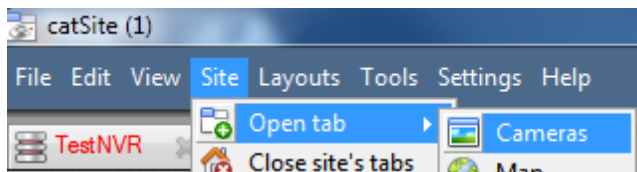
Just open the site (most sites are set to open at the Camera desktop by default):

**File** > Open Site > [Sitename]



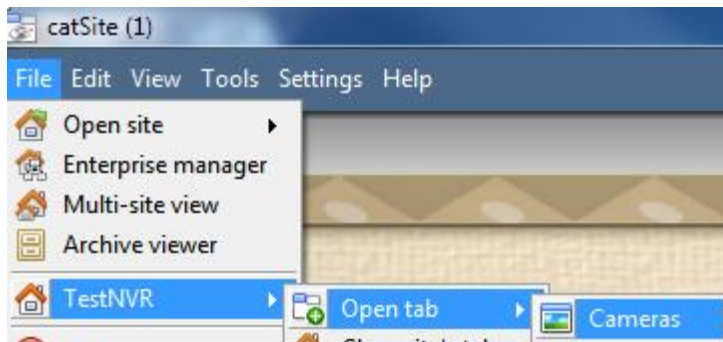
Option 2:

With the Site already opened, click **Site** > Open tab > Cameras



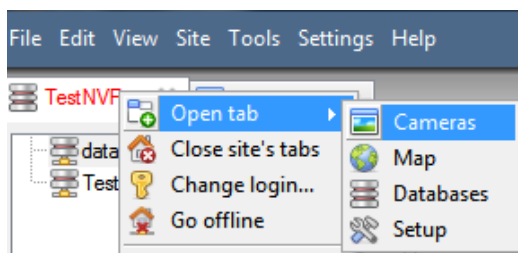
Option 3:

With the Site already opened, click **File** > [Sitename] > Open tab > Cameras



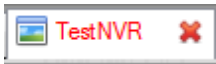
Option 4:

With the Site already opened, right-click any tab and select **Open tab** > Cameras:

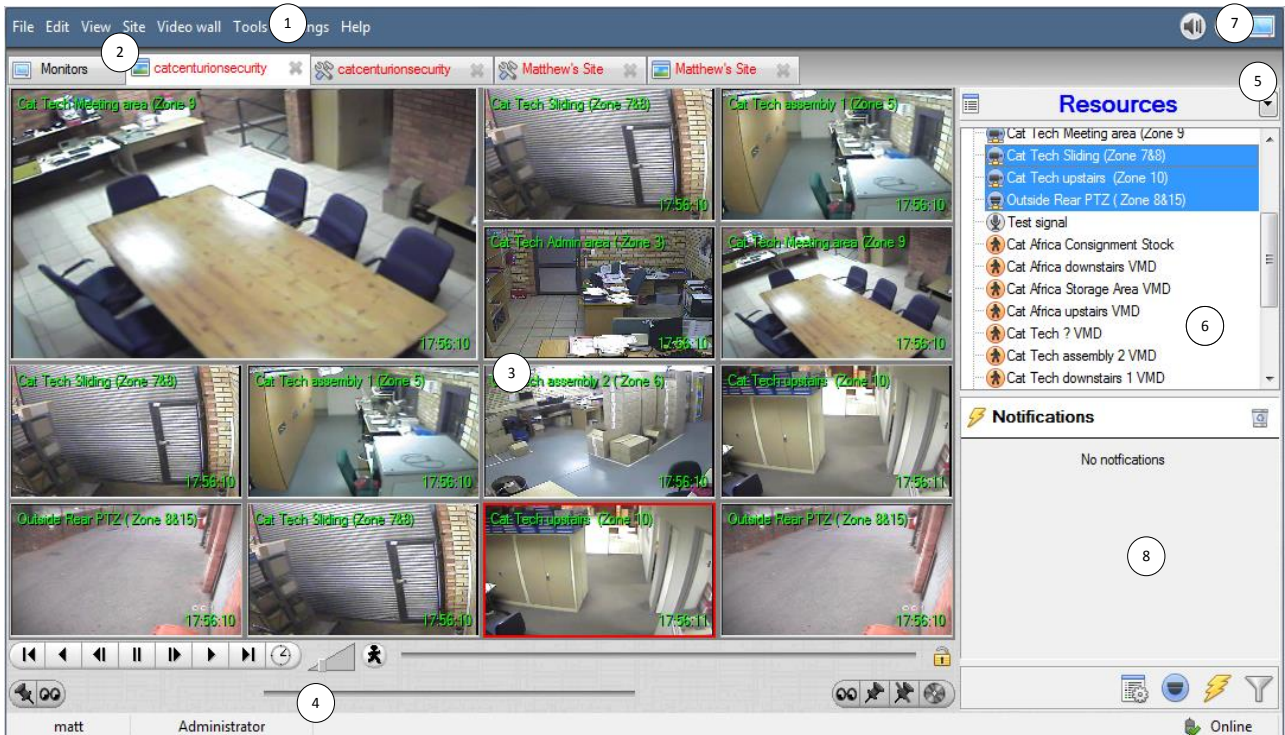


- *To close a Cameras desktop*

Click the **X** on the tab:

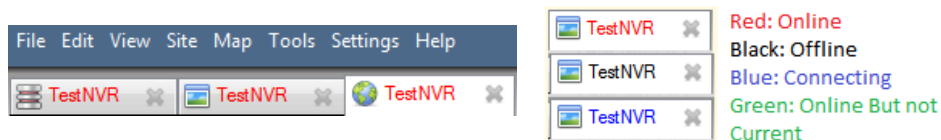


## b. Main Screen Areas



1 The **menu bar** provides menu options for the current desktop, and shows your access rights. These menu options change as you tab between cameras and map desktops.

2 The **desktop tabs** are opened desktops such as maps or sites. Status indications by text colour:



Right-click a tab to see a menu for that tab/desktop.

Click **X** to **Close a tab**.

Theoretically you can have an unlimited number of tabs opened, whether maps or resources, but in practice you will not be able to read the tab details.


Each Site can be custom-configured to automatically load certain desktops when a connection is made to the Site (this is configured from File → Enterprise Manager → Right Click **Site** → Properties).

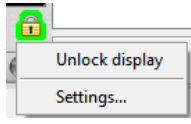
3 The **desktop** forms the main area of the screen. Normally this is a cameras desktop.

4



**Camera controls** are like VCR controls for the camera/s you have selected (indicated by a red border). Cameras can be viewed Live and Reviewed within the same interface. For example, simply click ◀ to play a Live camera backwards (if it has recordings).

This area also includes a button  for [configuring the automated switching of screen displays](#) (see pg 13):



“Lock display” prevents automate switching. “Unlock display” permits it.

5



The **panel selector** is a dropdown bar for selecting panels:

The **Resources panel** provides a folder-hierarchy of resources for the entire enterprise. The setup for these resources is highly customisable. Across the top of the panel is a rack of show-and-hide buttons to simplify the display of resources.

The **Dome panel** (pg 13) provides an intuitive, responsive software joystick.

6






The **panel** performs various functions, depending on the current selection from the panel selector.

7



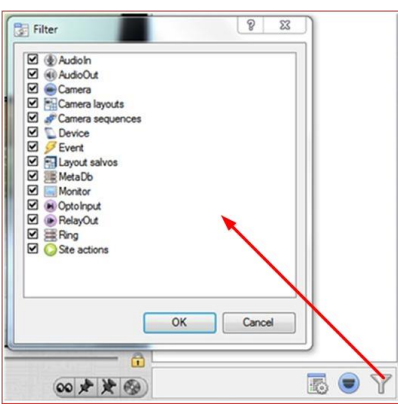
The **Local Resources bar** (top right) shows the status of local hardware resources:

-  Local default audio input (e.g. your microphone)  Local default audio output (e.g. your speakers)
-  Local monitor

When active, these resources display bright green, and when inactive they are grey. If you run your cursor over an active resource, a “tooltip” will provide information on the activity (for example, mouseover a green monitor to see what camera is displaying to that monitor).

If you have many local resources, they will be arranged in a scrolling area, with left and right scroll arrows.

• **To hide and show resources in the resources panel**



1. Click the Filter button to display the Filter dialogue.
2. Select or de-select resources for display, and then click OK.



If your administrator has set up **Event Notifications** for this unit then you will receive notifications based on these setups.



1 A Message Notification

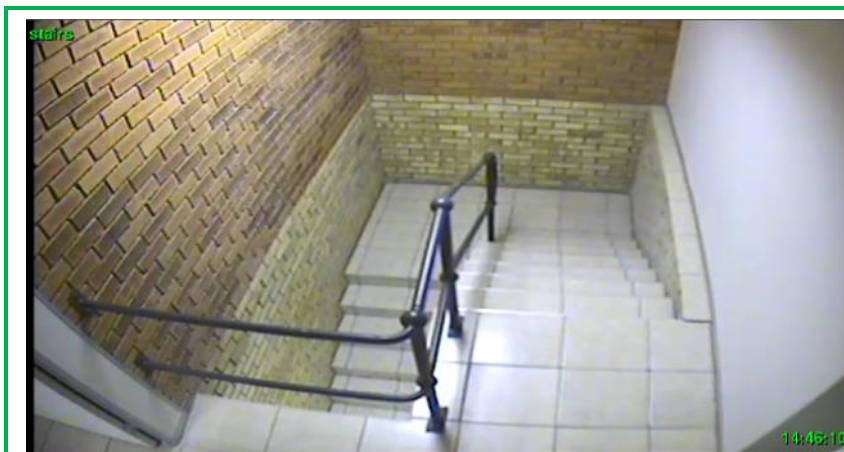


2 A Popup Notification

1. An **audio notification**. This is a sound clip that gets played when the event triggers.
2. A **message notification**. This is a message that gets displayed in the notification area of the resource panel. It's meant as an unobtrusive feed of events (To show the notifications area, click the ⚡ icon at the bottom of the resource panel. This can be resized). If an event has camera resources associated with it then the notification can be double-clicked and the cameras will be shown in the camera view.
3. A **popup notification**. This is a popup message box that is shown when the event triggers.

### c. Live and Review Cameras


Camera text overlays provide information. They can be hidden (middle-click>Hide text overlays).



Green text shows that the camera is Live.

**Camera number / name** (top left)

**Date and Time** at the live camera site (bottom right)

 (green microphone icon) On a Live remote MPEG camera with audio, audio input status (green is active, grey is inactive). This is at top left, before the camera number / name. It displays with MPEG, which has embedded audio.



Red text shows that the camera is being reviewed (replayed) – it is *not* live.

