

# **Digifort Release Notes**

**Version 7.3.0.2**

**August 04, 2020**

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**Part**

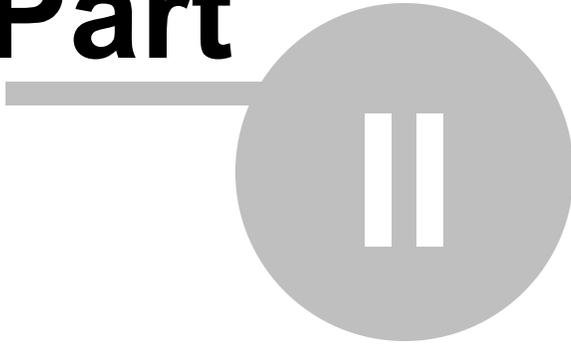


## 1 Description



This file contains the history of all changes made to the system. Changes here shown are valid for the Enterprise edition that has all the features. Professional, Standard and Explorer editions may not have certain items described in this file.

**Part**



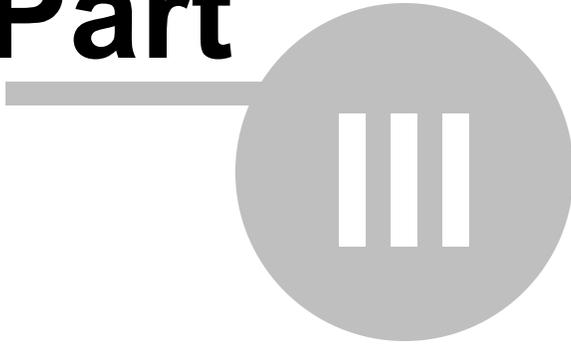
## 2 Version 7.3.0.2

**Release date:** August 04, 2020

### 2.1 Fixes

- When dragging a group of cameras that contain disabled cameras onto the monitoring screen, disabled cameras were being added even if the client was configured to not display disabled cameras in the object list
- Fixed a performance issue for 60FPS video playback
- Fixed an issue with Pelco drivers where old devices no longer work
- Fixed decoding of G.711 and G.726 that could fail on some devices
- OpenALPR vehicle classifier was not working
- Fixed a performance bottleneck issue in the API to generate live JPEG when the camera was set to 30 FPS and several users were accessing the command at the same time
- The design of some system reports has been changed to maintain the same visual identity as the others
- A day's video play was not showing the last 30 minutes of the period
- The alarm popup might not open in rare cases where objects from two or more servers with the same name generate the same event
- Fixed an issue with Axis edge recording drivers
- Fixed an issue where server edge analytic events were not being displayed for selection for recording by event
- Fixed some API issues
- Fixed translation issues
- When creating a camera using the Hebrew Admin Client, the media profile association was wrong
- General fixes in Media, PTZ, Edge Recording, Edge Analytics, LPR Edge and Events Drivers

**Part**



### 3 **Version 7.3.0.1**

**Release date:** May 05, 2020

#### 3.1 **Fixes**

- Fixed an issue in the analytics charts that could generate inconsistent results

**Part**



## 4 Version 7.3.0.0

**Release date:** May the 4th (be with you), 2020

### 4.1 New features and improvements

#### 4.1.1 Object Links

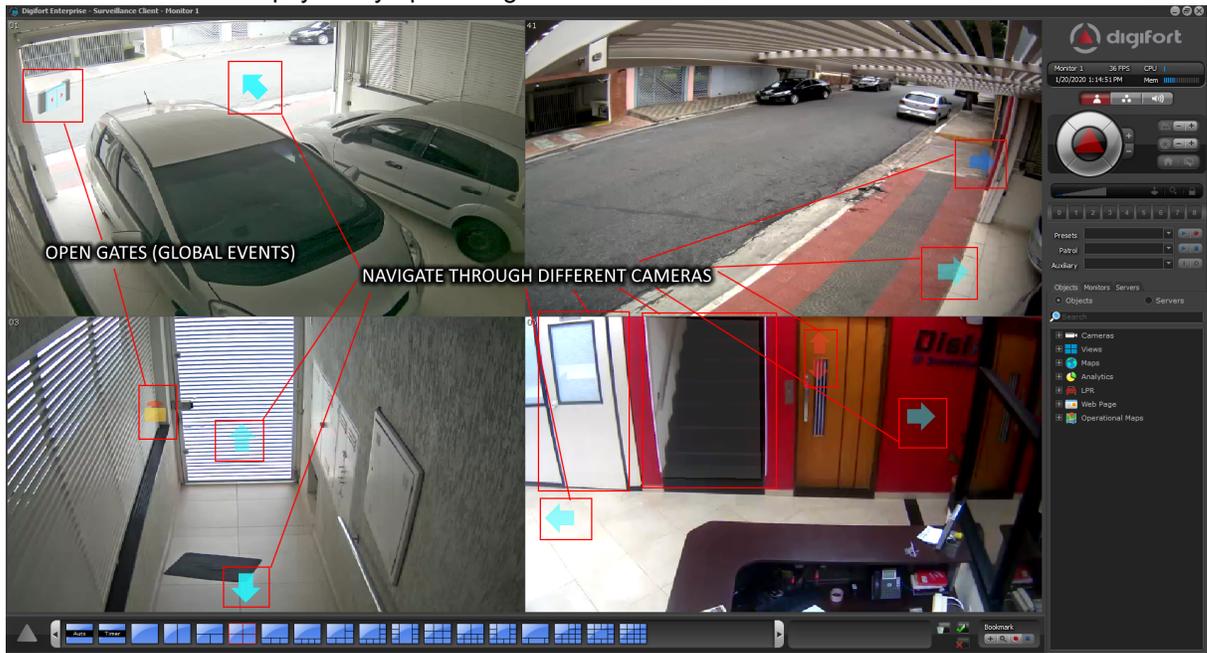
**Professional, Enterprise**

The new Object Links function provides a revolutionary new way to navigate between the system's cameras, facilitating and speeding up the operation of the system.

Object links allow you to create virtual links between different cameras and also to create event triggers overlaid on camera images.

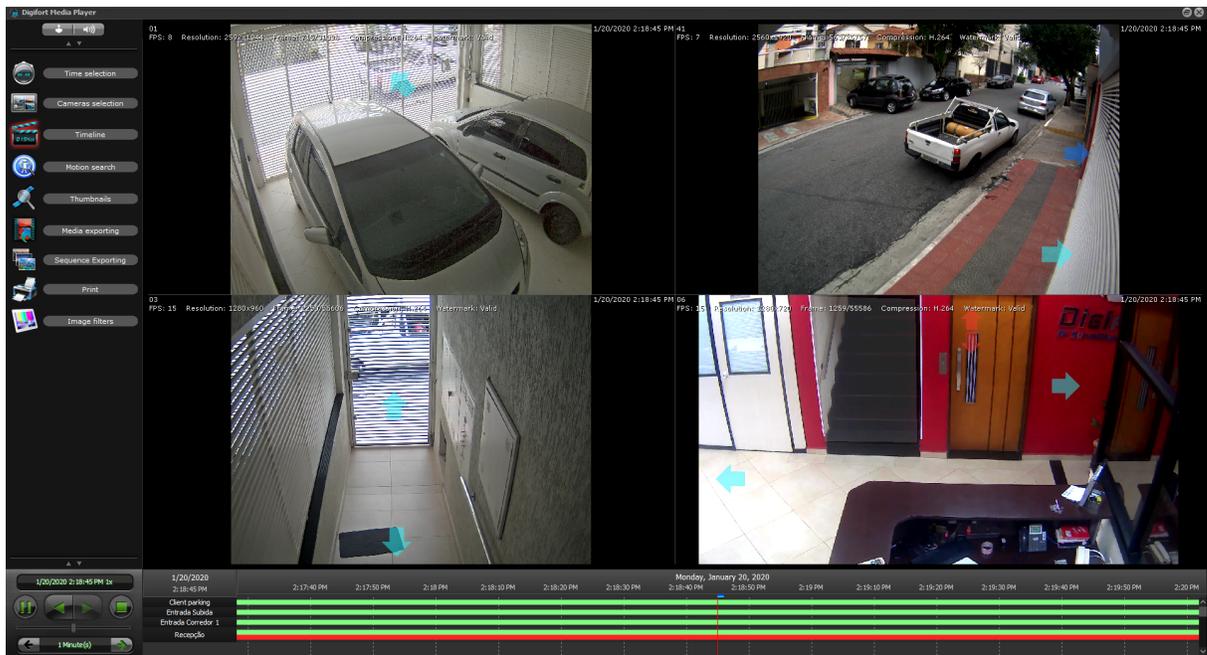
The image below shows an example of using object links. Each camera on display has a link to other cameras in the image. By clicking on the link (represented here by semi-transparent arrows), the associated camera will be loaded, allowing quick navigation between cameras, for example, when following a person who is moving between the cameras.

It is also possible to associate events (And several other types of objects) in the images, such as Global Events that can be used to trigger I/O outputs to open doors and gates. In the image below, cameras 01 and 03 have buttons to physically open the gates.

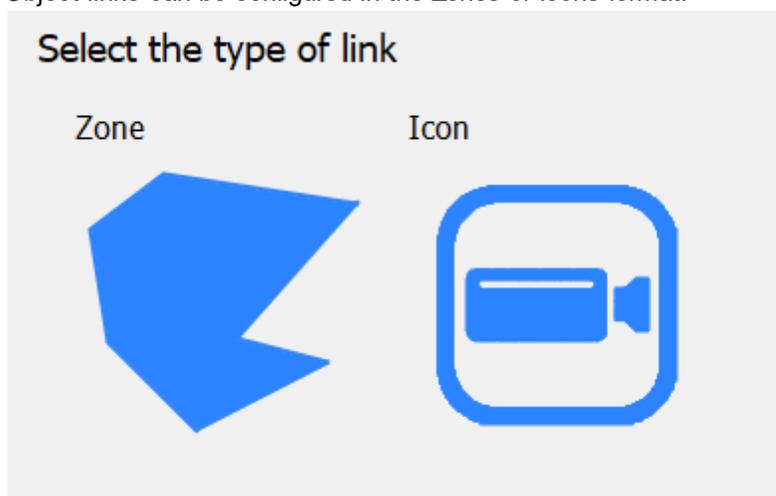


Object links can also be used during video playback, making it an indispensable tool for analyzing recorded incidents.

In the Media Player, only links to cameras will be displayed.



Object links can be configured in the Zones or Icons format:

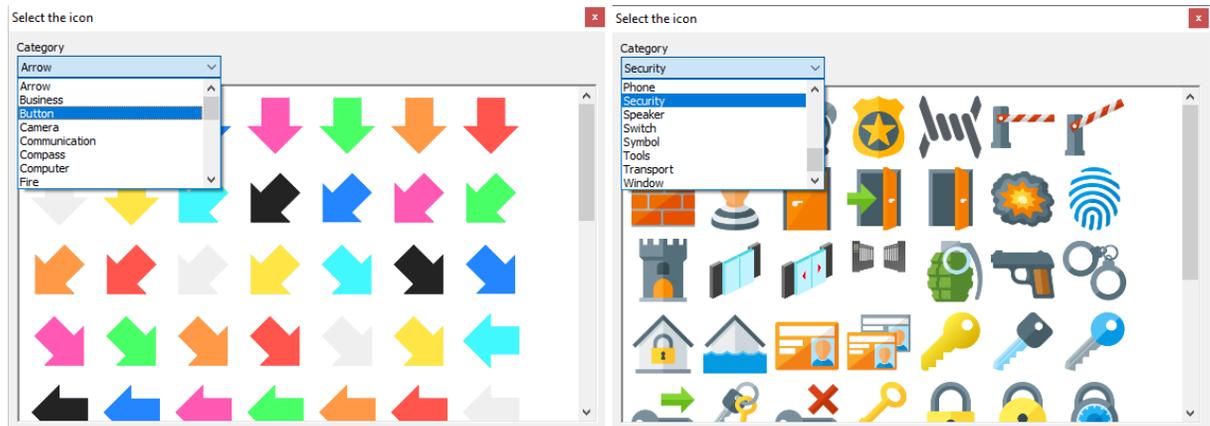


A zone is represented by a semi-transparent polygon in the image, which can be added for example in the outline of a door or gate, providing a visual representation that if the operator clicks on this gate, he will be able to see the image of the camera that is on the other side, or you can also open it.

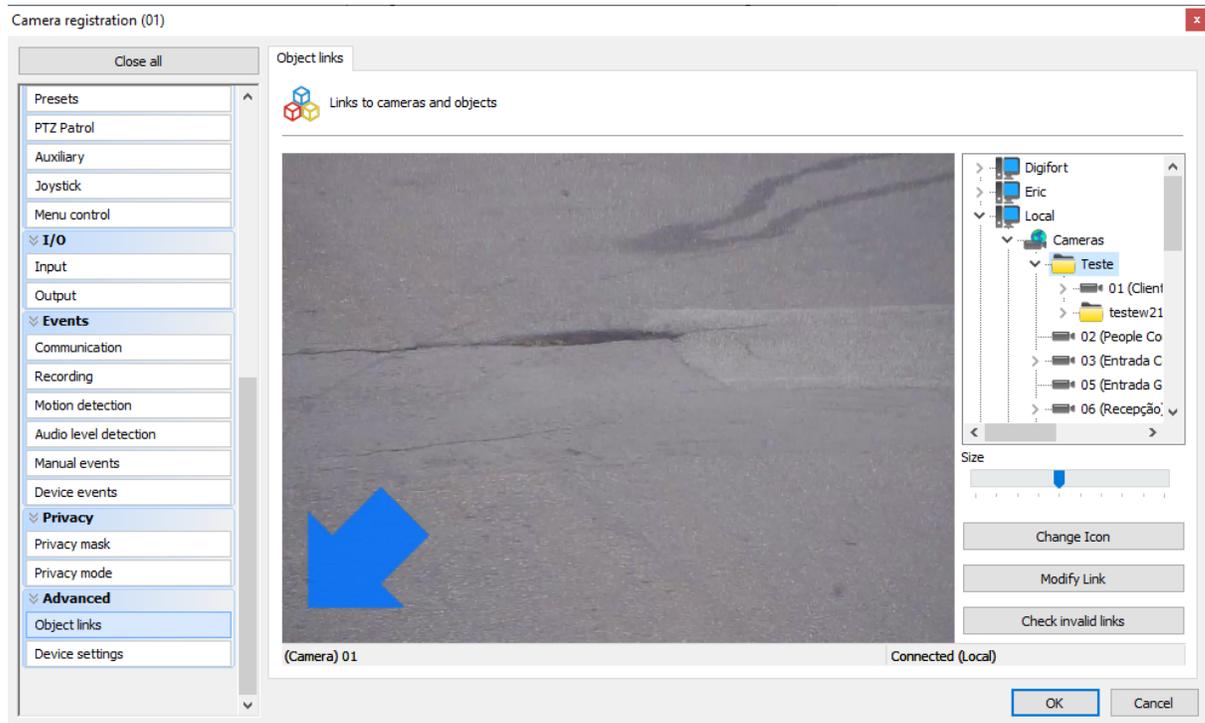
The image below shows a white area, which is associated with a door, when you click on the door, the camera inside the room will be displayed.



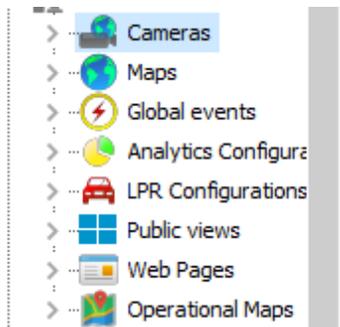
Links can also be in the form of icons superimposed on the image. When creating a link with an icon, an editor will be displayed with several categories of icons that can be chosen to better represent the associated action.



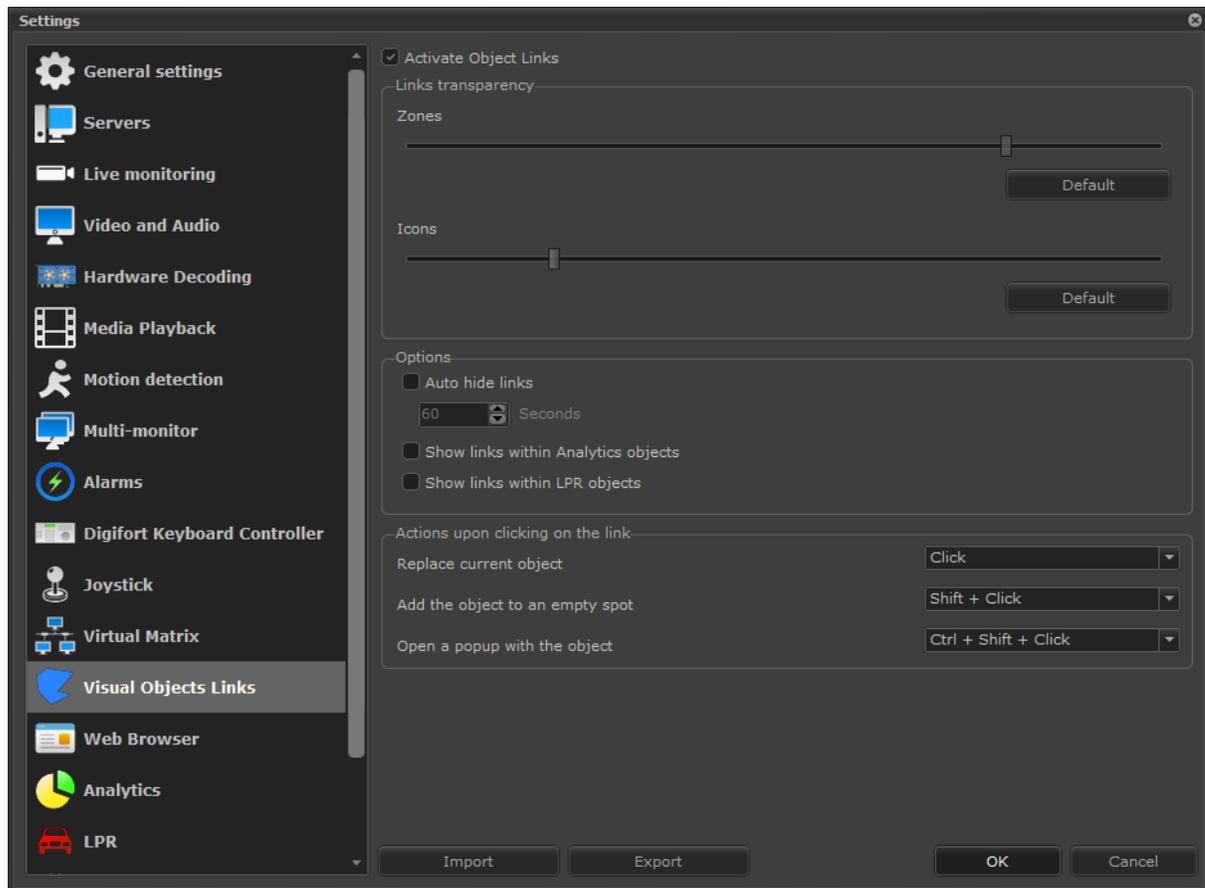
Setting up the links is very easy. The link editor is found under the "Object Links" option in the camera's register. To create a link just drag and drop the desired object from the list of objects and the option to select the type of link will be displayed (zone or icon).



The links can be configured for any visual object in the system, any event (Global and Manual), camera presets and public views, providing great flexibility to the feature:



The Surveillance Client has several options to optimize the use of object links:



It is possible to define the transparency value of the links (with different values for zones and icons), configure the links to hide automatically and configure the actions when clicking on the links.

The system provides 3 types of actions when clicking on the links:

- Replace current object - When executing the link, the current object on screen will be replaced by the link object
- Add object in empty space - When executing the link, the linked object will be added to the next empty space on the screen (And a popup can be opened if there are no more empty spaces available)
- Open a popup with object - A popup will open showing the linked object

You can configure how each action will be performed, with:

- Click
- Shift + Click
- Ctrl + Shift + Click

It is also possible to drag and drop a link from a camera to a space on the screen, so the linked object will be added to the selected space. If the selected space is already filled by another object, it will be replaced by the new dragged object.

All of these actions can also be performed in the Media Player, making the evidence review process very practical and quick.

To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/playlist?list=PLFihAF6oQd\\_gjUWb9Ri7XV955EhxweWgf](https://www.youtube.com/playlist?list=PLFihAF6oQd_gjUWb9Ri7XV955EhxweWgf)

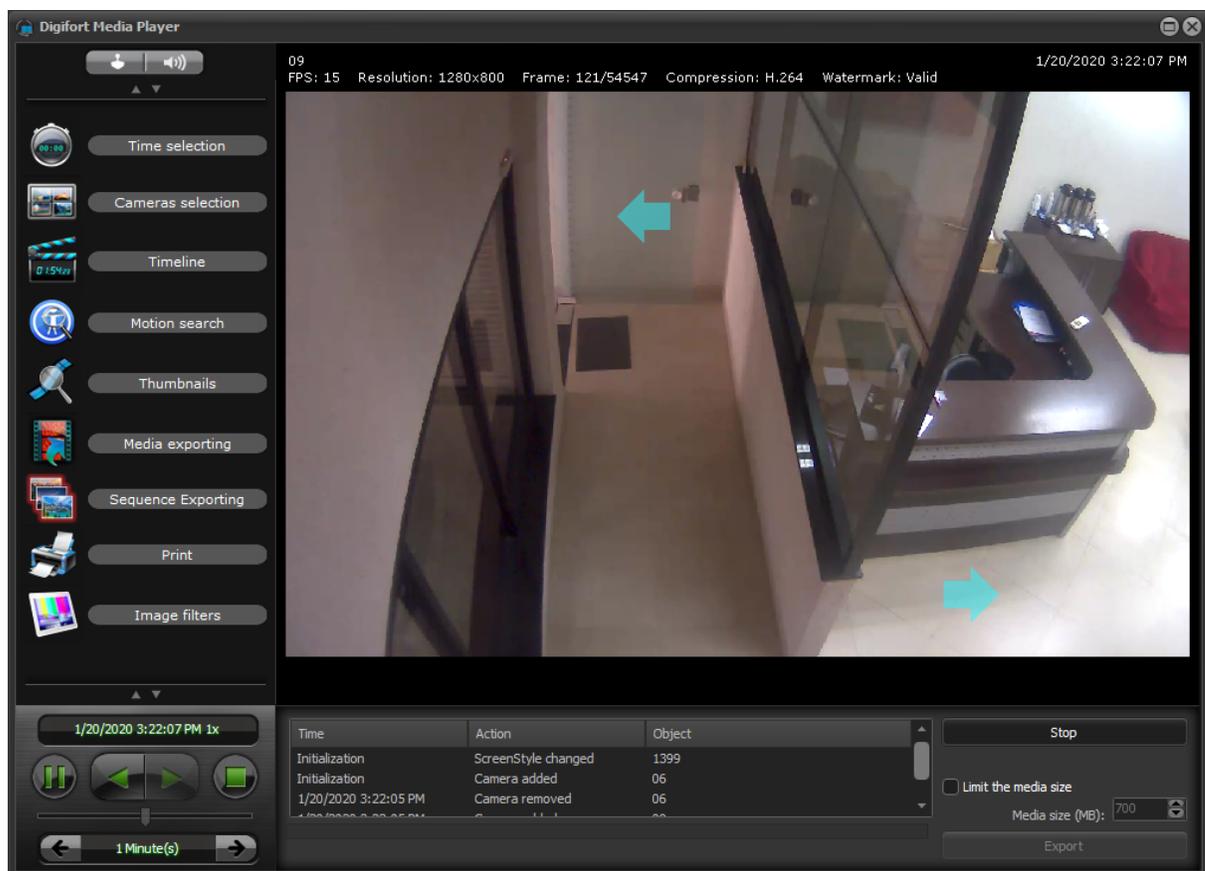
#### 4.1.1.1 Sequence Export

##### Professional, Enterprise

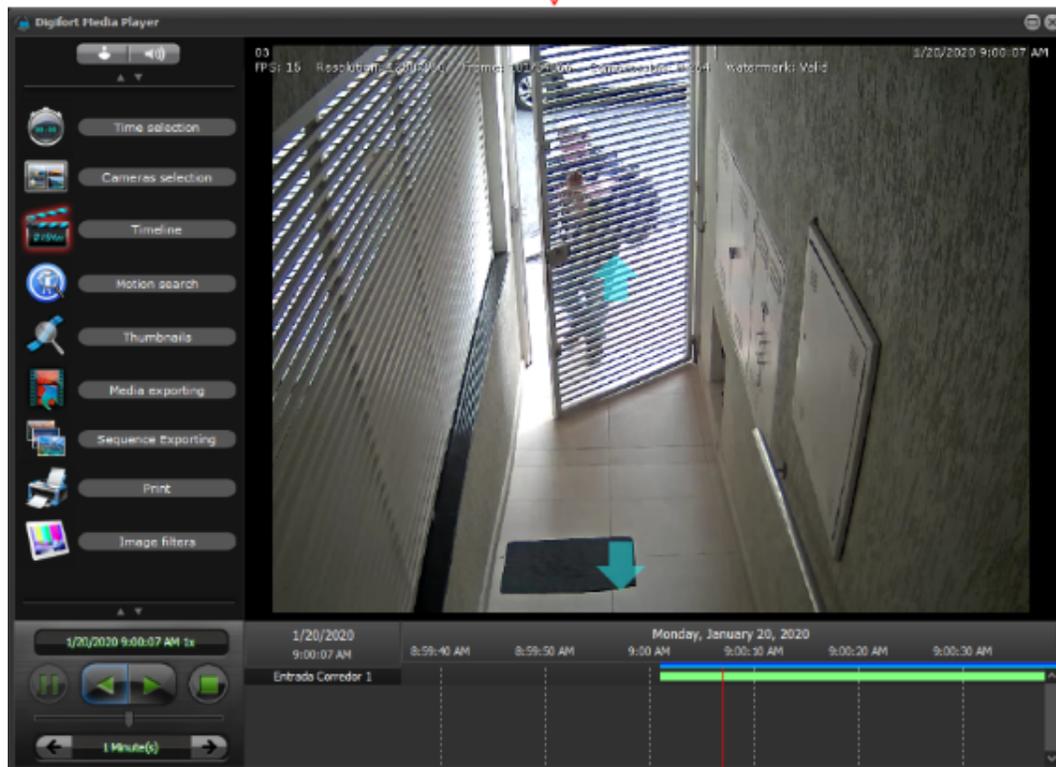
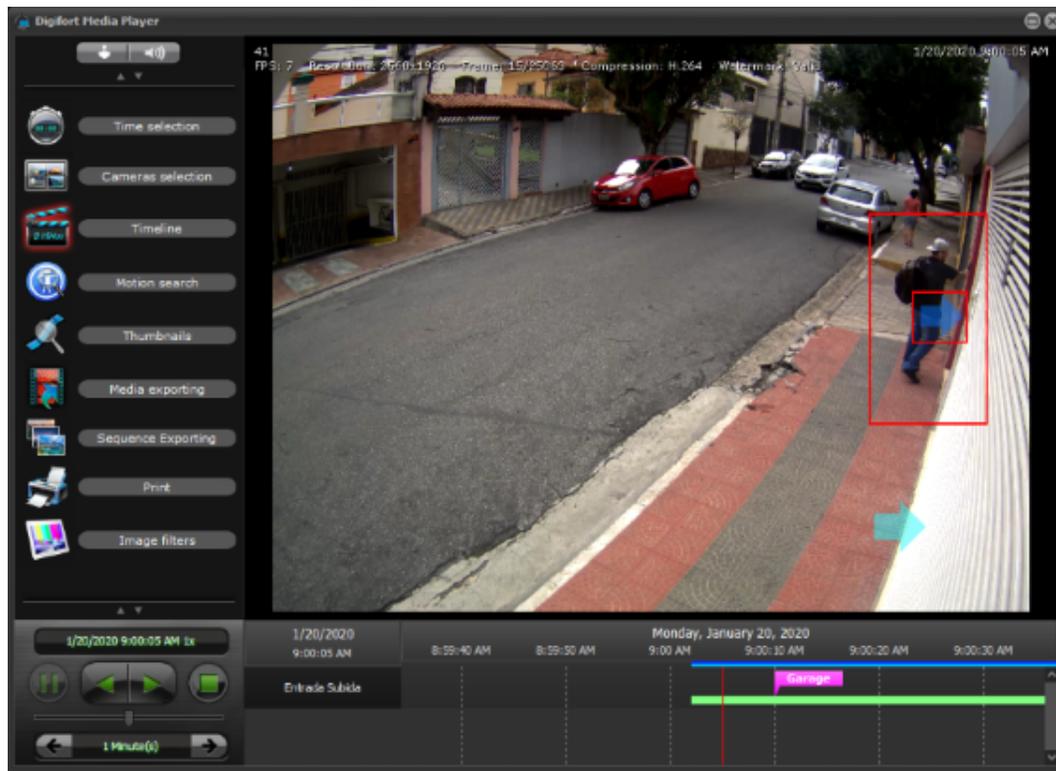
The object links provide an excellent tool for navigation between cameras, however, to complete the cycle, we developed a new feature called Sequence Export, which can also be understood as "Suspect Tracking".

During video playback, it is possible to switch cameras with links, for example to follow a suspect between cameras. The sequence export allows the export of video together with the actions of switching cameras, that is, it is possible to create an export where the exported video player will automatically change the cameras, following the actions created by the operator during the export.

To create a sequence export, simply position the video at the beginning, select "Sequence Export" and click the "Start" button. From now on, all actions (changing cameras and views/styles) will be recorded, so now you can click on "Play" and change the cameras as needed. At the end of the session, just click "Stop" and the "Export" button will be enabled, and the export of the sequence can be completed.

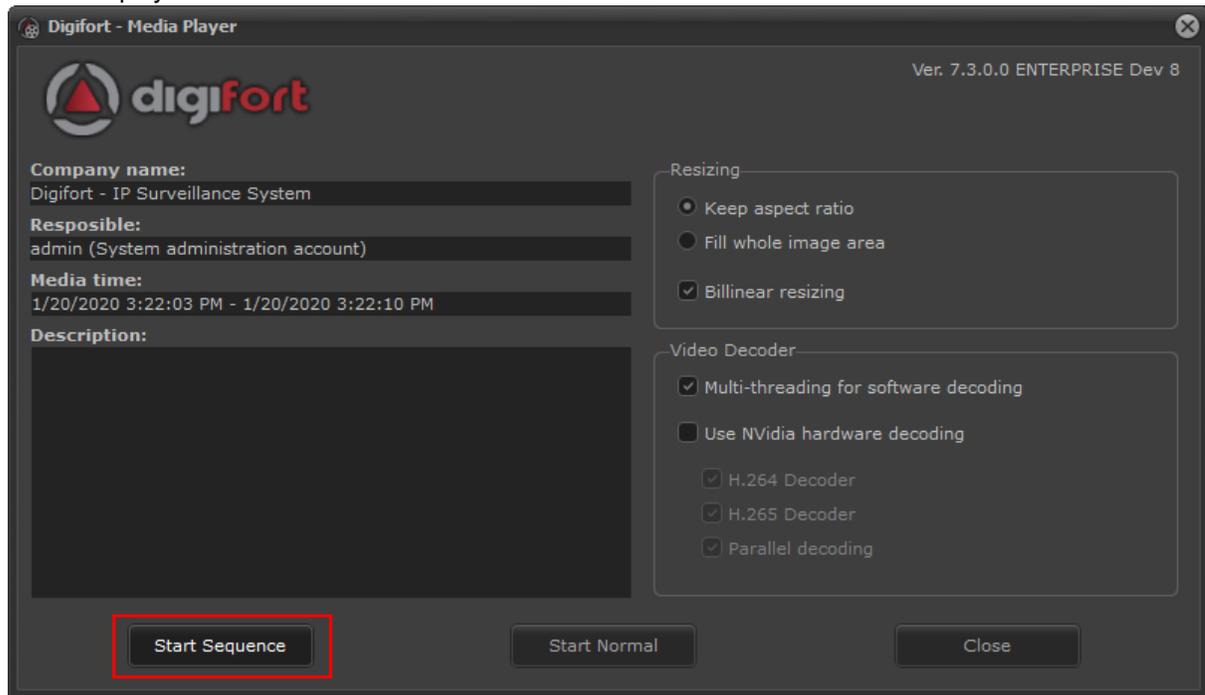


With this, it is possible to create an exported sequence, where the Media Player will automatically switch between cameras, following the exact moment when the operator switched between cameras during the export session:



When opening the Media Player exported from a Sequence Export, the user will have the option to "Start Sequence", which will display the video in the way it was configured to be viewed, changing between

cameras automatically, or it can also start "Normal" where all the cameras that were part of the export will be displayed.



The sequence export does not necessarily need the object links configured, as it will also export if the cameras are switched manually, by dragging / dropping objects from the list.

NOTE: This feature will export all images from all cameras that are part of the sequence during the entire period of the sequence.

To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=x1Ge6XsXDI0&list=PLFIhAF6oQd\\_qNQzD2TeE1Ph4VAxu89WNv&index=7&t=0s](https://www.youtube.com/watch?v=x1Ge6XsXDI0&list=PLFIhAF6oQd_qNQzD2TeE1Ph4VAxu89WNv&index=7&t=0s)

## 4.1.2 Operational Maps

### Professional, Enterprise

This is a powerful new feature that, through integration with Google Maps, allows the creation of navigation maps and event maps.

The navigation maps provide an overview with the geo-positioning of all the cameras in the system (which have geo-positioning enabled) and will allow access to these cameras through icons referenced on the map. If the Surveillance Client is connected to multiple servers, the operational map will concentrate and display objects from all servers automatically.

Event maps provide, in real time, the position of the event (if it is geo-referenced) on the map, when it occurs, creating a powerful visualization and navigation interface that offers a detailed view of the locations where events are taking place and allows the operator to access cameras close to an event, thereby speeding up response to the event.

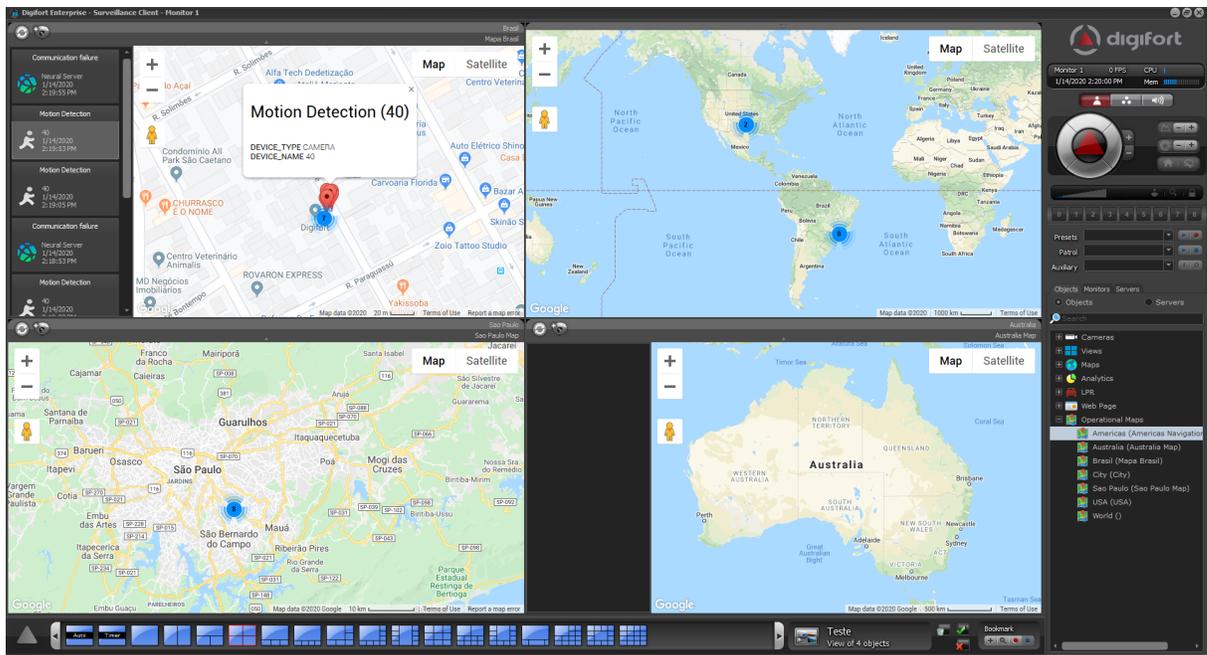
Maps can be registered and configured to display a region of the globe automatically when placed on screen, thus allowing the creation of maps for different regions.

Event maps can also be configured to filter and display events from only a few categories and events can also be filtered by geo-location, that is, only events from a specific region will be populated on the map.

To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/playlist?list=PLFIhAF6oQd\\_op7kOm-gULjQj-JSK0qGDE](https://www.youtube.com/playlist?list=PLFIhAF6oQd_op7kOm-gULjQj-JSK0qGDE)

To use this feature, you will need to acquire a Google Maps JavaScript key. The station running the Surveillance Client also needs to have access to the internet to be able to work with the maps.



### 4.1.3 Camera Groups

#### All editions

The system now allows the creation of Camera Groups for better organization of objects.

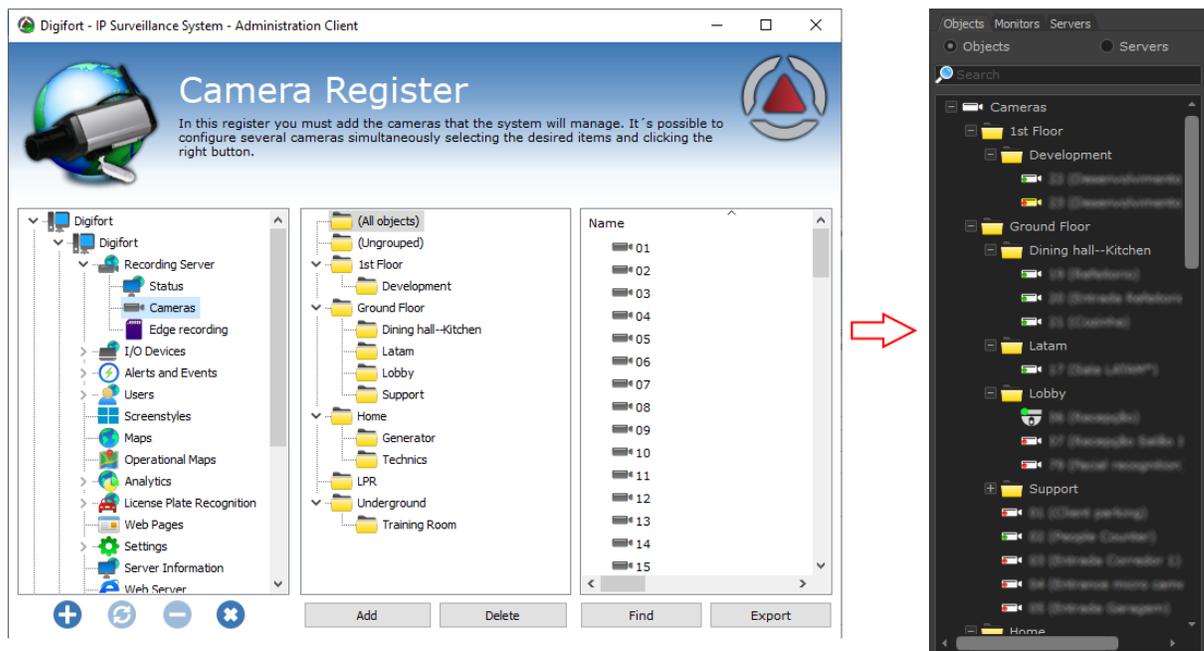
Camera Groups can be configured on the Camera Registration screen. In the Administration Client we have a separate list for registering and managing groups, where the user can select multiple groups to filter the list of cameras. The group filter will also work on the camera status screen.

Camera Groups can also be synchronized between servers using the Master / Slave function.

In the Surveillance Client, the groups will be part of the list of objects and the cameras belonging to the groups will be added below them.

The Surveillance Client offers great flexibility to work with groups:

- You can drag and drop a group on the screen and the cameras in that group will be added to the monitoring.
- To add the cameras from the group and all the cameras from all the subgroups just press and hold the Shift button while dragging and dropping the desired group.
- You can drag and drop a group into the media player to play the group's cameras. To add the cameras of the subgroups just hold the Shift key while dragging and dropping.
- With the right mouse button on the group it is possible to playback all the cameras in the group and, if desired, the cameras of all subgroups as well.
- With the right mouse button on the group it is possible to send all cameras in the group to the virtual matrix, and if desired, the cameras of all subgroups as well.



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=laNEKPyzdL0&list=PLFIhAF6oQd\\_rjV3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=laNEKPyzdL0&list=PLFIhAF6oQd_rjV3wEWHB8f0ZuzruvOS)

#### 4.1.4 Protection against deleting recordings

##### Professional, Enterprise

The system now allows you to create locks against the natural exclusion of recordings, that is, the protected recordings of a period and specified cameras will not be deleted during the recycling of recordings as long as the lock exists.

To create a new recording lock just create a new bookmark with the desired period and select the option "Protect recordings against deletion" and a new protection record will be created for the cameras specified in the bookmark and the desired period. By default, the locking of recordings will be perpetual, unless the option "Add expiration date" is selected, in which case the locking will be deleted on the specified date and consequently the recordings will re-enter the recording recycling and will be deleted normally during maintenance of the videos.

For added protection, the recording lock system, instead of preventing a recording file from being erased from the main disk, will copy the protected files to another secure folder (which may be on another disk drive) configured in the "Recordings" tab in the system options in the Administration Client. The file copy occurs only during the recycling process, that is, instead of deleting the file, the system will move the file to the protected folder, which prevents duplication of the recordings as the copy will only occur if the protected file is the oldest on the disk. This allows the primary recording disks not to be occupied by protected recordings that exceed the normal retention period, freeing up space for new recordings, while still providing record protection.

The playback of blocked videos (after being moved to the new folder) will be completely transparent to the user.

The system recording files are generated every 30 minutes of video, if a small block of time, for example 2 minutes, is locked, the entire 30 minute file will be protected. If the lock extends over multiple files, all files will be locked.

Adding new write protection via bookmark:

Search for protected videos with report and quick access for playback:

Initial Date	Final Date	Expiration	Description	Camera	User
1/1/2020 10:15:36 PM	1/2/2020 12:25:12 AM		Car crash	40	admin
1/14/2020 8:08:24 PM	1/14/2020 9:56:24 PM		Robbery	40	admin

Directory configuration of protected recordings in the system settings in the Administration Client:



#### 4.1.5 Web browser built into the Surveillance Client

##### Standard, Professional, Enterprise

The Surveillance Client now has a built-in web browser. Through the new "Web Page" objects, registered through the Administration Client, it is possible to add pre-configured links to web pages or web systems that can be accessed by the system operators.

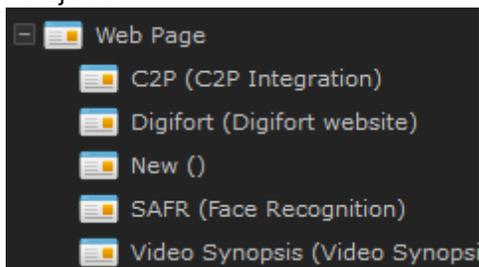
Examples of using the integrated browser:

- Integrate third-party web systems into the same camera management interface. Systems such as access controls, alarm controls, face recognition, among others, can now be opened and operated through the Surveillance Client
- Display dashboards on a video wall or operator stations
- Access predefined sites
- Free navigation

The pages can be registered in the Administration Client through the registration of Web Pages. The Web Page objects have access rights by user and user group, allowing full control of access rights.

Name	Description
C2P	C2P Integration
Digifort	Digifort website
New	
SAFR	Face Recognition
Video Synopsis	Video Synopsis Interface

In the Surveillance Client, the operator will have access to the web pages he is entitled to through the list of objects:



The browser associated with the pre-registered pages will not provide the address bar, preventing the operator from accessing any website or page other than the specified page, however, it is possible to show the address bar for free browsing by creating a web page object with blank address, in this case, when the operator places this object on screen, the browser will provide the address bar for navigation.

We use the Chromium browser by default, which is already embedded in the Surveillance Client, but it is possible to use the native Windows Internet Explorer 11 by changing the browser option in the Surveillance Client options.



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=ni8wkDQYOel&list=PLFIhAF6oQd\\_rJv3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=ni8wkDQYOel&list=PLFIhAF6oQd_rJv3wEWHB8f0ZuzruvOS)

#### 4.1.6 Video decoding via NVidia GPU

##### All editions

For higher system performance, it is now possible to use video decoding acceleration through NVidia cards.

Video decoding via the NVidia GPU will dramatically reduce the monitoring station's CPU usage, allowing for a larger number of cameras to decode in parallel.

We recommend using at least 1 video card of the Pascal architecture (At least one GTX 1060).

