CathexisVision
Video Monitoring Solutions

CathexisVision 2023

Operator's Manual

005-20230307-439 11 April 2023

Contents

1. Introduction 5

1.1 Supported Languages 5

1.2 Product Interoperability and Support 6

1.2.1 Product Interoperability 6

1.2.2 Product Support 6

2. General Interface 7

2.1 Connect and Log in to Site 7

2.1.1 Open Site 7

2.1.2 Login 7

2.1.3 Change Login 7

2.2 Minimising the GUI 7

2.2.1 Windows 7

2.2.2 Linux 8

2.3 Site Tabs 8

2.3.1 Open a Tab 8

2.3.2 Tab Types 8

2.3.3 Connection Status 8

2.3.4 Default Open Tabs 9

2.4 Menu Bar 9

2.4.1 File Menu 9

2.4.2 Edit Menu 10

2.4.3 View Menu 11

2.4.4 Site Menu 11

2.4.5 Video Wall Menu 12

2.4.6 Tools Menu 14

2.4.7 Settings Menu 14

2.4.10 Help 17

2.5 Status Bar 18

2.6 Local Resources 19

3. Cameras Tab 20

3.1 Open the Cameras Tab 20

3.2 Interface 21

3.3 Camera Panels 21

3.3.1 Overlays 21
3.3.2 Video feed Options Panel 22
3.3.3 Middle-Click on a Camera in Review 24
3.3.4 Hiding/Showing Privacy Zones in the Cameras Tab and Database Review 24
3.3.5 Select, or Move, Cameras 25
3.3.6 Digital Zoom 25
3.4 Resources Panel 26
3.4.1 Resources 26
3.4.2 PTZ Panel 30
3.4.3 Contacts Panel 32
3.4.4 Adjacent Cameras 32
3.4.5 Bookmarks 33
3.5 Review Control Panel 35
3.5.1 Review Controls 35
3.6 Timeline 36
3.6.1 Basic Description 36
3.6.2 Timeline View Types 37
3.7 Smart Search Tools 39
3.7.1 Open Smart Search Tools 39
3.7.2 Snap Search 39
3.7.3 Motion Search 42
3.8 Activity Trails 43
3.8.2 Live Mode 45
3.8.2 Review Mode 45
3.9 Heatmaps 47
3.9.1 View Heatmap 47
3.9.2 Heatmap Parameters 47
3.9.3 Heatmap Results 49
4. Archiving 50
4.1 Review Controls (Timeline and Review Controls Panel) 50
4.1.1 Review Control Panel 50
4.1.2 Timeline 51
4.2 Archiving Video 53
4.2.1 Archiving from Live/Review 54
4.2.2 Apply Archive Settings 54
4.3 Reviewing Archived Video 55

4.3.1 Multi-Camera Archive Player ... 55
4.3.2 Open Archive Viewer/Player ... 56
4.3.3 Archive Viewer/Player Interface ... 56
4.3.4 Export Archive ... 59
4.4 Archive Security ... 59
4.4.1 Inspect Archive ... 59
4.4.2 Verify Archive ... 60
5. Database Tab ... 61
5.1 Navigate to Database Tab ... 61
5.2 General Database ... 62
5.2.1 Locate an Entry ... 62
5.2.2 Replay an Associated Recording ... 62
5.3 Integration/Metadatabase ... 63
5.3.1 Interface ... 63
5.3.2 Viewing an Entry's Associated Recording ... 67
5.3.3 Archive Selected Database Recordings ... 68
5.4 Object Classification Database ... 68
5.4.1 Recordings List ... 69
5.4.2 Database Video Player ... 69
5.5 Pre-2015 Databases ... 70
5.5.1 Filters ... 70
5.5.2 Pre-2015 Playback Controls ... 72
6. Monitors Tab ... 73
6.1 Open a Site on a Screen ... 73
6.1.1 Layout ... 74
6.1.2 Sequence ... 74
6.2 Salvo ... 74
6.2.1 Run a Salvo ... 74
6.3 Virtual Cameras interface ... 75
6.3.1 Individual Panel Settings ... 75
6.3.2 Review Controls ... 76
7. System Alerts and Alarms ... 77
7.1 Types of Technical Alarms ... 77
7.2 Example: Database Technical Alarm ... 78
7.2.1 Notification Icon ... 78
7.2.2 Send Email ... 78

7.2.3 Call Base-Station 78
8. Audio Procedures 79
8.1 Stop/Listen to a Remote Site 79
8.1.1 Listen Via Resource Panel 79
8.1.2 Stop Listening via Resource Panel 79
8.2 Stop/Listen to Remote Live MPEG 79
8.2.1 Listen via Middle-click Camera Menu 79
8.2.2 Stop Listening via Middle-click Camera Menu 80
8.3 Stop/Speak to a Remote Site 80
8.3.1 Speak to a Remote Site 80
8.3.2 To Stop Speaking to a Remote Site 80
9. Other Procedures 81
9.1 Switch a Relay Output 81
9.2 Pulse a Relay Output 81
9.3 Manually Trigger a Site Action 81
10. Video Wall Software 82
10.1 Open Video Wall 82
10.2 Interface 82
10.3 Right-Click 83
10.3.1 Settings 84
11. Conclusion 85

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.

1. Introduction

This ***Operator’s Manual*** explains the **operating procedures** a user might perform, when using the CathexisVision client software. Examples of operating procedures include zooming on a PTZ camera, or reviewing previously recorded footage.

For information on **setups**, refer to the ***CathexisVision Setup Manual***. For example, the Setup Manual explains how to add and set up a new camera, or add a motion detection algorithm to a camera.

1.1 Supported Languages

The CathexisVision GUI supports the following languages (from CathexisVision 2023.2):

- Croatian
- English
- French
- German
- Hungarian
- Italian
- Polish
- Portuguese
- Russian
- Spanish
- Ukrainian

To change the language of the GUI, follow **Settings Menu / General** / **Language**.

Consult the ***CathexisVision Setup Manual*** for a more detailed description of this menu.

A NOTE ON CAMERA CHANNELS

The CathexisVision software packages have **limits on camera channels**. A multi-sensor camera is physically a single device (camera) but it requires a camera channel for each one of the internal cameras. The same applies to an encoder: a 16-channel encoder will account for 16 camera channels on the CathexisVision software, even though it is a single device. Even when a camera or device only uses a single IP license, the camera channel limit will still apply.

1.2 Product Interoperability and Support

Cathexis Technologies releases a new major version of the CathexisVision software annually. The software releases are named according to the year that they are in use (for example, CathexisVision 2017). The major software versions are usually released at the start of the third quarter of the preceding year. (For example, CathexisVision 2017 could be released in the third quarter of 2016.)

For a complete list of currently available licenses please contact your Cathexis representative or consult the latest pricelist. For more information on CathexisVision licensing, refer to the ***CathexisVision Software Product Description and License Document***.

Please note the following regarding product interoperability and support:

1.2.1 Product Interoperability

- All servers on a site should have the same product version installed (for example, CathexisVision 2017). Different product versions on the same site are not supported.
- The CathexisVision user interface will be able to connect to and view software running any service pack of the same version.
- The intention is for the user interface to be able to connect to a product one version earlier (such as CathexisVision 2017 connecting to CathexisVision 2016) but some features may not be available.
- The user interface may be able to connect to and view earlier products (2 or more versions earlier), but there are no guarantees – some or all features may not be functional.

1.2.2 Product Support

- A product/software version will be supported with software updates until the end of the next calendar year. For example, CathexisVision 2020 will be supported until December 2021 (in 2020 and 2021).
- Product support during the first year will include periodic software service packs, containing bug fixes, minor features, and additional integrations and camera drivers.
- Product support during the second year will include periodic service packs, containing critical bug fixes and additional integrations and camera drivers.

USEFUL LINKS

*To view **tutorial videos** on CathexisVision setup, visit https://cathexisvideo.com/resources/videos*

*Find answers to Cathexis **Frequently Asked Questions**: https://cathexis.crisp.help/en/?1557129162258*

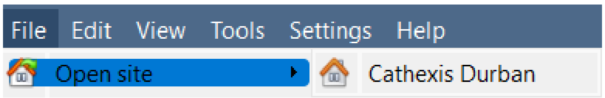
2. General Interface

The CathexisVision interface changes depending on the tab that is opened. However, some elements of the interface are common across all tabs.

2.1 Connect and Log in to Site

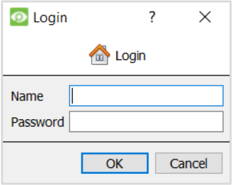
2.1.1 Open Site

The CathexisVision Client is not tied to any particular site. The user must first open a connection to the site they wish to view.


File Edit View Tools Settings Help
Open site
Cathexis Durban

Click on **File / Open Site** to open a list of all sites that have been added to the viewing PC. Select the site to view.

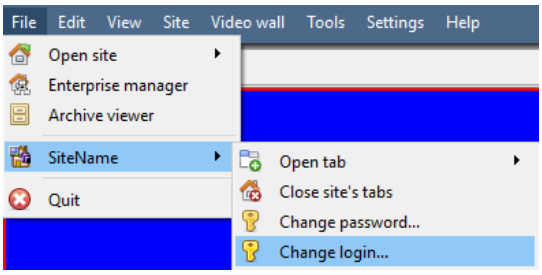
2.1.2 Login

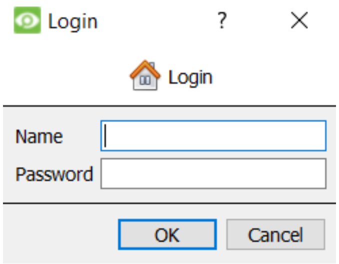

Login
?
Login
Name
Password
OK
Cancel

After selecting a site, the user can enter login credentials.

2.1.3 Change Login

To change login details, follow **Site / Change login…** . Enter details.


File Edit View Site Video wall Tools Settings Help
Open site
Enterprise manager
Archive viewer
SiteName
Quit
Open tab
Close site's tabs
Change password...
Change login...


Login
?
Login
Name
Password
OK
Cancel

2.2 Minimising the GUI

2.2.1 Windows

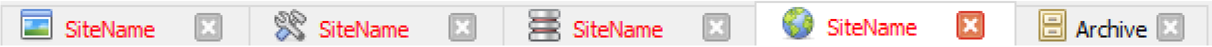
Users are advised not to minimise the CathexisVision GUI in Windows. Microsoft Windows does not allow applications to interrupt what the user is currently doing. Therefore, if an event occurs when the application is minimised, a notification will only pop up if no other active application is running. The taskbar will flash, indicating that there is a message in CathexisVision. However, the popup will not appear on top of other open applications.

2.2.2 Linux

In Linux, the event notification will appear on top of other applications.

2.3 Site Tabs

These are the tabs for one or multiple sites. The tabs show the site name, and the icons show the type of tab.


SiteName
SiteName
SiteName
SiteName
Archive

2.3.1 Open a Tab

Option 1: **File Menu / Site / Open Tab.**

Option 2: **Right-click on open site tab / Open Tab.**

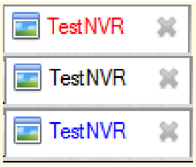
☒ Click on this icon to close a tab.

2.3.2 Tab Types

🖼	**Cameras Tab.**
🛠	**Setup Tab.**
🗄	**Databases tab.**
🌍	**Maps tab.**
🗃	**Archive Viewer tab.**

2.3.3 Connection Status

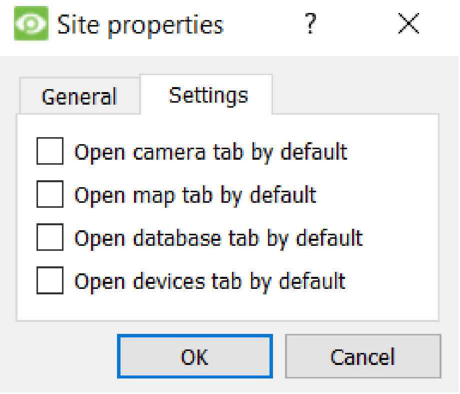
The colour of the text in the tab indicates its connection status:


TestNVR
TestNVR
TestNVR

Red: Online
Black: Offline
Blue: Connecting
Green: Online But not Current

2.3.4 Default Open Tabs

Each site can be configured to automatically load certain tabs, when a connection is made to the site. This is configured from **File / Enterprise Manager / Right-click Site / Properties**.


Site properties
?
General
Settings
OK
Cancel

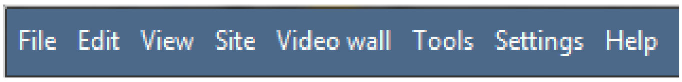
☐ Open camera tab by default
☐ Open map tab by default
☐ Open database tab by default
☐ Open devices tab by default

The **Site Properties** window will open. In the **Settings** tab, the user can select the tabs to open by default.

☒ Click on this icon to close a tab.

2.4 Menu Bar

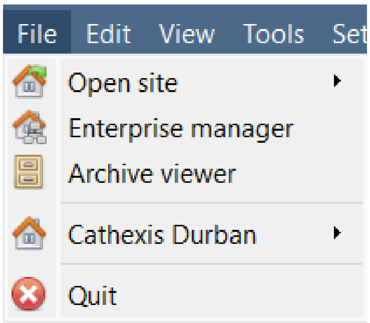
The CathexisVision menu bar is present in all site tabs. However, some site tabs show additional menu options.


File
Edit
View
Site
Video wall
Tools
Settings
Help

This section will detail the different options available to the user through the menu bar of the **CathexisVision GUI.**

2.4.1 File Menu

The CathexisVision File Menu does not change when different site tabs are opened.


File
Edit
View
Tools
Set
Open site
Enterprise manager
Archive viewer
Cathexis Durban
Quit

Open Site: The menu attached to this tab will be a list of the sites that have been added to this unit.

Enterprise Manager: The enterprise manager is where all site management occurs. Users can add, edit or remove sites, and create site folders. In the Enterprise Manager, users can assign Resource Sites.

Archive Viewer: This will open up the Archive Tab. If there is any archived video, it can be viewed here.

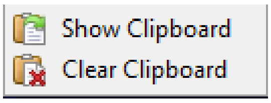
SiteName: this will open site and setup information.

Open Sites: The site names (shown under Archive Viewer and above Quit) represent the sites that currently have connection tabs open in the GUI.

2.4.2 Edit Menu

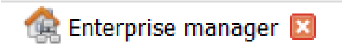
In general, the **Edit** menu only displays these options: **Show Clipboard** or **Clear Clipboard**. When the Enterprise Manager is open, there will be a range of different options.

2.4.2.1 General Edit Menu

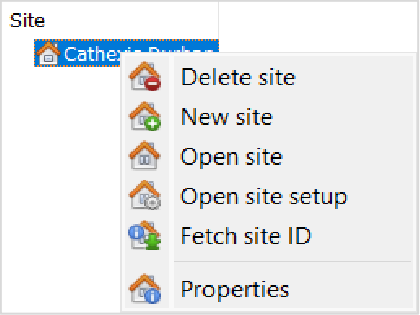

Show Clipboard
Clear Clipboard

The clipboard will only contain the following information: when a screengrab is captured from one of the cameras in the Camera Tab.

2.4.2.2 Enterprise Manager Edit Menu


Enterprise manager

In the Enterprise manager tab, right-click on the site to bring up the following options:

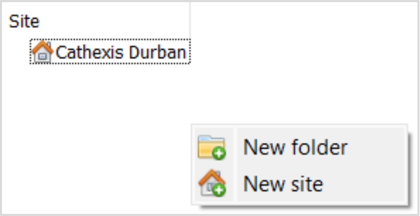

Site
Cathexis Durban
Delete site
New site
Open site
Open site setup
Fetch site ID
Properties

Delete site: delete an existing site.

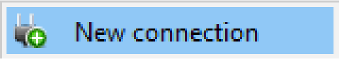
New site: add a new site.

Open site: open an existing site.

Fetch Site ID: gives a created site an ID. A site ID is essential for a site to run. Perform this after creating the site and adding unit connections to it.

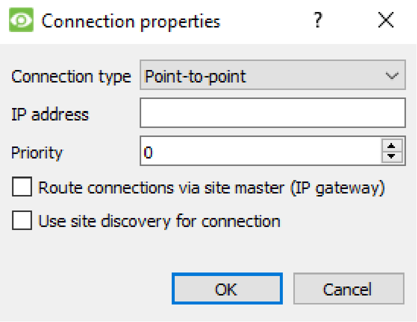

Site
Cathexis Durban
New folder
New site

Right-click the space below the site in the Enterprise Manager. This will bring up the options to create a new folder or new site.


New connection

To add a new site connection, right-click in the box to the right of the site.

In the **Connection properties** window:


Connection properties
?
X
OK
Cancel

Connection type: Point-to-point
IP address:
Priority: 0
☐ Route connections via site master (IP gateway)
☐ Use site discovery for connection

Choose **Connection type, IP address,** and **Priority.**

- The priority is a number assigned to the connection.
- A site can have more than one connection.
- Zero (0) is the lowest priority.
- The connection with the highest priority will be used first to make the connection.

Choose whether to enable **route connections via site master** or to **use site discovery for connection.**

Route connections via site master: these are used for access sites on public IP addresses, or located behind a router.

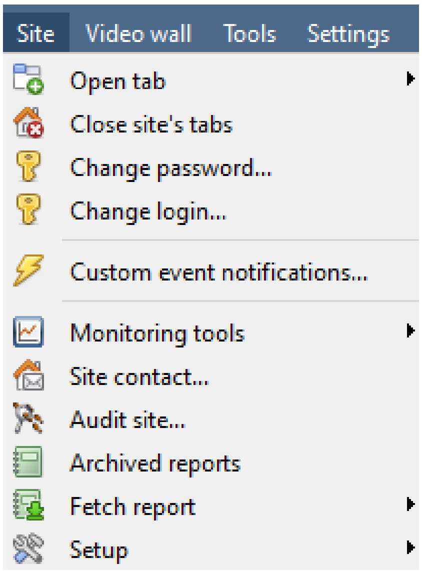
Use site discovery for connection: this is used for the failover client setup. It will be used to discover the failover server on the site running as master during failover, and also when the master servers recover again.

2.4.3 View Menu

The only option available here is to change the GUI view to full screen.

2.4.4 Site Menu

The Site menu will relate to the currently viewed Site. To open a new Site, follow **File / Open Site / Site Name.** This same menu can also be found from a list of all currently open Sites under the **File Menu**.


Site
Video wall
Tools
Settings
Open tab
Close site's tabs
Change password...
Change login...
Custom event notifications...
Monitoring tools
Site contact...
Audit site...
Archived reports
Fetch report
Setup

Open Tab: will open any available tabs (Cameras, Database, Map).

Close Sites Tabs: will close all open tabs for this Site.

Change password: will change the password.

Change Login: will change the user who is logged in.

Custom event notifications…: will set specific event notifications.

Monitoring tools: lays out the Forensic Tool, Stats, and Site Overview.

Site contact: will show the name and details of the Contact person for the Site.

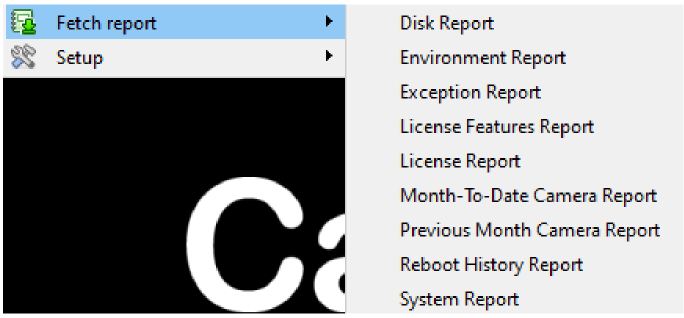
Audit Site…: allows auditing of SiteName details.

Archived Reports: will display a list of previously archived reports.

Fetch Report: will fetch a Site report.

Setup: is greyed out unless logged in as an administrator.

2.4.4.1 Fetch Report


Fetch report
Setup
Disk Report
Environment Report
Exception Report
License Features Report
License Report
Month-To-Date Camera Report
Previous Month Camera Report
Reboot History Report
System Report
Ca

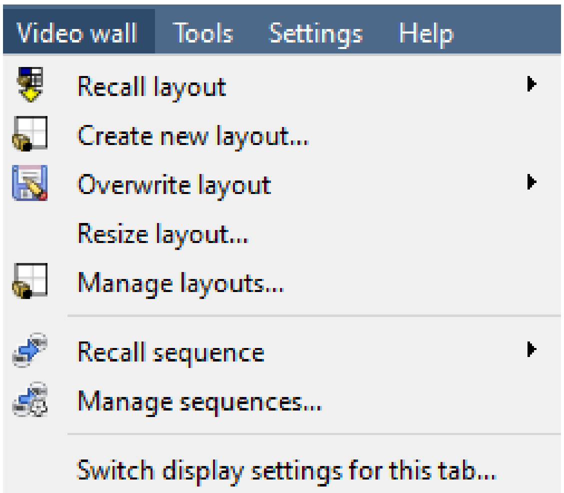
This menu allows a full report to be pulled for the entire site.

Select to pull a template, or pull up a quick report based on the list of variables below the border line.

Note: For individual unit reports, and a full description on the nature and details of reports, see the **Setup Guide / Configure Servers / Setup Tab: Reports** section of the manual.

2.4.5 Video Wall Menu

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


Video wall
Tools
Settings
Help
Recall layout
Create new layout...
Overwrite layout
Resize layout...
Manage layouts...
Recall sequence
Manage sequences...
Switch display settings for this tab...

A **Layout** defines how the cameras appear on the screen, in the Cameras Tab. This includes 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 panel, 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.

2.4.5.1 Recall a Layout

Click on this to bring up a list of existing layouts. Select the desired layout name.

2.4.5.2 Create new Layout

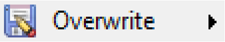
1. Organise cameras on the screen as desired.

   (To expand, double-left click. To reduce, single-right click.)

2. Click on **Layouts / New**. Give the layout a name.

   Click **OK**. (In the Monitors Tab, the user can use layouts created in the Cameras Tab, and vice versa.)

2.4.5.3 Overwrite Layout



Click on this icon to display a list of layouts.

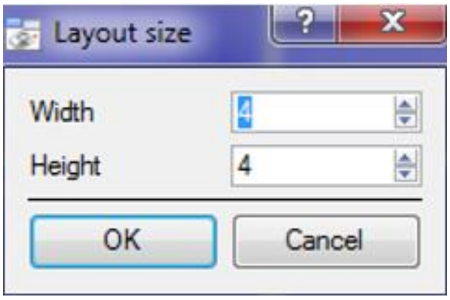
Select one of the layouts to overwrite it with the current panel organisation.

2.4.5.4 Resize Layout

Resize layout...

Click on this icon to change how many cameras are arranged on the screen.

The user can define the number of cameras per row and per column.



Width 4

Height 4

The maximum number of cameras allowed per screen is an 8-by-8 matrix.

This matrix gives a layout with 64 cameras. However, to be practical, 64 cameras would require an incredibly large screen.

2.4.5.5 Recall Sequence

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

Recall sequence

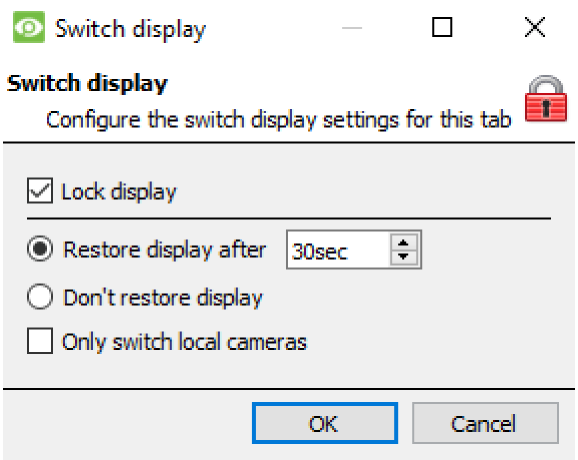
Click on this icon to bring up a list of existing sequences.

Click on the sequence to run.

2.4.5.6 Switch Display Settings For this Tab

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

To define the default Switch Display Settings for all tabs that are opened, navigate to **Settings Menu / Switch Display settings for new tabs…**



Configure the switch display settings for this tab

☑ Lock display

● Restore display after 30sec

○ Don't restore display

☐ Only switch local cameras

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

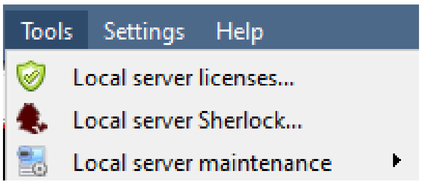
Restore display after: Will define the time after which the Cameras Tab will return to the original display settings, after switching to the Event Cameras.

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: **Lock / unlock** the currently opened Cameras Tab by clicking on the **lock / unlock icon** located at the bottom of the Resource Panel in the Cameras Tab (only appears when the mouse hovers over it).

2.4.6 Tools Menu

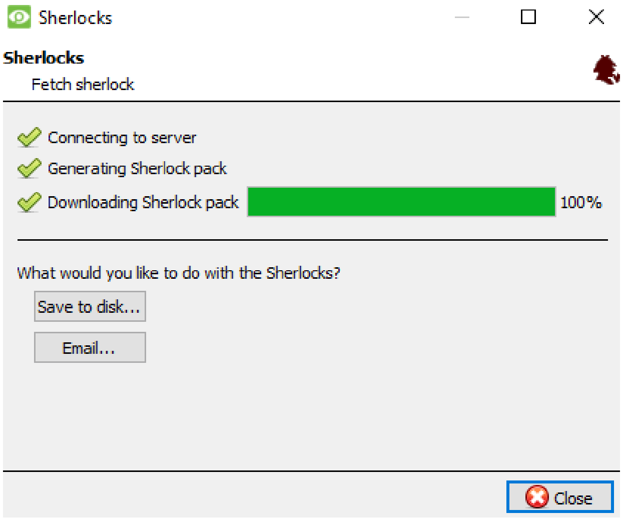

Tools
Settings
Help
Local server licenses...
Local server Sherlock...
Local server maintenance

If on a client PC, this will read “Viewing Station licenses”. If on the server, it will say "Local server licenses". Also retrieve the server licenses from Site, or units, by entering the **Setup / Configure Servers / and right-clicking on the unit.**

2.4.6.1 Licenses

This allows the user to add a license to the Base Station being worked on, not to any of the Recording Servers on the Site.

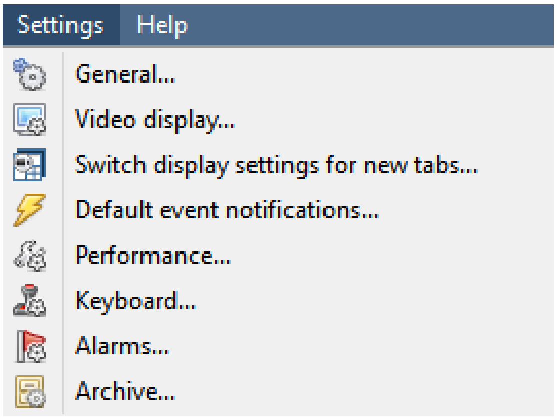
2.4.6.2 Sherlocks


Sherlocks
Sherlocks
Fetch sherlock
Connecting to server
Generating Sherlock pack
Downloading Sherlock pack
100%
What would you like to do with the Sherlocks?
Save to disk...
Email...
Close

Sherlock files are a diagnostic tool, used by the Support Desk. The normal procedure is to email the Sherlock file to the Support Desk, with a description of the problem. The Sherlock file can also be saved to disk.

Note: clicking on “**Email to Recipients”** will open the operating system’s default email client. **Save to Disk** will allow saving of the Sherlock files to any storage attached to the workstation.

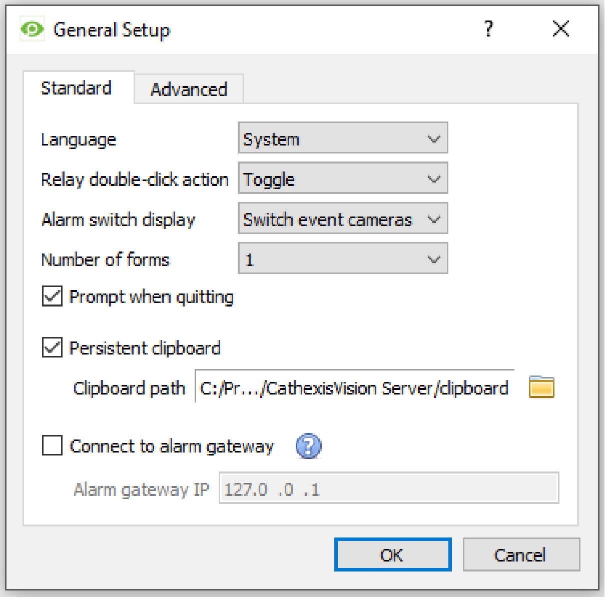
2.4.7 Settings Menu


Settings
Help
General...
Video display...
Switch display settings for new tabs...
Default event notifications...
Performance...
Keyboard...
Alarms...
Archive...