**Camera number / name** (top left)

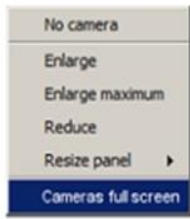
**Date and Time** of the current image/frame (bottom right)  
(Time display in CatVision is based on base-station regional settings)

**Speed and direction of replay** (top right). This relates to the speed slider bar setting in the Camera Controls. It does not apply for Live displays. For example,  
**x1.0 >** is a camera being reviewed, playing forward at 1x normal speed  
**x5.0 <** is a camera being reviewed, playing backward at 5x normal speed

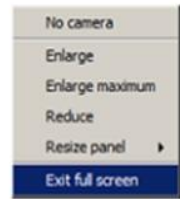
### d. Video wall of cameras with resources panel or menus (release 5042c2)

To display cameras as a video wall (only available from release 5042c2 onwards)

Right-click a camera and select "Cameras full screen"



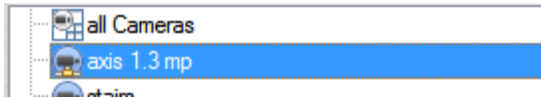
To exit this mode, either Press ESC, or Right-click > "Exit full screen"



**NOTE:** In full screen mode, you can still resize, zoom, and drag within camera panels cameras.

## e. Choose cameras to display

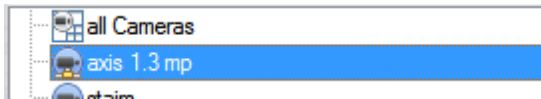
### *Double-click a camera in the Resources panel*



Double-click a camera in the Resources panel to load it Live into the camera panel that currently has focus (is **selected**).

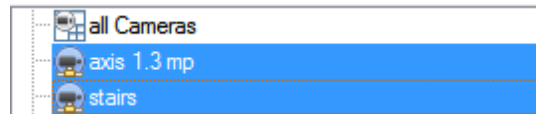
### *Drag a camera from the Resources panel*

Left Click on a camera, holding down the mouse button, and Drag a camera from the Resources panel (first drag the camera horizontally left, and then to the panel that you want to view it in)



### *Drag a group of cameras from the Resources panel*

From release 5042c2, January 2011, you can select a group of cameras from the resource pane and drag them onto the camera display (for camera tab or multisite tab). This is a quick and convenient way to populate a screen with cameras.



This is achieved by selecting cameras while holding down the CTRL button on your keyboard, then Dragging them across.

## f. Zoom within camera panels

- **To zoom within a camera panel with the mouse wheel (only available from release 5042c2 onwards)**

### 1. Roll the mouse wheel in and out.



If you have zoomed *into* the image, you will only be able to see a *part* of the image, so a grey overlay will indicate which part you are viewing.



### 2. LeftClick-drag the image to view different parts of it.



As you drag the image with your cursor, the grey box overlay moves accordingly, showing which area of the larger image is currently visible

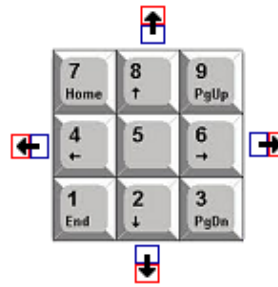
## g. Select a different camera panel

- **To select a panel with the mouse**

Simply click the appropriate panel.

> Your clicked panel will then have a **red outline**, indicating that it is selected.

- **To select a panel by means of the keypad**



The keypad arrows will move panel focus

i.e. they move the **red outline**

- **To select multiple cameras for replay or time-search from Camera control bar**

1. Left-click to select a camera

> A **red outline** shows that the camera is selected.

2. CTRL-left-click further camera/s or CTRL-A to select all cameras

> All selected cameras are **outlined in red**.

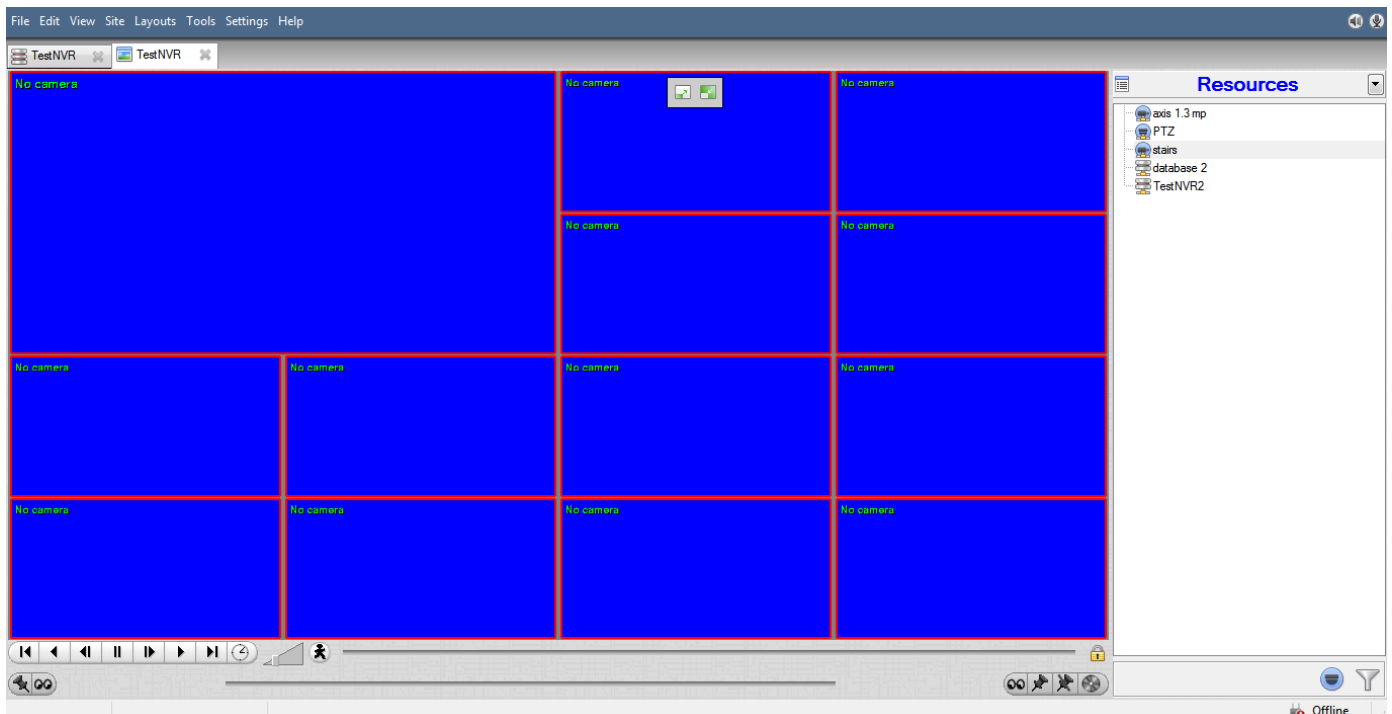
3. You can now use the [camera controls](#) (pg 16) to replay these cameras in concert, or to search to the nearest recordings based on time.

**NOTE:** In CatVision, the number of synchronized reviews is limited to 8 due to the large memory requirement of reviews.

- **To select ALL cameras in the Cameras or Multisite desktop**

Use **CRL-A** to select all of the visible cameras in the CatVision Cameras desktop and Multisite desktop.

This is useful to perform functions such as pausing all cameras on the screen.



## h. Resize a camera panel

- **To resize camera panels by mouse-clicking**



Double left click to increase size.



Right click to decrease size.

- **To resize camera panels by floating controls**

Hold your cursor top centre of the image to display these floating controls...



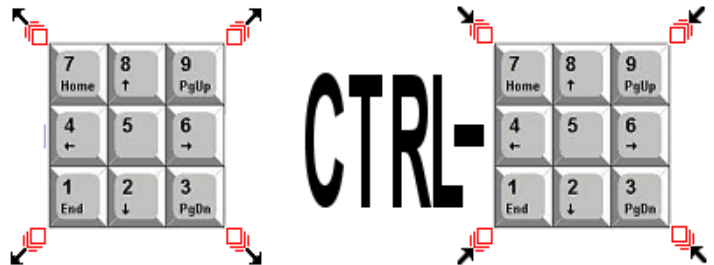
> ...and then click appropriately to resize.

- **To change panel size from the keypad:**


For the selected camera panel,

Press the keypad corner buttons to *increase* size.

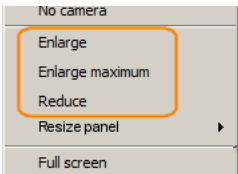
Hold the CTRL key and press the keypad corner buttons to *decrease* size.



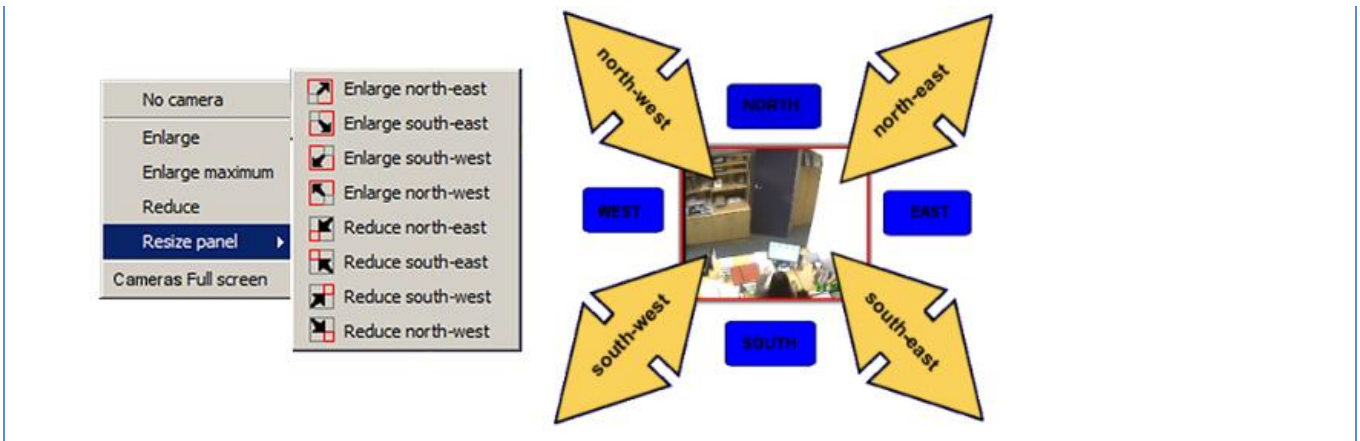
- **To resize a panel from the middle-click menu:**

1.  Middle-click the appropriate camera panel

> The middle-click menu displays...

2. 
  - Enlarge: Enlarges one step
  - Enlarge maximum: Enlarges to fill the camera displays.
  - Reduce: Reduces one step

3. To resize at an angle, select the appropriate icon from the menu (below left).  
The direction of resizing is explained below right:




## i. Enable or lock against automatic display switching

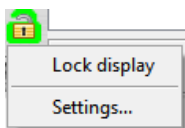
### What is “display-switching”?

