



USER MANUAL

V1.1

2023-12-20

Introduction – Table of Contents

DVR Viewer Pro 2 (DVP2) is the latest video editing software from 247Security. Existing functionality – working with recorded videos from DVRs – is improved through updated background processes. Your existing workflows won't change.

The biggest update is the inclusion of live, real-time access to cameras through cellular network access. You will notice a new button and menu items. Your DVR must have its cellular SIM activated, and you must have purchased cell minutes. Contact your sales rep at 1-866-693-7492 for more information.

This manual is intended to get you comfortable with *DVP2* as quickly as possible. There is a *Quick Start* section that can be used separately. The rest of this User Manual provides detailed information and instructions on all aspects of the software.

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Computer Requirements

Minimums

- PC only (Apple products are not supported)
- Windows 7
- Processor: i5 or Ryzen 5
- 8GB of RAM

Recommended

For best results, your PC should have at least:

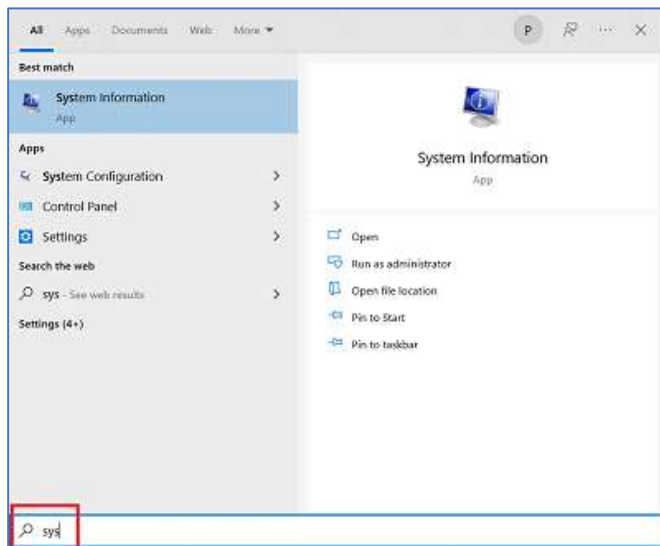
- Windows 10
- Processor: i7 or Ryzen 7
- 16GB of RAM
- Internet access (necessary to link video with GPS and map display)

To find what your PC has, press the windows key,



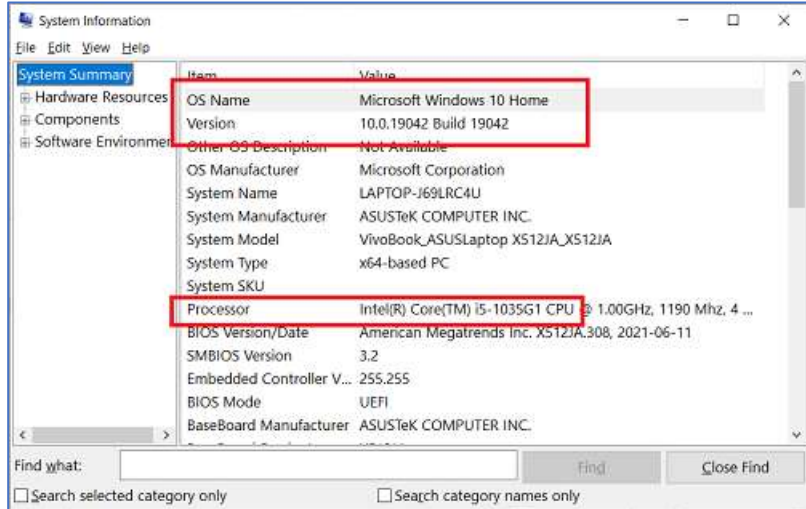
Type “sys”, and press “Enter”.

The *System Information* window will open.



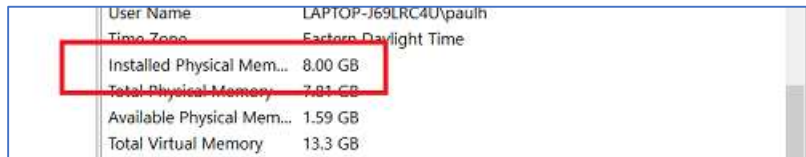
Look at:

- *OS Name and Version*
- *Processor*



...and scroll down to see

- *Installed Physical Memory*



If you are ready to go, go directly to the separate *Quick Start* section and return to this document for reference.

Quick Start

DVP2 focuses on 2 primary functions:

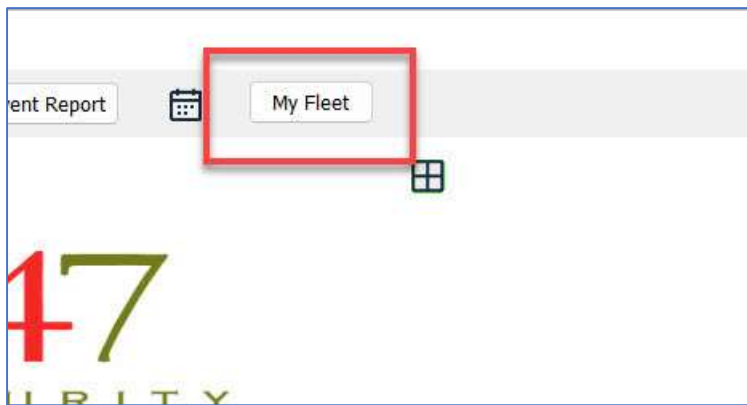
- Viewing live video feeds and GPS location from your fleet, if equipped
- Viewing recorded video for incidents, and creating content (Snap Shots, video clips and Event Reports) to share with appropriate parties (police, colleagues, parents, etc.)

For this section, it is assumed that you have:

- Downloaded and installed DVRViewer Pro 2
- Logged in
- Entered your Client ID in *My TDC Account*
- Connected a bus's hard drive to the PC

For details on how to do these, see later chapters.

Real-time Videos



After you have set up your TDC info (see page 49), click the *My Fleet* button.

Select the DVR/bus that you want to observe by clicking its check box.

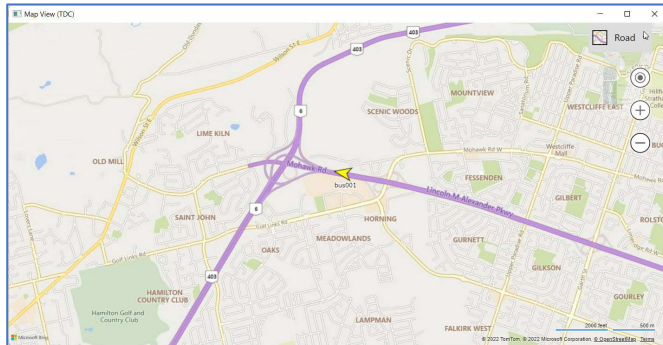
My Fleet - TDC

Vehicle ID	Modem ID	Vehicle Status	Battery Voltage	DVR Status	4G/LTE
<input type="checkbox"/> Bus001	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus002	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus003	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus004	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus005	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus006	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus007	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus008	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus009	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus010	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus011	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus012	[REDACTED]	stop	n/a	GOOD	on
<input type="checkbox"/> Bus013	[REDACTED]	idling	n/a	GOOD	on
<input type="checkbox"/> Bus014	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus015	[REDACTED]	n/a	n/a	n/a	off
<input type="checkbox"/> Bus016	[REDACTED]	n/a	n/a	n/a	off

Select All

Map View Live View Refresh Close

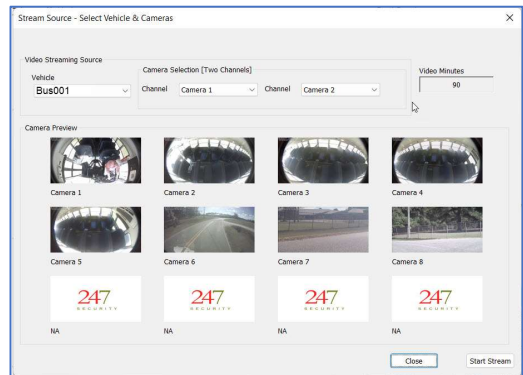
Click *Map View* to show the bus's current location on a map.



You can zoom, click and drag, and choose different overlays.

From the *My Fleet* vehicle list, click *Live View* to open a camera selection dialog window.

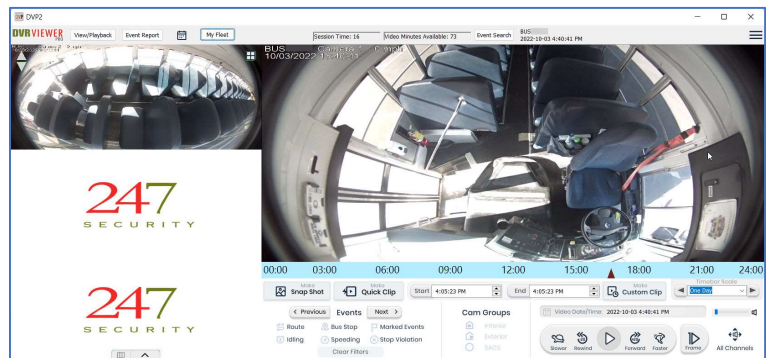
Select the 2 cameras you want to see and click *Start Stream*.



The live video from the selected cameras will show in DVP2.

The following controls are disabled with live video:

- Play/pause function (video only plays)
- Rewind/Forward 20s
- Slower/Faster
- Frame forward button
- Video clips (can be made from the hard drive per normal recorded video procedures, see relevant chapters below)
- Event Reports



These controls are enabled:

- TruView for OmniView360 cameras
- Snap Shots
- Zooms, Blurs, Rotate

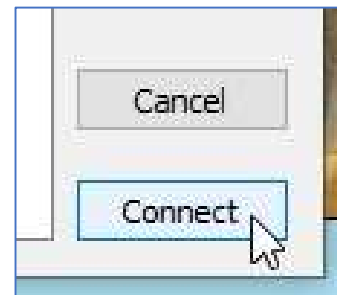
To disconnect, click *My Fleet* or *Disconnect* from the View/Playback menu.

Recorded Videos

Click *View/Playback*, select *Archives, Local* to connect with the hard drive you connected to your computer.

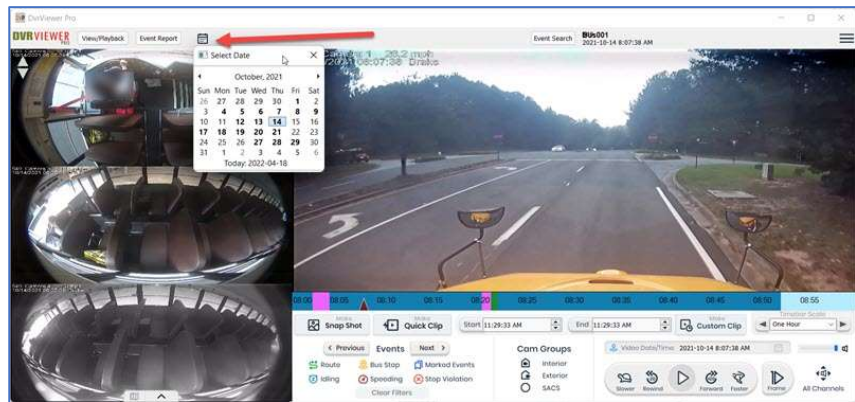


Select the bus and click *Connect*.



Your video will open to the most recent date with video.

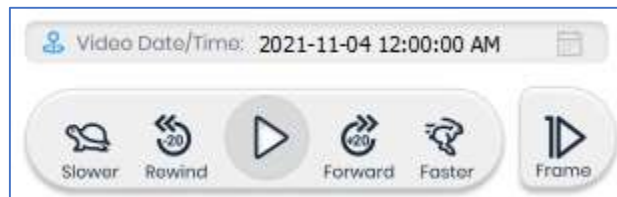
To view other dates, click the calendar icon; dates with video are in bold. Click on the date to access the video.



In this example, all *Events* have been selected, so the *Timebar* shows dark blue for video available at the indicated times, and color-coded for Events.

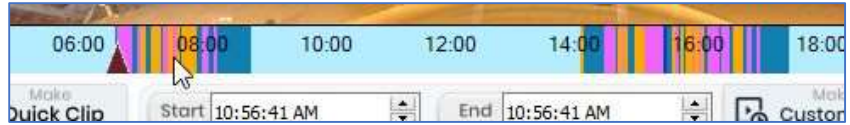
Events include bus stops, speeding, marked events (button push), stop arm violations, etc.

Play controls

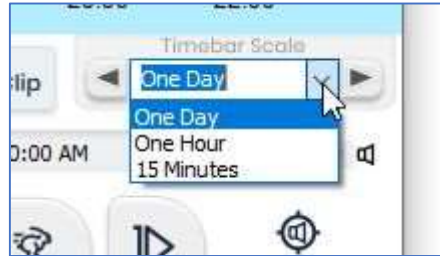


The *Play* button will change to a *Pause* button when clicked.

Timebar colors will change to indicate selected events in the bus's route.



Adjust the Timebar scale as needed and navigate to previous or next time block using left and right arrows.

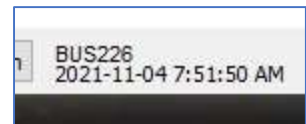


For example, if you select "One Hour", the Timebar scale will read the selected hour. Clicking the left or right arrows, the Timebar will be labelled as the previous or next hour.

Drag the Timebar pointer to navigate to a specific time in the scale.