This section deals with the **Settings Menu,** common across all Site tabs**.**

2.4.7.1 General

Standard Tab



Language: System
Relay double-click action: Toggle
Alarm switch display: Switch event cameras
Number of forms: 1
☑ Prompt when quitting
☑ Persistent clipboard
Clipboard path: C:/Pr.../CathexisVision Server/clipboard
☐ Connect to alarm gateway
Alarm gateway IP: 127.0 .0 .1

Language: Select the language of the GUI from the drop-down menu.

Relay double-click action: will set whether or not a relay in the Resources Panel will be changed from its current state, or set to pulse.

Alarm switch display: defines the GUI behaviour for when a user handles Event Alarm. It defines whether or not the display will switch to show the cameras attached to that alarm.

Number of forms: Selects the default number of monitors to be displayed. The default maximum is 6. This option can be overridden by editing the command line. See the Command Line Options section.

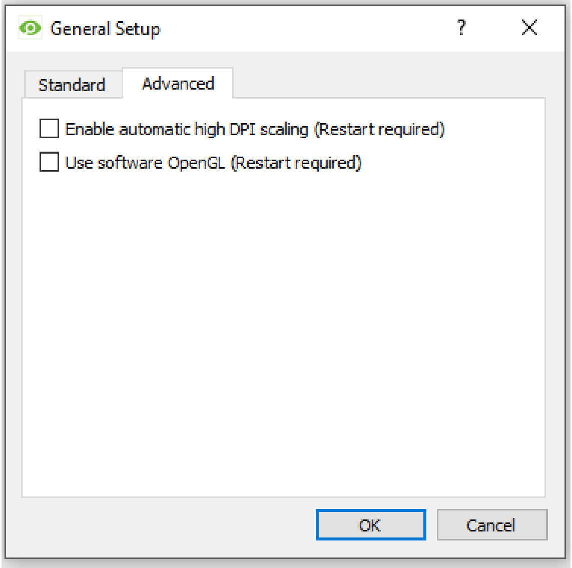
Prompt when quitting: every time CathexisVision quits, this will prompt the user regarding whether or not the current tabs should be reopened when the program is started.

Persistent clipboard: will persist after closing CathexisVision.

Connect to alarm gateway: Check to enable connection to the alarm gateway. Enter the gateway unit's IP address.

Click the **question mark icon (?)** to display license information. These settings can also be configured by editing the command line. See the Setup Manual.

Advanced Tab



☐ Enable automatic high DPI scaling (Restart required)
☐ Use software OpenGL (Restart required)

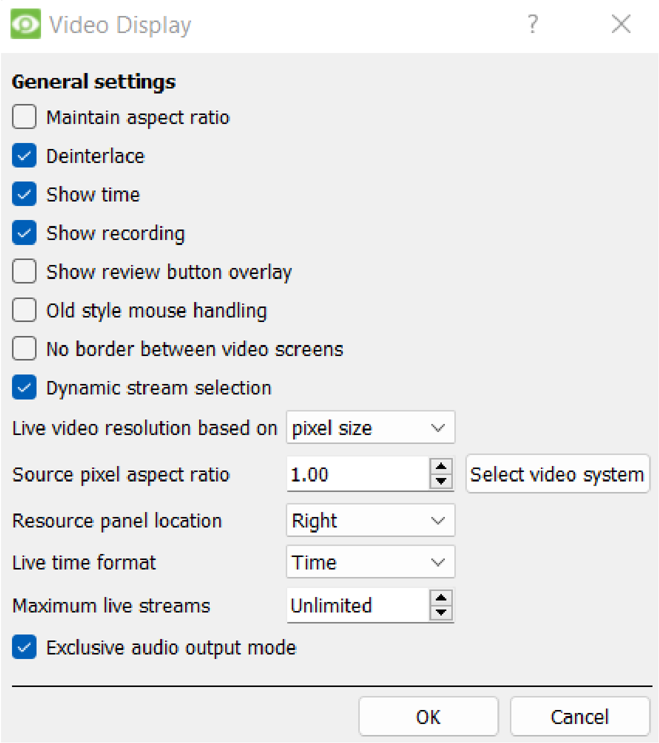
This tab deals with slightly more advanced settings for the GUI.

Check to **enable automatic high DPI scaling of the GUI**.

Check to **enable use of OpenGL software**.

Note: Restart required for both settings.

2.4.7.2 Video Display



Video Display

General settings

☐ Maintain aspect ratio

☑ Deinterlace

☑ Show time

☑ Show recording

☐ Show review button overlay

☐ Old style mouse handling

☐ No border between video screens

☑ Dynamic stream selection

Live video resolution based on: pixel size

Source pixel aspect ratio: 1.00

Resource panel location: Right

Live time format: Time

Maximum live streams: Unlimited

☑ Exclusive audio output mode

General Settings

Maintain aspect ratio: The ratio between the width and the length will be kept constant as the video size changes.

Deinterlacing: Converting interlaced video (such as analogue) to a non-interlaced form.

Show time: Shows the time on the video.

Show recording: indicates (using a red dot) when the video feed in a panel is currently being recorded.

Show review button overlay: will overlay buttons for review on mouse-over, on a camera panel, when its video feed is being reviewed.

Old style mouse handling: Use pre-2017.2 mouse handling.

No border between video screens: Check to remove borders between video screens.

Dynamic stream selection is enabled by default. This will dynamically select the stream based on the display resolution.

Live video resolution: Based on either panel size or pixel size.

Source pixel aspect ratio: Will conform the video source’s correct aspect ratio, making the object look more real-world. For example, when a video of a perfect circle appears oval on the screen, it is an indication that the aspect ratio might be different from the original source.

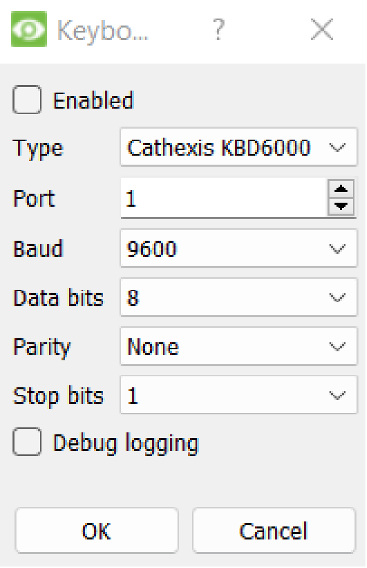
Resource Panel Location: Resource Panel can be configured for left or right of video screen.

Live Time Format: Time or Date and Time.

Maximum Live Streams. An option to limit the number of live video streams in the CathexisVision Camera Tab. The limit is a global limit and applies across all screens. (On an NVR / DVR, this setting is only accessible to an administrator.)

Exclusive audio output mode: determines if only a single audio stream will play when viewing or reviewing video footage, or if simultaneous playback of audio from multiple video feeds is allowed. When the audio output mode is ‘exclusive’, audio playing from one camera will stop if the user selects the audio from a different camera.

2.4.7.3 Keyboard



☐ Enabled
Type: Cathexis KBD6000
Port: 1
Baud: 9600
Data bits: 8
Parity: None
Stop bits: 1
☐ Debug logging

This option is for adding a keyboard to a **Base Station on a client PC.** If adding a Keyboard to a Recording Server, do so via **Site / Open Tab / Setup / Configure Servers / Keyboard / New**.

These settings are pre-set based on the type of board you are using.

2.4.7.4 Alarms

Enter an IP address for a technical alarm server, or gateway, for the viewing software to which to send alarms.

2.4.10 Help

Local server stats	Will show the statistics for the local server if it is an NVR, or for the Viewing Station, depending on which unit is being worked on.
Manuals	The ***QuickStart Guide***, ***Operator's Manual***, ***Setup Manual***, and ***Archiving Guide*** are accessible within the software.
About	Will give information about the License, the Release version, and the email address for Support. The following information will be provided: Version License ID Build ID Architecture Support Email

2.5 Status Bar

The status bar at the bottom on the interface provides information about the status of the software and its components.

The following status icons are visible on the bottom left of the interface:

dvs (Administrator)	CathexisVision Premium	Supplied by CatAfrica
The **username**, and their access level.	This represents the main **license** of the unit.	The distributor of the license.

The following notification icons are visible on the bottom right of the interface:

Icon	Description
	The **cameras notification** will only appear to alert the user when cameras are down. Clicking on it allows one to see which cameras these are.
	The **licensing notification** will be permanently present. It will change colour depending on licensing status. **Green** indicates a healthy licensing status. **Orange** indicates that there are demo licenses due to expire. **Red** means that there are either missing or expired licenses.
	The **performance monitor notification** is permanently present. It will allow viewing of performance statistics.
	The **connection status** icon is permanently present. It indicates the status of the connection to the current Site.
	Video Analytics notification: warns the user when an error has occurred, involving one or more of the video feeds on a site.
	Failover notification will provide information about the status of existing failover servers.
	Database volume / slice or performance notification: It can also indicate when cameras have been configured to record without being assigned a database.
	Failover database synchronization notification: the failover server is transferring recorded footage back to the main server after recovery.
	LPR notification: shows an error when there are LPR license / dongle problems.
	A health alert notification: Check the tooltip to see the health status. If the primary disk is "full" the health alert will be triggered.
	Tamper detection alarm: It will indicate the cameras where a tamper has been detected.
	A gateway notification: this is shown if the gateway database could not be started.

2.6 Local Resources

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

🔈	Local default audio input (for example, microphone).
🎙	Local default audio output (for example, speakers).
🖥	Local monitor.

When active, these resources display bright green. When inactive, the resources are grey.

If the cursor is run over an active resource, a “tooltip” will provide information on the activity. For example, mouse-over a green monitor to see what camera is displaying to that monitor. If there are many local resources, they will be arranged in a scrolling area, with left and right scroll arrows.

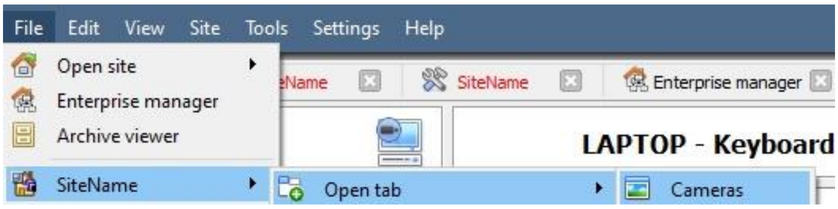
3. Cameras Tab

This section deals with the Cameras Tab. This is the tab through which the operator will view live footage and review recorded footage.

3.1 Open the Cameras Tab

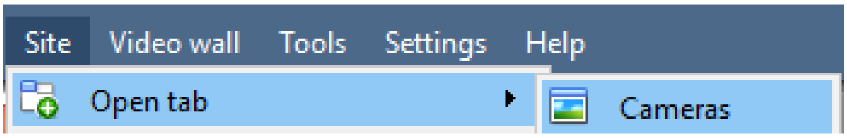
After opening a connection to the desired Site, open the Cameras Tab. There are three ways to do this:

OPTION 1


File
Edit
View
Site
Tools
Settings
Help
Open site
Enterprise manager
Archive viewer
SiteName
Open tab
Cameras
eName
SiteName
Enterprise manager
LAPTOP - Keyboard

File / Your_Site_Name / Open tab / Cameras Tab

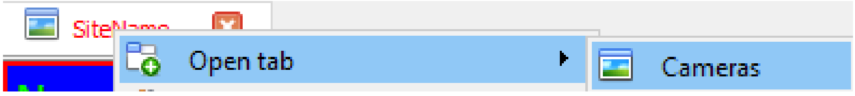
OPTION 2


Site
Video wall
Tools
Settings
Help
Open tab
Cameras

Site / Open tab / Cameras Tab

OPTION 3

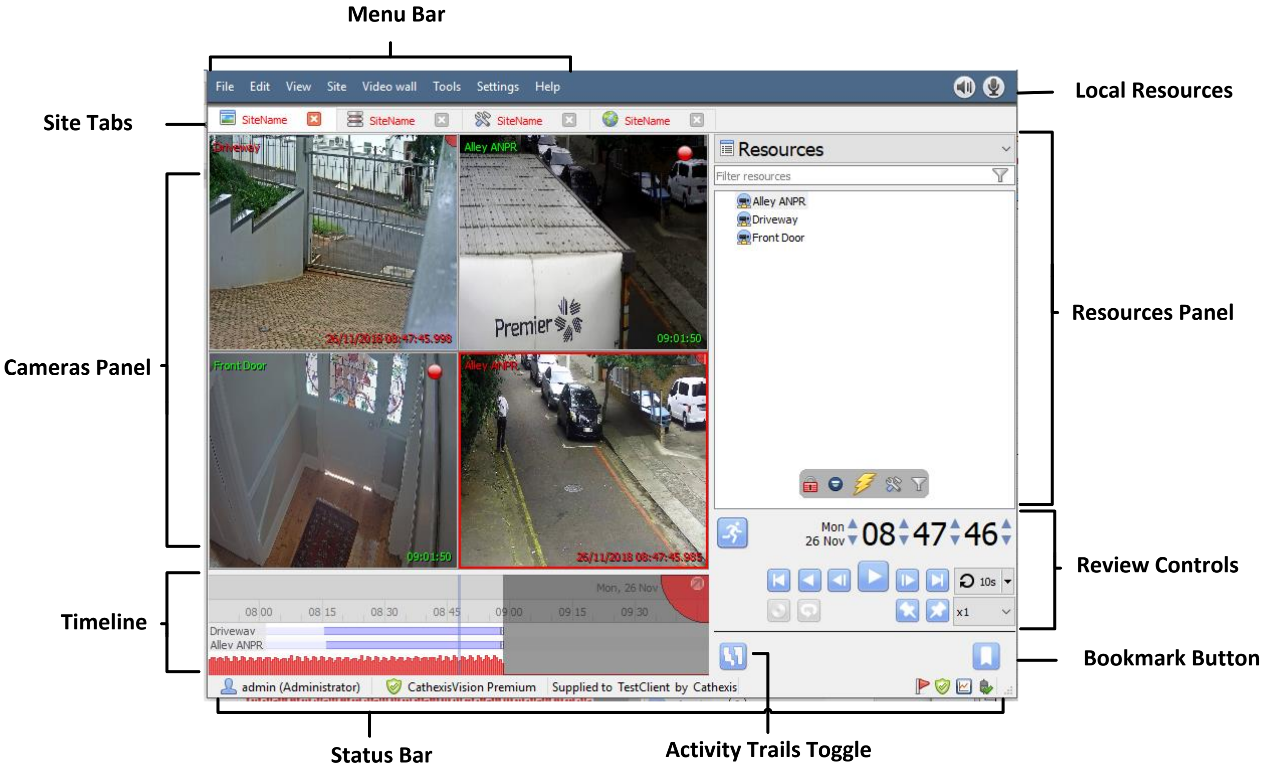
Site must already be open for this option.


SiteName
Open tab
Cameras

Right-click on Your_Site_Name tab / Open tab / Cameras Tab

3.2 Interface

This section describes the CathexisVision Cameras Tab interface and corresponding sections.

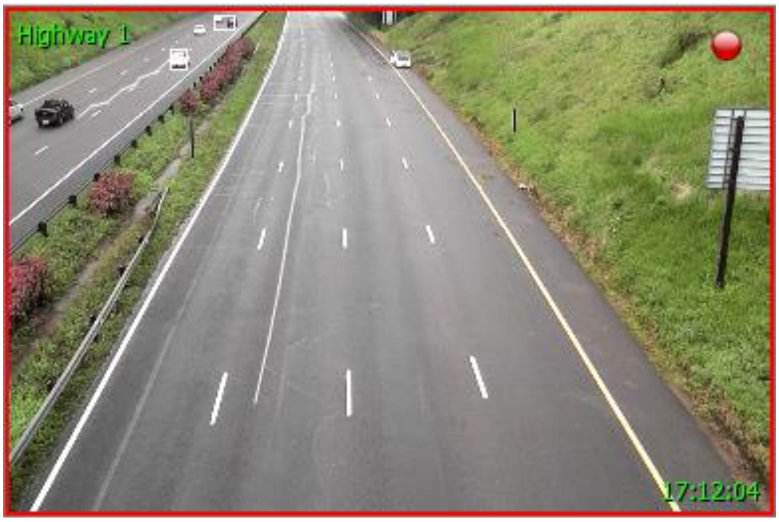

Menu Bar
Local Resources
Site Tabs
Resources Panel
Cameras Panel
Review Controls
Timeline
Bookmark Button
Status Bar
Activity Trails Toggle
File Edit View Site Video wall Tools Settings Help
SiteName
SiteName
SiteName
SiteName
Resources
Filter resources
Alley ANPR
Driveway
Front Door
Mon 26 Nov 08 47 46
10s
x1
Driveway
Alley ANPR
admin (Administrator)
CathexisVision Premium
Supplied to TestClient by Cathexis

3.3 Camera Panels

This section covers the overlays visible on each panel and the options available in the context menu.

3.3.1 Overlays

3.3.1.1 Live


Highway 1
17:12:04

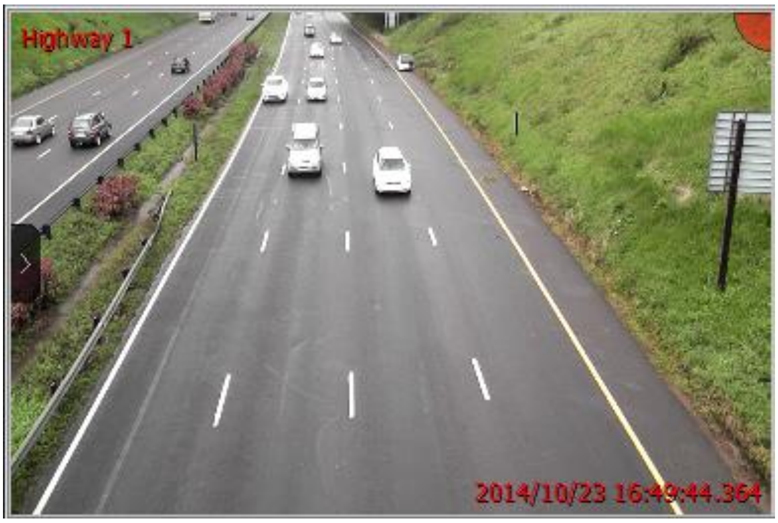
Green text shows that the stream is live.

The text in the top left is the camera's **name**. In this example, the camera's name is Highway 1.

● A red dot in the top-right corner indicates that the camera is currently **recording** to one of the databases.

The **timestamp** is shown on the bottom right.

3.3.1.2 Review



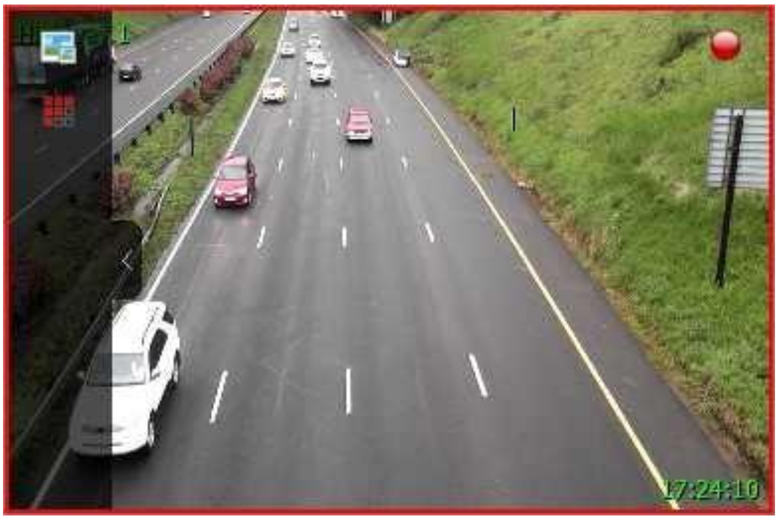
Red text indicates that the video in this panel is being reviewed, from previously recorded footage.

The text in the top left (Highway 1 here) is the camera’s given **name**.

The **date,** and**, timestamp** is seen on the bottom right.

3.3.2 Video feed Options Panel

Hover the mouse over a camera’s panel and a little black- arrow icon will appear on the left- middle of the panel. Clicking on this icon will expand the menu, as seen below:



Click on this icon to select available overlays (if configured and enabled).

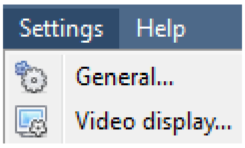
Click on this icon to choose between available video feeds for the selected camera. This is useful to view a camera over a slower link and the camera provides a lower format/ resolution feed.

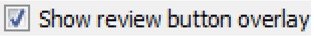
If in review, the following icons will also be present:

Database icon. Allows the user to select which database to review video from.

Smart Search button. Click to perform a Motion Search or SnapSearch. See respective sections later in this manual.

3.3.2.1 Review Button Overlay

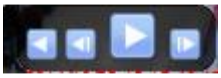

Settings
Help
General...
Video display...



☑ Show review button overlay

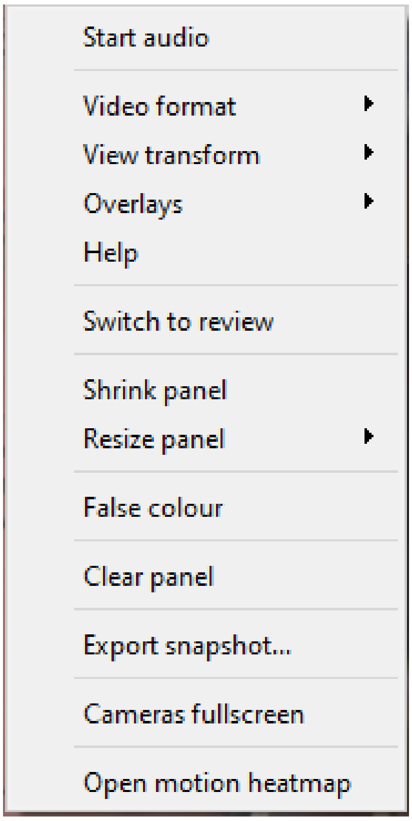
Under **Settings / Video Display**, there is an option that reads “Show review button overlay”.

When checked, the following overlay will be displayed when hovering the mouse over a camera panel where the video is currently being reviewed:



Live Context Menu

To see the context menu, middle-click the mouse on the camera panel of choice.


Start audio
Video format
View transform
Overlays
Help
Switch to review
Shrink panel
Resize panel
False colour
Clear panel
Export snapshot...
Cameras fullscreen
Open motion heatmap

Start Audio: If the camera supports audio, select to listen to live audio.

Video format: Allows the user to select which of the camera’s video streams (which format / resolution) they wish to view.

Hide / show privacy zones: Will hide / show privacy zones on camera image, depending on access rights.

View transform: Allows the user to transform images for cameras with special lenses. (For example, 360-degree cameras.)

Overlays: Allows viewing of the different analytics algorithms that have been applied to this camera’s feed, live in the Cameras Tab.

Help: A help window will pop up on Digital Zoom and PTZ Control within this panel.

Switch to review: Allows switching back and forth between live and review footage.

Export Snapshot…: Opens a window to print snapshot, save to folder, copy to system clipboard, or copy to CathexisVision clipboard. The user may choose to include the camera name and time of snapshot in the overlays.

Shrink panel: Reduces the size of the camera panel.

Resize panel: Gives more resizing options.

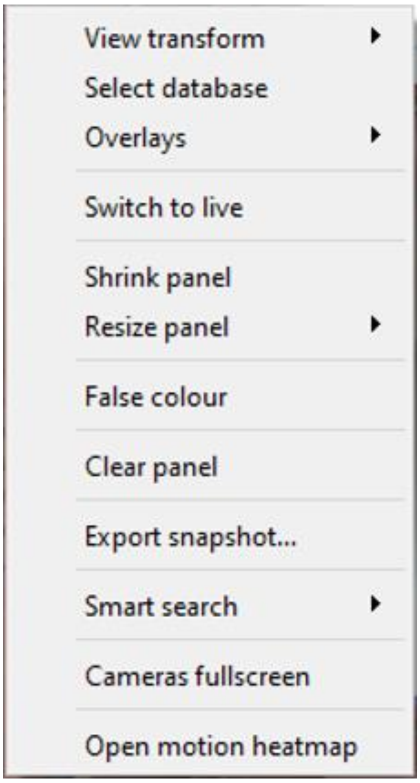
False colour: Changes the colour of the image to false colour.

Clear panel: Removes the camera or cameras from the currently selected panel or panels.

Cameras fullscreen: Fills the entire screen with the Cameras Panel, creating a Video Wall. The same procedure will exit fullscreen mode.

Open motion heatmap: Opens the Motion Heatmap search window.

3.3.3 Middle-Click on a Camera in Review

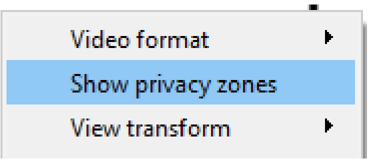

View transform
Select database
Overlays
Switch to live
Shrink panel
Resize panel
False colour
Clear panel
Export snapshot...
Smart search
Cameras fullscreen
Open motion heatmap

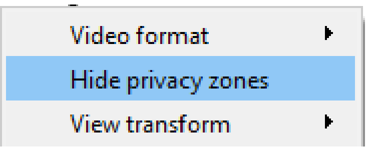
View transform: Allows transforming of images for cameras with special lenses. (For example, 360-degree cameras.)
Select database: If there are multiple databases set up, use this option to set a camera to record to a certain database.
Hide / show privacy zones: Will hide / show privacy zones on a camera image, depending on access rights.
Switch to review / live: Allows switching back and forth between live and review footage.
Export snapshot…: Opens a window to print snapshot, save to folder, copy to system clipboard, or copy to CathexisVision clipboard. The user may also choose to include the camera name and time of snapshot in the overlays.
Shrink panel: Reduces the size of the camera panel.
Resize panel: Gives more resizing options.
False colour: Changes the colour of the image to false colour.
Clear panel: Removes the camera or cameras from the currently selected panel or panels.
Export Snapshot…: Opens a window to print snapshot, save to folder, copy to system clipboard, or copy to CathexisVision clipboard. The user may also choose to include the camera name and time of snapshot in the overlays.
Smart search: Provides access to snap and motion search.
Cameras fullscreen: Fills the entire screen with the Cameras Panel, creating a Video Wall. The same procedure will exit fullscreen mode.
Open motion heatmap: Opens the Motion Heatmap search window.

3.3.4 Hiding/Showing Privacy Zones in the Cameras Tab and Database Review

Privacy zones will be shown by default. The option to hide privacy zones is in the **context menu** of the camera in the **Cameras Tab**, and in the **Database Video Player**. Users with **Access rights** may hide or show **Privacy zones** in both **Live** and **Review** mode, and from within the **Video** and **Integration Database Reviews**.

Middle-click on the camera image to open the **Context Menu**. If the user has the access rights, the option to hide or show privacy zones will be presented.


Video format
Show privacy zones
View transform


Video format
Hide privacy zones
View transform

Note:

1. Only users with the relevant access rights will be able to hide or show privacy zones.
2. Users cannot hide or show privacy zones in archived footage. Privacy zones will be hidden or shown depending on whether the privacy zones are hidden or shown during archiving.
3. Privacy zones will be exported for all snapshots.
4. Privacy zones are stationary. Only areas of the camera image can be hidden. Objects which move out of the privacy zones will be seen.
5. When privacy zones are added to a panoramic camera, the CathexisVision image transformations are disabled.

3.3.5 Select, or Move, Cameras

1. To **select a single camera:** left-click on it.
2. To **select multiple cameras**: hold down CTRL while left-clicking on the cameras to select.
3. To **move a camera** from one panel to another: right-click-and-hold the camera and drag it to the new panel.
4. CTRL + A will **select all cameras** in the Cameras Tab.

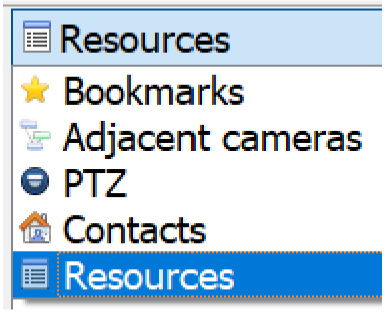
3.3.6 Digital Zoom

The user can zoom in digitally on cameras that have no physical PTZ capability. To do this, select the specific camera in the Cameras Panel. Then:

Zoom in / out:	Scroll the mouse wheel.
Zoom to area:	While holding the SHIFT key, drag-select an area using the left mouse button.
Pan:	Pan the image using the left mouse-button. To do this, hold down the left mouse button, while moving the mouse.

3.4 Resources Panel

The Resources Panel shows a list of resources and available resource tools, depending on which resource type is selected from the Panel selector.



The **panel selector** is a dropdown bar for selecting from a variety of panels. Selecting one of the panels will determine the resources that appear in the resource list.

See below for each panel type and associated resources.