For more information on NVidia video card compatibility visit this link: <https://developer.nvidia.com/video-encode-decode-gpu-support-matrix#Decoder>

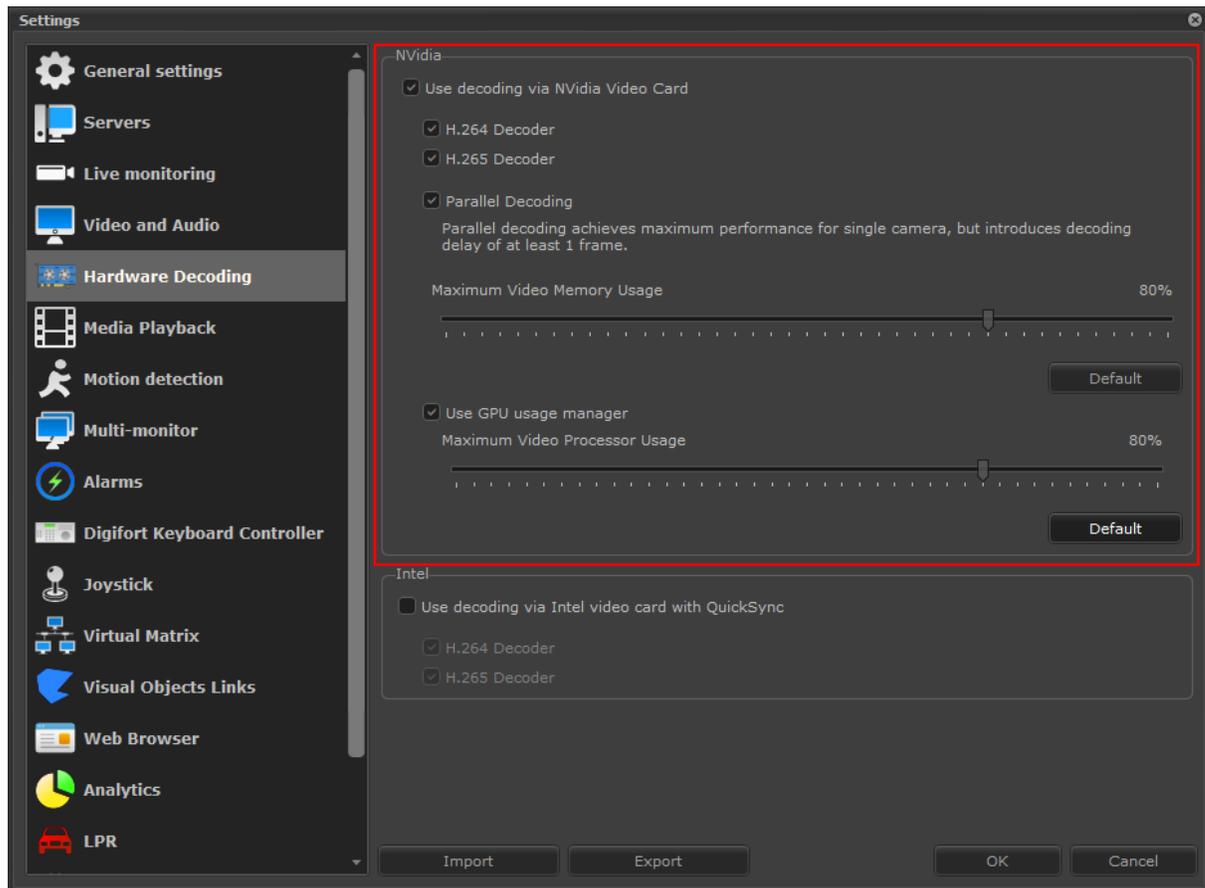
Decoding via the NVidia GPU is only available on the 64bit Surveillance Client (Surveillance64.exe) and requires the installation of the official NVidia drivers: <https://www.nvidia.com/Download/index.aspx?lang=en-us>

It is possible to use 2 or more video cards for decoding, and the system will balance the decoding load between the available NVidia video cards.

The system also implements a video card resource monitor, where it will constantly evaluate GPU usage and GPU memory usage. If the GPU or memory usage is above the configured limit, the system will start offloading and decoding via CPU (Software) will be used.

Currently the video decoding option via the NVidia GPU is only available in the Surveillance Client and the native exported Player, and is not available for use on the server.

Each camera instance being decoded (Regardless of the resolution used) will use about 200 ~ 250MB of GPU memory.

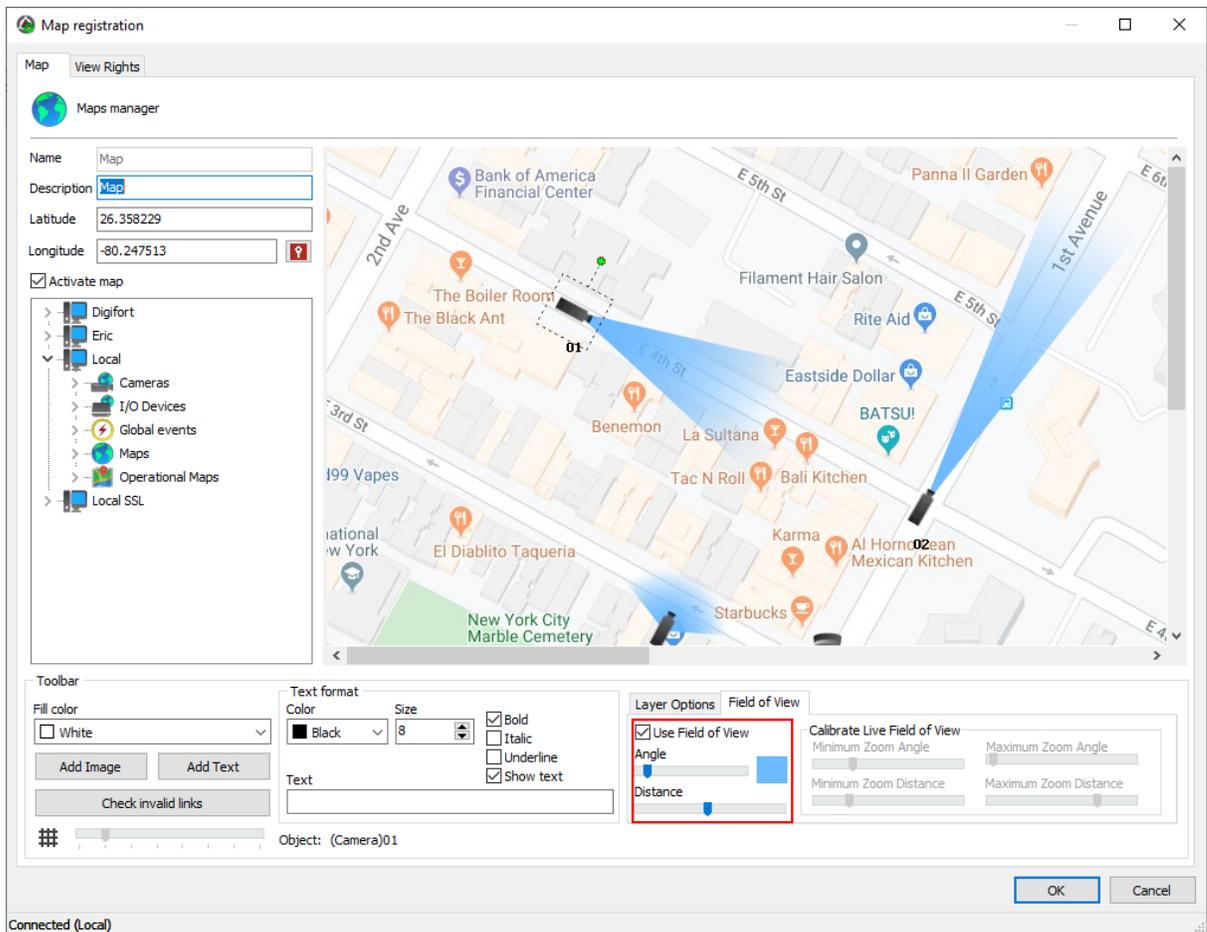


#### 4.1.7 Field of View of Cameras on Synoptic Map

##### Standard, Professional, Enterprise

The synoptic map system now allows the visual representation of a field of view of the cameras to be displayed. It is possible to configure the field of view for any camera on the synoptic map.

The field of view feature is only available for Synoptic Maps and is not available for Operational Maps.



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=pEwgc12a8zE&list=PLFIhAF6oQd\\_rjV3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=pEwgc12a8zE&list=PLFIhAF6oQd_rjV3wEWHB8f0ZuzruvOS)

#### 4.1.8 Real-time feedback of PTZ position on synoptic map

##### Standard, Professional, Enterprise

The synoptic map system now allows real-time representation of the current position of the PTZ camera.

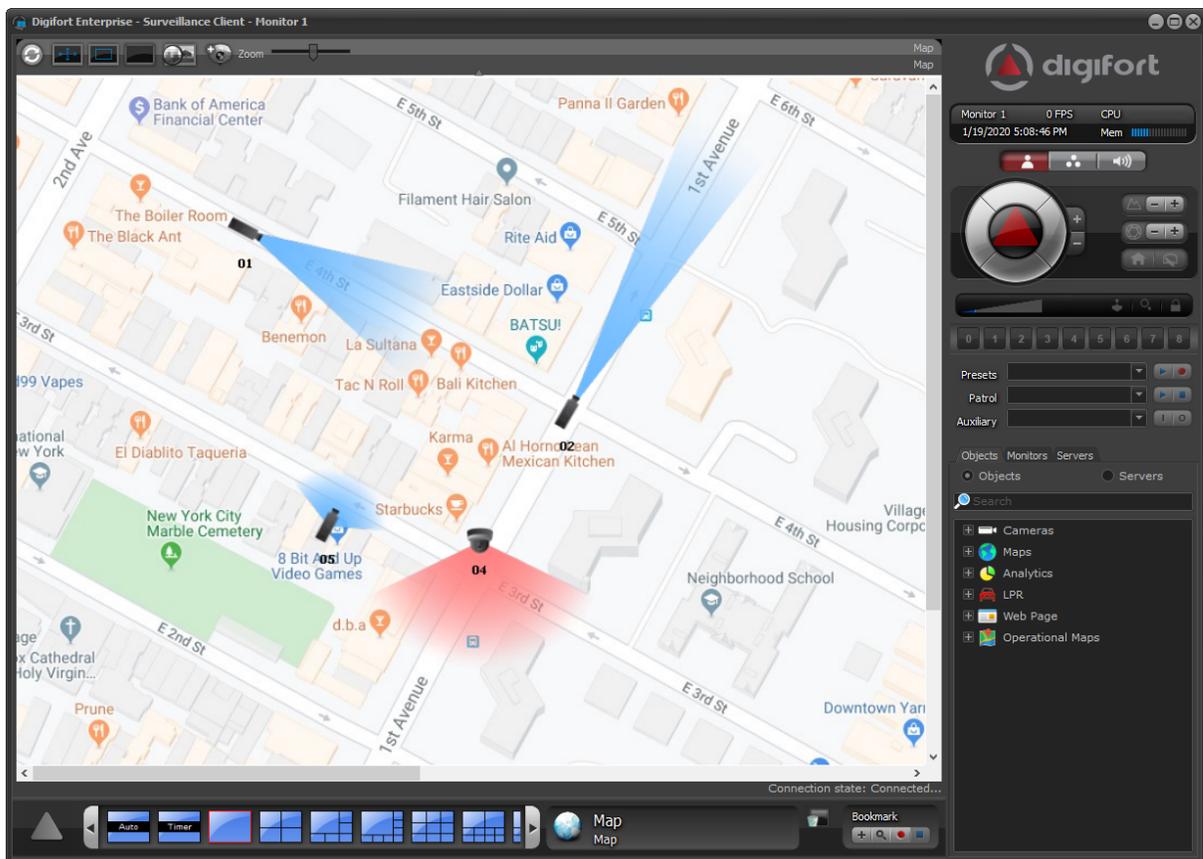
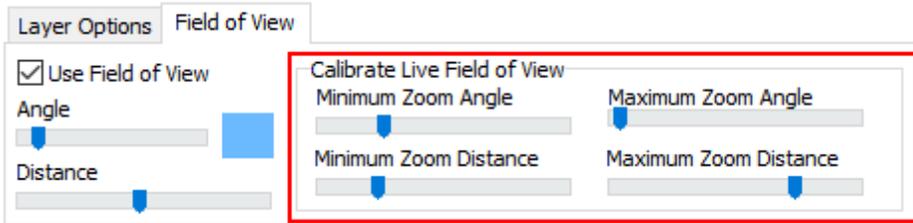
NOTE: This feature is currently only available for a very limited number of cameras.

When configuring the objects on the synoptic map, just activate the "Live Feedback" function (if available) and calibrate the initial position (Current position), so the system will have this position as a reference based on its current coordinates.

The PAN position will be represented by rotating the camera on the map:



The system also allows an approximate live representation of the current field of view (Zoom), simply setting the minimum angle and distances (When the camera is at minimum zoom) and maximum angle and distances (When the camera is at maximum zoom)



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

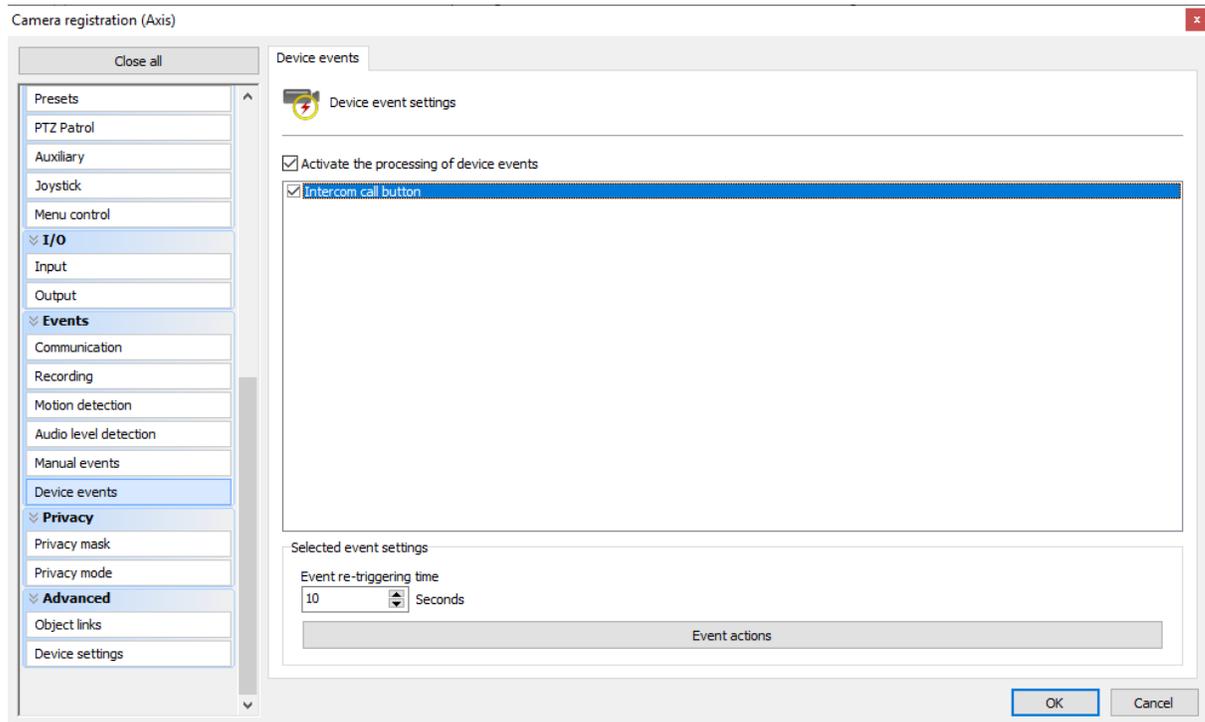
[https://www.youtube.com/watch?v=RoscPmmiZbk&list=PLFIhAF6oQd\\_rJv3WEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=RoscPmmiZbk&list=PLFIhAF6oQd_rJv3WEWHB8f0ZuzruvOS)

## 4.1.9 Cameras Events

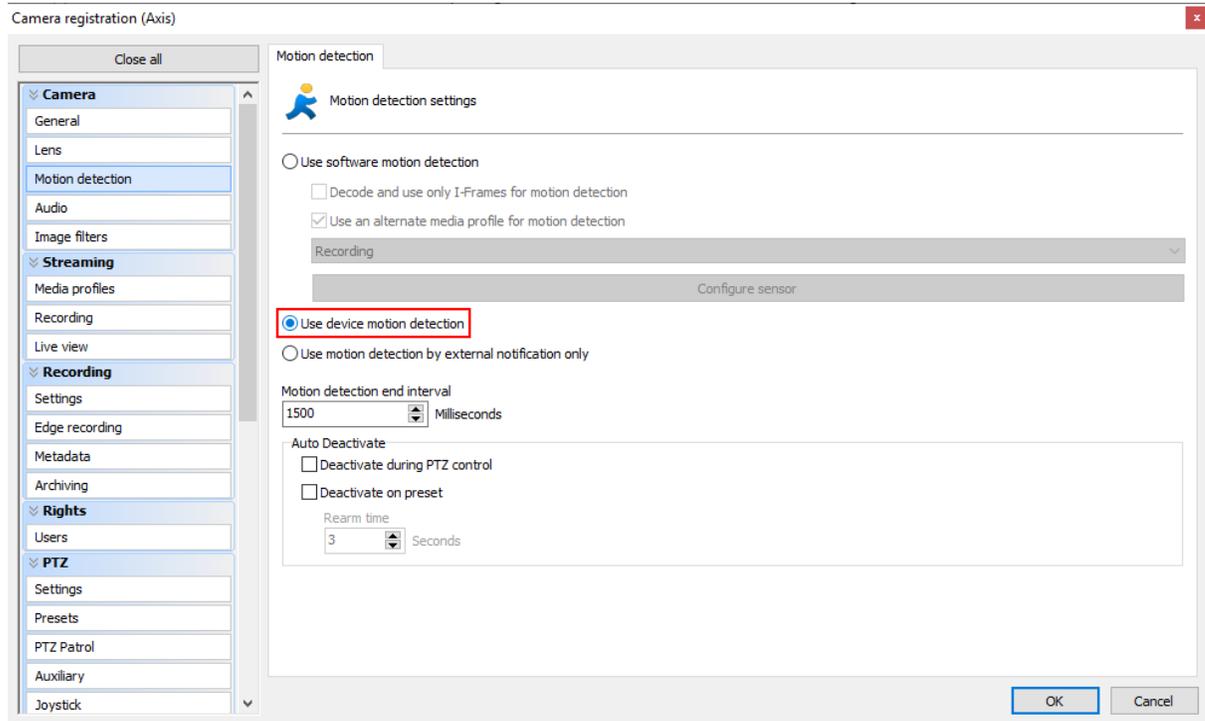
### Standard, Professional, Enterprise

The system now implements a new architecture for custom camera events. Some devices have events that do not fit into any pre-defined category of the system, so we created this architecture to be able to support different types of camera events.

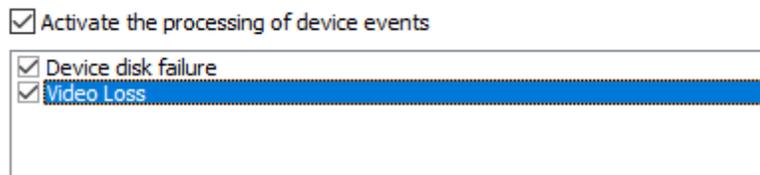
For example, integrated Intercomm devices will provide the "Intercomm call button" event that will be triggered when someone rings the equipment bell, and you can configure event actions associated with these custom events.



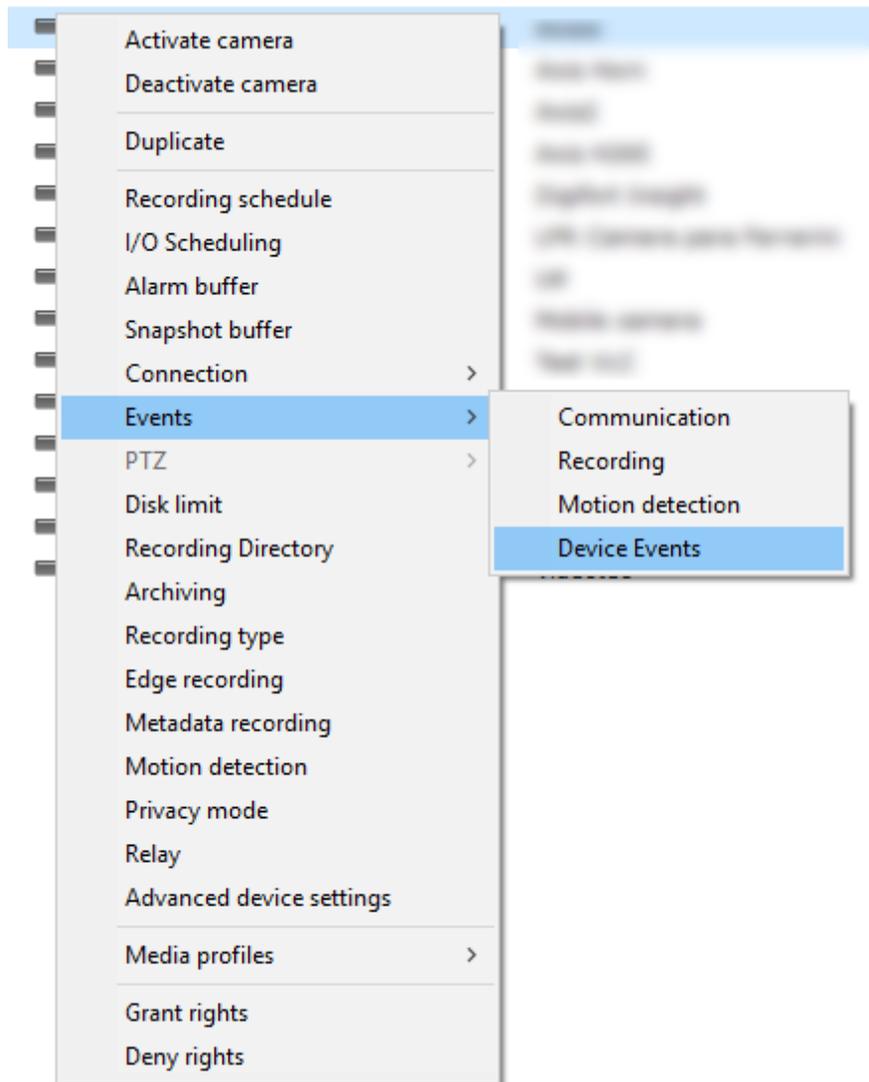
The new device event architecture also natively integrates motion detection events. The device motion detection event will be integrated transparently, and will not appear in the event list, but you will have the option to select "Use device motion detection" on the camera's motion sensor configuration screen. This will cause the system to use the device's motion detection events instead of the motion sensor via software, saving server CPU processing.



Some DVRs / NVRs integrated into the system even provide events that can be triggered in the event of a disk failure or loss of the analog signal:



As with most camera configurations, you can also configure actions for multiple camera events (which share the same event driver) simultaneously:



Tip: You can select all cameras that have the same event driver as the selected camera using the shortcut CTRL + E, so you can change all of them simultaneously.

#### 4.1.10 Advanced Device Settings

##### Standard, Professional, Enterprise

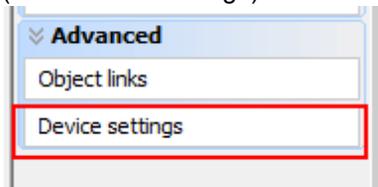
With the new Advanced Device Settings feature, you can configure camera parameters (usually streaming parameters) and apply the settings to multiple cameras simultaneously.

The vast majority of camera manufacturers do not allow dynamic image streaming, which allows VMS to request images in a certain configuration (Resolution, Frame Rate, Bitrate, etc.) dynamically, that is, these settings are fixed on the camera and the VMS can only request a pre-configured stream.

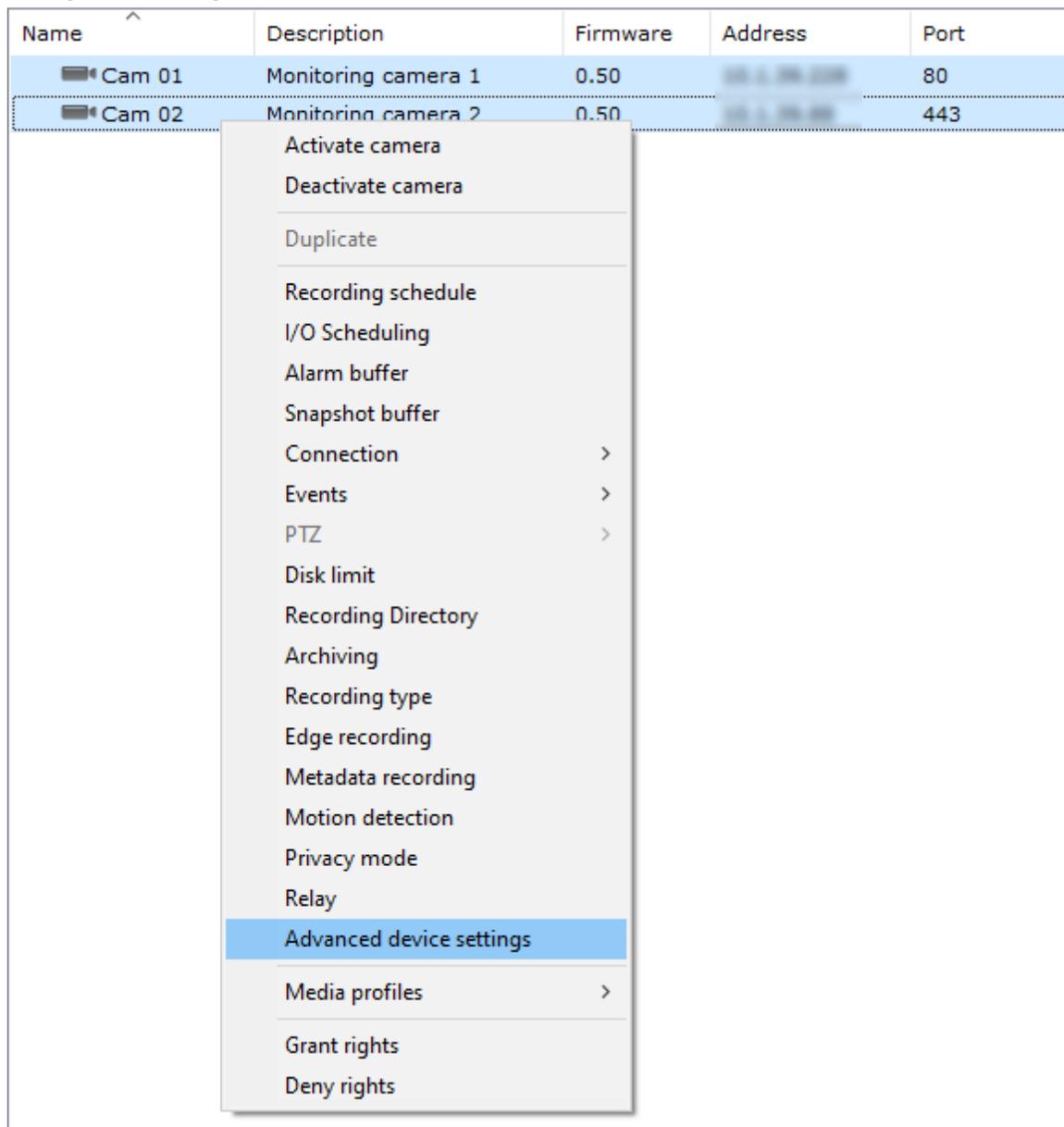
To facilitate the configuration of the cameras, we have developed an advanced configuration feature, where the system can manipulate these fixed camera configurations through the Administration Client interface, without having to open the browser and configure the cameras manually. The best thing about this feature is that you can apply the desired changes (such as resolution, bitrate, codec ...) to several cameras at the same time (as long as they are from the same manufacturer and have the same

configuration driver).

The advanced settings can be accessed through the "Device Settings" menu in the camera registration (For individual change):



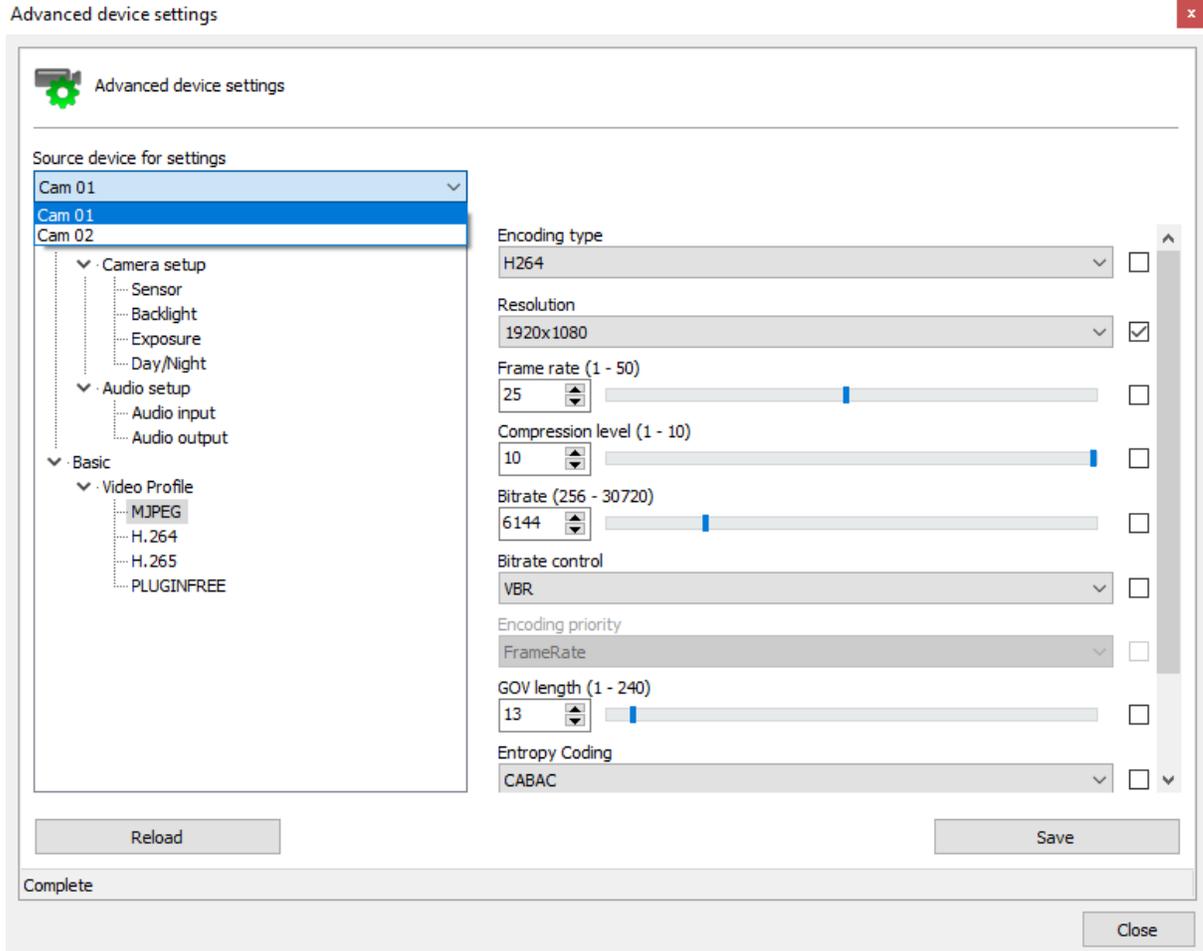
Or it can be accessed through the selection of multiple cameras and the option "Advanced device settings" with the right click of the mouse on the selected cameras:



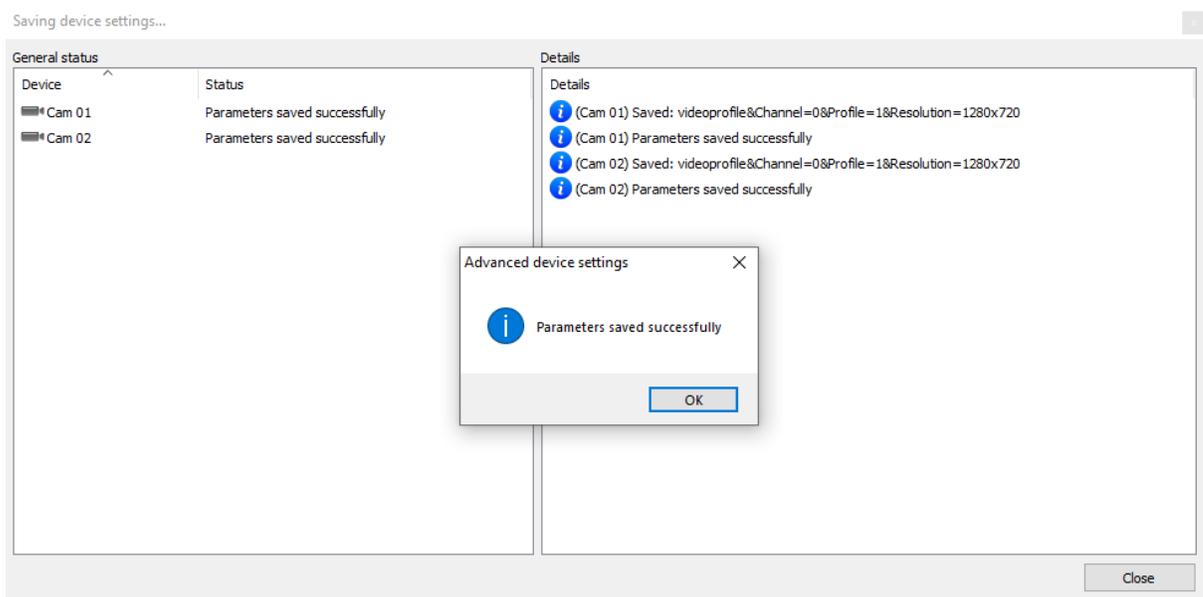
The camera settings will be downloaded (Only image, audio and streaming settings can be configured)

and you can change the desired parameters.

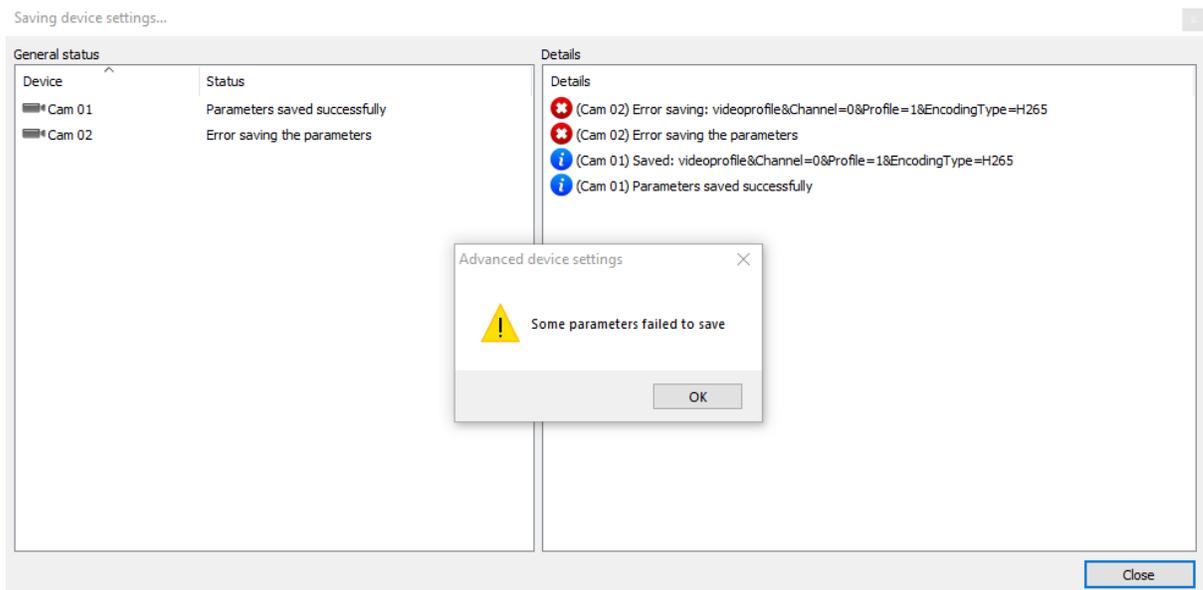
In the upper combo you can choose a reference camera (from which the system will download the settings and display) and when saving the settings, the system will only save the changed parameters (which are identified through the selected checkbox next to the changed option) :



The system will then save the changed parameters for all cameras:



If any configuration fails to save, the system will inform you with an error message, however it will try to save all changed settings. A setting can fail to be changed if the camera does not support the parameter (When a parameter is being recorded on multiple cameras at the same time):



Tip: You can select all cameras that have the same configuration driver as the selected camera using the shortcut CTRL + S, so you can change all of them simultaneously.

To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=tNCTZjVaBXg&list=PLFIhAF6oQd\\_rJv3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=tNCTZjVaBXg&list=PLFIhAF6oQd_rJv3wEWHB8f0ZuzruvOS)

### 4.1.11 Edge Video Playback

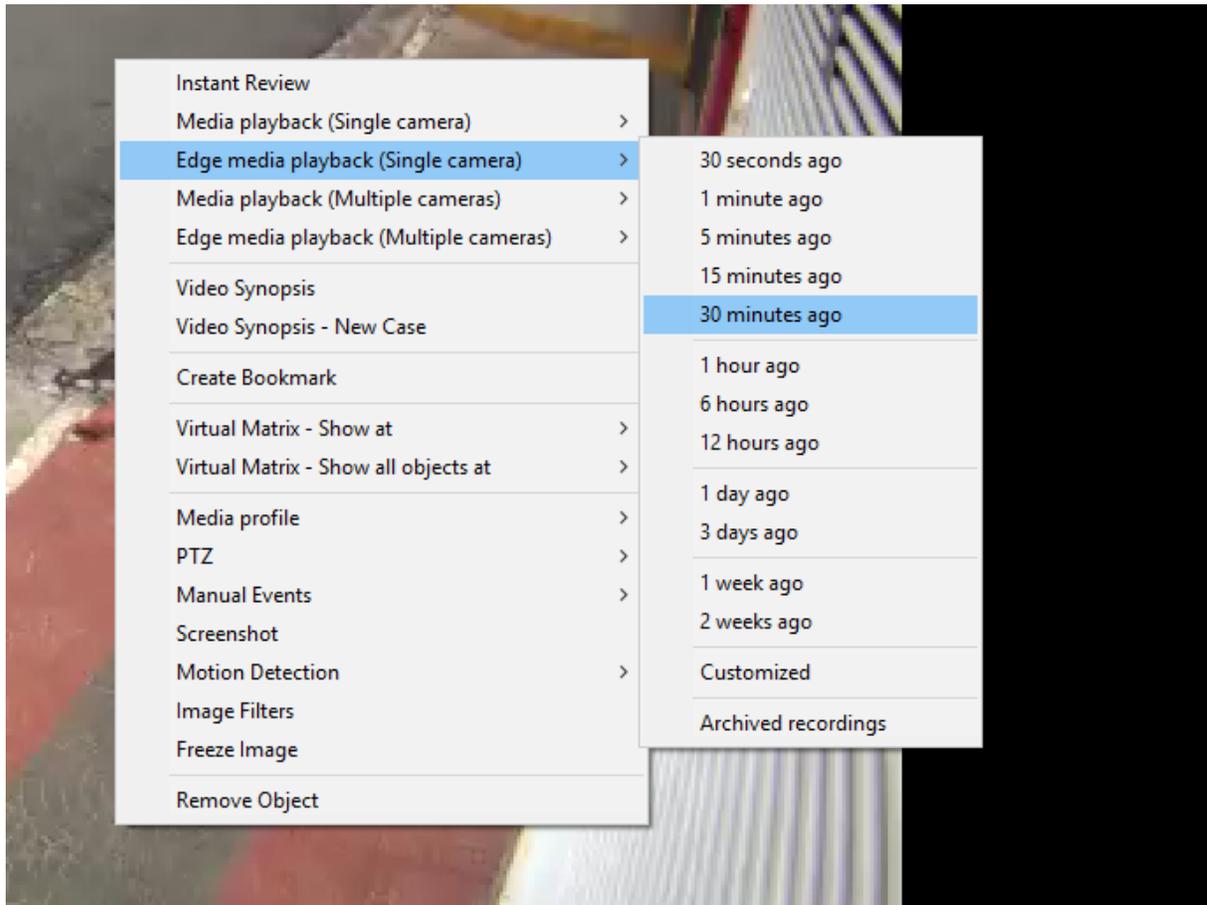
#### Professional, Enterprise

The new Edge Video Playback feature allows video playback to be downloaded directly from the device's edge recordings.

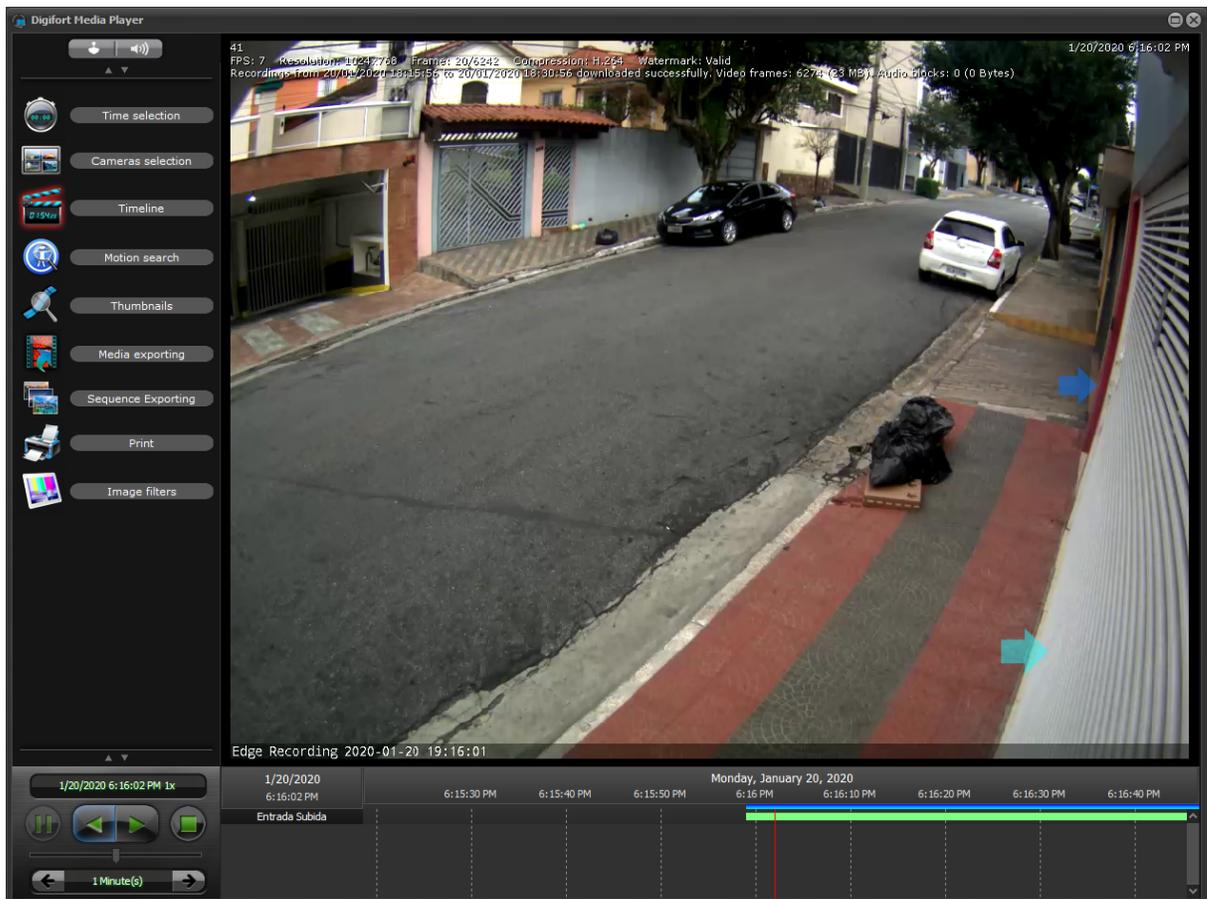
This new feature expands the current Edge Recording system (which allows you to download recordings stored on the cameras), with this, it is possible to playback the recordings from any device that has Edge Recording integrated into the system (Check our support page for supported equipment) .

It is also possible to play video recorded on supported DVRs / NVRs, thus enabling the use of distributed recording, since it is possible to view the recordings directly from the equipment.

To play the recordings on the edge, just right-click on the image of a camera or item in the list of objects and if the devices support Edge Recording select the option "Media playback on edge", and the sub-menu of options of playback will be displayed. The system also allows the playback of multiple cameras on the edge, thus allowing the playback of several cameras from a DVR / NVR simultaneously.



Video playback will be transparent to the user and all the features of the video player are also available for playing edge video:



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=nOW\\_tVXzrY&list=PLFIhAF6oQd\\_rJvV3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=nOW_tVXzrY&list=PLFIhAF6oQd_rJvV3wEWHB8f0ZuzruvOS)

## 4.1.12 Event Variables

### All editions

The new Event Variables feature allows the use of dynamic variable values within event actions.

The value of the Event Variable can be accessed through the reference of the variable name, using a variable name identifier:  $\$(VARIABLE\_NAME)$

Each event in the system introduces different types of variables whose values can be used in event actions.

