



CathexisVision Installation Guide for CatObserver

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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

CatObserver is a feature that enables a selected viewing monitor, or computer screen, to be configured as a virtual camera so that all the activity viewed on these screens is recorded. The benefits of this feature include easy archiving and access to all video footage, which an operator has viewed on this selected monitor/screen during an incident, without having to archive or access footage from multiple cameras.

Note: CatObserver is configured as an IP camera and as such, requires an IP license.

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.

USEFUL LINKS

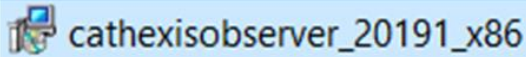
To view **tutorial videos** on CathexisVision setup, visit <https://cathexisvideo.com/resources/videos>

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

2. Install CatObserver

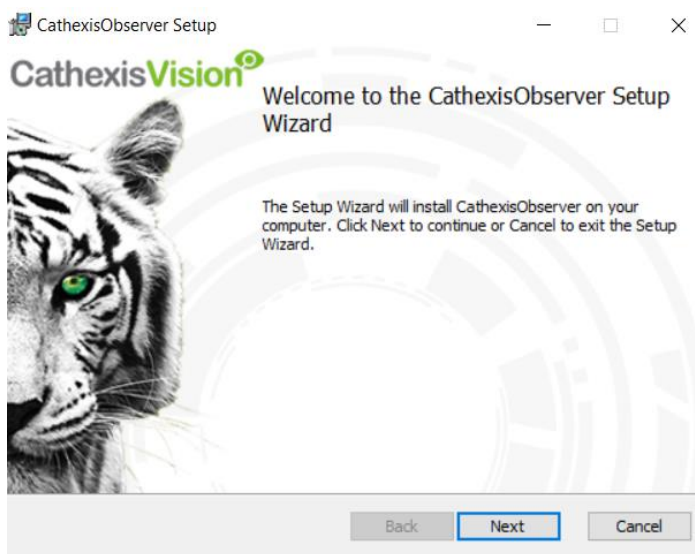
2.1 Install CatObserver

CatObserver must be installed on the computer/server where viewing is to take place.

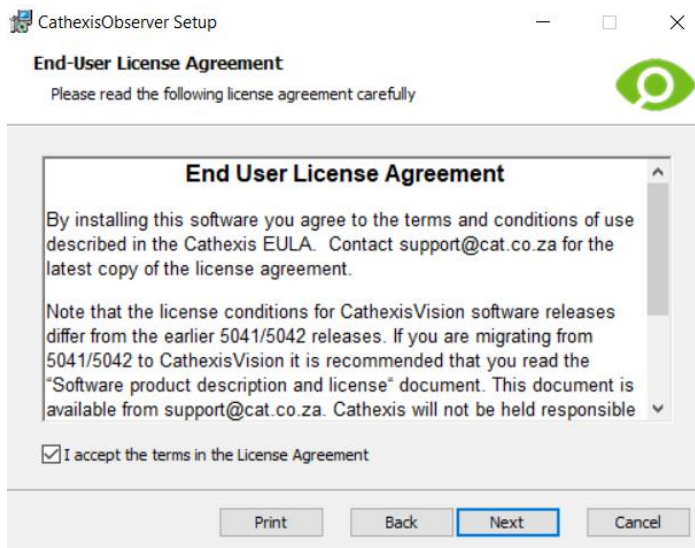


Start the setup process on the chosen computer by double-clicking the CatObserver installer icon.