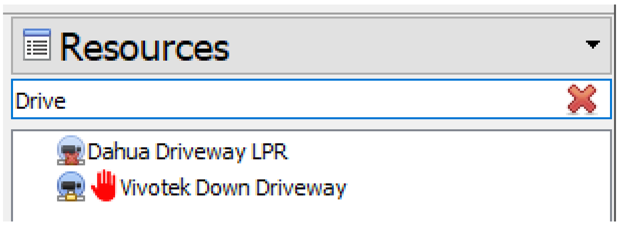
Note: Configure areas 4, 5, and 6 to appear on the left or the right side of the screen. Follow **Settings Menu / Video Display / Resource Panel Location.**

The Contacts are special Site contacts, set up by an administrator. The Resources are the Site resources (such as cameras and relays).

3.4.1 Resources

When the Resources option is selected from the dropdown menu, the panel will populate with all site resources that have been made available on the Site.

3.4.1.1 Filter Resources



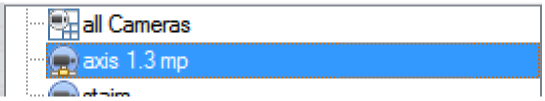
In the Resources Panel, resources may be filtered by typing in part of the resource name.

✖ Click this to clear the search.

3.4.1.2 Select a Camera

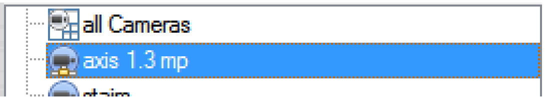
Cameras are selected from the Resources Panel, to be viewed in the Cameras Panel. There are a few ways to do this.

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


all Cameras
axis 1.3 mp

Left-click on a camera, holding down the mouse button. Drag a camera from the Resources panel (first drag the camera horizontally left, and then drag it to the panel to view it in).

Drag a group of cameras from the Resources panel

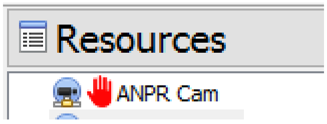
all Cameras
axis 1.3 mp
stairs

The user can select a group of cameras from the Resource Panel and drag them onto the camera display (for Cameras Tab or multisite tab). This is a quick way to populate a screen with cameras.

This is achieved by selecting cameras while holding down the CTRL button on the keyboard. Then, drag them across.

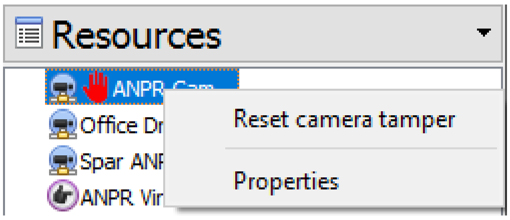
3.4.1.3 Reset Camera Tamper

Depending on access rights, the user may be able to reset a camera tamper if it is being tampered with. In some cases, a camera will remain in a tamper state until the camera has been restored to its normal state. This may include the physical removal of the tamper, such as refocusing the camera lens or correcting the camera's position. However, when necessary, the user may need to clear the tamper state from within the software.


Resources
ANPR Cam

In the **Resources Panel**, a camera tamper icon (red hand) will appear in front of a camera that has been/is being tampered with.

Right-click the camera being tampered with and select **Reset camera tamper**.


Resources
ANPR Cam
Office Dr
Spar ANF
ANPR Vir
Reset camera tamper
Properties

3.4.1.3 Mouse-over Options

With the Resources Panel selected, hover over the bottom of the Resources List. The resource panel’s mouse-over options include:

🔒	Lock display.
⊖	PTZ Controls.
⚡	Event Notifications.
🛠	Configure Resource Panel.
▽	Resource Panel Filter.

Lock Display

Some CathexisVision events will be set up to switch the camera panel to view cameras related to the event. Clicking on this lock will enable or disable this feature.

🔓 🔒 An unlocked display will switch. A locked display will not switch.

PTZ Controls

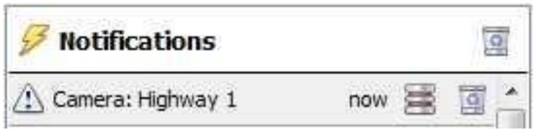
Click this to bring up the PTZ control panel. Alternatively, select PTZ from the Panel Selector.

Event Notifications

If an administrator has set up **Event Notifications** for this unit, then notifications will be received based on these setups.

a. An audio notification. This is a sound clip that gets played when the event triggers.

b. A message notification. This is a message that gets displayed in the notification area of the Resource Panel. It is meant as an unobtrusive feed of events.



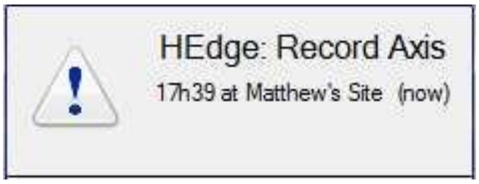
Notifications

Camera: Highway 1 now

Above: A Message Notification

⚡ **Note**: 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.

c. A popup notification. This is a popup message that is shown when the event triggers.



HEdge: Record Axis

17h39 at Matthew's Site (now)

Above: A Popup Notification

Click on the **database icon** in the Notifications Panel to open that camera in the cameras panel, at the point in the database where the event occurred.

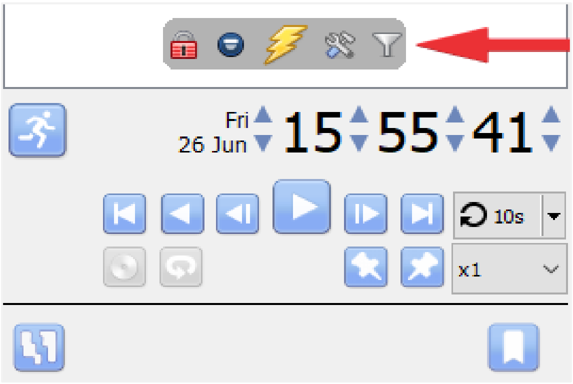
Click on the **recycle icon** to either clear the notification (if clicking on the recycle icon attached to the notification) or to clear all notifications (if clicking on the icon at the top of the notifications panel).

Configure Resource Panel

This section allows the administrator to set up the resources that are pulled through into the resources panel. These include the Unit Resources, Camera Layouts, Camera Sequences, Layout Salvos, and Site Actions.

Note: This topic is part of the Site Configuration and is dealt with in the ***CathexisVision Setup Manual***.

Resource Panel Filter



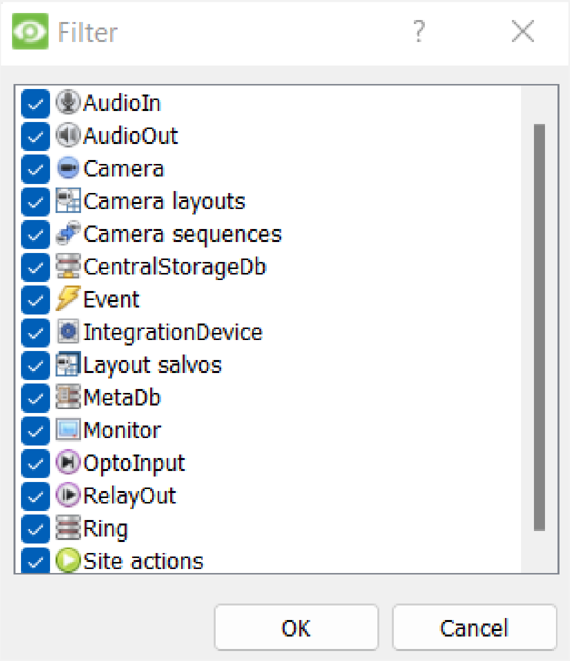
To bring up additional resource options, hover the mouse above the date / time, or at the bottom of the resource window.

Click on the **resource filter icon** to bring up the filter panel window below.

☑ The checked items will appear in the resources panel.

The unchecked items will not appear.

This is useful in sites that have many resources, and the user may want to filter these when searching for a specific resource.



Filter

☑ AudioIn
☑ AudioOut
☑ Camera
☑ Camera layouts
☑ Camera sequences
☑ CentralStorageDb
☑ Event
☑ IntegrationDevice
☑ Layout salvos
☑ MetaDb
☑ Monitor
☑ OptoInput
☑ RelayOut
☑ Ring
☑ Site actions

3.4.2 PTZ Panel

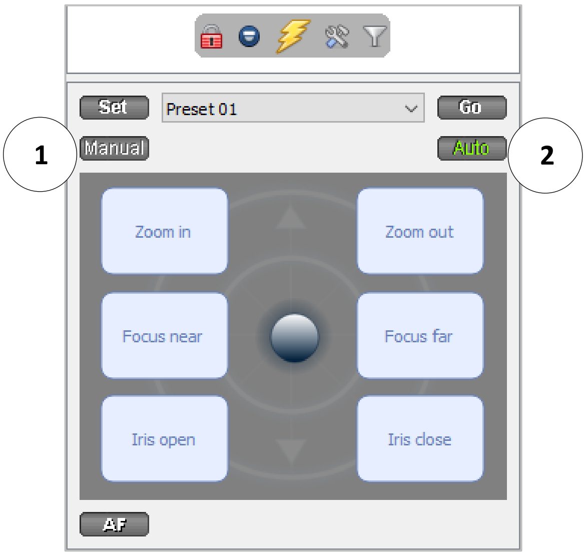
Click on this icon to bring up the PTZ panel. This icon is shown in the Resources Panel, in the mouse hover Options. Alternatively, select the PTZ option from the Panel Selector.

This icon indicates a PTZ camera, in the Resources Panel. With a PTZ camera, an operator can manipulate the camera's direction, zoom, focal distance, and amount of light.

The operator can also control pre-configured camera views, called "Presets".

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

The **Presets controls** enable the user to set Presets, and go to Presets.

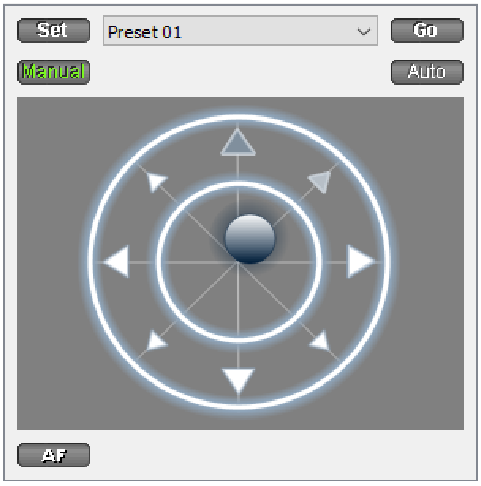


① The **Manual button** is for manual override of the dome. This is to override automated patterns, local tours, etc.

② The **Auto button** relinquishes manual control to let the system regain its automated configuration.

Note: Auto The green text on one of these buttons indicates the mode that currently applies: Manual or Auto.

In the example on the left, the system can function automatically. The screen may change unexpectedly as it runs patterns or tours.

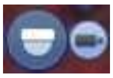


The Dome / PTZ camera can be panned or tilted by dragging the joystick positioned in the middle of the PTZ control block.

3.4.2.1 PTZ Panel

To go to a Preset from the PTZ panel Select the Preset from the dropdown menu. Then click GO. The camera view will change to the Preset.	**To set a Preset from the PTZ panel** 1. Select the Preset from the dropdown menu. 2. Use the joystick controls to establish the camera view, zoom, focus, and light (iris). 3. Click SET. 4. Go to this Preset to check it.
To relinquish manual control of the dome / PTZ camera from the PTZ panel Click Auto. If the system runs remote tours automatically, or switches display based on events, these automated responses will take over.	**Pause a PTZ Tour** PTZ tours can be paused or restarted, per camera. This is achieved by right-clicking on the camera in the Resource Panel and selecting the "Pause / restart PTZ tours" option.
To lighten/darken the live camera view from the PTZ panel Watch the live camera as the iris+, or iris button is pressed. The image will lighten or darken.	**To gain manual control of the dome / PTZ camera from the PTZ panel** (This applies if the system runs remote tours automatically, or switches display based on events.) Either click Manual, or move the software joystick.

3.4.2.2 Individual Camera Panel Zoom Options

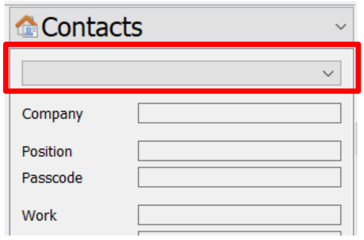


Note: If the camera supports any of the above then one can switch between digital and PTZ control using the icons on the bottom-left of the camera panel.

Zoom In / Out Scroll the mouse wheel. To do an accelerated zoom, hold down the SHIFT key while scrolling the mouse wheel.	**Zoom to Area** Holding the SHIFT key, select an area using the left mouse button.
Zoom out completely Press the Z key **or** hold down the left mouse-button for half a second, and select the zoom-out menu option.	**Centre on Point** Holding the shift key, press the left mouse button **or** Hold down the left mouse button for half a second, and select the centre on point menu option.

3.4.3 Contacts Panel

The contacts panel displays the special site contacts and their details that have been set up by the Site administrator.

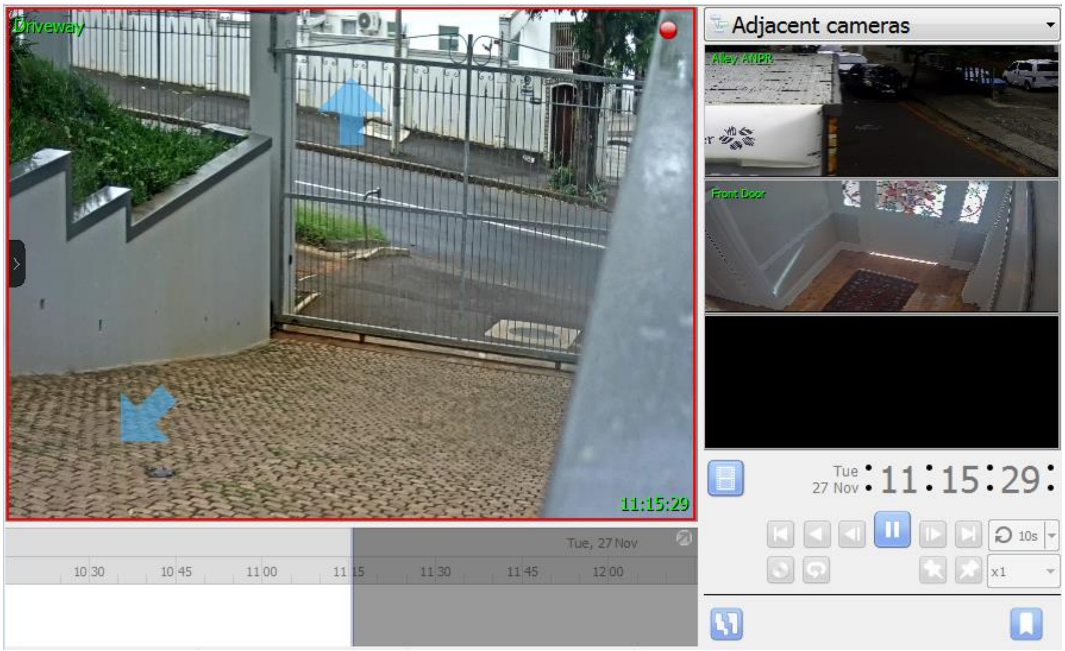

Contacts
Company
Position
Passcode
Work

Contacts that have been added will be listed in the top drop-down menu (outlined in red in the image).

Select the desired contact from the dropdown list to display their details.

3.4.4 Adjacent Cameras

Adjacent cameras are set up by the site administrator. Adjacent cameras allow operators to navigate quickly and seamlessly between cameras. This feature allows the user to follow a person in real-time using linked cameras, which appear over the camera image as overlays. (See the blue direction arrows.)


Driveway
11:15:29
Tue, 27 Nov
10:30
10:45
11:00
11:15
11:30
11:45
12:00
Adjacent cameras
Alley ANPR
Front Door
Tue
27 Nov
11:15:29
10s
x1

Select **Adjacent Cameras** from the panel selector.

3.4.4.1 Resources List

The list of cameras that are adjacent to the currently selected camera will be displayed as thumbnails in the **adjacent cameras resource** list. Double-click on a camera to switch to it.

3.4.4.2 Navigate

Click the blue arrows to navigate to cameras that are adjacent to the current camera. The direction of the arrow (the direction of the connection between the cameras) is determined by the system administrator when adjacent cameras are configured. The user may also double-click on a camera name from the Resources list to switch to it.

3.4.5 Bookmarks

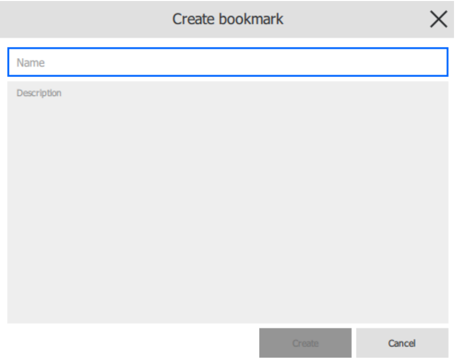
Bookmarking is a feature which preserves camera layouts in live / review. Note:

1. When a bookmark is recalled, any cameras that were **live** will switch to **review** at the time the bookmark was created.
2. Bookmarks will only contain resources to which the user has access.
3. Bookmarks are stored locally (on the client PC). If the same user logs in from a different unit, the saved bookmarks will not be available.
4. Bookmarking will **not** save:
    a. PTZ position,
    b. Current digital zoom parameters,
    c. Live camera sequence running in a panel.
5. Bookmarks do not prevent data from being overwritten on the server. If the user requires bookmarked video to be retained, then the user should create an archive.

3.4.5.1 New Bookmark

To create a bookmark, lay out the cameras as desired.

Then click the button located beneath the Review Controls Panel.



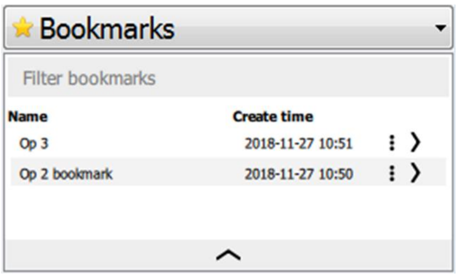
In the window that opens, give the bookmark a name and a description. Click **Create** when done.

Note:

1. When a bookmark is recalled, any cameras that were **live** will switch to **review** at the time the bookmark was created.
2. Bookmarks will only contain resources to which the user has access.

3.4.5.2 Bookmark Panel

Once bookmarks are created (above), they can be viewed and managed in the bookmarks panel. Select bookmarks from the Panel Selector.



Name	Create time
Op 3	2018-11-27 10:51
Op 2 bookmark	2018-11-27 10:50

To filter through bookmarks, enter a search term.

Click column names to sort.

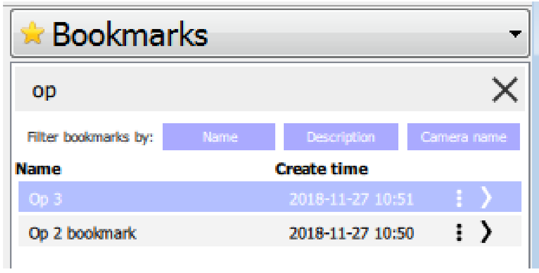
› Click on this arrow to open bookmark.

Alternatively, double-click on the entry.

⋮ Click on the three dots to show bookmark options, to export / delete bookmark.

Click the arrow at the bottom of the panel to show more information about the selected bookmark.

Filter Bookmarks


Bookmarks
op
Filter bookmarks by:
Name
Description
Camera name

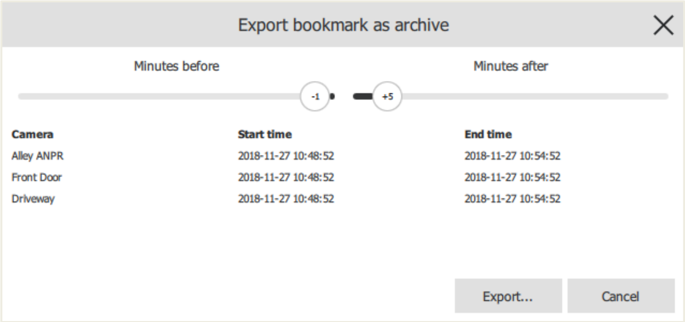
Name	Create time
Op 3	2018-11-27 10:51
Op 2 bookmark	2018-11-27 10:50

Enter a search term in the text field. The search term can be a camera name, or an excerpt from the description.

Associated results will be displayed.

Results can be further filtered by name of bookmark, bookmark description, or name of camera in the bookmark.

Export Bookmark


Export bookmark as archive
Minutes before
Minutes after
-1
+5
Export...
Cancel

Camera	Start time	End time
Alley ANPR	2018-11-27 10:48:52	2018-11-27 10:54:52
Front Door	2018-11-27 10:48:52	2018-11-27 10:54:52
Driveway	2018-11-27 10:48:52	2018-11-27 10:54:52

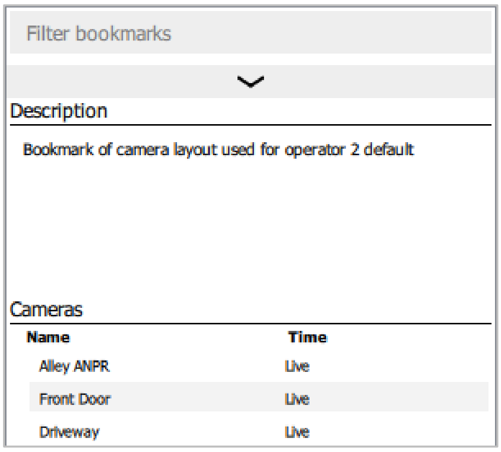
Bookmarks may be exported as archives.

⋮ Click on this icon.

The list of cameras in the bookmark will be shown. Set the Start / End time of the archive by dragging the sliders to determine how many minutes before / after the time of bookmarking the archive should be.

The times listed next to each camera will adjust accordingly. Click **Export** to bring up the archive window. See archiving section for more. **Note**: The bookmark's name will be used as a default filename. The bookmark's description will be used as the default archive description.

Display Bookmark Information


Filter bookmarks
Description
Cameras

Bookmark of camera layout used for operator 2 default

Name	Time
Alley ANPR	Live
Front Door	Live
Driveway	Live

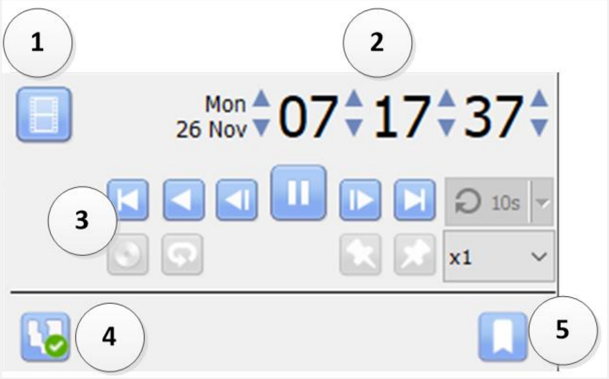
To display more information about the selected bookmark, click the arrow at the bottom of the bookmarks Resource Panel.

Bookmark description (if any) will be shown.

List of cameras and time of bookmarking will be shown.

To close this panel, click the arrow again.

3.5 Review Control Panel


1
2
Mon
26 Nov
07
17
37
3
10s
x1
4
5

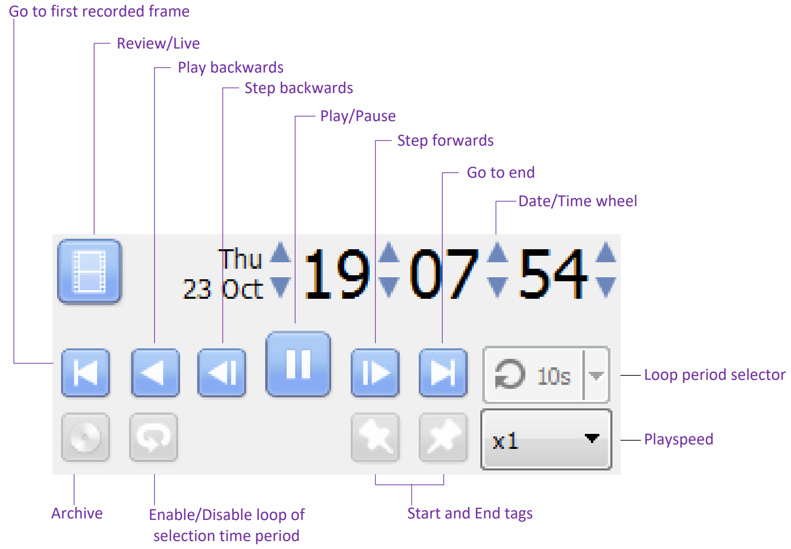
1. **Toggle Live / Review mode.**

   In Review, click to return to Live.

   In Live, click to switch to Review.

2. **Go to date / time.**
3. **Review Controls**
4. **Toggle Activity Trails on / off.**
5. **Bookmarks.**

3.5.1 Review Controls


Go to first recorded frame
Review/Live
Play backwards
Step backwards
Play/Pause
Step forwards
Go to end
Date/Time wheel
Thu
23 Oct
19
07
54
10s
Loop period selector
x1
Playspeed
Archive
Enable/Disable loop of selection time period
Start and End tags

Note: When a camera is put into review mode, and another camera is selected for the same panel, that camera will retain the review time of the original camera.

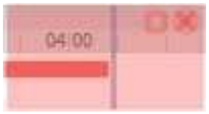
3.5.1.1 Playback Speed

Select a play speed up to **x64** from the Play speed options. Then click **Play** to play forwards at the selected play speed, or click **Play Backwards** to rewind at the selected play speed.

3.5.1.2 Selecting a Period for Review

After finding something of interest, the user may wish to loop through the recorded footage around that event. (This can also be useful when selecting footage for archive). One may move the timeline around by left-click- dragging it. There are two ways to select the period for review.

1. **Tagging:** Click on this icon to tag the start of the selection.
   Click on this icon to tag the end of the selection.
2. **Shift-selection:** This is done by holding down the SHIFT key, while click-dragging the selection with the left mouse button. The selection will look like the image below.

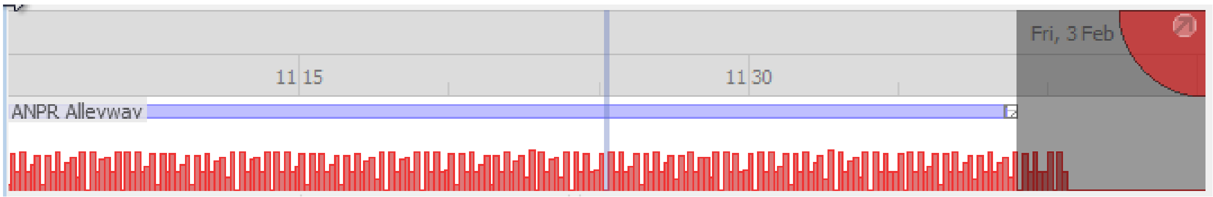


The selected areas will appear as shown on the left. By default, it will be set to loop. This can be seen when looking at the loop icon.

This means that it will loop to the beginning of the selection, as it gets to the end of the selection.

This means that the video will continue to play past the end of the selection.

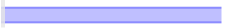
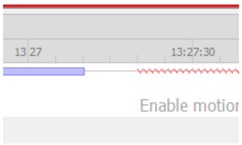
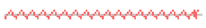
3.6 Timeline

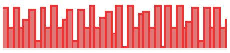
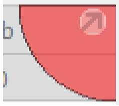


The timeline at the bottom of the GUI indicates where the currently selected cameras are in time.

Note: although review legacy video is available in CathexisVision 2015 and onwards (recordings made on pre-2015 systems) the timeline will remain blank.

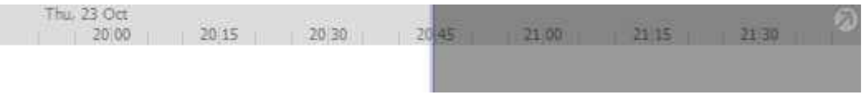
3.6.1 Basic Description

GENERAL CATEGORY	SYMBOL	DESCRIPTION
Recordings	  	**This solid bar** indicates there are recordings **for this camera**. **The thin grey line** indicates that the **server was running,** and the **camera was online**, but there are **no recordings.** **A red jagged line** indicates that the **camera is down.**

		Actions: - Click anywhere to go to a time in recording, or drag the timeline to the desired location. - Hover mouse over recording area to display thumbnail preview image of recording.
Motion Analytics		This indicates that this camera has **a motion database**, and that there has been activity in the area.
		Actions: Click anywhere to go to a time in recording, or drag the timeline to the desired location
Popout		Click this to pop the timeline out into a detached mode. Click the arrow again to dock it.