The following event actions support the use of variables:

- Send Email
- Send Message to the Operator
- Send HTTP Request
- Create Bookmark

In the example below, an email will be sent automatically with data specific to the LPR event that includes the license plate number and the name of the driver if the recognized license plate is marked as stolen:

Event action (Send e-mail)

E-Mail

Configure e-mail sending

E-mail group:  
Emails

Message:  
Suspect of robbery  
Event Name: \${EVENT\_NAME},  
Camera: \${CAMERA\_NAME},  
License Plate: \${LICENSE\_PLATE},  
Driver Name: \${PLATE\_OWNER},  
Details: \${PLATE\_REMARKS},  
Lists: \${PLATE\_LISTS}

Available objects

- Camera
- Analytics configuration

Selected objects

- Camera
- 40

Include camera image

Number of images (1 image per second prior to the event)  
1

SMS:  
 Use default SMS message  
 Use custom SMS message

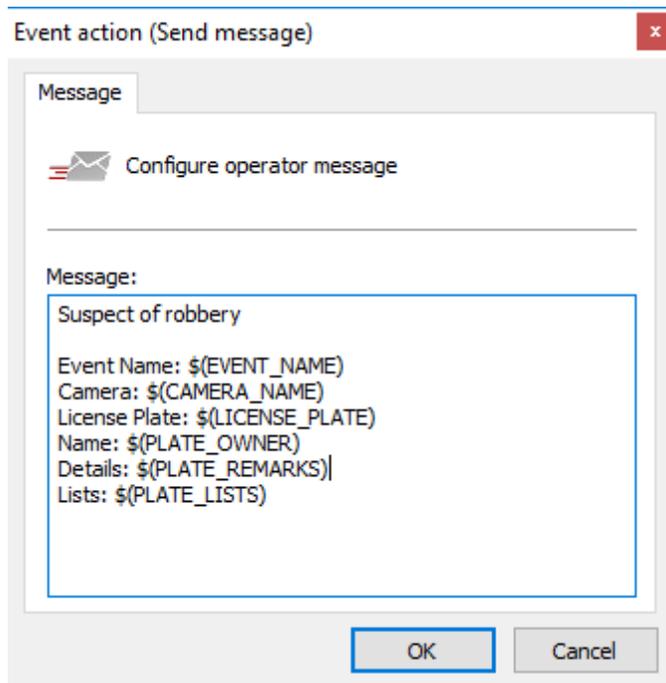
Include link for event playback

Use this server record  Auto Login

Server IP: [ ] Port: 8600 User: [ ] Password: [ ]

OK Cancel

It can be configured for messages sent to system operators, adding valuable information to the alarm popup:



In the following example we can create a bookmark with the recognized license plate value, which will be displayed on the video player:

Event action (Create bookmark) ✕

Bookmark

 Configure bookmark creation options

---

Title:  Color:  Red

Hours:  Minutes:  Seconds:

Create a bookmark with start date/time of 0 seconds prior to the time of the event until the time of the event

▼  Camera

-  40



To receive the complete document with all system event variables, please contact our support team.

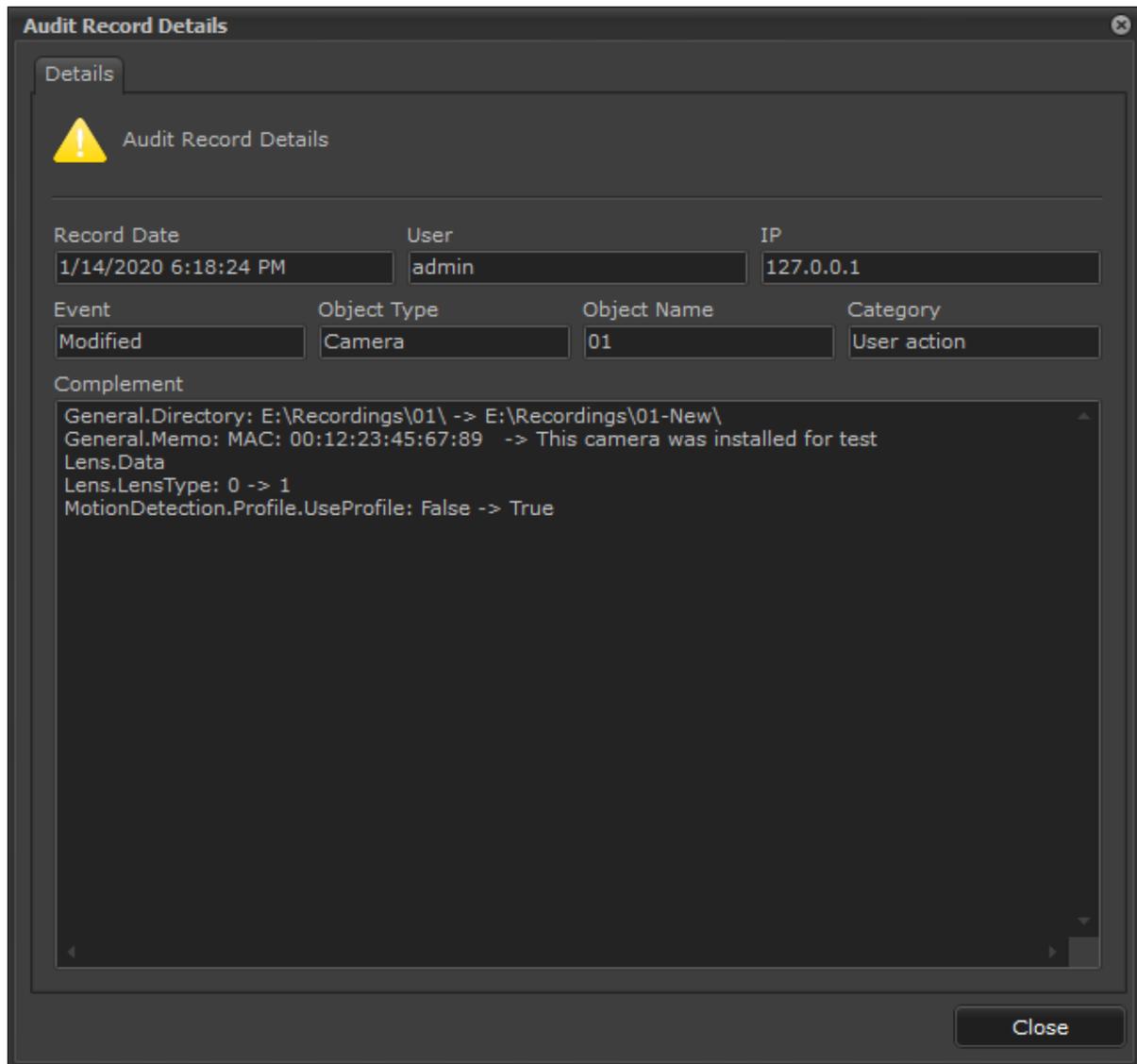
### 4.1.13 Comprehensive Audit

#### All editions

Auditing user actions now has much more details about changes to the system. Any changes made to any object will now be recorded in the audit log details. For example, if a user changes a camera's recording directory, or the configured retention time, this information will be detailed in the audit log, including the old values and the new values.

Comprehensive Auditing is applied to all system objects, including server configurations, thus making the audit tool super powerful for recording and identifying user actions on the system.

Critical fields such as password or binary fields (or data storage containers) that cannot be displayed in text will only be referred to as "changed" but their values will not be displayed, such as "Lens.Data" in the image below, where it has no value because it is a field stored in binary format.



#### 4.1.14 Multi-server auditing on the Surveillance Client

##### All editions

The audit search was added in the Surveillance Client (A simpler version is still found in the Administration Client) and allows for audit search on multiple servers, new record filters and option to print the report.

Date	User	IP	Event	Object	Object Name	Category	Complement
1/14/2020 12:00:00 AM			Error	RTSP Server		User action	Camera out of order
1/14/2020 12:00:00 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:00 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:00 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:00 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:01 AM			Error	RTSP Server		User action	Camera out of order
1/14/2020 12:00:01 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:01 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:01 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:01 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:02 AM			Error	RTSP Server		User action	Camera out of order
1/14/2020 12:00:03 AM			Error	RTSP Server		User action	Camera out of order
1/14/2020 12:00:04 AM			Error	RTSP Server		User action	Camera out of order
1/14/2020 12:00:04 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:04 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:04 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:04 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:04 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:05 AM			Error	RTSP Server		User action	Camera out of order
1/14/2020 12:00:05 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:05 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:05 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t
1/14/2020 12:00:05 AM			Login	Server		Connections to the serv	The user does not have permission to login at this t

Start date: 1/14/2020  
End date: 1/14/2020  
00:00:00 23:59:59

- Date
- Category
- Event Type
- Event
- Object Type
- Keyword
- Servers

To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=fmtiaaFDi\\_I&list=PLFihAF6oQd\\_rjV3wEWHB8f0ZuzrurOS](https://www.youtube.com/watch?v=fmtiaaFDi_I&list=PLFihAF6oQd_rjV3wEWHB8f0ZuzrurOS)

## 4.1.15 General Surveillance Client interface improvements

### 4.1.15.1 Main screen design improvements

#### All editions

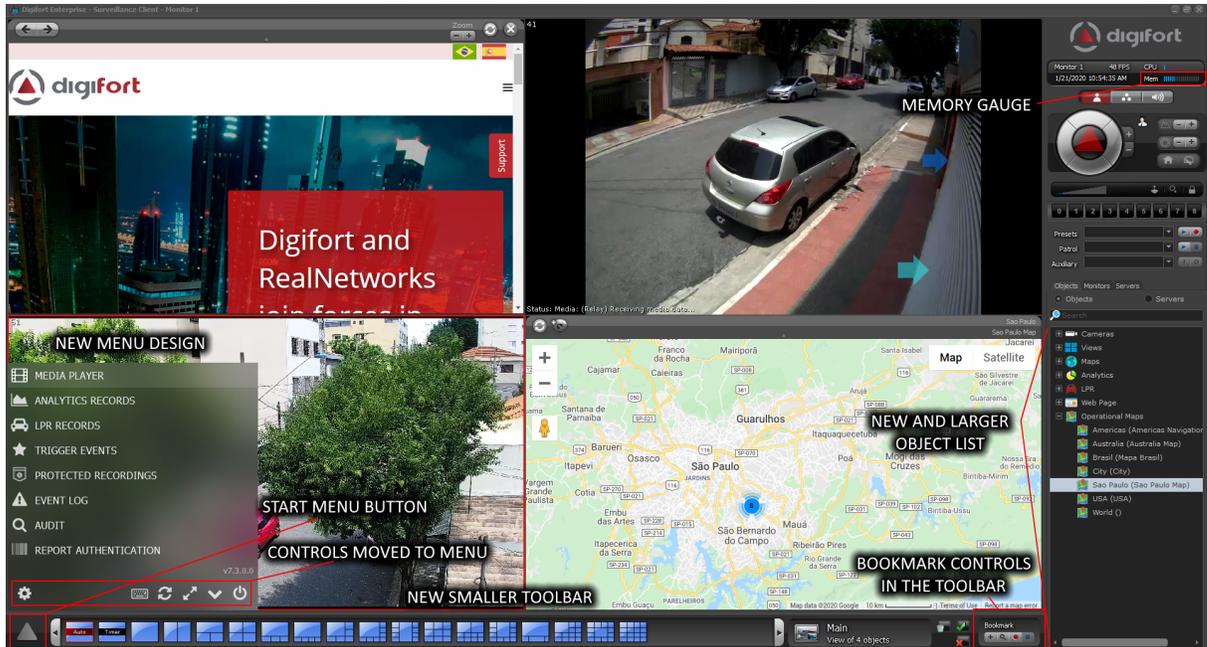
The main interface of the Surveillance Client has been modified for better viewing and accessibility.

Main changes:

- The bottom toolbar has been drastically reduced to provide a larger area for viewing objects
- The control bar has been enlarged, now it will occupy the entire space on the side instead of ending at

the same height as the bottom toolbar, providing greater area for viewing the list of objects

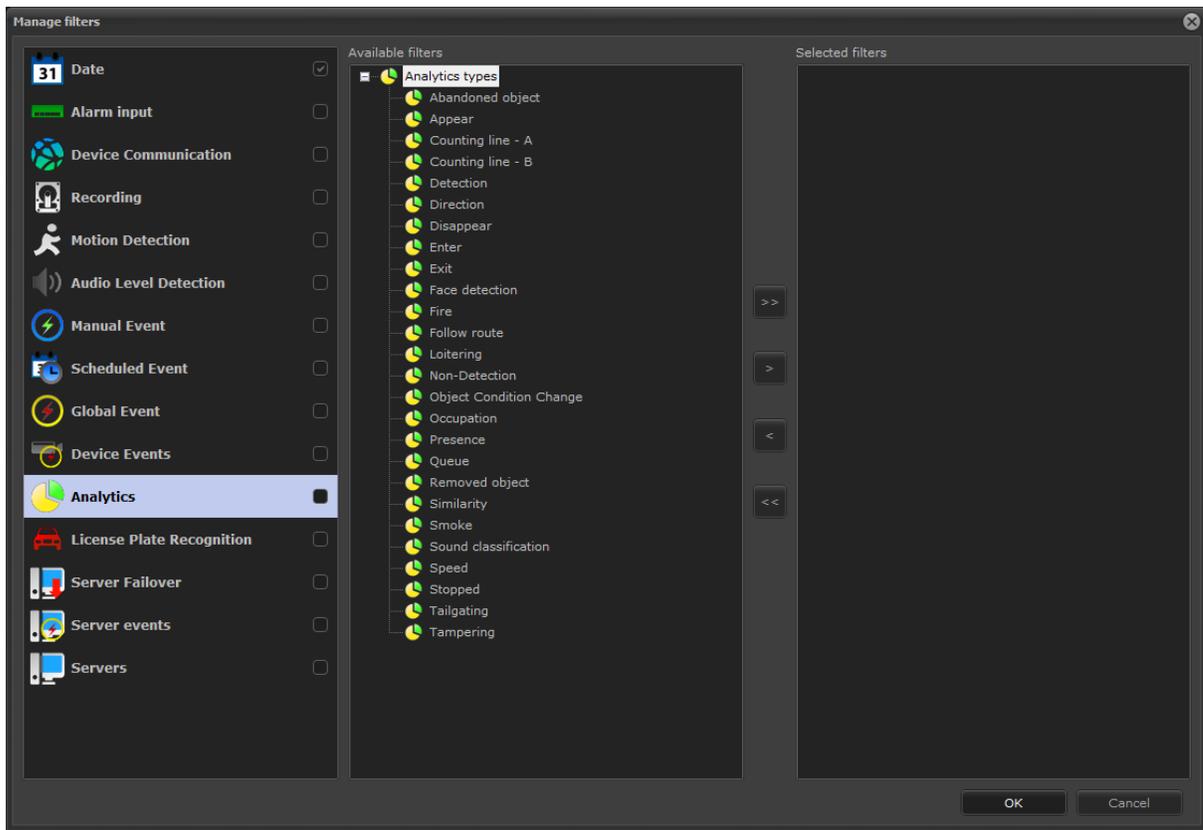
- The bookmark controls have been moved to the bottom toolbar
- New main menu. The main menu can be opened via the "Start Button" which is next to the screen style bar. The main menu contains access to all client modules and settings
- The Virtual Keyboard controls, Refresh Connections, Hide Controls, Minimize to Tray and Close have been moved to the main menu
- A memory usage indicator was added
- The object list control has been changed and now has a different design and high performance to display thousands of objects



#### 4.1.15.2 Improvements in the design of filter screens

##### All editions

The design of the search filter screens (LPR, Analytics, Bookmark, Events, etc.) has been changed. The types of filters will now be presented in a list on the left side, with icons to identify each type of filter and the screens have been standardized with TreeView controls to allow different types of objects to be filtered.

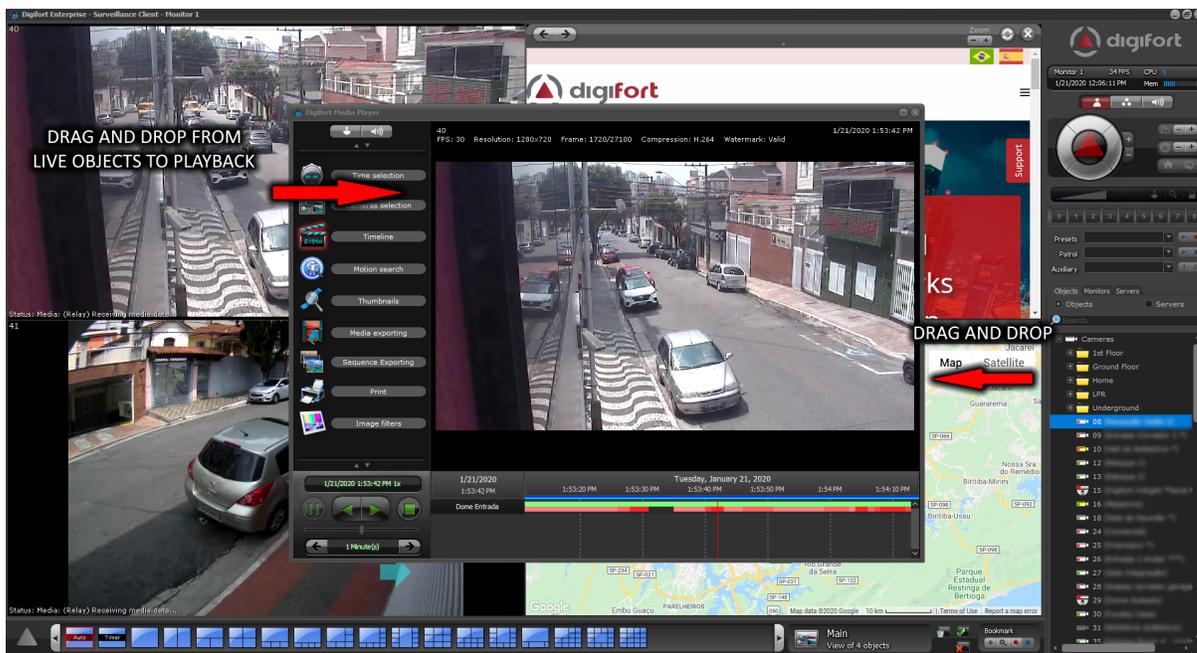


#### 4.1.15.3 Drag and drop from the main list into the Media Player

##### All editions

It is now possible to drag and drop "live" and objects from the object list to the media player, allowing you to add or change cameras within a running video session.

It is also possible to drag and drop special objects like LPR and Analytics directly to the media player, and the main camera associated with the object will be loaded into the player.



## 4.1.16 Cybersecurity

### 4.1.16.1 Record Encryption

#### All editions

The system now allows encryption of recordings with AES 128 or AES 256 algorithm. With this option all recordings on disk (data at rest) will be encrypted using the encryption key and configured algorithm, adding another layer of protection to the system.

This option will use a little more of the server's processor to perform the recording and also during the video playback, where the recordings will be decrypted.

**Recording Encryption**

**Activate Recording Encryption**

Method

AES 256 bit

Key

••••••••

### 4.1.16.2 Client Communication Encryption (TLS / SSL)

#### All editions

To add even more security, the system now allows secure communication between the Server and the Clients via SSL / TLS. An SSL certificate will be required for this feature.

This option will use a little more processor from Servers and Clients.

TCP port for server communication:

  
 Secure communication via SSL  

#### 4.1.16.3 Communication Encryption with Cameras (TLS / SSL)

##### All editions

For greater security of communication between the server and the cameras, the system now allows the use of SSL / TLS encryption with supported cameras.

Currently only a few camera brands / models will support this option.

Camera address  Port (80)

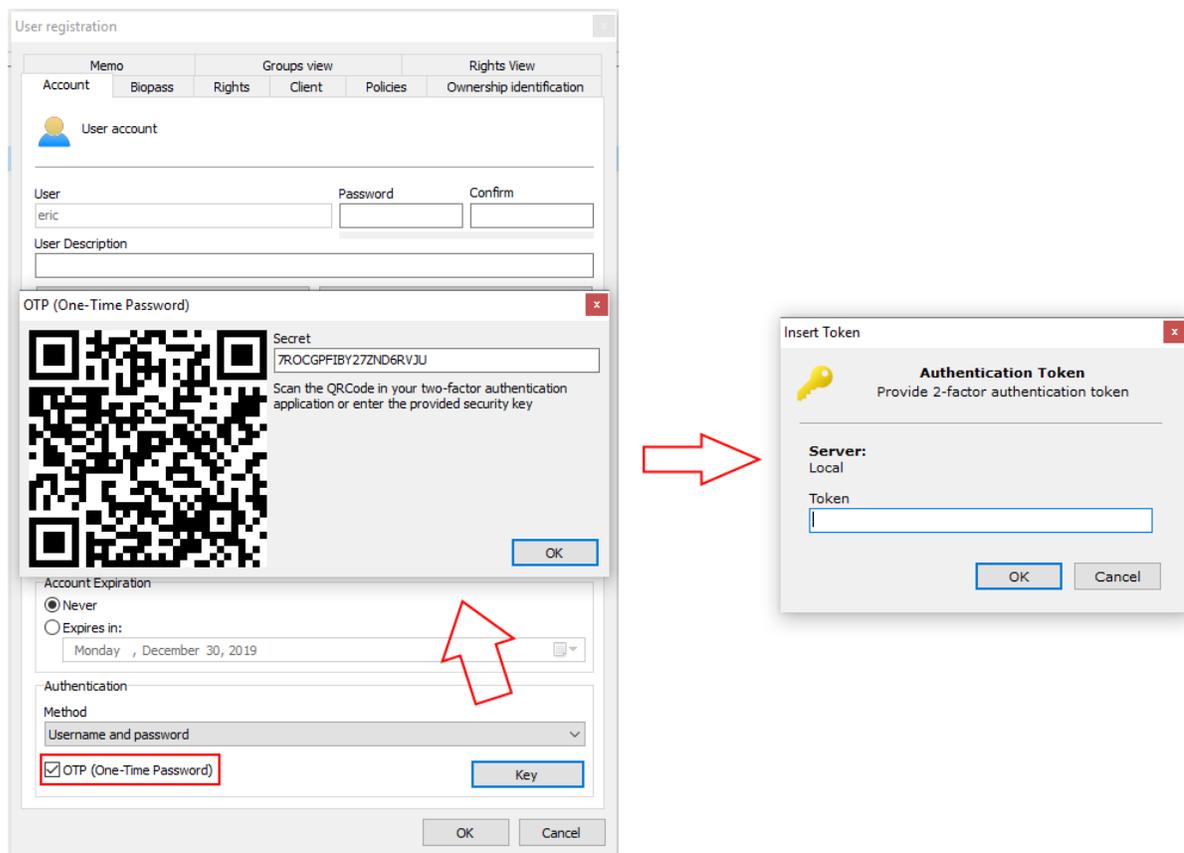
Secure connection via SSL/TLS (Check connection port)

#### 4.1.16.4 2-Factor Authentication

##### All editions

For greater security, the system now allows the use of 2-factor authentication using the TOTP (Time-based One-Time Password algorithm).

The user can use any 2FA application compatible with this algorithm (Ex: Google Authenticator).



#### 4.1.16.5 Force use of Strong Password

##### All editions

The system now allows users to use a strong password. A strong password must contain at least 8 characters and 3 of 4 characteristics below:

- Contain at least 1 lowercase character
- Contain at least 1 uppercase character
- Contain at least 1 number
- Contain at least 1 symbol

When activating the option to force use of strong password, new users can only be registered with strong password. The system also allows you to force a weak password change (if the user is currently using a weak password) at the user's next login via the Surveillance Client or Administration Client.

The use of strong password applies only to native users of the system and not to LDAP / Active Directory users, where the strong password requirement must be applied directly at the domain controller.

##### Security

- Force the use of strong passwords for users
  - Force user to change weak password at next login



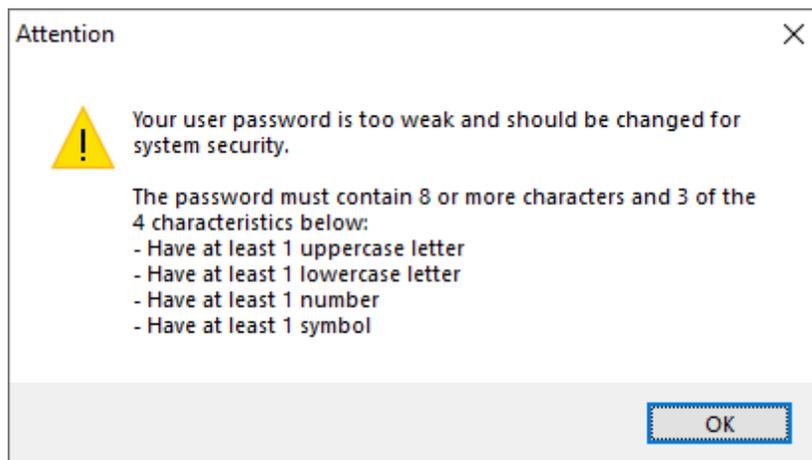
The password must contain 8 or more characters and 3 of the 4 characteristics below:

- Have at least 1 uppercase letter
- Have at least 1 lowercase letter
- Have at least 1 number
- Have at least 1 symbol

#### 4.1.16.6 Weak password warning

##### All editions

The system will now issue a weak password alert when the user accesses the server through the Administration Client with a password that does not reach the minimum security levels.



#### 4.1.16.7 RTSP with TLS / SSL

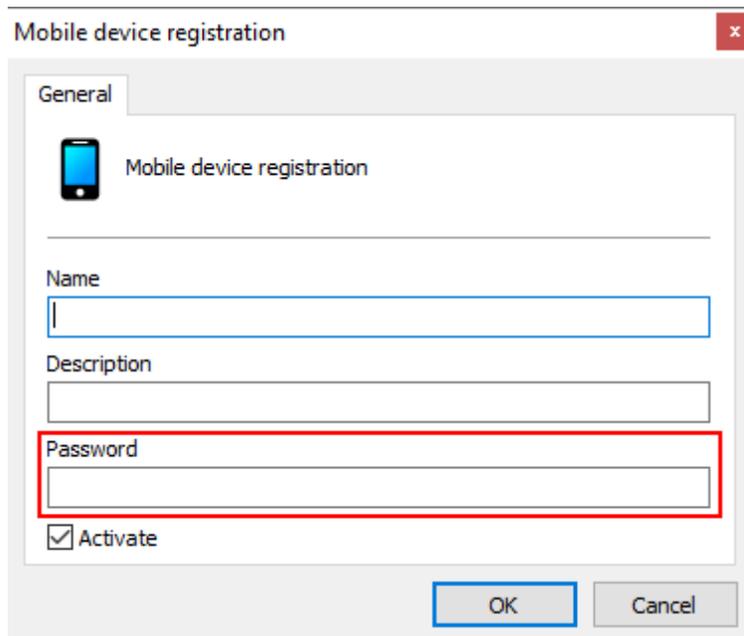
##### All editions

The system's RTSP Server now also supports TLS / SSL on port 322

#### 4.1.16.8 Password for Mobile Camera devices

##### All editions

The Digifort Mobile Camera Pro app server that allows you to send live video from an Android / iOS mobile device to the Digifort server now allows you to define a password for each registered mobile device. This password must be provided within the app's settings and the app will only start streaming to the server if the provided password is correct. This prevents unauthorized people from streaming live video to the server.



Mobile device registration

General

Mobile device registration

Name

Description

Password

Activate

OK Cancel

#### 4.1.16.9 Multicast with SRTP

##### All editions

When the Surveillance Client connects to the server using SSL / TLS, the multicast media transmission to the client (if configured for multicast video transmission) will also be encrypted using the SRTP protocol.

#### 4.1.17 Camera Status Screen

##### All editions

The design of the camera status screen has been extensively modified to provide more information. The screen is now unique (no longer contains the General and Status tabs) and has a powerful dashboard with an excellent status summary.

The new dashboard in the right corner of the screen replaces the previous design where 2 tabs (General and Details) were needed, and has all the information that was previously displayed on the "General" tab.

New information on the number of cameras recording has been added to the dashboard. This number will count all cameras configured to record (Continuous, By Motion or By Event) that are currently in operation. The camera will count towards this value even if it is not currently recording to disk (such as when configured to record by motion or event).

New recording rate information per disk unit has also been added to the dashboard. The system will now inform the recording rate (In MB/s and Mbits/s) of each disk unit and with this it is possible to check in detail the usage of recording band for each disk unit and diagnose possible problems of overload and unbalance .

The dashboard also implements information about the number of cameras configured to record and the number of cameras currently writing to disk.

The new status screen also allows the selection of custom columns with new information to be displayed

in the list (by right clicking on the list header) and sorting by any column in the list and it is also possible to export the current data to a file. CSV.

With the new Camera Groups feature, when selecting a group (or multiple groups), the records will be filtered to display only the cameras in the selected groups.

The screenshot shows the 'Server Monitoring' window in the Digifort Administration Client. The main table displays the following data:

Name	Working	Address	Description	Bitrate
01	Yes			12.52 mbits/s
02	Yes			2.38 mbits/s
03	Yes			1.32 mbits/s
04	Yes			204.57 kbits/s
05	Yes			172.00 kbits/s
06	Yes			1.79 mbits/s
07	Yes			1.80 mbits/s
08	Yes			1.74 mbits/s
09	Yes			293.29 kbits/s
10	Yes			476.97 kbits/s
11	Yes			1000.90 kbits/s
12	Yes			366.69 kbits/s
13	Yes			673.43 kbits/s
14	Yes			470.45 kbits/s
15	Yes			13.50 mbits/s
16	Yes			967.60 kbits/s
17	Yes			2.74 mbits/s
18	Yes			4.32 mbits/s
19	Yes			322.23 kbits/s
20	Yes			915.16 kbits/s
21	Yes			877.20 kbits/s
22	Yes			1.71 mbits/s
23	Yes			1.75 mbits/s
24	Yes			1.08 mbits/s
25	Yes			1.46 mbits/s
26	Yes			12.30 mbits/s
27	Yes			1.63 mbits/s
28	Yes			1.81 mbits/s
29	Yes			70.31 kbits/s
30	Yes			977.21 kbits/s
32	Yes			135.47 kbits/s
33	Yes			4.76 mbits/s
35	Yes			0 bits/s
36	Yes			0 bits/s
37	Yes			147.67 kbits/s
38	Yes			0 bits/s
39	Yes			1.90 mbits/s

The summary panel on the right shows the following statistics:

- Total: 95
- Activated: 63
- Deactivated: 32
- Working: 57
- Not Working: 6
- Recording: 58
- Total FPS: 1238
- Recorded FPS: 620
- Recorded FPS: 0
- Highest recording buffer: 179.37 mbits/s
- Total received data rate: 32.42 mb/s
- Total recording data: 11.48 MB/s
- Total recording data: 11.48 MB/s
- Free: 2.41%

To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=NQrCZ588Txc&list=PLFIhAF6oQd\\_rjV3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=NQrCZ588Txc&list=PLFIhAF6oQd_rjV3wEWHB8f0ZuzruvOS)

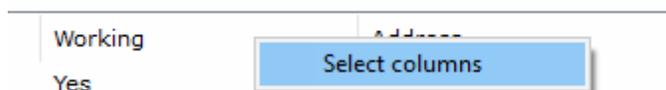
#### 4.1.18 Status screens with extended columns

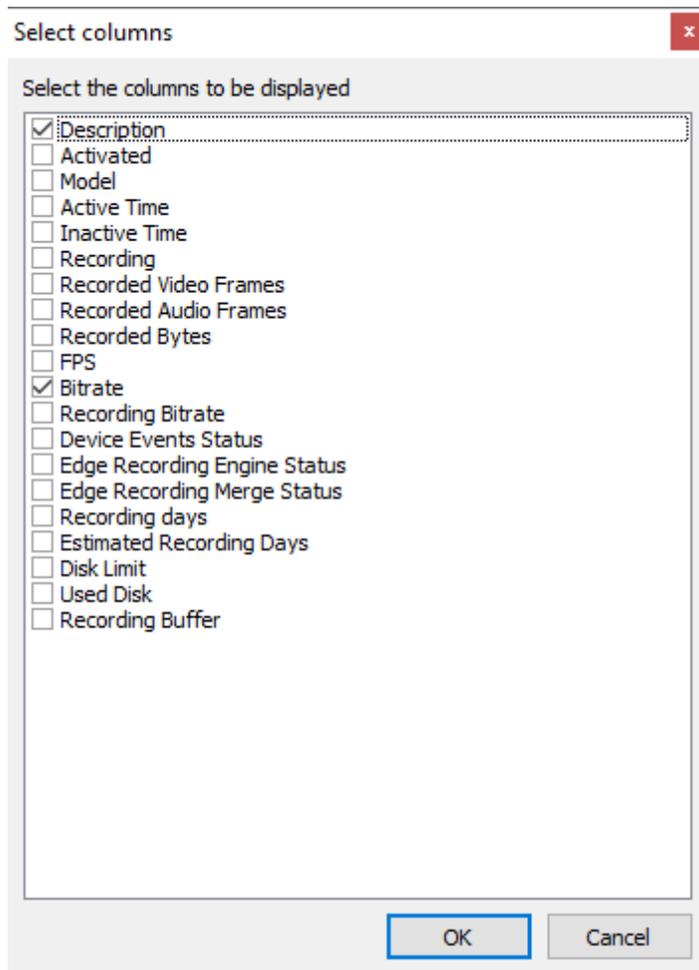
##### All editions

The Administration Client status screens now also allow the selection of extended columns for further status information on objects.

To select extended columns in the status screens, just right-click on the header of a list of object statuses and click on the "Select columns" option

The new status lists also allow the ordering of the records through any desired column, simply clicking on the column name to perform the ordering of the records.





The status screens that support this feature are:

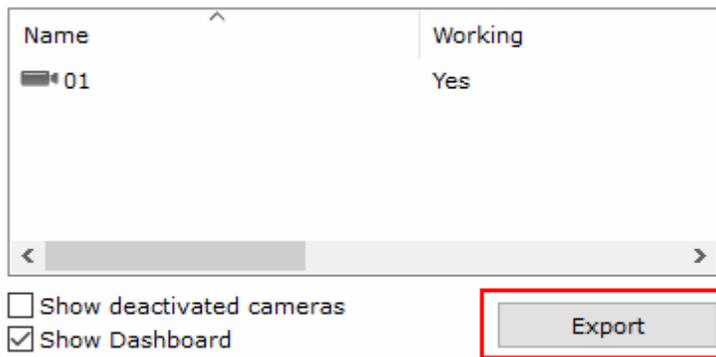
- Camera Status
- I/O Device Status
- Analytics Configuration Status
- LPR Configuration Status
- Failover Status

#### 4.1.19 Exporting data from status screens

##### All editions

The Administration Client object status screens now allow you to export the data to a .CSV file.

All status screens now have a button named "Export" and the data will be exported including all selected columns.



Screens with export button support:

- Camera Status
- I/O Device Status
- Analytics Configurations Status
- LPR Configurations Status
- Failover status
- Master / Slave connections
- Scheduled Events Status
- User Connection Status
- RTSP Connections Status
- Edge Recording Log

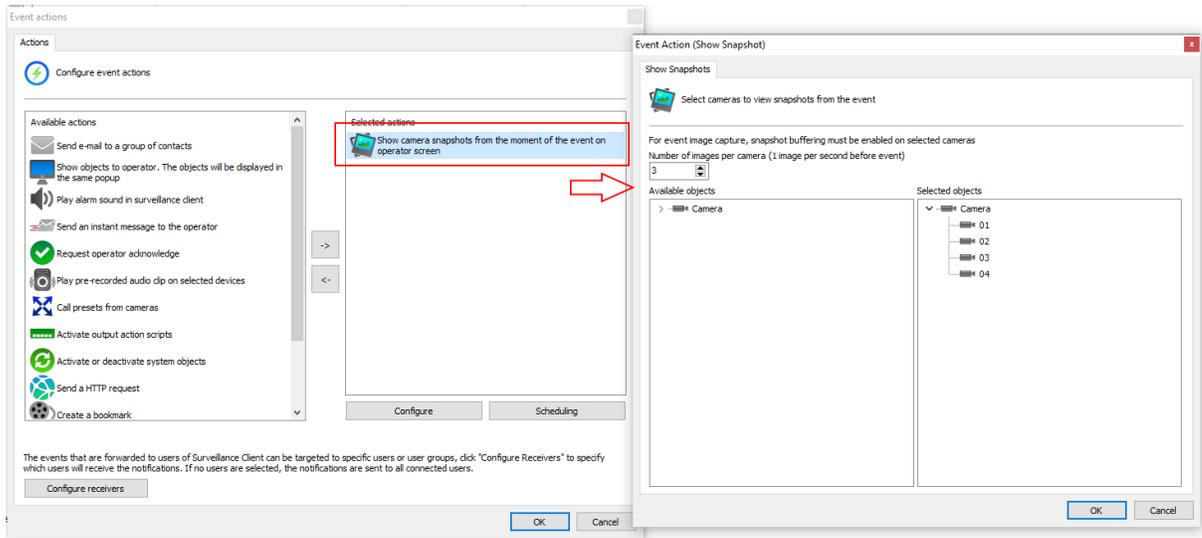
#### 4.1.20 Event Action to send snapshots

##### Standard, Professional, Enterprise

A new Event Action was added to allow the display of snapshots from the moment the event was triggered, adding much more flexibility to alarm popups that only supported live objects.

The system also allows you to choose the number of images (1 image per second for each second before the event, including the image of the moment of the event) to be displayed in the alarm popup.

This function is particularly useful in combination with LPR Events, Analytics, Face Recognition, among other alarms, where the image of the moment of the event is necessary and not just the live video.

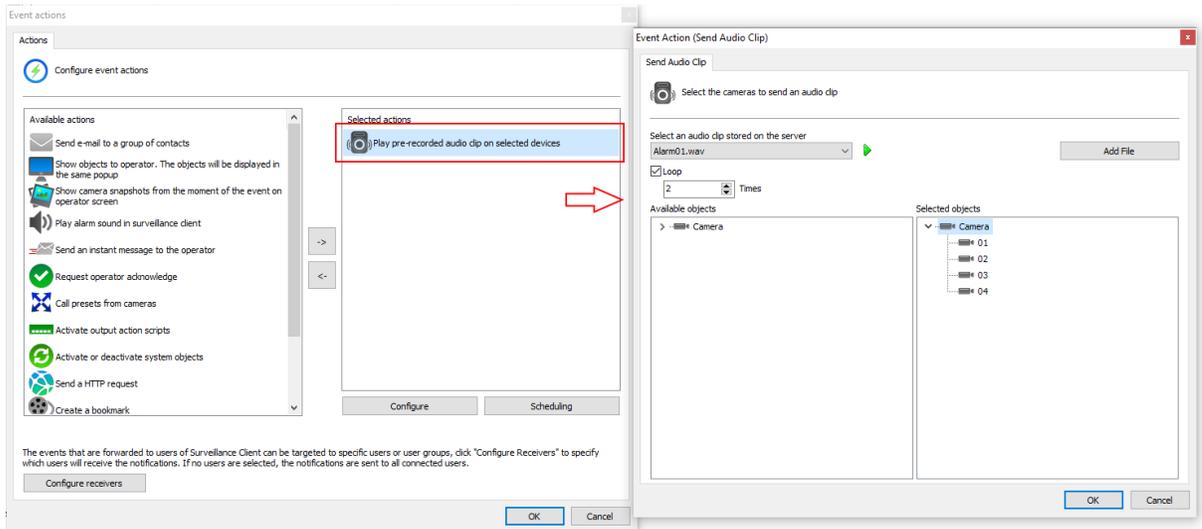


#### 4.1.21 Event Action to send audio to cameras

##### Standard, Professional, Enterprise

A new Event Action has been added to allow the sending of pre-recorded audio files to be played through the audio output of one or more cameras simultaneously.

With this feature, it is possible to configure personalized alarm messages (or use the alarms already provided with the system) to play in speakers connected to cameras in the event of an event or alarm, becoming a very useful tool for installations with alarms.



#### 4.1.22 Event Action for HTTPS call

##### Professional, Enterprise

The Event Action of sending HTTP command now also supports HTTPS.

Event action (HTTP Request)

HTTP Request

Configure HTTP request

Request type:

GET

POST

URL:

https://192.168.1.1:443/Alarm?AlarmTest

User:

admin

Password:

•••••

Data:

Test

HTTP command test will be performed locally (Through the Administration Client)

Test

OK Cancel

#### 4.1.23 Send link for mobile playback in alert emails

##### All editions

Alert emails that include images from cameras will now include a "DeepLink" in the body in the email, where if the email is being viewed via an Android or iOS mobile device it will allow video playback of the event (By pressing the link) through the Mobile Client (If installed).

**Digifort - IP Surveillance System**  
MOTION DETECTION - 01

You are receiving this e-mail as the server is configured to notify you whenever there is motion in the recording of some camera.

Object data:  
Name: 01

If you are viewing this email from an Android / iOS mobile device and have the Mobile Client installed, click on the image links to start video playback of the event through the app.

Attached pictures:

[Image from camera 01 \(Client parking 1\) from time 1/20/2020 6:36:07 PM](#)



Event data:  
Date: 1/20/2020  
Hour: 6:36:08 PM

This e-mail was sent to: [REDACTED]

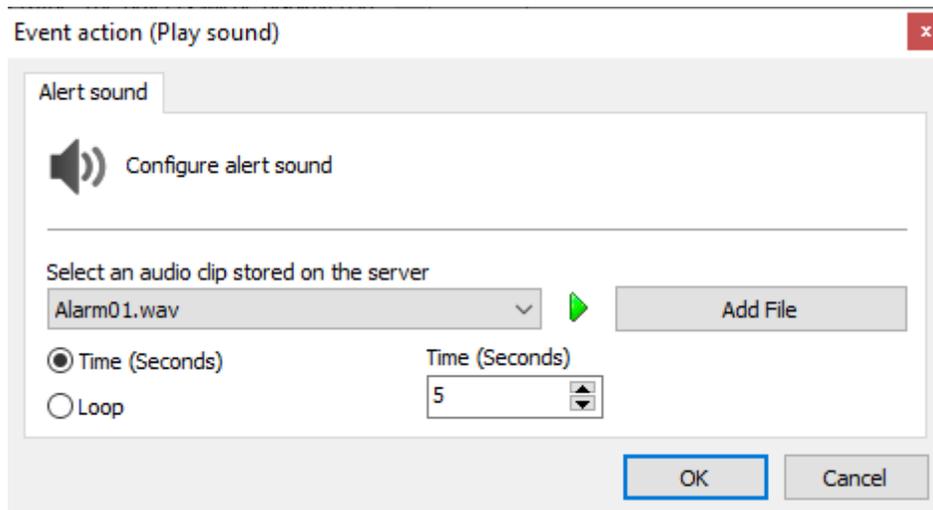
Digifort - IP Surveillance System

## 4.1.24 Custom alert sounds

### All editions

The system now allows the use of customized files of alert sounds to be played in the Surveillance Client.

A new alert audio playback time option has also been added to allow you to choose between Time and Loop.



#### 4.1.25 Centralized Surveillance Client configuration

##### Enterprise

The system now allows you to apply specific settings (or all) to the Surveillance Client according to the user login. You can adjust settings by user and user group.