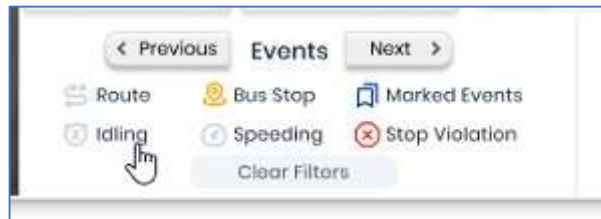


The Info Bar, right of the Event Search button



updates according to the time.

Click the Event Filter icons to color-code the events you want to see. Use Previous/Next to quickly navigate to highlighted events, or...



...drag the Timebar Pointer to the event you want and click Play.

The Map will display Events and the bus's Route. Click the button, lower left to open the map.



Icons on the Map are clickable, and the video will advance to that point in the timeline. The yellow arrow represents the bus on the map. You can select different overviews by clicking the dropdown.



Note that the green line represents the route taken by the bus and is not clickable.

Click to expand the map to full-screen.

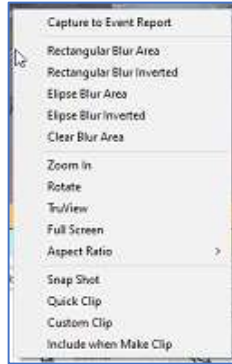
Select the camera views with the two buttons top left. For buses with multiple cameras, click the up/down arrows or the grid button to display cameras.



To open a minimized camera (on the left) to the main window, right-click and select *Make Primary*. To maximize any camera, double-click it.

Right-click on any camera to open other options, such as:

- Blur
- Zoom
- TruView
- Clip and snapshot shortcuts (see below)



Selecting *Blur* or *Zoom* allows you to select an area of the video and apply the command.


TruView only works with 247 Security’s *OmniView 360°* HD camera. It applies a visual algorithm to make it easier to view wide-angle video.

To create clips, snapshots and Event Reports, see below.

Clips, Snap Shots and Event Reports

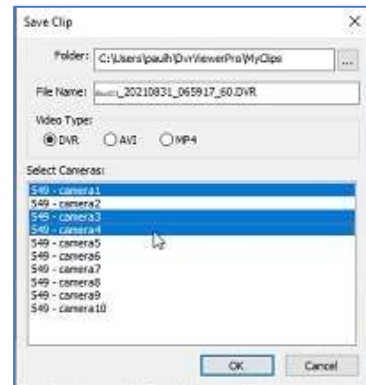
A *Quick clip* creates a 1-minute video, 30 seconds before the Timebar pointer to 30 seconds after.

Locate the incident you need to capture, and click the *Make Quick clip* button.

Click  to save the video to a location other than the defaults set by DVP.



Select the cameras you want to include.



DVP2 sets the default folders as:

- My Clips: C:\Users*<your user name>*\DvrViewerPro\MyClips
- My Snap Shots: C:\Users*<your user name>*\DvrViewerPro2\MySnapShots
- My Event Reports: C:\Users*<your user name>*\DvrViewerPro2\MyEventReports

You can change the default location of these folders in the Settings dialog. See page 9.

File Types



We strongly recommend that you save video clips in DVR format for security and privacy reasons. Here’s a comparison of your options:

- *AVI* and *MP4*: very portable; not secure or private; can be publicly viewable online; each camera is saved as a different file, and it takes longer for DVP2 to process
- *DVR*: not portable; very secure; viewer must have DVRViewer, DVP or DVP2 to open; all selected cameras saved as one file; includes GPS map data

Event Reports

A formatted document that includes up to 4 Snap Shots, GPS data, and information you enter.

1. Find the video you want, right click and select *Capture to Event Report*. Only the **four most recent captures** will be included.



2. Click  and complete the report.

3. Click  and complete the report.

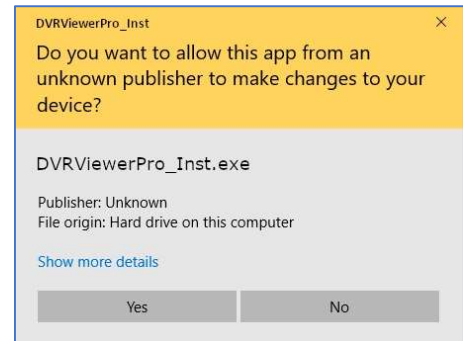
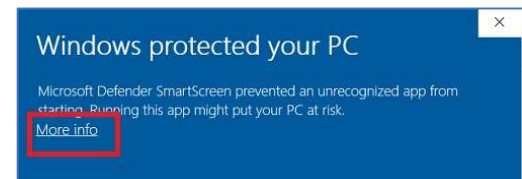
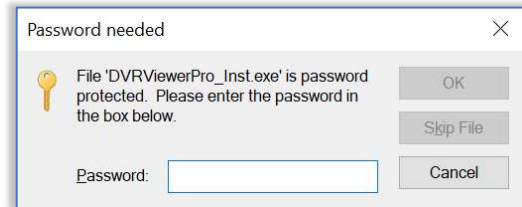
4. The formatted pdf document will be saved in your chosen location and will open in your PDF Viewer.



Installing DVP2

It is strongly recommended that you perform this installation with System Administrator privileges. Otherwise, Windows 10 and 11 may not properly mount the Infinity Drive (DHD) storage media. Discuss this with your IT department before proceeding.

1. Go to *pro.247securityinc.com*
2. Click the “Download” or “Download DVP2” buttons, and login with the credentials provided
3. Click the “DVP2_Inst” zip file to download
4. Navigate to where you saved the zip file and double-click it
5. The zip file will open in a new window; double-click “DVP2_Inst”
6. If you need a password, use “247SECURITYINC”
7. You **might** see this window, click “More info”, and “Run Anyway”
8. On the *User Account Control* window, click “Yes”.



When the Installer window opens, click the “Next” or “Install” button as you progress through the screens.

When it’s done, click the “Finished” button.



Connect DVR Hard Drive to PC

The DVR is usually located in the bus's front bulkhead compartment.

Unlock the DVR and open the front panel door.



Remove the hard drive from the DVR. Slide it straight back from the DVR.

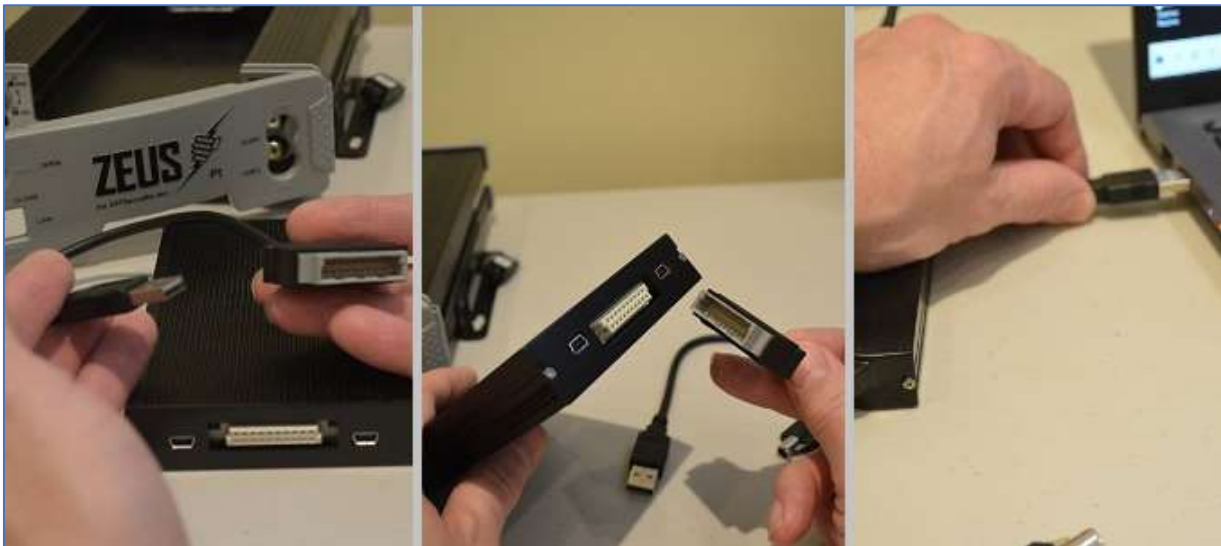


Note

Opening the door tells the DVR to shut down. Wait until the *REC* light is out. The *POWER* and *IGNITION* lights can be on or off.



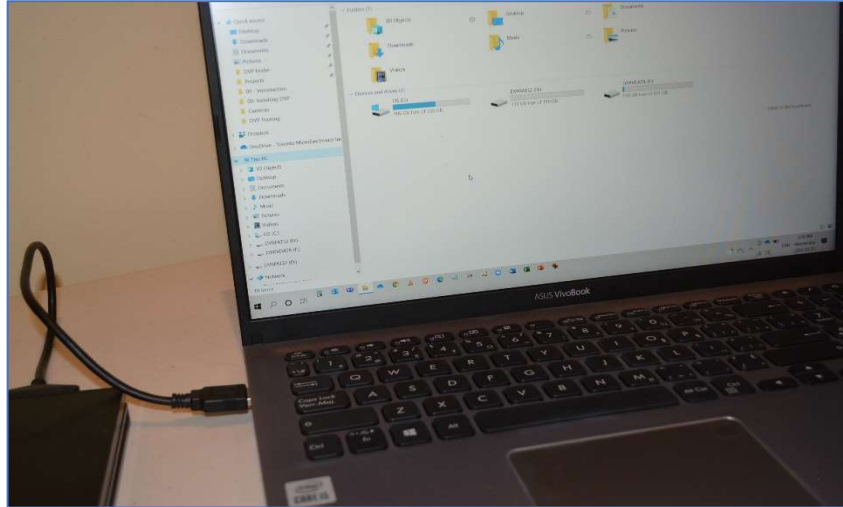
Connect the USB cable to the drive and to the computer.



Make sure the computer is on.

Be patient at this stage, it may take Windows a few minutes to 'talk to' the hard drive.

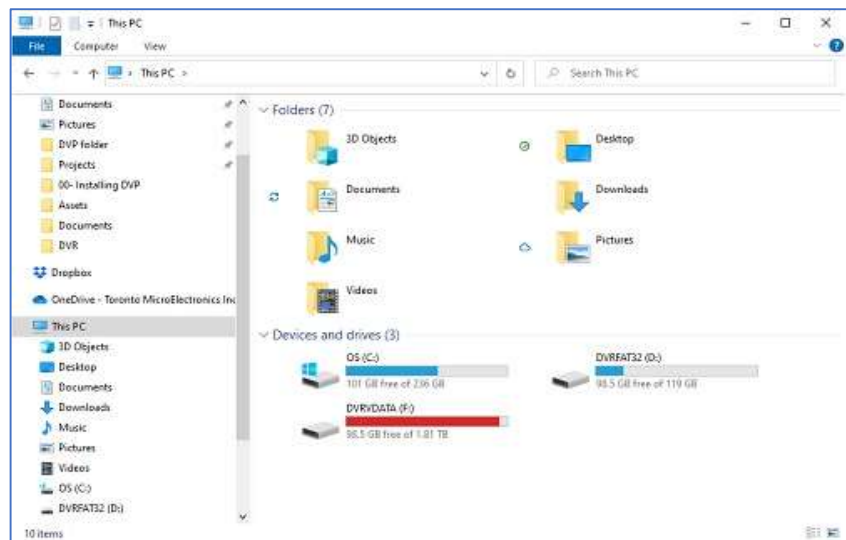
If you want, you can follow along during this process. Open Windows Explorer by pressing the 'Windows' key and 'E'.



Two new drives will display under *This PC*.

Your computer will look like this. The first drive will load quickly, "DVRFAT32". This is the SSD (solid state drive).

The main hard drive, "DVRDATA", takes longer because it's a standard mechanical hard drive.



It may take Windows a few minutes to mount the drive.

You're ready to open DVP2 and start working with videos.

Launching DVP2

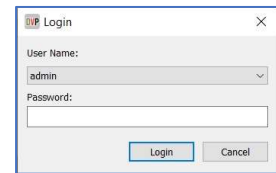
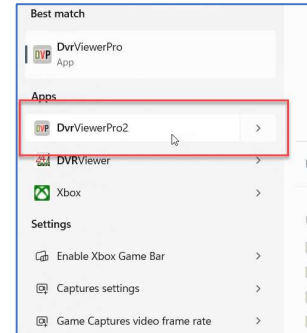
To open DVP2, press the *Windows* key, begin typing “DVRViewer Pro 2”, and select the program.

If you see an alert from Windows Firewall, click “Allow Access”.

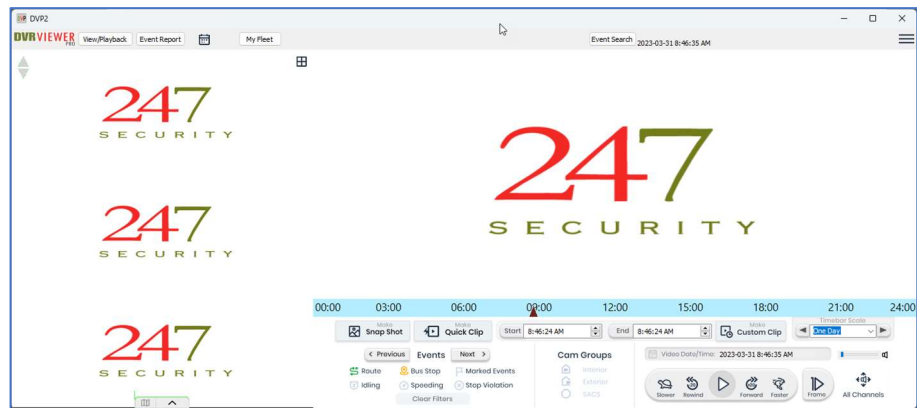
Windows may need to download and install *Microsoft Webview2 Runtime*. Allow the computer to complete the task.