This is when automated system actions change the graphical user interface unexpectedly.

For example, while an operator is working in the interface, a “switch display event action” may suddenly display a Live camera view that takes over the entire cameras desktop.


- **To stop automated system display-switching of the operator interface**

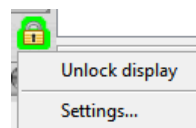
Click the Lock icon  at bottom right of your CatVision screen, and select “Lock display”:



> The icon will change to denote “Locked” 

- **To enable automated system display-switching of the operator interface**


Click the Lock icon  at bottom right of your CatVision screen, and select “Unlock display”:



> The icon will change to denote “Unlocked” 

## j. Manually Record Video (User Recordings)

### Start the Recording

Middle Click on a camera in the Cameras Tab and you should see **Start recording** as an option in the drop down Menu. Click this to start the recording. If the recording has started you should get a flashing  in the top right hand corner of the camera panel.

### Stop the Recording

To stop the recording middle-click on the camera panel and click on **Stop recording**, in the drop-down menu.

**Note:** you may only trigger one camera at a time.

## 2 PTZ / dome camera procedures

With a Pan-Tilt-Zoom (PTZ) camera an operator can manipulate the camera's direction, zoom, focal distance and amount of light. He / she can also control pre-configured camera views called “Presets”.

A Dome Control Panel becomes available when you select a Live PTZ camera in the CatVision interface.

Click the panels dropdown and select **PTZ** (see below). The software joystick displays:



This panel provides controls for camera presets, and a software joystick for interactive control of the camera.


The Preset controls enable you to **set** Presets and **go to** Presets.

The curved grey buttons surrounding the joystick enable zooming in and out, focussing closer or further away, and iris control – lightening or darkening the camera image.

The **Manual** button is for manual override of the dome (to override automated patterns, local tours etc). The **Auto** button relinquishes manual control, to let the system regain its automated configuration.

Note the green text on one of these buttons. This indicates which mode currently applies – **Manual** or **Auto**. In the example at left, the system can function automatically. The screen may change unexpectedly as it runs patterns, tours, etc.

**IMPORTANT:** If you cannot see this panel as an option, either you do not have a PTZ/dome camera selected, or the camera has not been properly configured as a dome/PTZ.

<ul style="list-style-type: none"> <li>• <b>To pan left / right from the PTZ panel</b></li> </ul>  Drag joystick left / right	<ul style="list-style-type: none"> <li>• <b>To tilt up / down from the PTZ panel</b></li> </ul>  Drag joystick up / down
<ul style="list-style-type: none"> <li>• <b>To move the camera faster from the PTZ panel</b></li> </ul>  Distance determines speed - drag joystick out, in required direction	<ul style="list-style-type: none"> <li>• <b>To move the camera slower from the PTZ panel</b></li> </ul>  Distance determines speed - drag joystick closer in, in required direction
<ul style="list-style-type: none"> <li>• <b>To zoom in / out from the PTZ panel</b></li> </ul> Watch the live camera as you press the Zoom + and Zoom - button	<ul style="list-style-type: none"> <li>• <b>To focus further / closer from the PTZ panel</b></li> </ul> Watch the live camera as you press the Focus + and Focus - button

<ul style="list-style-type: none"> <li>• <b>To go to a preset from the PTZ panel</b></li> </ul> <p>Select the preset from the dropdown, and then click GO</p> <p>&gt; The camera view will change to the preset.</p>	<ul style="list-style-type: none"> <li>• <b>To set a preset from the PTZ panel</b></li> </ul> <ol style="list-style-type: none"> <li>1. Select the preset from the dropdown,</li> <li>2. Use the joystick controls to establish the camera view, zoom, focus and light (iris).</li> </ol> <p><i>IMPORTANT for the Merit Li Lin Fastdome: First go to a preset to recall it, before using joystick etc.</i></p> <ol style="list-style-type: none"> <li>3. Click SET.</li> <li>4. Go to this preset to check it.</li> </ol>
<ul style="list-style-type: none"> <li>• <b>To relinquish manual control of the dome / PTZ camera from the PTZ panel</b></li> </ul> <p>Click Auto. &gt; If your system runs remote tours automatically, or switches display based on events, these automated responses will take over.</p>	<ul style="list-style-type: none"> <li>• <b>Pause a PTZ Tour</b></li> </ul> <p>PTZ tours can be paused/restarted, per camera. This is achieved by right-clicking on the camera in the resource panel and selecting the "Pause/restart PTZ tours" option.</p>
<ul style="list-style-type: none"> <li>• <b>To allow more or less light in the image (lighten and darken the live camera view) from the PTZ panel</b></li> </ul> <p>Watch the live camera as you press the iris+, or iris – button. You will see the image lighten or darken</p>	<ul style="list-style-type: none"> <li>• <b>To gain manual control of the dome / PTZ camera from the PTZ panel</b></li> </ul> <p>(This applies if you system runs remote tours automatically, or switches display based on events)</p> <p>Either click <b>manual</b>, or simply move the software joystick</p>



## 3 Review

### a. Review (replay) a camera

- *To Review a camera from the video wall by means of overlaid controls*



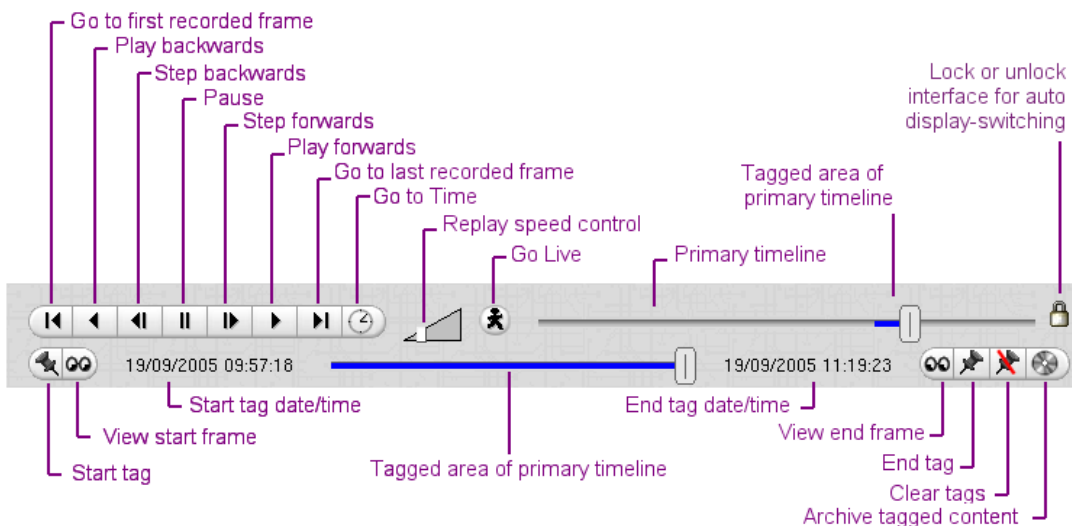
1. Hold the mouse cursor at the bottom middle of the camera panel to display the Replay controls.

2. Use the replay buttons as follows:

Start frame | Rewind | 1-frame back | Pause | 1-frame forward | Play | End frame

- *To review a camera from the Camera control bar*

These controls can replay 1x camera, or, up to 8x selected cameras (synchronized).



Camera controls closely follow the VCR norm. Cameras can be viewed Live and Reviewed within the same display.

Replay speed: set this at a multiple of normal speed (**0.2x, 0.5x, 1x, 2x, 5x, 10x, 100x**)

See [Display-switching](#) (pg 13) for procedures to enable or lock against automated system switching of the interface display.

### b. Print a snapshot

- *To print a snapshot from the CatVision Resources desktop*

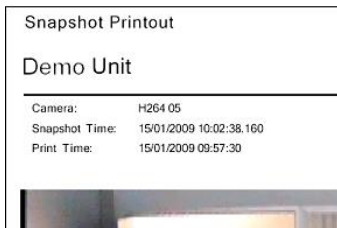
The DSS printer must have been be setup from the catLite / catPro interface.

1. Middle-Mouse Click, and select "Print snapshot" (On camera review, first pause the replay at the image that you want)

-> The standard print dialogue displays

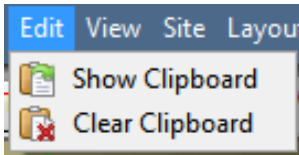
2. Print normally to the printer.

-> The printed image includes information on the DSS Unit, Camera name, Snapshot Time, and Print Time:



**TIP:** With the Adobe Writer, you can print to .pdf files, and then email the files

### c. Use the CLIPBOARD to snapshot, print and export camera images




CatVision has three snapshot options:

- Copy snapshot to Clipboard
- Print snapshot
- Save snapshot image to USB – this saved JPEG file is the image only, without the date/time

- ***To print a snapshot with date/time reference***


Copy the snapshot to the clipboard, and print from there,  
*or*  
 Print the snapshot directly from CatVision.

- ***To show the clipboard***

**Edit** > Show clipboard 

Clipboard holds images that have been manually snapshotted from cameras. For use generally, and with the Incident Database. Double-click to display an image.

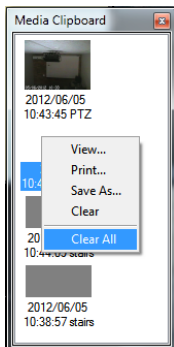
- ***To clear the clipboard***

**Edit** > Clear clipboard 

Clears all images from the clipboard

- ***To export an image from the clipboard to a folder***

1. Open the clipboard in the CatVision interface: click **Edit** > **Show Clipboard**
2. Right click the photo and click **Save as...**



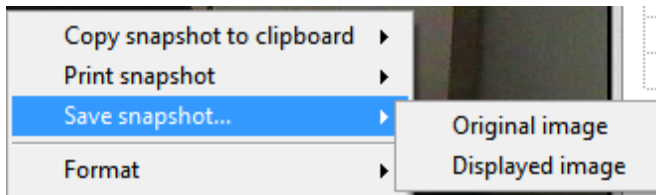
3. Browse to the appropriate folder, type a **File name** and click **Save**.

- ***To print a snapshot***

1. Open the clipboard in the CatVision interface: click **Edit** > **Show Clipboard**
2. Right click the thumbnail and click **Print...**

- *To export an image from a camera view*

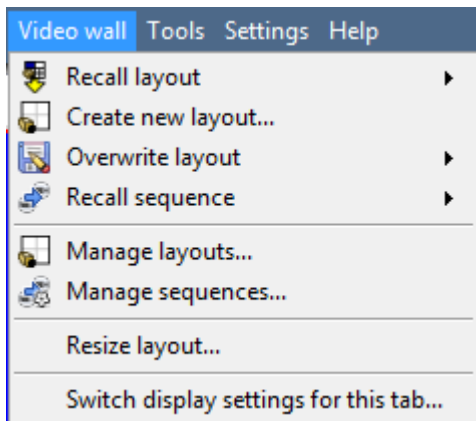
1. Middle-Mouse click any camera in the CatVision interface and select **Save snapshot...**



2. Browse to the appropriate folder, type a **File name**, and click **Save**:

## 4 Layouts and Sequences (Video Wall Menu)

### a. Video Wall



In pre-5403b software this menu was titled the Layout Menu, and only contained setup information for Layouts.