In the user registration, or in the registration of user groups, a new Client Settings option will be displayed:

User registration

Memo Groups view Rights View

Account Biopass Rights Client Policies Ownership identification

Surveillance Client Features

- Allow the user to activate Local Recording
- Allow the user to use screenshot
- Disable the configurations button of the Surveillance Client
- Force full screen
- Hide system operation controls
- Deactivate context menus (Right mouse button)
- Disable Print-Screen
- Do not allow the user to close the surveillance client
- Do not allow the user to minimize the surveillance client
- Lock the workstation

Default Features Limited Features

Inactivity Detection

- Disconnect the user upon inactivity

Inactivity Time

1 Minutes

Language

- Change default client language

Português (Brasil)

Client Settings

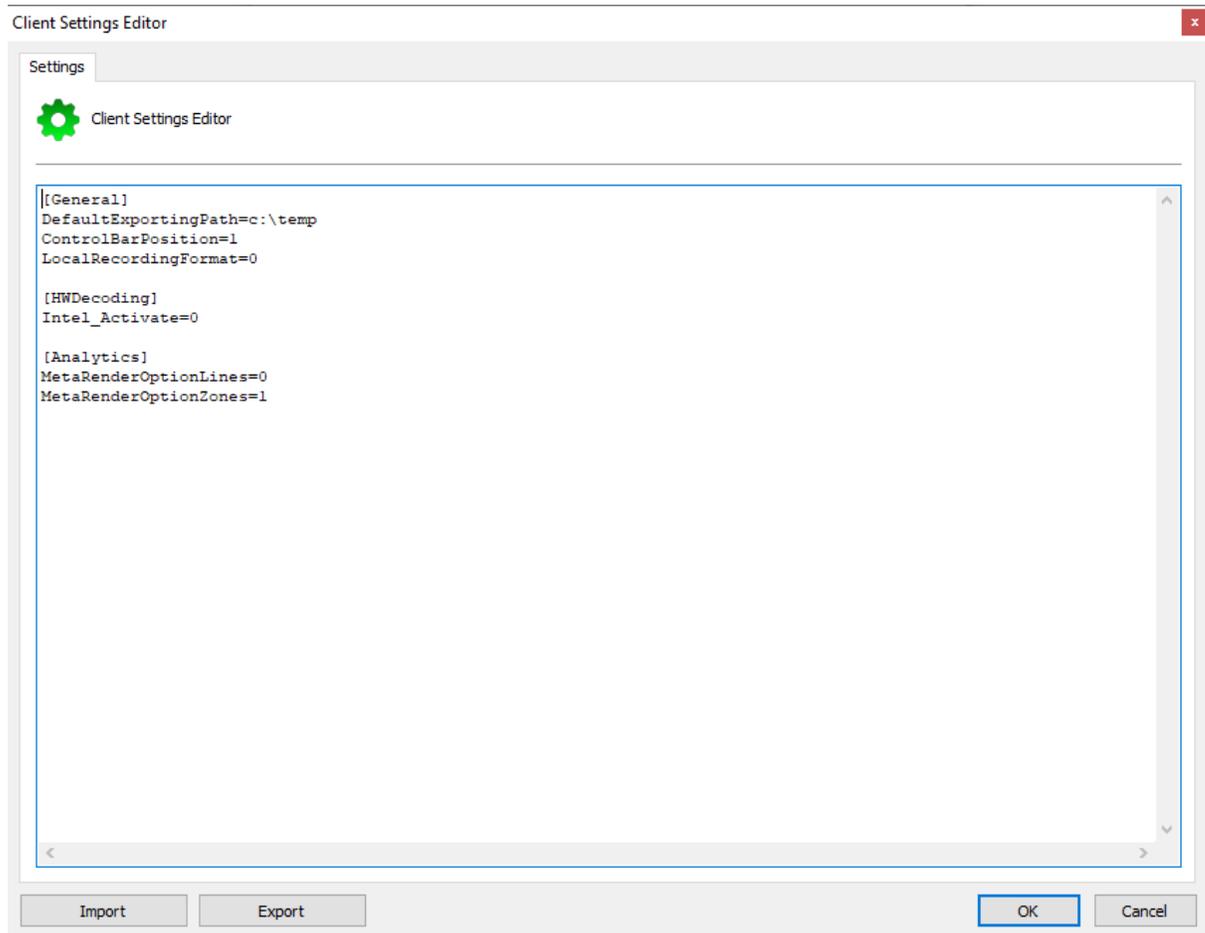
- Ignore inherited group settings
- Apply customized settings to Surveillance Client

Settings Editor

OK Cancel

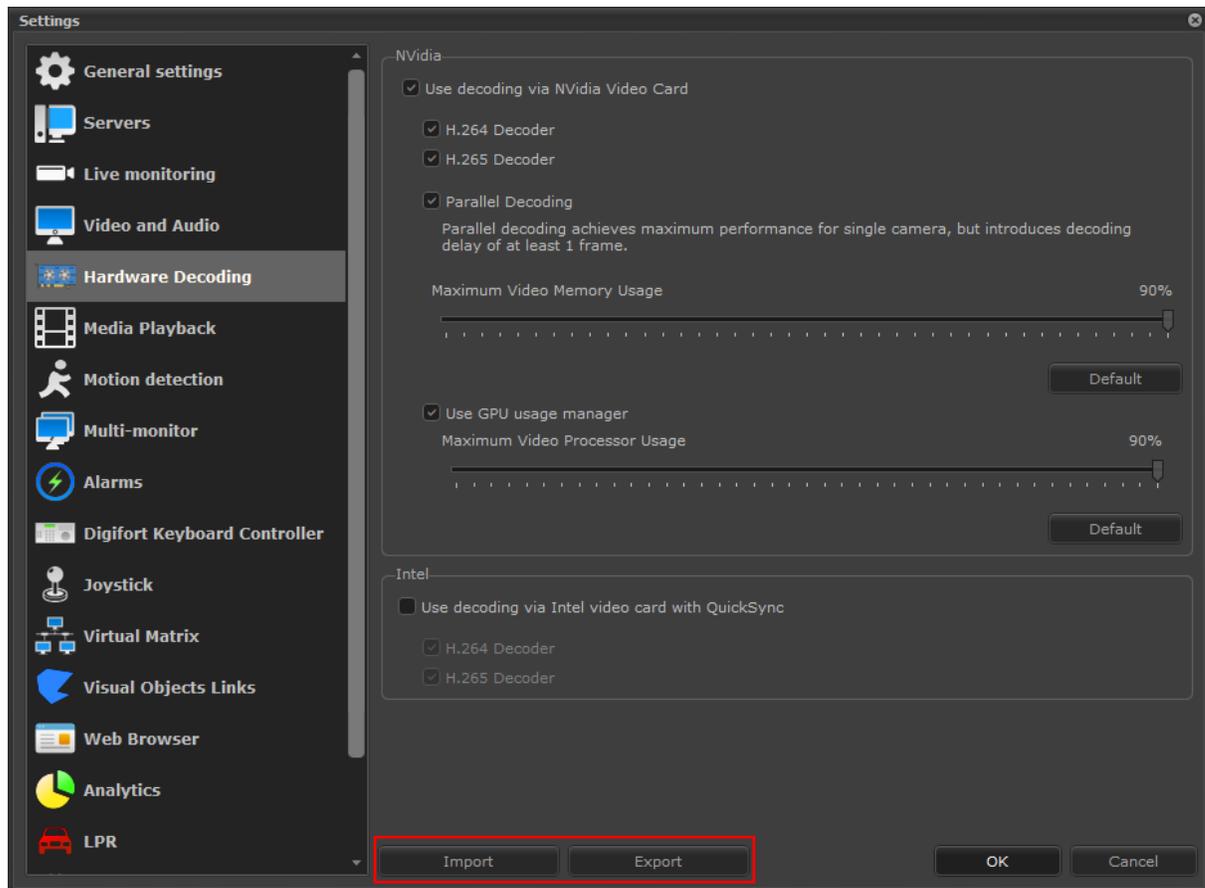
The editor allows you to adjust the settings and values that will be applied to the Surveillance Client when the user logs in to the server.

The values follow the format of .INI files:



This is a way to force default settings for multiple Surveillance Clients in a centralized manner, facilitating the distribution and configuration of workstations, since their options can be changed in the user profile.

Configuration values can be exported via the Surveillance Client settings export screen:



You can change any configuration value and apply it to the client through this editor. Use a settings file exported from the Surveillance Client as a reference for setting values to be added to the editor.

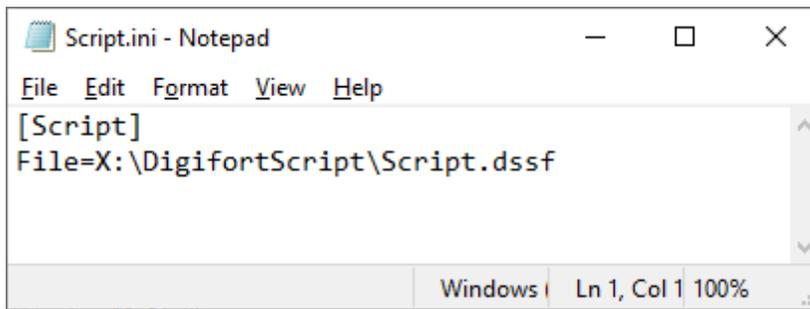
#### 4.1.26 Centralized registration of servers in Surveillance Client

##### All editions

In installations with multiple servers, registering the servers at the monitoring stations can become a very complex job, and when there is an IP change or server addition, all clients must be changed.

To facilitate the registration of servers in Surveillance Clients, the system now allows the specification of a file (of a folder shared on the network) from where the Surveillance Client will load the registration of servers.

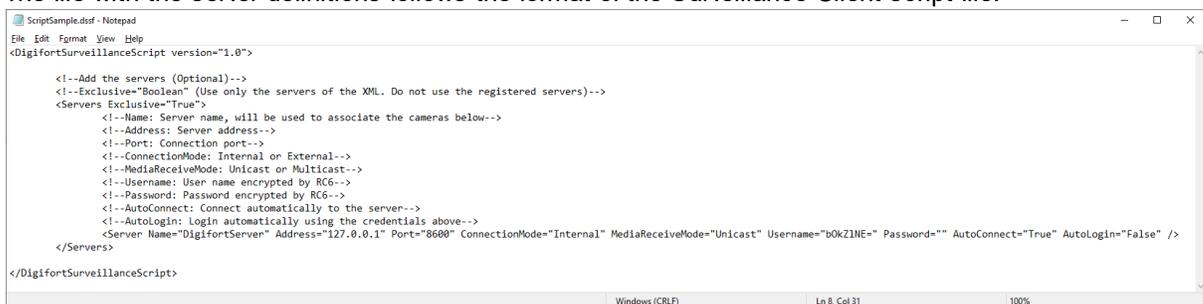
To use this feature, it is first necessary to define a file called Script.ini and save it in the Surveillance Client installation folder. This file will contain the server file path:



When the Surveillance Client opens, this file (if any) will be consulted and the system will try to open the referenced script file (which preference should be on a shared network drive, where all clients have access. You can also specify a URL for a file stored on a web server), if the file is located and opened successfully, the system will load the list of servers registered in this file.

With this method, when there is a server change (For example a new server or changed IP address), just change this central file and all clients will receive the update the next time they are loaded.

The file with the server definitions follows the format of the Surveillance Client script file:



An example script to load 3 servers:



## 4.1.27 Instant Review

### All editions

The new Instant Review function provides a quick way to playback a video with a pre-configured time period. This option is very useful for environments where quick viewing of events is necessary, such as in Casinos where the instant review of a fact is necessary.

Through clicking with the right mouse button on the camera or the list of cameras, the context popup will be displayed and the first option will be Instant Review, allowing quick access to the event.

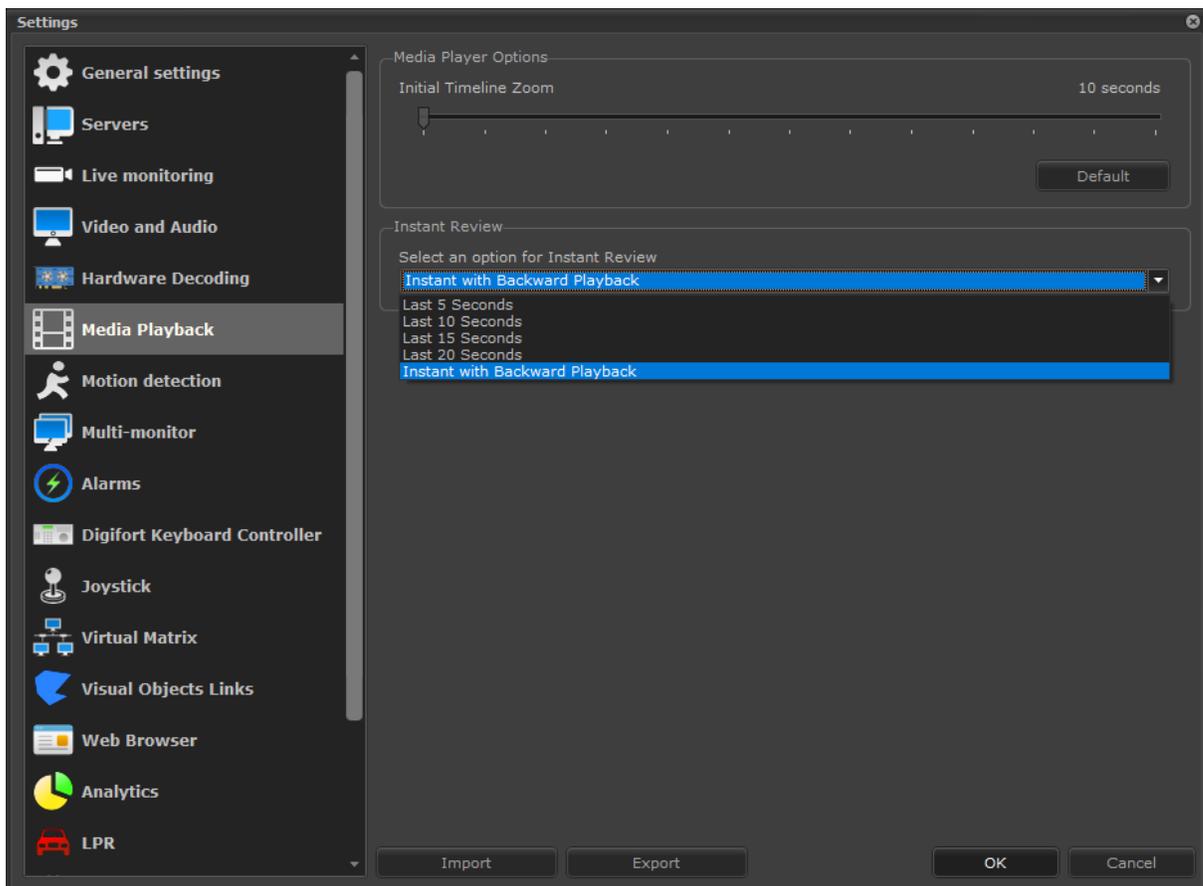
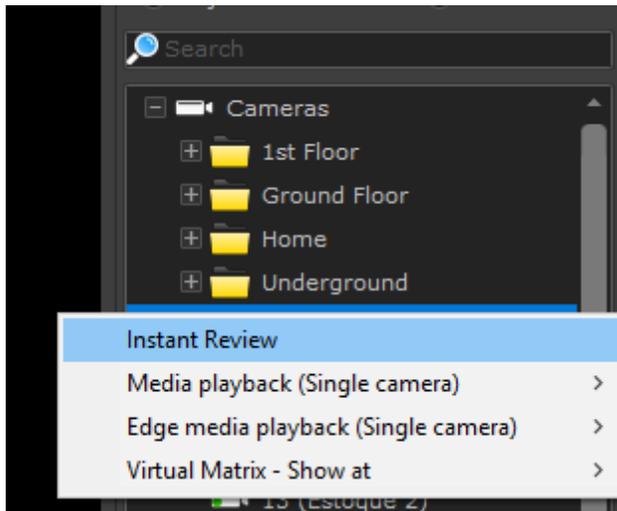
It is also possible to start the instant review via F4 shortcut.

You can configure the time that the Instant Review will play:

- Last 5 seconds

- Last 10 seconds
- Last 15 seconds
- Last 20 seconds

And also a special "Instant Review with Backward Playback" option. This is becoming a fundamental tool for Casinos, since the playback will start at the current moment and will play the video backwards, allowing the visualization of a fact that occurred in a few moments.



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

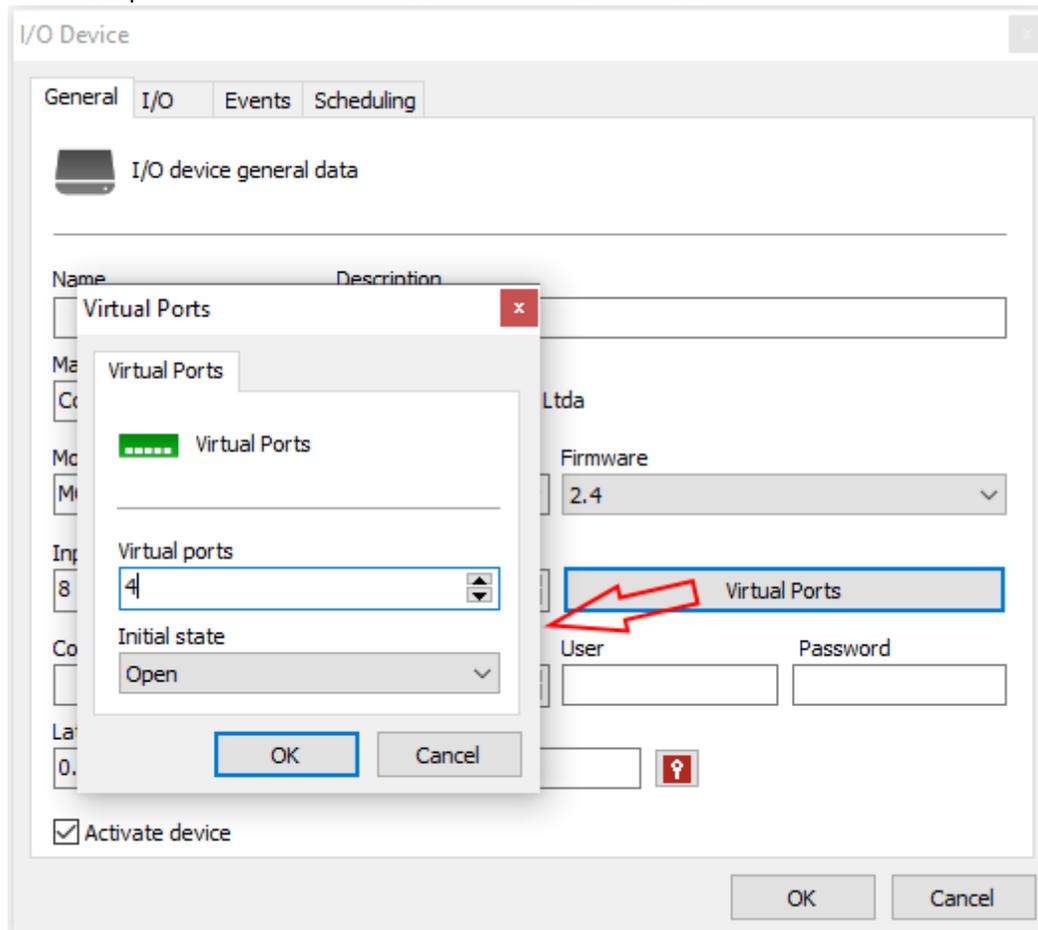
[https://www.youtube.com/watch?v=o1wzJsFxsp8&list=PLFlhAF6oQd\\_rJv3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=o1wzJsFxsp8&list=PLFlhAF6oQd_rJv3wEWHB8f0ZuzruvOS)

## 4.1.28 Virtual I/O

### Standard, Professional, Enterprise

The new Virtual I/O Port feature can be used for advanced integrations between physical I/O inputs and software events.

Virtual I/O ports can be defined for I/O Devices or Camera I/O:



With virtual I/O it is possible to combine one or more physical alarm inputs with one or more virtual I/O ports, with this it is possible to define for example that for an event to occur it is necessary that the alarm input is triggered (through physical input) and a software event occurs (for example an analytics, or an LPR event) and change the status of the virtual port

In the example below, we are specifying that the input event "Trigger alarm" will occur when port 1 of the device is closed and virtual port 1 is closed. Port 1 of the device will be closed through a dry contact (for example connected to a door, a motion sensor, temperature, etc.) and virtual door 1 will be activated through the analytics.

Alarm Input Events ✕

Input Events

Alarm Input Events

---

Event Name  
Trigger alarm

Event Description  
Trigger alarm when port 1 is short and analytics detected a person

Latitude  
0.000000

Longitude  
0.000000 📍

The event will occurs when:

Event

- 💡 The input port 1 is short
- 💡 The virtual port 1 is short

Add      Modify      Delete

Schedule when this event will be recognized:  
Scheduling

Configure the actions to execute on event:  
Configure Actions

OK      Cancel

To activate the virtual port, you need to create an exit script that activates the port:

Output Actions

Output Action

Output Action

Action Name  
Set virtual port

Action Description  
Activate and Deactivate Virtual Port

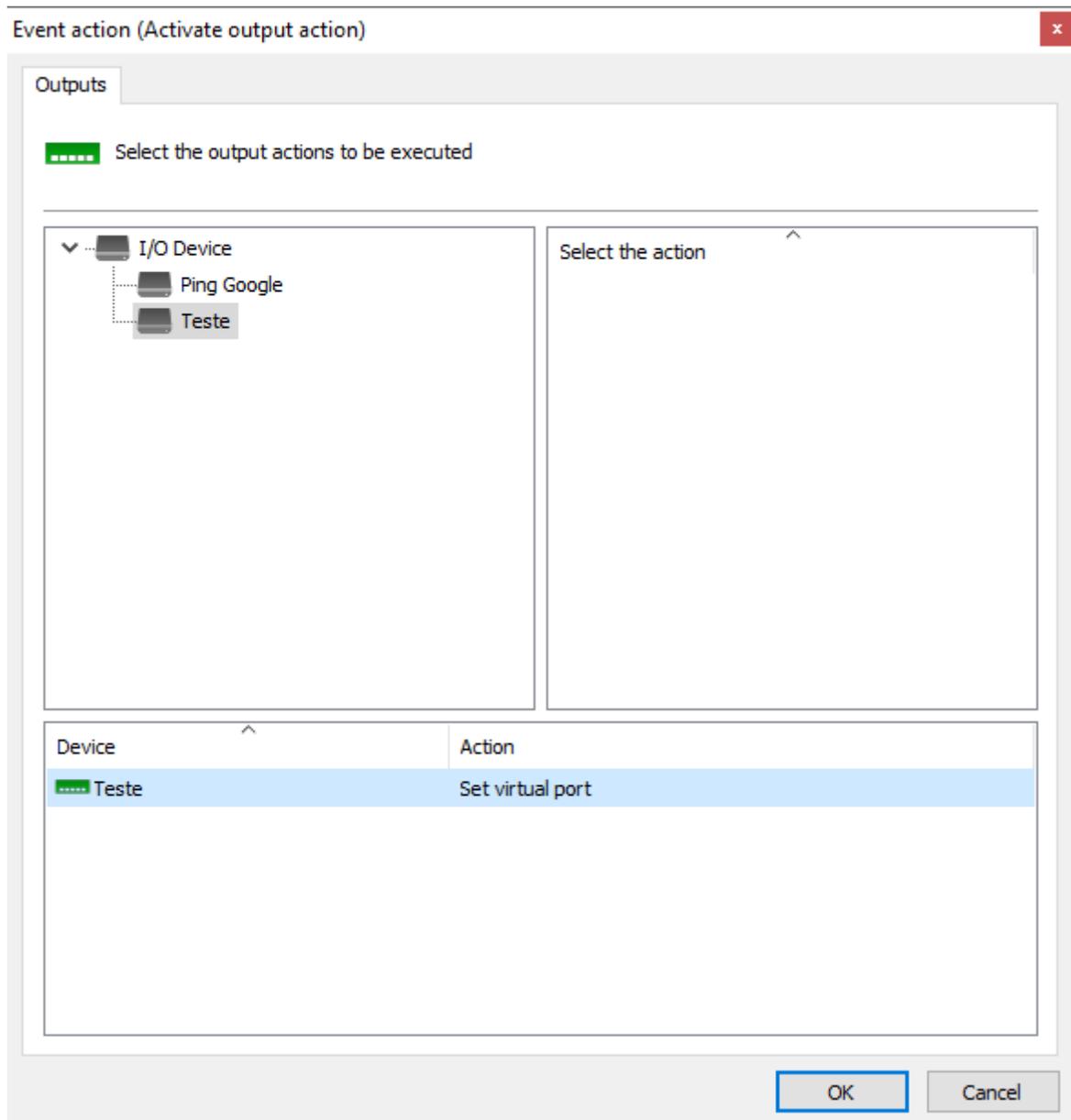
Output Script

Action	Parameter
Activate	Virtual Port: 1
Pause	5000 MS
Deactivate	Virtual Port: 1

Add Modify Delete

OK Cancel

And this script can be called by any system event, such as an analytics presence detection:



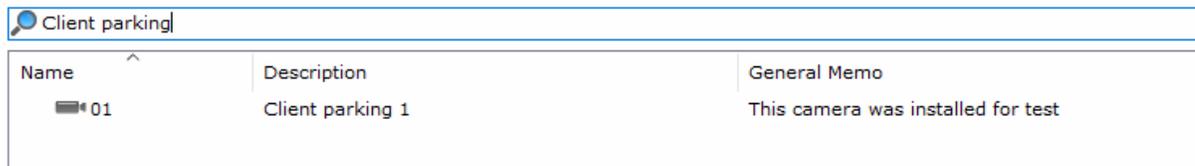
Virtual I/O is an excellent tool that can be explored to create complex automation and alarm scenarios combining logical and physical events. As it is a complex feature, if you have difficulty configuring it, please contact our support team and we will help you succeed.

#### 4.1.29 Records Filter in the Administration Client

##### All editions

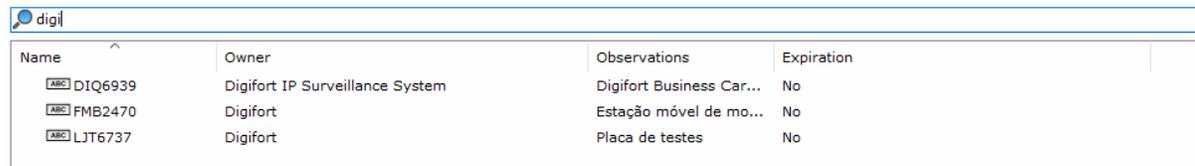
The Administration Client now has a search field (Filter) of records on all screens for registering objects such as cameras, I/O devices, users, registration of license plates, etc ...

This option greatly facilitates the administration of systems with many objects as it allows you to filter the objects by name or description.



Name	Description	General Memo
01	Client parking 1	This camera was installed for test

Some screens such as the registration plate also allow you to filter the records through the name of the owner or observations.



Name	Owner	Observations	Expiration
DIQ6939	Digifort IP Surveillance System	Digifort Business Car...	No
FMB2470	Digifort	Estação móvel de mo...	No
LJT6737	Digifort	Placa de testes	No

### 4.1.30 GPS Coordinates and Audio Output for Mobile Camera Pro

#### Standard, Professional, Enterprise

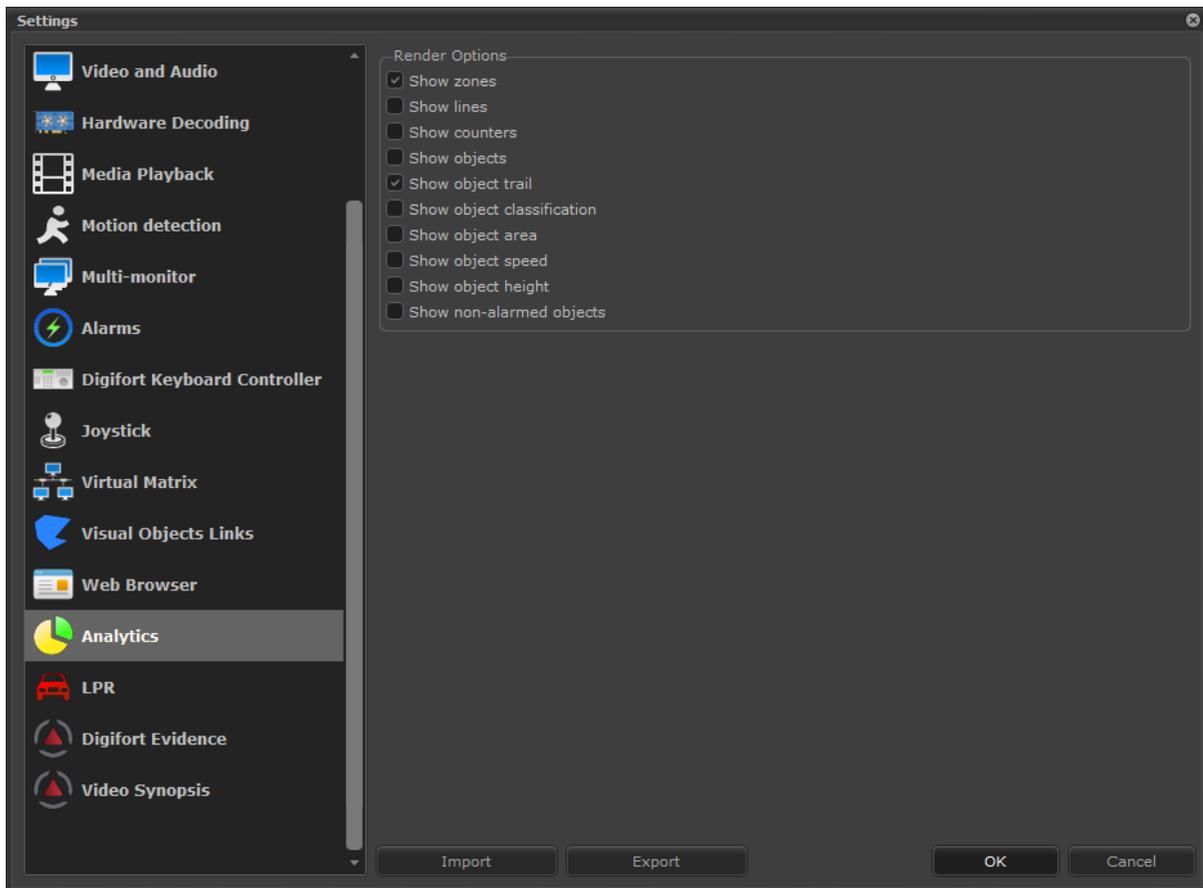
The system now supports receiving the GPS position of Mobile Camera Pro devices, as well as bi-directional audio with Mobile Camera Pro.

**NOTE:** The Mobile Camera Pro app with these features is not yet available and will be updated after the final version 7.3 is released

### 4.1.31 Default analytics rendering options

#### Standard, Professional, Enterprise

You can now configure the default rendering options for analytics metadata. When an analytics object is added on screen (In the Surveillance Client), the options defined in these settings will be used by default. The user can also change the options for each object manually through the context menu by right-clicking on the analytics object.



### 4.1.32 Master / Slave Synchronization Options

#### Professional, Enterprise

The system now allows the choice of which items will be synchronized between the Master / Slave servers

Master server

Slave server

Master server address

192.168.0.1 : 8600

Master server admin password

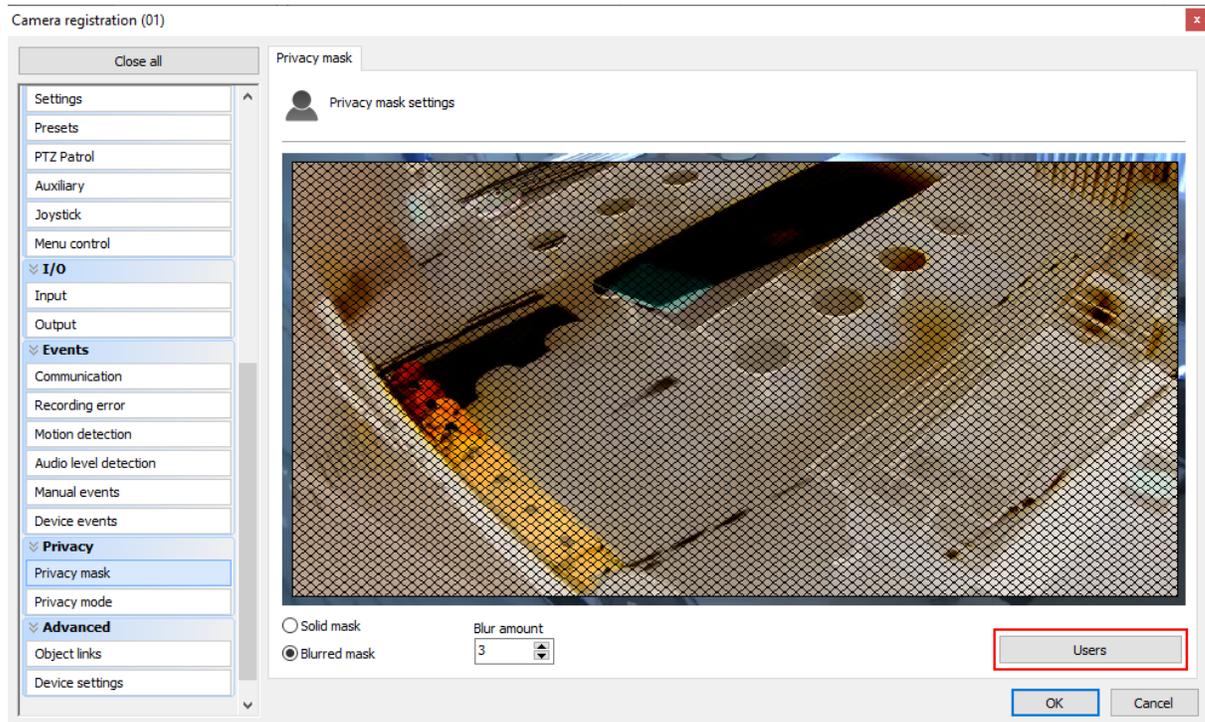
Items for synchronization

- User
- Screenstyle
- Alert contact
- Camera Group
- License Plate

### 4.1.33 User selection for Privacy Mask

#### All editions

The Privacy Mask can now be applied conditionally to specific users / groups of users.



### 4.1.34 Disconnect user due to inactivity

#### All editions

The system now allows you to configure a disconnect time due to inactivity for users / user groups. This function, when activated, will disconnect a user from the Surveillance Client if he has been inactive for longer than the configured limit.

The screenshot shows the 'User registration' dialog box with the 'Client' tab selected under 'Rights View'. The 'Inactivity Detection' section is highlighted with a red box. It contains the following settings:

- Allow the user to activate Local Recording
- Allow the user to use screenshot
- Disable the configurations button of the Surveillance Client
- Force full screen
- Hide system operation controls
- Deactivate context menus (Right mouse button)
- Disable Print-Screen
- Do not allow the user to close the surveillance client
- Do not allow the user to minimize the surveillance client
- Lock the workstation

Buttons: Default Features, Limited Features

**Inactivity Detection**

- Disconnect the user upon inactivity
- Inactivity Time: 10 Minutes

**Language**

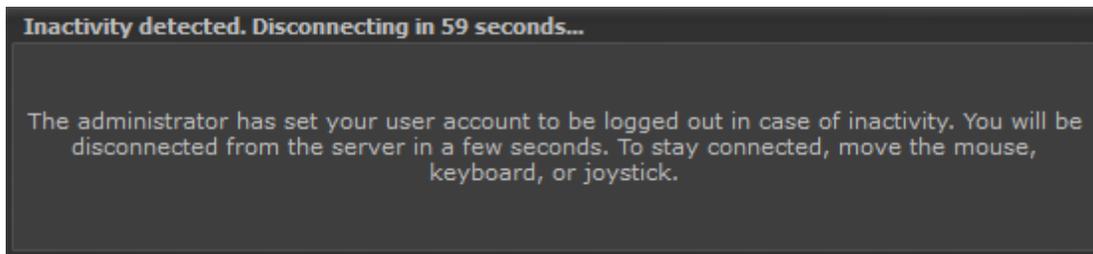
- Change default client language
- Português (Brasil)

**Client Settings**

- Ignore inherited group settings
- Apply customized settings to Surveillance Client
- Settings Editor

Buttons: OK, Cancel

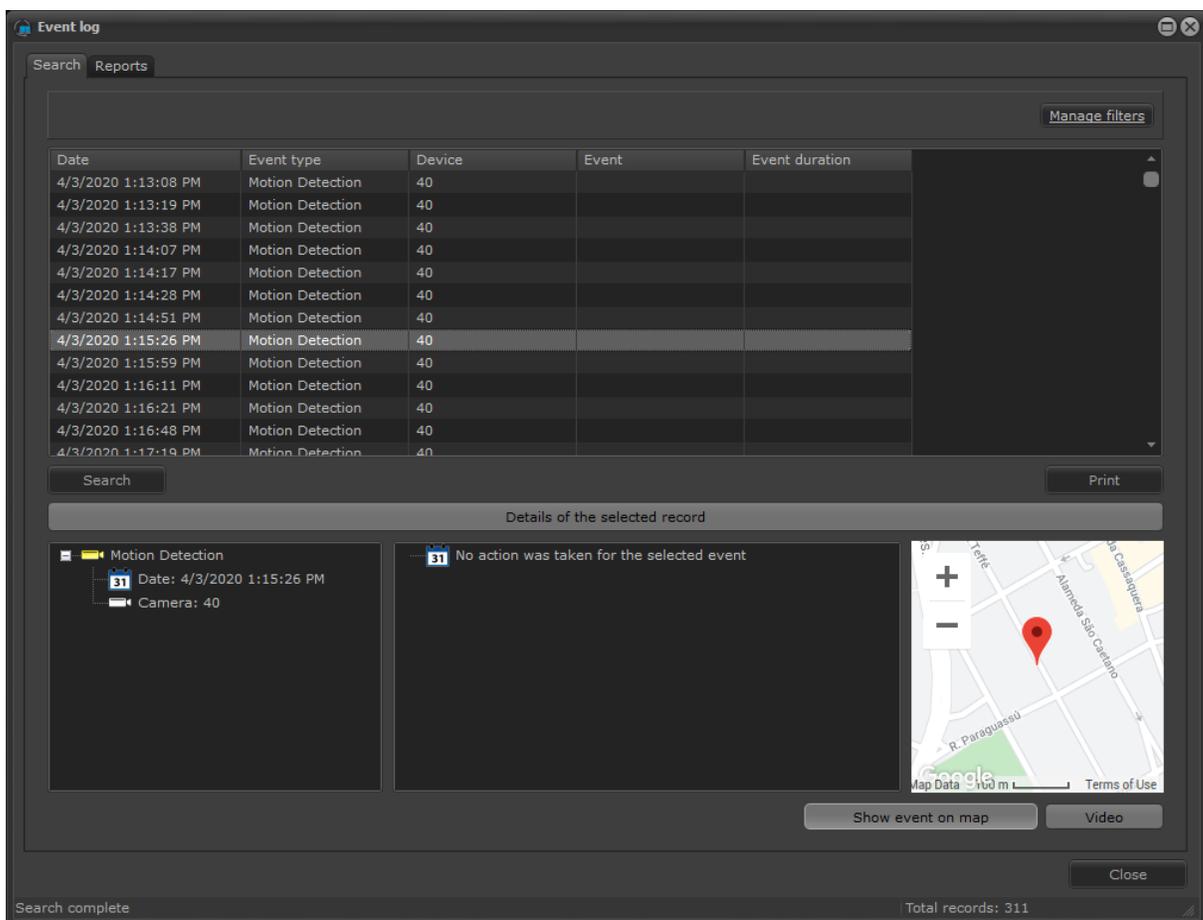
When inactivity is detected, a message with a count of 60 seconds will be displayed to the user, he must then move the mouse, activate the keyboard or joystick to cancel the disconnection.



#### 4.1.35 Google Maps event location in event search

##### Standard, Professional, Enterprise

Event Log in the Surveillance Client can now display the location of the event on a mini map.



#### 4.1.36 Records search will apply user rights

##### All editions

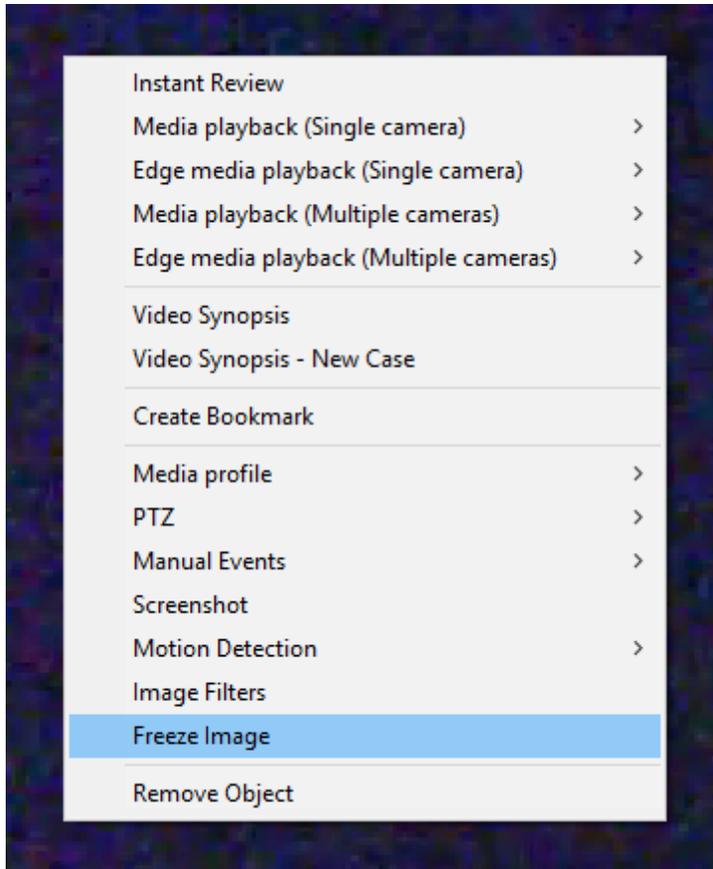
Searching for event, analytics, LPR and bookmark records in the Surveillance Client will now only return records of objects that the logged user has access to. Previously, when searching the event log, for example, all records of all objects were returned to the user, regardless of whether the user had access rights to the objects.

Some records such as Scheduled Events, Failover and I/O Device Events will be presented to all users as these objects do not have user rights.

#### 4.1.37 Freeze live camera image

##### All editions

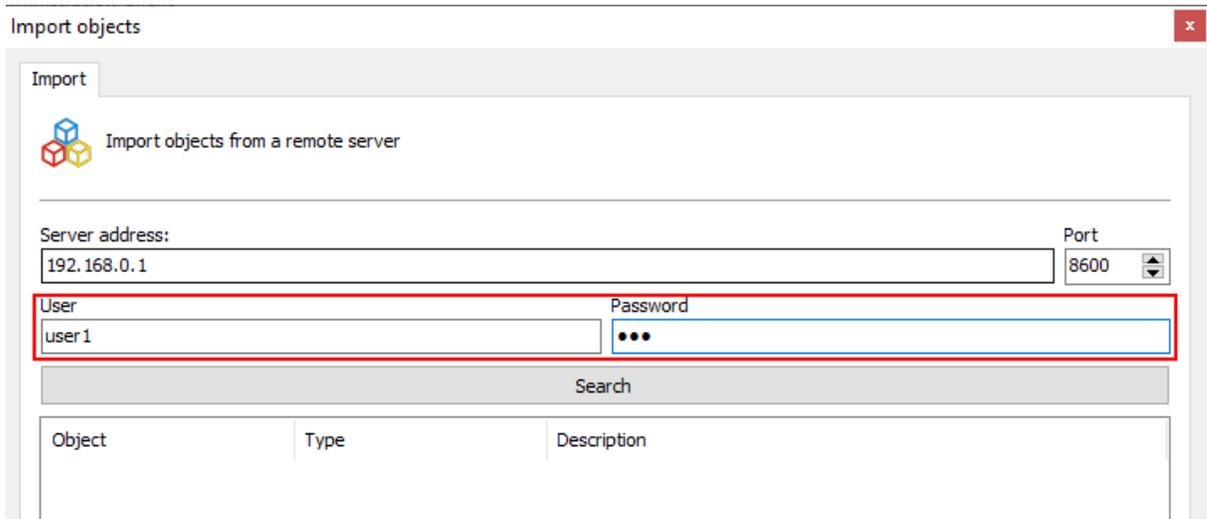
It is now possible to freeze the image from a live camera in the Surveillance Client by simply right-clicking on the image and selecting "Freeze Image"



#### 4.1.38 Importing objects with a specific user

##### All editions

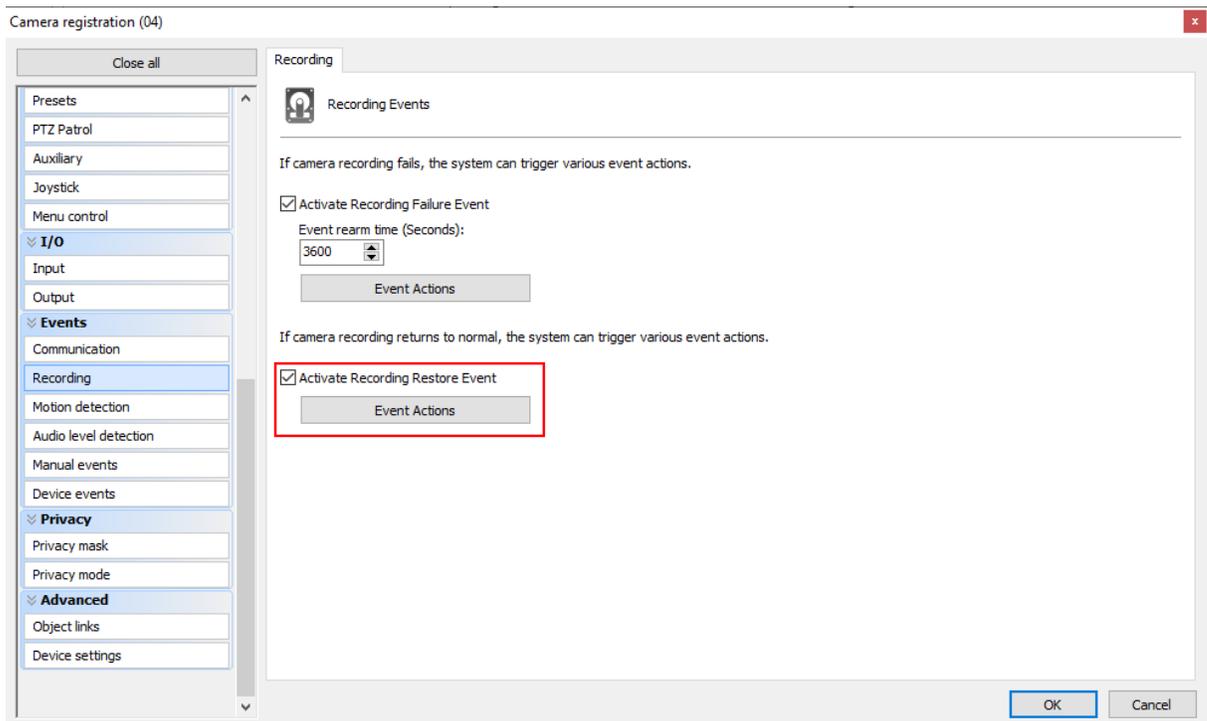
When importing objects from another server, the system now allows you to specify a user account to be used to import the objects. Previously it was necessary to specify the password for the Admin user.



### 4.1.39 Recording Restore event

#### All editions

The cameras now have the "Recording Restore" event, which will be triggered when the camera successfully records again after a Recording Failure.