The program will ask for a login and password. For now, use “**admin**” and “**247SECURITYINC**”.

You can configure other users, each with their own User Name and Password, and with 2 levels of access. See page 17 for more information.



Congratulations! You have successfully installed DVP2. Initial launch is now complete.



Overview



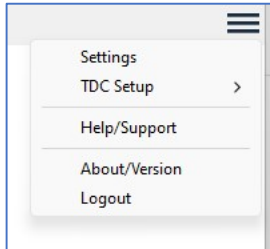
1	View/Playback (Open) - dropdown menu to open a resource for viewing and playback – pg. 20
2	Event Report - opens Event Report popup form to input fields and image captures – pg. 43
3	Calendar Icon (Date) – dates with available video are in bold
4	Event Search (Filter) – opens search filters for selecting events – pg. 27
5	Info for the current video: date, time, bus name
6	Options and Settings menu – pg. 17
7	Primary video camera/channel
8	Secondary video cameras/channels
9	Map View toggle – click to open – pg.29
10	Navigation and Playback controls – pg. 25
11	Camera/channel buttons: scroll and grid toggle – pg. 23
12	My Fleet button for live view of map and cameras

Options / Settings menu

The Options/Settings button:



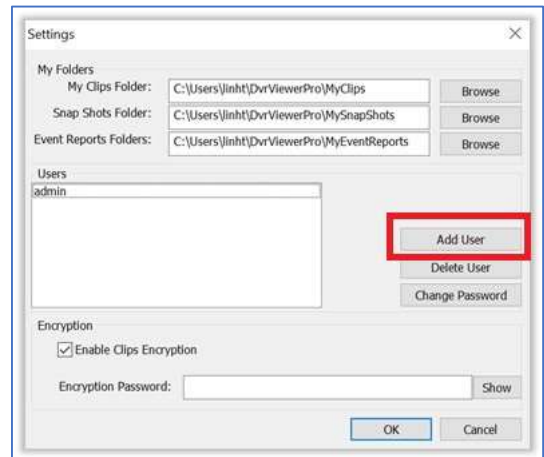
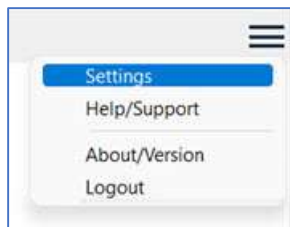
Menu:



Managing Users

Adding users

To add a user: open the Options/Settings menu, click Settings, then Add User.



Input the new user's name, select the Type, and complete the password fields.

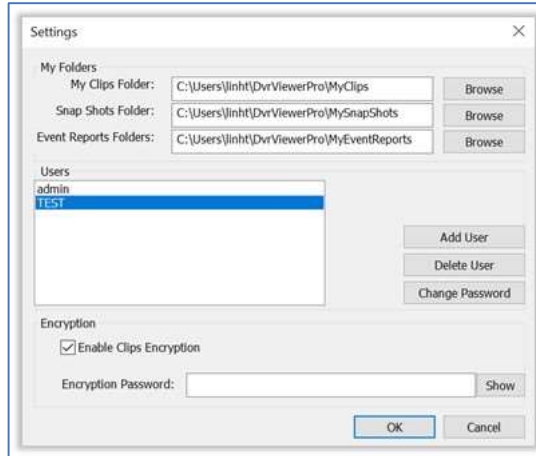


User Types

Admin – has full access, can add or delete Users and change passwords

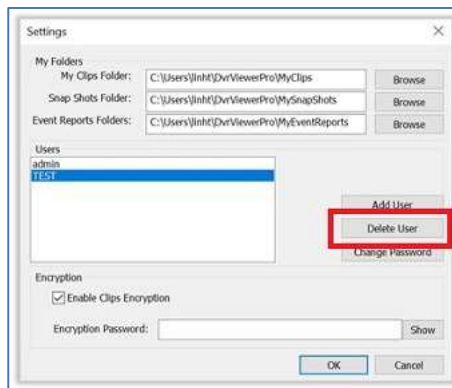
User – can only change their own password, cannot add or delete users

The new user will now appear on the list.

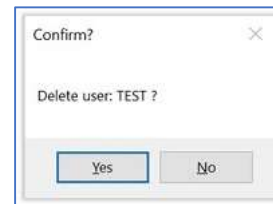


Deleting Users

From the *Options/Settings* window, select the user you want to delete, and click “Delete User”.



A confirmation dialog will appear. Click “Yes” to confirm deletion.

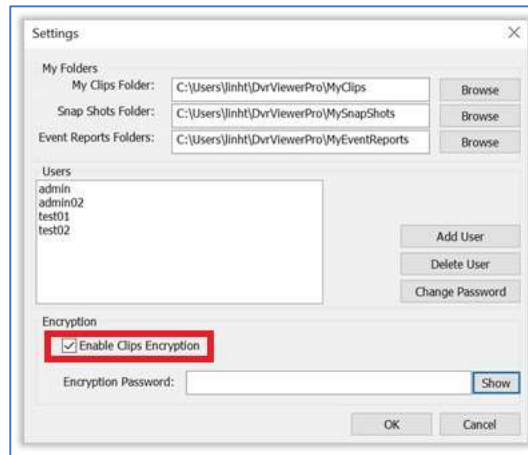


Setting video encryption password

This will assign a password to all video clips saved in “DVR” format.

From the *Settings* window, click the “Enable Clips Encryption” check box, and enter your password.

To disable encryption, uncheck the box.



Click the “Show” button to make the password visible. When you click *OK*, the password is saved, and will display when you re-open the *Settings* window.

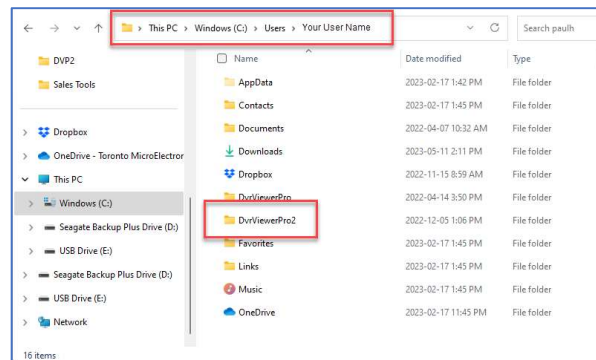
It is important that you manage your passwords carefully. There is no way to recover lost passwords. There is no ‘master password’ or ‘backdoors’ to recover files encrypted with a misplaced password!

Setting default folders for Clips, Snap Shots and Event Reports

By default, these folders are created when you install DVRViewer Pro 2. The location is under the computer’s current Windows User directory, in a folder called “DVRViewerPro2”.

The path looks like this:

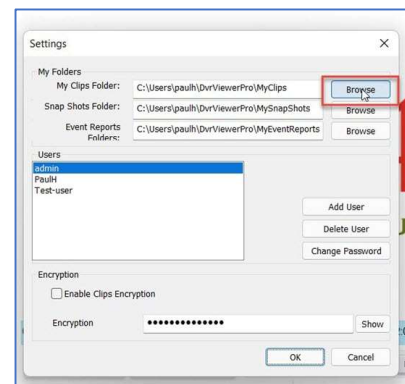
C:\Users\[user]\DvrViewerPro2



To set different folders, open the *Settings* window. Click on “Browse” beside the corresponding item.

A standard Windows File Explorer window will open. Navigate to your desired location and click *Open*. Click *OK* on the *Settings* window.

The new folder location has now been set and saved. DVP2 will remember the location until it is changed.

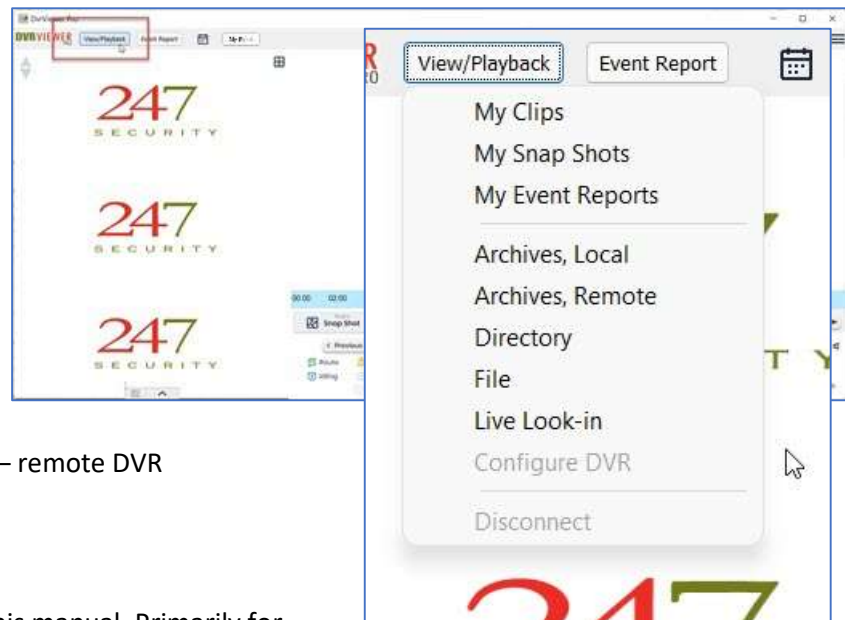


The View/Playback menu

The *View/Playback* menu allows you to open and work with videos and other files.

From here you can:

- Open Windows File Explorer folders where you have saved Clips, Snap Shots and Event Reports
- Open videos on a locally connected hard drive
- Open videos on a networked – remote DVR
- Open saved video files



Configure DVR is not covered in this manual. Primarily for installers or senior admins, it allows the user to change the settings directly on the bus's DVR. It requires a physical Ethernet connection to a DVR, and an additional login.

Viewing videos

Archives, Local

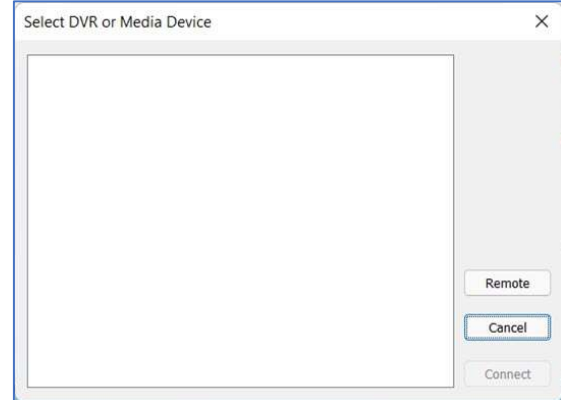
To view a physically connected bus's hard drive (see "Connect DVR Hard Drive to PC" – pg. 12), select *Archives, Local* from the *View/Playback* menu.

A pop-up dialog will list available devices. (You may need to plug in a storage device to see in this list). Select desired device and click "Connect" to load.

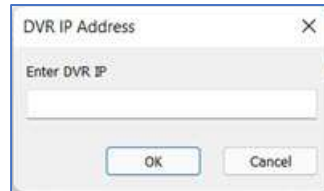


Archives, Remote

To view a WiFi/Networked connected device, click *Archives, Remote*. A pop-up dialog will list available devices. Select device and click “Connect”.



If no device is listed, click “Remote”, enter the IP of DVR, and click *OK*.

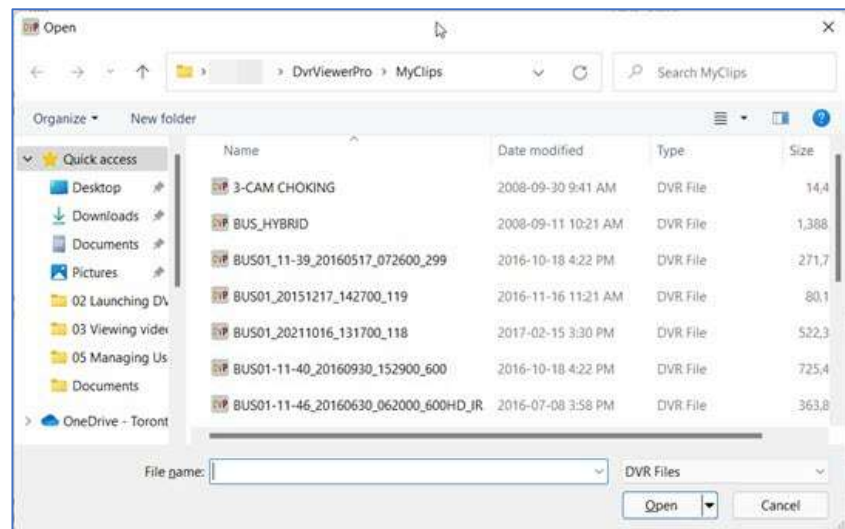


Directory (i.e. MP4 or AVI files)

To open video files that are not saved in “.DVR” format, such as MP4 or AVI videos, click *Directory*. A Windows File Explorer dialog will pop-up. Locate the folder of your resource to view.