A **Layout** defines how the cameras appear on the screen, in the Cameras Tab. Including which cameras are shown, and how much space they take up on the screen.

A **Sequence** is a cycle of individual cameras that will run, on a timer, in a single viewing pane, in the Cameras Tab.

The **Switch Display Settings for this tab** will define the behaviour of the currently open Cameras Tab, when video information is sent to the Client Station with an alarm.

**Note:** this menu option will only be present when you are viewing a Cameras Tab.

#### Layout

A **Layout** defines how the cameras appear on the screen, in the Cameras Tab. Including which cameras are shown, and how much space they take up on the screen.

- **Create new Layout**

To create a layout, organise your cameras on the screen as you desire (double-left-click to expand; single-right-click to reduce). Then click on **Layouts** → **New**. Give the Layout a name, and click OK. (you can use Layouts created in the Cameras Tab in the Monitors Tab, and Visa Versa.)

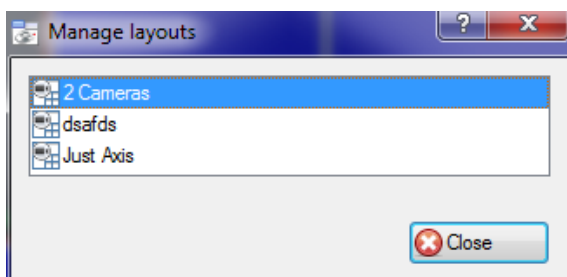
- **Recall a Layout**

To bring up a list of existing Layouts, click on **Recall** and select the layout name that you desire.

- **Overwrite Layout**

Clicking on **Overwrite**, and selecting on one of the Layouts in the list, will overwrite that Layout with the current panel organisation.

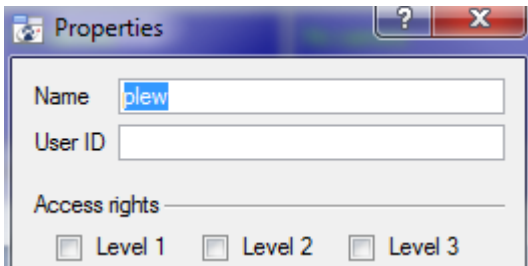
- **Manage Layouts**



Clicking on **Manage** will bring up the list of existing Layouts for you to manage.

From the management list you may either delete the Layout or enter the Layout Properties window.

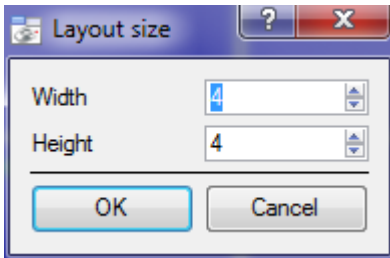
These are both done by right-clicking on the Layout in the list.



In the **Layout Properties** window you may change the Name, and User ID of the Layout, as well as the User Access Level required to view, or edit, the layout.

**Note:** if you have limited access rights, you won't be able to change these settings.

- **Resize Layout**



Clicking on **Resize layout...** will give you the ability to change how many cameras are arranged on the screen.

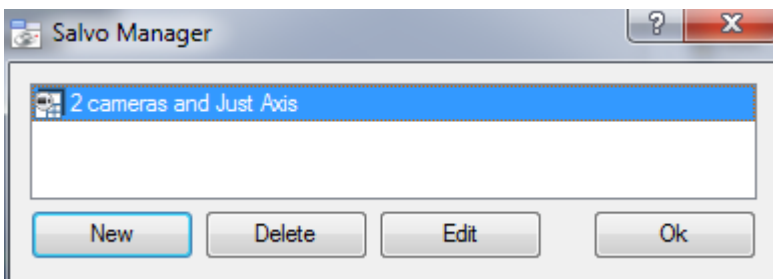
You may define how many cameras there are per row, and per column.


The maximum amount of cameras you may have per screen will be an 8\*8 matrix. This gives you a possible 64 cameras per Layout. (This would require an incredibly large screen to be practical though.)

## Sequence

A **Sequence** is a cycle of individual cameras that will run, on a timer, in a single viewing pane.

- **Sequence Manager**

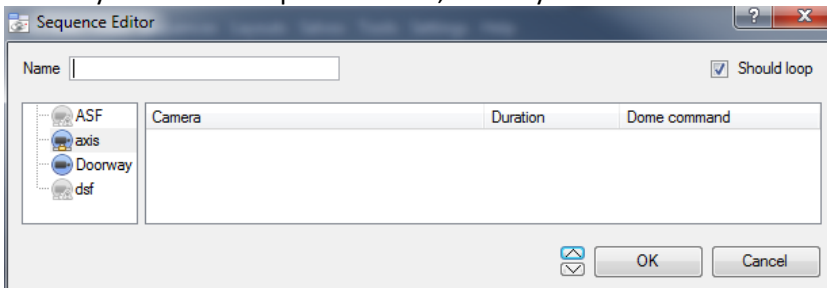


Clicking on the  icon will bring up the Sequence Manager.

To **edit** a Sequence, select the existing Sequence and click Edit. To create a **new** Sequence click on New. This will bring up the **Sequence Editor**.

- **Sequence Editor**

You may access the Sequence Editor, where you can create and edit sequences, via the Sequence Manager.





**Name** your Sequence appropriately.


The left hand panel will hold a list of available cameras.

The right hand panel will hold a list of cameras that are included in the Sequence.

Sequence Editor Procedures	
<b>Add a camera to a Sequence</b>	You may: -double-click on a camera in the list of available cameras.

	-Or click-drag one, or multiple cameras, across into the Sequence list.
<b>Remove a camera</b>	Right-click on the camera and select Delete.
<b>Set the duration of a camera for each loop of the Sequence</b>	-Right-click, and select Set Duration. -Enter the duration in seconds, and click OK.
<b>Looping</b>	If the <input checked="" type="checkbox"/> <b>Should loop</b> option is checked the Sequence will run indefinitely, if it is unchecked the Sequence will run once.
<b>Change the order</b>	Select a camera and use the   arrows to move that camera up or down the order.

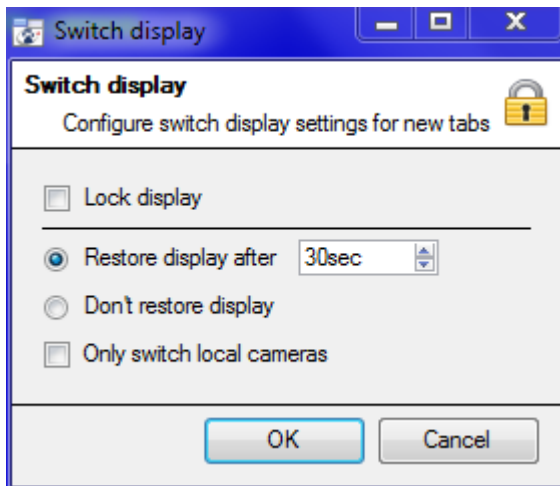
- **Recall Sequence**

To recall an existing sequence click on  **Recall sequence** to bring up a list of all existing sequences. Click on the sequence you wish to run.

### Switch Display Settings

This will define how your cameras tab responds when there is an event on the site that sends video and information to the Cameras Tab of the viewing client.

**Note:** The Switch Display Settings that you set here are for the currently open tab only



#### **Lock Display**

Will prevent the Cameras Tab from displaying any video feeds sent to it by the Event.

#### **Restore display after**



Will define how long after switching to the Event Cameras the Cameras Tab will return to the original display settings.

#### **Don't restore display**

Will leave the Cameras Tab on the Event Cameras until an operator, or administrator, resets the display.

#### **Only Switch Local Cameras**

Will only switch to Event cameras originating from a local site.

**Note:** you may also either lock , or unlock , the currently opened Cameras Tab by clicking on the little lock located at the end of the Timeline on the Review Controls.

## 5 Archiving

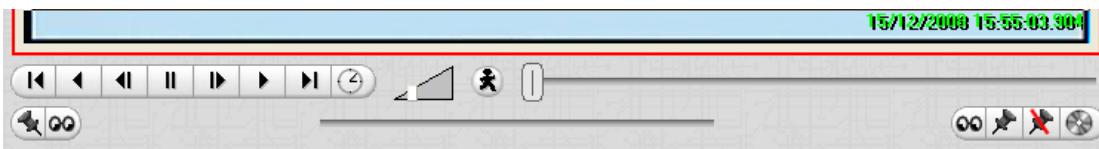
### a. Archive recordings

#### *1. Archived recordings retain their “Authenticity”*

Archiving is a facility to enable you to select recordings (including images video and text) on a DVR unit and copy them to archiving media (USB key, hard drive or CD/DVD). Unlike normal recordings, *archived* recordings retain their authenticity, and can be verified as authentic (unaltered) on replay, making them suitable for use in courts of law.

- **To archive recordings**

1. Left click to select a camera (or select multiple cameras by means of CTRL-leftclick)
  - > The camera/s will be highlighted in red.



2. Locate an image to set the start tag position of your archive, by either

- I. Dragging the scrollbar
- II. Using the camera controls
- III. Doing a time/date search

3. When you have found your starting image, click the Start tag button

4. Locate an image to set the end-tag position by either.

- I. Dragging the scrollbar
- II. Doing a time/date search

5. When you have found your end image, click the End-Tag button

> A partial blue line appears on the main scroll bar, representing the tagged selection of recordings.



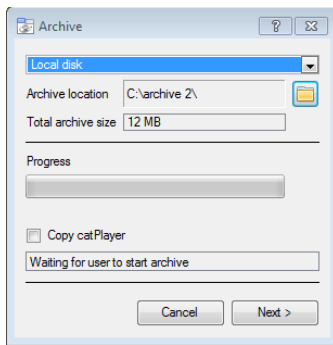
Simultaneously, a second blue “tagged scroll bar” appears beneath the main scroll bar. Whereas the top bar represents *all* recordings, this second bar represents just your *selected* recordings.



When the scroll button on the main (top) scroll bar is *not* in its blue area (as at left), there will be no interactivity possible on the tagged (bottom) scroll bar.

6. Click the Archive button

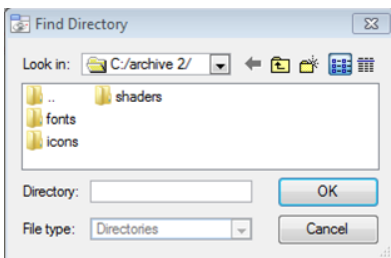
> An Archive window appears:



7. Tick **Copy catPlayer** if you want to include catPlayer in the folder (this copies the autorun catPlayer files and the catPlayer .exe file into the folder).