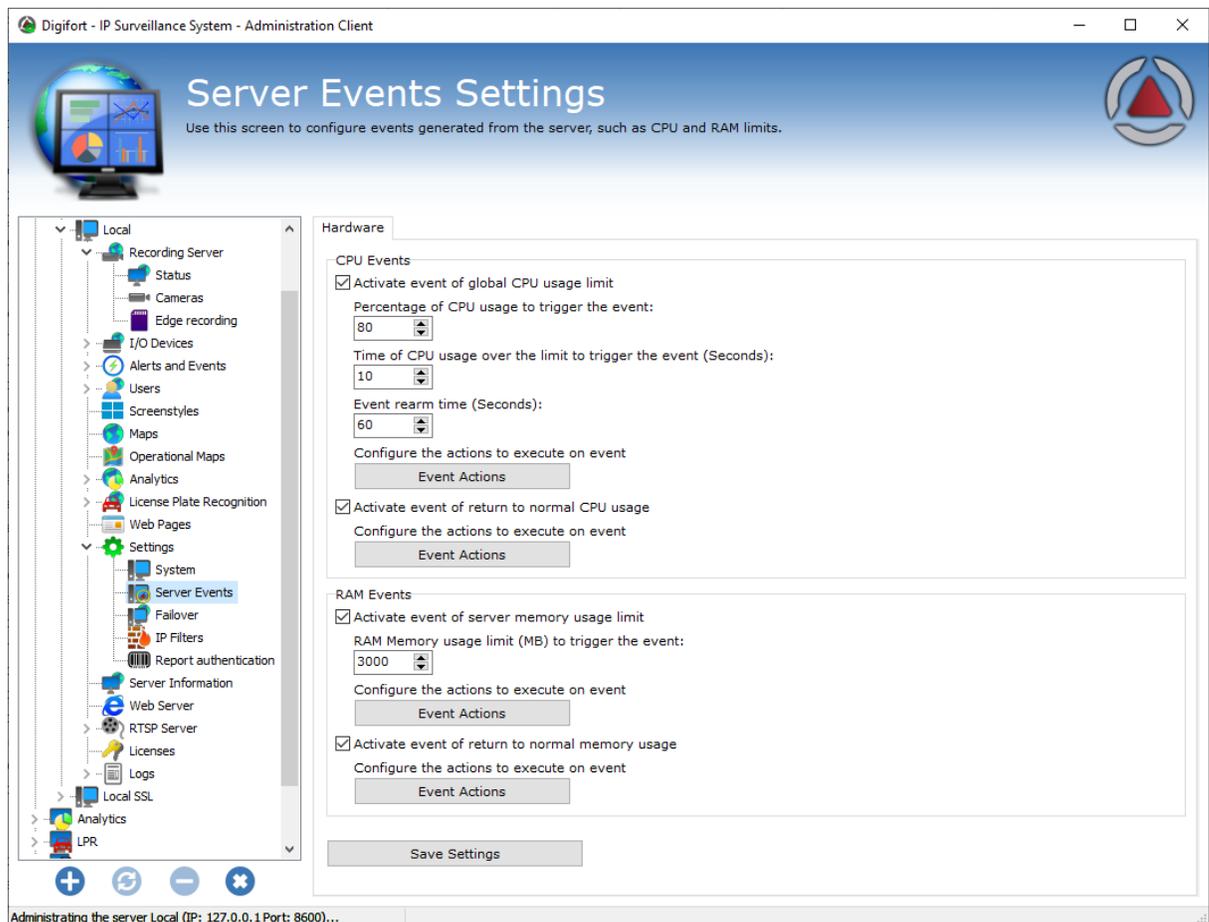
### 4.1.40 Server health monitoring event

#### All editions

The system now allows the configuration of server health monitoring events. With these events it is possible to monitor the CPU and memory usage of the system and trigger events in case of abnormality.

CPU monitoring will monitor the server's global CPU (and not just the system server process). It is possible to configure a usage limit and a time limit, where if the global CPU usage is above the limit configured for the specified time, then the event will be generated. A normal condition restore event (Below the threshold) can be triggered when CPU usage returns below the threshold.

RAM monitoring will monitor only the memory usage by the system server process (Server.exe). It is possible to configure a limit for memory usage by the server, where if the usage is above the configured limit, then the event will be generated. A normal condition restore event (Below the threshold) can be triggered when RAM usage returns below the threshold.



#### 4.1.41 Option to manage disk space from deactivated cameras

##### All editions

The recording system now has the option of managing the disk space used by disabled cameras. Previously, if the camera was disabled, the recordings were not erased during recording recycling. With this option enabled, all disabled cameras will also enter the recording recycle and their recordings will be deleted according to the retention time. This option is important for failover servers (where cameras are usually disabled) and compliance with GDPR data protection laws that define the maximum image retention period.

General Recordings Master / Slave Multicast Backup Database SMTP settings Disk Limits

Percentage of free space that the system must maintain when performing the recordings

5%

Manage used disk space by deactivated cameras

Use files cache for quick server startup

#### 4.1.42 Reuse login credentials on the Administration Client

##### All editions

To make managing multiple servers easier, the Administration Client will now reuse login credentials for all servers. If the login is successful on one server, when connecting to another server, these same credentials will be used automatically, facilitating the administration process since it will not be necessary to enter the login credentials for all servers. An exception is if 2-factor authentication is enabled, then it will be necessary to provide the 2-factor key at each login.

#### 4.1.43 Active Directory User Synchronization

##### Professional, Enterprise

The server now allows users imported from Active Directory to be synchronized with the domain, that is, if the user is deleted from the domain, it will also be deleted from the system.

Active Directory

Keep imported Active Directory users synchronized

User for domain authentication

Password for domain authentication

Synchronization Interval

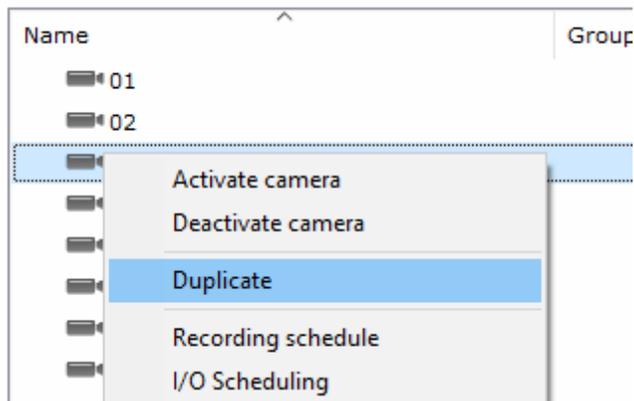
6 Hours

#### 4.1.44 Camera Duplication

##### All editions

The Administration Client now allows you to duplicate the configurations of a camera to facilitate the registration of similar cameras with the same configurations.

This feature can also be used to create and maintain configuration templates.



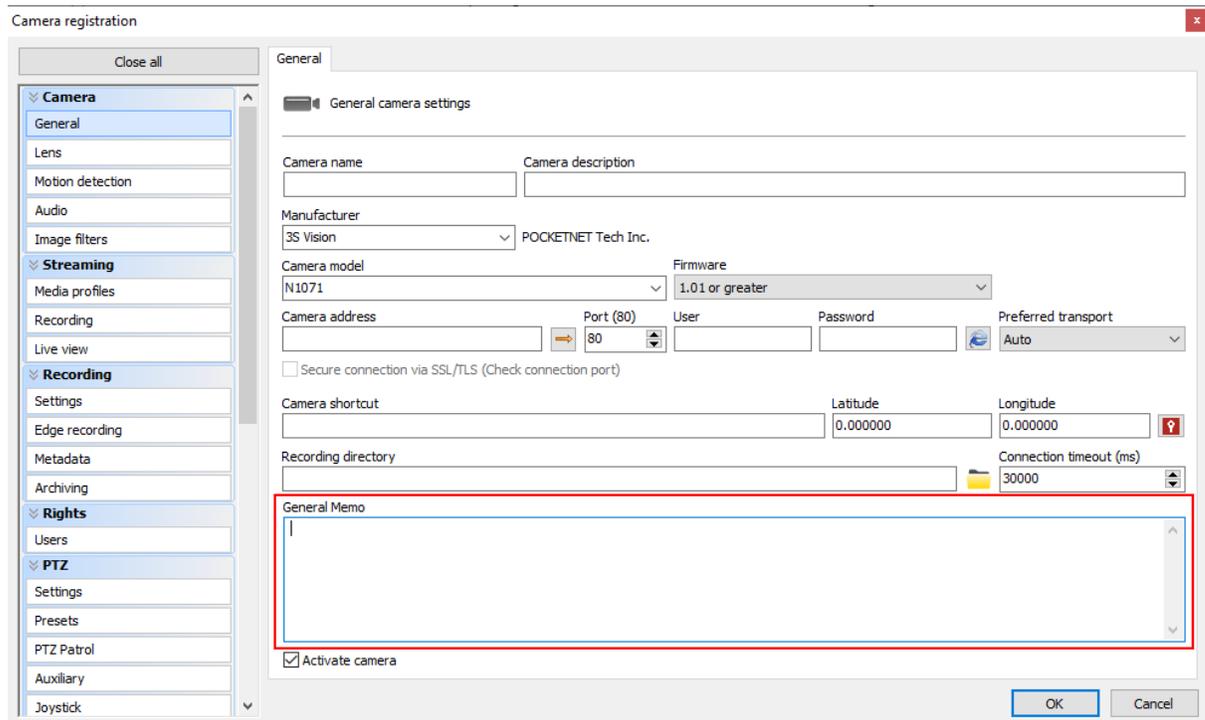
#### 4.1.45 General camera notes field

##### All editions

A new field for general camera notes has been added.

This field is free text and can be used to store any information relevant to the camera.

The field can also be displayed in the camera list through the extended columns and exported along with export of the camera list.



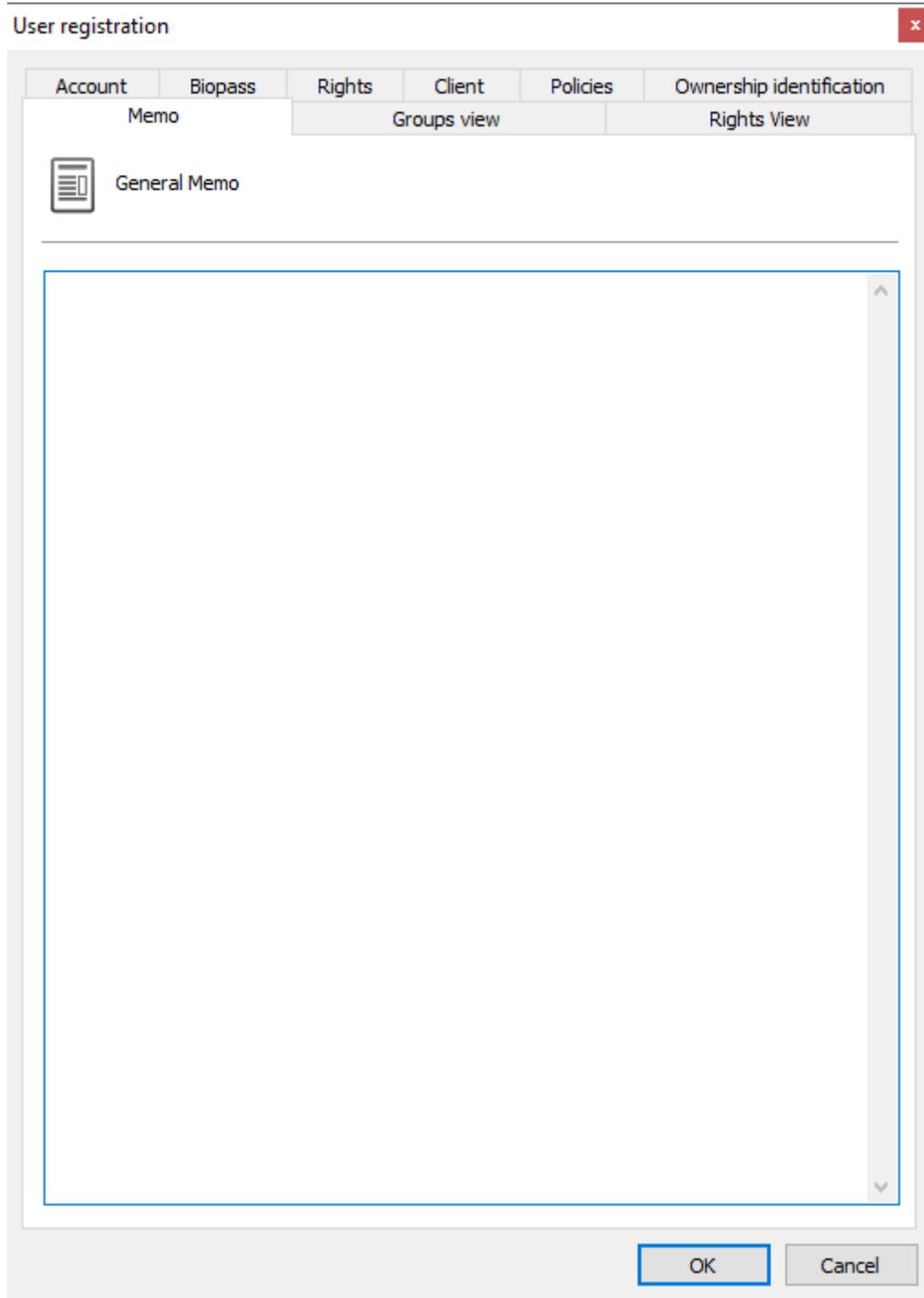
#### 4.1.46 General user notes field

##### All editions

A new field for general user notes has been added.

This field is free text and can be used to store any information relevant to the user.

The field can also be displayed in the user list through the extended columns and exported along with exporting the user list.



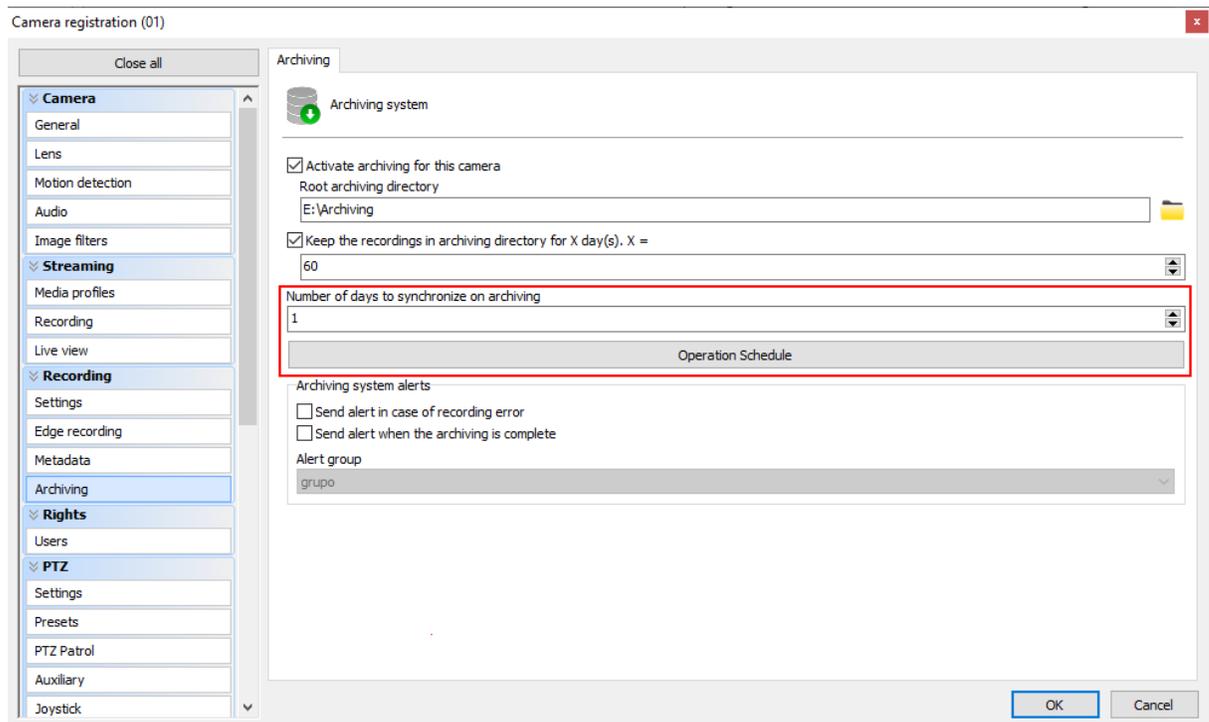
## 4.1.47 Archiving Scheduling

### Professional, Enterprise

The archiving system now allows you to set up an operation schedule to determine when archiving will run.

The archiving system is an ongoing process, however it will only work during the scheduled period.

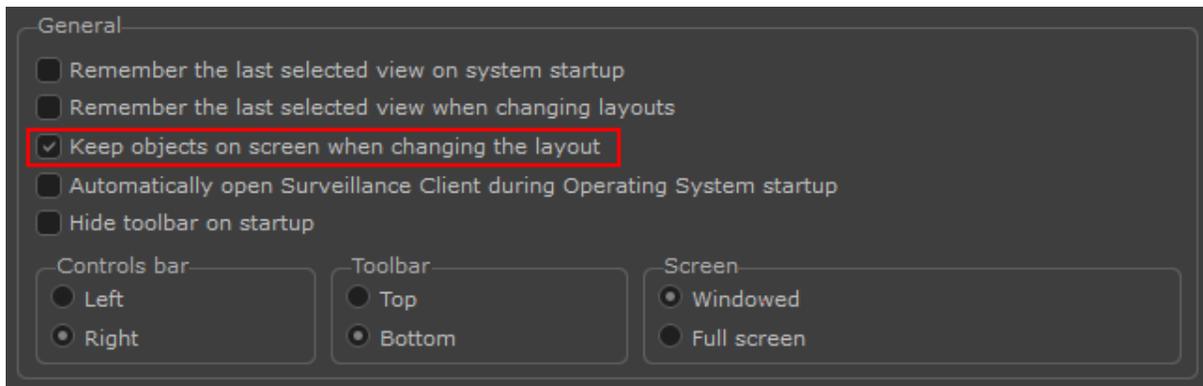
In addition, it is now also possible to configure how many days of recordings that the archiving will copy during its processing (Previously the archiving only copied the previous day).



## 4.1.48 Keep objects on screen when changing the layout

### All editions

The Surveillance Client now has a new option to keep objects on screen when changing the layout, however, if the option "Remember the last selected view when changing layouts" is selected, then this option will have no effect.



#### 4.1.49 Summary of Event Actions

##### All editions

It is now possible to view a summary of the actions configured for events. A new column called "Event Actions" is now available and will display all active actions for the event.

The event action summary has been added for:

- Global Events
- Manual Events
- Scheduled Events
- LPR Events

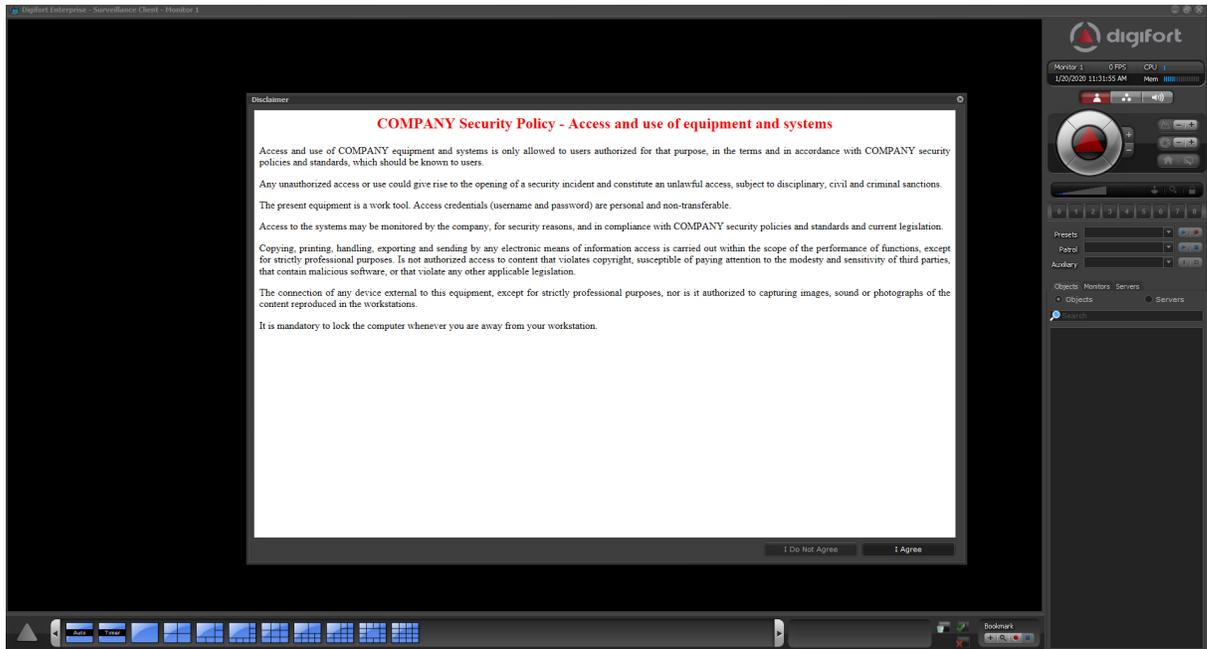
Name	Description	Latitude	Event Actions
Desativar		0.000000	(Activate or deactivate system objects)
Ativar		0.000000	(Activate or deactivate system objects)
Edge	Edge Recording	0.000000	(Download device recordings)
Teste Audio		0.000000	(Play alarm sound)
Teste 1		26.358269	(Play alarm sound), (Play audio clip)
Teste Audio1		0.000000	(Play audio clip)
Teste	tete	0.000000	(Show objects)

#### 4.1.50 Disclaimer Message

##### All editions

The system now allows the display of a personalized legal notice message (Disclaimer) when opening the Surveillance Client or Administration Client. The user must click on "I Agree" to be able to use the system, otherwise the client will be closed.

To add a personalized legal warning message just add a file called "Disclaimer.htm" in the clients' installation folder.

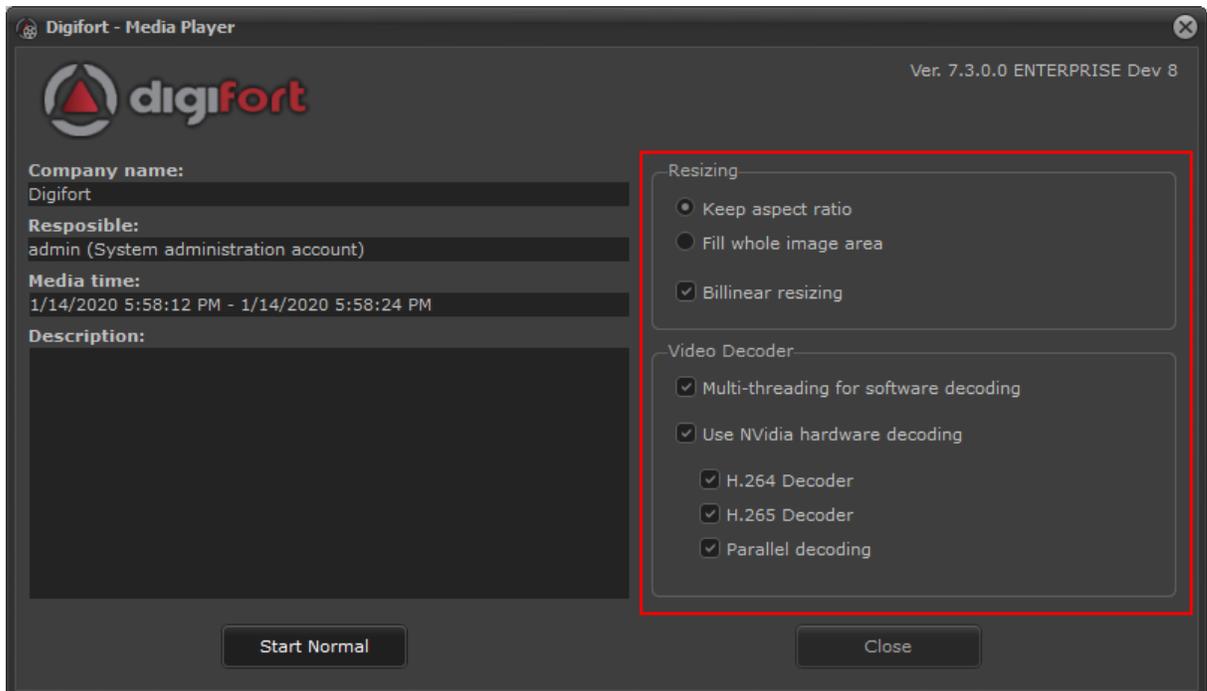


#### 4.1.51 Image and decoder options in the exported Player

##### All editions

The video media player exported in the native format now provides options for playing video:

- Resizing Options - Allows you to configure the type of image resizing for better viewing
- Video Decoder - Allows you to choose multi-threading options for decoder via software (For higher performance) and decoding via NVidia GPU (Only in Player64.exe)

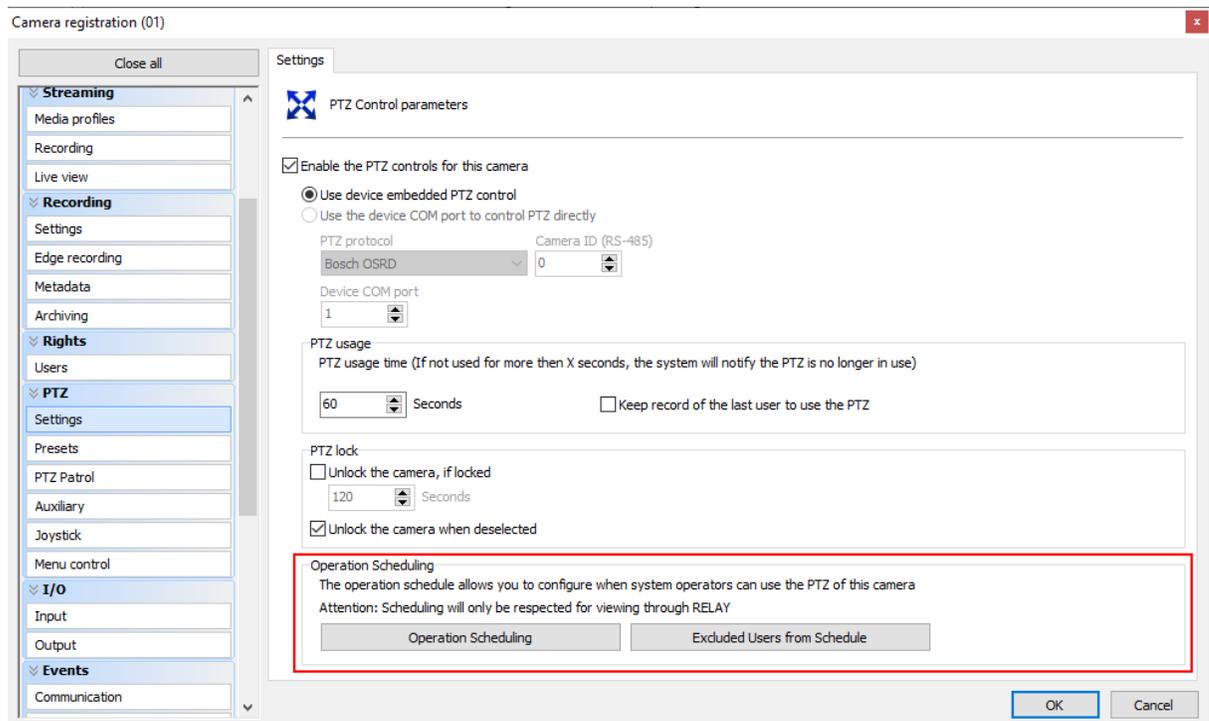


## 4.1.52 PTZ usage schedule

### All editions

The system now allows the configuration of a PTZ Use Schedule. The usage schedule defines the days and times when the system operators (with PTZ control rights) can move the configured camera.

For greater flexibility, the system also allows the configuration of a User Exclusion List, where the users or groups of users present in this list will not be part of the schedule and will be able to control the PTZ of the camera at any time.



## 4.1.53 Bookmarks Report

### Professional, Enterprise

The Surveillance Client's Bookmarks search system now allows the printing of a Bookmarks Report

Bookmarks

Date Manage filters

	Title	Start date	End date	Observations	Cameras	User	Recording Protection
	VCA Detection	1/13/2020 2:50:37 AM	1/13/2020 2:50:40 AM		30, 29, 62		
	Loitering	1/13/2020 7:20:32 AM	1/13/2020 7:20:39 AM		07		
	Social Gate Left Open	1/13/2020 7:54:14 AM	1/13/2020 7:54:14 AM		41, 03, 40, 04, 09		
	Intrusion Detected back	1/13/2020 7:59:15 AM	1/13/2020 7:59:18 AM		61, 29		
	Intrusion Detected back	1/13/2020 7:59:22 AM	1/13/2020 7:59:25 AM		61, 29		
	Loitering	1/13/2020 8:00:41 AM	1/13/2020 8:00:48 AM		07		
	Intrusion Detected back	1/13/2020 8:08:04 AM	1/13/2020 8:08:07 AM		61, 29		
	Intrusion Detected back	1/13/2020 8:08:58 AM	1/13/2020 8:09:01 AM		61, 29		
	Loitering	1/13/2020 8:18:02 AM	1/13/2020 8:18:09 AM		07		
	Loitering	1/13/2020 8:18:59 AM	1/13/2020 8:19:06 AM		07		
	Entrance/Exit	1/13/2020 8:19:25 AM	1/13/2020 8:19:25 AM		41, 03		
	Intrusion Detected back	1/13/2020 8:22:59 AM	1/13/2020 8:23:02 AM		61, 29		
	Loitering	1/13/2020 8:28:16 AM	1/13/2020 8:28:23 AM		07		
	LPR-Digifort-Employee	1/13/2020 8:45:28 AM	1/13/2020 8:45:28 AM		29, 28		
	Intrusion Detected back	1/13/2020 8:58:32 AM	1/13/2020 8:58:35 AM		61, 29		
	VCA Detection	1/13/2020 8:58:42 AM	1/13/2020 8:58:45 AM		30, 29, 62		
	Loitering	1/13/2020 9:00:02 AM	1/13/2020 9:00:09 AM		07		
	VCA Detection	1/13/2020 9:02:45 AM	1/13/2020 9:02:48 AM		30, 29, 62		
	Garage	1/13/2020 9:02:52 AM	1/13/2020 9:02:52 AM		41, 05		
	VCA Detection	1/13/2020 9:03:19 AM	1/13/2020 9:03:22 AM		30, 29, 62		
	Garage	1/13/2020 9:03:20 AM	1/13/2020 9:03:20 AM		41, 05		
	VCA Detection	1/13/2020 9:03:29 AM	1/13/2020 9:03:32 AM		30, 29, 62		
	Intrusion Detected back	1/13/2020 9:03:30 AM	1/13/2020 9:03:33 AM		61, 29		
	Intrusion Detected back	1/13/2020 9:06:50 AM	1/13/2020 9:06:53 AM		61, 29		
	Loitering	1/13/2020 9:08:00 AM	1/13/2020 9:08:07 AM		07		
	Entrance/Exit	1/13/2020 9:12:24 AM	1/13/2020 9:12:24 AM		41, 03		

Search Print Video Close

Search complete Total records: 108

**BOOKMARKS LIST**

Bookmark color	Initial date	Final date	Title	Camera	User	Recording Protection
	1/13/2020 1:25:38 PM	1/13/2020 1:25:40 PM	Intrusion Detected	02, 04, 09		
Group total: 1						
Bookmark color	Initial date	Final date	Title	Camera	User	Recording Protection
	1/13/2020 7:54:15 AM	1/13/2020 7:54:15 AM	Social Gate Left Open	41, 03, 40, 04, 09		
Group total: 1						
Bookmark color	Initial date	Final date	Title	Camera	User	Recording Protection
	1/13/2020 11:51:49 AM	1/13/2020 11:51:52 AM	Intrusion Detected back door	61, 29		
	1/13/2020 11:09:04 AM	1/13/2020 11:09:07 AM	Intrusion Detected back door	61, 29		
	1/13/2020 12:26:21 PM	1/13/2020 12:26:24 PM	Intrusion Detected back door	61, 29		
	1/13/2020 12:03:06 PM	1/13/2020 12:03:09 PM	Intrusion Detected back door	61, 29		
	1/13/2020 12:02:48 PM	1/13/2020 12:02:51 PM	Intrusion Detected back door	61, 29		
	1/13/2020 10:53:07 AM	1/13/2020 10:53:10 AM	Intrusion Detected back door	61, 29		
	1/13/2020 9:59:31 AM	1/13/2020 9:59:34 AM	Intrusion Detected back door	61, 29		
	1/13/2020 9:28:43 AM	1/13/2020 9:28:46 AM	Intrusion Detected back door	61, 29		

Authentication code  
  
 2A61-85B3-4D63-61DD-EA6D-592C-7802-0DF3

Digifort - IP Surveillance System  
 Print date: 1/13/2020 11:54:43 AM  
 Page 1 / 7

#### 4.1.54 Option for standard zoom of the player timeline

##### All editions

The Surveillance Client now allows you to configure the default zoom of the video player's timeline, so when a video playback starts, the timeline will open with the zoom specified in the settings.

Media Player Options

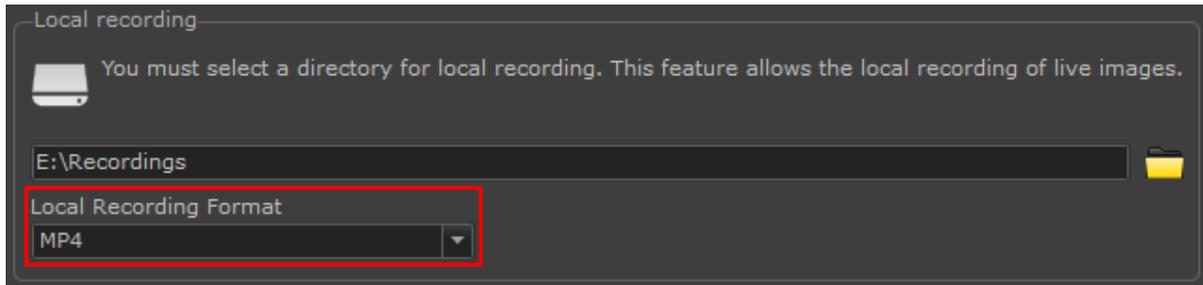
Initial Timeline Zoom 1 hour

Default

#### 4.1.55 Local recording in MP4

##### All editions

The Surveillance Client now allows local emergency recording to be saved in MP4 format, now providing 2 formats: Native and MP4. The ActiveX preview control also supports local recording in MP4.



#### 4.1.56 New Virtual Matrix right

##### Standard, Professional, Enterprise

The Virtual Matrix Use right has now been divided into 2 rights:

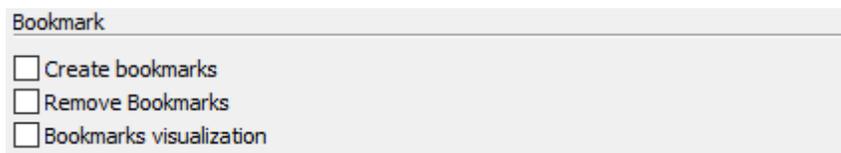
- Allow the Use of the Virtual Matrix - Right that allows the operator to send objects to the Virtual Matrix monitors (Right that already exists).
- Allow Joining the Virtual Matrix - Right that allows the operator to share the monitors of his workstation with the Virtual Matrix, expanding the Matrix (New Right).



#### 4.1.57 New right to Delete Bookmark

##### Professional, Enterprise

The system now has a new right to allow the user to delete Bookmarks. By default, the user who created a particular Bookmark already has the right to delete their Bookmark, this new right provides the possibility for a user to delete any Bookmark created by any user.

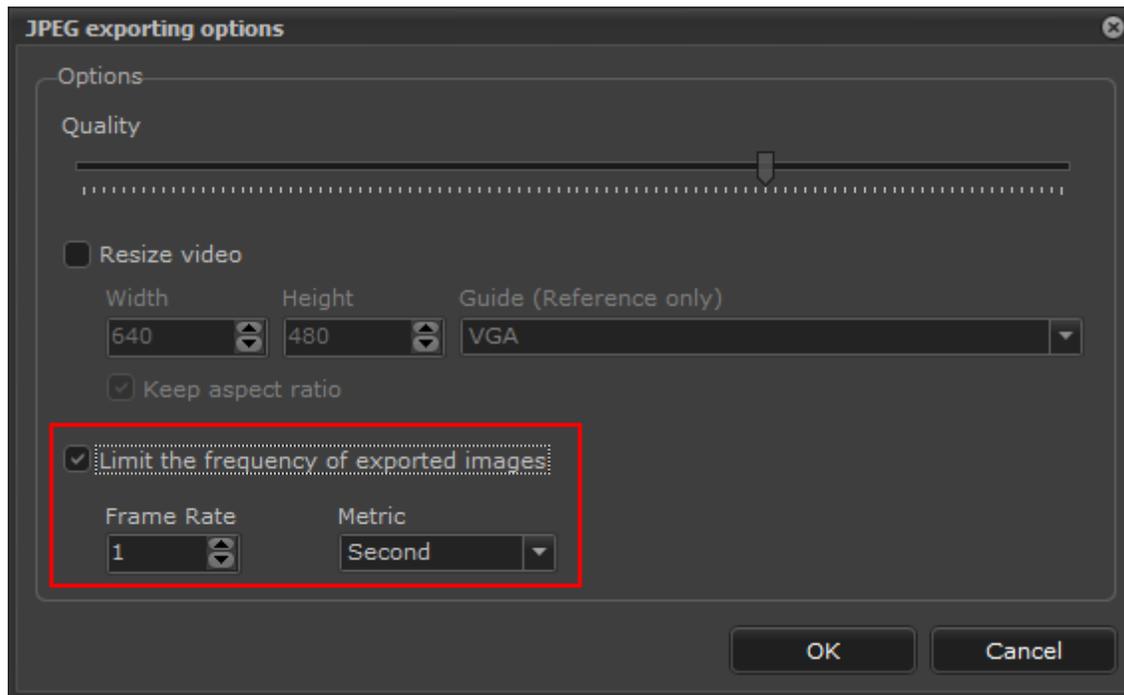


#### 4.1.58 JPEG export with Frame Rate limit

##### All editions

The Media Player in the Surveillance Client now allows you to limit the frequency of the images exported in JPEG, that is, from the recorded video it is possible to export, for example, 1 JPEG per Second, or 1 JPEG per Minute of video instead of exporting all images.

This feature is especially useful for the creation of "accelerated construction" videos, where the same location is recorded for months and a final video is generated with a condensate of all months being shown in a few minutes or seconds. This tool, however, provides only the JPEG images exported at the desired frequency and not an MP4 or AVI video.



#### 4.1.59 Special I/O driver for PING

##### Standard, Professional, Enterprise

A special "I/O Device" driver has been created for monitoring hosts via PING.

Through the "Generic Ping" model in the I/O Devices register, it is possible to monitor any IP or host (for equipment monitoring, for example) and configure alarms and events when the host goes offline. It is also possible to add the status of the hosts on a Synoptic Map.

The driver has 1 input port, and this port will reflect the ping status. If the door is CLOSED, the host is functioning, if the door is OPEN, the host is not accessible.

The "host not working" alarm can be configured through the Alarm Input Events (Using Port 1) or also through the Communication Failure and Communication Restored events in the "I/O Device" register.

I/O Device (Ping Digifort)

General I/O Events Scheduling

I/O device general data

Name: Ping Digifort Description: www.digifort.com

Manufacturer: Generic Generic

Model: Ping Firmware: 1.0

Inputs: 1 Outputs: 0 Virtual Ports

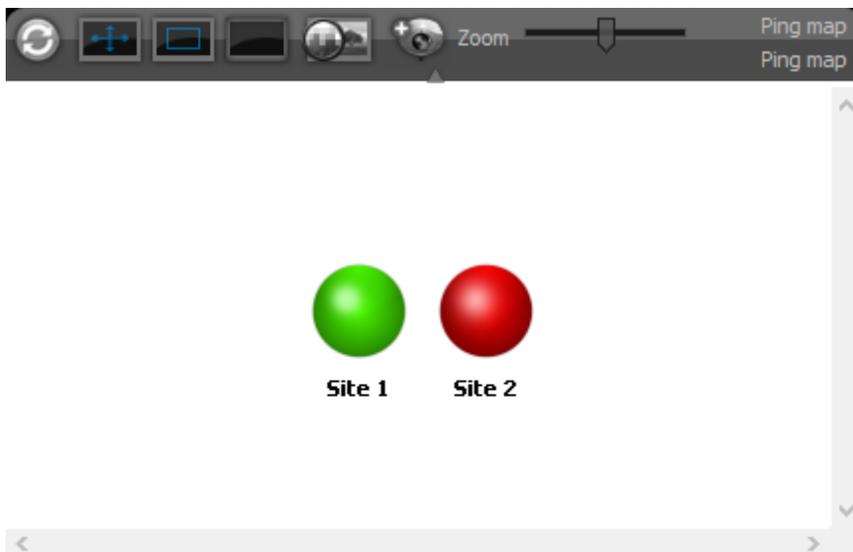
Connection address: www.digifort.com Port: 80 User: Password:

Latitude: 0.000000 Longitude: 0.000000

Activate device

OK Cancel

The image below exemplifies a simple use in the Synoptic Map to display the status of several hosts, in which case Site 1 is accessible and Site 2 is not accessible.



## 4.1.60 Special I/O driver for TCP Connection Test

### Standard, Professional, Enterprise

A special "I/O Device" driver has been created for monitoring hosts via TCP Connection.

Through the "Generic TCP Connection Test" model in the I/O Devices register, it is possible to monitor any TCP port (for monitoring equipment or services, for example) and configure alarms and events when the host goes offline. It is also possible to add the status of the hosts on a Synoptic Map.

The driver has 1 input port, and this port will reflect the status of the TCP Connection. If the door is CLOSED, the host is functioning, if the door is OPEN, the host is not accessible.

The out-of-order host alarm can be configured through the Alarm Input Events (Using Port 1) or also through the Communication Failure and Communication Restoration events in the "I/O Device" Register.

I/O Device (TCP 1)

General I/O Events Scheduling

I/O device general data

Name: TCP 1 Description: TCP connection test

Manufacturer: Generic

Model: TCP Connection Test Firmware: 1.0

Inputs: 1 Outputs: 0 Virtual Ports

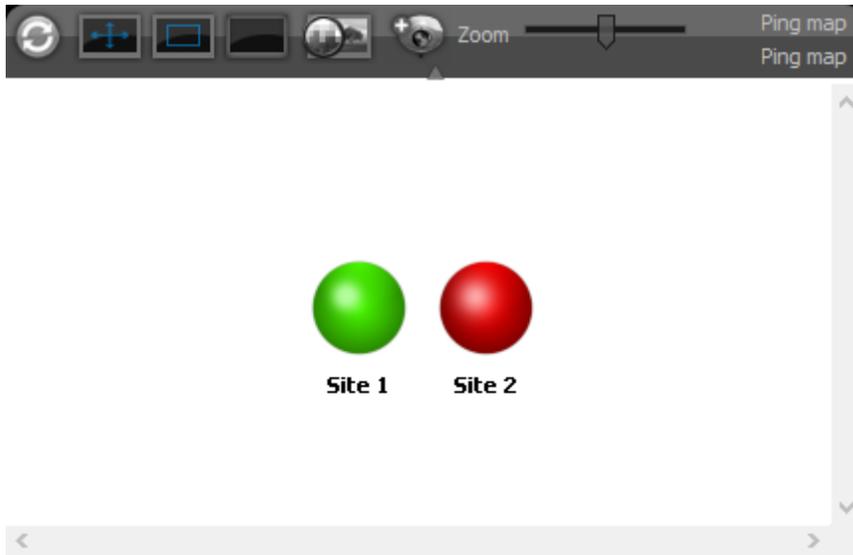
Connection address: 192.168.0.1 Port (80): 8610 User: Password:

Latitude: 0.000000 Longitude: 0.000000

Activate device

OK Cancel

The image below exemplifies a simple use in the Synoptic Map to display the status of several hosts, in which case Site 1 is accessible and Site 2 is not accessible.



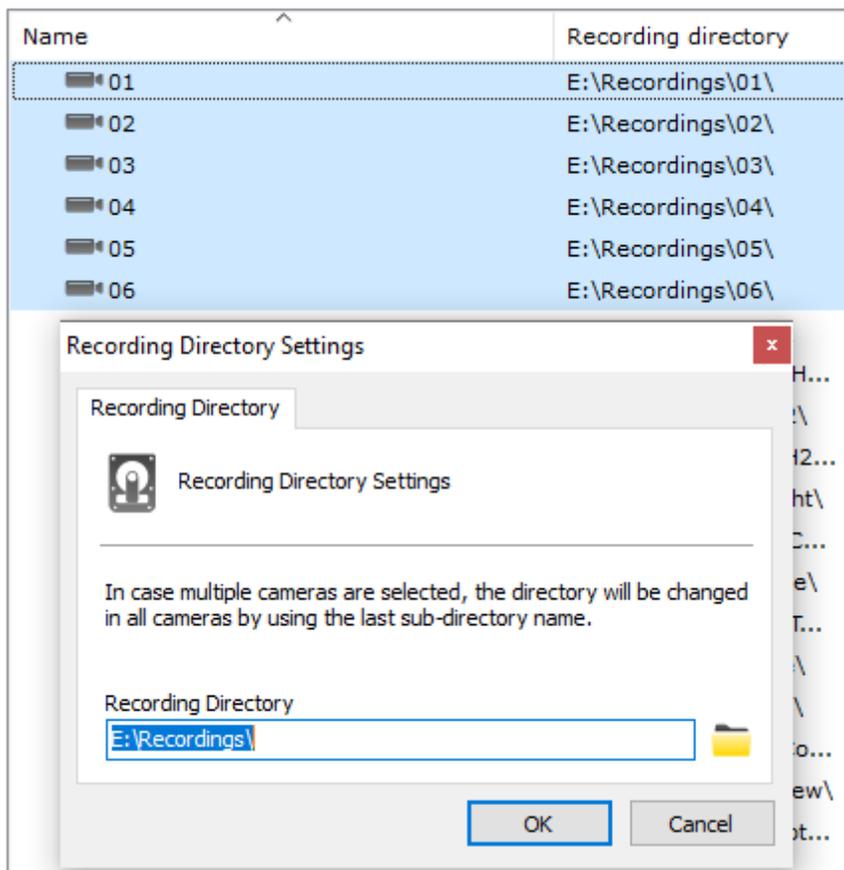
#### 4.1.61 Changing the recording directory of multiple cameras

##### All editions

The Administration Client now allows changing the root directory for recording multiple cameras simultaneously. To change the recording directory just select the cameras, right-click on the camera list and select "Recording Directory" from the popup context menu.