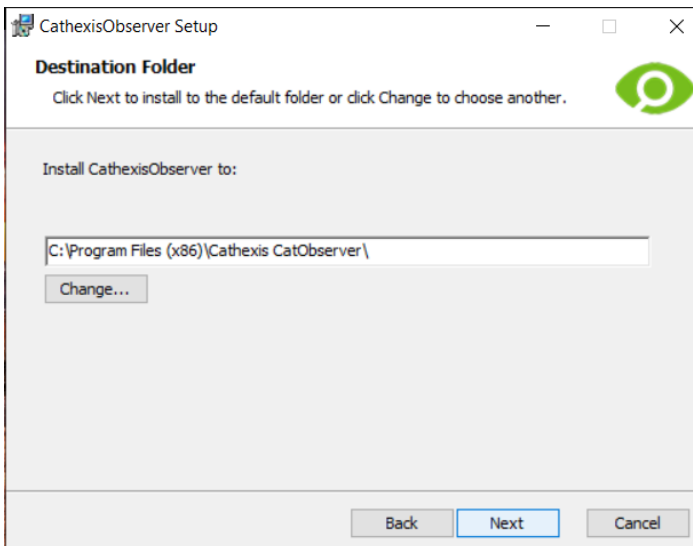
2.2 Cathexis Observer Setup Wizard



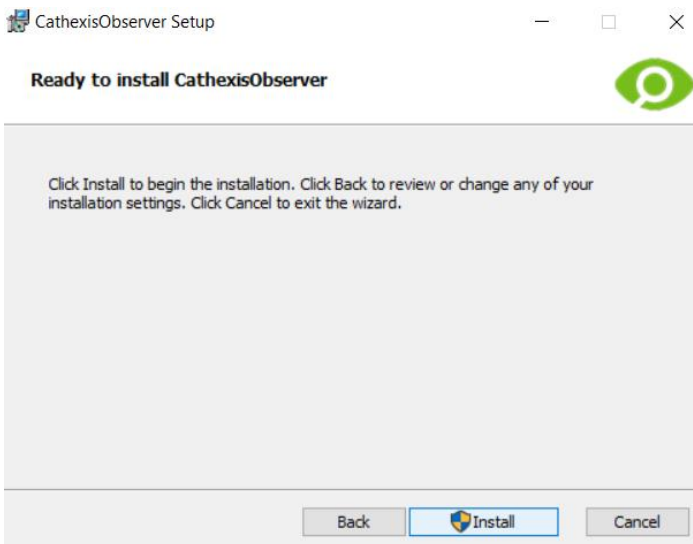
1. Click **Next** to follow the Setup Wizard.



2. **Accept** the End User License Agreement.



3. Choose a **destination folder**.



4. In order to complete the process, click **Install**.

Note: For setup, The IP address and screen number (video input) of the screen being monitored will be required.

3. Add a CatObserver Camera on the CathesisVision Server

There are two ways to add a camera in **CathesisVision**:

1. The camera wizard.
2. The copy/paste function.

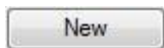
This section of the manual provides instructions for these two methods, followed by a description of the camera editing options, and some extra information on the mouse right-click menu.

3.1 Camera Addition Method 1: Wizard

The camera addition wizard explains all the steps needed to **add a camera**, as well as **creating databases, schedules, and events**.

There are two phases in the addition wizard:

1. The addition of the camera.
2. Setting up the system to record from that camera (either via a VMD Event, or via a scheduled recording).




To start the camera addition Wizard, click on the button at the bottom of the cameras panel.

The following is a guide to each step in the Wizard.

3.1.1 Camera Connection

The first step in the Wizard is the **Camera Connection** step. Here, set up all the connection details of the CatObserver camera installation. The user needs to choose between adding a new camera, and adding a camera view that is a new video input for an existing camera. The options below will change on a camera-by-camera basis.

 New camera

Camera connection
Specify the connection details for the camera

Driver	Cathesis catObserver	<input type="button" value="Scan"/>
IP address	192.168.33.152	
Video input	1	
Port	Default	
Login	<input type="text"/>	
Password	<input type="text"/>	

- **Driver:** Select the Cathesis CatObserver driver.
- **IP Address:** Set the IP address of the computer/server on which CatObserver is loaded.
- **Scan:** Scan the network for available cameras. Click on a camera and driver and an IP address will be automatically set. (Under scan, will be the option to list cameras that are already linked to other servers. Check the box to “Show devices used by servers.”)
- **Video Input:** This will be used if connecting to a computer/server with multiple monitors. **Default is 1.**
- **Port:** This has a default setting, but can be configured to connect through the desired port.
- **Login and password:** The default is admin/admin.

Note:

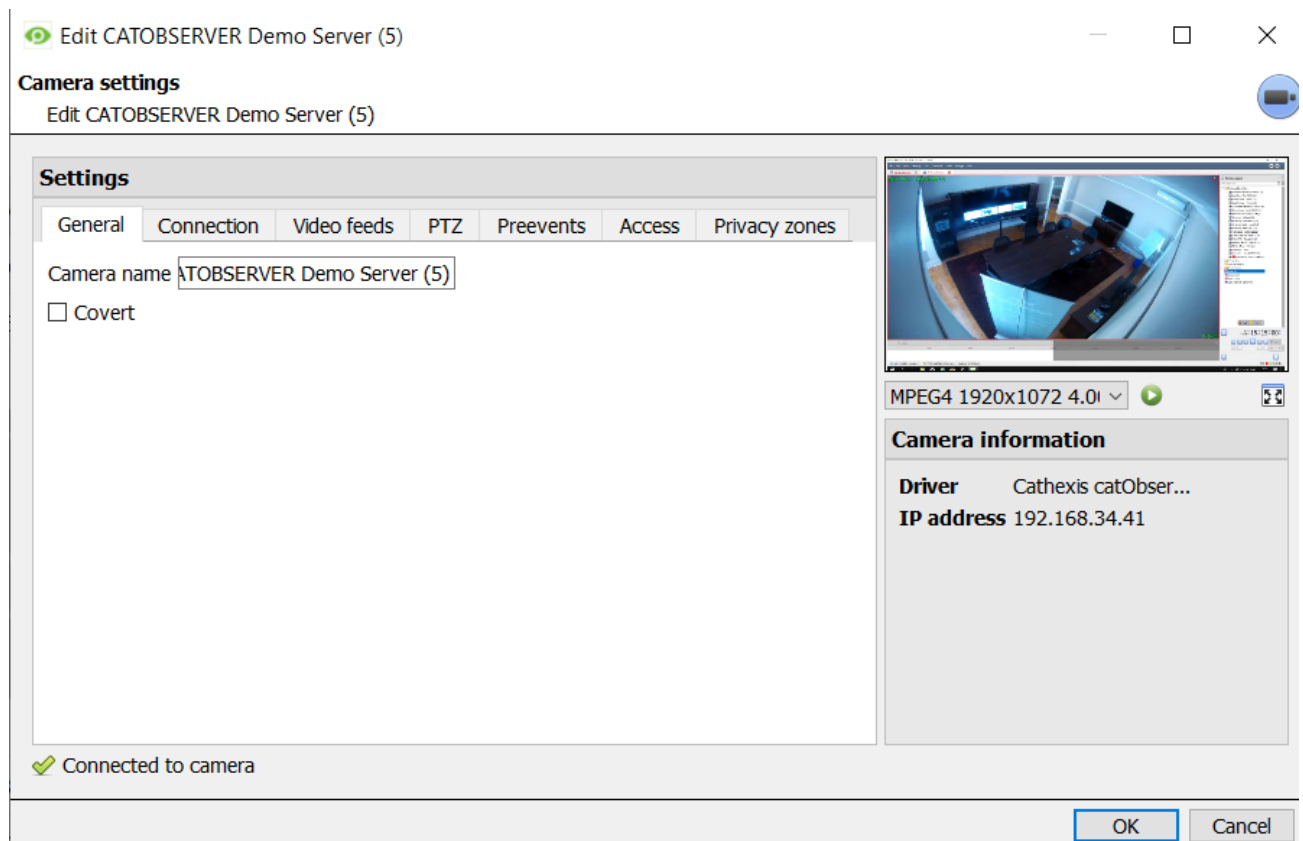
Adding a New Video Input:

- When adding a new video input to an existing camera, the user will be unable to change the IP address of that camera.
- This option is not available when connecting a **CathesisVision 2015** site to a later site, as this option is exclusive to later versions.

Scanning:

- Some Servers/Cameras do not support automatic location requests, and will not be found using **Scan**.
- Universal Plug and Play (**UPnP**) will have to be enabled on the cameras that do support location requests.

3.1.2 General Settings



Name	Give the CatObserver camera a descriptive name, so as to make it easily identifiable in a list.
Covert	CathesisVision gives the option to create a covert camera. There is a difference between a camera being covert, and a user not having access to it.
Covert	Camera will only be present in the Resources List of an Administrator, or an access level that has been granted access to this camera.
Access Level Defined	Camera will still appear in the Resources List of lower login levels, but these levels will not be able to view the feed.

Device Information This will be a list of all the relevant information, pertaining to the device itself. It can be seen underneath the image preview.

Live Preview MPEG4 1920x1072 4.0i The image displayed is a frame grab from the video feed chosen.

- To play the live preview click the play button.
- To enlarge the image, click the enlarge icon.

Note: The image in the preview will not reflect the actual quality of the feed, as it is transcoded when viewed in the camera addition wizard.

3.1.3 Video Feeds

There is a default feed for CatObserver. It can be found by navigating to Camera Settings and **selecting 'Video Feeds'**.

Camera settings
Edit CatObserver

Settings

General | Connection | **Video feeds** | PTZ | Preevents | Access | Privacy zones

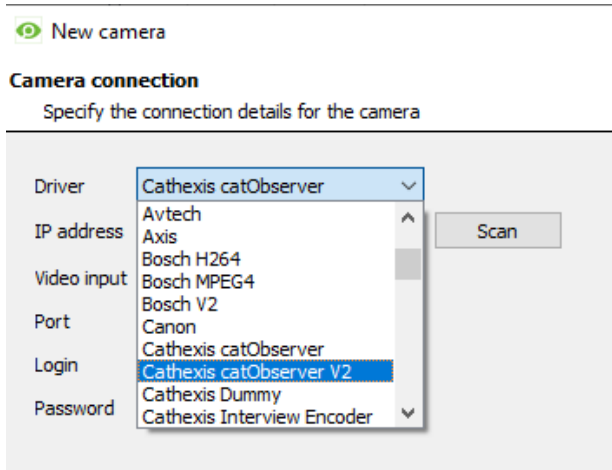
Format	Res.	Live	Rec. channel	Video analytics	Fps	Bitrate	GOP	Feed
1 MPEG4	2.0MP (1920x1072)	Yes	#1 (default)		2.0	1.80 Mbps	4	Format - Resolution - Framerate -

Live Live viewing is enabled on 1 of the feeds
Recording Recording is enabled on 1 of the feeds
Video analytics No video analytics feeds are enabled