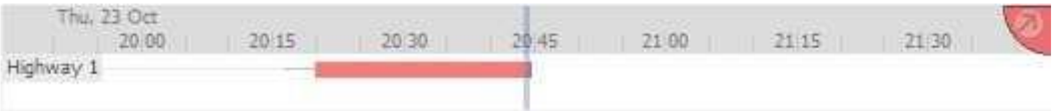
3.6.2 Timeline View Types

3.6.2.1 Live View Timeline

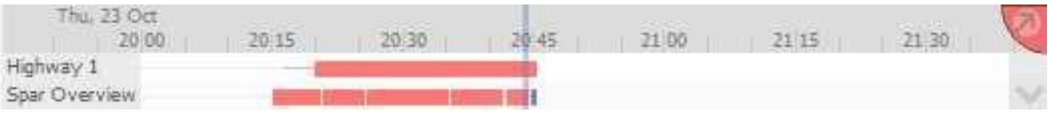

Thu, 23 Oct
20:00
20:15
20:30
20:45
21:00
21:15
21:30

The live view timeline simply shows the current time at the intersection between white and grey.

3.6.2.2 Single and Multiple Camera Review Timeline


Thu, 23 Oct
20:00
20:15
20:30
20:45
21:00
21:15
21:30
Highway 1

When reviewing a camera's recorded video, one will see the timeline change to show red blocks. These blocks on the timeline represent recorded events.

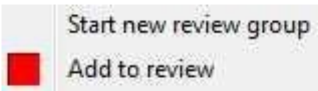

Thu, 23 Oct
20:00
20:15
20:30
20:45
21:00
21:15
21:30
Highway 1
Spar Overview

If multiple cameras are selected to review, they will appear stacked on the timeline.

3.6.2.3 Synchronised/Independent Review

By default, all reviews are synchronised, when multiple cameras are selected for review. It is possible to review cameras independently.

When already reviewing a camera, middle-clicking on a camera's panel will display the following options in the context menu:



Start new review group will add this camera to a separate group of review cameras, which will be asynchronous to the original review group. The new review group is indicated by the tag on the top-right of the video. Each review group will get its own colour.

Add to review will add this camera to the already existing review group. As review groups are added, the number of options here will increase as a result.

3.6.2.4 Zoom in on Timeline

There are two ways to zoom in on a section of the timeline:

1. Mouse over the timeline (during review) and roll the mouse-wheel forwards. Roll back to zoom out.

2. Shift-select a section of the timeline.

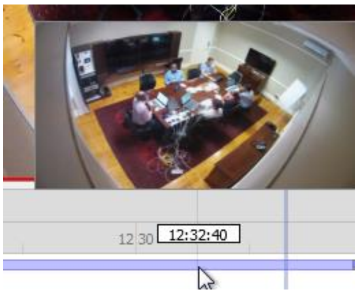
This is done by holding down the **SHIFT key**, while click-dragging the selection with the left mouse button. The selection will look like the image to the left.

To **zoom in** on this selection, click on this icon.

3.6.2.5 Move the Timeline with the Mouse

Move backwards and forwards in time by left-click dragging the timeline in the desired direction of travel.

3.6.2.6 Hover over Timeline



If a camera has recordings, one may hover over the timeline to display a thumbnail preview image of the recording at the selected time.

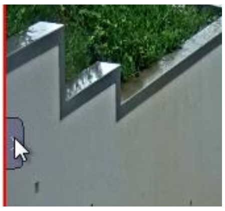
3.7 Smart Search Tools

Smart Search is a collection of tools which intelligently search video footage. These are **Motion Search** and **Snap Search**, and are dealt with below. **Note**: Camera must be in review for Smart Search tools to appear.

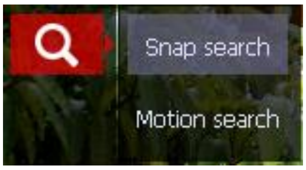
3.7.1 Open Smart Search Tools

First, turn to review mode.

OPTION 1

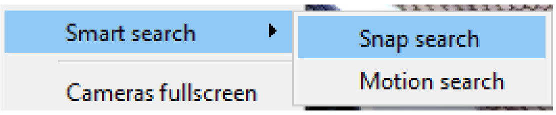


Open the Video Feed Options Panel by hovering near the left of the panel and clicking the arrow that appears.


Snap search
Motion search

Click the **Search Tools** icon and select either **Motion Search** or **Snap Search**.

OPTION 2

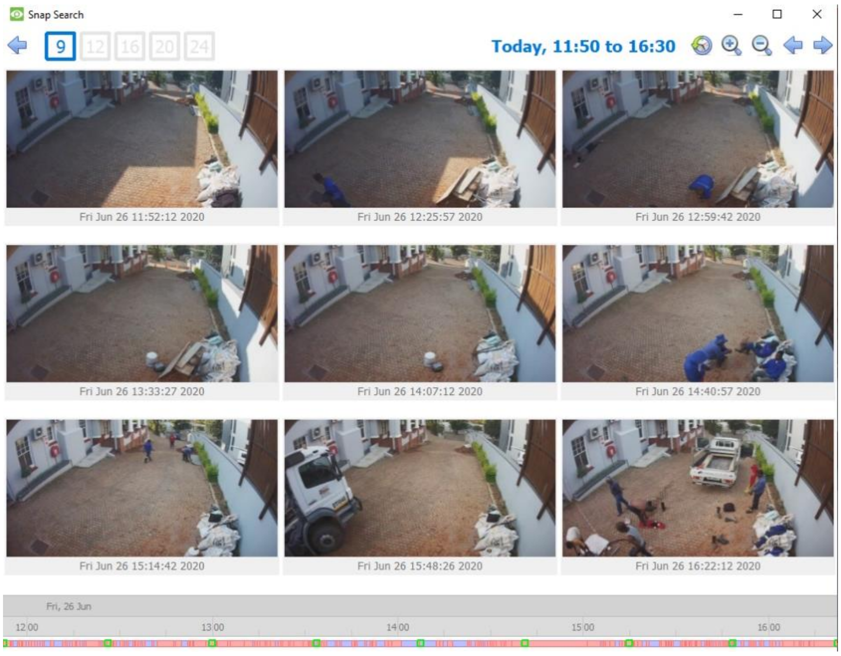

Smart search
Cameras fullscreen
Snap search
Motion search

Middle-clicking on the camera image and selecting **Search / Snap search.**

3.7.2 Snap Search

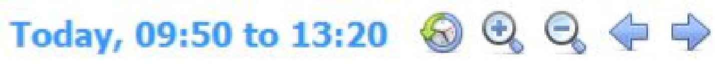
While in review mode, the user can search the database recordings for frames which match the current still-image on the screen.

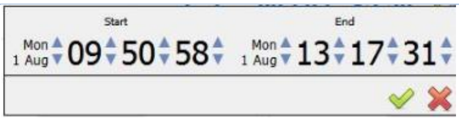
3.7.2.1 Snap Search Window


Snap Search
9
12
16
20
24
Today, 11:50 to 16:30
Fri Jun 26 11:52:12 2020
Fri Jun 26 12:25:57 2020
Fri Jun 26 12:59:42 2020
Fri Jun 26 13:33:27 2020
Fri Jun 26 14:07:12 2020
Fri Jun 26 14:40:57 2020
Fri Jun 26 15:14:42 2020
Fri Jun 26 15:48:26 2020
Fri Jun 26 16:22:12 2020
Fri, 26 Jun
12:00
13:00
14:00
15:00
16:00

1. **Frame Display**. Choose how many frames to display on the page.
2. **Time Range Control**. Set the time range of the search, zoom in/zoom out to narrow or widen the time range, or go backwards and forwards between time periods.
3. **Frame Area**. All frames which are similar to the image used to search will be displayed in this area.
4. **Timeline**. Use this timeline to navigate between relevant frames.

3.7.2.2 Time Range Control


Today, 09:50 to 13:20

Today, 09:50 to 13:20	The current time range in which frames are being viewed. If the time range is changed, it will be reflected here.	
	Set the time range. Clicking this icon will bring up the window below, in which the range may be set.	
	 Start Mon 1 Aug 09 50 58 End Mon 1 Aug 13 17 31 ✓ ✗	Set a Start and End time range. ✓ Click this to **Accept**. ✗ Click this to **Cancel**.
⊕ ⊖	Zoom in to narrow the time range. Zoom out to widen the time range.	
← →	Go to next / previous time periods. The user can navigate between time range periods using these buttons (depending on the time range set), using the clock icon above. The length of the period is determined by how narrow or wide the set time range is.	

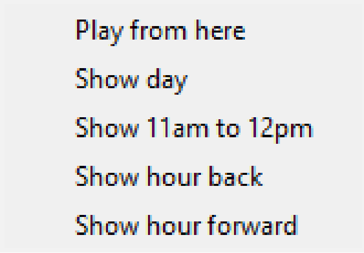
3.7.2.3 Frame Area Controls

Several controls are available in the frame area. These are:

Double-click a frame

Double-click on a thumbnail to start playback from that frame in the CathexisVision GUI review. The **Snap Search Window** will remain open.

Right-Click a Frame



Play from here
Show day
Show 11am to 12pm
Show hour back
Show hour forward

Play from here: this will open an embedded video player and start playback of the recording from the frame selected.

Show day: this will display frames from that day over 24 hours (midnight to midnight).

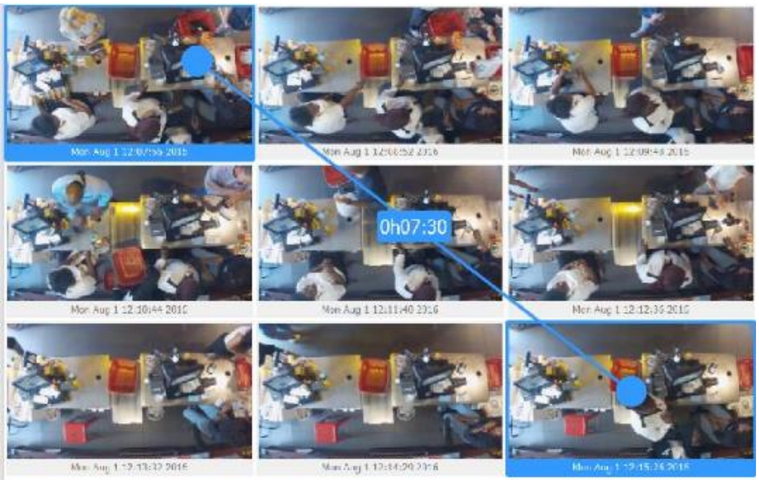
Show 11am to 12pm: this shows frames from the hour of the selected frame. This time range will change according to the time of the specific frame that has been right-clicked on.

Show hour back: will move the time range an hour back and display the relevant frames.

Show hour forward: will move the time range an hour forward and display the relevant frames.

Search Between Frames

Search time periods between specific frames on the page by clicking-and-dragging.

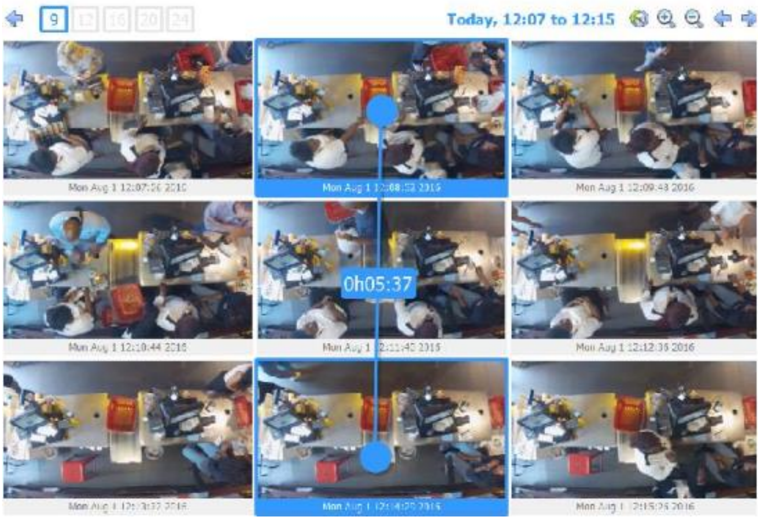


Click on the desired frame to start search with, and drag to the frame where the search is desired to end.

A blue line will visualise this, and the time between the two frames will be displayed.

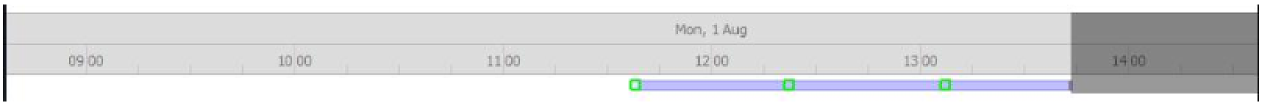
−
+

A negative / positive sign indicates whether the time difference is ahead or behind the selected frame.



Search between any frames, in any direction.

3.7.2.4 Timeline

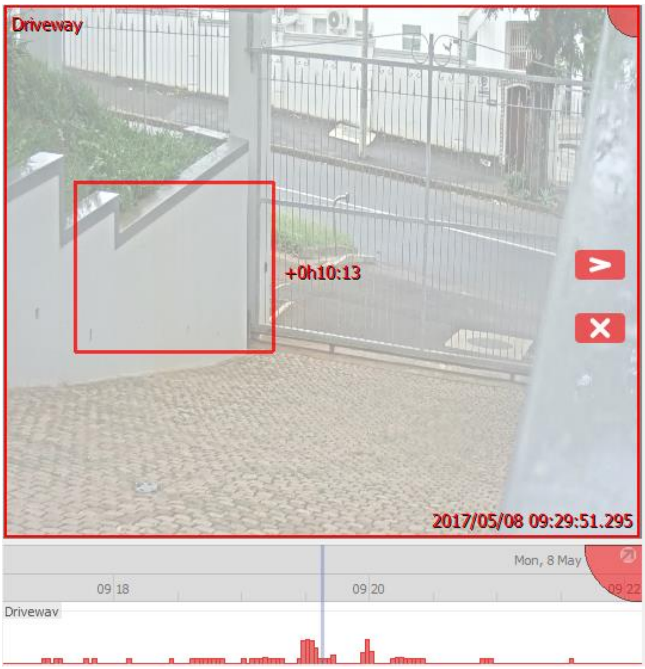


The “snap search” timeline functions in the same way as the CathexisVision GUI timeline. Click anywhere on the timeline, to go to that time. Also archive from the embedded player.

This indicates that there are recordings during the highlighted time period.

The green square on the timeline indicates that the position of matching frames. Click on it to display.

3.7.3 Motion Search



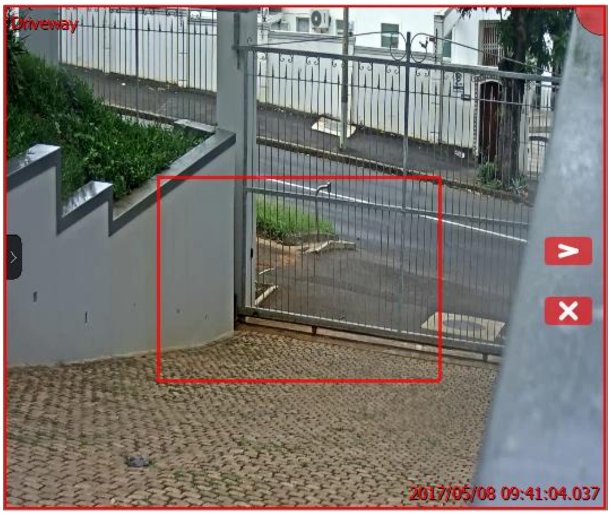
In review mode, the **Motion Search** function allows the selection of certain areas of the camera image to search for recent motion in the selected area.

When attempting to perform a Motion Search on a camera that is not being recorded in the motion database, a notifying popup will be displayed. See notes below.

Note:

- **Camera must be in review for Motion Search to work.**
- Motion Search uses metadata from the Motion Search analytics database. To perform a motion search, cameras must have Motion Search analytics configured (**Setup Tab / Configure Servers / Video Analytics / Motion Database**).
- Motion search data is gathered in real time. This means that there will not be any search data available for periods when Motion Search was not configured.
- This feature is not connected to Activity Trails, but both utilise data collected by the motion database.

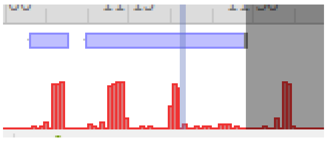
3.7.3.1 Select Region to Search


Driveway
>
✕
2017/05/08 09:41:04.037

With the left mouse-button, click and drag to select an area on the camera.

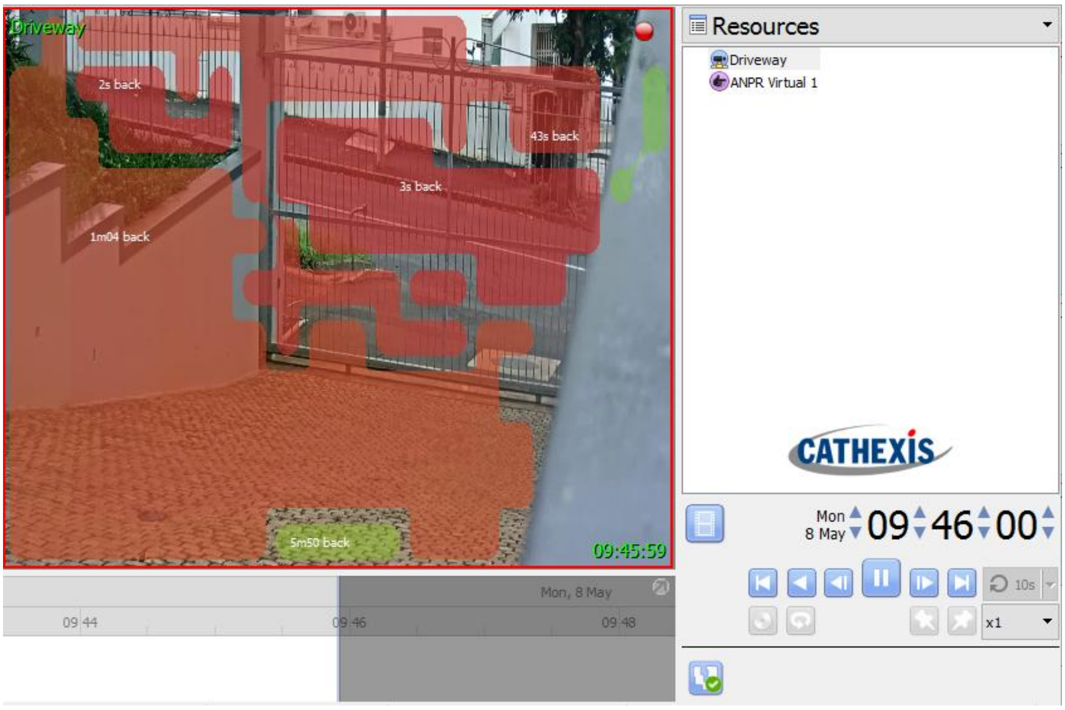
> Click to search for motion in the selected region.

Motion will be displayed on the timeline:



✕ Click to exit Motion Search.

3.8 Activity Trails


Driveway
2s back
43s back
3s back
1m04 back
5m50 back
09:45:59
Mon, 8 May
09 44
09 46
09 48
Resources
Driveway
ANPR Virtual 1
CATHEXIS
Mon 8 May
09 46 00
10s
x1

The Activity Trail feature indicates where and when activity happened in an area. It displays an overlay over the camera feed. The movement of a person or object will be recorded as an activity trail. It will be represented in this overlay, with the colour of the overlay indicating how recently the activity took place. The overlay is interactive: clicking on an activity area will navigate to the time that activity occurred.

The information below is about the elements of the **Activity Trails feature** which apply to both **Live** and **Review mode**. Below that, there are dedicated sections for both **Live** and **Review** which deal with the options specific to each mode.

When attempting to enable Activity Trails on a camera that is not being recorded in the motion database, a warning notification is displayed.

Note:

- For all features to work, cameras must have recording set up.
- The Activity Trails feature uses metadata from the Motion Search analytics database. To view Activity Trails in review mode, cameras must have Motion Search analytics configured.

3.8.1.1 Toggle Activity Trails On/Off

Click this button to turn Activity Trails on / off:

Activity Trails: **off**.

Activity Trails: **on**.

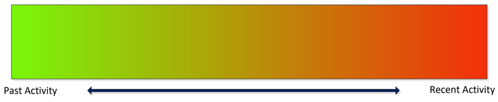
When Activity Trails are **on** and the camera is in review, these arrow buttons will appear. They look back / ahead for activity trails in the recording.

3.8.1.2 Activity Trail Overlays

The time that activity occurred in the area is indicated by the **colour of overlays** and by **Activity Time** (in minutes and seconds, displayed on top of the overlay).

Note: In **live mode**, the overlay will show the most recent activity in an area (if that activity occurred in the last 15 minutes). In **review mode**, the overlay can show activity up to an hour before and an hour after the current review time.

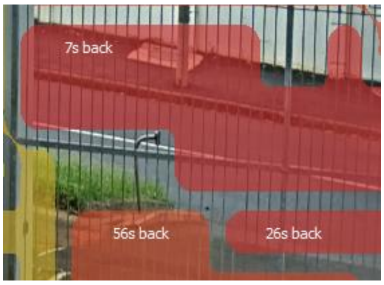
Overlay Colours



Overlays range along a colour spectrum from green to red. Overlays are coloured according to when activity occurred in an area.

The greener an overlay, the further back in time the activity in that area occurred. The redder an overlay, the more recent the activity occurred in that area.

Activity Time



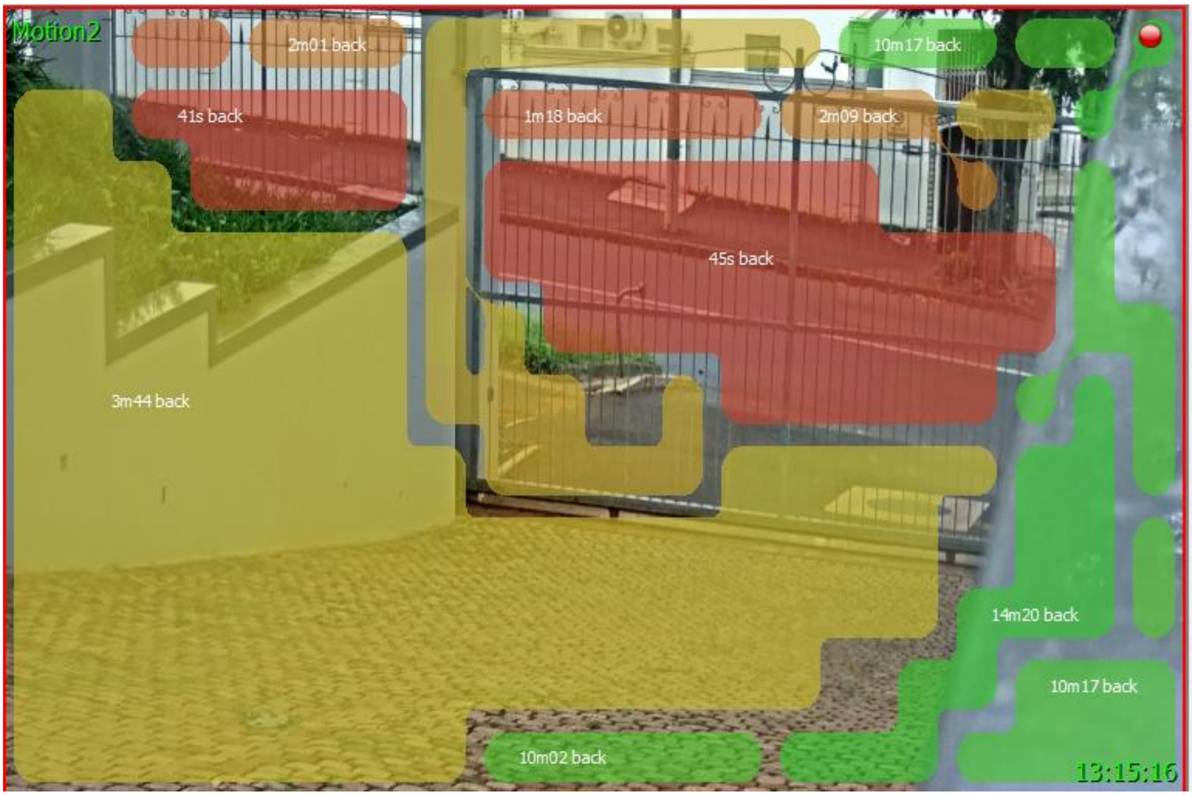
Time of activity in the area is also indicated by the actual time in minutes and seconds, which is displayed on top of the overlay.

Go to Time of Activity

Double-click on one of the activity areas (highlighted by the overlay) to go to the time of that activity in the recordings. If in Live mode, this option switches to review mode. **Note**: This option is dependent on recording being set up on the camera.

3.8.2 Live Mode

When in **live mode**, and Activity Trails is toggled on, the activity overlays will appear. The time that activity occurred in an area is indicated both by the colour of the overlay, and by the activity time (displayed in minutes and seconds), which appears on the overlay. In live mode, the overlay will only show activity which has occurred in the last 15 minutes.

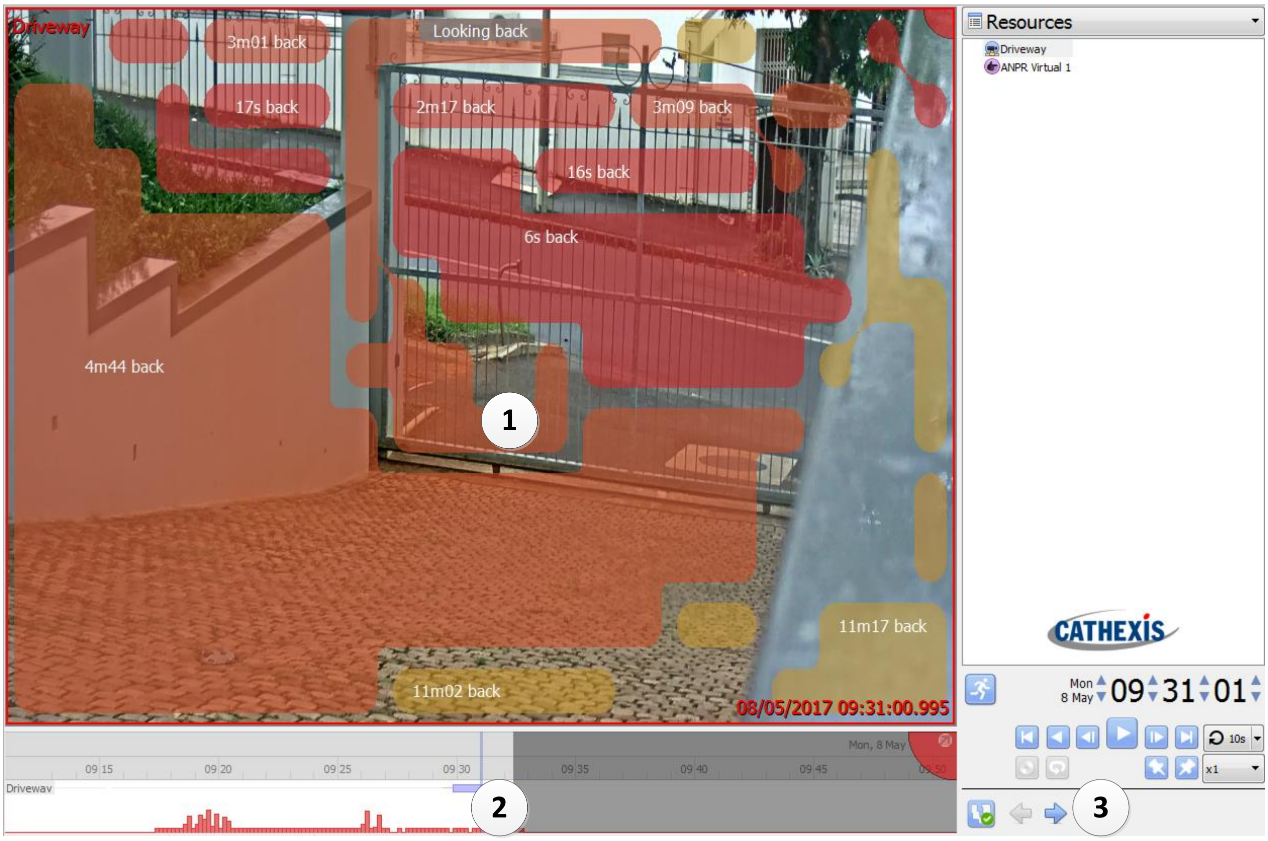


- Clicking on an activity area will switch to review mode.
- In Live mode, motion is displayed along the timeline.

3.8.2 Review Mode

If the user has double-clicked an activity area to review, or the user has switched to review, the activity overlays and the timeline will differ slightly from live mode. **Note**:

- In review mode, the overlay is able to highlight activity up to an hour ahead or behind the current review time.
- The Activity Trails feature uses metadata from the Motion Search analytics database. To view Activity Trails in review mode, cameras must have Motion Search analytics configured.