**NOTE:** If you “Copy catPlayer” for every archive into different folders, you may be wasting hard drive space.

9. Click the Browse button  to display the Find Directory Window:

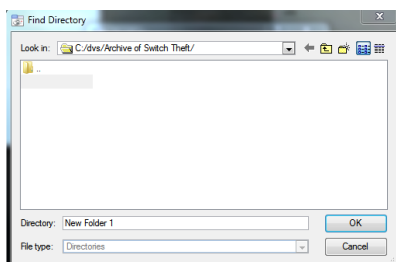


**IMPORTANT:** Your system administrator may have limited you to archiving in a single folder location.

10. Either browse for an existing folder, and then click OK, or **Create a New folder:**

10.1. Click the Create New Folder button .

> A new folder is created, and you are prompted to name it:



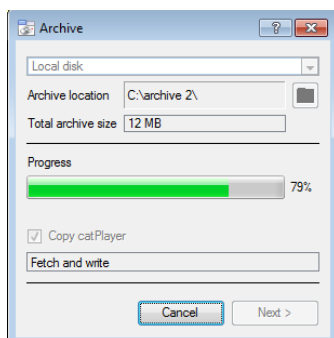
10.2. Type a name for the folder.

10.3. Double-click the folder so that it opens.

[Although you can create a folder, you cannot custom-name the archive itself]

11. Click OK and then click Next.

> You will see a status display of the progress, including:



12. When you see “Archive complete”, click the Close button.



## b. Replay archived recordings

### Two means of replaying archived recordings:

There are two means of replaying archived recordings: 1) Windows catPlayer archive player, and 2) the Archive Player desktop in CatVision. The functionality is almost identical.

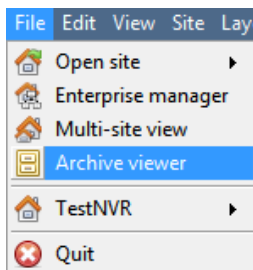
- **Windows catPlayer archive player**

Click Start>Programs>Cathexis> catPlayer



The Windows catPlayer software has a means of verifying and reporting on the authenticity of the archive or image. The catPlayer utilizes DSA 1024 bit encryption. At the time of archiving, the DVR performs a mathematical hash function on the file. When verified by means of the catPlayer on the local windows PC, the same hash function is again run on the file, and if the result is different in any way (even if a single pixel has been changed) the file is rejected as unauthentic. Windows catPlayer archive-player software can be optionally copied into the archive folder with each archiving action.

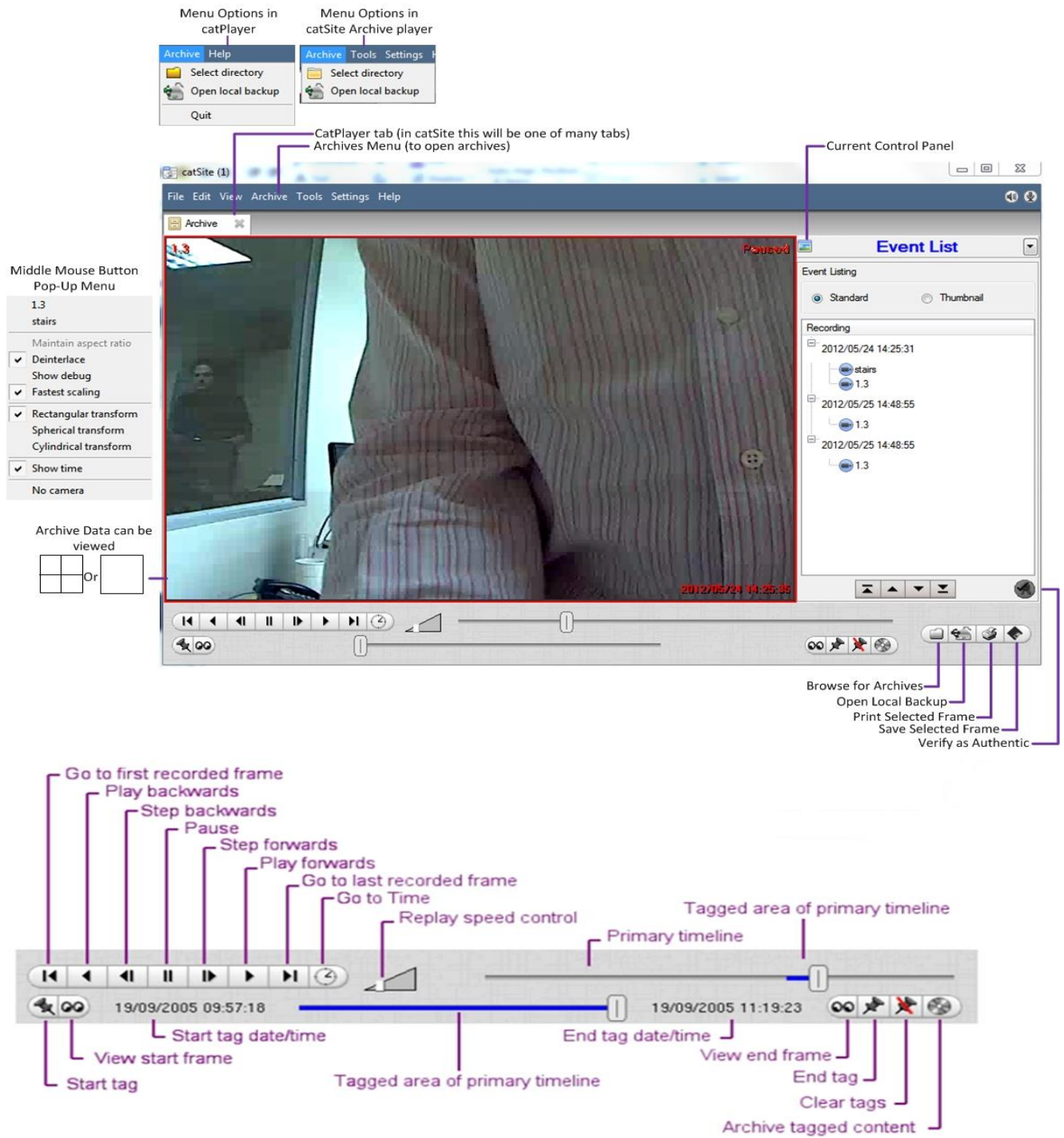
- **Archive Viewer desktop in CatVision**



The Archive Player is incorporated as an “Archive viewer” desktop within CatVision software.

It has the same functionality as the Windows catPlayer, except that it is possible to export archived content from this desktop to AVI format that can be played in many commercial / popular software programs.

### c. Archive Player / Viewer interface

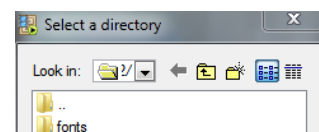


### d. How to use the Archive Player / Viewer

- *To browse for archived data in a folder of archives*



Click the **Open** > **Select Directory** icon to specify a folder of archives (on hard drive, CD/DVD or USB), or





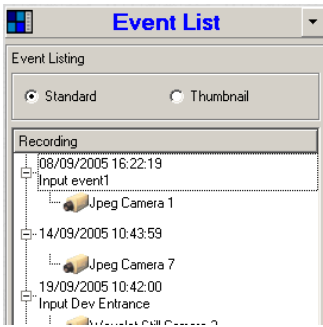
Click the **Browse for archives** button, or



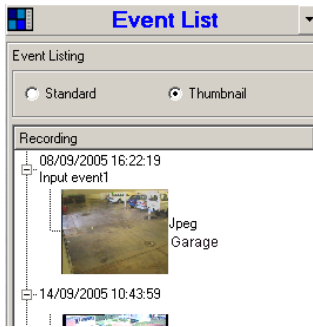
Click the **Open local backup** icon to locate a local backup drive

> Individual archives have automated names such as **051007154908\_0051BB04\_011.WVL**

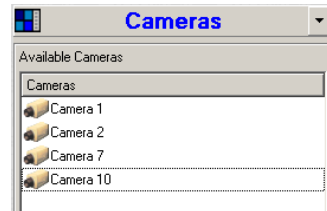
> The system lists all valid archives/backups in the Cameras or Event List panel on the right of the main screen, depending which you have selected...



● **Standard Event List**  
sorts Events by date/time



● **Thumbnail Event List**  
displays 1<sup>st</sup> frame of each recording



**Cameras List** displays all cameras found in the archive folder. Drag cameras to the desktop for camera replay.

● **To replay a recording in a floating window**

From the **Event List (standard)** panel, double-click an individual event item / recording, or

From the **Event List (thumbnails)** panel, double-click a thumbnail.

The replay window can display in three different forms:



**View sequential images** (as above)

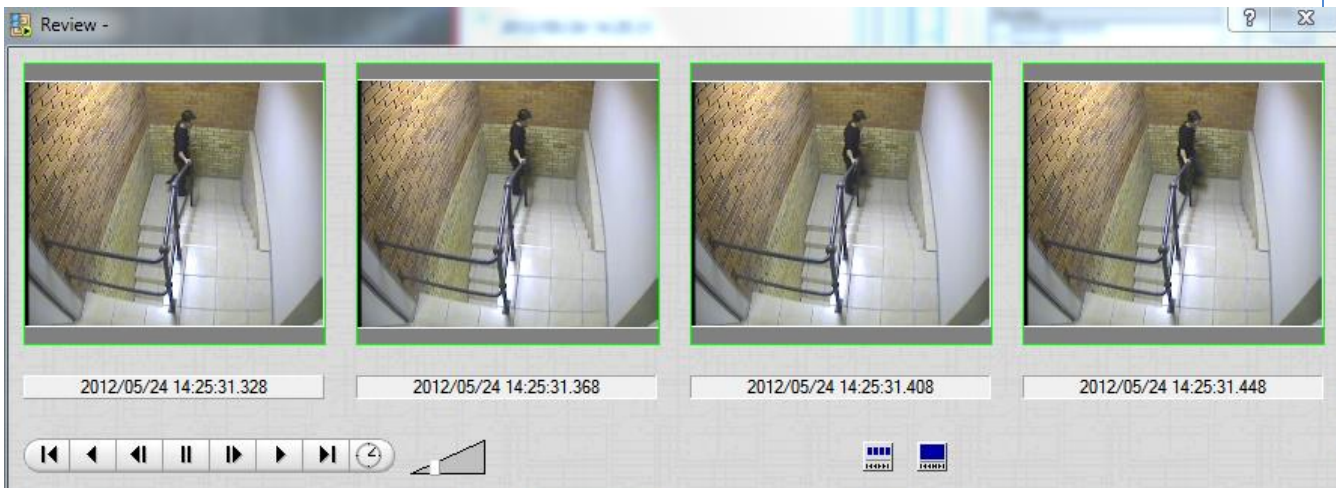


**View as a single pane**



**View as 4 staggered panes**

Example: sequential images...