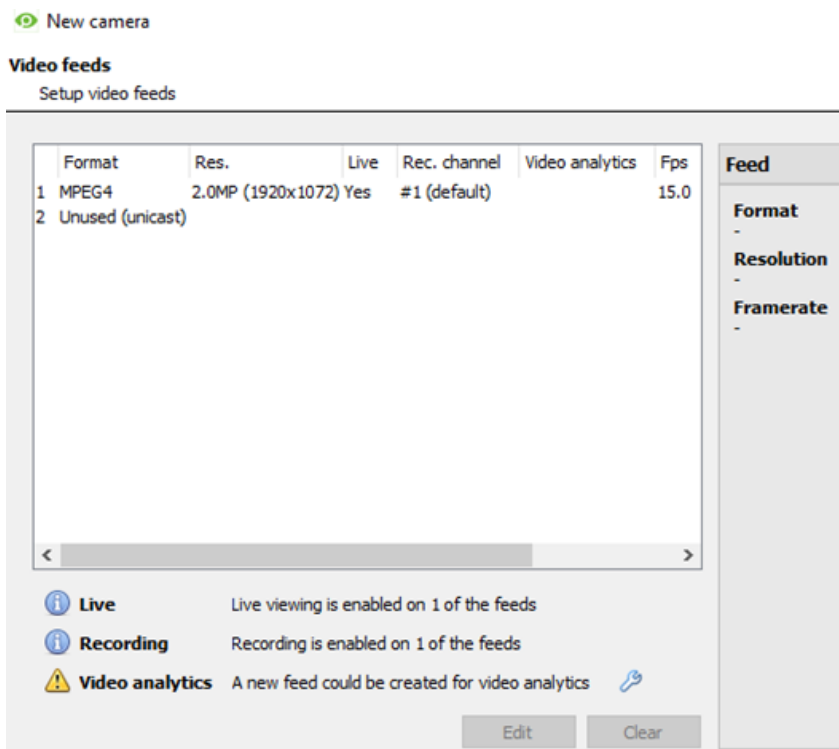
catObserver size 100%

Connected to camera

A **second feed** may be set up with the CatObserver V2 Driver:



1. When adding a new camera, select the **CatObserver V2 Driver** from the drop-down menu.



2. Under 'Video Feeds', select the **second option**.

3.1.4 Add/Edit a Video Feed

For CatObserver, only the Framerate can be edited.

New feed
?
×

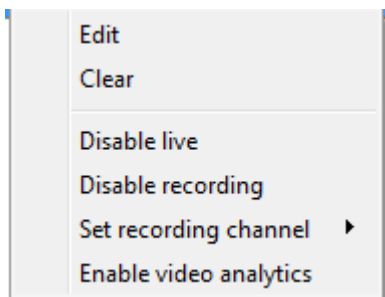
Transmission	Unicast	▼
Format	MPEG4	▼
Resolution	2.0MP (1920x1072)	▼
Framerate	2.0	▲▼
Bitrate	1800kbps	▲▼
	Normal quality	▼
Key frame distance	4 frames	▲▼
Key frame rate	0.5 fps	▲▼

OK
Cancel

Note: Transmission, Format, and Resolution may not be edited. Bitrate, Key Frame Distance, and Key Frame Rate are editable but this is not advisable as it is not resource efficient.

3.1.5 Right-Click Menu (Live, Recording, and Recording Channel Settings)

Right-clicking on a feed, after it is set up, will bring up the menu seen below. These are settings that can only be accomplished after the feed has been set up.



Edit	Add/edit a feed.
Clear	Clears the feed.
Disable Live	Disable the live viewing of the feed.
Disable Recording	Disable the recording of the feed.
Set Recording Channel	Define which channel number will represent this feed.
Enable Analytics	Enable Video Analytics.

3.1.6 Analytics

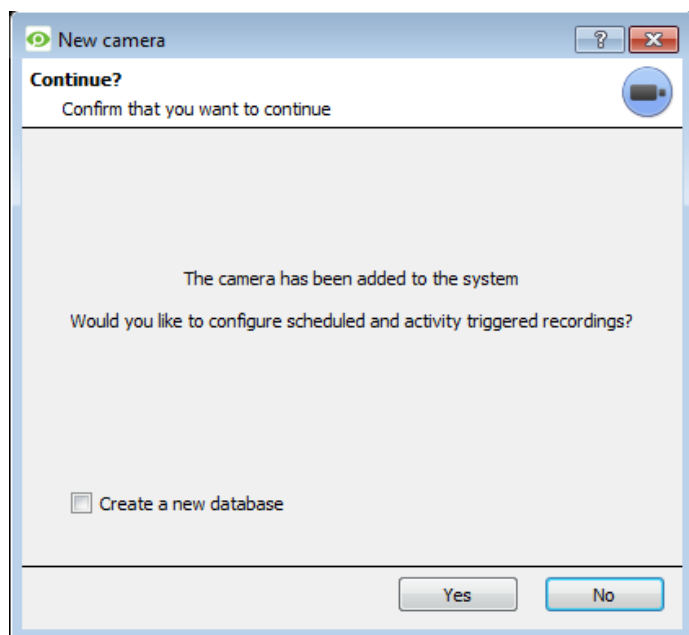
Create a second feed in order to enable analytics on a unit. Right-click feed / **Enable Analytics**. There are a few rules when it comes to enabling analytics:

1. If an analytics-enabled channel is not set up, there will not be a prompt to add Video Motion Detection (VMD) later in this wizard, nor can one add VMD, using this feed later.
2. Only feeds that are QVGA resolution, and lower, will give the option to enable analytics.

3. If there is a spanner icon at the end of the analytics feed notification, feed is not enabled for analytics. Clicking on the spanner icon will automatically enable one.