File (to open .DVR files)

To open a clip created in DVRViewer, DVP or DVP2, click *View/Playback > File*. A Windows File Explorer dialog will pop-up. Locate the .DVR file and select it to view.



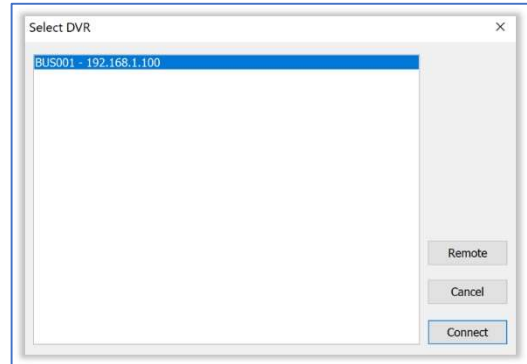
“.DVR” files are associated with DVRViewer Pro 2.

Live Look-in

To view a bus's cameras in real time, through a WiFi or cellular connection, click *View/Playback > Live Look-in*. A pop-up dialog will list available devices. Select device and click "Connect".



If no device is listed, click "Remote" to specify an IP address. Enter the IP of the DVR and click "OK" to load.



Overview of video



1	<p>Scroll Camera Buttons (Up/Down) – display the next 3 available secondary video channels, dependent on the number of cameras on a particular bus. I.e., if less than 4 cameras this scroll button will have no effect.</p>
2	<p>Toggles between 3 secondary video channels and up to 12 secondary channels/cameras.</p> <p>In the example to the right, the bus has 10 cameras: one in the Primary position (not shown here) and 9 more cameras/channels. To revert back to the 3-camera layout, click the toggle.</p>
3	<p>Map View button – click to open Map View</p>
4	<p>Primary camera/video channel.</p>

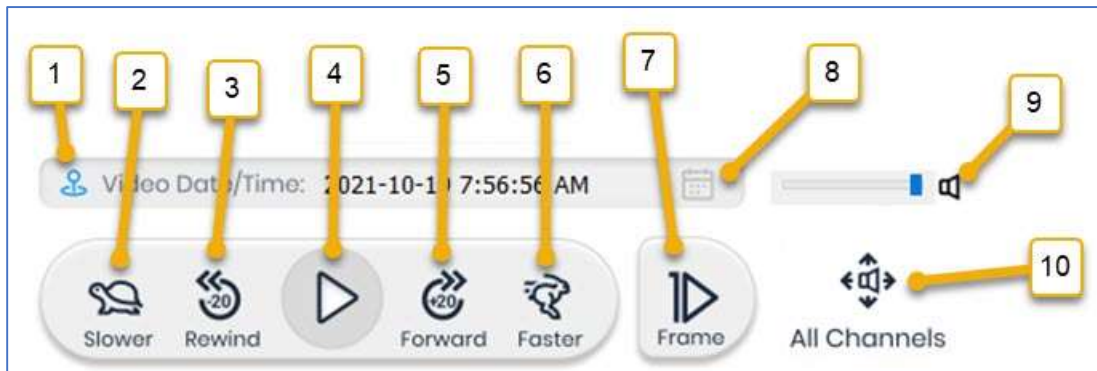


Other View/Playback functionality

Configure DVR is for installers and advanced admins. It is covered in a separate manual.

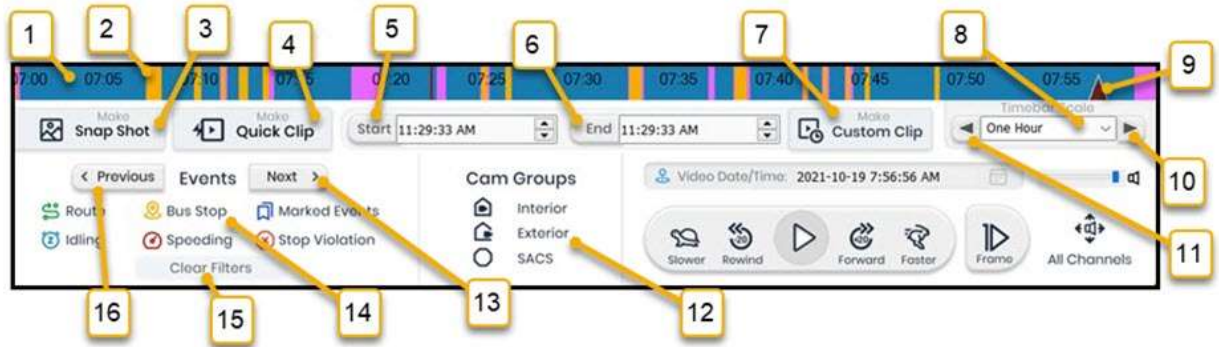
Disconnect stops the video playing and severs the current connection. You can re-open the connection using one of the methods above.

Playback Controls



1	GPS indicator pin (grey = no GPS data, green = has route only, blue = has all GPS events) This GPS icon corresponds to current vehicle location in map view.
2	Slow down video playback speed.
3	Rewind 20 seconds.
4	Play/Pause button.
5	Fast-Forward 20 seconds.
6	Speed up playback speed.
7	Advance the video forward one frame.
8	The date and time of the video.
9	Global volume control.
10	Audio output button: toggles the audio output so you can hear all internal channels/cameras or only the Primary channel.

Navigation controls



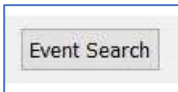
1	The “Timebar” displays a solid light or dark blue band depending on whether video is available at the indicated time.
2	Vertical bands are color-coded based on Events selected in item #14.
3	<i>Make Snap Shot</i> – creates a Snap Shot of current image in Primary window. Details below, see page 38.
4	<i>Make Quick Clip</i> – opens dialog to create Quick Clip, see page 39 for details.
5	Custom Clip start time, at the Timebar pointer location. See page 42 for details on creating a Custom Clip.
6	Custom Clip end time, at the Timebar pointer location.
7	Click <i>Make Custom Clip</i> to open the dialog to save a custom clip.
8	Selects the scale displayed by the Timebar, 1 day / 1 hour / 15 minutes.
9	Timebar pointer
10	Timescale navigate buttons – click to display the previous or next block of time. E.g. if timescale is 15min, and the current time block is 7:00am to 7:15; clicking “Next” will show the timebar with the next 15min block - 7:15am to 7:30am - on the timebar.
11	
12	Note – this is in development, currently not functional
13	Clicking these buttons moves the video and Map to the previous/next Event according to the Events Toggle buttons (see #14).
14	Events Toggle buttons – turns color-coded events on/off on the Timebar AND Map icons.
15	Clears all Events (except dates) from Map and Timebar.
16	

Timebar Color Key

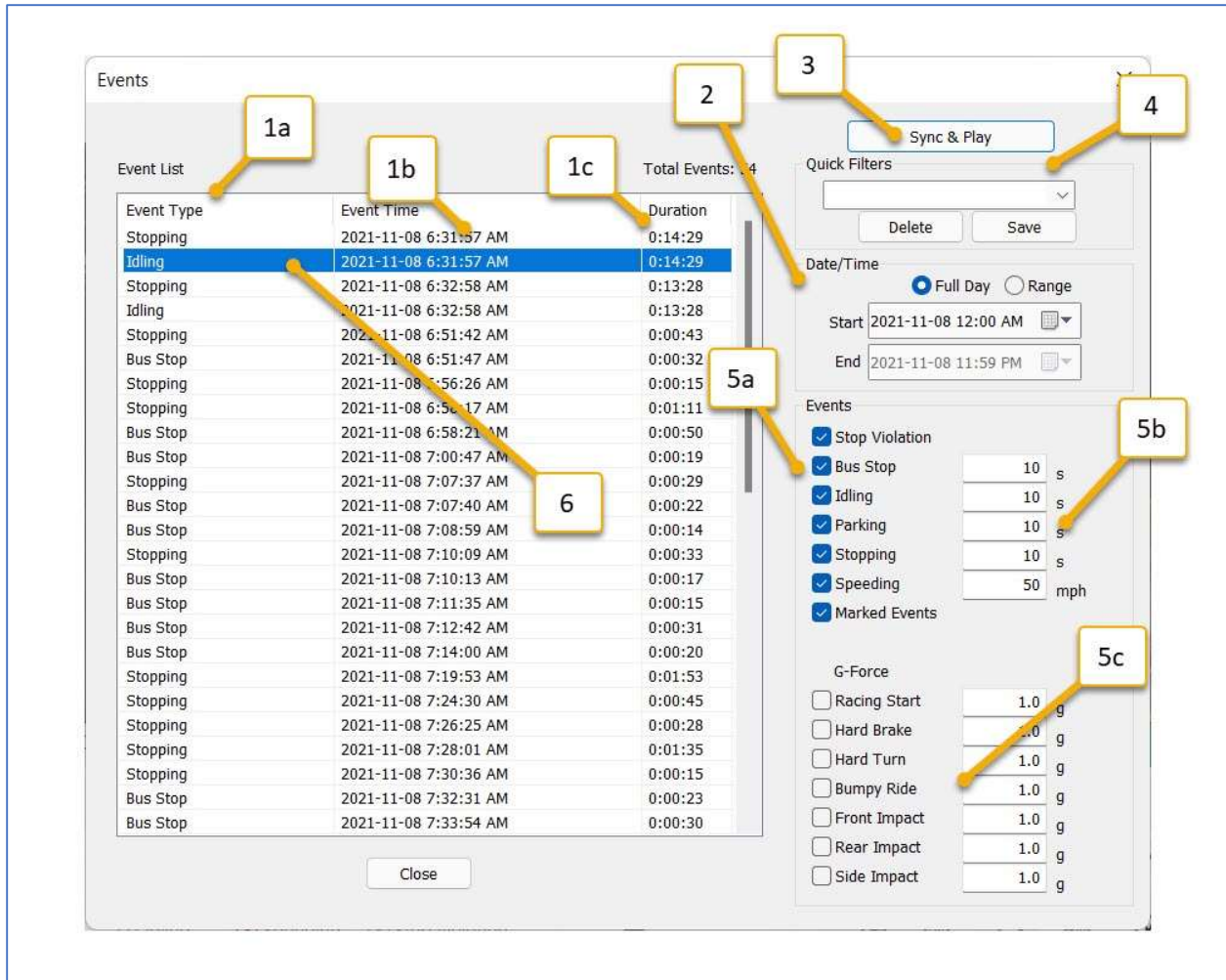
These *Events* will appear on the timebar with this color code, and on the Map.

	Stop Violation		Speeding
	Bus Stops		Marked Events
	Idling		G-Force Event
	Parking		Route
	Stopping		

Event Search



To find video of GPS and Marked Events (Bus Stops, Stop Arm Violations, etc.), click on the *Event Search* button at the top of the screen to open the *Events* dialog. Apply the desired parameters and click “Sync & Play” to start the video from the earliest event. Events will appear on the Map and Timebar based on the filters selected.



1a	The <i>Event List</i> window shows a list of event records based on parameters selected to the right. It will auto-refresh with each parameter selected. Click each column heading to sort by that field.
1b	Date/Time stamp of each GPS event record; click <i>Event Time</i> to sort by date-time.
1c	Duration of the event record.
2	Date and time selection. Choose <i>Full Day</i> or choose the <i>Start</i> and <i>End</i> times and click <i>Range</i> for a custom time period.

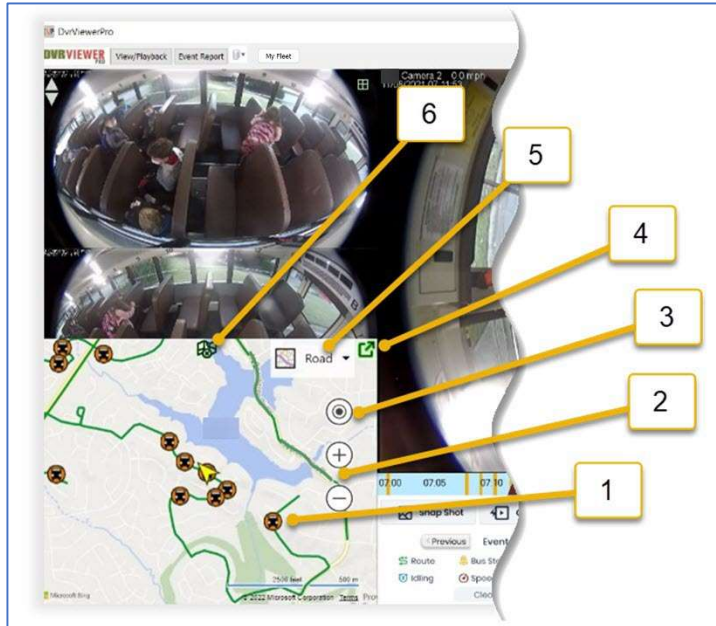
3	<i>Sync & Play</i> synchronizes the video with events data and plays the video from the start of the time range, or from an event selected in <i>Event List</i> .
4	<i>Quick Filters</i> allows you to save and delete event presets. Adjust your settings (see #5), name the preset in the dropdown field, and click <i>Save</i> . Select from the dropdown to load or delete a preset.
5a	Check the boxes to include the indicated events.
5b	You can adjust the threshold parameter for the event to register as an event. For example, if the bus never goes on to a highway, you may want to adjust the <i>Speeding</i> threshold to an appropriate value for urban streets.
5c	If you have buses equipped with G-Force sensors, DVRViewer Pro 2 can automatically include these events according to the parameters you set.
6	Double-click any event in the list to jump directly to the video for the event.