● **To display archived data in the Archive Player / Viewer desktop**



From the **Cameras** panel, drag cameras to the desktop, or double-click a camera to display it in the currently selected camera view, **or**

From the [Event List \(standard\)](#) panel, drag individual event items (recordings) to the desktop, *or*

From the [Event List \(thumbnails\)](#) panel, drag thumbnails to the desktop, *or*



Middle-click a camera panel and then select the camera from the middle-click menu.

- **To apply a lens transformation to correct images**

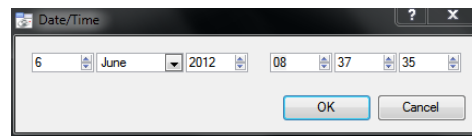
Right-click the image and select one of the available “transforms”:

- Rectangular transform
- Spherical transform
- Cylindrical transform

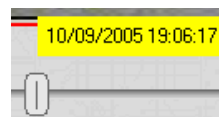
(For specific cameras that use very high resolutions and special lenses to enable the camera to cover an entire room without panning. However, the lens twists the image, so when a user “pans and zooms” the room during replay (actually pans and zooms the image), software is required to correct the image twist.)

- **To locate a specific time in the recording timeline**

Click the Time icon, and then specify from the Date/Time dialogue:




or,

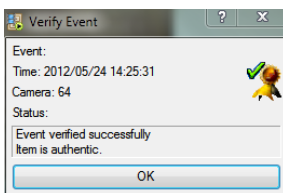


Drag the slider along the timeline until you reach the appropriate date/time. As you drag, a “callout” displays date/time.

- **To verify an event as authentic (i.e. unmodified)**

Select a specific Event (*not* a generalised camera review), and then Click the Verify icon 

> A window displays, with verification or non-verification information:



This does not function with a camera review – you must select a specific event from the event list or from a camera display of a specific event.

- **To browse a long Event list**

Use the browse buttons at the bottom of the Event List panel:



- **To change the camera display size**



Double-click to change from 4 camera to 1 camera.



Right-click to change from 1 camera to 4 camera.

## e. Export archived Events and tagged regions as AVI files (from CatVision)

### I. Overview

This enables the user to view archived video footage in standard AVI format, using standard video players.

The procedure involves exporting the standard archiving footage to AVI (Multimedia container format) using WMV compression.

Software that can play WMV files includes Windows Media Player, GOM Player, ALLPlayer, The KMPlayer, PowerDVD, RealPlayer, MPlayer, VLC Media Player, Zoom Player and Media Player Classic.

The Microsoft Zune media management software supports the WMV codec, but uses a Zune-specific variation of Windows Media DRM which is used by PlaysForSure. Many third-party players exist for various platforms such as Linux that use the FFmpeg implementation of the WMV codecs.

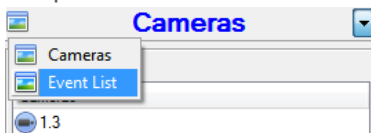
## Requirements

To export to an AVI file, you need to already have archived the footage (using the standard archiving procedure) and have opened the footage via the Archive Viewer desktop.

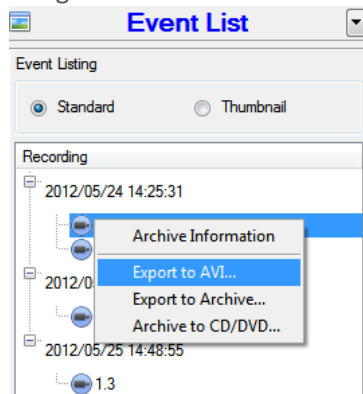
From the Archive Viewer there are two ways to archive the footage: 1) By means of the Event List or 2) by tagging a region. Both procedures are described below.

### • *To export media to AVI via the Event List*

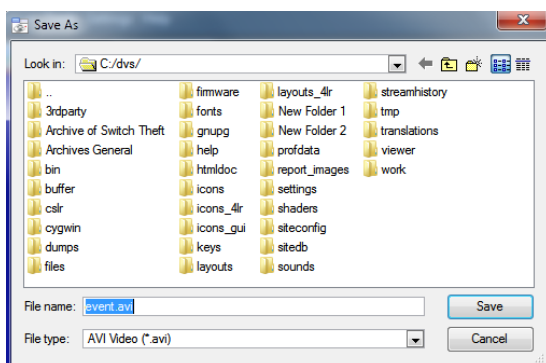
1. Open the Event List as follows:



2. Right-click the event and choose the export option that you require from the drop down menu.

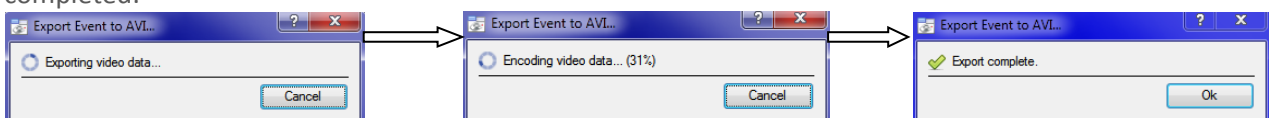


> This will open a file browser:



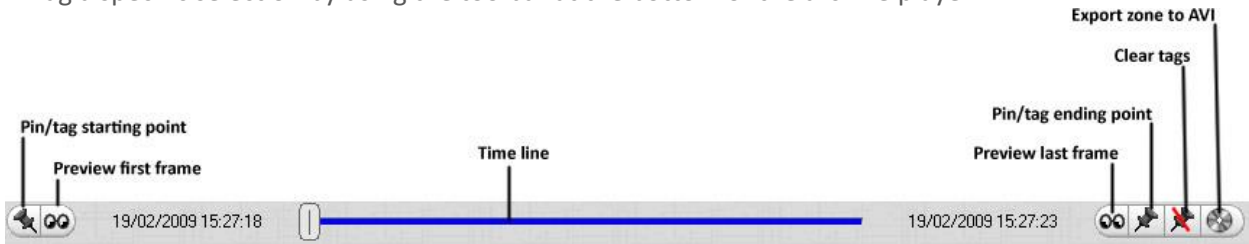
3. Browse for a folder and click the “Save” button.

> The conversion (from the standard archiving format to AVI) will start, and will indicate when exporting is completed:



- *To export to AVI by means of a tagged region*

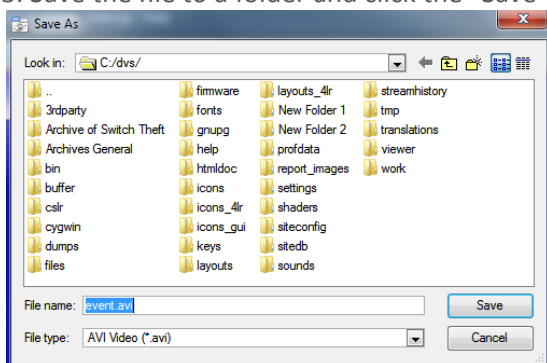
1. Tag a specific selection by using the toolbar at the bottom of the archive player:



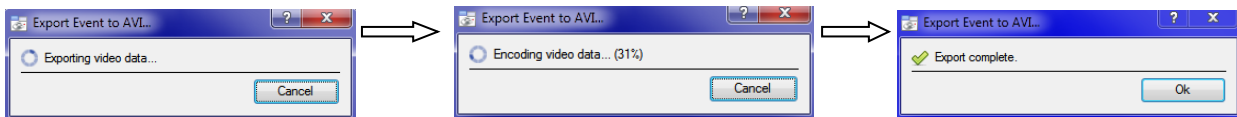
2. With the region successfully tagged, click the **Export zone to AVI** button.

> This will open a file browser.

3. Save the file to a folder and click the “Save” button:

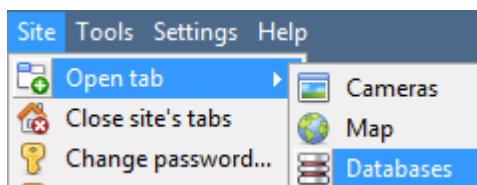
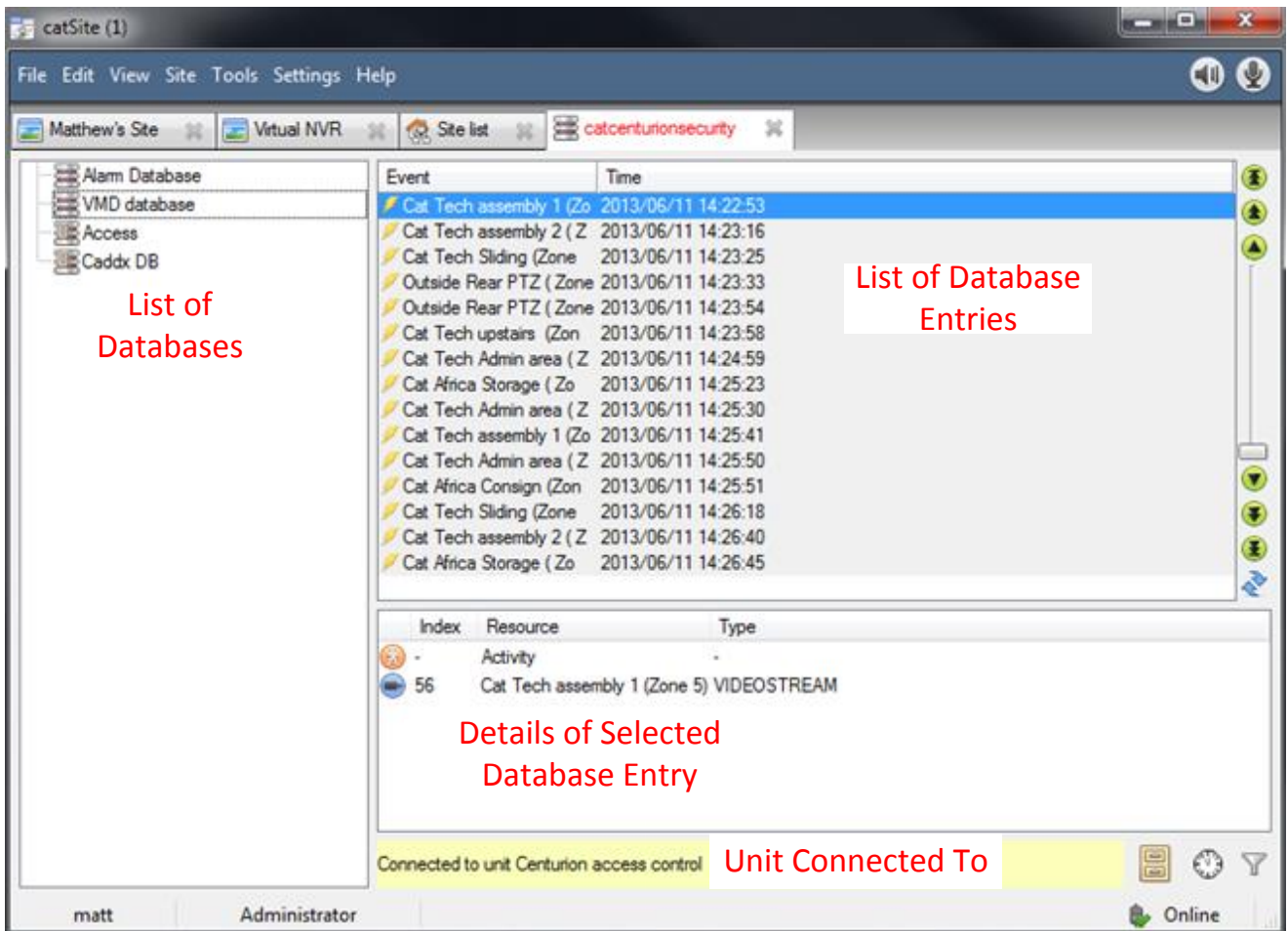


> The conversion (from the standard archiving format to AVI) will start and will indicate when exporting is completed:



## 6 Database Tab

### a. Database Tab





To open the CatVision Database Tab select **Site**—>**Open Tab**—>**Databases**

### b. Replay a Recording

To replay a recording that has been associated with a database entry, simply double click on the relevant entry.