Driveway
3m01 back
Looking back
17s back
2m17 back
3m09 back
16s back
6s back
4m44 back
1
11m17 back
11m02 back
08/05/2017 09:31:00.995
Mon, 8 May
09 15
09 20
09 25
09 30
09 35
09 40
09 45
09 50
Driveway
2
Resources
Driveway
ANPR Virtual 1
Mon
8 May
09:31:01
10s
x1
3

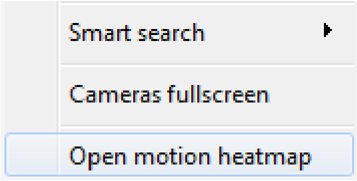
①	**Overlay and Activity Time**	The overlays will change colour and the activity time will decrease / increase depending on how recent the activity is. When activity is 'Active', it means that activity occurs at that point in the recording. When looking forwards, the activity time counts down to the time that activity occurs (instead of counting the time after activity occurred).
②	**Activity level on Timeline**	This indicates that this camera has **Motion Search** analytics enabled, and that there has been activity at the points indicated along the timeline. The higher the motion spikes, the more activity in the area at that point. When Motion Search analytics is configured on a camera, activity levels on the timeline are enabled by default.
③	**Look Back / Ahead**	These buttons allow looking back or ahead an hour in the activity data.

3.9 Heatmaps

Similar to Activity Trails, the Heatmaps feature uses data from the Motion Database to indicate less or more motion in the camera. It does this by overlaying a heatmap over a camera snapshot.

The greener an overlay, the less motion occurred in that area. The redder an overlay, the more motion in that area.

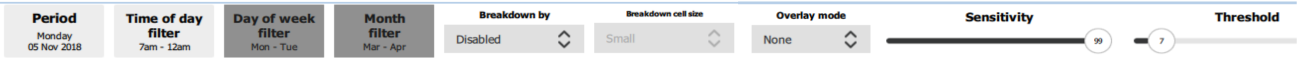
3.9.1 View Heatmap

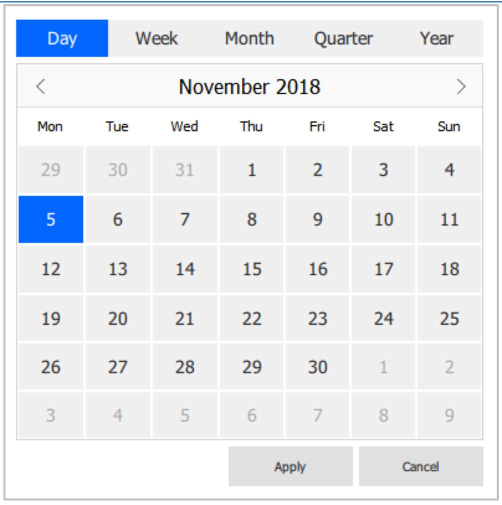

Smart search
Cameras fullscreen
Open motion heatmap

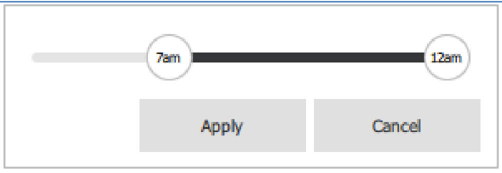
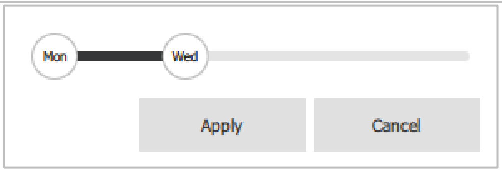
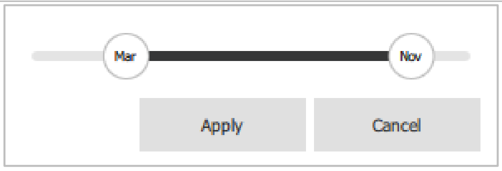
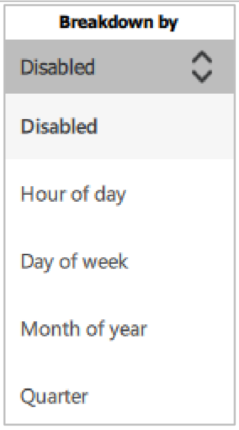
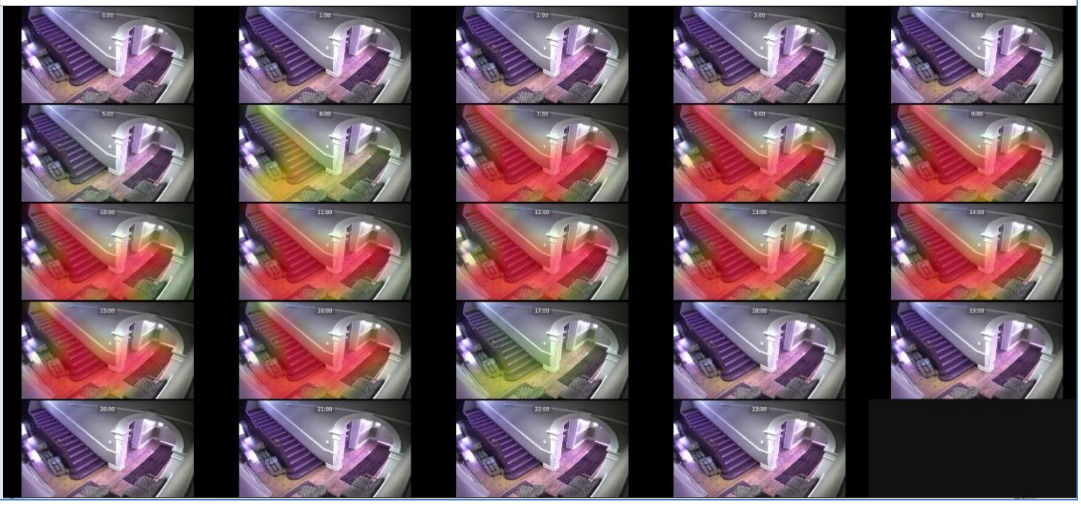
To view a camera's heatmap, load a camera in the **Cameras Tab / right-click on the feed / select Open motion heatmap.**

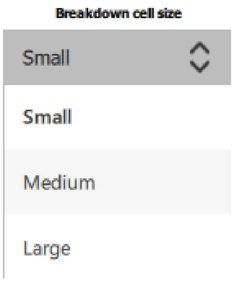
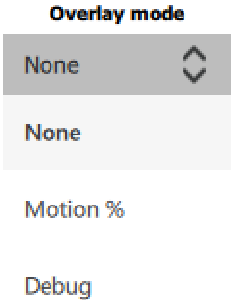
3.9.2 Heatmap Parameters

When the heatmap window opens, the user will need to define a few parameters before a heatmap can be generated. See below.


Period
Monday
05 Nov 2018
Time of day filter
7am - 12am
Day of week filter
Mon - Tue
Month filter
Mar - Apr
Breakdown by
Disabled
Breakdown cell size
Small
Overlay mode
None
Sensitivity
99
Threshold
7

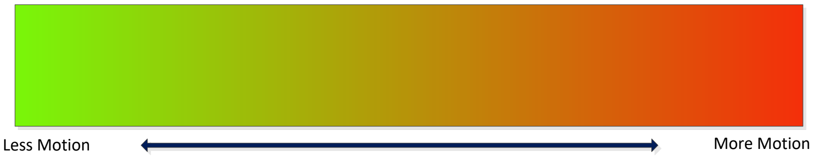
Period	 Day Week Month Quarter Year November 2018 Mon Tue Wed Thu Fri Sat Sun Apply Cancel The user needs to select a period of analysis. Select: **Day / Week / Month / Quarter / Year** from the tabs at the top of the period table. Then refine further by selecting either: - a specific day in a week - week in a month - month in a year - quarter in a year - year. When done, click **Apply**.

Time of Day Filter	 7am 12am Apply Cancel	The period (defined above) can be further refined. Drag the sliders to limit analysis to certain times of the day.
Day of Week Filter	 Mon Wed Apply Cancel	The period (defined above) can be further refined. Drag the sliders to limit analysis to certain days of the week. **Note**: Not applicable when only 'Day' is selected for period of analysis.
Month Filter	 Mar Nov Apply Cancel	The period (defined above) can be further refined. Drag the sliders to limit analysis to certain months of the year. **Note**: Only applicable if Quarter / Year is selected for period of analysis.
Breakdown	 Breakdown by Disabled Disabled Hour of day Day of week Month of year Quarter	Results generated by the application of the above filters are displayed in snapshots. The snapshots can be broken down according to various timeframes: **Hour of day**: Displays 24 snapshots. **Day of week**: Seven snapshots. **Month of year**: 12 snapshots. **Quarter**: Four snapshots. **Note**: Breakdown options will be determined by the period of analysis. I.e., **Month of year** breakdown cannot be selected if only 'Day' is selected for period of analysis. Below is an example of the heatmap snapshot results when 'Hour of day' is selected for the breakdown. There are 24 snap shots for each hour of the day.
		

Breakdown Cell Size		The size of the breakdown snapshots can be set to small / medium / large. The snapshots in the above example are set to 'Small.'
Overlay Mode		Select which mode of overlay to display: **Motion %**: - Displays amount of time (as a percentage) out of the selected time period in which motion occurred. For example, if the 24-hour time period is selected and motion is 50 %, this means that motion occurred for 50% of the 24-hour period, which is 12 hours. - Displays motion in percentage (in text) over corresponding zones of motion in the snapshot. **Debug:** - As above, debug overlay also displays the amount of time (in percentage) during which motion occurred. - The fraction value represents the actual data used to generate the percentage value. It indicates the number of seconds (out of an evaluation period of 3600 seconds) during which motion occurred.
Sensitivity	Sensitivity 99	• For scenes with low overall activity, increase the sensitivity to highlight small differences in motion in the scene. • For scenes with greater overall activity, decrease the sensitivity to allow comparison between areas that have a higher base motion level.
Threshold	Threshold 68	• The threshold slider allows the user to filter out low levels of activity in the scene. The slider adjusts the minimum level required for motion to be shown in the heatmap overlay.

3.9.3 Heatmap Results

Click **Apply** once parameter adjustments have been made. The heatmap results will be updated. The greener an overlay, the less motion occurred in that area. The redder an overlay, the more motion in that area.



Close the window when done.

4. Archiving

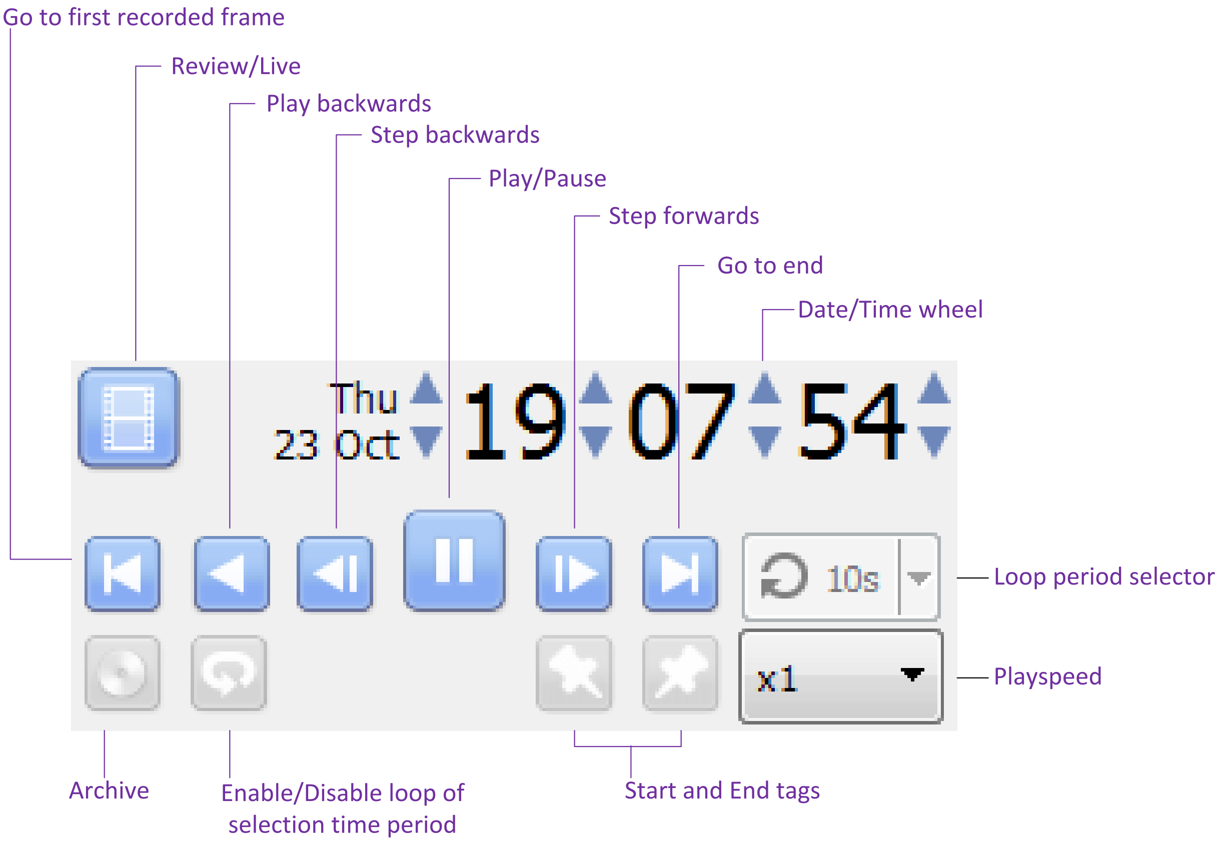
Archiving is a process of selecting recordings and copying them to archiving media, such as USB key, hard drive, CD or DVD. Archived recordings retain their authenticity and can be verified as authentic (unaltered) on replay. Creating an archive is done from within the Cameras Tab. Reviewing and exporting an archive all occurs in the **Archive viewer tab**, or the **CathexisVision Archive Player**.

This section details the procedures for reviewing video and selecting portions of the video to be archived. This is done from either the Archive Player or the Archive Viewer tab in CathexisVision, because the interfaces for doing so are the same.

4.1 Review Controls (Timeline and Review Controls Panel)

This section deals with reviewing video in CathexisVision. Two sections can be used to review recorded footage: the **Review Control Panel**, and the **Timeline**.

4.1.1 Review Control Panel

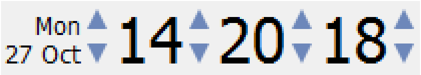

Go to first recorded frame
Review/Live
Play backwards
Step backwards
Play/Pause
Step forwards
Go to end
Date/Time wheel
Thu
23 Oct
19
07
54
10s
x1
Loop period selector
Playspeed
Archive
Enable/Disable loop of selection time period
Start and End tags

Note: To enable review, click on this icon. It will change to the following running-man icon:

Click on the running-man icon to return to live view.

4.1.1.1 To Review Footage from a Certain Date

Using the Time/Date Wheel



To go to a specific date, select the camera or cameras for review. Click on the arrows of the date / time wheel until the correct date / time is selected.

Using the Timeline

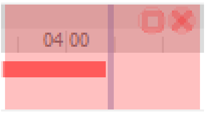
To move to a date and time, using the timeline, left-click and hold anywhere on the timeline. Drag the timeline to the desired time / date.

4.1.1.2 Selecting a Period for Review

After finding something of interest, the user can loop through the recorded footage around that event. (This can also be useful when selecting footage for archive.)

1. Use the date / time wheel to navigate to the desired start point.
2. Then click on this icon: . This will tag the start of the selection.
3. The navigate to the end of the desired period.

Click on this icon to tag the end of the selection.



The selected areas will appear to the left. By default, it will be set to loop. This can be seen when looking at the loop icon.

This means that it will loop to the beginning of the selection, as it gets to the end of the selection.

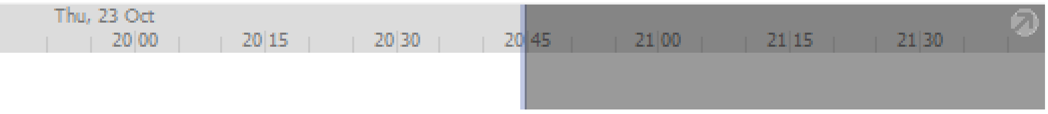
This means that the video will continue to play past the end of the selection.

4.1.2 Timeline

The timeline at the bottom of the GUI indicates where the currently selected cameras are in time.

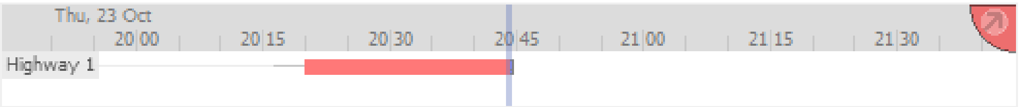
Note: The user may review legacy video in CathexisVision 2015 and onwards (recordings made on pre-2015 systems), but the timeline will remain blank.

4.1.2.1 Live View Timeline

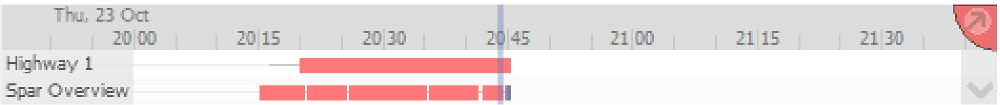

Thu, 23 Oct
20:00
20:15
20:30
20:45
21:00
21:15
21:30

The live view timeline shows the current time at the intersection between white and grey.

4.1.2.2 Single and Multiple Camera Review Timeline


Thu, 23 Oct
20:00
20:15
20:30
20:45
21:00
21:15
21:30
Highway 1

When reviewing a camera's recorded video, the timeline will change to show red blocks. These blocks on the timeline represent recorded events.


Thu, 23 Oct
20:00
20:15
20:30
20:45
21:00
21:15
21:30
Highway 1
Spar Overview

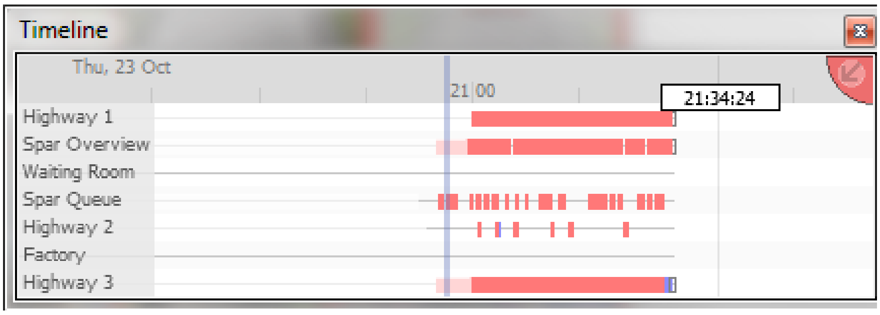
If multiple cameras have been selected for review, they will appear stacked on the timeline.

Note: One may only view two cameras' timelines at once.

Click on this icon at the bottom-right of the timeline to cycle between camera timelines.

To see more, detach the timeline from the GUI. This is described below.

4.1.2.3 Detached Review Timeline


Timeline
Thu, 23 Oct
21:00
21:34:24
Highway 1
Spar Overview
Waiting Room
Spar Queue
Highway 2
Factory
Highway 3

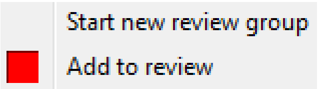
To detach the timeline from the GUI, click on the icon at the top right of the timeline.

To reattach the timeline, click on the icon in the same place.

4.1.2.4 Synchronised / Independent Review

By default, all reviews are synchronised, when multiple cameras are selected for review. It is possible to review cameras independently.

When already reviewing a camera, middle-clicking on a camera's panel will display the following options in the context menu.



Start new review group: this will add this camera to a separate group of review cameras, which will be asynchronous to the original review group. The new review group is indicated by the tag on the top-right of the video. Each review group will get its own colour.

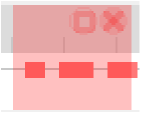
Add to review: this will add this camera to the already existing review group. As review groups are added, the number of options shown here will increase.

4.1.2.5 Timeline Actions

Zoom in on Timeline

There are two ways to zoom in on a section of the timeline:

1. Place the mouse over the timeline (during review) and roll the mouse-wheel forwards. To zoom out, roll it backwards.
2. Shift-select a section of the timeline.



This is done by holding down the SHIFT key, while click-dragging the selection with the left mouse button. The selection will look like the image to the left.

To **zoom in** on this selection, click on the icon.

Move the Timeline with the Mouse

Move backwards and forwards in time by left-click dragging the timeline in the desired direction of travel.

4.2 Archiving Video

Once the video is selected, it may be archived for later review.

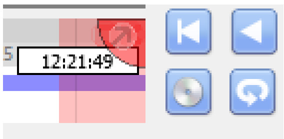
Special Notes

1. A Windows / Linux GUI can only output new archive files, but will be able to archive video from a VR running any OS.
2. Do not format or configure the newly inserted CD / DVD. Windows presents an option to configure the disk as CD/DVD, or drive. Do **not** do this.
3. When archiving a video stream which has **Privacy Zones,** the archive file will have the zones included only if the feed is set to "Show privacy zones" at the time of archiving.

4.2.1 Archiving from Live/Review

The Archive system has changed the creation and review processes for archiving.

4.2.1.1 Select Video to Archive



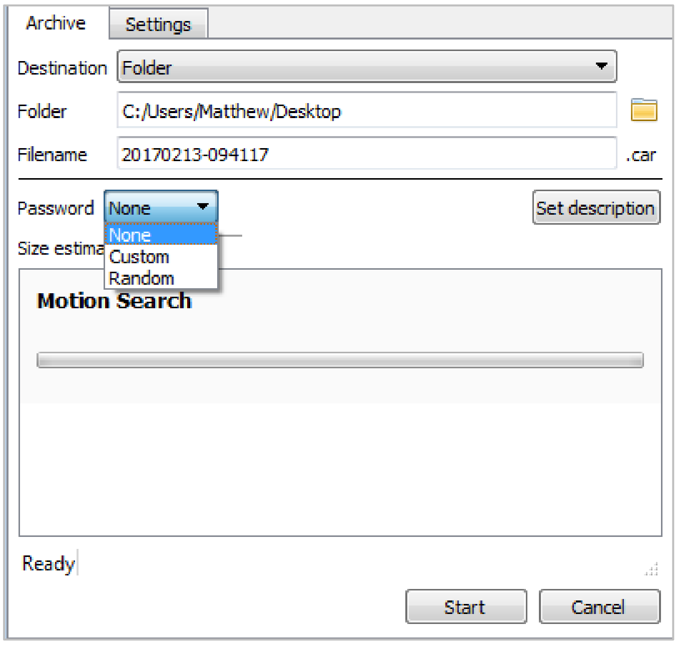
There are two ways to select the period for archiving.

1. **Tagging**:
    - Click on this icon to tag the start of the selection.
    - Navigate to the end of the desired period.
    - Click on this icon to tag the end of the selection.
2. **Shift-selection**:
    - Hold down the SHIFT key while click-dragging the selection with the left mouse button.
    - The selection will look like the image shown to the left.

Click on this icon to start archiving the selection.

4.2.2 Apply Archive Settings

Archive Tab



Destination: Folder

Folder: C:/Users/Matthew/Desktop

Filename: 20170213-094117 .car

Password: None

Ready

Choose the **Folder** to which the archive should be sent. Select a **subfolder** for this specific archive. The default folder name will be the current date. It can also be given a more descriptive name.

The **filename** may be defined manually.

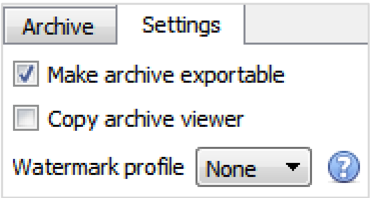
Add a **Password**, if needed.

A **Size estimate** of the archive is provided.

Clicking on **Set description** allows one to give this specific archive a title.

Click on **Start** to archive the selection with these settings.

Settings Tab



☑ Make archive exportable

☐ Copy archive viewer

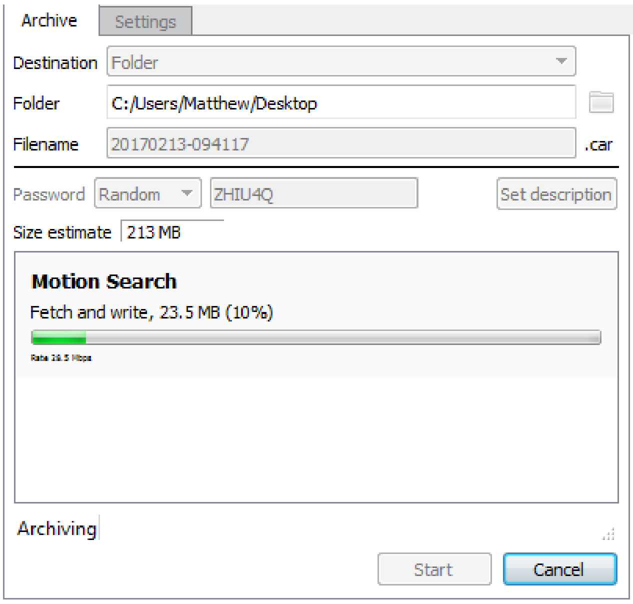
Watermark profile: None

Check the box to make archives exportable or not exportable.

Use the **Copy archive viewer** option when the archive will be viewed on a computer that does not have the CathexisVision interface installed.

Note: The option to set up **Watermark profiles** is configured in **Setup Tab / General Site Setup / Configure archiving**. This setting is controlled by the administrator of the Site.

4.2.2.1 Complete the Archive Process



Destination: Folder

Folder: C:/Users/Matthew/Desktop

Filename: 20170213-094117 .car

Password: Random ZHIU4Q

Size estimate: 213 MB

Motion Search

Fetch and write, 23.5 MB (10%)

Archiving

While archiving, the interface will display moving progress bars to indicate the progress of the archiving process.

4.3 Reviewing Archived Video

Archives can either be reviewed from within the CathexisVision software using the Archive Viewer, or from the standalone Archive Player software, which is installed with the CathexisVision software. The interfaces for both are exactly the same.

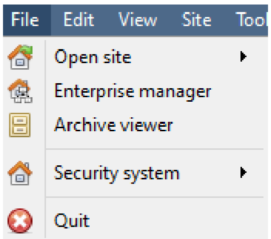
Note: ‘Maintain aspect ratio’ is enabled by default. It can be toggled on or off in **Settings Menu / Video Display / Maintain Aspect Ratio.**

4.3.1 Multi-Camera Archive Player

Archives with multiple cameras can be reviewed in the CathexisVision Multi-Camera Archive Player, available in CathexisVision 2020 and later. It is installed along with the software, but it is only launchable from the Windows Start Menu. The Multi-Camera Archive Player is dealt with in the ***CathexisVision Archiving App-note***. For more information, please consult this guide, or contact Support at support@cathexisvideo.com.

4.3.2 Open Archive Viewer/Player

Archive Viewer


File
Edit
View
Site
Tool
Open site
Enterprise manager
Archive viewer
Security system
Quit

Open the CathexisVision GUI. Select **File Menu / Archive viewer**.

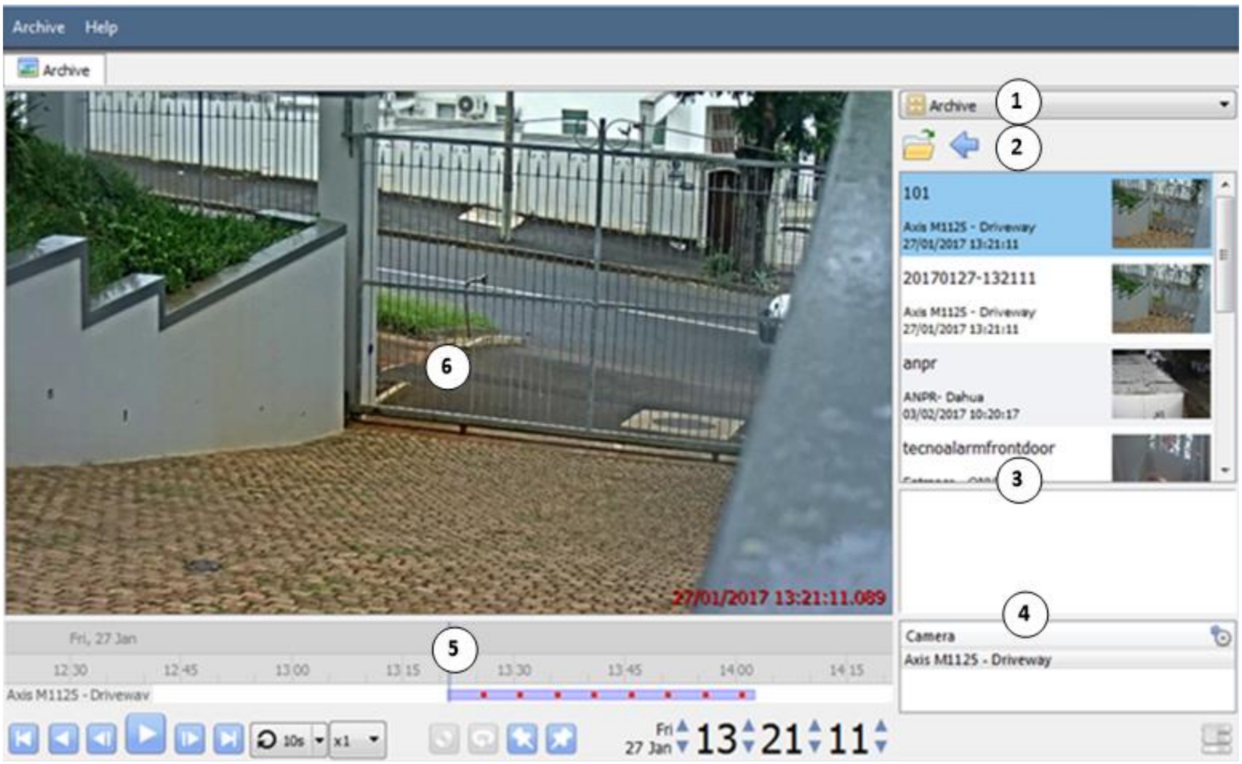
Archive Player

CathexisVision Archive Player

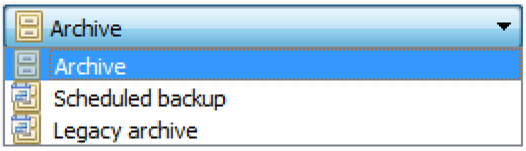
Double-click the **Archive Player shortcut** that is automatically created when the CathexisVision software is installed.