Map View

Buses with GPS data can display events in *Map View* synchronized with video. To open the map, click on the map button at the bottom of the Secondary channels area. Click on the pop out arrow to open map in separate window (can be used on second monitor).



- 1 Events Icons – color-coded event icons. Click icon to jump to that point in the video.
- 2 Zoom the map in/out.
- 3 Re-center the current bus position (current video time) to the center of map.
- 4 Expand the map to full screen mode.
- 5 Dropdown selects the type of map view: Road, Aerial, Bird's eye, Streetside, and a switch to turn road and landmark labels on or off.
- 6 Hide the map overlay from the main window.



Working with cameras / video channels

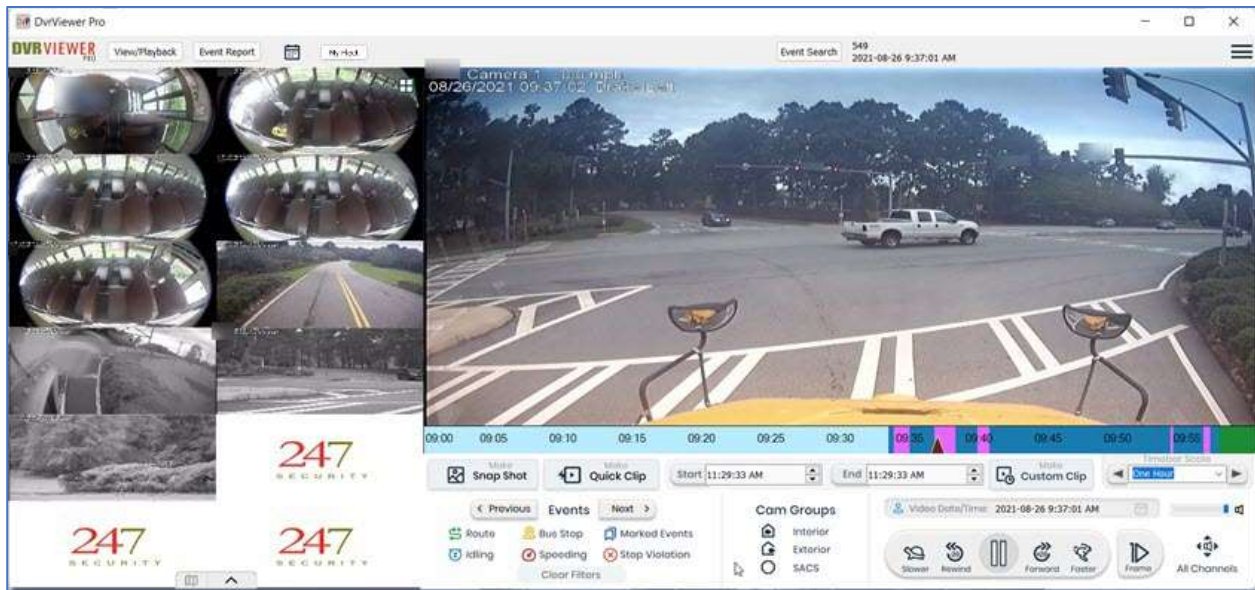
Scrolling through the cameras

Select the camera views with the two buttons top left. For buses with multiple cameras, click the up/down arrows or the grid button to display more cameras.



Be aware that more cameras = more video = more for the computer to process. On some machines, video and audio will get choppy with multiple cameras. The recorded video will be smooth.

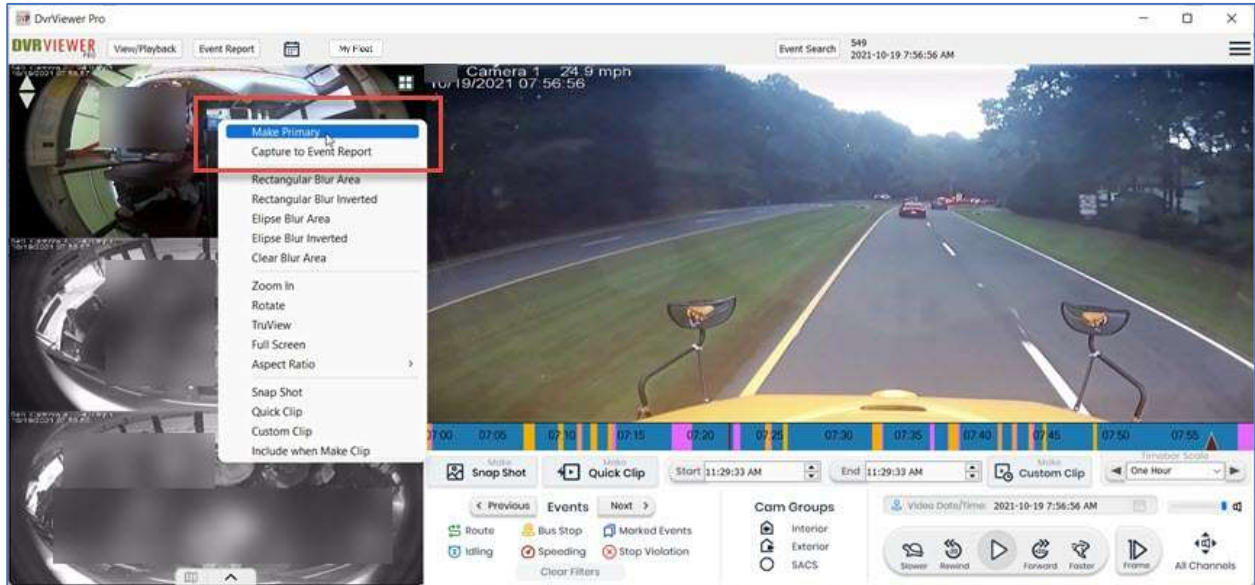
In the example below, the bus has 10 cameras. Playing back 10 channels of video can appear choppy and the audio may have clicks and dropouts if the computer struggles to display all the channels.



When you save videos for incident reporting, only include the necessary cameras.

Moving a camera to the *Primary* position

Right-click on any camera, select “Make Primary”, and it will swap positions with the camera in the Primary spot.

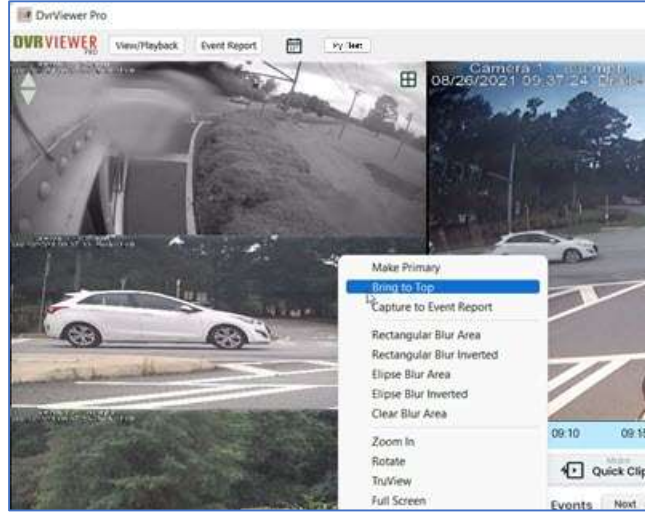


Camera 2 becomes Primary:



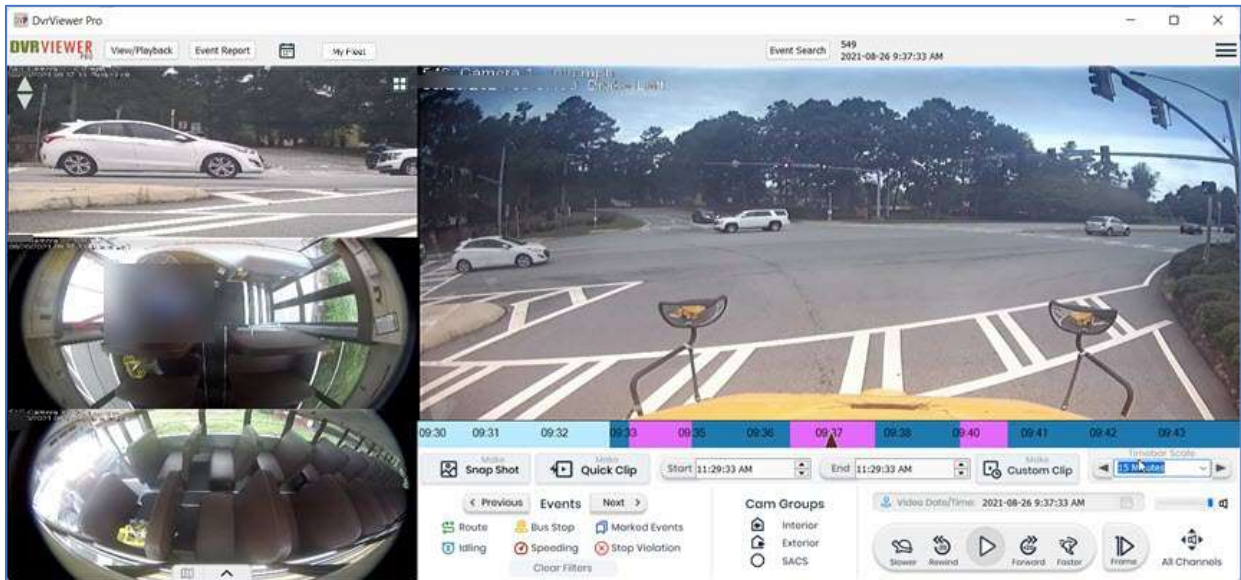
Moving a camera to the top of the list

To bring a camera to the top of the secondary list, right click and select “Bring to Top”.



In this example, selecting the camera with the white car in the frame...

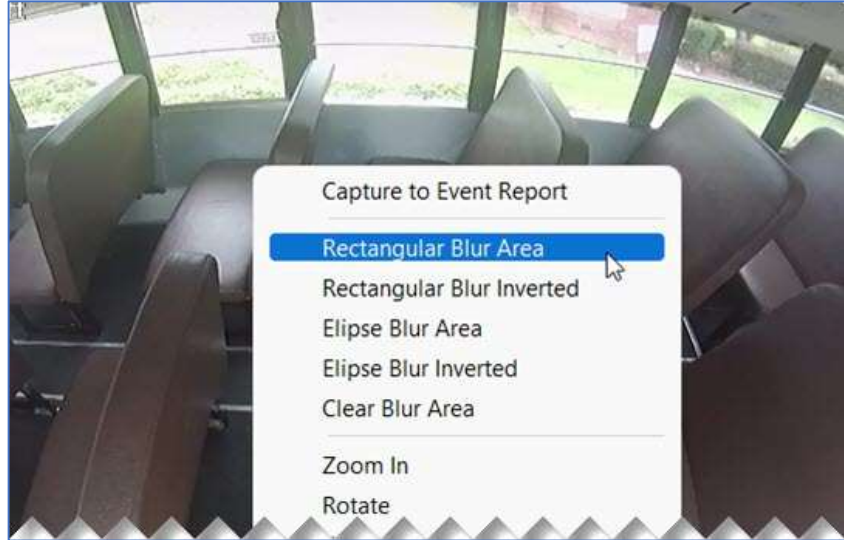
...moves the channel to the top of the list of cameras.



Blurring video

Right click on any channel. The *Options* dialog will appear. Select the type of blur you want to apply, then click and drag across the part of the video you want to affect. The region you just created will be blurred or inverted-blur. A description of each option follows.

If the video is on pause, you will need to advance the video to see your blur.



Unaffected – original image:



Rectangular Blur Area



Rectangular Blur Inverted



Ellipse Blur Area



Ellipse Blur Inverted



Notes regarding blur tools:

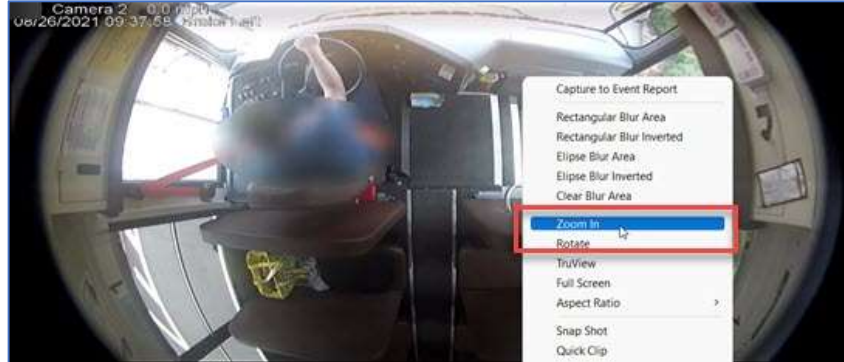
- Any combination of Rectangular Blur and Ellipse Blur can be applied at the same time on the same channel, and across multiple channels.
- Only one inverted blur can be applied to a channel.
- Blurs hold their fixed position when the video is running.
- Blurs are saved to Snap Shots of the selected channel.
- Blurs are saved on AVI/MP4 video clips of the selected camera channel; *DVR* format videos are unedited and unaffected.
- If the video is on pause, you will need to advance the video to see your blur. You can press *Play* or the *Frame* button to advance the video.

Right click and select *Clear Blur Area* to remove all blurs from the currently selected channel.

Zoom in

Zooms are saved to Snap Shots only, not video clips.

Right click on any channel. Select “Zoom In” on the *Options dialog*. Click and drag the mouse pointer across any part of the image. The smaller the area selected, the greater the zoom.