3.1.7 Scheduled and Activity Triggered Recording; Database

Once the camera has been added to the system, the user is presented with the option to configure scheduled and activity triggered recordings.



Recordings require a database.

- If a database has not yet been created, select “Create a new database” and click **Yes** to create a database and configure recordings.

If a database has already been created, leave the option unselected and click **Yes**.

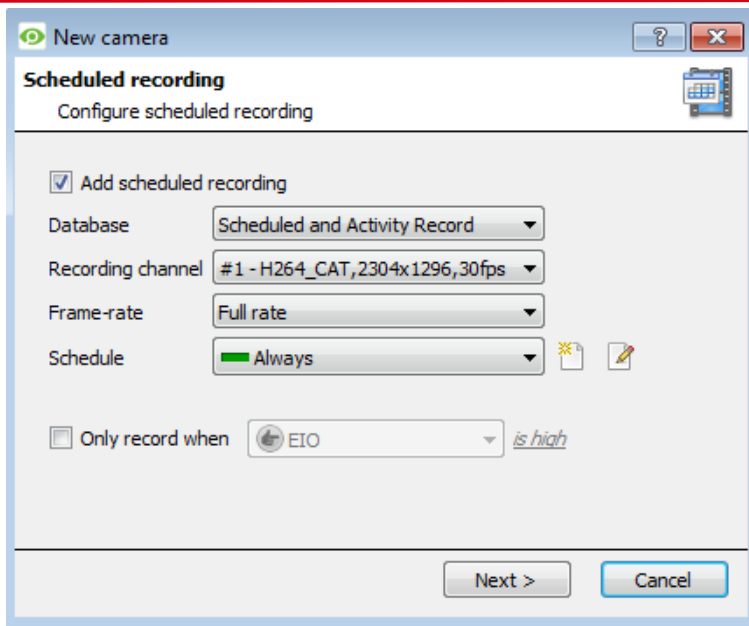
If recordings are not required, click **No**.

Note:

- This will set up the database on the recording server to which the CatObserver camera has been added, not the local unit (unless the recording server is the local unit). For further information on setting up a database, please consult the Databases section.
- Activity Scheduled recordings are only available if at least one of the streams has been enabled for video analytics.

3.1.8 Add Scheduled Recording

Set the camera to only record at certain times, to increase efficiency and save disk space.



Check the box to “Add scheduled recording.”

Select the **database**, **channel**, and **frame-rate** to apply a schedule to.

Set up the **Schedule** during which the cameras should record. Select an existing schedule or create a new one. See below.

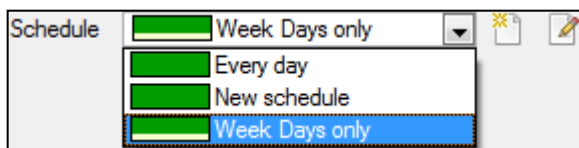
Select “Only record when” to record conditionally based on the state of an input. See below.

Input Condition: Check the box to **only record when...** then select an input from the drop-down menu, and modify the condition requirement of that input by clicking on the blue hyperlink next to the menu.

This sets the scheduled recording to record based on the condition of an input. Inputs include existing schedules, virtual inputs, analytics algorithms, etc. See the Scheduled Recordings section of Configure Servers for more information.

Note: Depending on the schedule selected for the recording, unless an input condition is enabled, the recording will be continuous.

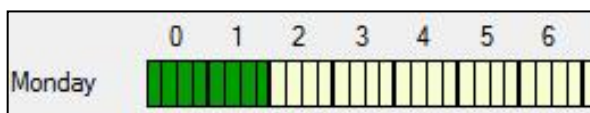
3.1.9 Set Up a Schedule



Select the schedule from the drop-down menu.

Create a new schedule by clicking on the new icon.

To change an existing schedule, click on the edit button.



Select/Deselect time cells

Left-click to **select recording time** – the green bars.

Right-click to **unselect recording time** – the yellow bars.

Monday will be recording from 00:00 – 02:00 in the morning.

3.20 Activity Recording

Note: Activity recording does a number of things. This will add Video Motion Detection, pre-event recordings, and add an Event to the system.

3.21 Recording

The recording option enables setup of the recording settings.

Database is the database this event will record to.

Schedule defines when this event will be active.

Recording channel defines which video channel will be recorded.

Frame rate defines the frame-rate that recordings will take place in.

Pre-events defines a time that will be buffered, and recorded, from before the initial trigger.

3.22 Activity

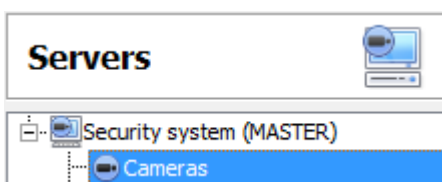
The default algorithm here is the Basic Video Motion detection.

The settings for Video Motion Detection are too detailed to go into under this section, for a full description see the Video analytics section of the full CathesisVision Setup document.

3.2 Camera Addition Method 2: Copy/Paste Cameras

The second method of adding a camera is by Copy/Paste. This is accessed by **right-clicking on an existing camera**.

If adding more than one camera that operates on the same driver, **CathesisVision** offers a very easy solution. Copy and paste new cameras, retaining the information of the camera selected for copying.