4.3.3 Archive Viewer/Player Interface

This section details the interface of the **archive viewer / player**, and the processes performed in each.


Archive
Help
Archive
Archive
1
2
101
Axis M1125 - Driveway
27/01/2017 13:21:11
20170127-132111
Axis M1125 - Driveway
27/01/2017 13:21:11
anpr
ANPR- Dahua
03/02/2017 10:20:17
tecnoalarmfrontdoor
3
6
27/01/2017 13:21:11.089
4
Camera
Axis M1125 - Driveway
5
Fri, 27 Jan
12:30
12:45
13:00
13:15
13:30
13:45
14:00
14:15
Axis M1125 - Driveway
10s
x1
27 Fri Jan 13:21:11

1 Type Selection


Archive
Archive
Scheduled backup
Legacy archive

From this drop-down menu, select the type of archive to view.

2 Folder Navigation and Archive File List

Navigate folders on the computer containing archive files in order to find and view them.

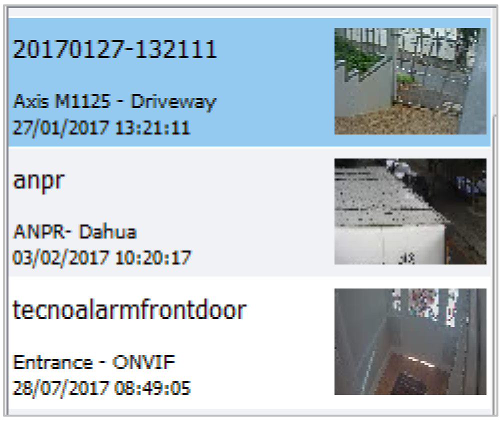
Click to browse folders in dialog window.

Click to go back to previous folder.

Once the folder containing the archive is selected / opened, all appropriate archive files will be populated in the archive file list.

Note: Individual archive files will not be visible when searching through folders. Archive files are only visible in the archive file list, after the general folder containing the archive files has been selected.

File Information



20170127-132111
Axis M1125 - Driveway
27/01/2017 13:21:11

anpr
ANPR- Dahua
03/02/2017 10:20:17

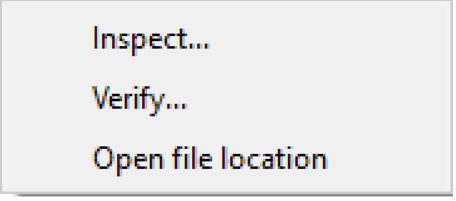
tecnoalarmfrontdoor
Entrance - ONVIF
28/07/2017 08:49:05

The archive file list displays information about the archives in the selected folder. This information includes:

- Archive file name. (Where no name is given at the time of archiving, the date of archive is used instead.)
- Name of camera from which archive originated.
- Date and time of archive.

Right-Click Options

Right-clicking on an archive in the archive file list will present the following options:

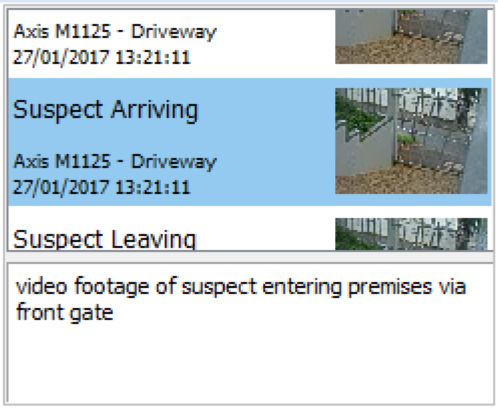


Inspect: will display the meta-information of the archive. See the Archive Security section.

Verify: will confirm whether the archive is authentic or not. See the Archive Security Section.

Open file location: will open up the location of the selected archive file.

3 Description



Axis M1125 - Driveway
27/01/2017 13:21:11

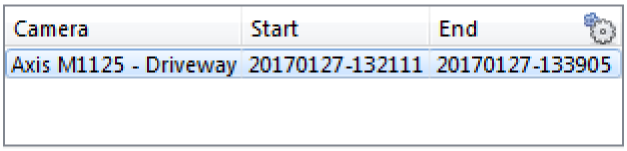
Suspect Arriving
Axis M1125 - Driveway
27/01/2017 13:21:11

Suspect Leaving

video footage of suspect entering premises via front gate

When the relevant archive file is selected, a description of the archive will appear in the field beneath the archive file list (if the description was set during the archiving process).

4 Archive Properties



Camera	Start	End
Axis M1125 - Driveway	20170127-132111	20170127-133905

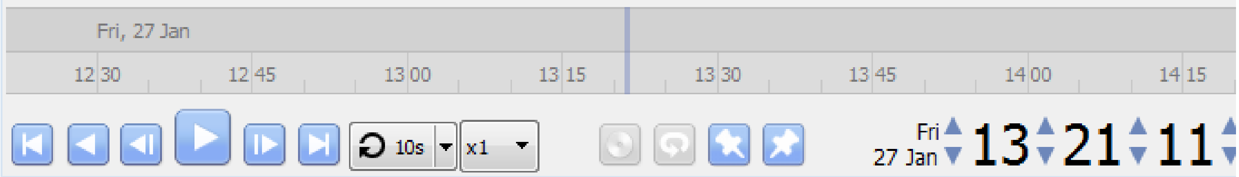
When an archive is selected, its properties will be listed in the Archive Properties field.

Click on this icon to change column view.

5 Timeline Controls

The timeline controls of the Archive interface are the same as those described in the **Cameras Tab** section. On the timeline itself, the blue line indicates an event / recorded video.

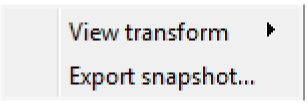
🟥 The red dots indicate the point that an event was triggered.



6 Archive Camera Panel

The selected archive will be available to view from within the camera panel.

Right-Click Options



Select View Transform to transform the video.

Select Export snapshot to export a snapshot from the archived video.

Export Snapshot

When reviewing archived video, video snapshots may be exported.

Right-click on the image and select **"Export snapshot…"**.

This will bring up the **Export snapshot** window, which provides the following options:

Print snapshot.

Save snapshot to folder.

Copy to system clipboard.

Copy to Cathexis clipboard.

☐ Overlay camera name

☐ Overlay time

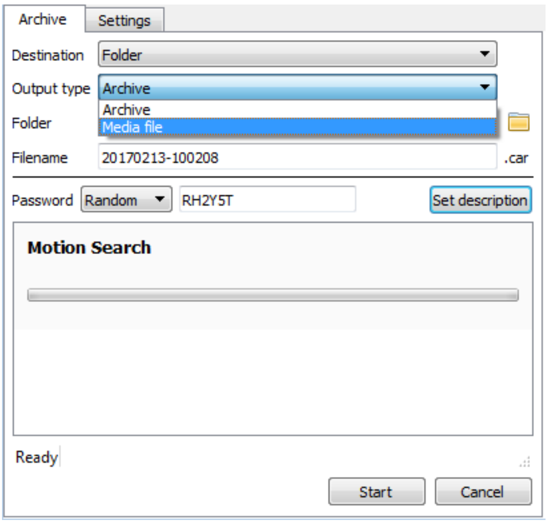
Overlay the name of the camera in the top-left corner of the camera image.

Overlay the time of the recording in the bottom-right corner of the camera.

Close

Click once the snapshot has been exported as desired.

4.3.4 Export Archive



Destination: Folder
Output type: Archive
Folder:
Filename: 20170213-100208 .car
Password: Random RH2Y5T
Ready

Archives (or a selection of an archive) may be exported either as another archive or as a media file.

To export the video as a media file, click on the dropdown menu for Output Type. Select **Media file**.

4.4 Archive Security

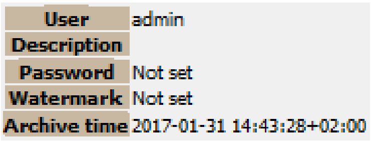
CathexisVision includes the following measures to ensure archive security:

- The overall signature of the archive is retained, linking it to the source NVR.
- Critical portions of video or audio can be independently signed and explicitly linked to the source NVR.
- Clients sourcing data from an NVR for archive are audit logged.
- During the archiving process, archives can be encrypted with a password.
- During the archiving process, watermarks can be embedded in archive.
- Archives can be inspected to reveal archive meta-data.
- Archives can be verified in order to determine the authenticity of an archive.

This section demonstrates how to inspect an archive's meta-data, and how to verify an archive's authenticity.

4.4.1 Inspect Archive

To inspect an archive for its meta-information, right-click on the archive in the archive file list. Select "**Inspect**". This will bring up the following window:



User	admin
Description	
Password	Not set
Watermark	Not set
Archive time	2017-01-31 14:43:28+02:00

User will display the username of the operator who performed the archive.

Description will show the description of the archive (if set).

Password will show **Encrypted** if a password is set, and **Not set** if not.

Watermark will show the watermark of the archive (if set).

Archive time will show the time and date that the archive was performed.

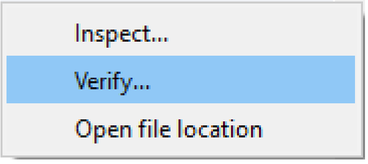
4.4.2 Verify Archive

From CathexisVision 2017, a new verification feature has been introduced. For security reasons, it provides a report on the authenticity of an archive. Archives may be verified from the archive viewer in CathexisVision, or from within the CathexisVision Archive Player.

If operators have a query regarding the verification, they can copy the verification result and email it to Cathexis support for help.

Note:

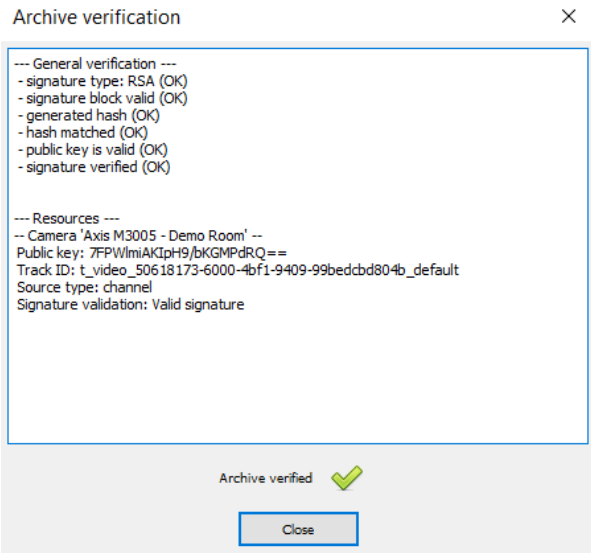
Sub-archives (archives of archives) do not contain any signatures generated by the original NVR that sourced the video data. The authenticity of these archives cannot be verified by Cathexis.



Once the file location of the archive is opened (in either the archive viewer or the CathexisVision Archive Player) right-click on the relevant archive. Select **Verify.**

Once **Verify** is clicked, the software will determine whether or not the archive is authentic by indicating an archive as **Archive Verified** or **Archive failed**.

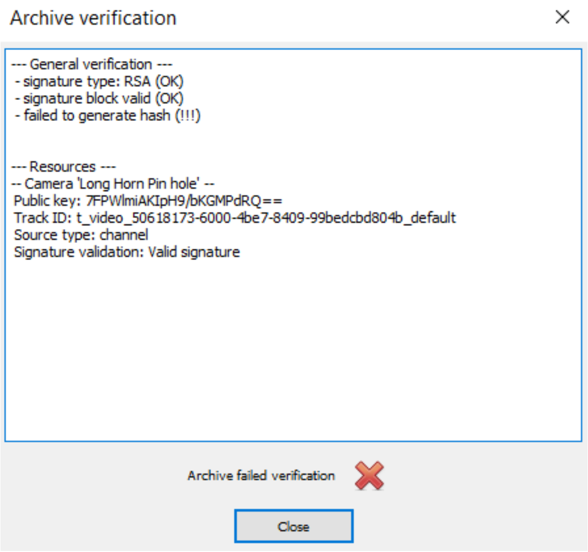
Archive verified



```
--- General verification ---
 - signature type: RSA (OK)
 - signature block valid (OK)
 - generated hash (OK)
 - hash matched (OK)
 - public key is valid (OK)
 - signature verified (OK)


--- Resources ---
-- Camera 'Axis M3005 - Demo Room' --
 Public key: 7FPWlmiAKIpH9/bKGMPdRQ==
 Track ID: t_video_50618173-6000-4bf1-9409-99bedcbd804b_default
 Source type: channel
 Signature validation: Valid signature
```

Archive failed verification



```
--- General verification ---
 - signature type: RSA (OK)
 - signature block valid (OK)
 - failed to generate hash (!!!)


--- Resources ---
-- Camera 'Long Horn Pin hole' --
 Public key: 7FPWlmiAKIpH9/bKGMPdRQ==
 Track ID: t_video_50618173-6000-4be7-8409-99bedcbd804b_default
 Source type: channel
 Signature validation: Valid signature
```

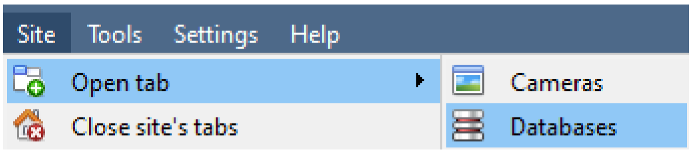
Note: Archive verification reports may be copied and emailed to support@cathexisvideo.com

5. Database Tab

In the database tab, both the general databases and the integration / metadatabases may be viewed.

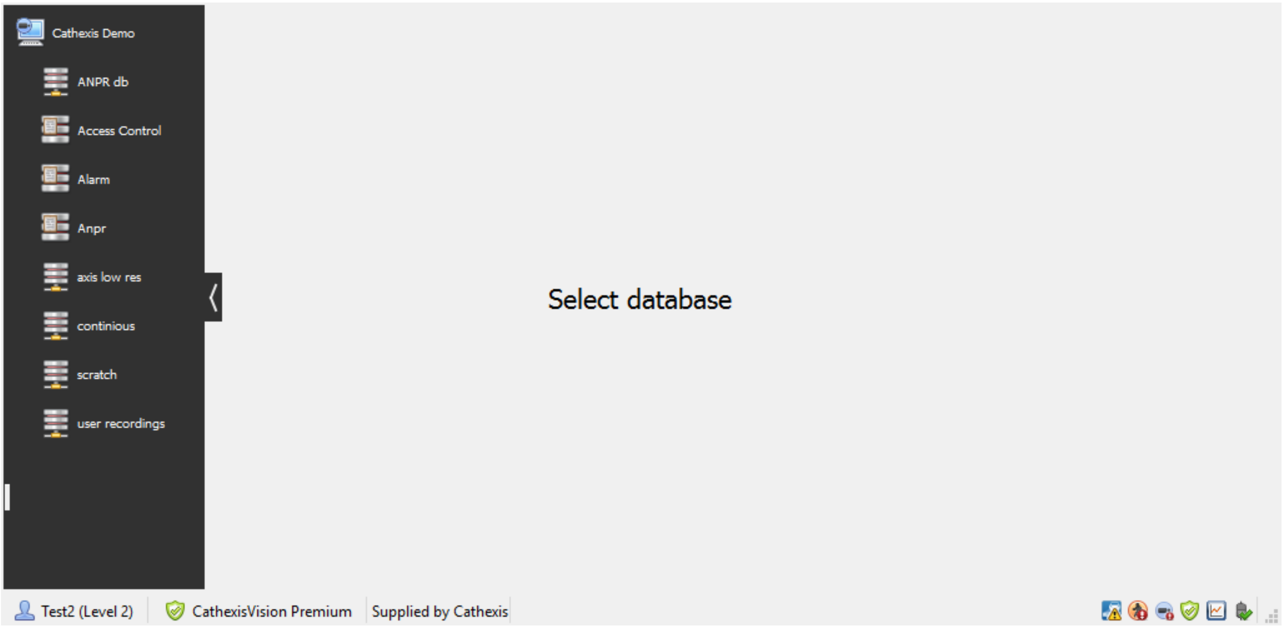
Note: Only users with correct access rights will be able to view database entries.

5.1 Navigate to Database Tab


Site
Tools
Settings
Help
Open tab
Close site's tabs
Cameras
Databases

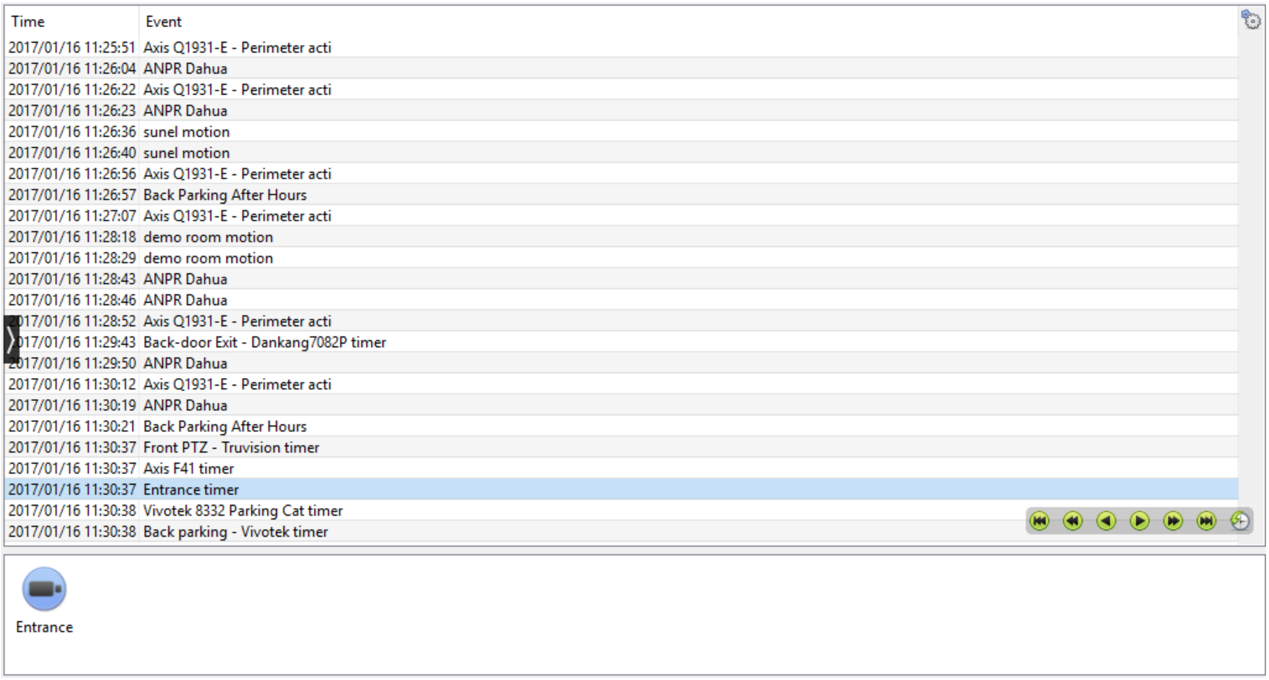
To open the CathexisVision Database Tab, select **Site/ Open Tab / Databases**

Once the tab is open, select a database to view.


Cathexis Demo
ANPR db
Access Control
Alarm
Anpr
axis low res
continious
scratch
user recordings
Select database
Test2 (Level 2)
CathexisVision Premium
Supplied by Cathexis

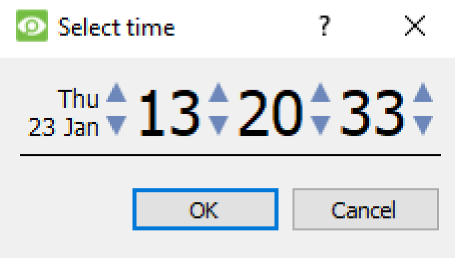
5.2 General Database

To view entries, select one of the general databases. If a Cathexis Events Database has been created, it will have the same interface as shown below.



Time	Event
2017/01/16 11:25:51	Axis Q1931-E - Perimeter acti
2017/01/16 11:26:04	ANPR Dahua
2017/01/16 11:26:22	Axis Q1931-E - Perimeter acti
2017/01/16 11:26:23	ANPR Dahua
2017/01/16 11:26:36	sunel motion
2017/01/16 11:26:40	sunel motion
2017/01/16 11:26:56	Axis Q1931-E - Perimeter acti
2017/01/16 11:26:57	Back Parking After Hours
2017/01/16 11:27:07	Axis Q1931-E - Perimeter acti
2017/01/16 11:28:18	demo room motion
2017/01/16 11:28:29	demo room motion
2017/01/16 11:28:43	ANPR Dahua
2017/01/16 11:28:46	ANPR Dahua
2017/01/16 11:28:52	Axis Q1931-E - Perimeter acti
017/01/16 11:29:43	Back-door Exit - Dankang7082P timer
2017/01/16 11:29:50	ANPR Dahua
2017/01/16 11:30:12	Axis Q1931-E - Perimeter acti
2017/01/16 11:30:19	ANPR Dahua
2017/01/16 11:30:21	Back Parking After Hours
2017/01/16 11:30:37	Front PTZ - Truvision timer
2017/01/16 11:30:37	Axis F41 timer
2017/01/16 11:30:37	Entrance timer
2017/01/16 11:30:38	Vivotek 8332 Parking Cat timer
2017/01/16 11:30:38	Back parking - Vivotek timer

5.2.1 Locate an Entry



Select time

Thu 23 Jan 13 20 33

In the Database Tab, click on this icon. (It is located in the bottom right corner.)

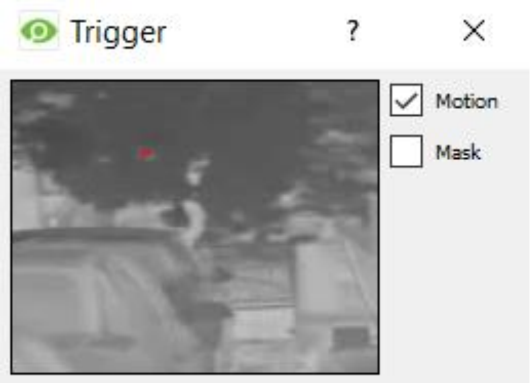
Select the date and time.

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

5.2.2 Replay an Associated Recording

CathexisVision can associate video footage and other data with database entries. When reviewing associated footage, there are two options. The user may review the associated video clip, or they may view the video frame at the point that the event was triggered.

5.2.2.1 Review Trigger Frame


Trigger
?
×
☑ Motion
☐ Mask

To review the trigger frame, left-click on an entry.

If this icon is present in the panel below, double-click on it. This will bring up the dialogue shown to the left.

Motion: select this to show where the motion occurred in the image.

Mask: select this to show the areas of the image that are covered by the algorithm which triggered the database entry.

5.2.2.2 Review Event Video

To review the video associated with a database entry, either:

- Double-click on that entry

- Double-click on this icon in the entry's details:

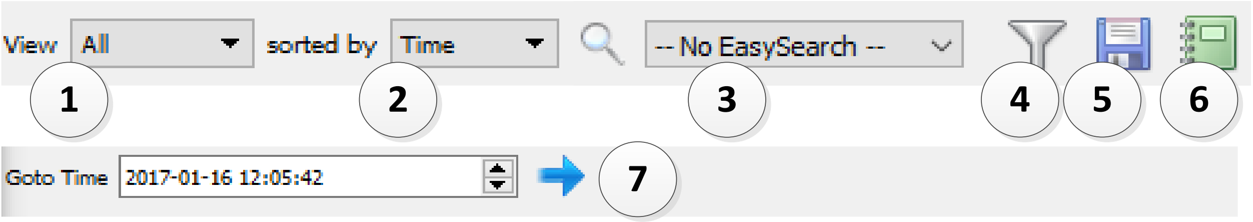
5.2.2.3 CathexisVision Controls

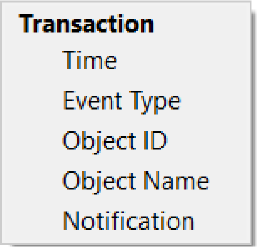
CathexisVision database review uses the same control schema as the timeline review used in the Cameras Tab / Review Controls section.

5.3 Integration/Metadatabase

Select the relevant integration / metadatabase.

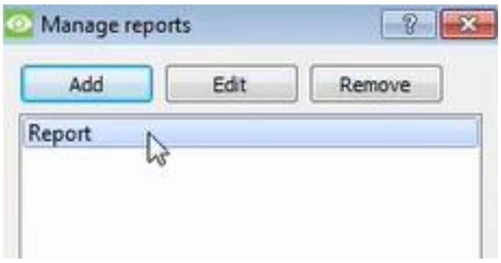
5.3.1 Interface


View
All
sorted by
Time
-- No EasySearch --
1
2
3
4
5
6
Goto Time
2017-01-16 12:05:42
7

①	**View**	The user may change the way that the database is presented. Some integration databases have multiple view options.
②	**Sorted By**	Events can only be sorted by certain parameters.
③	**Easy Search**	The Easy Search option lets the user quickly search the database.
④	**Filter**	Filter offers a more advanced manner of sorting information in the Integration Database table. Once the filters dialogue is open, the following filter options are available: ☑ Enable filters — To **enable** filters, check this box. To **add** a new filter, click on this icon. To **delete** an added filter, click on this icon. It is possible to filter the same parameters more than once. *Timestamp* — To **change** a filter, click on the blue hyperlinked text. In this example, the user can click on "Timestamp" to change the filter from Timestamp, to any of the other options. For example:  **Transaction** Time Event Type Object ID Object Name Notification **Note**: Multiple filters may be run simultaneously. This is the filter icon. When filters are active, the icon will change:
⑤	**Export**	Generate metadatabase reports in PDF or CSV format. See below.
⑥	**Scheduled Reports**	Click on this to create and manage scheduled metadatabase reports. See below.
⑦	**Go to Time**	This navigates to a specific point in time, down to the second. To navigate to a timestamp, set the time using the time and date boxes. Then click the arrow icon. ➡

5.3.1.1 Scheduled Metadatabase Reports

Click on this icon to open the scheduled report window.



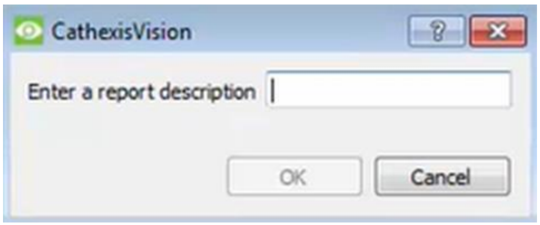
All created reports will be listed here.

First, click **Add** to create a report. Then **edit** to define the reporting schedule. See below for more detail.

To create, edit, or delete a report, select the entry and click on the corresponding button.

New Scheduled Report

Click **Add**.



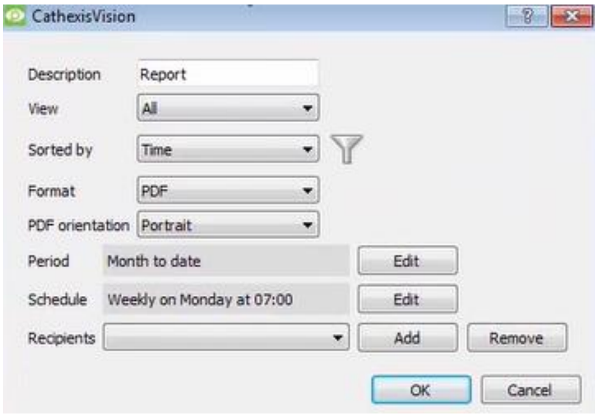
Enter a report description

Give the report a description.

Click **OK** when done.

Once the new report is listed with the other reports, select it for editing. Define the reporting schedule.

Either right-click the entry and select schedule, or select the entry and click the schedule button at the bottom of the screen: Schedule .