The area inside of the rectangle will be zoomed in.

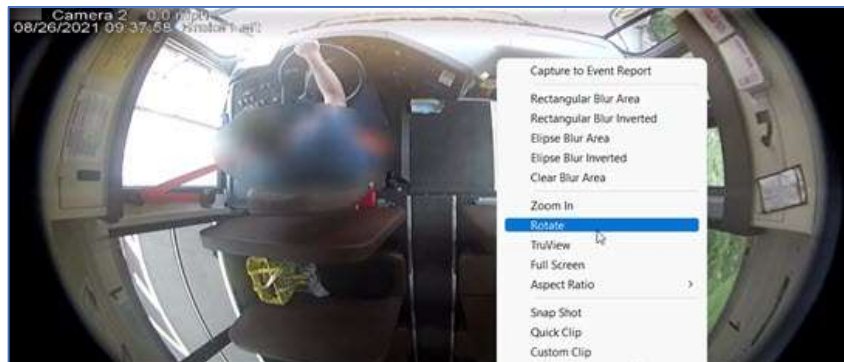
You can move the zoomed image with the arrow keys on your keyboard.

Right click and uncheck *Zoom In* to clear the zoomed effect.



Rotate camera

Right click on any channel. Select “Rotate” to rotate image by 90° clockwise.



Rotated image:

Continue to rotate the image as desired. The image will be in its original state after four rotations.



Fullscreen mode

Double click on any channel to view it in full screen. Double click again to return to original state.

Original:



Full screen:



TruView

TruView is a 247 Security Inc exclusive! You can convert a fish-eye lens image from an OmniView 360° camera into 3 additional images. TruView adjusts the image to three separate linear views to make it easier to see.

To switch to TruView mode, select any channel with an OmniView 360° camera, right click to open the popup dialog then select “Truview”. The camera you select can be Primary, or one of the channels on the left.



The original channel will be in the Primary channel position. Three additional linear perspective views will be created from the 360 view.



Currently, full screen mode, blur, and zoom tools cannot be performed on the TruView derived channels but can still be done for the original OmniView 360° channel.

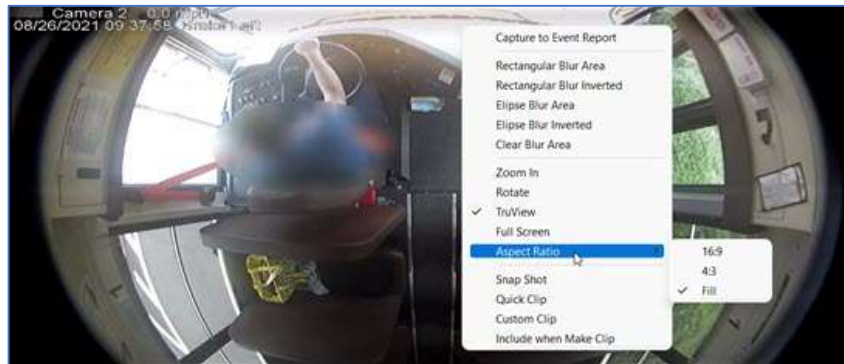
You can save Snap Shots from TruView; video clips are not saved.

To exit TruView, right click on any of the 4 channels and uncheck *TruView*.

Changing video aspect ratio

DVRViewer Pro 2 automatically scales its window to optimize viewing on your computer monitor.

To accommodate the best views, right click on any channel. Select “Aspect Ratio”. Choose the appropriate ratio (16:9, 4:3, Fill) to size each channel to the desired proportions in each viewing area.



Video Clips and Snap Shots

You can capture different elements of your videos to distribute to interested parties. Customized video clips and Snap Shots (still images) are captured directly from the video and are useful for incident reporting.

Creating Snap Shots

Use the *Play/Pause* and *Frame* buttons to locate the best shot.

Right click on any channel.

Select "Snap Shot" to capture image.

You can also use the *Make Snap Shot* button on the control panel to capture a still image of the Primary window.



This dialog will display. Click *Save* and choose a destination folder, or use the default *MySnapShots* folder.

Click *OK* to close the dialog.



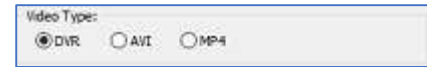
Creating Video Clips

There are two ways to create video clips:

- Quick Clip: automatically creates a 1 minute clip
- Custom Clip: you set the start and stop times

Video File Types

You have 3 choices of file format when you save a video clip, although AVI and MP4 are functionally identical. We strongly recommend that you save video clips in *DVR* format for security and privacy reasons. Here's a comparison of your options.



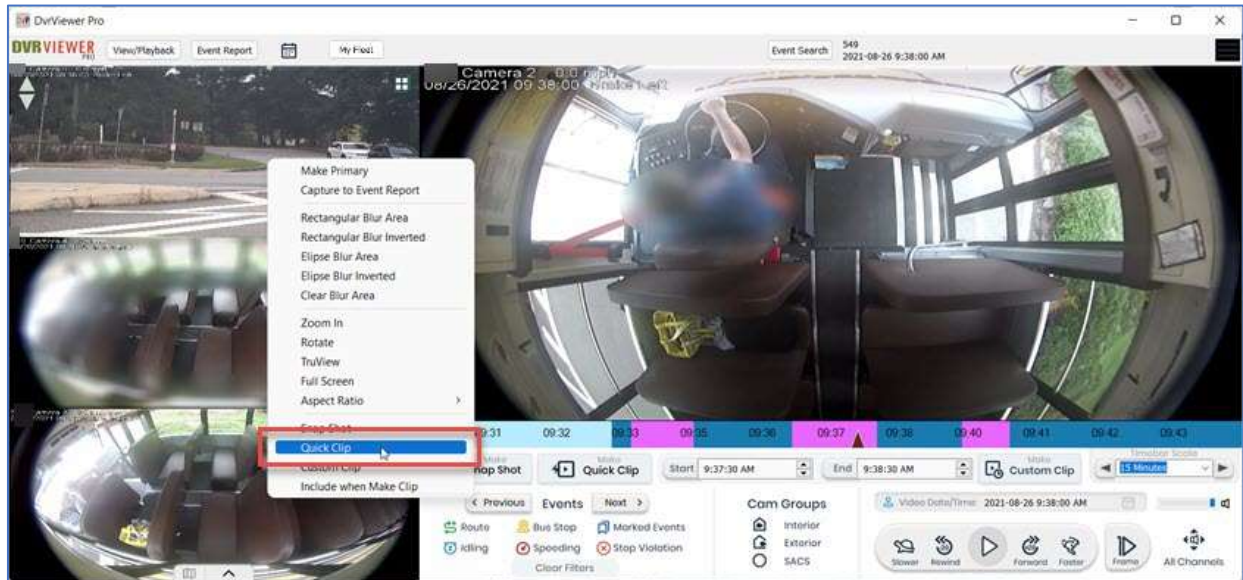
AVI and MP4	DVR (DvrViewer Pro 2)
<ul style="list-style-type: none"> • Very portable 	<ul style="list-style-type: none"> • Not as portable
<ul style="list-style-type: none"> • Can be viewed by any device: Apple, PC, smart phones, etc. 	<ul style="list-style-type: none"> • Can only be viewed on a PC with DVRViewer, DVP or DVP2
<ul style="list-style-type: none"> • Not secure or private 	<ul style="list-style-type: none"> • Very secure; can be encrypted and password protected
<ul style="list-style-type: none"> • Can be shared and viewed online: FaceBook, InstaGram, TikTok, etc. 	<ul style="list-style-type: none"> • Not viewable online
<ul style="list-style-type: none"> • Each camera is saved as a different file 	<ul style="list-style-type: none"> • All selected cameras saved as one file
<ul style="list-style-type: none"> • Map and GPS data is not included in the files 	<ul style="list-style-type: none"> • Map and GPS data is included in DVR file
<ul style="list-style-type: none"> • Takes longer for DVP to process when saving 	<ul style="list-style-type: none"> • Faster processing from DVP2

Bear in mind that *DVRViewer Pro 2* can be installed on any PC; the installation files are accessible by download from the **247 Security Inc.** support website. Therefore, you can assist trusted colleagues to install DVP2 on their machines so they can view DVR-format videos.

Creating a Quick Clip

Click the *Make Quick Clip* button, or right-click and select. The clip will automatically include 30 seconds before and 30 seconds after the current video time. It's also a good idea to know which cameras you want to include in the clip. For example, it may not be relevant to include external cameras, etc.


Right click on any camera and select *Quick Clip*, or click the *Make Quick Clip* button.



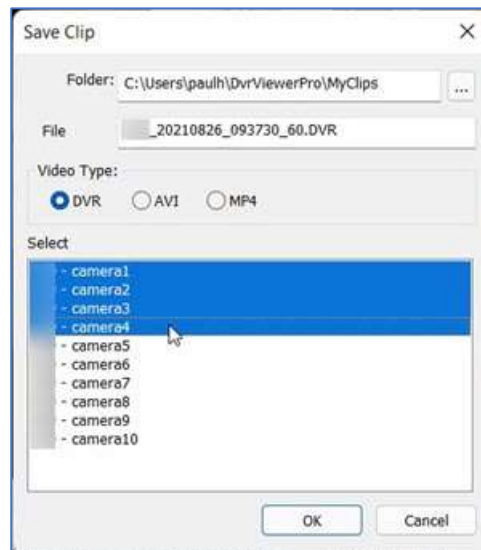
A popup dialog with available camera channels will appear.

From top to bottom:

Folder: Choose the location to save your file(s).

Click the three dots -  - to choose a location other than the default *MyClips* folder.

File: Rename the file if you want. It's a good idea to include at least the bus number and the date.



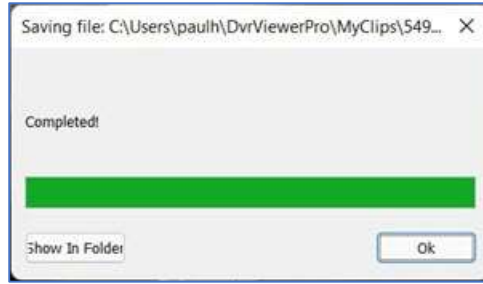
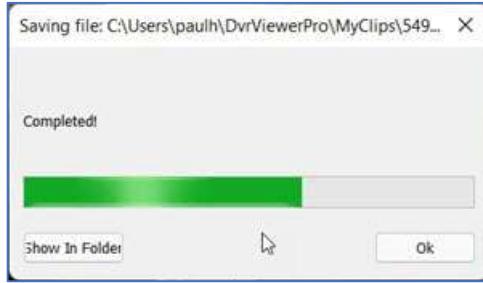
Video Type: As discussed above, see pg. 39.

Select: Choose the cameras to include in your clip, click to select and highlight.

Click *OK* and your Quick Clip will save to the selected folder.

The progress will be shown as the clip(s) is saved.

AVI/MP4 files take a lot longer to process than DVR files. Also, each camera is saved as a different video file.



Clicking *Show In Folder* will open the Windows Explorer directory where the video has been saved. Click *OK* to return to DVRViewer Pro 2.

Creating a Custom Clip

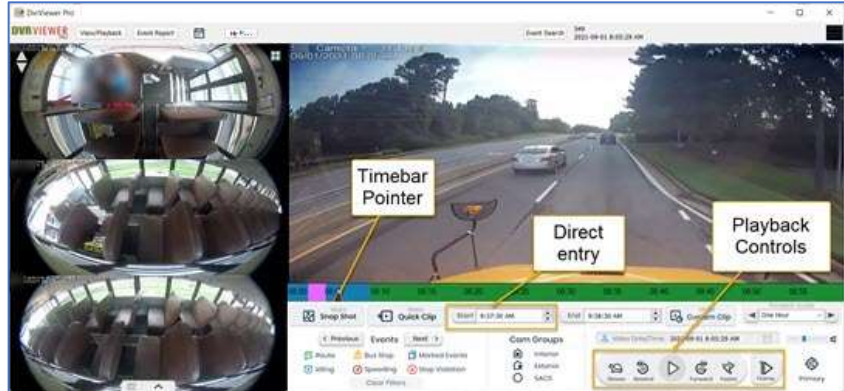
This is a very similar process to creating a *Quick Clip*.

Where *Quick Clip* creates a one-minute video, *Custom Clip* can be any length.

Determine when the beginning of your video clip should start. You can:

- Drag the *Timebar Pointer*
- Use the *Playback Controls*

Click the *Start* button.

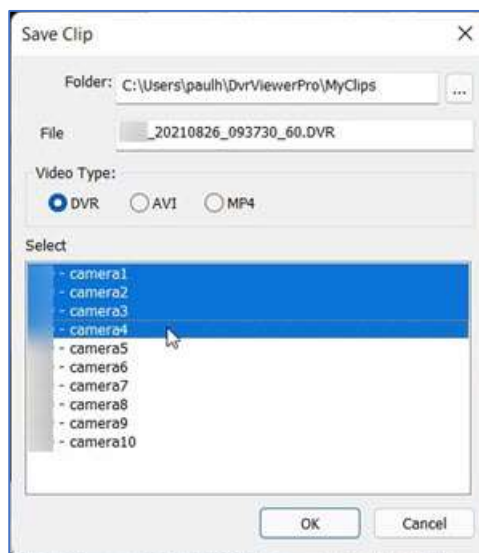


DO NOT USE DIRECT ENTRY OR UP/DOWN ARROWS IN THE BOXES TO SET THE TIME. ONLY USE THE START & END BUTTONS.