To Copy/Paste new cameras, navigate to the cameras panel of the desired unit.

Copy

Right-click on the previously added camera and click **Copy**.

Paste new...

Then right-click anywhere in the Cameras Panel and click **Paste new**.

There are two ways to paste cameras: **Sequential**, and **Discovered**. These are unlikely to be required for a CatObserver setup. Please refer to the main *CathexisVision Setup Manual* for more detail if more than one additional CatObserver camera is required.

3.2.1 Copy/ Paste Video Settings

If a number of cameras with the same drivers have already been added, simply transfer the Video Settings of each camera across:

Copy Right-click and select **Copy**.

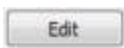
Paste video settings Then right-click on the camera to add the video settings to, and select **Paste video settings**.

Note:

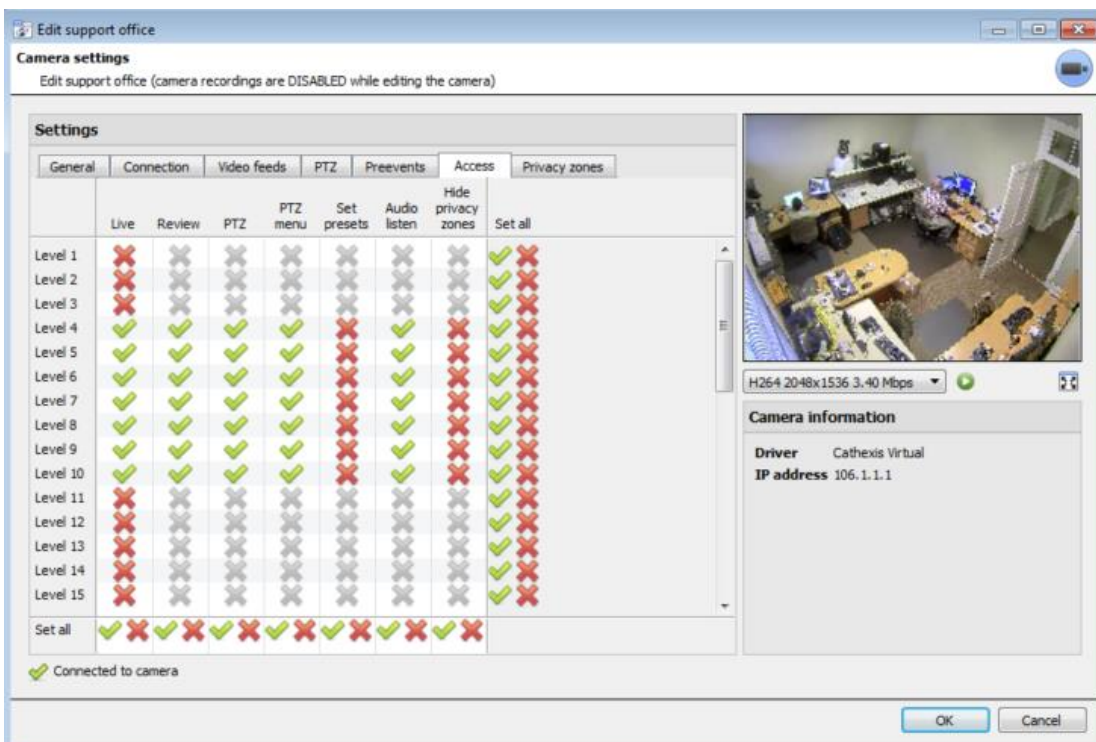
- This relates only to the Video Feed settings; it will not add Video Motion Detection analytics.
- Only copy onto cameras that have the same driver as the camera that has been copied.




3.3 Access Tab

Under the **Access tab**, setup which user levels have control of the different facets of the camera.





From within the **Cameras** section, under **Your_Server_Name**, select the camera, click **Edit** and select the **Access** tab.



Icon	Description
	A tick means that this level has access.
	A red cross means that this right has been denied to this level. Left-click on the tick/cross to change its designation.
	A greyed-out cross means that this right requires another right to be set in order for it to be enabled. For instance, one cannot give a user rights to Review , or use PTZ unless Live Viewing is enabled; disabling Live Viewing will automatically disable the rest of the user rights. Thus, the administrator should be careful to enable the Live Viewing access right for the user levels, which will need to view and manage the video stream.

Important Note:

1. All access levels on this unit are managed in the Access Rights Panel of the Server (**Site / Open Tab / Setup / Configure Servers / Expand the Server / Access Rights**).
2. Access rights pertain to the access levels assigned to specific users. If a user is given level 1 access, and this camera is only assigned to other levels, that user will not see this camera (users are managed in the **Site / Open Tab / Setup / Users**).
3. Non-admin users may be given the right to configure other non-admin users. See the main Setup manual for more information on this.