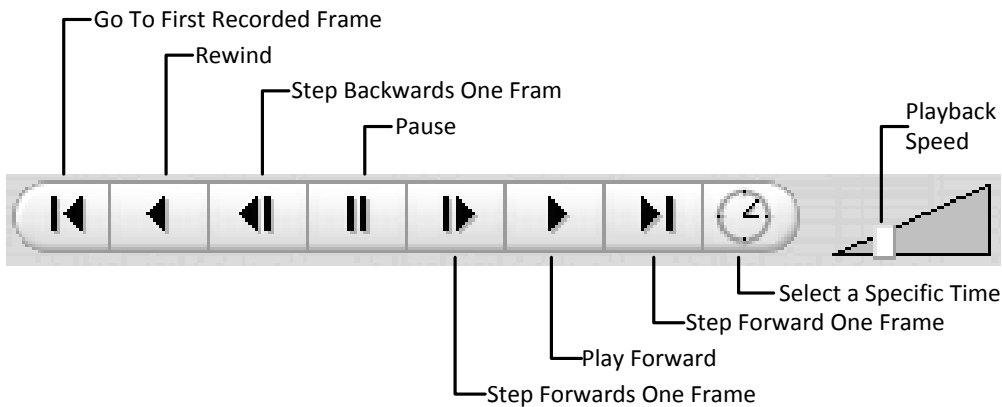
*Replay as a Stepped Strip, or a Single Image.*

You may play your replay as a strip that is stepped by four frames, this is useful for comparison between frames, as you may have four sequential frames visible at all times. Click on  for stepped replay, and click on  for single pane replay.


In both instances the date and time of the current frame will be listed in the grey bar under the frame.

2013/06/11 14:31:46.395

- **Playback Controls**



### c. Do a Time Search

1. In the Database Tab, click on the  icon, located in the bottom right hand corner.
2. Select the date and time:



The list of database entries will have been pared down to beginning with the event closest to the time you selected, and a few subsequent entries.

### d. Filter a database to Locate recordings

While the time-filtering is useful, CatVision provides for far more powerful filtering of databases. There are three major filter types: **Filters**, **Field Constraints**, and **Time Constraints**.


**Note:** All filtering is based on AND/OR options.

- AND** If you apply Filter A AND Filter B, the result will contain only those Events in which both Filter A and Filter B are true.
- OR** If you apply Filter A OR Filter B, the result will contain any Event in which Filter A is true, plus any Event in which Filter B is true.

Note however that within a single filter you cannot use both functions – so you cannot apply “Filter A AND Filter B OR Filter C”. (It must either be all AND filters or all OR filters.)

- **Add/Remove a Filter**

Click on  to add a filter.

Click on  to remove a filter.







- **Enable a Filter**

Filters  Field constraints  Time constraints In order to have any of the Filters active you need to check the relevant filter box at the bottom of the filters dialogue.



**Note:** you may further constrain results, by making **Filters** and **Field Constraints** AND/OR dependant. For example you may have a search that requires that the Event must match filters *or* field constraints, or you may have it set so that the Event must match filters *and* field constraints.

### Filters Tab

<p>If event <u>has camera</u> <u>Camera n</u></p>	<p>These are the primary sorting lists. The blue underlined style indicates that they are options. Click to see a pop-up list of the options. You can choose from the following: <u>Has camera</u> &gt; (then choose camera from <u>Camera Name</u> dropdown list) <u>Has audio</u> &gt; (then choose audio input from <u>Audio Input Name</u> dropdown list) <u>Is tagged</u></p>
<p><u>and</u></p>	<p>This is a logical parameter for multiple filters. It may be “<u>and</u>” or “<u>or</u>”. It only appears if you have more than one filter. By default it is “<u>and</u>”.</p> <p><b>The filter results must match <i>all</i> of the filters.</b> For example, if we have</p> <p> If event <u>is tagged</u> <u>and</u></p> <p> If event <u>has camera</u> <u>Cat Tech Sliding (Zone 7&amp;8)</u> <u>and</u></p> <p> If event <u>has audio</u> <u>Cat Tech Sliding (Zone 7&amp;8)</u></p> <p>Then the result is only those Events that are Tagged, that also include Camera 5 content, and that also include Audio Input 3 content – probably a short list.</p> <p><b>The filter results must match <i>any</i> of the filters.</b> For example, if we have</p> <p> If event <u>has camera</u> <u>Cat Tech Sliding (Zone 7&amp;8)</u> <u>or</u></p> <p> If event <u>is tagged</u> <u>or</u></p> <p> If event <u>has audio</u> <u>Cat Tech Sliding (Zone 7&amp;8)</u></p> <p>Then the result is all events with Camera 5 content <b>plus</b> all Events that are tagged <b>plus</b> all events that have Audio Input 3 content – probably a long list.</p>

### Field Constraints Tab

This tab is only visible if you have a streaming text data application installed, in which case you see these text data field filters. They include the fields that have been identified in the text data streaming setup. i.e. on this tab you will see the fields that you have customised for the text data application.

Examples of text data are the data streamed from till transactions (transaction number, purchase amount, time, number of purchased items, etc.), and data streamed from Access Control applications (name, time, employee number, etc.). This data is stored as different “fields”. It is possible to constrain filtered results based on various decisions with these fields.

The principle remains the same as the Filters tab, where you create a filter and then change its parameters using dropdown options (see above). The nature of these parameters depends entirely on your custom application.


### Time Constraints Tab

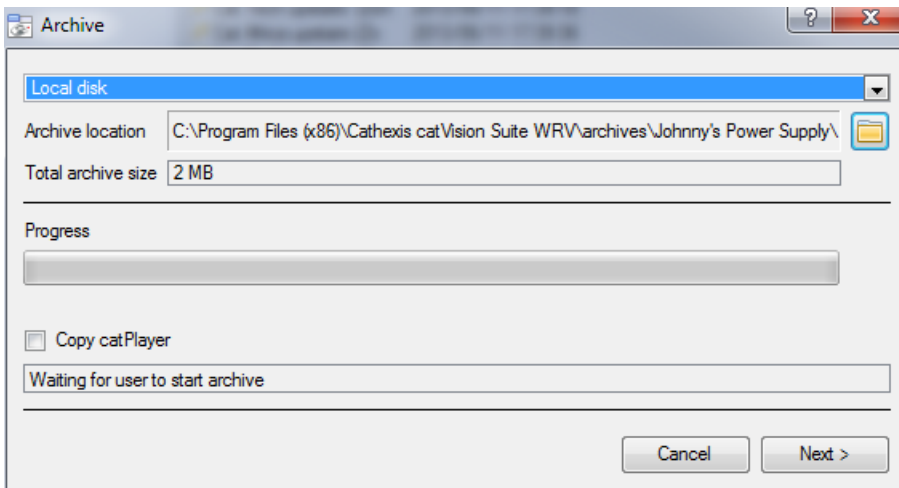
There are a number of different ways to constrain the time these are:

- equal to
- greater than
- greater than or equal to
- less than
- less than or equal to
- between (inclusive)
- between (exclusive)

**Note:** to modify the times click on the Date/Time hyperlink and enter in your parameters in the dialogue that pops up.

## e. Archive Selected Database Recordings

If you wish to save a particular Database entry for later viewing, or to prevent an important piece of information from being overwritten, you may archive it. To archive a selected Database Entry click on the  icon.



The archive interface will tell you where the archive will be created, and allow you to define your own **archive location**.

You will also see the **total archive size** that the Archive will take.

The **progress** bar will indicate how far along the archives creation is.

The  **Copy catPlayer** option exists because the archived recording, for authenticity purposes may only be played back using CatVision’s archive player (which comes with all installations of the CatVision suite). If you are going to be playing the archive on a computer that does not have the CatVision suite, you may check this option, and an archive player will be included in the archive’s folder.

- **Archive multiple Database Entries**

To archive multiple Database entries simply Ctrl-Click, or Shift-Click, the entries that you wish to archive, and follow the procedure outlined above.