Description: Report
View: All
Sorted by: Time
Format: PDF
PDF orientation: Portrait
Period: Month to date
Schedule: Weekly on Monday at 07:00
Recipients:

Edit the **description** (if needed).

Edit **Viewing** options.

Select the "**Sorted by"** option.

Select the **Format**.

Select the **orientation** of the Format.

Select the **period** to be reported on.

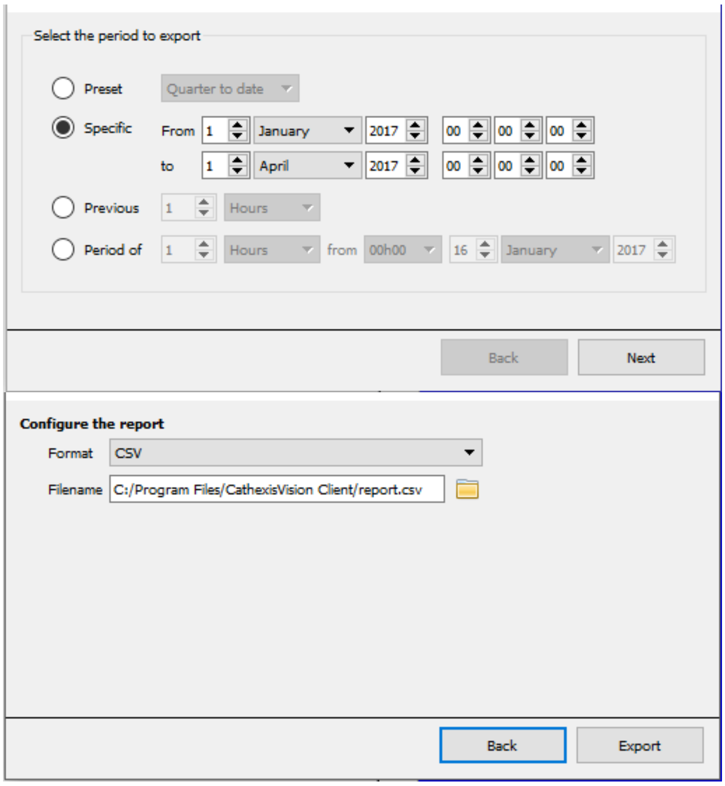
Define the **Schedule** for the report.

Add/remove recipients to whom reports will be sent.

Add recipient:	Click **Add** and enter the email address of the recipient. Multiple recipients may be added. All recipients receive emails.
Remove recipient:	Select the recipient from the dropdown menu. Click **Remove**.

5.3.1.2 Generate Metadatabase Reports

To open the **Export** window, click on this icon.



Select the period to export

○ Preset Quarter to date
● Specific From 1 January 2017 00 00 00
to 1 April 2017 00 00 00
○ Previous 1 Hours
○ Period of 1 Hours from 00h00 16 January 2017

Configure the report
Format CSV
Filename C:/Program Files/CathexisVision Client/report.csv

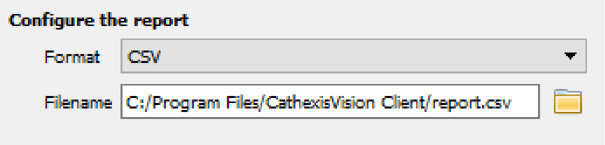
Select the **Period** to export. Enter the required details.

Click **Next**.

Select the **Format** to export the report in (either CSV or PDF).

See below for the two options.

Export CSV



Configure the report
Format CSV
Filename C:/Program Files/CathexisVision Client/report.csv

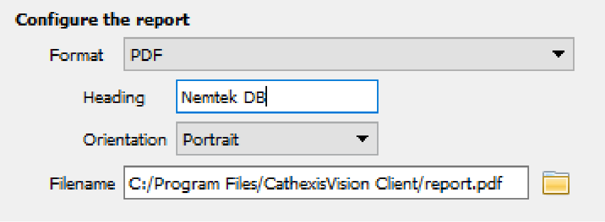
Select CSV **Format**.

Edit the **Filename** using one of the following options:

- Enter the file name straight into the text field (replacing **report.csv**). OR

Click this icon to choose a new folder and filename.

Export PDF



Configure the report
Format PDF
Heading Nemtek DB
Orientation Portrait
Filename C:/Program Files/CathexisVision Client/report.pdf

Select PDF **Format**.

Give the PDF a **Heading**.

Select either Landscape or Portrait **Orientation** of the PDF.

Edit the **Filename** using one of the following options:

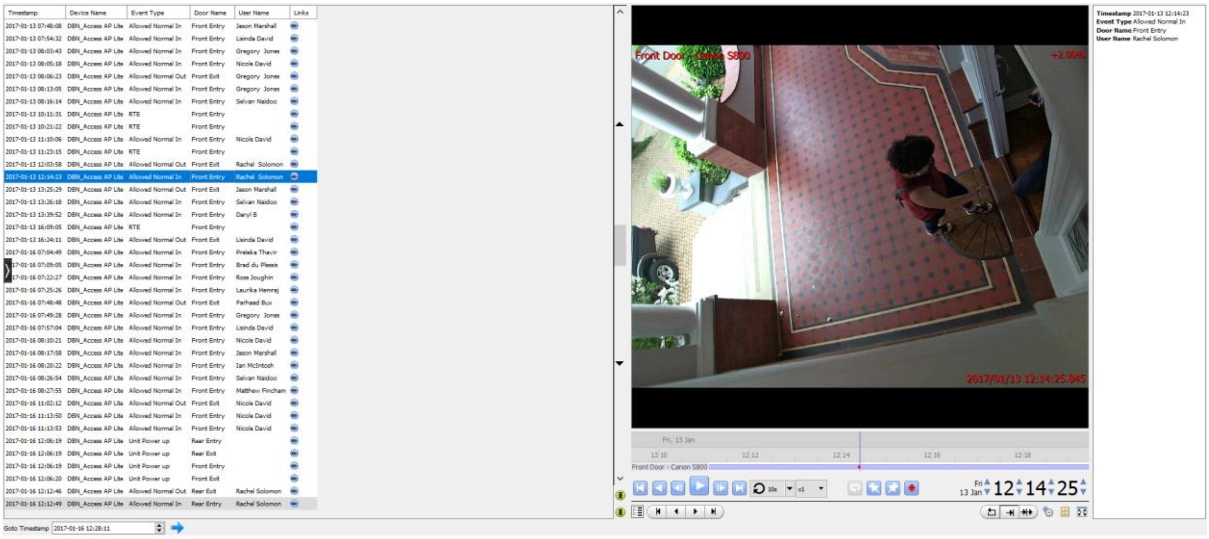
- Enter the file name straight into the text field (replacing **report.pdf**). OR

Click this icon to choose a new folder and filename.

5.3.2 Viewing an Entry's Associated Recording

In the new video option, the video player is embedded in the database view. This player uses the same timeline features as the CathexisVision Cameras Tab.

To view an associated recording, left-click on a database entry which has this icon in the **Links** column: ●. Then click **play** in the video player.

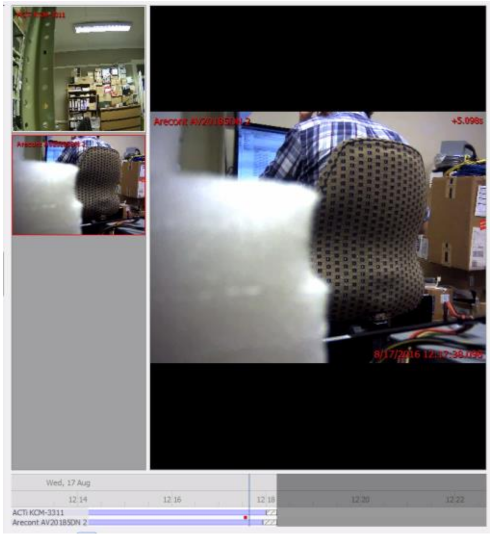


Timestamp	Device Name	Event Type	Door Name	User Name	Links
2017-01-13 07:48:08	DBN_Access AP Lite	Allowed Normal In	Front Entry	Jason Marshall	●
2017-01-13 07:54:32	DBN_Access AP Lite	Allowed Normal In	Front Entry	Lisinda David	●
2017-01-13 08:03:43	DBN_Access AP Lite	Allowed Normal In	Front Entry	Gregory Jones	●
2017-01-13 08:05:18	DBN_Access AP Lite	Allowed Normal In	Front Entry	Nicole David	●
2017-01-13 08:06:23	DBN_Access AP Lite	Allowed Normal Out	Front Exit	Gregory Jones	●
2017-01-13 08:13:05	DBN_Access AP Lite	Allowed Normal In	Front Entry	Gregory Jones	●
2017-01-13 08:16:14	DBN_Access AP Lite	Allowed Normal In	Front Entry	Selvan Naidoo	●
2017-01-13 10:11:31	DBN_Access AP Lite	RTE	Front Entry		●
2017-01-13 10:21:22	DBN_Access AP Lite	RTE	Front Entry		●
2017-01-13 11:10:06	DBN_Access AP Lite	Allowed Normal In	Front Entry	Nicole David	●
2017-01-13 11:23:15	DBN_Access AP Lite	RTE	Front Entry		●
2017-01-13 12:03:58	DBN_Access AP Lite	Allowed Normal Out	Front Exit	Rachel Solomon	●
2017-01-13 12:14:23	DBN_Access AP Lite	Allowed Normal In	Front Entry	Rachel Solomon	●
2017-01-13 13:25:29	DBN_Access AP Lite	Allowed Normal Out	Front Exit	Jason Marshall	●
2017-01-13 13:26:18	DBN_Access AP Lite	Allowed Normal In	Front Entry	Selvan Naidoo	●
2017-01-13 13:39:52	DBN_Access AP Lite	Allowed Normal In	Front Entry	Daryl B	●
2017-01-13 16:09:05	DBN_Access AP Lite	RTE	Front Entry		●
2017-01-13 16:24:11	DBN_Access AP Lite	Allowed Normal Out	Front Exit	Lisinda David	●
2017-01-16 07:04:49	DBN_Access AP Lite	Allowed Normal In	Front Entry	Preleka Thavir	●
17-01-16 07:09:05	DBN_Access AP Lite	Allowed Normal In	Front Entry	Brad du Plessis	●
17-01-16 07:22:27	DBN_Access AP Lite	Allowed Normal In	Front Entry	Ross Joughin	●
2017-01-16 07:25:26	DBN_Access AP Lite	Allowed Normal In	Front Entry	Laurika Hemraj	●
2017-01-16 07:48:48	DBN_Access AP Lite	Allowed Normal Out	Front Exit	Farhaad Bux	●
2017-01-16 07:49:28	DBN_Access AP Lite	Allowed Normal In	Front Entry	Gregory Jones	●
2017-01-16 07:57:04	DBN_Access AP Lite	Allowed Normal In	Front Entry	Lisinda David	●
2017-01-16 08:10:21	DBN_Access AP Lite	Allowed Normal In	Front Entry	Nicole David	●
2017-01-16 08:17:58	DBN_Access AP Lite	Allowed Normal In	Front Entry	Jason Marshall	●
2017-01-16 08:20:22	DBN_Access AP Lite	Allowed Normal In	Front Entry	Ian McIntosh	●
2017-01-16 08:26:54	DBN_Access AP Lite	Allowed Normal In	Front Entry	Selvan Naidoo	●
2017-01-16 08:27:55	DBN_Access AP Lite	Allowed Normal In	Front Entry	Matthew Fincham	●
2017-01-16 11:02:12	DBN_Access AP Lite	Allowed Normal Out	Front Exit	Nicole David	●
2017-01-16 11:13:50	DBN_Access AP Lite	Allowed Normal In	Front Entry	Nicole David	●
2017-01-16 11:13:53	DBN_Access AP Lite	Allowed Normal In	Front Entry	Nicole David	●
2017-01-16 12:06:19	DBN_Access AP Lite	Unit Power up	Rear Entry		●
2017-01-16 12:06:19	DBN_Access AP Lite	Unit Power up	Rear Exit		●
2017-01-16 12:06:19	DBN_Access AP Lite	Unit Power up	Front Entry		●
2017-01-16 12:06:20	DBN_Access AP Lite	Unit Power up	Front Exit		●
2017-01-16 12:12:46	DBN_Access AP Lite	Allowed Normal Out	Rear Exit	Rachel Solomon	●
2017-01-16 12:12:49	DBN_Access AP Lite	Allowed Normal In	Rear Entry	Rachel Solomon	●

Goto Timestamp 2017-01-16 12:28:11

Timestamp 2017-01-13 12:14:23
Event Type Allowed Normal In
Door Name Front Entry
User Name Rachel Solomon

5.3.2.1 Reviewing Multiple Cameras

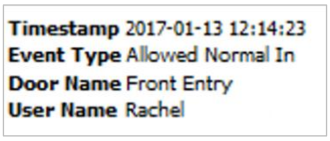


If multiple cameras were added to the recorded object during the integration setup, these are displayed as thumbnails on the left of the video player screen.

To review a camera, select a thumbnail.

5.3.2.2 Device Event Metadata

When an integration database entry is selected, its event information will be displayed on the right of the video player.



Timestamp 2017-01-13 12:14:23
Event Type Allowed Normal In
Door Name Front Entry
User Name Rachel

5.3.3 Archive Selected Database Recordings

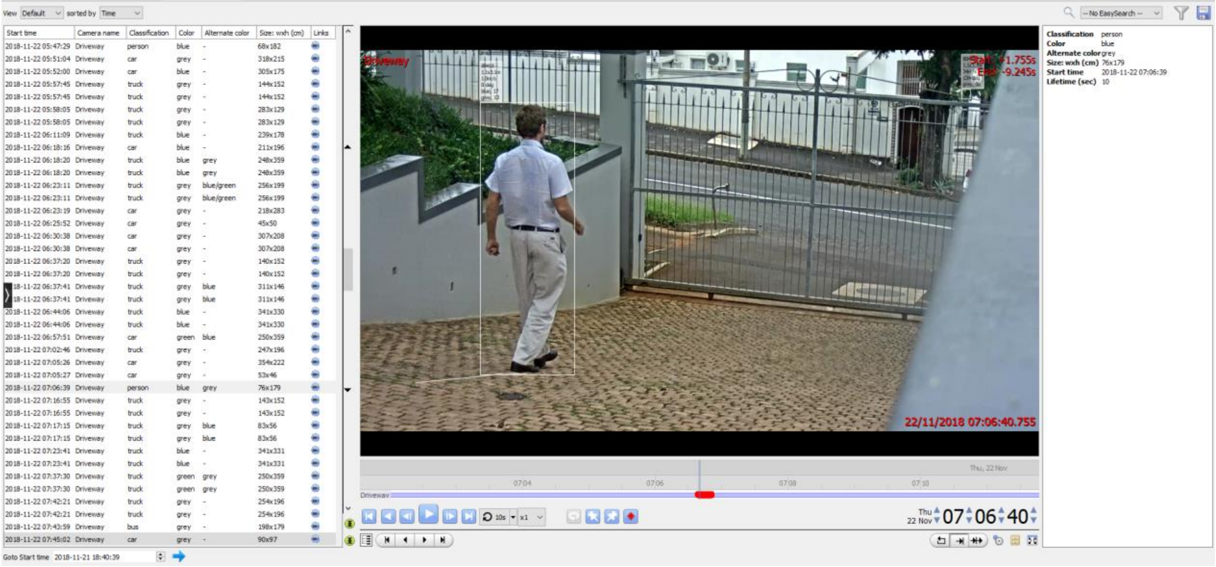
Archiving video from the database follows the same process described above, in the **Archiving** section of this document.

Note: when in the database tab, the archive button icon changes.

Note: When archiving a video feed that has **Privacy Zones** enabled, the privacy zones will appear or not appear, depending on whether they are enabled in the feed at the time of archiving.

(Privacy zones may be enabled or disabled by right-clicking on the feed of video being reviewed, via the database tab).

5.4 Object Classification Database



View Default sorted by Time

Start time	Camera name	Classification	Color	Alternate color	Size: wxh (cm)	Links
2018-11-22 05:47:29	Driveway	person	blue	-	68x182	●
2018-11-22 05:51:04	Driveway	car	grey	-	318x215	●
2018-11-22 05:52:00	Driveway	car	blue	-	305x175	●
2018-11-22 05:57:45	Driveway	truck	grey	-	144x152	●
2018-11-22 05:57:45	Driveway	truck	grey	-	144x152	●
2018-11-22 05:58:05	Driveway	truck	grey	-	283x129	●
2018-11-22 05:58:05	Driveway	truck	grey	-	283x129	●
2018-11-22 06:11:09	Driveway	truck	blue	-	239x178	●
2018-11-22 06:18:16	Driveway	car	blue	-	211x196	●
2018-11-22 06:18:20	Driveway	truck	blue	grey	248x359	●
2018-11-22 06:18:20	Driveway	truck	blue	grey	248x359	●
2018-11-22 06:23:11	Driveway	truck	grey	blue/green	256x199	●
2018-11-22 06:23:11	Driveway	truck	grey	blue/green	256x199	●
2018-11-22 06:23:19	Driveway	car	grey	-	218x283	●
2018-11-22 06:25:52	Driveway	car	grey	-	45x50	●
2018-11-22 06:30:38	Driveway	car	grey	-	307x208	●
2018-11-22 06:30:38	Driveway	car	grey	-	307x208	●
2018-11-22 06:37:20	Driveway	truck	grey	-	140x152	●
2018-11-22 06:37:20	Driveway	truck	grey	-	140x152	●
18-11-22 06:37:41	Driveway	truck	grey	blue	311x146	●
18-11-22 06:37:41	Driveway	truck	grey	blue	311x146	●
2018-11-22 06:44:06	Driveway	truck	blue	-	341x330	●
2018-11-22 06:44:06	Driveway	truck	blue	-	341x330	●
2018-11-22 06:57:51	Driveway	car	green	blue	250x359	●
2018-11-22 07:02:46	Driveway	truck	grey	-	247x196	●
2018-11-22 07:05:26	Driveway	car	grey	-	354x222	●
2018-11-22 07:05:27	Driveway	car	grey	-	53x46	●
2018-11-22 07:06:39	Driveway	person	blue	grey	76x179	●
2018-11-22 07:16:55	Driveway	truck	grey	-	143x152	●
2018-11-22 07:16:55	Driveway	truck	grey	-	143x152	●
2018-11-22 07:17:15	Driveway	truck	grey	blue	83x56	●
2018-11-22 07:17:15	Driveway	truck	grey	blue	83x56	●
2018-11-22 07:23:41	Driveway	truck	blue	-	341x331	●
2018-11-22 07:23:41	Driveway	truck	blue	-	341x331	●
2018-11-22 07:37:30	Driveway	truck	green	grey	250x359	●
2018-11-22 07:37:30	Driveway	truck	green	grey	250x359	●
2018-11-22 07:42:21	Driveway	truck	grey	-	254x196	●
2018-11-22 07:42:21	Driveway	truck	grey	-	254x196	●
2018-11-22 07:43:59	Driveway	bus	grey	-	198x179	●
2018-11-22 07:45:02	Driveway	car	grey	-	90x97	●

Goto Start time 2018-11-21 18:40:39

-- No EasySearch --

Classification	person
Color	blue
Alternate color	grey
Size: wxh (cm)	76x179
Start time	2018-11-22 07:06:39
Lifetime (sec)	10

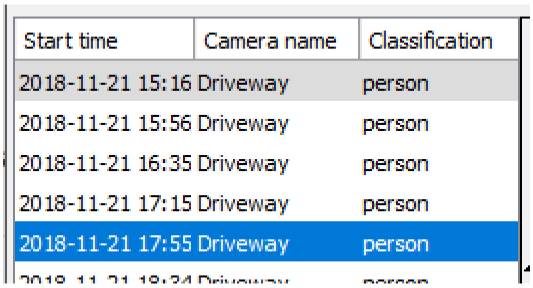
The object classification database allows users to review recordings associated with the tracking and classification of objects. It is an integration database. Navigate to the object classification database in the same as the integration database, described above. This section provides a brief overview of the elements of the integration database that are unique to the object classification database.

See the section above for more information.

Note:

1. **Object classification database** must be enabled in video analytics, and configured. Consult the ***CathexisVision Setup Manual***.
2. Object classification **analytics** must be configured. Consult the ***CathexisVision Setup Manual***.

5.4.1 Recordings List

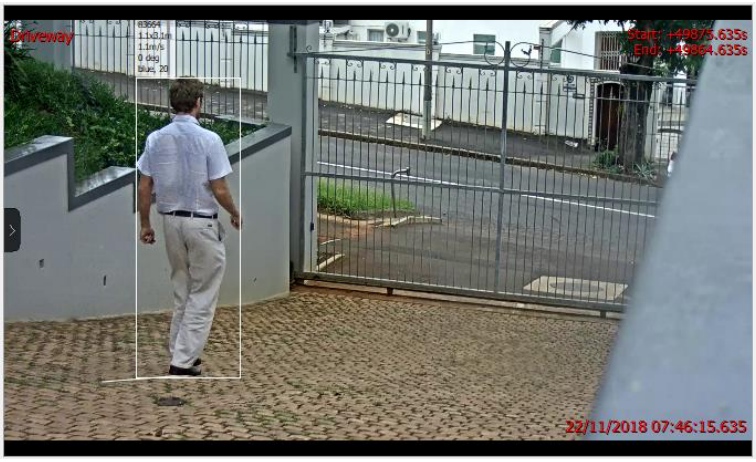


Start time	Camera name	Classification
2018-11-21 15:16	Driveway	person
2018-11-21 15:56	Driveway	person
2018-11-21 16:35	Driveway	person
2018-11-21 17:15	Driveway	person
2018-11-21 17:55	Driveway	person

The recordings listed on the left side of the database indicate the details of the recording. In particular, they indicate the object classification that was made.

Click on one of the recordings in the list to play the video in the database video player (below).

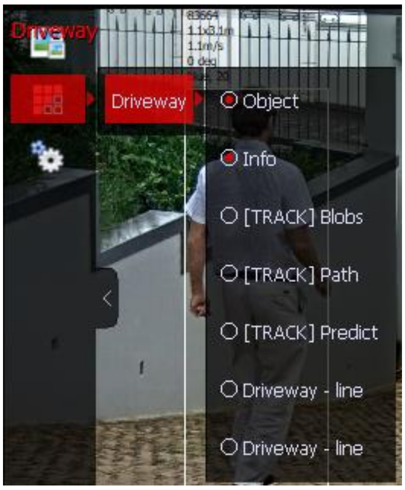
5.4.2 Database Video Player


Driveway
83664
1.1x3.1m
1.1m/s
0 deg
Blue, 20
Start: +49875.635s
End: +49864.635s
22/11/2018 07:46:15.635

The video player will indicate recording information, such as:

- Camera name.
- Overlays (if enabled and selected - see below).
- Recording start and end time. This refers to the times when the classified object enters and leaves the scene.

5.4.2.1 Overlays

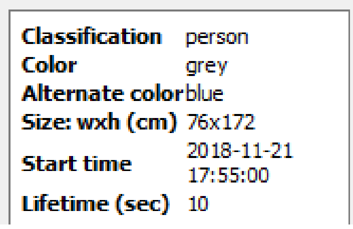

Driveway
Driveway
● Object
● Info
○ [TRACK] Blobs
○ [TRACK] Path
○ [TRACK] Predict
○ Driveway - line
○ Driveway - line

To display overlays:

1. Hover over the left side of the video player.
2. Click the arrow that appears.
3. Select the overlays button.
4. Select the relevant camera.
5. Select the desired overlays from the list.

Note: multiple overlays can be selected.

5.4.2.2 Recording Metadata



Classification	person
Color	grey
Alternate color	blue
Size: wxh (cm)	76x172
Start time	2018-11-21 17:55:00
Lifetime (sec)	10

On the right side of the database, metadata about the recording will be displayed. Most of this is also displayed in overlays (if enabled) and in the recordings list information.

The metadata panel the user to quickly review the object classification information.

5.5 Pre-2015 Databases

Pre-2015 databases allow for filtering when viewed from later CathexisVision clients. There are three major filter types: **Filters, Field Constraints**, and **Time Constraints**.

5.5.1 Filters

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

AND	Applying Filter A **AND** Filter B will provide results which only contain Events where both Filter A and Filter B are true.
OR	Applying Filter A **OR** Filter B will provide results which contain any Event in which Filter A is true, plus any Event in which Filter B is true.

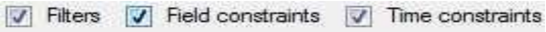
Note: Within a single filter, one cannot use both functions. Thus, the user cannot "Filter A **AND** Filter B **OR** Filter C". (It must either be all AND filters, or all OR filters.)

5.5.1.1 Add/Remove a Filter

Click this icon to add a filter.

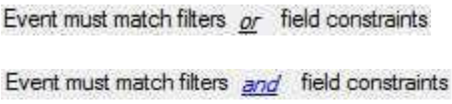
Click this icon to remove a filter.

5.5.1.2 Enable a Filter



☑ Filters ☑ Field constraints ☑ Time constraints

In order to have any of the Filters active, check the relevant filter box at the bottom of the filters dialogue. Note: The user may further constrain results, by making **Filters** and **Field Constraints dependent on** AND / OR.

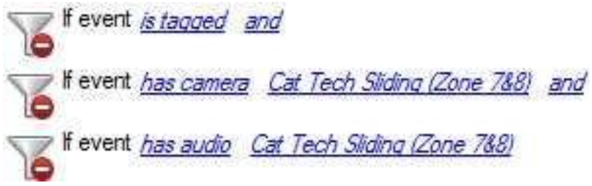
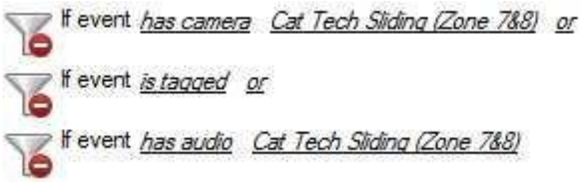


Event must match filters *or* field constraints

Event must match filters *and* field constraints

For example, the user can search using the settings shown to the left.

5.5.1.3 Filters Tab

If event has Camera	These are the primary sorting lists. The text is blue and underlined, indicating that they are options. Click to see a pop-up list of the options. Choose from the following: Has camera: then choose camera from **Camera Name dropdown list**. Has audio: then choose audio input from **Audio Input Name drop-down list**.
and	This is a logical parameter for multiple filters. It may be “and” or “or”. It only appears if there is more than one filter. By default, it is “and”. **The filter results must match *all* of the filters**. For example:  If event is tagged and If event has camera Cat Tech Sliding (Zone 7&8) and If event has audio Cat Tech Sliding (Zone 7&8) Then the result is only those events that are tagged, that also include the listed camera’s content, and that also include the listed audio content – probably a short list.
Or	There are cases when it is “or”. **The filter results must match *any* of the filters.** For example:  If event has camera Cat Tech Sliding (Zone 7&8) or If event is tagged or If event has audio Cat Tech Sliding (Zone 7&8) Then the result is all events with the listed camera’s content *plus* all Events that are tagged *plus* all events that have the listed audio content – probably a long list.

5.5.1.4 Field Constraints Tab

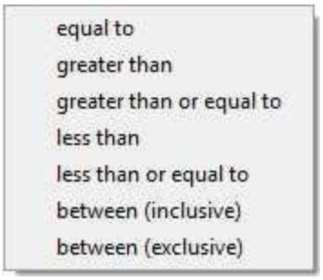
The Field Constraints tab is only visible if a streaming text data application is installed. If this is the case, text data field filters are visible. They include the fields that have been identified in the text data streaming setup. On this tab, the fields customised for the text data application are shown.

Examples of text data are the data streamed from till transactions (such as transaction number, purchase amount, time, and number of purchased items), and data streamed from Access Control applications (such as name, time, and employee number). 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 a filter is created and then its parameters are changed using dropdown options (see above). The nature of these parameters depends entirely on custom application.

5.5.1.5 Time Constraint Tab

There are several ways to constrain the time. These are:

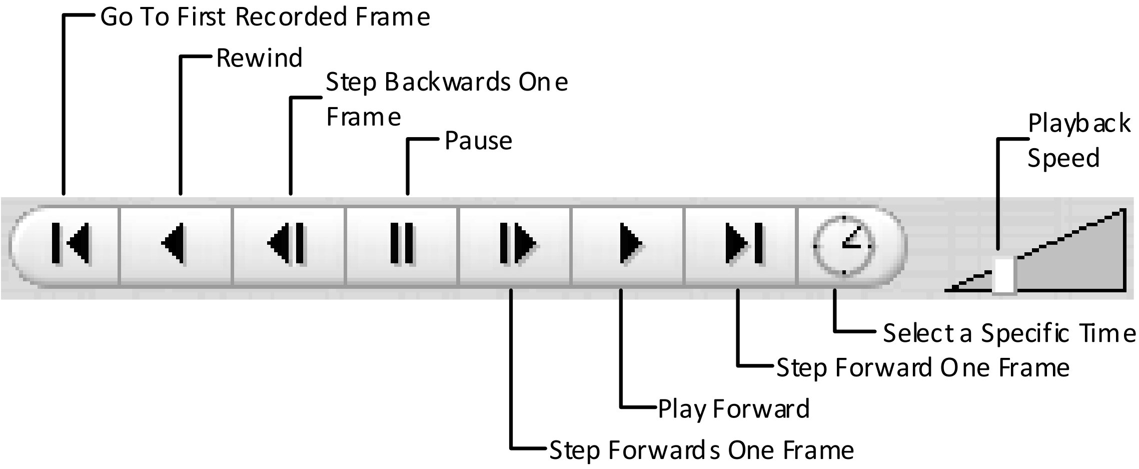


equal to
greater than
greater than or equal to
less than
less than or equal to
between (inclusive)
between (exclusive)

Note: To modify the times, click on the **Date / Time hyperlink**. Enter parameters in the dialogue that pops up.