The system allows you to define a "Root" directory that will be used as the basis for all cameras. The name of the last subdirectory (usually the name of the camera) will be kept. For example, if the camera is currently being recorded in "E:\Recordings\01" and you want to change it to "E:\NewRecordings", the system will change the directory of this specific camera to "E:\NewRecordings\01", and so on for all selected cameras.

It is important to note that changing the directory will not move recordings from old directories to new ones, this procedure must be done manually, with the server service stopped.



#### 4.1.62 New bulk configuration options for cameras

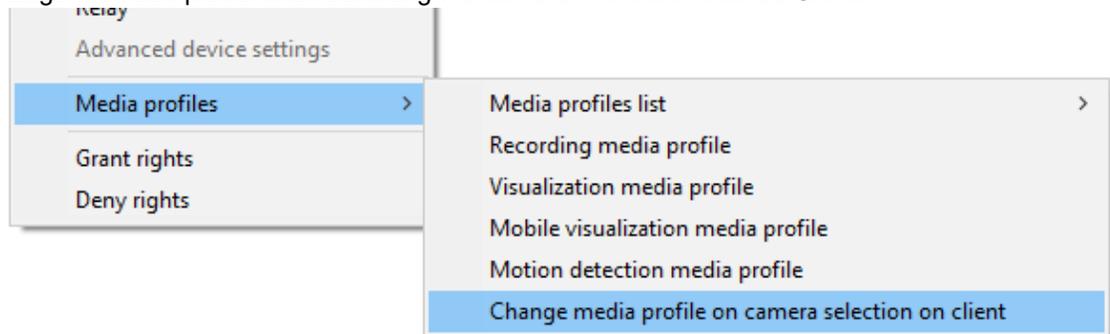
##### All editions

Registering cameras in the Administration Client now provides new options for mass configuration of cameras:

- [Change recording directory](#)
- PTZ Options: Enable / Disable, Operation Schedule, Usage Notification, Auto Unlock

Name	Description	Recording directory
Client parking 1		E:\Recordings\01\
People Counter Teste (01)		E:\Recordings\02\
Entrada Corredor 1		E:\Recordings\03\
Entrance micro camera		E:\Recordings\04\
Entrada Garagem		E:\Recordings\05\
Recepção		E:\Recordings\06\
Axisw		E:\Recordings\Axis\
Axis Horn		E:\Recordings\Axis H...
Axis2		E:\Recordings\Axis2\
Axis H265		E:\Recordings\AxisH2...
Digifort Insight		E:\Recordings\Insight\
		E:\Recordings\PR C...
		W1\
		Mobile\
		E:\Recordings\VLC T...
teste		E:\Recordings\Teste\
Teste		E:\Recordings\Local\
teste		E:\Recordings\JFL-Co...
Uniview		E:\Recordings\Uniview\
videotec		E:\Recordings\Videot...

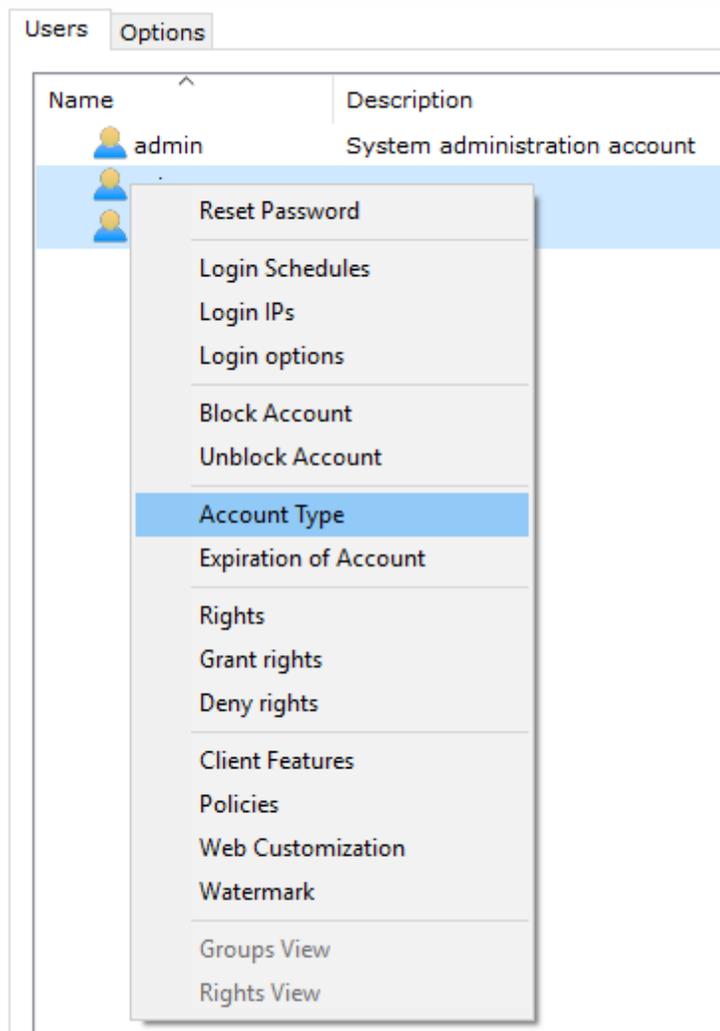
- Change the video profile when selecting the camera in the Surveillance Client:



#### 4.1.63 Changing the user type of multiple users

##### Professional, Enterprise

It is now possible to change the type of user account (Between Native and Active Directory) for multiple users selected in the Administration Client's user registry.



#### 4.1.64 Fisheye / Panomorph in 64bit

##### All editions

The Fisheye and Panomorph dewarping libraries have been updated to work on the 64-bit Surveillance Client

#### 4.1.65 API with JSON response

##### All editions

The system API now supports data return in JSON format.

#### 4.1.66 ONVIF Profile G

##### All editions

The system now supports ONVIF Profile G with support for Edge Recording and Edge Playback.

### 4.1.67 ONVIF Profile T

#### All editions

The system now supports ONVIF Profile T with support for H.265 streaming, device configuration, HTTPS, analytics metadata and bi-directional audio.

### 4.1.68 Automatic database maintenance

#### All editions

The system now has automatic database maintenance. Maintenance can be scheduled to run weekly or monthly and set up to recompute indexes and clear old filter records. The recomputation of the indexes is essential to maintain the high performance of the database.

General Recordings Master / Slave Multicast Backup Database SMTP settings Disk Limits Network Units

**Recompute Indexes**  
The task of recomputing indexes should be performed periodically to improve database performance.

Progress (Stopped)

Start Stop

Last Run Date: 1/20/2020 3:25:25 PM

**Purge Old Search Filters**  
Old search filters are records of deleted system objects that appear as a filtering option in search screens.

Progress (Stopped)

Start Stop

Last Run Date: 1/20/2020 3:25:22 PM

**Automatic Maintenance Scheduling**

Recompute Indexes  
 Purge Old Search Filters

Scheduling  
Weekly

Monday  
 Tuesday  
 Wednesday  
 Thursday  
 Friday  
 Saturday  
 Sunday

Save Settings

\* The scheduled tasks will run before the database backup

### 4.1.69 Playback block in Privacy Mode

#### Professional, Enterprise

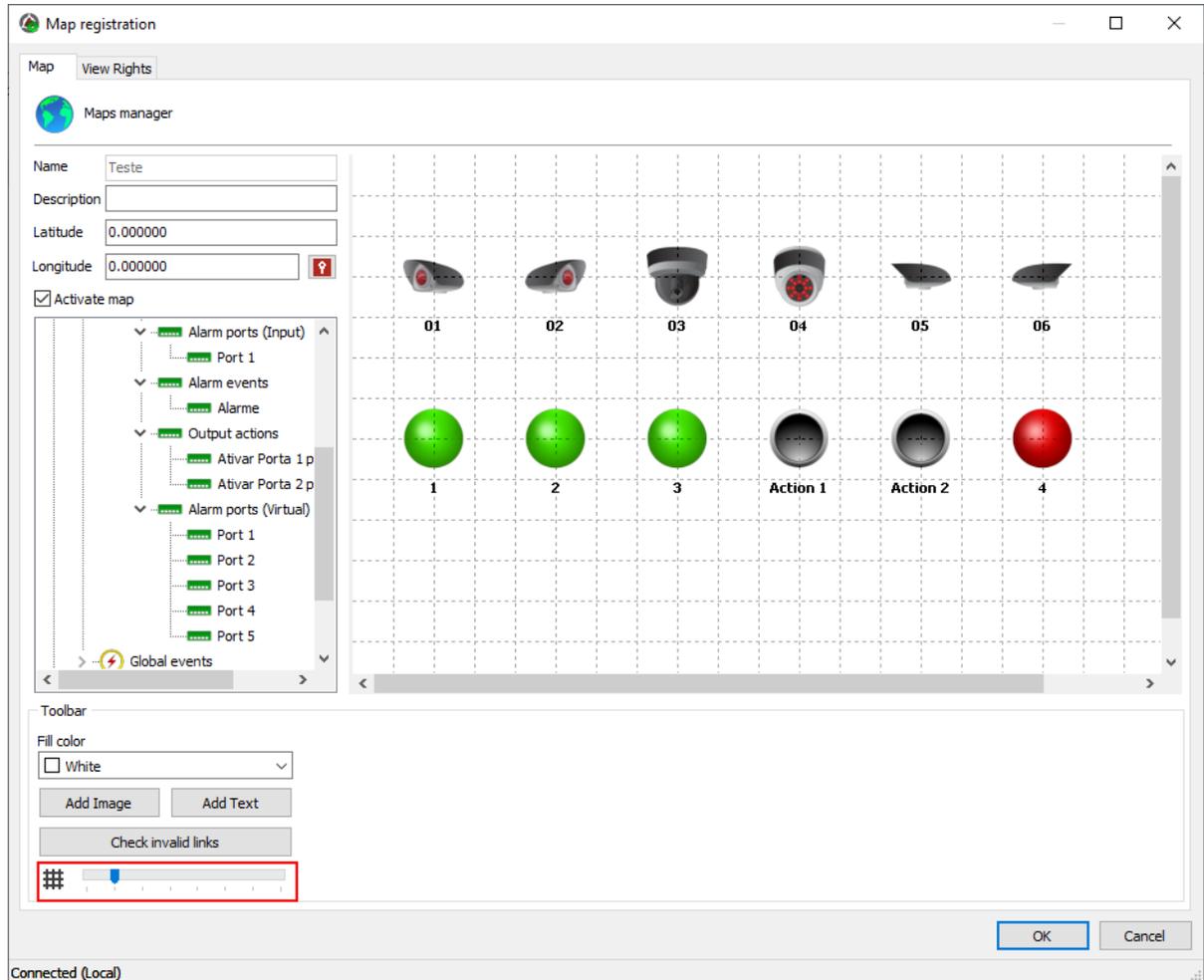
Privacy Mode, when active, will now also block playback from the blocked camera. Previously only live

view was blocked.

#### 4.1.70 Alignment grid in synoptic map editor

##### Standard, Professional, Enterprise

The Synoptic Map Editor in the Administration Client now allows you to display an alignment grid for better map design. The grid will be displayed only in the editor and can be adjusted for greater or lesser accuracy.



#### 4.1.71 Status of objects on the synoptic map

##### Standard, Professional, Enterprise

The device status identifier on the synoptic maps has now been changed to reflect the current recording state.



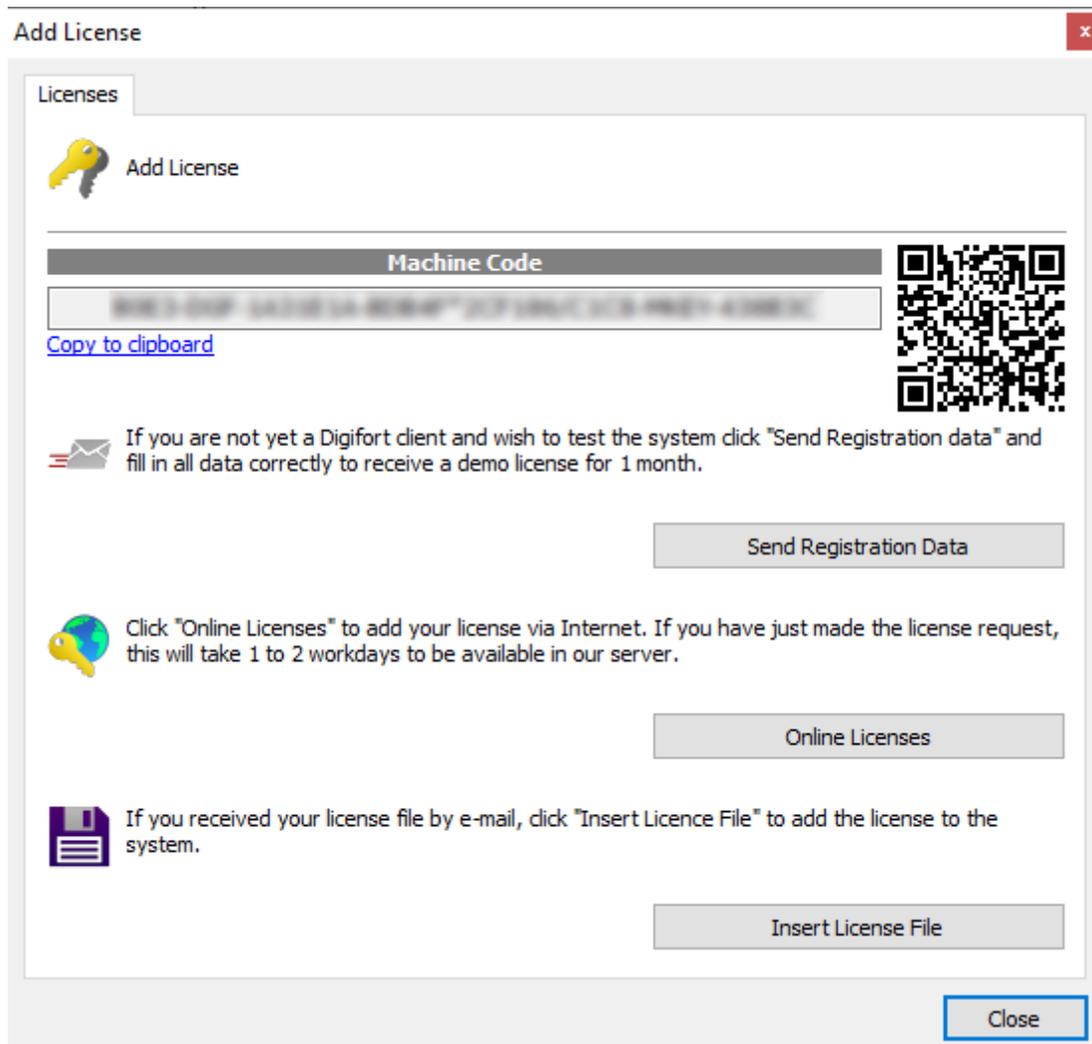
- Identifies that the device is working and currently writing to disk
- Identifies that the device is working but is not currently writing to disk
- ⊘ Identifies that the device is out of order

The absence of a status identifier indicates that the device is disabled.

#### 4.1.72 Machine Code with QRCode

##### All editions

The licensing screen now has a QRCode to facilitate sending the password for servers without Internet access to our licensing team.

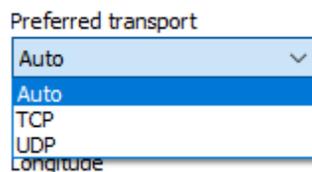


#### 4.1.73 Preferred transport option for connecting to cameras

##### All editions

In the registration of the system cameras, it is now possible to specify the preferred type of transport between the camera and the server:

- Auto - Transport used will generally be TCP, unless during the integration of the device the performance was not satisfactory, so the transport will be done by UDP
- TCP - Transport will be done by TCP when possible
- UDP - Transport will be done by UDP when possible



This option is a transport preference and not mandatory, that is, even configuring specifically in TCP or

UDP, the system will not necessarily follow the configuration, as the device's media driver must support the desired protocol.

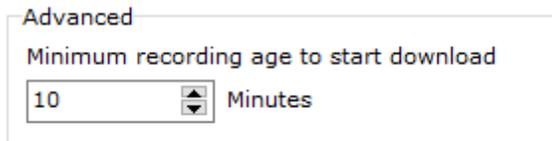
#### 4.1.74 Minimum download time for Edge Recording Self Healing

##### Enterprise

The system now allows the adjustment of the minimum age of the recording to start the download via Edge Recording for "Self Healing" option. This value was pre-fixed at 10 minutes and it was not possible to change it.

When the Edge Recording system has a task (Download a recording), it will wait until the end time of this recording has at least X minutes (configured) to start the download, this is because it has been identified that some cameras need a longer time to close the recording file and if the system tries to download a period when the camera is not yet closed, it will return that there are no recordings.

Example: A task to download a video from 13:00:00 to 14:00:00 from a specific camera will start only at 14:10:00 to provide enough time for the camera to close the recording file.

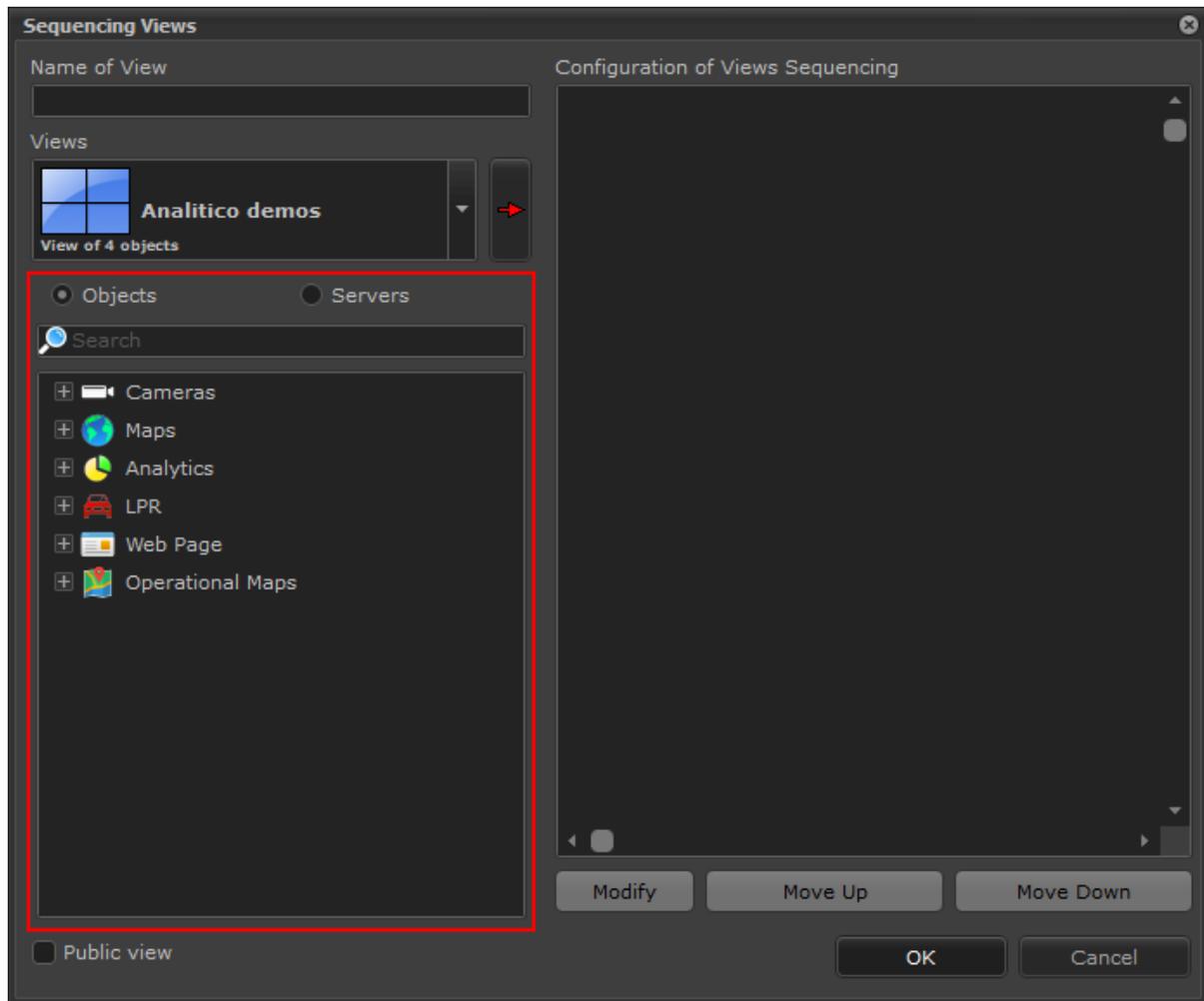


Advanced  
Minimum recording age to start download  
10 Minutes

#### 4.1.75 Improvement in the registration of Timer Views

##### All editions

The controls for the registration of timer views in the Surveillance Client have been improved to provide the standard list of objects for selecting and filtering objects, facilitating the registration of the views. Previously, a "Combo Box" was used for each type of object, and it was not allowed to filter objects.

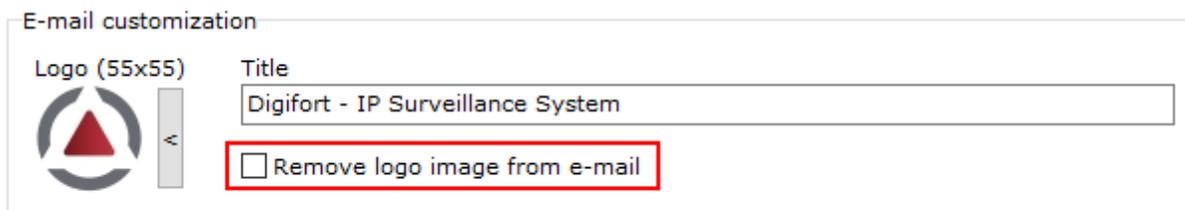


#### 4.1.76 Option to remove the logo from alert emails

##### All editions

The system now allows you to remove the logo from the alert emails sent by the server.

This function is particularly useful for integration with systems that receive e-mail and collect alarm images, because when removing the logo, these external systems will extract only the alert images from the cameras, since the logo will not be added to e-mail.



#### 4.1.77 Sender of alert emails

##### All editions

The system now allows the configuration of the sender's name for alert emails. Previously the name "Digifort - Alerts" was used in a fixed way.

From (Name):

Digifort - Alerts

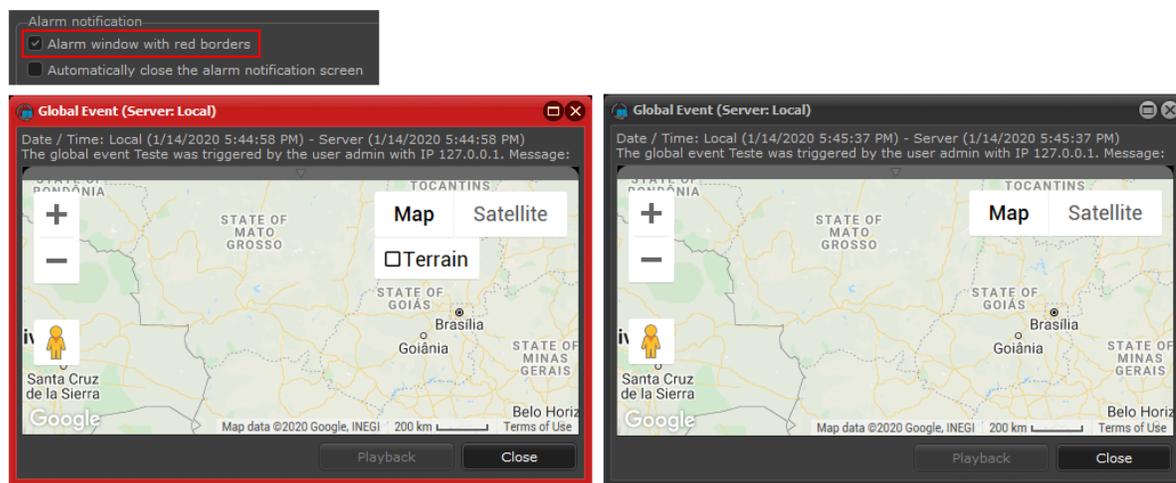
From (E-Mail):

digifort@digifort.com

#### 4.1.78 Alarm popup border color

All editions

The Surveillance Client now provides the option for alarm popups to have a red or normal border.



#### 4.1.79 Do not display server alert messages

All editions

The Surveillance Client now provides an option (Accessible in the Server Register) to disable alert messages sent by the server. Messages such as license warning and database alert will not be displayed if this option is enabled.

This option is particularly useful when the Surveillance Client is running on video wall stations, as these stations generally work without human interference and an alert message displayed on these stations would need to be closed manually.

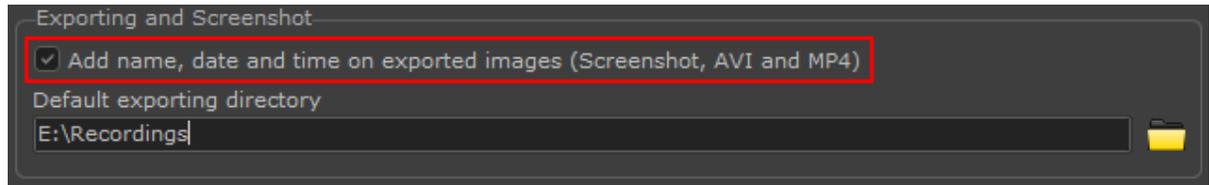
Do not display server alert messages

#### 4.1.80 Camera information in snapshots and export

All editions

The Surveillance Client now provides an option to add (or remove) the camera name, date and time to the exported image. Previously this information was added by default in exported images and in export in AVI / MP4.

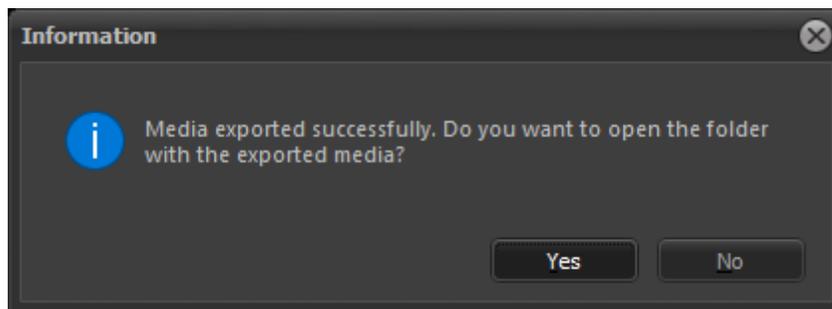
For MP4 exporting, even if you activate this option, it may not be added to the final video if the original image to be exported is recorded in H.264, if the original video is in any other format or the option to Transcode to H.264 is activated during export to MP4, then the information will be rendered. This is due to the optimization of export to MP4 where it is not necessary to transcode the original video if it is already in the native H.264 format.



#### 4.1.81 Open folder at the end of export

##### All editions

At the end of a video export in the Surveillance Client's Media Player, the system will now display a message providing the option to open the exported video folder in Windows Explorer.



#### 4.1.82 Visual Joystick zoom button size

##### All editions

The size of the Visual Joystick zoom button in the Surveillance Client can now be increased by up to 300% to optimize use on Windows tablets.





#### 4.1.83 MxPEG for Mobotix cameras

##### All editions

Integrated new MxPEG video codec for Mobotix cameras

#### 4.1.84 Support for P2P services

##### All editions

The system is now able to access cameras via P2P services from camera manufacturers via the new "Device Cloud Bridge" service with a separate installation package.

Supported P2P services:

- Hikconnect
- IBCloud

#### 4.1.85 Server connection verification time

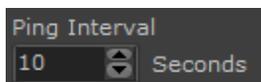
##### All editions

The Surveillance Client now allows the specification of the "Ping" interval value between the Client and the Server.

This value is used to verify that the server is still available and functioning, if the server does not respond to the Client's ping message, then the connection will be terminated and restarted.

In case of using Failover servers, use lower values for the client to identify more quickly in case the main server becomes unavailable, so the change to the Failover server will occur faster.

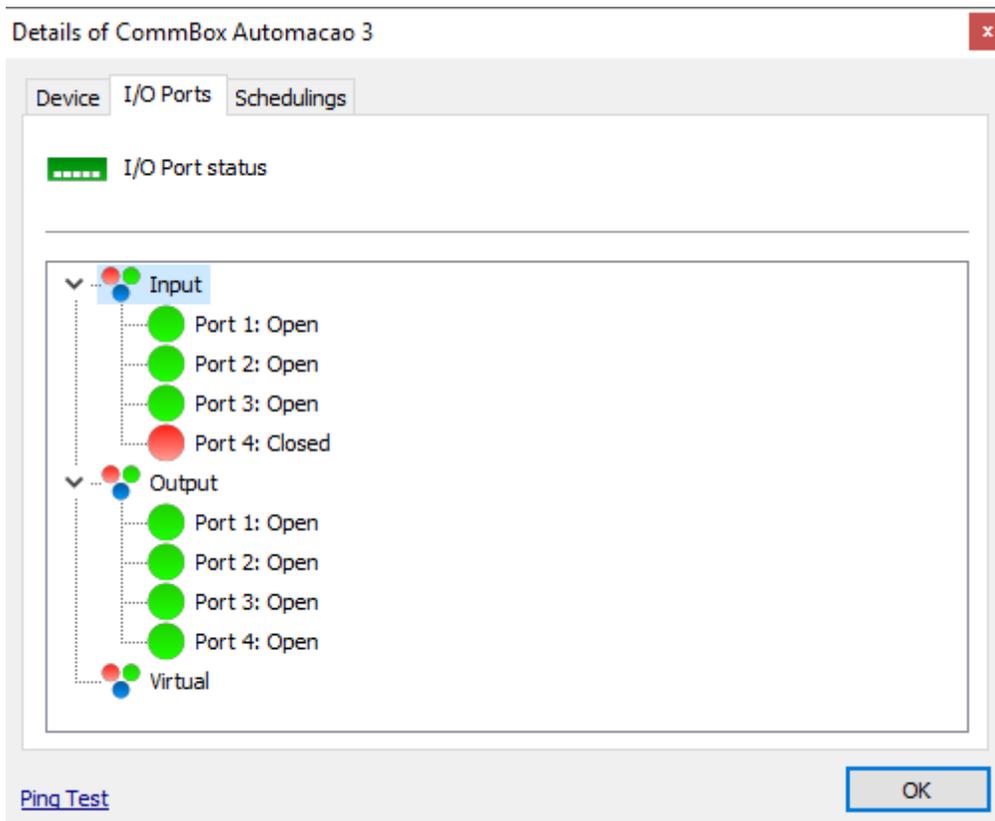
This configuration is found in the server register, in the Surveillance Client settings.



#### 4.1.86 Status of output and virtual ports on the Administration Client

##### Standard, Professional, Enterprise

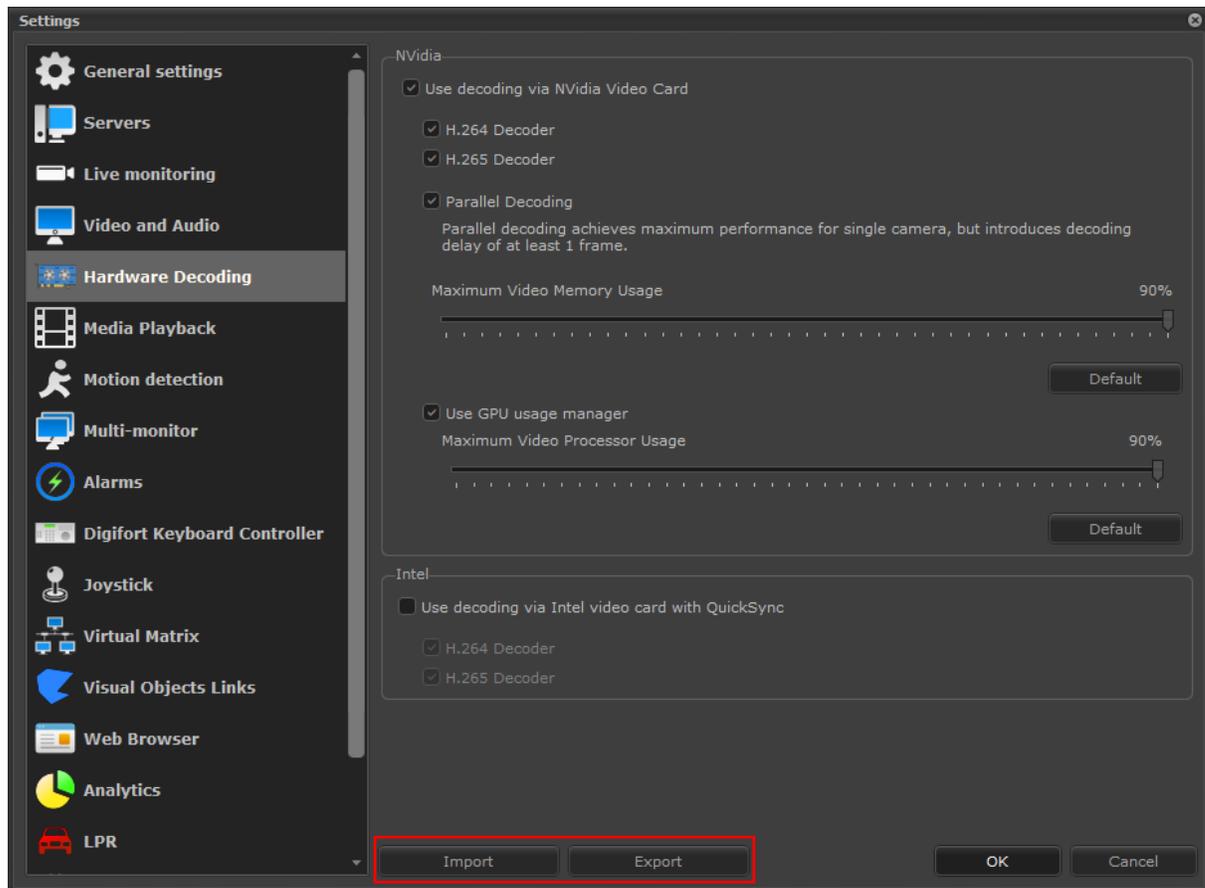
It is now possible to view the status of the output I/O ports and virtual ports for Cameras and I/O Devices in the Administration Client.



#### 4.1.87 Import / Export Surveillance Client settings

##### All editions

The Surveillance Client settings can now be exported and imported from .ini files. With this it is possible to create a configuration template to upload to other monitoring stations. It is also possible to export and import the server list (The server list is treated separately from the settings).



#### 4.1.88 License expiration during business hours

##### All editions

When the system is running with a temporary license, the license will now expire only during business hours (Between 9:00 am and 4:00 pm, Monday through Thursday). This prevents the system from stopping (due to expired license) at inconvenient times.

Attention: If the license is already expired and the server is restarted after hours (For example, during the weekend), when loading the server again, the licenses will not be loaded.

#### 4.1.89 Exporting audio to MP4 through API

##### All editions

Exporting video in MP4 format via API now also supports audio.

#### 4.1.90 Timer Views and Screen Style Editor for all editions

##### All editions

The Timer View and Screen Style Editor features are now available for all editions of the system.

## 4.1.91 Features added in all editions

### All editions

The following features have been added in all editions of the software:

- Advanced Video Playback Search
- PTZ control by USB Joystick
- Recording Schedule
- Motion Detection Event
- Event Action to Show Objects
- Event Action to Call Presets
- Live Motion Detection Filter
- Image Filters
- Image Printing in Video Playback

## 4.1.92 LPR

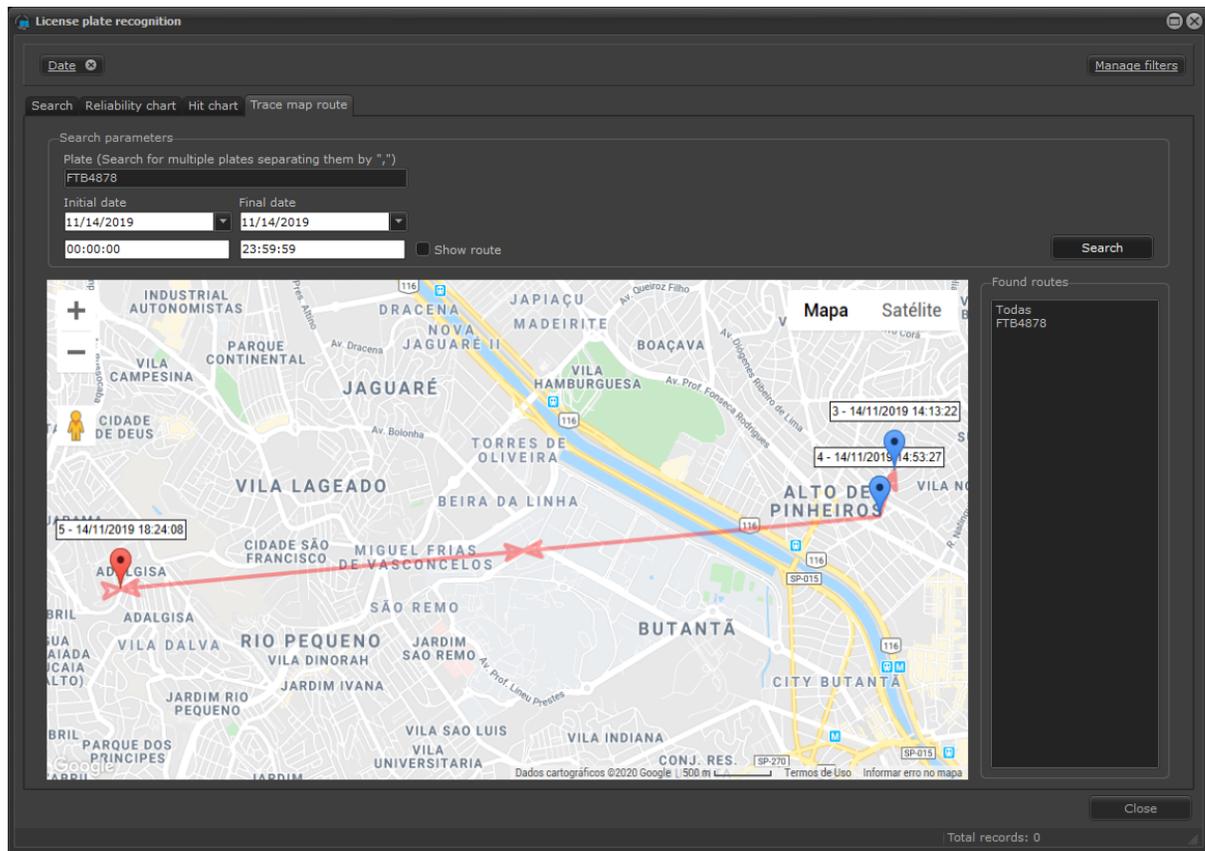
### 4.1.92.1 Plate Trace with Google Maps

#### Standard, Professional, Enterprise

The LPR records query system in the Surveillance Client now has integration with Google Maps, allowing you to display all the recognition points of a plate on the map, just by registering the GPS position of the LPR cameras.

The screen for plotting the LPR route will display all the points at which the plates informed in the search were found in the specified period and will connect the points through the time, and it is also possible to use the Google Maps route engine and plot a route between the recognized points, however for this feature to work correctly it is necessary that the plate has been recognized in several cameras to generate greater precision of the route.

This is an excellent feature for LPR installations in smart cities.



To see this new feature in action visit the videos available on our YouTube channel: <http://www.youtube.com/DigifortChannel>

[https://www.youtube.com/watch?v=gC7U1GKiRdc&list=PLFIhAF6oQd\\_rJv3wEWHB8f0ZuzruvOS](https://www.youtube.com/watch?v=gC7U1GKiRdc&list=PLFIhAF6oQd_rJv3wEWHB8f0ZuzruvOS)

#### 4.1.92.2 Show plate cropping in results

##### Standard, Professional, Enterprise

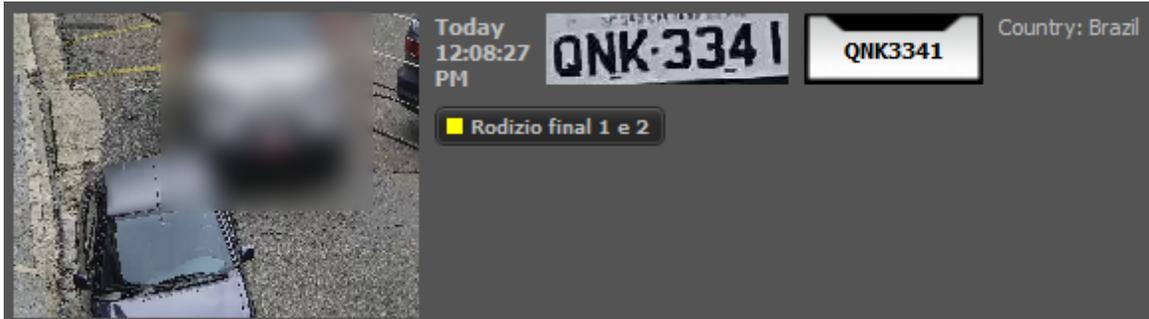
The LPR record viewer (Live and Search) now allows the display of the recognized plate cutout.

In live records, the system allows you to choose between the cropping of the image or the virtual representation of the plate:

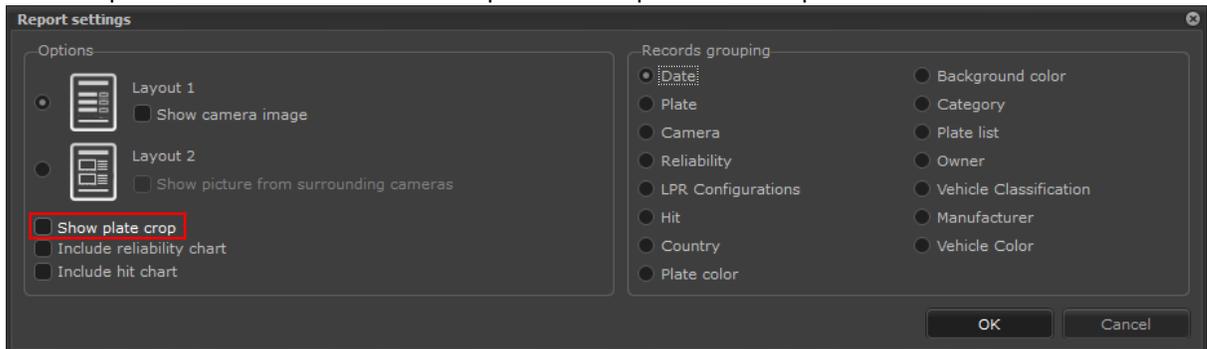




In the details of a record in the LPR record search, it is possible to configure the display of both the card cutout and the virtual plate:



It is also possible to add the cutout of the plates in the printed LPR reports:



**LICENSE PLATES LISTING**

1/17/2020

Date	License Plate	Country	Settings (Camera)	Lists	Owner	Camera
	QNK3341	Brazil	LPR - Frente Digifort	Rodizio final 1 e 2		

Total from group: 1

Total: 1

■ High reliability  
■ Medium reliability  
■ Low reliability  
■ No reliability

Authentication code



555C-7D7D-0A2E-30BE-97B0-73F4-3FDE-447A

Digifort - IP Surveillance System  
 Issue date: 1/17/2020 10:15:22 AM  
 Page 1 / 1

#### 4.1.92.3 Country recognition support

##### Standard, Professional, Enterprise

The system now supports the recognition of the country of the recognized cards (if the LPR engine used supports this feature). The country will be added to the recognition results and can also be filtered through the new country filter.