Access	Description
Live	This controls which Access Levels can view the camera's live feed. If this option is disabled, the user will not be able to view the camera at all, and all the following rights will be automatically denied.
Review	This controls which Access Levels can review recorded footage from this camera.
PTZ	This controls which Access Levels can control PTZ movement.
PTZ Menu	This controls which Access Levels have the ability to alter the PTZ menu.
Set Presets	This controls which Access Levels can change PTZ Preset positions.
Audio Listen	This controls which Access Levels can listen to the audio associated with the camera.
Hide Privacy Zones	This controls which Access Levels can remove the privacy zones added to the camera.
Set All	 Selecting the tick icon will give this level access to all settings  Selecting the cancel icon will give this level access to none.

3.4 Privacy Zones Tab

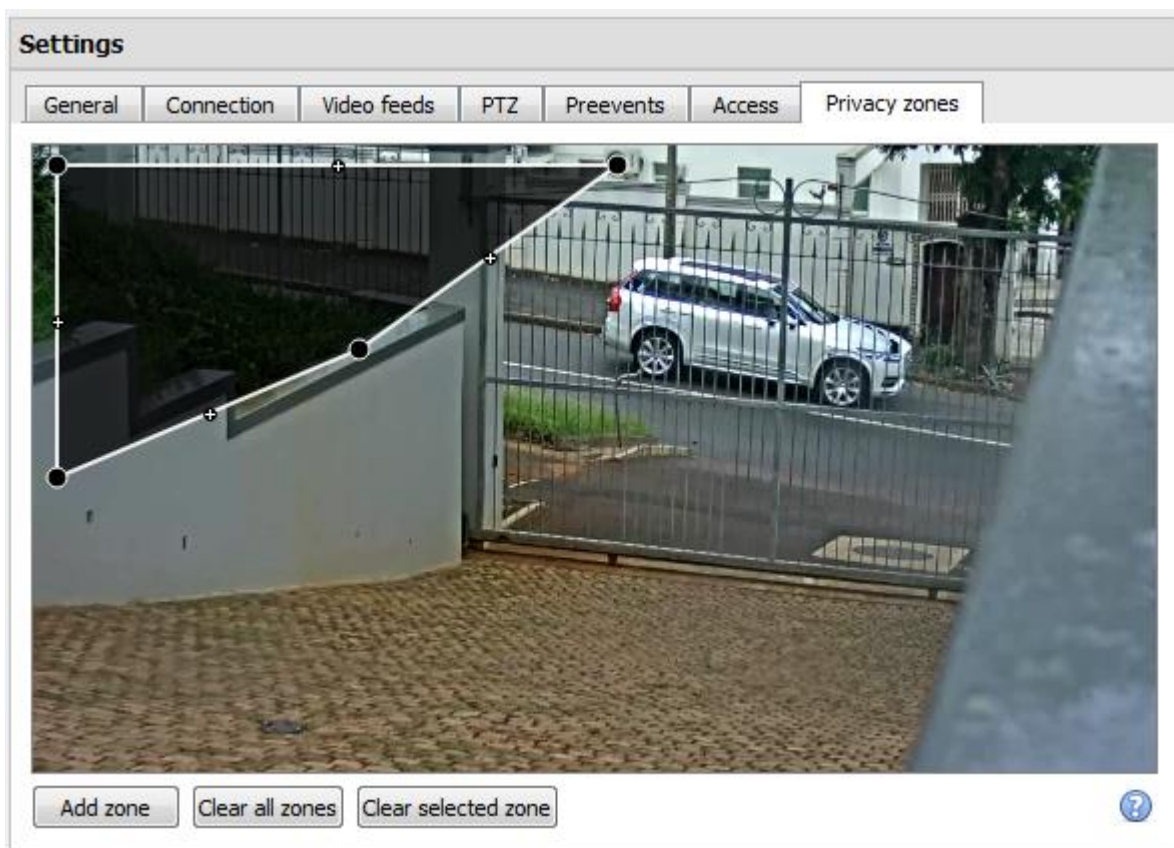
Note: Adding/editing **Privacy zones** is not a part of the camera addition wizard, and can only be completed by editing a camera after it has been added.

- Adding a **Privacy zone** will hide an area(s) of the camera image.
- The **Privacy zones** can be hidden/shown by an administrator or user levels which have been assigned the access right to do so. This is covered in the previous section and in **Access Rights**.
- As such, the **CathexisVision** system will record the footage behind the privacy zone, but only users with access rights will be able to view it.

This is a useful feature, as some areas of the video stream may contain sensitive information, which require certain clearance levels to view. For example, a camera operator in a bank might not be privy to footage in which money is being counted, but if there is a dispute surrounding the money then a user with the correct access level will be able to hide the **Privacy zone** and review the dispute.

3.4.1 Add a Privacy Zone

Once the wizard is complete, open the camera for editing again and navigate to the Privacy Zones tab.



Add zone

Add a new privacy zone to the camera image.

Clear all zones

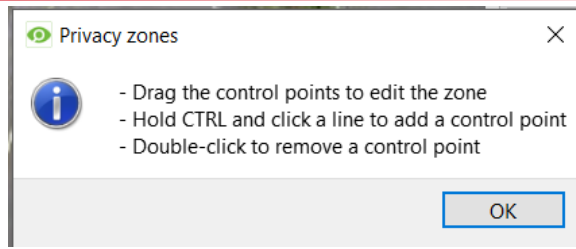
Clear all privacy zones from the camera image.