5.5.2 Pre-2015 Playback Controls

When reviewing video from pre-CathexisVision 2015 sites, the controls will be as follows:


Go To First Recorded Frame
Rewind
Step Backwards One Frame
Pause
Playback Speed
Select a Specific Time
Step Forward One Frame
Play Forward
Step Forwards One Frame

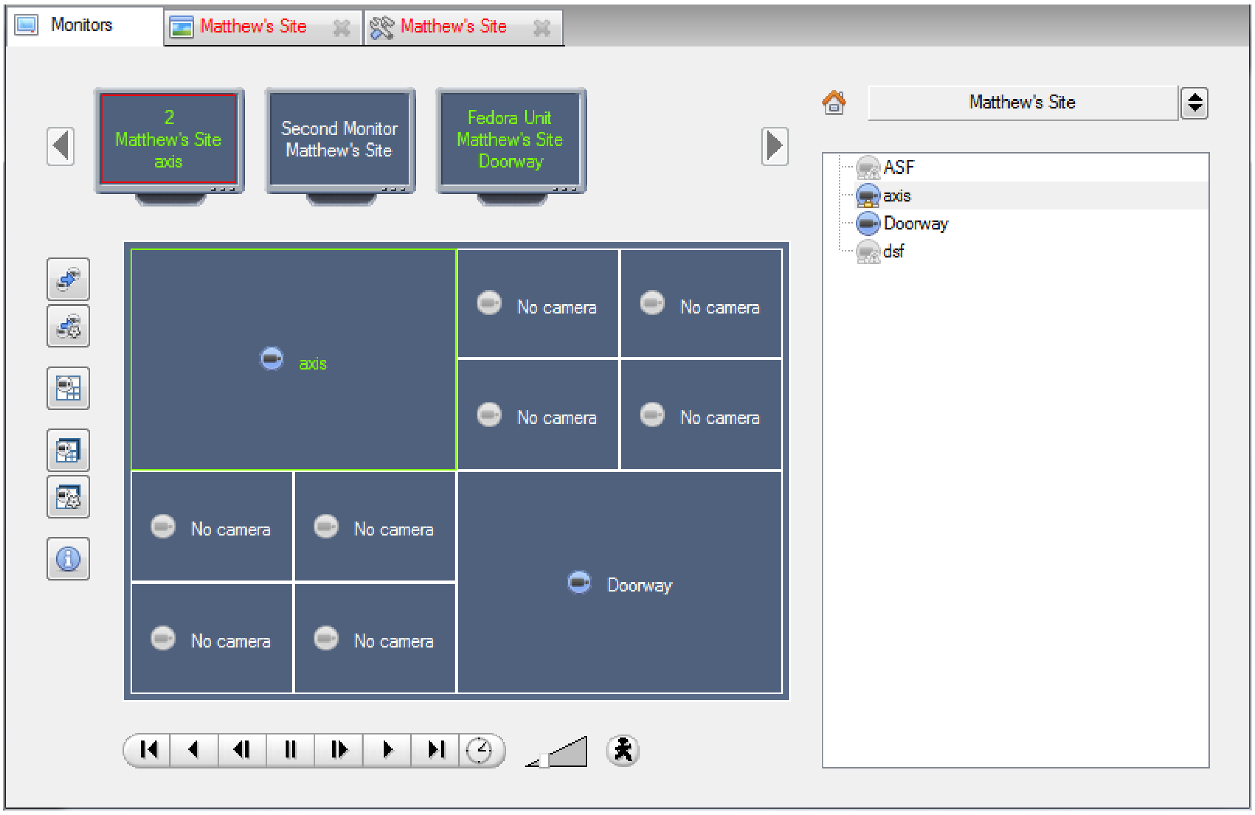
6. Monitors Tab

This tab will only be available if the system administrator has given the user monitor access rights.

The **monitors tab** gives full control over the Video Wall. Here, one can change the layout, and define camera sequences and salvos.

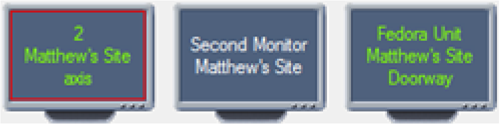
Because this tab deals only with the configuration of the Video Wall, there will be no video playing on the interface. Only the names of cameras and where they are placed in the layout will be visible.

The next section deals with the Video Wall Software, which will reflect the settings configured here.

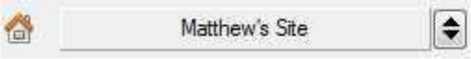

Monitors
Matthew's Site
Matthew's Site
2
Matthew's Site
axis
Second Monitor
Matthew's Site
Fedora Unit
Matthew's Site
Doorway
Matthew's Site
ASF
axis
Doorway
dsf
axis
No camera
No camera
No camera
No camera
No camera
No camera
No camera
No camera
Doorway

6.1 Open a Site on a Screen

The list of monitors will represent the number of monitors that have been added to servers on the Site.


2
Matthew's Site
axis
Second Monitor
Matthew's Site
Fedora Unit
Matthew's Site
Doorway

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


Matthew's Site

Then select a site.

The monitor with a red border will have its camera layout displayed below it.

6.1.1 Layout

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

6.1.1.1 Recall a Layout

To bring up a particular layout on a screen, click on this icon. Select the desired layout name.

6.1.2 Sequence

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

6.1.2.1 Run a Sequence

1. Click on a camera panel.
2. Click on this icon.
3. Select the relevant sequence from the drop-down menu.

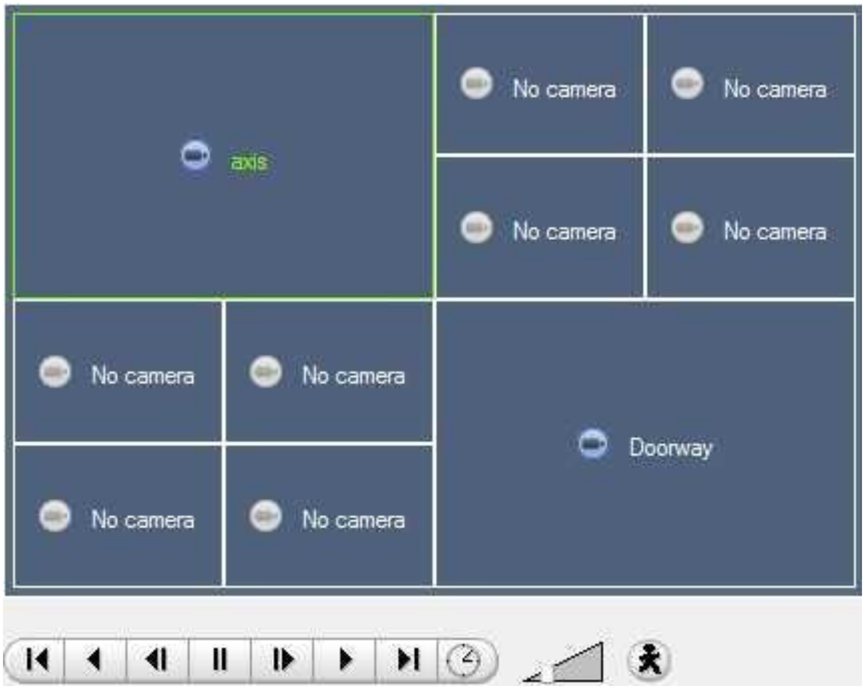
6.2 Salvo

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.

6.2.1 Run a Salvo

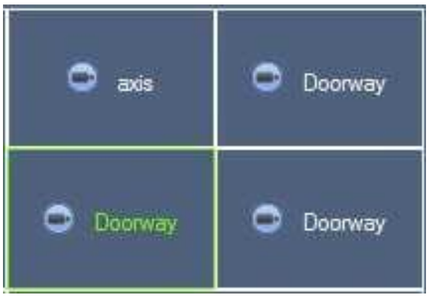
1. Click on a layout panel.
2. Click on this icon.
3. Select the relevant Salvo from the drop-down menu.

6.3 Virtual Cameras interface


axis
No camera
No camera
No camera
No camera
No camera
No camera
No camera
No camera
Doorway

The virtual cameras interface is the interface where the user can:

- See the Layout that the cameras will take on the selected monitor.
- See what cameras are in which panels.
- Control the overlays on each camera.
- Use the Playback controls to review video on the Monitor.


axis
Doorway
Doorway
Doorway

Note: When the user selects a camera, the camera's border and name will become green.

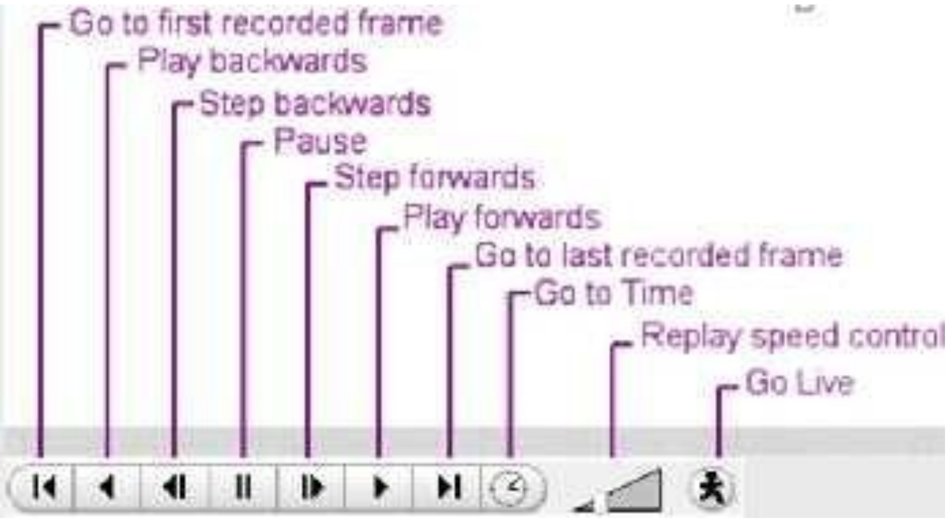
.

6.3.1 Individual Panel Settings

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

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

6.3.2 Review Controls


Go to first recorded frame
Play backwards
Step backwards
Pause
Step forwards
Play forwards
Go to last recorded frame
Go to Time
Replay speed control
Go Live

7. System Alerts and Alarms

Technical alarms and alerts will be received via the Alarm Gateway and / or the main CathexisVision interface, if there is a system error. This section explains the kinds of technical alarms and alerts that may be received, and what a sample alarm looks like in the interface. **Note**: This does **not** deal with receiving alarms to the Alarm Gateway. Consult the ***Alarm Management Gateway Setup and Operation Manuals*** for information on this aspect of technical alarms.

7.1 Types of Technical Alarms

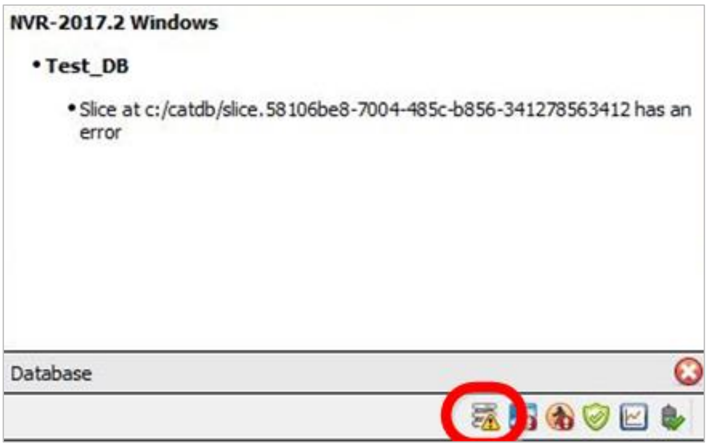
A single **Technical Alarm** can send multiple different errors. Here are some examples:

Technical Alarm	Error/s
Test	Triggers an alarm at a set frequency. This is intended to test the system, to see if it will receive alarms.
Camera Faults	Will generate based on cameras being up for a certain percent of the time, or cameras failing a certain number of times in a given period.
Frame-Grabber	Will generate if a frame-grabber has a problem, such as frame-grabber reboot, or card stalled.
Scheduled Archive	Will generate if a scheduled archive encounters a problem, such as the archive destination being inaccessible.
Disk	Will generate when disk errors occur.
Environment	Will generate if environment warnings are received, such as high CPU temperature and fans running at low RPM (NetBSD only).
Software Failure	Will generate if a software module fails.
Database	Will generate if the database encounters an error, such as failing to write data to the database.
File-System	Will generate if file-systems become full (NetBSD only).
Metadatabase	Will generate if the metadatabase (typically used in integrations) encounters a problem, such as running out of disk space.
Base-Station Alarms	Will generate if a base-station has been configured to send alarms via a capture station. The base-station can generate alarms such as software failures.
Reboots	Will generate if a unit reboots frequently, has a watchdog, or hard-reboots (configurable, NetBSD only).
Server Monitoring	Will generate if a unit on the site goes down.
Recording failure	Will generate if a recording should be taking place, but for some reason is not.
Recording Period	Will generate if a database stops recording before its predefined period is complete. For example, if a database is set to record for 30 days, but it only records for 25.
Gateway alarm	**Note**: **o**nly applies to **gateway systems**, and triggers when the gateway experiences a problem, such as an error connecting to the alarm database.
Integration Database	Will generate if the integration database is down.
Network I/O	Will generate if an **EIO** is down.
Failover	Will generate if any of the failover servers are down.

7.2 Example: Database Technical Alarm

This is an example of how a database technical alarm looks in the software, as well as when an email is sent and / or a base-station is called.

7.2.1 Notification Icon



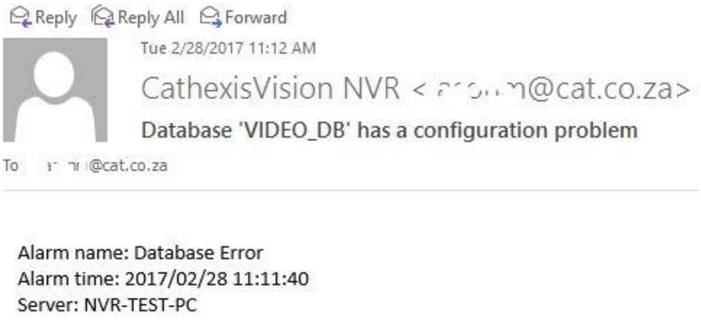
NVR-2017.2 Windows

- **Test_DB**
  - Slice at c:/catdb/slice.58106be8-7004-485c-b856-341278563412 has an error

If a database technical alarm is sent, a database error icon will appear in the Status Bar at the bottom of the interface.

Click on the icon to display information about the error.

7.2.2 Send Email



Tue 2/28/2017 11:12 AM

CathexisVision NVR <[redacted]@cat.co.za>

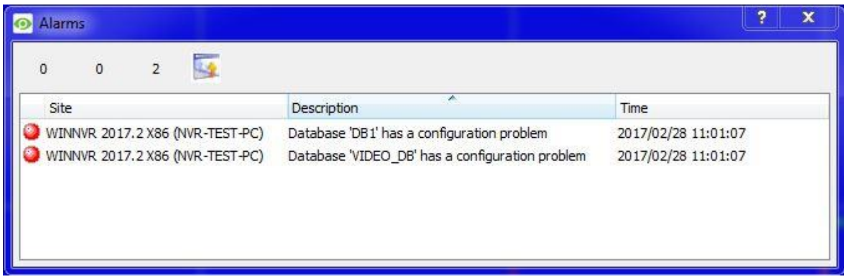
Database 'VIDEO_DB' has a configuration problem

To [redacted]@cat.co.za

Alarm name: Database Error
Alarm time: 2017/02/28 11:11:40
Server: NVR-TEST-PC

This is an example of what will be received if an email address has been set up to receive an email when a database technical alarm is sent.

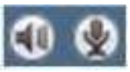
7.2.3 Call Base-Station



Site	Description	Time
● WINNVR 2017.2 X86 (NVR-TEST-PC)	Database 'DB1' has a configuration problem	2017/02/28 11:01:07
● WINNVR 2017.2 X86 (NVR-TEST-PC)	Database 'VIDEO_DB' has a configuration problem	2017/02/28 11:01:07

If the unit has been configured as a base-station and a database technical alarm is sent to it, an alarm window will open.

8. Audio Procedures



The microphone and speaker icons on the menu bar (at the top right of the screen) represent the two local audio hardware resources: **local audio input** and **local audio output**.

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

Look at these icons to see the current state of audio interaction. Run the 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**:

8.1 Stop/Listen to a Remote Site

8.1.1 Listen Via Resource Panel

Open the Resource Panel for the remote Site, and double-click the remote microphone to listen to.

The local speaker goes green, indicating that listening is in progress. Move the cursor over the speaker to see a tool-tip describing the remote audio input that is being listened to. One should hear sound from the remote site.

8.1.2 Stop Listening via Resource Panel

Right-click the local speaker. Choose **Stop**.

The local speaker goes grey, indicating that listening is no longer in progress.

8.2 Stop/Listen to Remote Live MPEG

8.2.1 Listen via 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. Select **Listen** from the menu.

The icon will change from grey to green, to indicate activity. One should also hear sound on the local speaker.

8.2.2 Stop Listening via Middle-click Camera Menu

Middle-click the camera image. Select **Stop listening** from the menu.

The icon will change from green to grey, to indicate inactivity. Sound on the local speak should stop.

8.3 Stop/Speak to a Remote Site

8.3.1 Speak to a Remote Site

Open the Resource Panel for the remote site. Double-click the remote speaker to speak through. The local microphone goes green, indicating that speaking is in progress.

8.3.2 To Stop Speaking to a Remote Site

Right-click the local microphone. Choose **Stop call**. The local microphone goes grey, indicating that speaking is no longer in progress.

9. Other Procedures

9.1 Switch a Relay Output

Examples of switching a relay output include unlocking a door or activating 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 CathexisVision Resource Panel can be configured. The setting is in CathexisVision **menu / Settings / General**

1. Left double-click to toggle the relay between set and clear. ***Or*** Right-click the relay.
   a. A popup menu offers the choice between Set Output or Pulse Output. Activate **Set Output**.
   b. Select an option. Click **OK**.
   c. 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.
2. To clear a set relay, left double-click. Alternatively, right-click and select **Clear Output**.

9.2 Pulse a Relay Output

For example, unlock a door for a defined 4-second period.

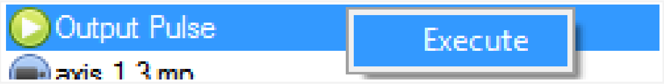
Relay outputs can also be pulsed from the Map (**right-click / Pulse Output**).

Right-click the output. Select **Pulse Output**.

This pulses the output for the time that has been set at the unit. While the output is pulsed, the play / pause image in the middle of the output icon will change from black to white.

When it re-sets, it will return to black.

9.3 Manually Trigger a Site Action



Right-click the Site Action in the Resources Panel. Click **Execute**.

Note: This requires:

1) Site action setup

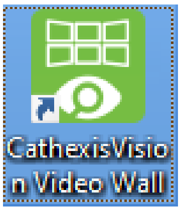
2) Assignment of Site action to resources panel

3) Appropriate access rights.

10. Video Wall Software

The Video Wall software is automatically installed when installing CathexisVision. A shortcut to the Video Wall is created by default on the desktop.

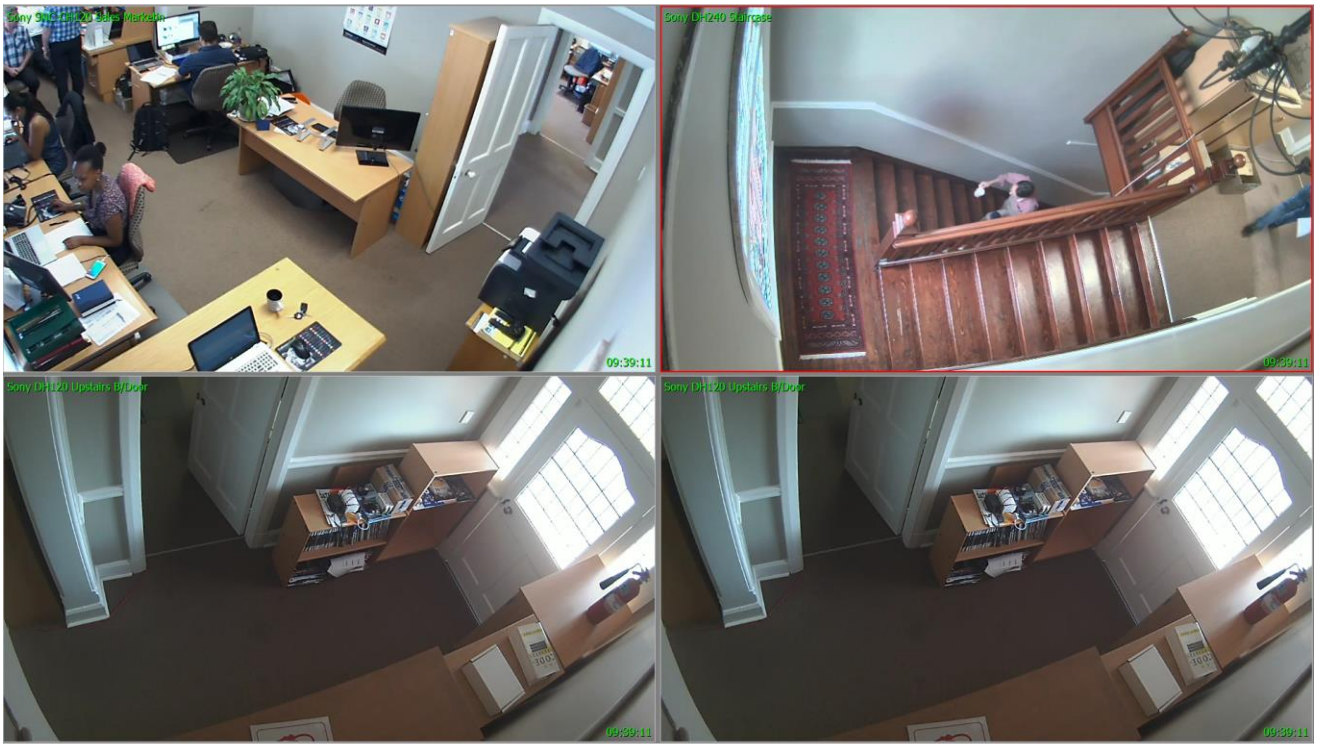
10.1 Open Video Wall


CathexisVision Video Wall

To open the Video Wall, double-click the Video Wall shortcut.

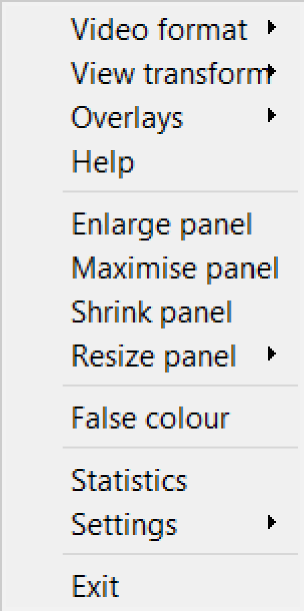
10.2 Interface

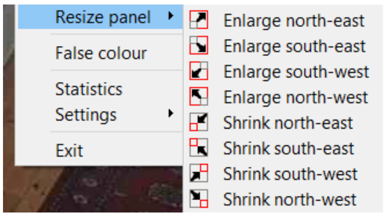
Panels configured in the Monitors Tab of CathexisVision (above section), will be immediately visible when the Video Wall is opened:


Sony SNC-CH120 Sales Marketin
Sony DH240 Staircase
09:39:11
09:39:11
Sony DH120 Upstairs B/Door
Sony DH120 Upstairs B/Door
09:39:11
09:39:11

10.3 Right-Click

Right-click anywhere in the Video Wall to bring up the menu below.

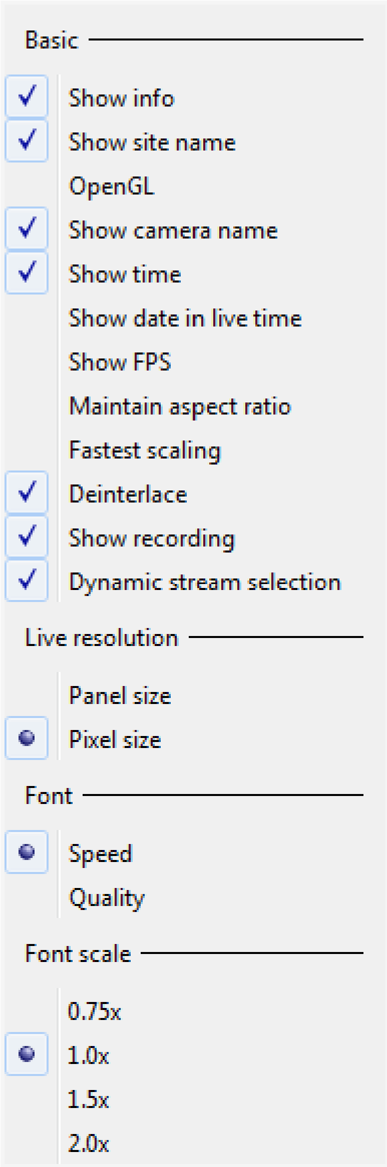

Video format
View transform
Overlays
Help
Enlarge panel
Maximise panel
Shrink panel
Resize panel
False colour
Statistics
Settings
Exit

Video format	Select video format for camera in selected panel.
View transform	Transform video for camera in selected panel.
Overlays	Select overlay to display from available overlays, enable default overlays, or disable overlays for the selected panel.
Help	Display help screen for basic camera controls.
Enlarge panel	Enlarge selected panel by one panel size.
Maximise panel	Make selected panel fullscreen.
Shrink panel	Shrink selected panel by one panel size.
Resize panel	Depending on current size of panel, resize and orientate the selected panel:  Resize panel False colour Statistics Settings Exit Enlarge north-east Enlarge south-east Enlarge south-west Enlarge north-west Shrink north-east Shrink south-east Shrink south-west Shrink north-west
False colour	Enable false colour on selected panel.
Statistics	View overall statistics for Video Wall.
Settings	Configure settings for all panels on Video Wall. See below for details.
Exit	Close the Video Wall.

10.3.1 Settings

Right-click anywhere in the Video Wall. Select **Settings**.

The settings menu is divided into four sections: Basic, Live Resolution, Font, and Font Scale.



Basic
☑ Show info
☑ Show site name
☐ OpenGL
☑ Show camera name
☑ Show time
☐ Show date in live time
☐ Show FPS
☐ Maintain aspect ratio
☐ Fastest scaling
☑ Deinterlace
☑ Show recording
☑ Dynamic stream selection

Live resolution
○ Panel size
● Pixel size

Font
● Speed
○ Quality

Font scale
○ 0.75x
● 1.0x
○ 1.5x
○ 2.0x

Basic Settings	
Show info	Displays information about all panels as an overlay.
Show Site name	Shows the name of the connected site above Video Wall panels.
OpenGL	Uses OpenGL.
Show camera name	Displays camera names for all panels.
Show time	Displays time for all panels.
Show date in live time	Includes the date when time is displayed on live video.
Show FPS	Displays frames per second for all panels.
Maintain aspect ratio	Keeps aspect ratio of cameras for all panels.
Fastest scaling	Uses fastest scaling for all panels (non-OpenGL setting).
Deinterlace	Uses deinterlace for all panels.
Show recording	Shows recording icon in panel for all cameras which are recording.
Dynamic stream selection	Enabled by default. This selects the correct stream based on the display size / resolution when a camera has multiple streams.
Live Resolution Settings	
Panel size	Select whether live video resolution is based on **Panel size** or **Pixel size**.
Pixel size	
Font Settings	
Speed	Select whether OpenGL settings should optimise fonts for **Speed** or **Quality**.
Quality	
Font Scale Settings	
Select the size to which all Video Wall fonts will be scaled.	

11. Conclusion

Note: This manual was designed to deal with operating procedures.

For more information about the CathexisVision software, consult the ***CathexisVision Setup Manual*** (https://downloads.cathexisvideo.com).

For support, email support@cathexisvideo.com