License plate recognition

Date Manage filters

Search Reliability chart Hit chart Trace map route

License Plate	Date	Camera	LPR configuration	Country	Reliability	Hit	Lists	Owner
	1/17/2020 8:22:37 AM			Brazil	High	Hit	Rodizio final 9 e 0	
	1/17/2020 8:24:11 AM			Brazil	High	Hit	Rodizio final 5 e 6	
	1/17/2020 8:25:27 AM			Brazil	High	Hit	Rodizio final 7 e 8	
	1/17/2020 8:26:11 AM			Brazil	High	Hit	Rodizio final 5 e 6	
	1/17/2020 8:28:39 AM			Brazil	High	Hit	Rodizio final 7 e 8	
	1/17/2020 8:29:18 AM			Brazil	High	Hit	Rodizio final 1 e 2	
	1/17/2020 8:29:35 AM			Brazil	High	Hit	Rodizio final 3 e 4	
	1/17/2020 8:30:27 AM			Brazil	High	Hit	Rodizio final 9 e 0	
	1/17/2020 8:30:48 AM			Brazil	High	Hit	Rodizio final 5 e 6	
	1/17/2020 8:31:15 AM			Brazil	High	Hit	Rodizio final 5 e 6	
	1/17/2020 8:32:32 AM			Brazil	High	Hit	Rodizio final 7 e 8	
	1/17/2020 8:33:01 AM			Brazil	Medium	Hit	Rodizio final 5 e 6	
	1/17/2020 8:33:24 AM			Brazil	High	Hit	Rodizio final 1 e 2	
	1/17/2020 8:33:25 AM			Brazil	Medium	Hit	Rodizio final 9 e 0	
	1/17/2020 8:34:22 AM			Brazil	High	Hit	Rodizio final 1 e 2	
	1/17/2020 8:34:42 AM			Brazil	High	Hit	Rodizio final 3 e 4	
	1/17/2020 8:36:16 AM			Brazil	Medium	Hit	Rodizio final 9 e 0	
	1/17/2020 8:37:02 AM			Brazil	High	Hit	Rodizio final 9 e 0	
	1/17/2020 8:37:27 AM			Brazil	High	Hit	Rodizio final 3 e 4	
	1/17/2020 8:37:29 AM			Brazil	High	Hit	Rodizio final 3 e 4	
	1/17/2020 8:37:35 AM			Brazil	High	Hit	Rodizio final 7 e 8	
	1/17/2020 8:37:44 AM			Brazil	Low	Uncertainty	Rodizio final 7 e 8	
	1/17/2020 8:37:45 AM			Brazil	Medium	Hit	Rodizio final 7 e 8	
	1/17/2020 8:40:30 AM			Brazil	High	Hit	Rodizio final 5 e 6	
	1/17/2020 8:40:43 AM			Brazil	High	Hit	Rodizio final 7 e 8	
	1/17/2020 8:42:15 AM			Brazil	High	Hit	Rodizio final 1 e 2	

Search Report Print Video

Details of the selected record

Search complete Total records: 362

Manage filters

Available filters	Selected filters
<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> 31 Date</li> <li><input type="checkbox"/> ABC License plates</li> <li><input type="checkbox"/> Speed</li> <li><input type="checkbox"/> Cameras</li> <li><input type="checkbox"/> LPR Configurations</li> <li><input type="checkbox"/> ABC Categories</li> <li><input type="checkbox"/> Classifications</li> <li><input type="checkbox"/> Manufacturers</li> <li><input type="checkbox"/> Colors</li> <li><input checked="" type="checkbox"/> Countries</li> <li><input type="checkbox"/> ABC Lists</li> <li><input type="checkbox"/> ABC Reliability</li> <li><input type="checkbox"/> Owner</li> <li><input type="checkbox"/> Servers</li> </ul>	<ul style="list-style-type: none"> <li>Brazil</li> </ul>

OK Cancel

#### 4.1.92.4 Plate color recognition

Standard, Professional, Enterprise

The system now supports the recognition of the color of the recognized plates (If the LPR engine used

supports this feature). The plate color will be added to the recognition results and can also be filtered through the new plate color filter.

**NOTE:** Currently the only engine that supports plate colors is the ARH Carmen engine for plates from the Middle East. If engine manufacturers support plate color recognition for other countries, the system structure is ready to receive this information.

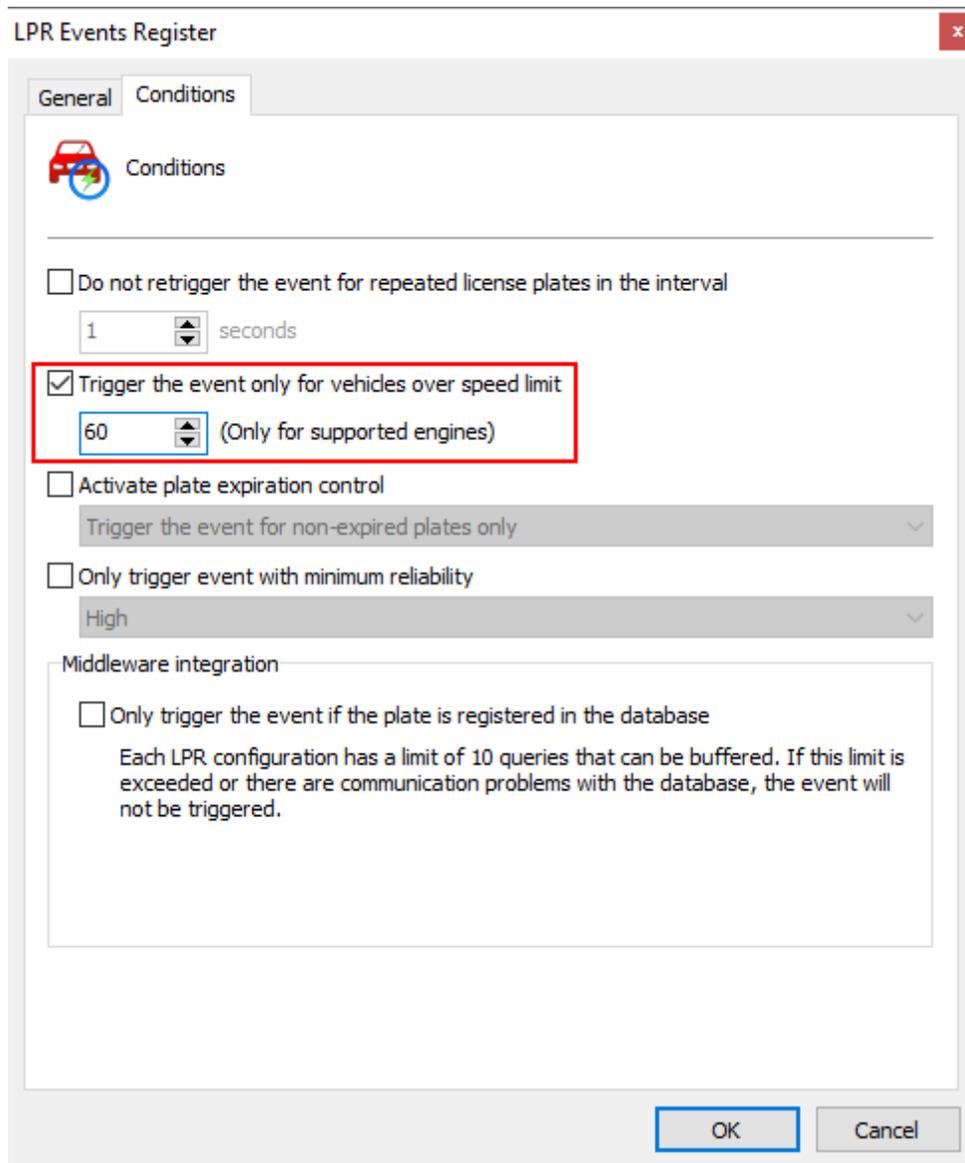
#### 4.1.92.5 Vehicle speed recognition

##### **Standard, Professional, Enterprise**

The system now supports vehicle speed recognition (if the LPR engine used supports this feature). The vehicle speed will be added to the search results and the system also provides a filter for records with speed.

**OBS:** Currently the only way to process the vehicle speed is through the use of Edge LPR with ARH LPR cameras with integrated speed camera. If engine manufacturers support vehicle speed recognition, the system structure is ready to receive this information.

When configuring LPR events, the system also allows you to create a condition where the event will only be triggered if the vehicle is recognized at a speed above the configured speed, allowing you to create high speed alarms:



LPR Events Register

General Conditions

Conditions

Do not retrigger the event for repeated license plates in the interval

1 seconds

Trigger the event only for vehicles over speed limit

60 (Only for supported engines)

Activate plate expiration control

Trigger the event for non-expired plates only

Only trigger event with minimum reliability

High

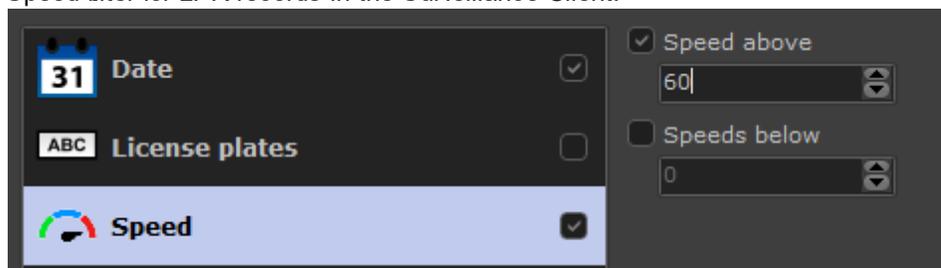
Middleware integration

Only trigger the event if the plate is registered in the database

Each LPR configuration has a limit of 10 queries that can be buffered. If this limit is exceeded or there are communication problems with the database, the event will not be triggered.

OK Cancel

Speed filter for LPR records in the Surveillance Client:



31 Date

ABC License plates

Speed

Speed above

60

Speeds below

0

#### 4.1.92.6 Vehicle type recognition

Standard, Professional, Enterprise

The system now supports vehicle type recognition (if the LPR engine used supports this feature). The

vehicle type will be added to the recognition results and can also be filtered through the new vehicle type filter.

**NOTE:** Currently the only way to process the vehicle type is through the use of Edge LPR together with Neural Labs Neural Server software. If the engine manufacturers support the vehicle type recognition natively in the LPR engine, the system structure is ready to receive this information.

License plate recognition

Classifications

Search Reliability chart Hit chart Trace map route

License Plate	Date	Camera	LPR configuration	Country	Reliability	Hit	Classification	Manufacturer	Vehicle Color
	11/1/2019 9:10:27 AM		Neural Server	Brazil	Low	Uncertainty	Car	RENAULT	
	11/1/2019 9:10:57 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:11:10 AM		Neural Server	Brazil	Medium	Hit	Car	FORD	
	11/1/2019 9:11:17 AM		Neural Server	Brazil	Low	Uncertainty	Car	FORD	
	11/1/2019 9:14:23 AM		Neural Server	Brazil	Medium	Hit	Car	LAND ROVER	
	11/1/2019 9:15:37 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET	
	11/1/2019 9:17:38 AM		Neural Server	Brazil	High	Hit	Car	VOLKSWAGEN	
	11/1/2019 9:17:47 AM		Neural Server	Brazil	Medium	Hit	Car	NISSAN	
	11/1/2019 9:18:09 AM		Neural Server	Brazil	Low	Uncertainty	Car	VOLKSWAGEN	
	11/1/2019 9:18:51 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:19:03 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	
	11/1/2019 9:19:37 AM		Neural Server	Brazil	High	Hit	Car		
	11/1/2019 9:21:14 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:21:23 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT	
	11/1/2019 9:22:49 AM		Neural Server	Brazil	Low	Uncertainty	Car		
	11/1/2019 9:24:01 AM		Neural Server	Brazil	High	Hit	Car	RENAULT	
	11/1/2019 9:24:07 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:25:13 AM		Neural Server	Brazil	High	Hit	Car		
	11/1/2019 9:25:38 AM		Neural Server	Brazil	Medium	Hit	Car	RENAULT	
	11/1/2019 9:25:51 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	
	11/1/2019 9:26:00 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:26:05 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:26:05 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:28:50 AM		Neural Server	Brazil	Medium	Hit	Car		
	11/1/2019 9:29:12 AM		Neural Server	Brazil	Medium	Hit	Car	VOLKSWAGEN	
	11/1/2019 9:29:17 AM		Neural Server	Brazil	High	Hit	Car	VOLKSWAGEN	

Search

Details of the selected record

Report Print Video

Search complete Total records: 2460

Manage filters

Available filters

- Date
- License plates
- Speed
- Cameras
- LPR Configurations
- Categories
- Classifications
- Manufacturers
- Colors
- Countries
- Lists
- Reliability
- Owner
- Servers

Selected filters

- Motorbike
- Car

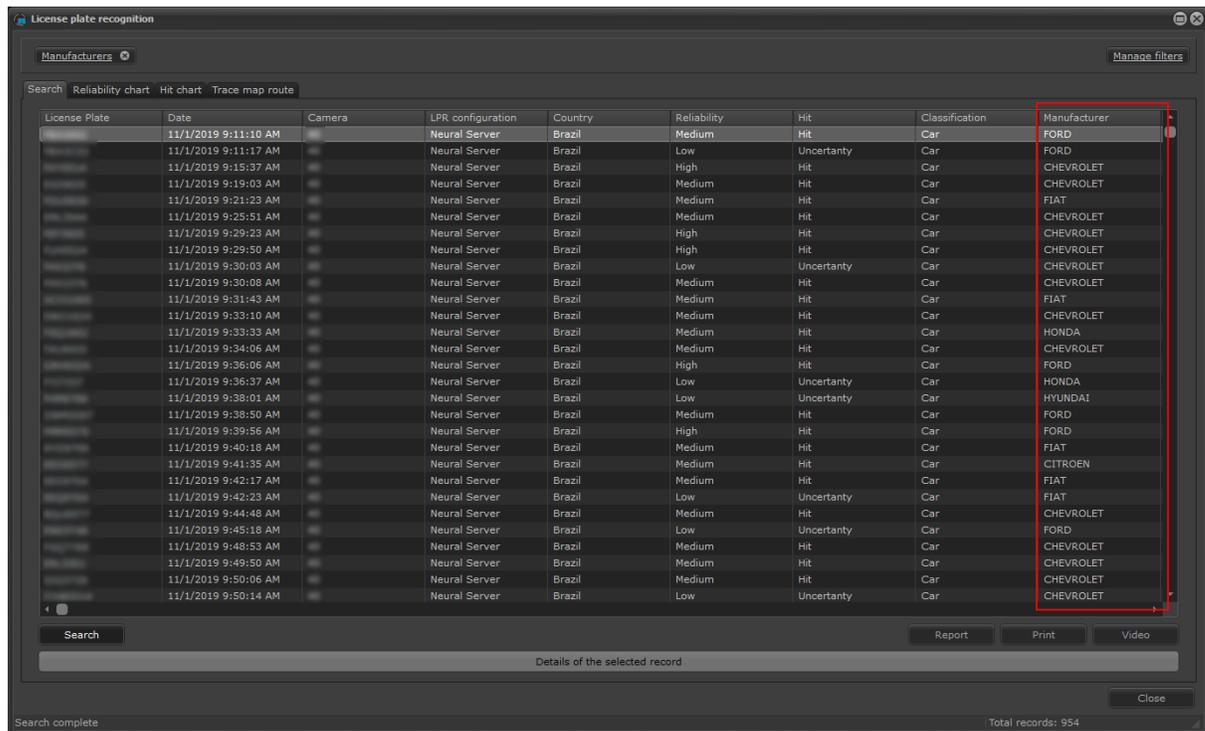
OK Cancel

#### 4.1.92.7 Vehicle manufacturer recognition

##### Standard, Professional, Enterprise

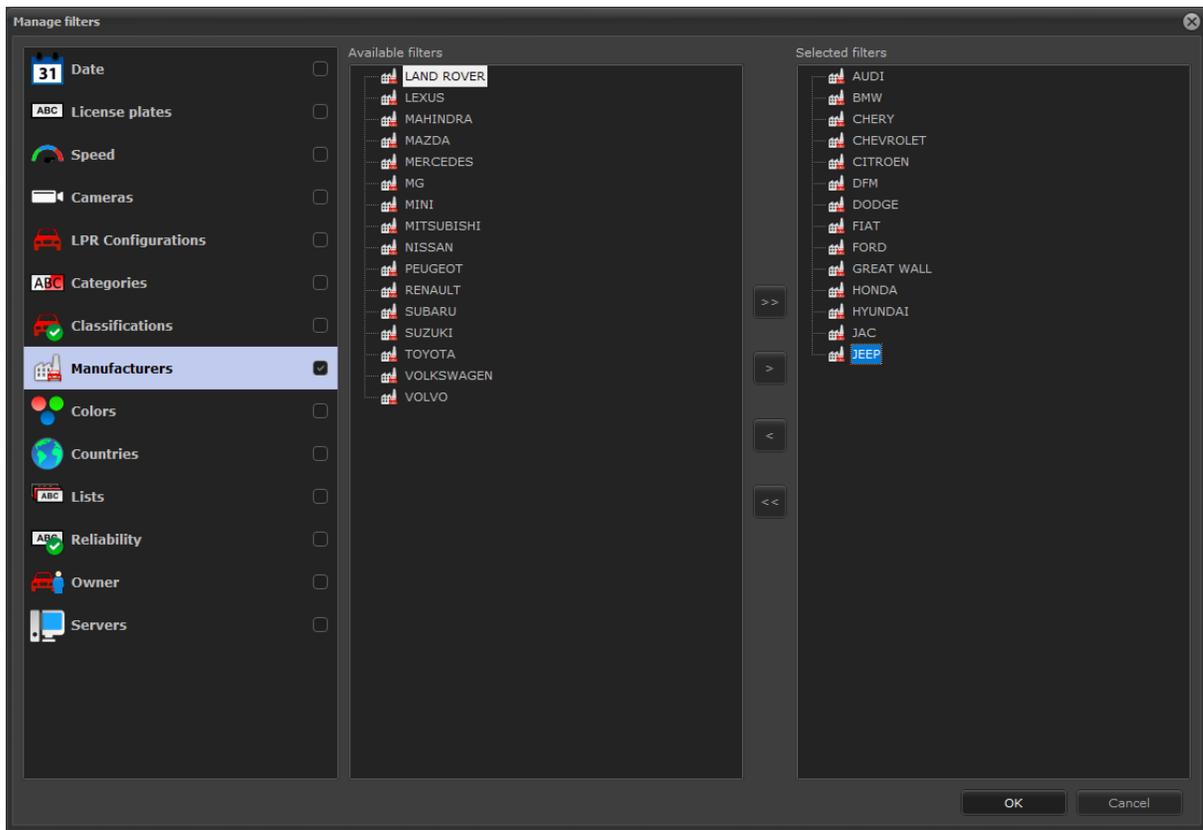
The system now supports the vehicle manufacturer's recognition (if the LPR engine used supports this feature). The vehicle manufacturer will be added to the recognition results and can also be filtered through the new vehicle manufacturer filter.

**NOTE:** Currently the only way to sue the vehicle manufacturer is through the use of Edge LPR together with Neural Labs Neural Server software. If the engine manufacturers support the vehicle manufacturer's recognition natively in the LPR engine, the system structure is ready to receive this information.



The screenshot displays the 'License plate recognition' window. At the top, there are tabs for 'Manufacturers', 'Reliability chart', 'Hit chart', and 'Trace map route'. Below these is a search bar and a 'Manage filters' button. The main area contains a table with the following columns: License Plate, Date, Camera, LPR configuration, Country, Reliability, Hit, Classification, and Manufacturer. The 'Manufacturer' column is highlighted with a red box, and the table contains 25 rows of data. At the bottom, there are buttons for 'Search', 'Report', 'Print', and 'Video', along with a 'Details of the selected record' section and a 'Close' button. The status bar at the bottom indicates 'Search complete' and 'Total records: 954'.

License Plate	Date	Camera	LPR configuration	Country	Reliability	Hit	Classification	Manufacturer
	11/1/2019 9:11:10 AM		Neural Server	Brazil	Medium	Hit	Car	FORD
	11/1/2019 9:11:17 AM		Neural Server	Brazil	Low	Uncertainty	Car	FORD
	11/1/2019 9:15:37 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET
	11/1/2019 9:19:03 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:21:23 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT
	11/1/2019 9:25:51 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:29:23 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET
	11/1/2019 9:29:50 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET
	11/1/2019 9:30:03 AM		Neural Server	Brazil	Low	Uncertainty	Car	CHEVROLET
	11/1/2019 9:30:08 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:31:43 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT
	11/1/2019 9:33:10 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:33:33 AM		Neural Server	Brazil	Medium	Hit	Car	HONDA
	11/1/2019 9:34:06 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:36:06 AM		Neural Server	Brazil	High	Hit	Car	FORD
	11/1/2019 9:36:37 AM		Neural Server	Brazil	Low	Uncertainty	Car	HONDA
	11/1/2019 9:38:01 AM		Neural Server	Brazil	Low	Uncertainty	Car	HYUNDAI
	11/1/2019 9:38:50 AM		Neural Server	Brazil	Medium	Hit	Car	FORD
	11/1/2019 9:39:56 AM		Neural Server	Brazil	High	Hit	Car	FORD
	11/1/2019 9:40:18 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT
	11/1/2019 9:41:35 AM		Neural Server	Brazil	Medium	Hit	Car	CITROEN
	11/1/2019 9:42:17 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT
	11/1/2019 9:42:23 AM		Neural Server	Brazil	Low	Uncertainty	Car	FIAT
	11/1/2019 9:44:48 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:45:18 AM		Neural Server	Brazil	Low	Uncertainty	Car	FORD
	11/1/2019 9:48:53 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:49:50 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:50:06 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET
	11/1/2019 9:50:14 AM		Neural Server	Brazil	Low	Uncertainty	Car	CHEVROLET



#### 4.1.92.8 Vehicle color recognition

##### Standard, Professional, Enterprise

The system now supports the vehicle's color recognition (if the LPR engine used supports this feature). The vehicle color will be added to the recognition results and can also be filtered through the new vehicle color filter.

**NOTE:** Currently the only way to process the vehicle's color is through the use of Edge LPR together with Neural Labs Neural Server software. If the engine manufacturers support the vehicle color recognition natively in the LPR engine, the system structure is ready to receive this information.

License plate recognition

Manufacturers

Search Reliability chart Hit chart Trace map route

License Plate	Date	Camera	LPR configuration	Country	Reliability	Ht	Classification	Manufacturer	Lists	Vehicle Color
	11/1/2019 9:11:10 AM		Neural Server	Brazil	Medium	Hit	Car	FORD	Rodizio final 1 e 2	
	11/1/2019 9:11:17 AM		Neural Server	Brazil	Low	Uncertainty	Car	FORD	Rodizio final 1 e 4	
	11/1/2019 9:15:37 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET	Rodizio final 3 e 4	
	11/1/2019 9:19:03 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 5 e 6	
	11/1/2019 9:21:23 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT	Rodizio final 5 e 6	
	11/1/2019 9:25:51 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 3 e 4	
	11/1/2019 9:29:23 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET	Rodizio final 5 e 6	
	11/1/2019 9:30:50 AM		Neural Server	Brazil	High	Hit	Car	CHEVROLET	Rodizio final 3 e 4	
	11/1/2019 9:30:03 AM		Neural Server	Brazil	Low	Uncertainty	Car	CHEVROLET	Rodizio final 5 e 6	
	11/1/2019 9:30:08 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 5 e 6	
	11/1/2019 9:31:43 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT	Rodizio final 5 e 6	
	11/1/2019 9:33:10 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 3 e 4	
	11/1/2019 9:33:33 AM		Neural Server	Brazil	Medium	Hit	Car	HONDA	Rodizio final 1 e 2	
	11/1/2019 9:34:06 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 3 e 4	
	11/1/2019 9:36:06 AM		Neural Server	Brazil	High	Hit	Car	FORD	Rodizio final 3 e 4	
	11/1/2019 9:36:37 AM		Neural Server	Brazil	Low	Uncertainty	Car	HONDA	Rodizio final 7 e 8	
	11/1/2019 9:38:01 AM		Neural Server	Brazil	Low	Uncertainty	Car	HYUNDAI	Rodizio final 5 e 6	
	11/1/2019 9:38:50 AM		Neural Server	Brazil	Medium	Hit	Car	FORD	Rodizio final 7 e 8	
	11/1/2019 9:39:56 AM		Neural Server	Brazil	High	Hit	Car	FORD	Rodizio final 5 e 6	
	11/1/2019 9:40:18 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT	Rodizio final 9 e 0	
	11/1/2019 9:41:35 AM		Neural Server	Brazil	Medium	Hit	Car	CITROEN	Rodizio final 7 e 8	
	11/1/2019 9:42:17 AM		Neural Server	Brazil	Medium	Hit	Car	FIAT	Rodizio final 3 e 4	
	11/1/2019 9:42:23 AM		Neural Server	Brazil	Low	Uncertainty	Car	FIAT	Rodizio final 3 e 4	
	11/1/2019 9:44:48 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 7 e 8	
	11/1/2019 9:45:18 AM		Neural Server	Brazil	Low	Uncertainty	Car	FORD	Rodizio final 7 e 8	
	11/1/2019 9:45:53 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 7 e 8	
	11/1/2019 9:49:50 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 1 e 2	
	11/1/2019 9:50:06 AM		Neural Server	Brazil	Medium	Hit	Car	CHEVROLET	Rodizio final 5 e 6	
	11/1/2019 9:50:14 AM		Neural Server	Brazil	Low	Uncertainty	Car	CHEVROLET	Rodizio final 3 e 4	

Search Report Print Video

Details of the selected record

Search complete Total records: 954

Manage filters

Available filters

- Date
- License plates
- Speed
- Cameras
- LPR Configurations
- Categories
- Classifications
- Manufacturers
- Colors
- Countries
- Lists
- Reliability
- Owner
- Servers

Vehicle Color

Selected filters

Vehicle Color

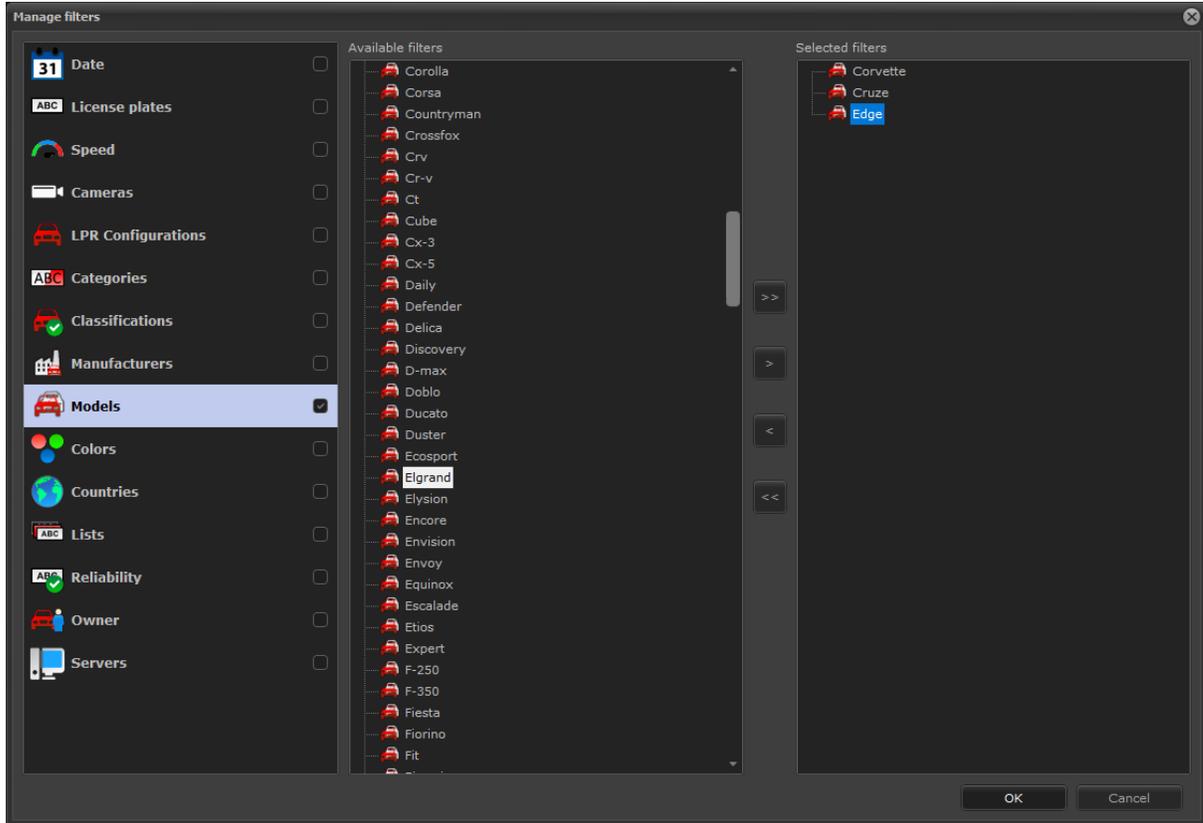
OK Cancel

#### 4.1.92.9 Vehicle Model Recognition

##### Standard, Professional, Enterprise

The system now supports vehicle model recognition (if the LPR engine used supports this feature). The vehicle type will be added to the recognition results and can also be filtered through the new vehicle type filter.

**NOTE:** Currently the only way to process the vehicle model is through the use of the OpenALPR engine. If the engine manufacturers support the vehicle type recognition natively in the LPR engine, the system structure is ready to receive this information.



#### 4.1.92.10 Type, color and manufacturer recognition with OpenALPR

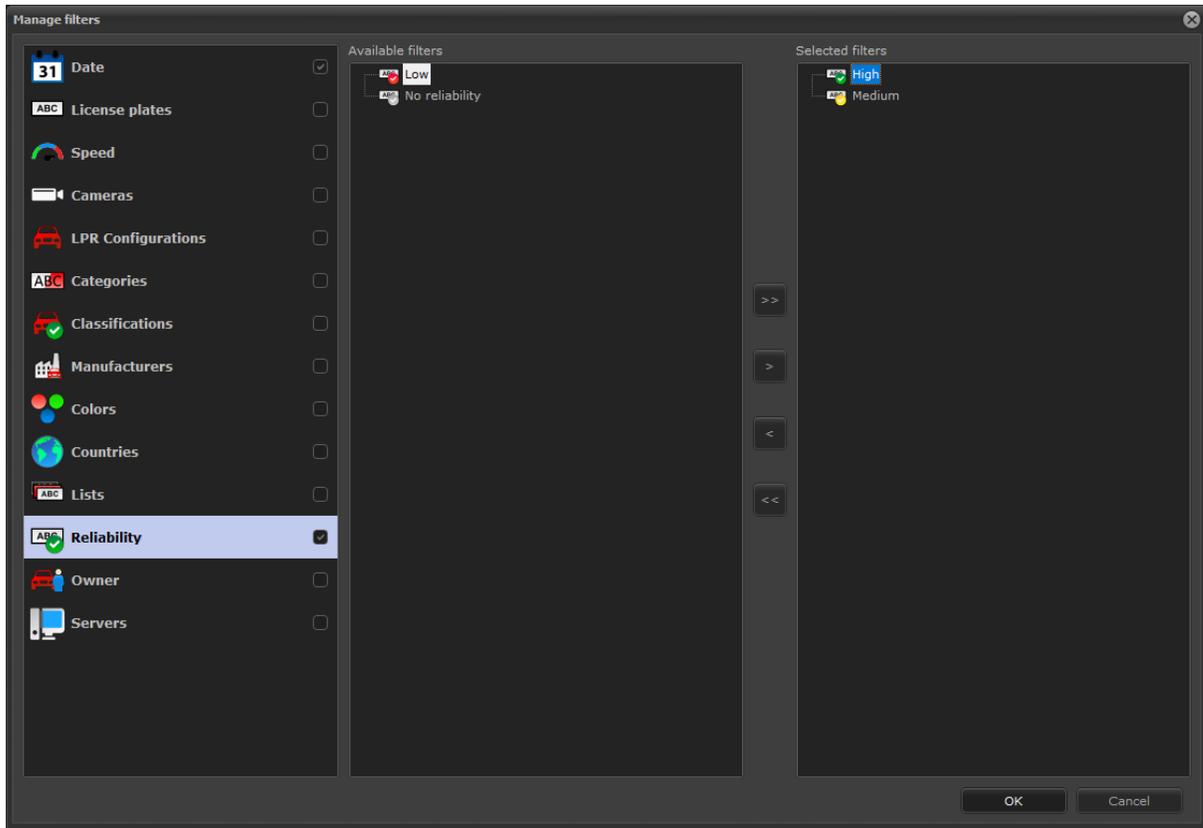
##### Standard, Professional, Enterprise

The LPR OpenALPR engine now supports recognition of Vehicle Type, Vehicle Color and Vehicle Manufacturer.

#### 4.1.92.11 New record filter for reliability

##### Standard, Professional, Enterprise

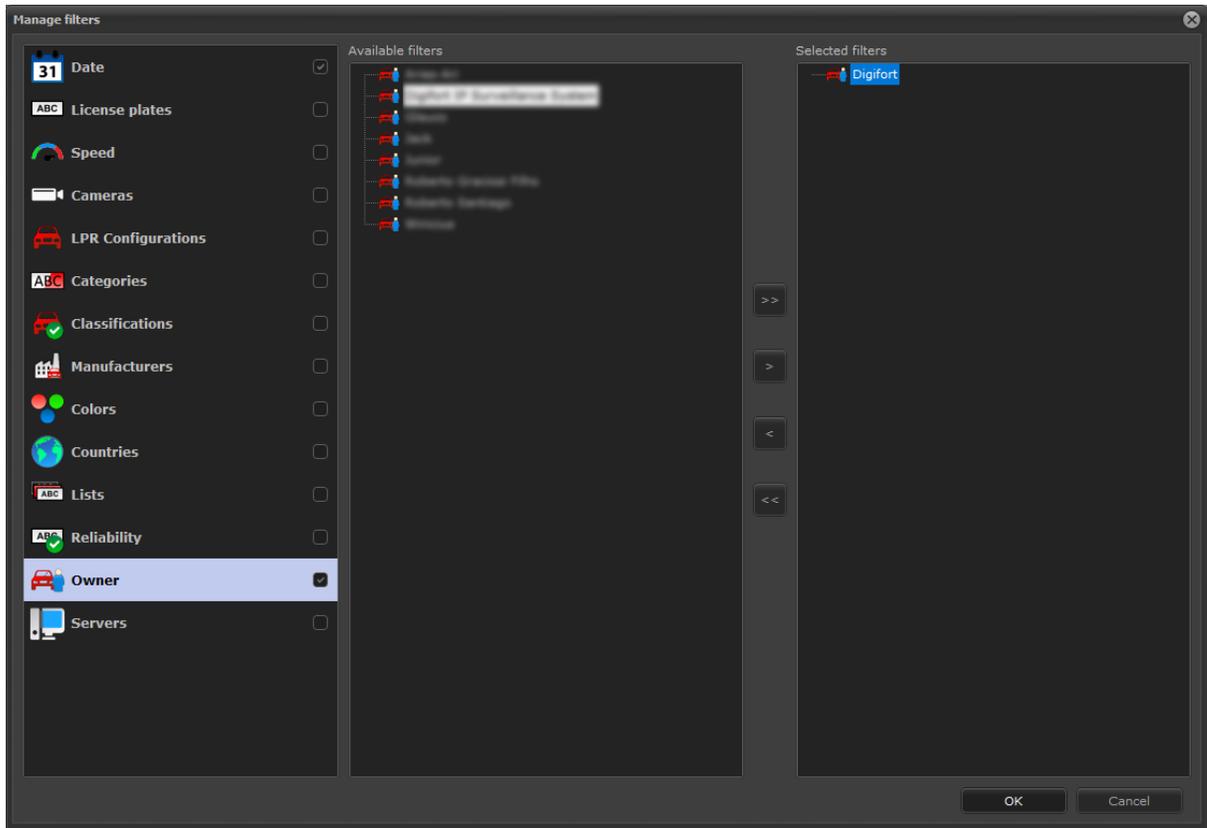
A new filter was added to allow filtering records through the reliability of the recognition result.



#### 4.1.92.12 New record filter by owner

##### Standard, Professional, Enterprise

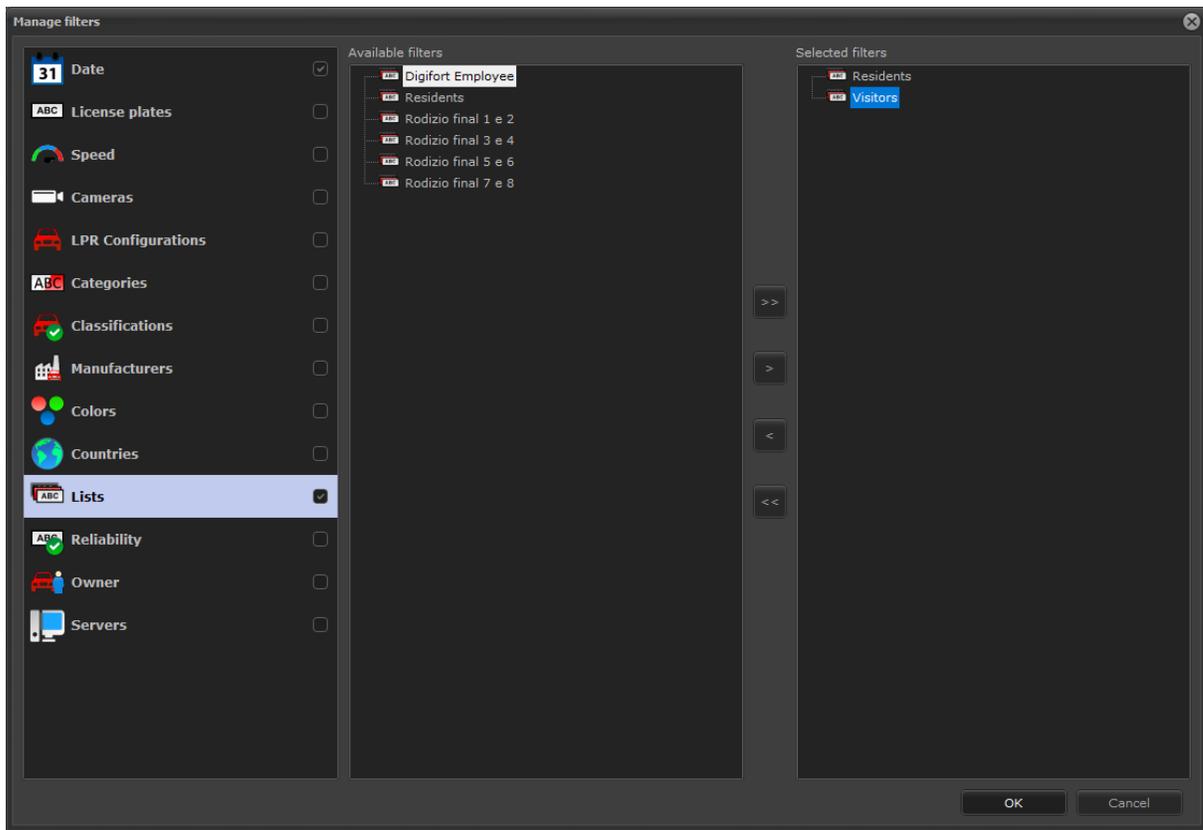
A new filter was added to allow filtering records through the vehicle owner. The vehicle owner can be specified in the license plate registration through the Administration Client.



#### 4.1.92.13 New record filter by plate list

##### Standard, Professional, Enterprise

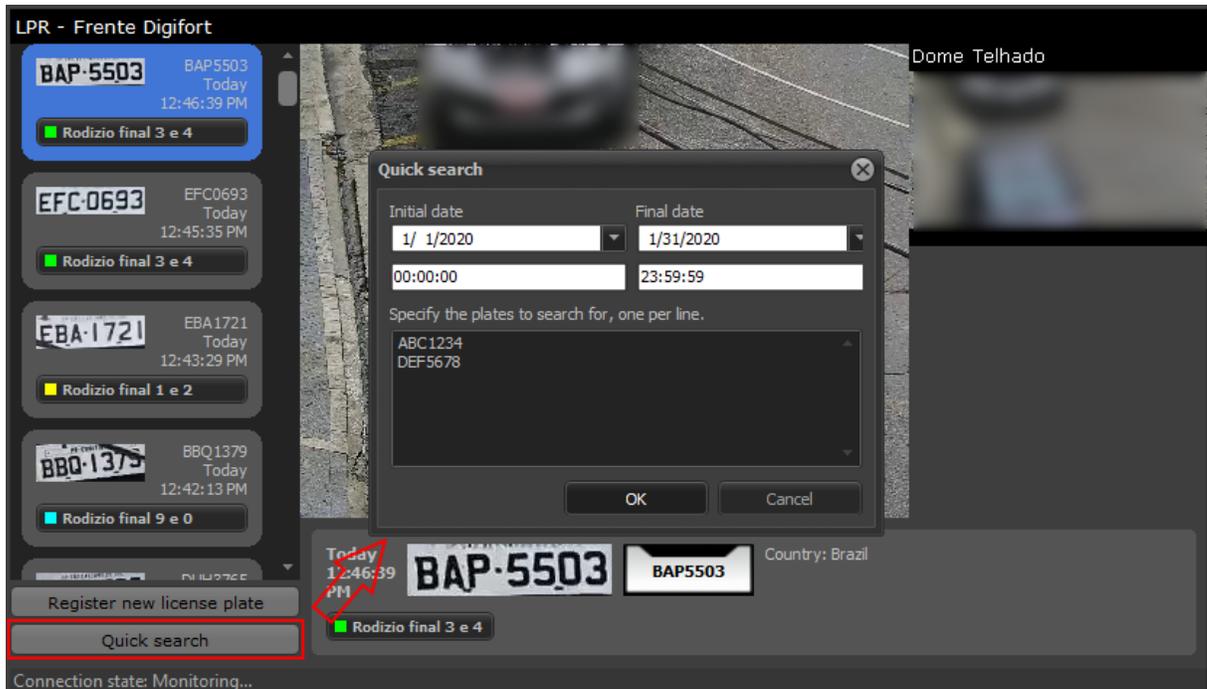
A new filter was added to allow filtering records through the lists of plates registered in the Administration Client.



#### 4.1.92.14 Quick search

##### Standard, Professional, Enterprise

The Live LPR control now has a new quick search function. Through the "Quick Search" button on the interface it is possible to quickly open a small query screen that already has a pre-configured filter to bring up all the records for the current month and allows you to specify a list of plates for quick consultation.

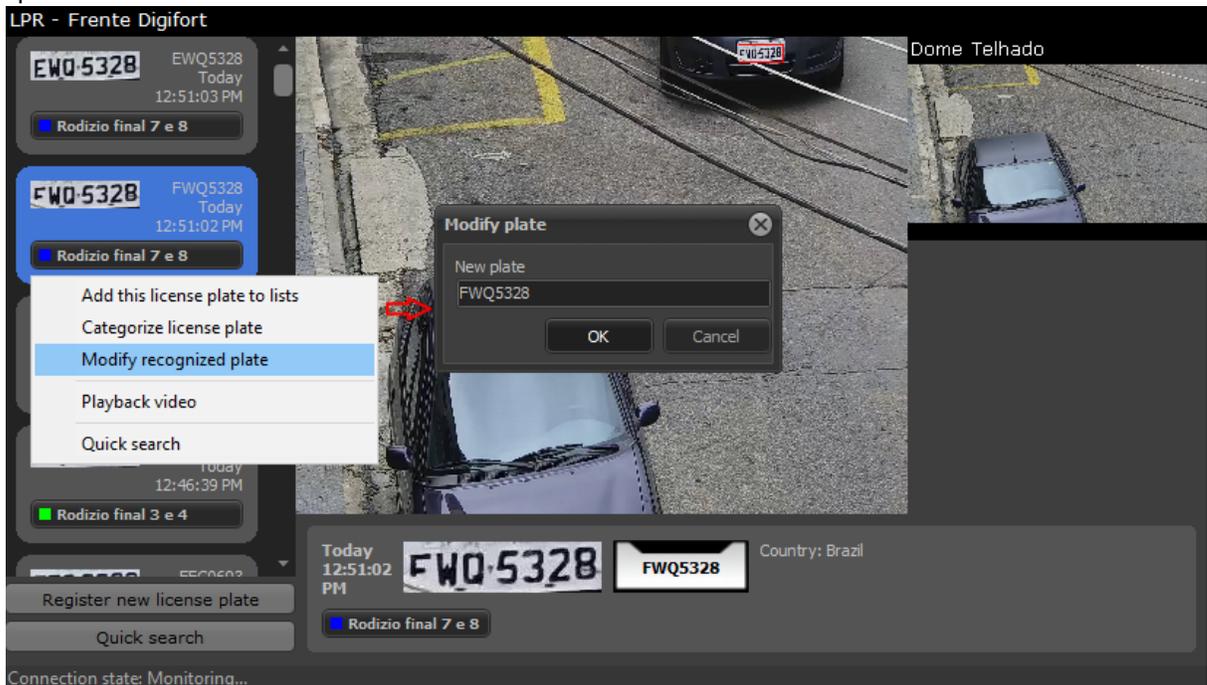


#### 4.1.92.15 Change recognized license plate number

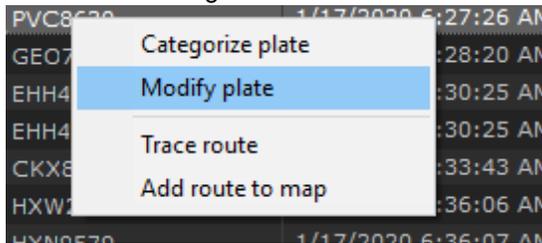
##### Standard, Professional, Enterprise

The system now allows you to change the recognized plate number. The operator must have the right to change the recognized plate for this function to be enabled.

In the live LPR control, just right-click on a recognized record and choose the "Modify recognized plate" option:



It is also possible to change the recognized plate in the search for LPR records by right-clicking on the record to be changed:



#### 4.1.92.16 Location of recognized license plates on Google Maps in search

Standard, Professional, Enterprise

The LPR Records Search in the Surveillance Client now displays the record's location on a mini map.