Set the end of the video and click the *End* button. Click the *Make Custom Clip* button, or right-click on a camera and select *Custom Clip*.

The same popup dialog as *Quick Clip* will appear.

Choose where to save your clip (default is *MyClips*), the name of your file, and the file format.



Highlight the channels you wish to include in your clip and click *OK*.

The same window will open displaying the progress, and then you will have the option of *Show In Folder* or *OK* to close the dialog.

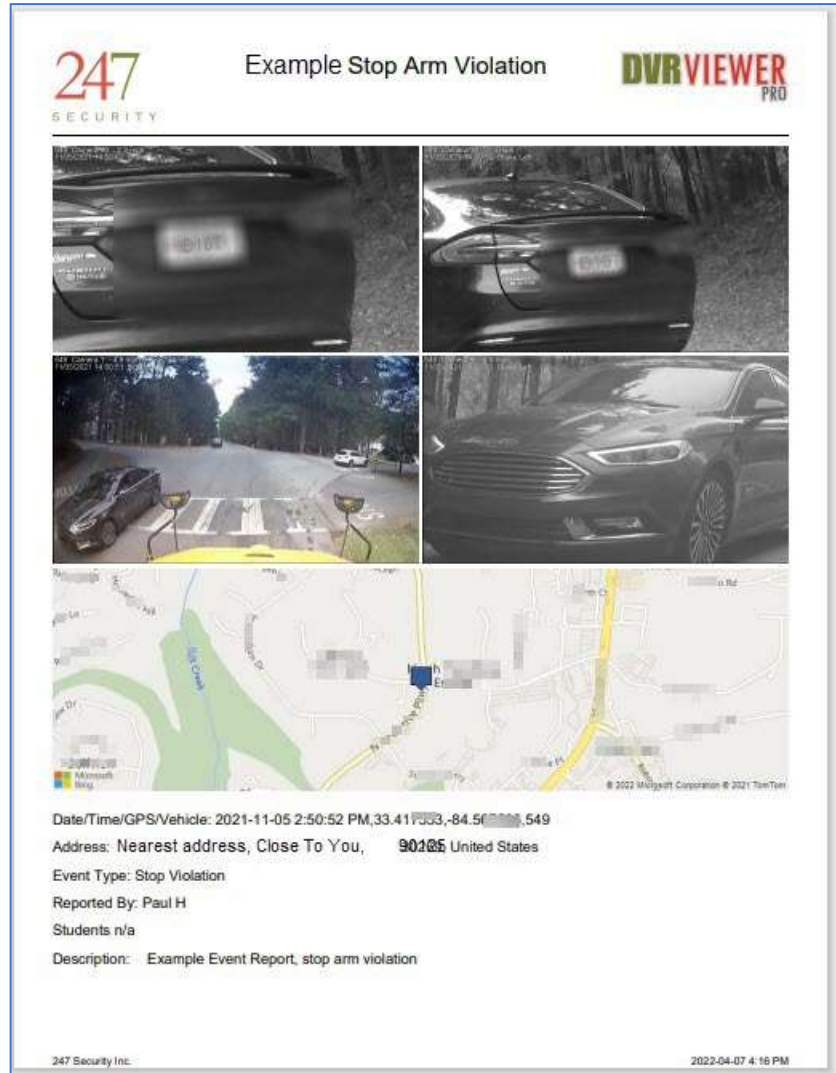
Creating *Event Reports*

An Event Report is a formatted “pdf” document designed for sharing with law enforcement, parents, principals, and other interested parties.

It includes up to 4 Snap Shots, GPS data regarding where and when the incident took place, and customized fields for you to enter your own text.

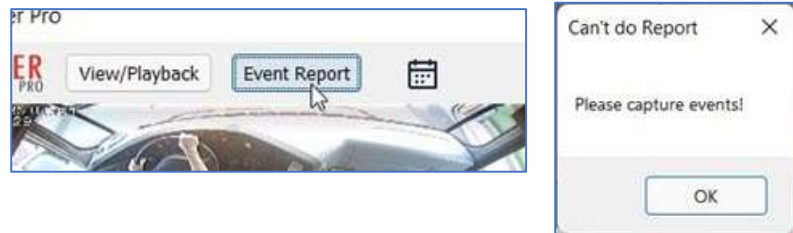
A map is provided with a “pin drop” based on the GPS coordinates, as well as the nearest street address.

This document is saved as a PDF file that can be emailed or printed as required by the situation.



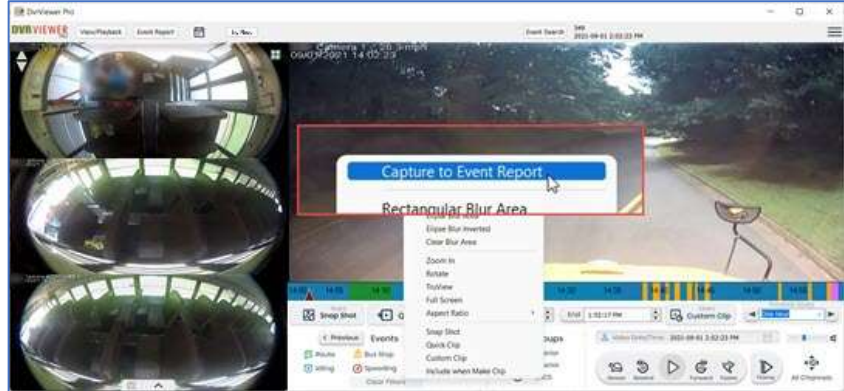
Note Details in this example have been blurred out for privacy.

The first step is to populate the Event Report with Snap Shots. If you click the *Event Report* button before doing this, you will get this message.



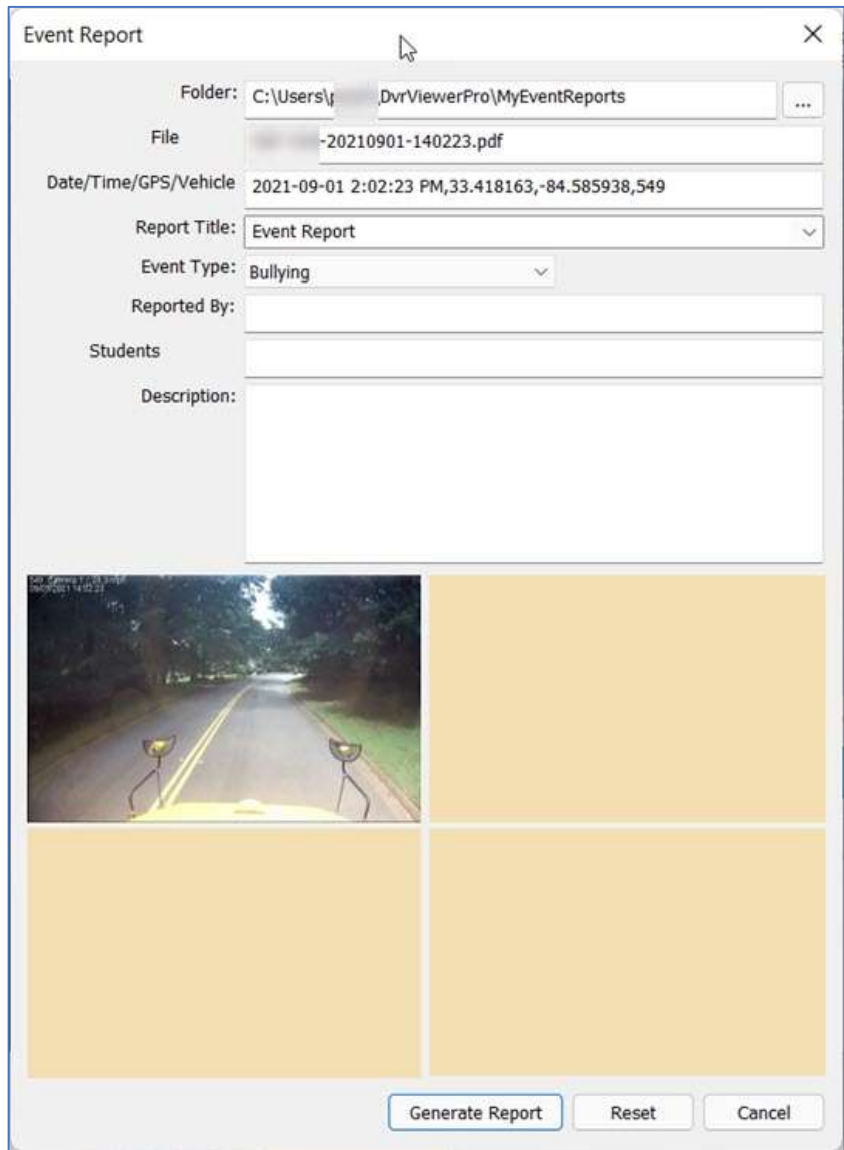
Find the video that you want to include as a Snap Shot.

Right click on any channel, and select *Capture to Event Report* to capture an image. Your capture will be added to the content for your Event Report.

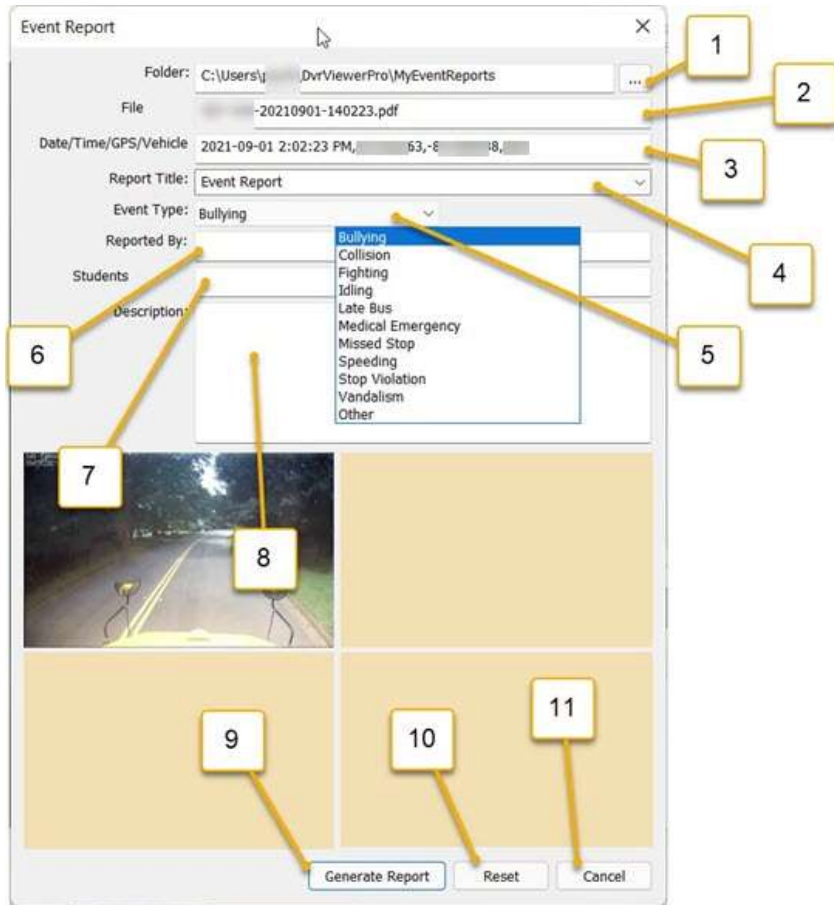


Click the *Event Report* button, and you will see the blank dialog window with your just-captured Snap Shot.

Locate the video you want, right-click and select *Capture to Event Report*. The report shows the most recent 4 captures; if you do a 5th, the first one gets deleted from the report. Once you have the Snap Shots you want, click the *Generate Report* button.



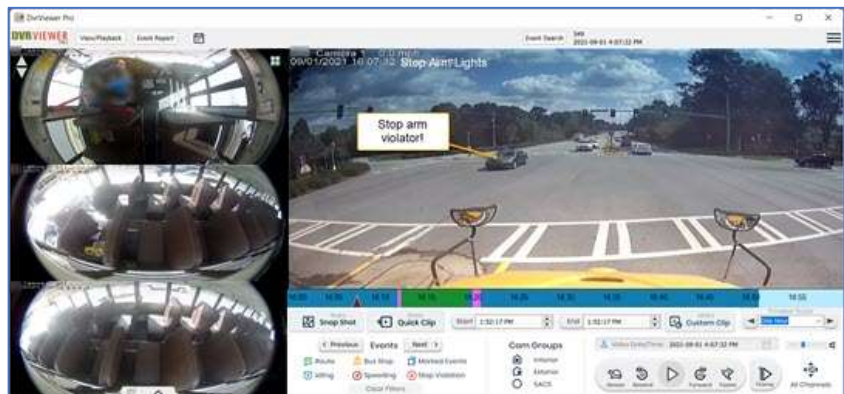
1. Save location: defaults to *MyEventReports*. Click the three-dot button to navigate to a different location.
2. Name of the file.
3. Date, time, and GPS coordinates of the incident.
4. Title of the report.
5. The category of incident: some fields may alter depending on what is selected here.
6. Your name, or whoever is reporting the incident.
7. Student names or leave blank (or 'N/A').
8. Description field: enter the details, such as license plates and incident specifics.
9. *Generate Report* button will create the pdf.
10. *Reset* deletes everything so you can start over.
11. *Cancel* closes the dialog window.