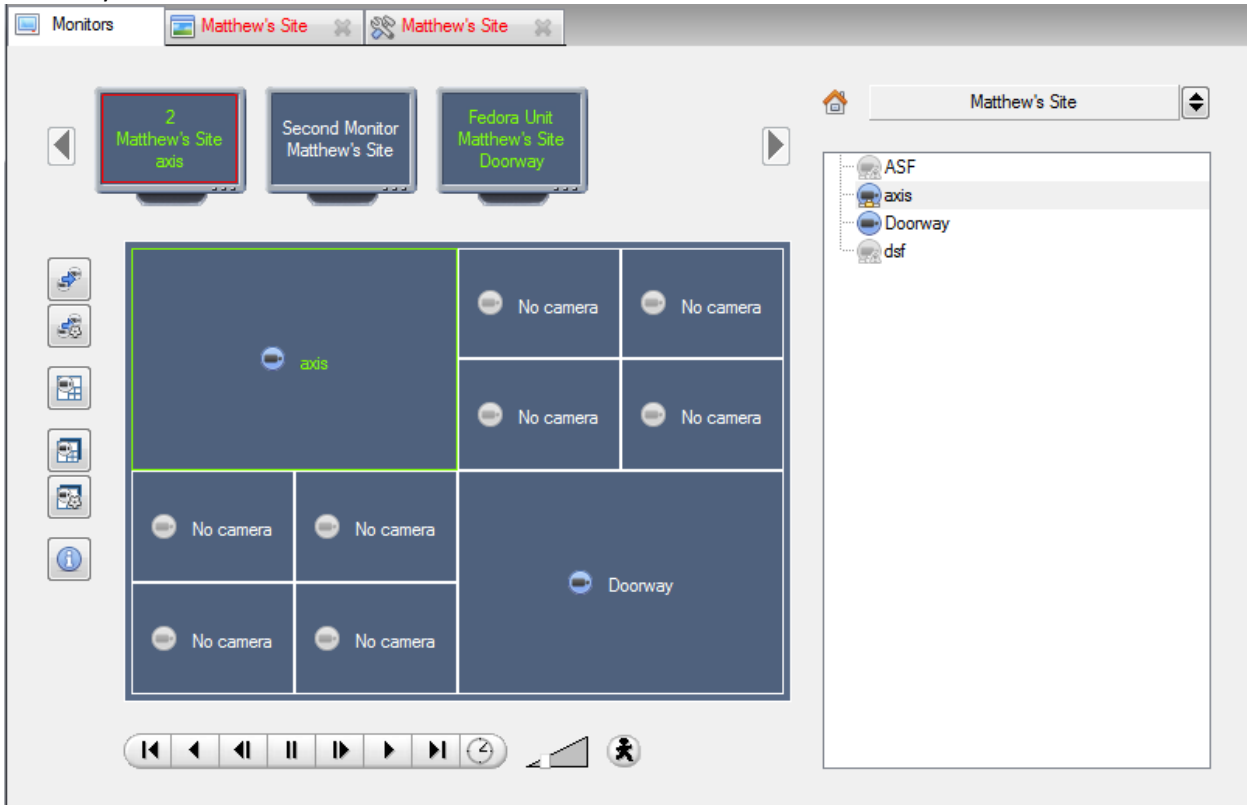
## f. Print an Image from a Video Replay

To print a specific frame from video replay, you may right click anywhere on the on the image, and select **print**.

## 7 Monitors Tab

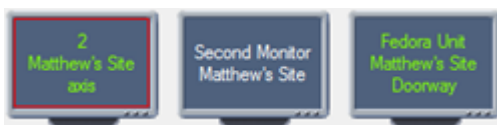
The monitors tab is a tab that gives you full control over the Video Wall. Here you can change the layout, and define camera Sequences, and salvos.

You will not see any video playing on the interface. You will see the names of cameras where they are placed in the layout.

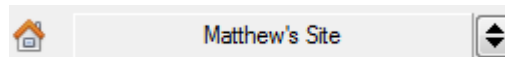


### Open a Site on a Screen

The list of monitors that you see will be representative of the number of monitors that have been added to servers on the site.



To Open a monitor from a site, select one of the available Monitors. Then click the Sites list:




Then select your site.

The Monitor with a red border will be the Monitor whose camera Layout is displayed below it.

### Layout

A layout defines how the cameras appear on the screen. This includes which cameras are present, to how much of the screen an individual camera takes up.


#### **Recall a Layout**

To bring up a particular layout on a screen, click on the  icon, and select the layout name that you desire. The Layout

## Sequence

A Sequence will run a set of cameras, in single camera panel.


**Run a Sequence** - Click on a camera panel.

- Click on 
- Select the relevant Sequence from the drop down menu.

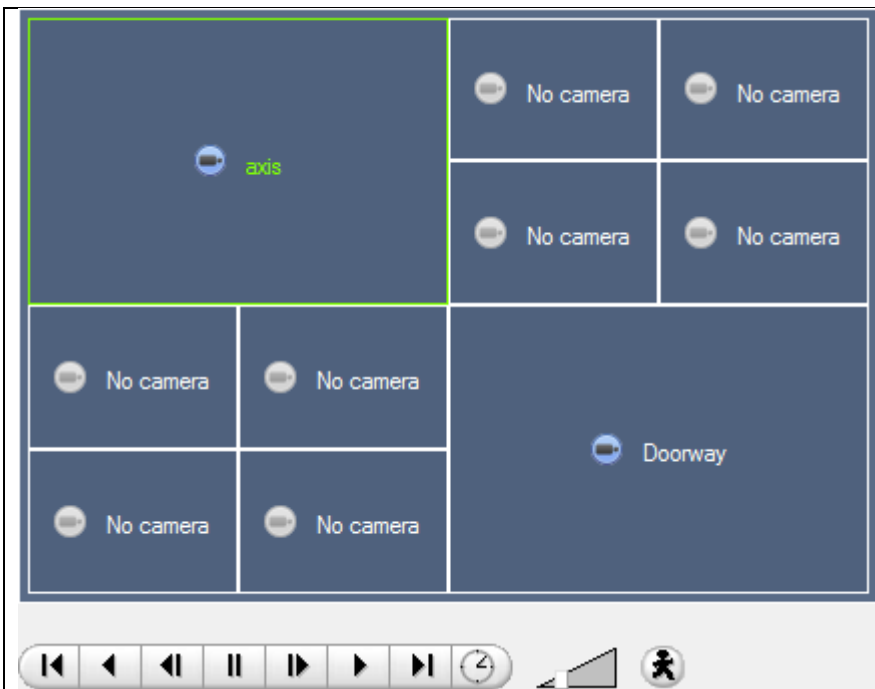
## Salvo

A Salvo is a set of Layouts. This means that the Layout of cameras on the monitor will change, running through a set order, using the pre-defined Layouts.

**Run a Salvo** - Click on a Layout panel.

- Click on 
- Select the relevant Salvo from the drop down menu.

## Virtual Cameras interface

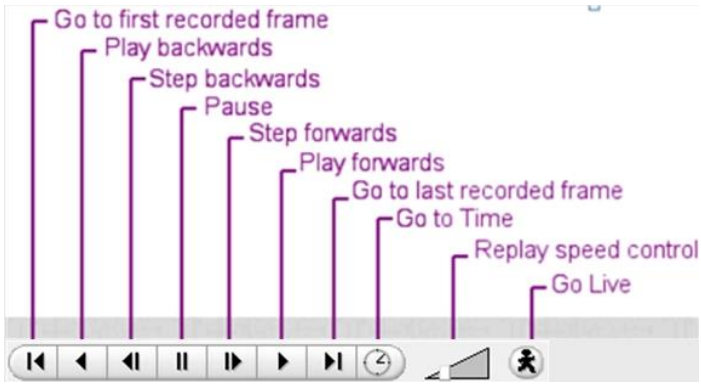
	<p>The virtual cameras interface is the interface where you</p> <ul style="list-style-type: none"><li>• See the Layout that the cameras will take on the Monitor that you have selected.</li><li>• See what cameras are in which panels.</li><li>• May control the overlays on each camera</li><li>• And use the Playback controls to review video on the Monitor.</li></ul>
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- **Individual Panel Settings**

To change the settings of an individual panel middle-click on the panel, this will bring up the following menu:

<b>Set no camera</b>	<b>Set No Camera</b> will make this panel blank
<b>Review camera</b>	This will bring up the recordings of the selected camera. For information on reviewing the camera see the section below, on Review Controls
<b>Next video format</b>	This will cycle through the available video feeds that are available on the selected camera.

- **Review Controls**



**Note:** When a camera has been selected its border, and camera name, will become Green:



## 8 Audio procedures



A microphone and speaker on the menu bar (at the top right of the screen) represent your two local audio hardware resources, local audio input and local audio output.

These two icons represent the *state* of your local microphone and speaker - when a resource is being used, its icon is bright **green** in colour, and when the resource is inactive, its icon is **grey**.

You can look at these icons to see the current state of audio interaction, and you can run your mouse cursor over a **green** icon for information on the activity. However, the actual control of audio is from icons in the Resource Panel and Live remote cameras:

- ***To listen to a remote site by means of the Resource panel***

Open the Resource panel for the remote site, and double-click the remote microphone that you wish to listen to.

> Your local speaker goes green, indicating that your listening is in progress. If you move the cursor over the speaker, you will see a tool-tip describing the remote audio input that is being listened to. You should hear sound from the remote site.

- ***To stop listening to a remote site by means of the Resource panel***

Right click your local speaker, and choose **Stop**.

> Your local speaker goes grey, indicating that your listening is no longer in progress.

- ***To listen to remote Live MPEG by means of the middle-click camera menu***

A Live remote MPEG camera with audio will display a small microphone icon before the name on the camera display:

Middle-click the camera image, and select **Listen** from the menu.

> You will see the icon change from grey to green, to indicate activity. You should also hear sound on your local speaker

- ***To stop listening to remote Live MPEG by means of the middle-click camera menu***

Middle-click the camera image, and select **Stop listening** from the menu.

> You will see the icon change from green to grey, to indicate inactivity. Sound should stop on your local speaker

- ***To speak to a remote site***

Open the Resource panel for the remote site, and double-click the remote speaker that you wish to speak through.

> Your local microphone goes green, indicating that your speaking is in progress.

- ***To stop speaking to a remote site***

Right click your local microphone, and choose **Stop call**.



> Your local microphone goes grey, indicating that your speaking is no longer in progress.

## 9 Other procedures

- **To switch a relay output (e.g. unlock a door, activate a siren)**


Relay outputs can also be switched from the Map (right-click>Set Output / Clear Output).

The action performed when double-clicking a relay in the CatVision resource panel is configurable. The setting is in CatVision menu->Settings->General

1.  Left double-click to toggle the relay between set and clear, **or** Right-click the relay.
  - > A popup menu offers you the choice of Set output (activate it) or Pulse Output (activate it for the period of time that has been configured in catPro Relay Outputs setup).
2. Select an option and click OK.
  - >The relay changes state, and the output changes colour . While active the play/pause image in the middle of the Output icon will change from black to white.
3. To clear a set relay, left double-click or right-click >Clear output

- **To pulse a relay output (e.g. unlock a door for a defined 4-second period)**

Relay outputs can also be pulsed from the Map (right-click>Pulse Output).

1.  Right-click the output and select **Pulse output**.
  - > This pulses the output *for the time that has been set at the unit* (this time is set via catPro interface: Main Menu>System Setup>Relay Outputs). While the output is pulsed the play/pause image in the middle of the Output icon will change from black to white, when it resets it will return to black.

- **To manually trigger a Site Action**

This requires 1) Site action setup 2) Assignment of site action to resources pane 3) Appropriate access rights



Right-click the Site Action in the Resources Pane and then click Execute.



- **To Manually Trigger a Recording**

If User Recording has been setup in the Setup Tab (Site—>Open Tab—>Setup—>Configure Servers), then all you have to do to manually trigger a recording is to middle-click on an individual camera in the Cameras Tab.

### Start the Recording

Middle Click on a camera in the Cameras Tab and you should see **Start recording** as an option in the drop down Menu. Click this to start the recording. If the recording has started you should get a flashing  &  in the top right hand corner of the camera panel.

### Stop the Recording

To stop the recording middle-click on the camera panel and click on **Stop recording**, in the drop-down menu.

**Note:** you may only trigger one camera at a time.