Clear selected zone

Clear only the selected zone from the camera image.



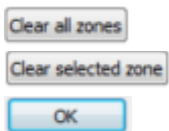
Clicking the question mark shows instructions on defining the privacy zone:



3.4.2 Reshape a Privacy Zone

- Select a **Privacy zone** to bring up control points:
- Click and drag the **control points** at the corner of the box.
- Ctrl-click on a line to add a new control point.
- Double-click an existing control point to remove it.

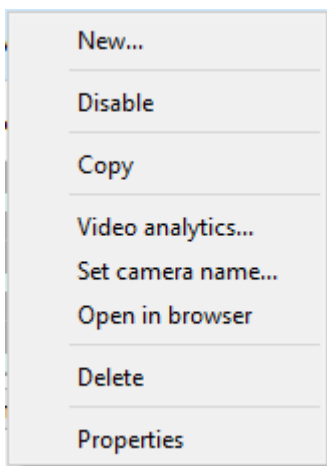
3.4.3 Remove a Privacy Zone



- To remove all, click **Clear all zones**.
- To remove specific zones, select and click **Clear selected zone**.
- When complete, click **OK** to save.

Please consult the Operator’s Manual for guidance on how to hide/show privacy zones in the Cameras Tab.

3.4.4 Right-Click on a Camera



New...	Add a new camera.
Disable	Disables the current camera (but does not delete it).
Copy	Copies camera settings and enables them to be pasted onto a new camera or existing camera.
Video analytics...	Opens Edit Video Analytics window.
Set camera name	Edit the camera name without having to open the edit window.
Open in browser	Opens camera URL in web browser.
Delete	Removes camera from site.
Properties	Opens properties window (below), and enables editing the camera.

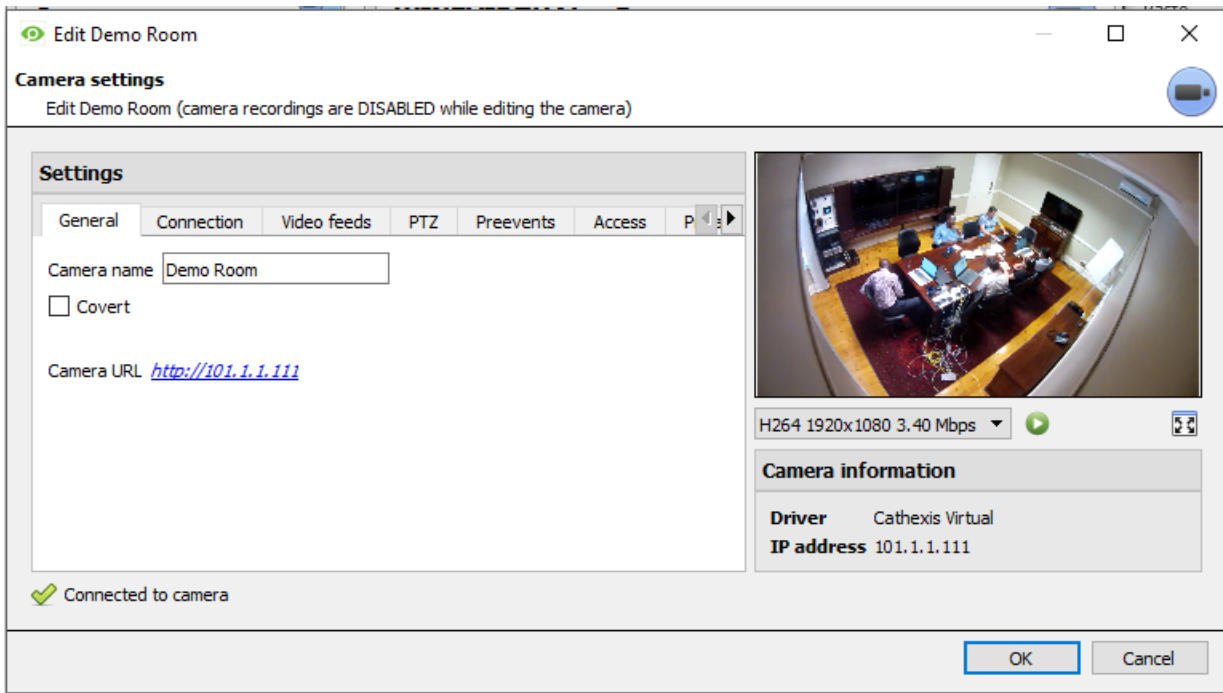
Note: **New**, **Paste New**, **Copy**, and **Paste Video Settings** are all dealt with above, under Copy/Paste Cameras.

3.5 Camera Properties

Right-click camera and select **Properties**.

A new window will open. Here, all camera settings configured during the Camera Addition Wizard can be edited by selecting the various tabs.

The Camera URL of the specific camera is listed automatically when the camera is added.



4. Conclusion

This manual was designed to deal specifically with this installation.

For further information about the CathesisVision software, please consult the main manual (<http://cathesisvideo.com/>).

For support, email support@cat.co.za.