Event Report Tutorial: Stop Arm Violation

This section shows you how to generate an Event Report for a (fake) Stop Arm violation.

1. Find the video when the violation occurred. (In this fictitious scenario, imagine the bus is at a stop with children, the stop lights are on and stop arm are out).



- 2. Capture the image in Primary window to the report.



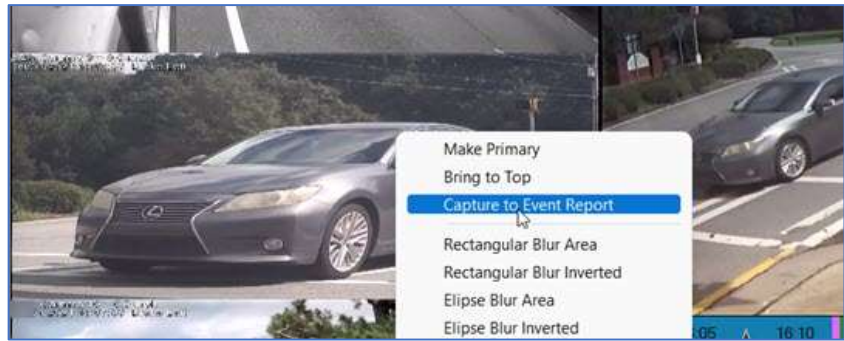
- 3. Find other cameras with the violation in frame.



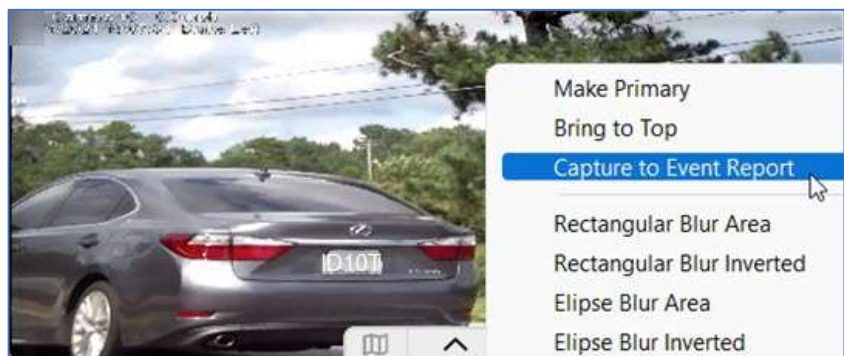
Use the *Frame* button to step forward until you get the perfect image.



- 4. Right click on any camera and select *Capture to Event Report*.



- 5. We need some clear shots of the license plate, so find the best camera and step through the frames.

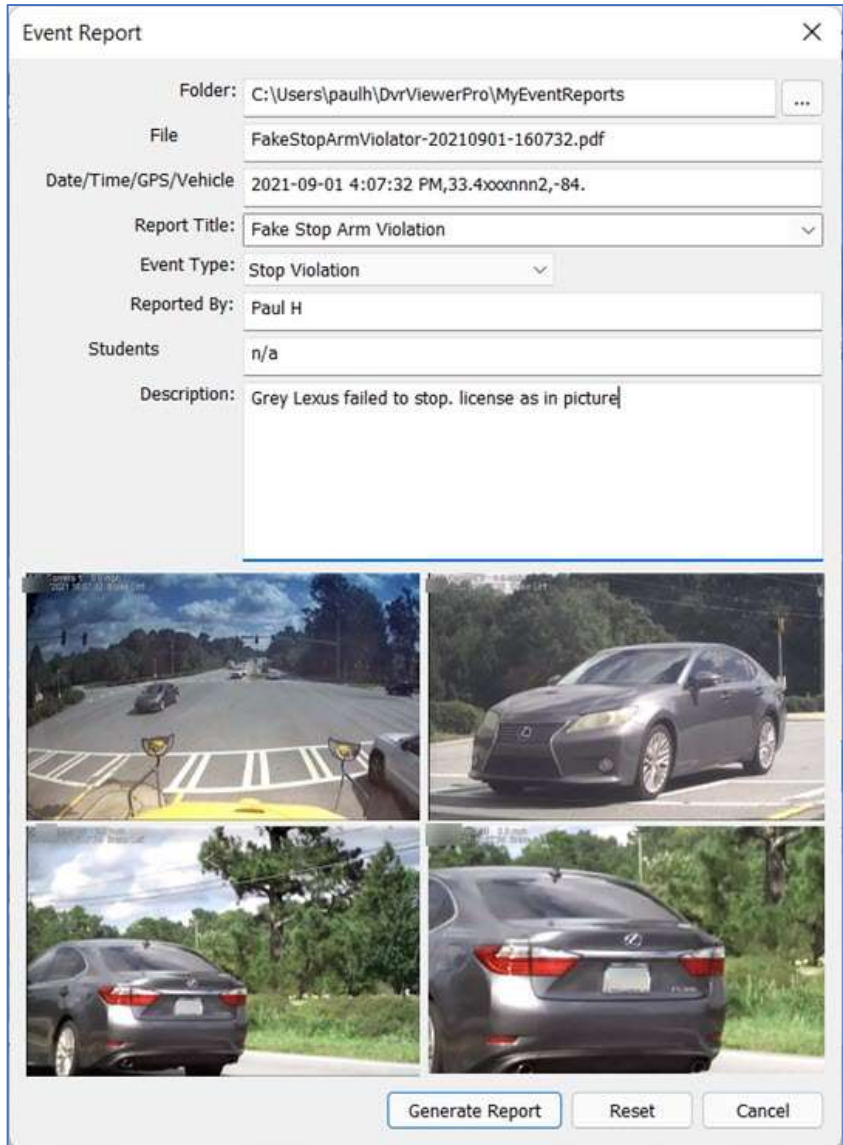


- 6. Use the *Zoom* feature to make the license plate clearly visible, then capture it to the Event Report.



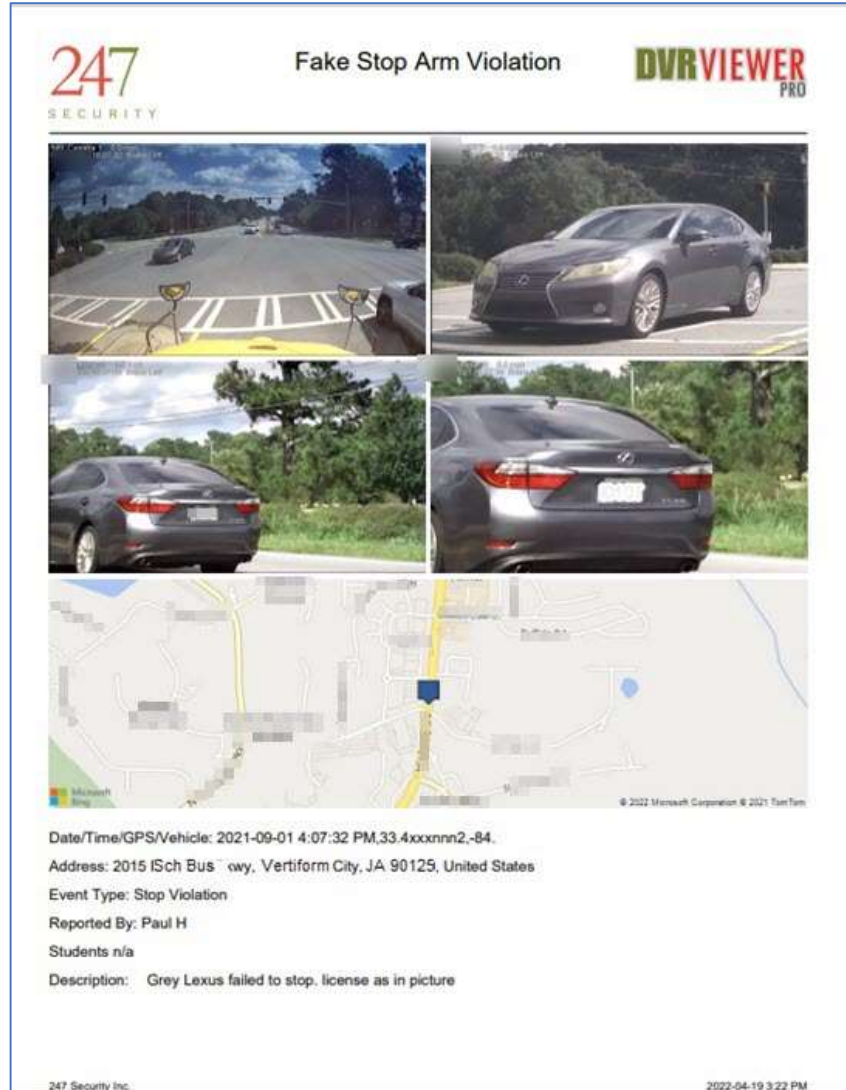
- 7. Click the *Event Report* button and complete the fields.

- 8. Click *Generate Report*.



9. The completed report will open in your PDF viewer. If there is a local street address according to the GPS coordinates, it will automatically populate.
10. To share with others, you can print and distribute hard copies, or navigate to the folder where you have your Event Reports saved and email it.

Note if you haven't changed it, the default location for Event Reports is:
 C:\Users\[yourUserName]\Dvr ViewerPro2\MyEventReports



Note some elements of the above example have been blurred for privacy.

Real-time Features

If you have activated the built-in cellular SIM and purchased data minutes, you will be able to view live video and location information for your vehicles. Contact your sales rep for more information.

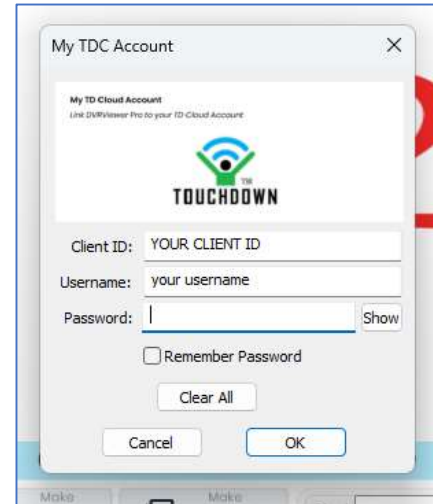
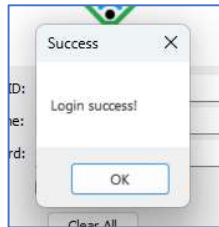
Once activated, you need to enter the TDC Server credentials we will provide.

Connecting to the TDC Server

Click the *Settings* menu, top right, open *TDC Setup*, and select *My TDC Account*.

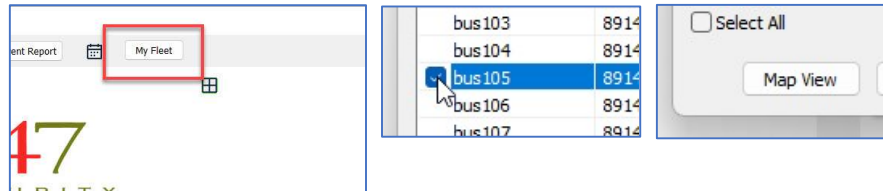
Enter the credentials as provided and click OK.

You will see a confirmation:



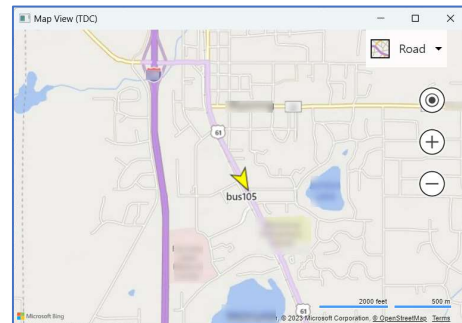
Viewing live location info – Map View

Click *My Fleet*, select a bus, and click *Map View*.



The location of the bus will display on a map, represented by a yellow arrow.

As the bus moves, the arrow will move on the map.



Live Video

From the *My Fleet* window, select a bus, and click *Live View*.

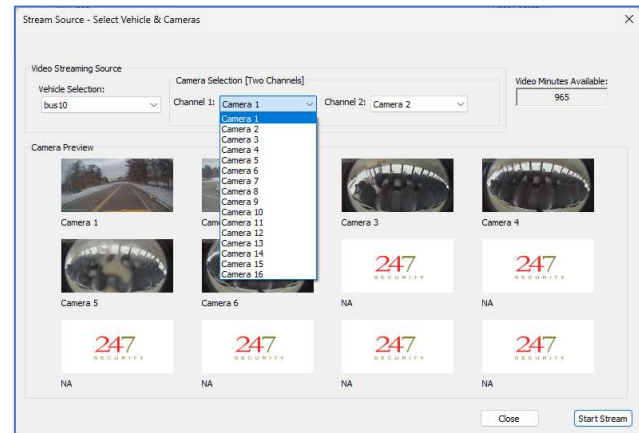


Select two cameras that you want to stream in the drop-down menus and click *Start Stream*.

The selected cameras will display.

The following controls are disabled with live video:

- Play/pause function (only play)
- Rewind/Forward 20s
- Slower/Faster
- Frame forward button
- Video clips (can be made from the hard drive per normal recorded video procedures, see relevant chapters below)
- Event Reports



These controls are enabled:

- TruView for OmniView360 cameras
- Snap Shots
- Zooms, Blurs, Rotate

To disconnect, click *My Fleet* or *Disconnect* from the View/Playback menu.

More information

Should you experience any issues, call support at 1.866.693.7492.