License Plate	Date	Camera	LPR configuration	Country	Reliability	Hit
EFY2879	4/6/2020 3:41:51 PM	40	teste	Brazil	High	Hit
EWQ5052	4/6/2020 3:46:26 PM	40	teste	Brazil	High	Hit
FWB0192	4/6/2020 3:46:40 PM	40	teste	Brazil	High	Hit
DYE0057	4/6/2020 3:49:41 PM	40	teste	Brazil	High	Hit
FCK5594	4/6/2020 3:51:35 PM	40	teste	Brazil	Medium	Hit
FCK5994	4/6/2020 3:51:35 PM	40	teste	Brazil	High	Hit
FGZ5954	4/6/2020 3:52:35 PM	40	teste	Brazil	High	Hit
FLC7675	4/6/2020 4:47:09 PM	40	teste	Brazil	High	Hit
DRC5737	4/6/2020 4:52:42 PM	40	teste	Brazil	High	Hit
EQZ4923	4/6/2020 4:53:04 PM	40	teste	Brazil	Medium	Hit
EG19825	4/6/2020 4:54:11 PM	40	teste	Brazil	Medium	Hit
DRH9H61	4/6/2020 4:54:23 PM	40	teste	Brazil	High	Hit
EQZ4923	4/6/2020 4:55:00 PM	40	teste	Brazil	Medium	Hit
EG19925	4/6/2020 4:55:12 PM	40	teste	Brazil	Medium	Hit

Search complete

Total records: 30

#### 4.1.92.17 Plate expiration

Standard, Professional, Enterprise

It is now possible to set an expiration date for plates registered in the LPR system.

Plate expiration is used by LPR Events and is very useful for scenarios where, for example, an expired

plate cannot open a gate associated with the event, so it is possible to register temporary plates that will have access to the site.

It is possible to define a start date (When the plate will be valid) and an expiration date through the plate registration:

License plates register ✕

General

**ABC** License plate list registration

---

License Plate

Owner

Observations

Activate plate expiration

Start Date

Expiration Date

LPR Lists

LPR events can be conditioned to trigger using plate expiration control. You can configure an LPR Event to fire only if:

- The recognized plate is not expired - This option is useful to create an access control to a location, where the system will only open a gate automatically for the plates that are not expired
- Recognized license plate is expired - This option is useful to create alarm events if a vehicle with an expired license plate is recognized, in this case, the operator can receive an alarm popup to inform about the vehicle's condition

LPR Events Register

General Conditions

Conditions

Do not retrigger the event for repeated license plates in the interval

1 seconds

Trigger the event only for vehicles over speed limit

1 (Only for supported engines)

Activate plate expiration control

Trigger the event for non-expired plates only

Trigger the event for non-expired plates only

Trigger the event for expired plates only

High

Middleware integration

Only trigger the event if the plate is registered in the database

Each LPR configuration has a limit of 10 queries that can be buffered. If this limit is exceeded or there are communication problems with the database, the event will not be triggered.

OK Cancel

#### 4.1.92.18 Open field for registration of plates

##### Standard, Professional, Enterprise

Vehicle license plate registration now allows the use of Unicode characters. Some countries have special characters on license plates and it will now be possible to register the license plates of these countries.

#### 4.1.92.19 Conditions for triggering events

##### Standard, Professional, Enterprise

LPR Events now support multiple trigger conditions.

Using trigger conditions, it is possible to restrict when an LPR event will be triggered, offering great configuration flexibility.

## Conditions:

- Do not re-trigger the event for repeated plates in an interval - This option prevents the system from triggering the LPR event if the same plate is recognized in a configured time interval
- Trigger the event only for vehicles over speed limit
- Plate expiration control - This option allows the event triggering to be conditioned to the expiration of the plates
- Trigger the event only with minimal reliability - This option prevents the system from triggering the LPR event if the plate recognition result does not reach a minimum level of reliability
- (Middleware) Only fire if the plate is registered in a database - This option allows the event to check if the plate is registered in an external database (Using LPR Middleware for integration with external databases) and condition your shot only if the plate is found on the database.

The screenshot shows the 'LPR Events Register' dialog box with the 'Conditions' tab selected. The dialog has a title bar with a close button (X) and two tabs: 'General' and 'Conditions'. Below the tabs is a header area with a car icon and the word 'Conditions'. The main area contains several settings:

- Do not retrigger the event for repeated license plates in the interval
  - 1 seconds
- Trigger the event only for vehicles over speed limit
  - 1 (Only for supported engines)
- Activate plate expiration control
  - Trigger the event for non-expired plates only
- Only trigger event with minimum reliability
  - High

Below these is a section titled 'Middleware integration' with a sub-section:

- Only trigger the event if the plate is registered in the database
 

Each LPR configuration has a limit of 10 queries that can be buffered. If this limit is exceeded or there are communication problems with the database, the event will not be triggered.

At the bottom right are 'OK' and 'Cancel' buttons.

#### 4.1.92.20 Display only recognized plates in lists

##### Standard, Professional, Enterprise

The LPR system now has a new option (in the LPR settings of the Surveillance Client) that allows the Live LPR component to only display plate records that are registered in a list of cards.

The screenshot shows a dark-themed dialog box titled 'License plate filters'. It contains a single checkbox that is checked, with the text: 'Display only recognized plates that are registered in a plate list'.

#### 4.1.92.21 Data sharing between Master / Slave

##### Professional, Enterprise

The object synchronizer between Master / Slave servers now supports LPR.

When the LPR synchronization option between Master / Slave is activated, the Plate Registration, List Registration and Plate Category Registration will be shared between the servers.

Generally, object registration is only allowed on the Master server, however, in the case of LPR it is possible to register plates through the Surveillance Client, connected to a Slave server only, and the Slave server will share the data with the Master and the Master will forward the data to the other Slaves servers.

Master server

Slave server

Master server address

: 8600

Master server admin password

Items for synchronization

- User
- Screenstyle
- Alert contact
- Camera Group
- License Plate

#### 4.1.92.22 Surrounding camera image storage

##### Standard, Professional, Enterprise

The LPR system now allows you to store the images from the surrounding cameras associated with the LPR Configuration.

By default the images from the surrounding cameras are consulted from the camera recordings, however, in some cases it is necessary to keep these records for longer and in this case the images can be saved together with the recognition image.

This option is only available when the images are saved to disk instead of to the database.

Save images in the database

Save images to disk

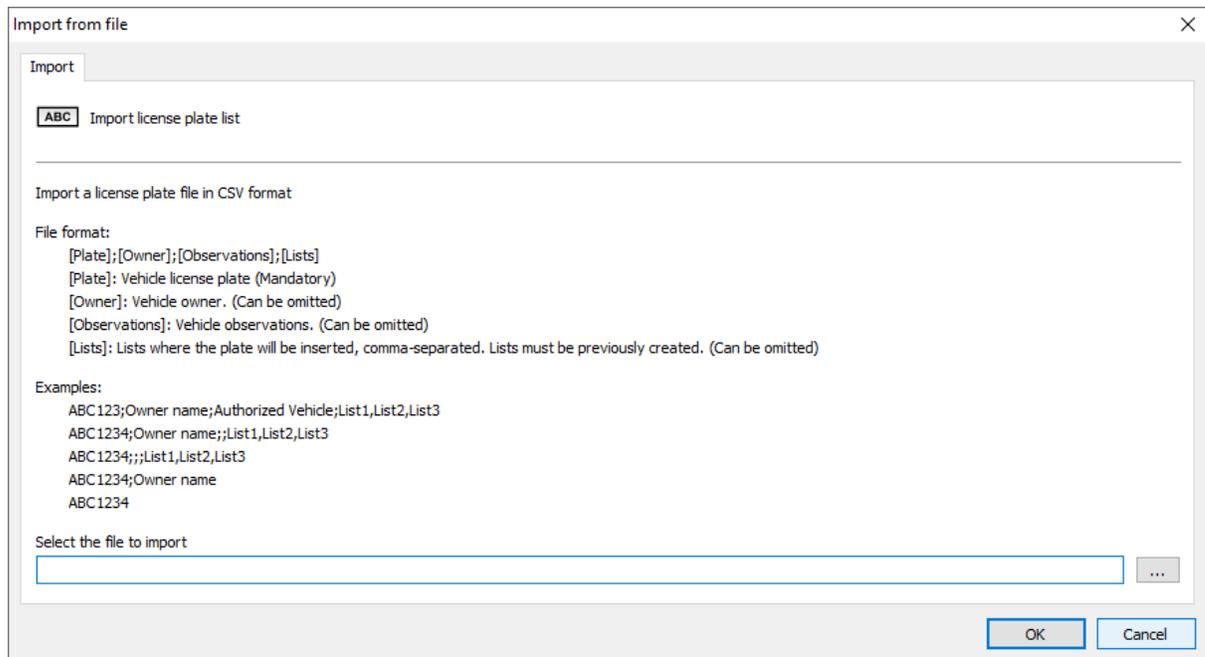
Save images from surrounding cameras

Local

#### 4.1.92.23 Importing plates with lists

##### Standard, Professional, Enterprise

The plate list importer now allows you to specify which lists the plate belongs to.



#### 4.1.92.24 64Bits Server

##### Standard, Professional, Enterprise

The LPR Server now has a 64-bit version.

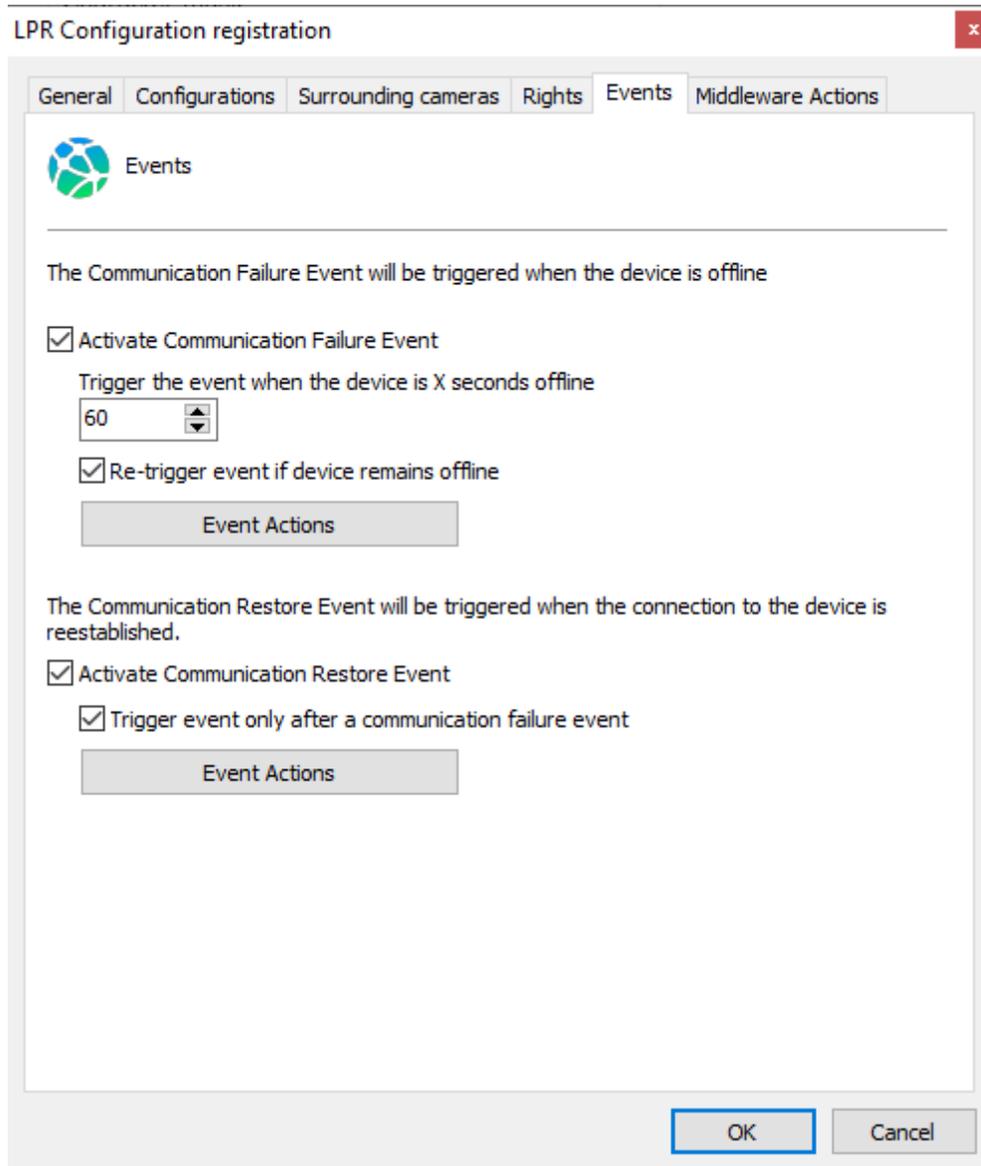
The OpenALPR engine works only in the 64bit version.

This version is still experimental. Use only if using the OpenALPR engine or if the LPR server service is consuming more than 3GB of memory.

#### 4.1.92.25 Communication Failure and Restore Events

##### Standard, Professional, Enterprise

Added Communication Failure and Communication Restore events for LPR Configurations.



#### 4.1.92.26 LPR Edge with third party servers

##### Standard, Professional, Enterprise

The edge LPR architecture has been improved to allow integration with third party LPR servers. This option opens the range of LPR integrations and allows for the future expansion of the Digifort LPR base system for powerful integrations with third party systems.

The following servers are currently supported:

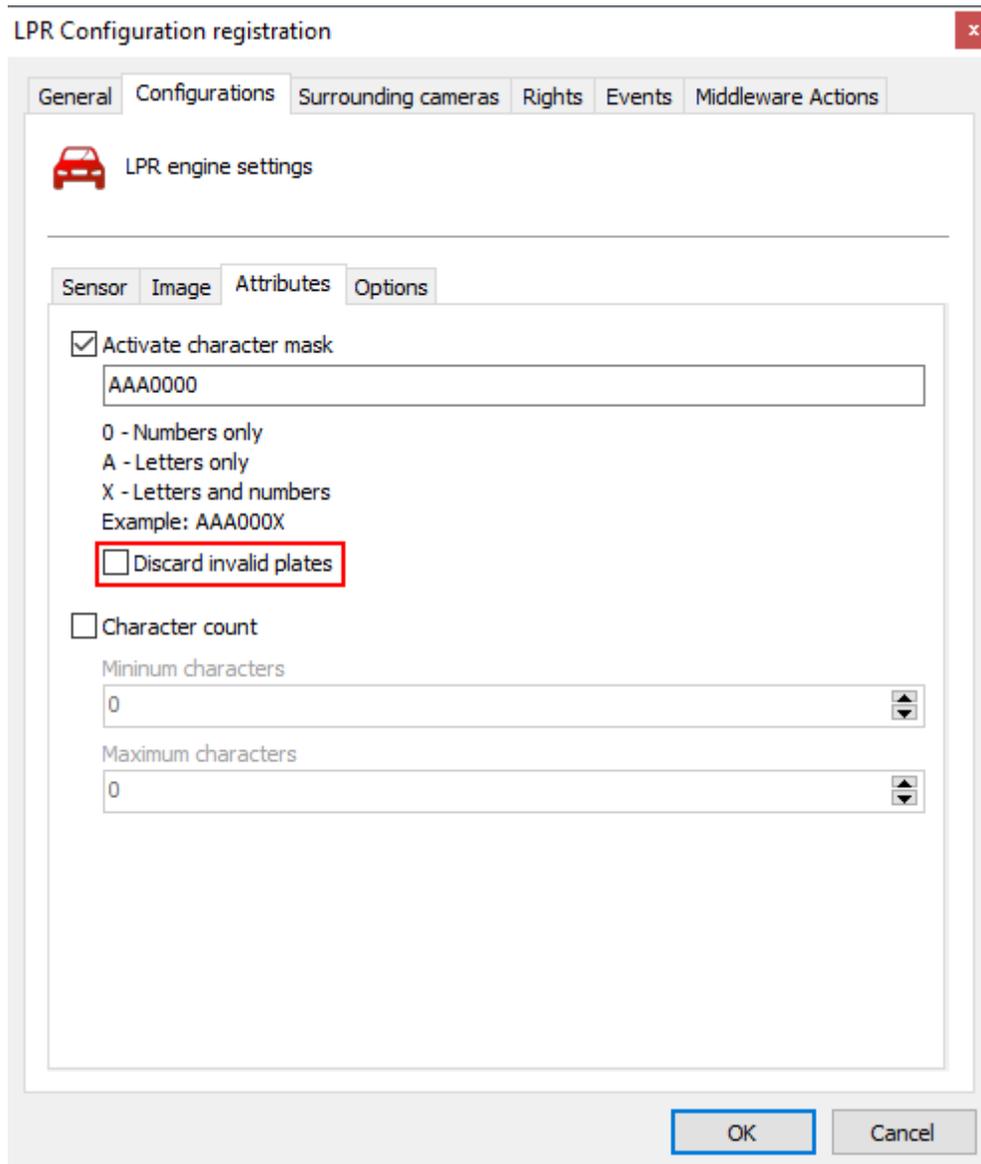
- Neural Server

#### 4.1.92.27 Discard records that do not meet the mask

##### Standard, Professional, Enterprise

The character mask setting now allows the option to discard invalid records, that is, that do not follow the

character mask. Previously the system tried to change the numerical values to letters, or vice versa.



#### 4.1.92.28 Owner and Details in the LPR report

##### Standard, Professional, Enterprise

The LPR report on the Surveillance Client will now also display the owner and details of the vehicle (if registered).

#### 4.1.92.29 Setting the image buffer size

##### Standard, Professional, Enterprise

The LPR system now allows the configuration of the image buffer size for processing. This buffer is used when the LPR Server is overloaded (which can occur when image recognition from several cameras is activated simultaneously), so the system will temporarily store the images in memory (before discarding) for a few seconds in order to wait the LPR Server responds to the processing of the images. A high buffer

value can improve the processing and recognition result, since previously the images would be discarded if the LPR Server was overloaded, however, it could also increase the recognition response time.

The screenshot shows the 'Options' tab of the configuration interface. It contains several settings:

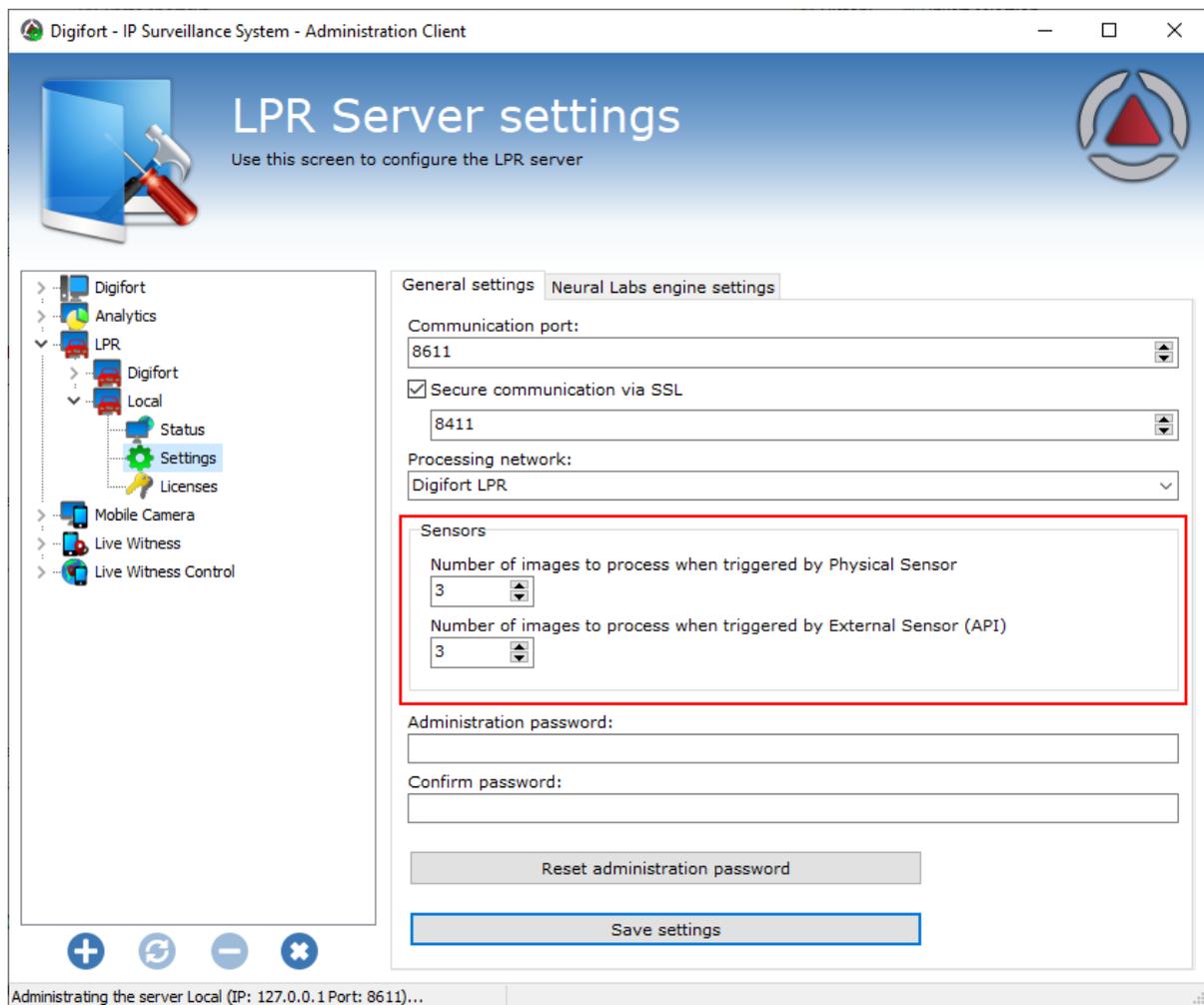
- Save images in the database
- Save images to disk
  - Save images from surrounding cameras
  - Local
- Delete database records older than X days
  -
- Resize stored images if bigger than:
  - x
- Image buffer for server processing** (highlighted in red)
  - Seconds
- Activate LPR middleware queries
  - Address
- Speed Metric
  - km/h
  - mph

#### 4.1.92.30 Setting number of images for physical loop

##### Standard, Professional, Enterprise

The LPR Server now allows the configuration of the number of images that will be used when the recognition takes place by event (Physical Sensor) or by the API.

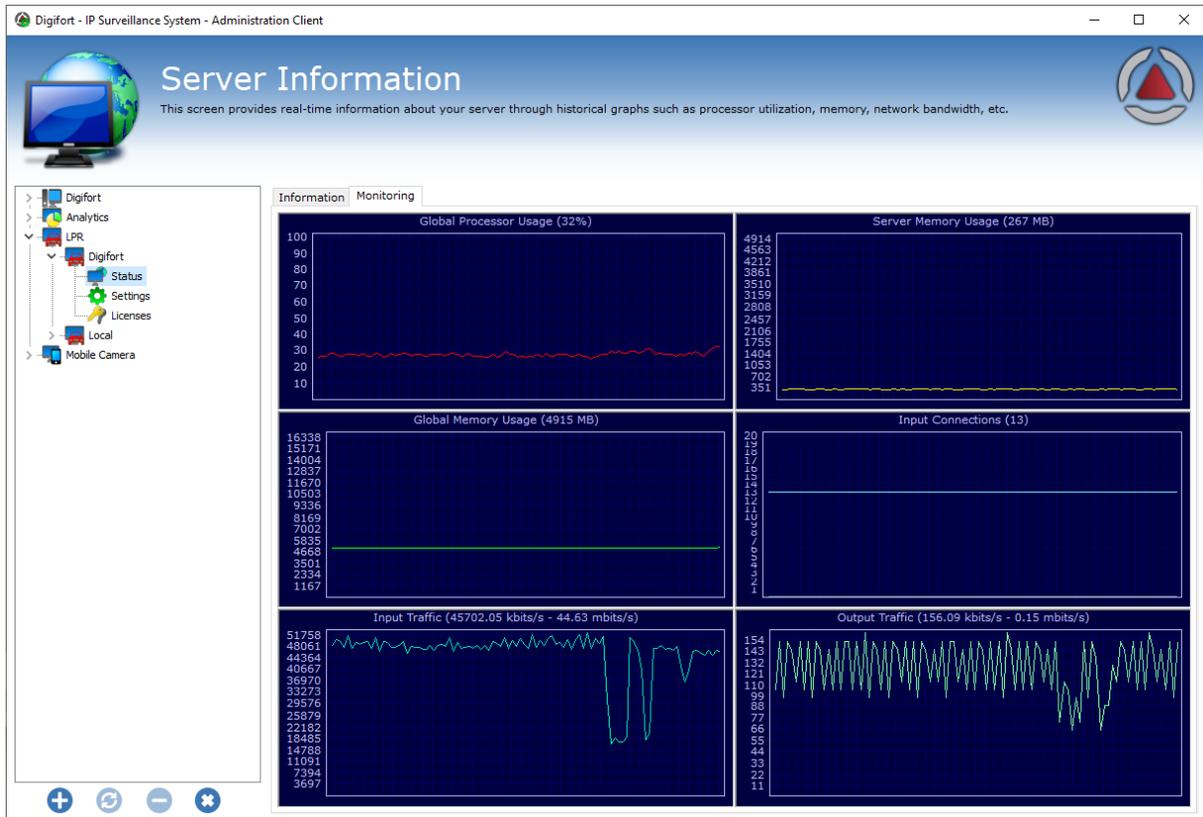
Unlike motion detection, recognition via a physical loop will analyze only X images from the moment of the event. This number of images can now be configured in these parameters. Previously, the value 3 was used by default.



#### 4.1.92.31 Server Status

##### Standard, Professional, Enterprise

The Administration Client now has a status screen for LPR servers.



#### 4.1.92.32 New LPR Engine (OpenALPR)

**Standard, Professional, Enterprise**

The LPR Server now supports a new LPR engine: OpenALPR

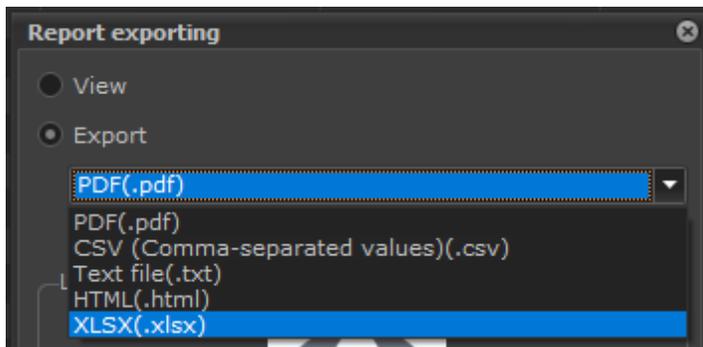
LPR Engine

Carmen  
 Neural Labs  
 OpenALPR

#### 4.1.92.33 Exporting reports in XLSX format

**Standard, Professional, Enterprise**

LPR reports can now also be exported in XLSX format

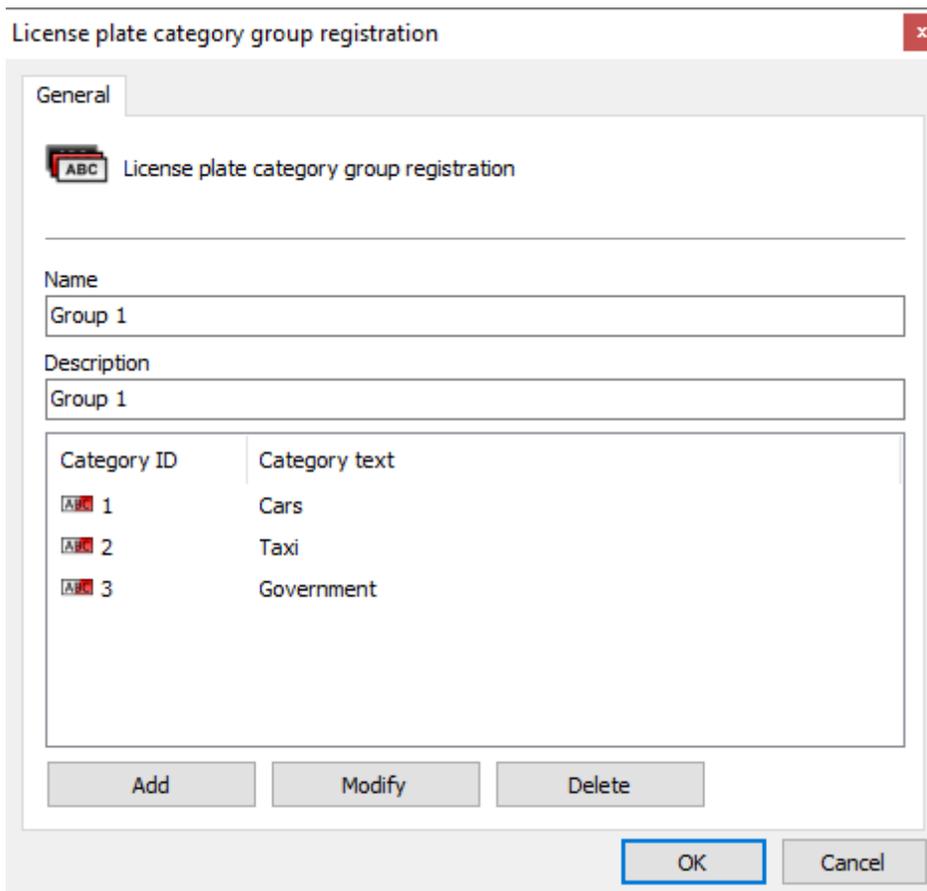


#### 4.1.92.34 Plate category groups

##### Standard, Professional, Enterprise

The plate category groups feature uses a plate categorization feature of the ARH Carmen engine that is able to differentiate the type of plate (for example, cars, taxi, motorbikes...) through a category code that is provided by the engine.

This feature was specifically developed for countries in the Middle East where license plate categorization is important to identify the type of vehicle, but it should work for other countries if the LPR engine supports license plate categorization.



#### 4.1.92.35 Updated libraries

##### **Standard, Professional, Enterprise**

The LPR libraries of Neural Labs, ARH Carmen and Open ALPR were updated to the latest version in January 2020.

#### 4.1.93 Analytics

##### 4.1.93.1 Communication Failure and Restore Events

##### **Standard, Professional, Enterprise**

Added Communication Failure and Communication Restore events for Analytics Configurations.

Analytics configuration registration

General Events Rights

 Events

The Communication Failure Event will be triggered when the device is offline

Activate Communication Failure Event

Trigger the event when the device is X seconds offline

60

Re-trigger event if device remains offline

Event Actions

The Communication Restore Event will be triggered when the connection to the device is reestablished.

Activate Communication Restore Event

Trigger event only after a communication failure event

Event Actions

OK Cancel

#### 4.1.93.2 Edge Metadata Render

##### Standard, Professional, Enterprise

The system now allows integration and rendering of metadata for Edge Analytics (Analytics running on the device)

### 4.1.93.3 SAFR Face Recognition Metadata

#### Standard, Professional, Enterprise

The integration with the SAFR Face Recognition system is even better and it is now possible to receive, display and record metadata with live recognition information on the images.

The screenshot displays the Digifort software interface. The main window shows a video feed of two men standing in front of a window with blinds. The man on the left is wearing a maroon polo shirt and has a blue bounding box around his face with three yellow smiley face emojis above it. The man on the right is wearing a dark blue polo shirt and has a green bounding box around his face with three yellow smiley face emojis above it. The name 'Vinicio Lima' is displayed above the second man's face. In the bottom left corner of the video feed, technical details are shown: '60 FPS (EP Frames: 60) @ 1200x1024', '239 Kbps (1,840 Kbps)', and 'Video Decoder: H.264'. Below the video feed is a table of recorded events:

Start time	End time	Zone	Event	Class
04/07/2020 03:17:04 PM	04/07/2020 03:17:04 ...	Technical Support	Face detection	Vinicio Lima
04/07/2020 03:14:56 PM	04/07/2020 03:15:13 ...	Technical Support	Face detection	Vinicio Lima
04/07/2020 03:14:56 PM	04/07/2020 03:15:12 ...		Face detection	Marcelo Tamam

The right side of the interface features a control panel with the Digifort logo, system status (Monitor 1, 23 FPS, CPU, Mem), and various navigation and search options. The bottom of the interface includes a multi-view grid and a bookmark icon.



#### 4.1.93.4 Edge Analytics with third-party servers

##### Standard, Professional, Enterprise

The edge analytics architecture has been improved to allow integration with third party analytics servers. This option opens the range of analytics integrations and allows the future expansion of Digifort's base analytics system for powerful integrations with third-party systems.

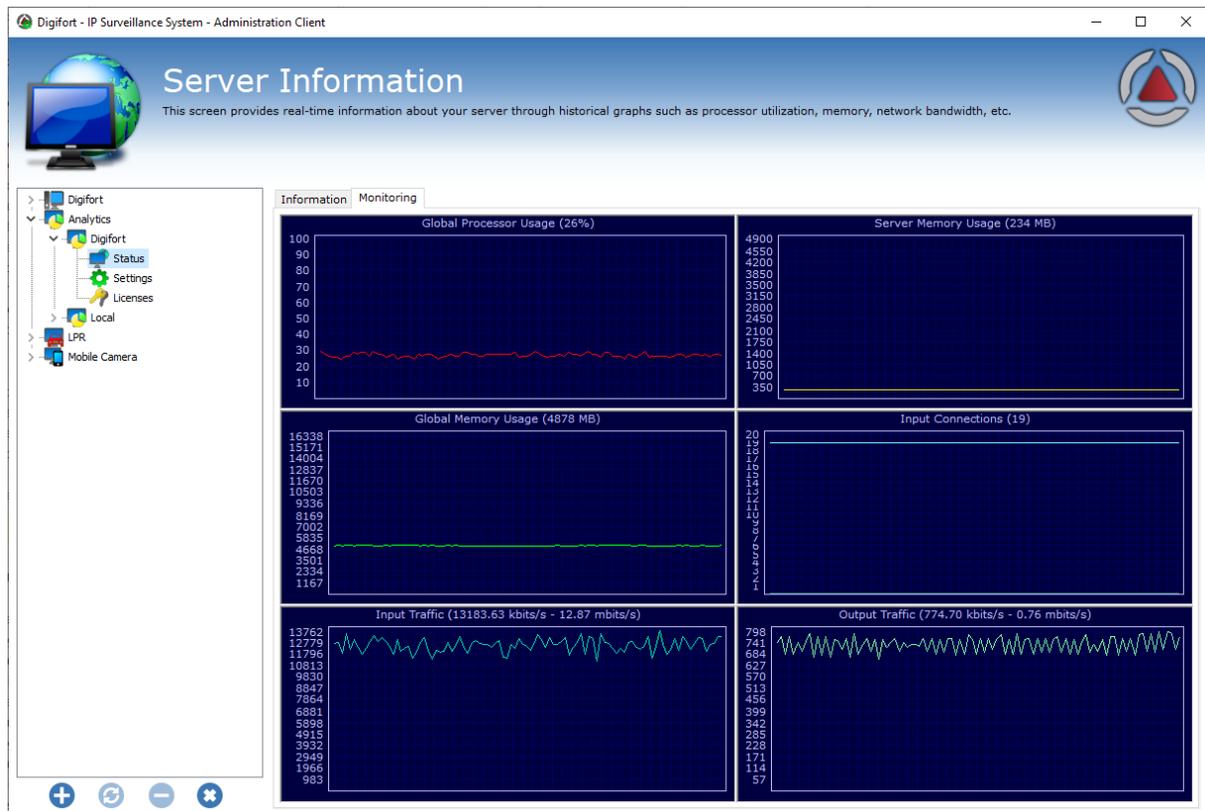
The following servers are currently supported:

- Axis Perimeter Defender
- IPXAnalytics
- SAFR
- VCA Server
- Video Synopsis

#### 4.1.93.5 Server Status

##### Standard, Professional, Enterprise

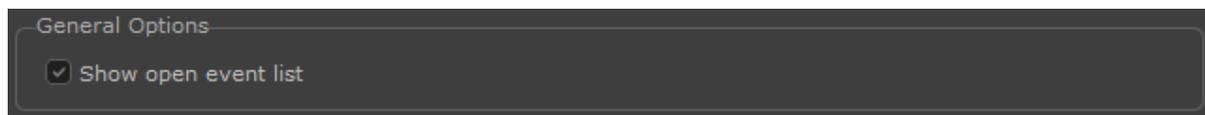
The Administration Client now has a status screen for analytics servers.



#### 4.1.93.6 Option to show / hide list of analytic events

##### Standard, Professional, Enterprise

The Surveillance Client now has a new option for the Live Analytics Configuration controls to display or hide the list of events by default when adding the on-screen control.



#### 4.1.93.7 Option for offsetting analytics metadata

##### Standard, Professional, Enterprise

The system now allows you to set a value (independent for each analytics configuration) in milliseconds for metadata offsetting. The analytics metadata may be "out of sync" with the video depending on the engine used due to the processing time of the images, this option allows fine synchronization between the live / recorded video with the analytics metadata.



#### 4.1.93.8 Support for new types of rules

##### Standard, Professional, Enterprise

The analytics system now supports new rules present in cameras with analytics (Edge Analytics):

- Altered object condition (When an object's condition is changed, for example, its size, speed, direction, etc ...)
- Following a route (Object is following a defined route)
- Similarity (When an object enters a scene and looks like a predefined object)
- Occupancy (When objects occupy an area with a defined maximum number of objects)

#### 4.1.93.9 Support for logical analytics rules

##### Standard, Professional, Enterprise

The integration of edge analytics with VCACore now allows the use of logical rules.

#### 4.1.93.10 Support of analytics temperature rules

##### Standard, Professional, Enterprise

The integration of edge analytics now allows the use of temperature rules (Thermal) for supported cameras.

#### 4.1.93.11 Support for analytics Facial Recognition rules

##### Standard, Professional, Enterprise

Edge analytics integration now allows the use of facial recognition rules for supported cameras.

#### 4.1.93.12 Live Analytics Improvements

##### Standard, Professional, Enterprise

The Live Analytics control will now remove zones, objects and counters from the screen if an update does not occur within 10 seconds.

## 4.1.94 Mobile Camera

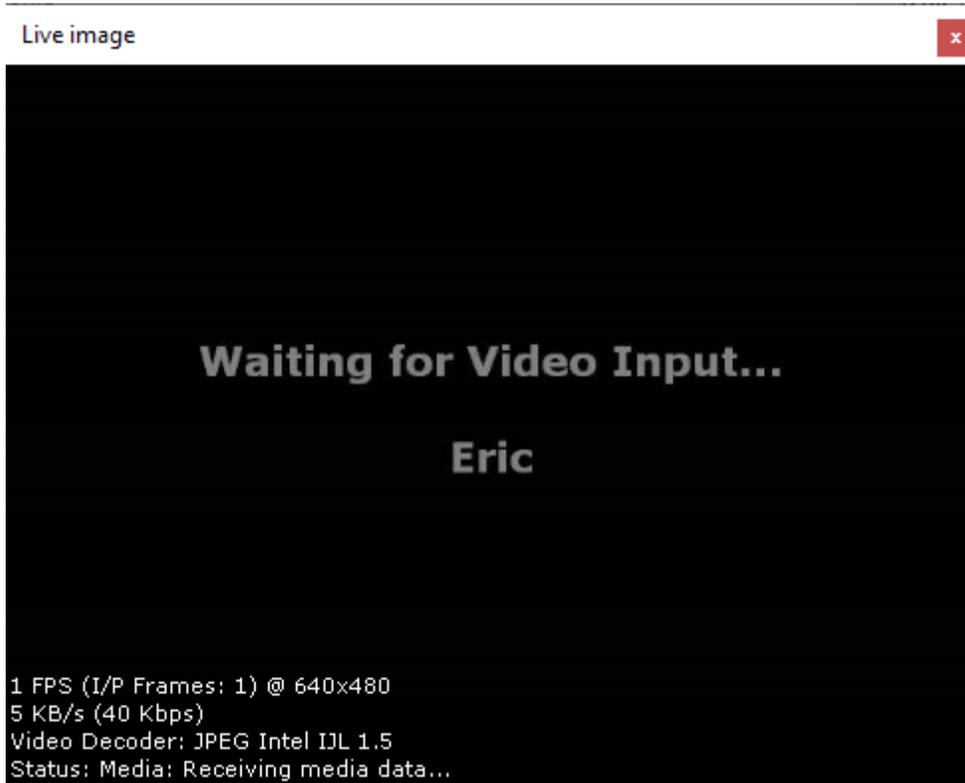
### 4.1.94.1 Waiting for Video Input Message

#### All editions

The Mobile Camera server now allows the display of a message indicating that the system is waiting for a video stream. With this, the camera on the recording server will always be in operation while the Mobile Camera server is in operation.

#### Streaming

Show "Waiting for Video Input..." message when the device is not sending video

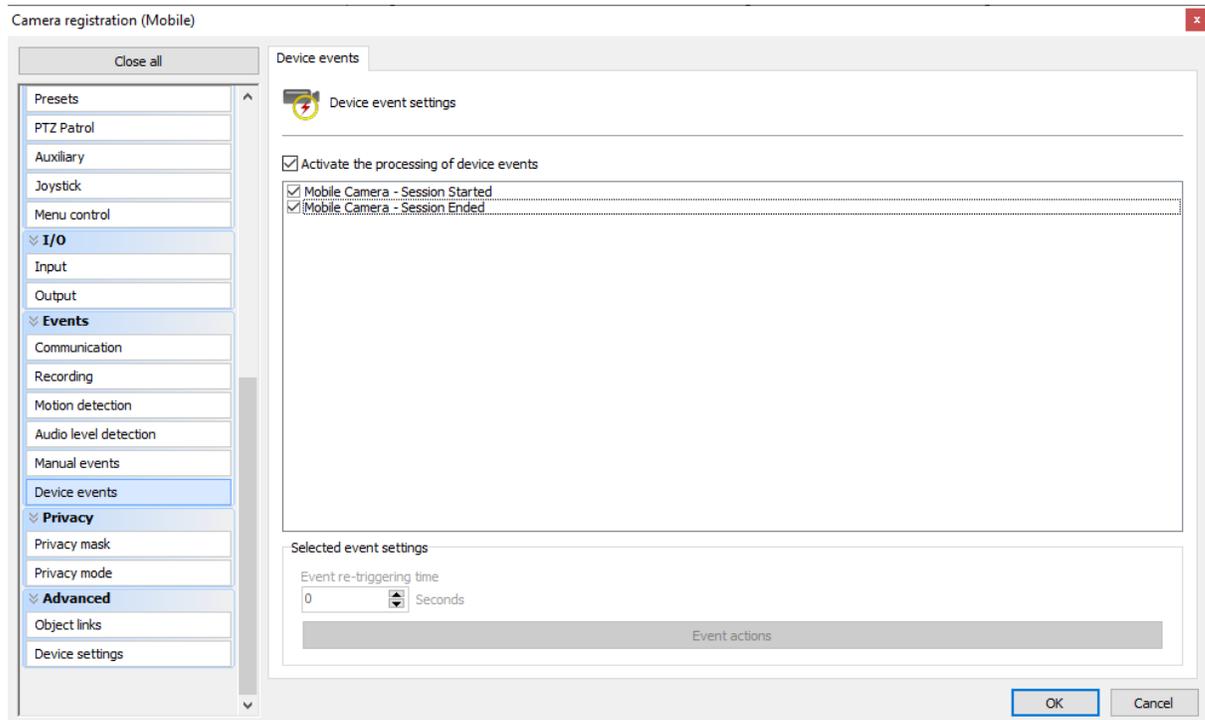


### 4.1.94.2 Device Events

#### Standard, Professional, Enterprise

With the new Camera Events feature it is now possible to configure "Session Started" and "Session Ended" events in the Mobile Camera driver.

These events will be triggered when the mobile device starts to send the stream or stop and can be used for example to start and stop recording the camera in event recording mode.



## 4.1.95 Performance improvements

### 4.1.95.1 Better performance for remote playback

#### All editions

Remote video playback (over internet links or with latency greater than 30ms) has been drastically improved, allowing playback at maximum frame rate, depending only on the bandwidth. Previously, high latency (message traffic time between server and client) greatly affected video playback performance.

### 4.1.95.2 Improved performance for cloud archiving playback

#### Professional, Enterprise

The system now has better performance of playing videos stored through the Archiving function when these recordings are stored in a cloud storage service provider (Amazon S3, Microsoft Azure ...)

### 4.1.95.3 Multi-thread for sending multicast data via relay

#### All editions

The performance of sending data from the relay server to multicast clients has been drastically improved using multi-thread. Previously, the relay system could present performance bottlenecks (with "stuttering" of the images) when the images were distributed in multicast.

### 4.1.95.4 Performance improvement of synoptic map rendering

#### Standard, Professional, Enterprise

The rendering performance of synoptic maps in the Surveillance Client has been drastically improved

#### **4.1.95.5 Improved performance when right clicking on the camera register**

##### **All editions**

In systems with thousands of registered cameras, by right clicking on the camera registration list, the system could hang for a few seconds. Performance is now improved.

#### **4.1.95.6 Performance improvement in database queries**

##### **All editions**

Database queries are now faster due to local ordering of records rather than sorting by the database during a query.

#### **4.1.95.7 Performance improvement when deleting old records**

##### **All editions**

The database structure has been changed to improve performance when deleting old records (record recycling). Previously the database could hang, preventing new records from being saved, while old records were being deleted.

#### **4.1.95.8 Improved timeline performance**

##### **All editions**

The rendering performance of the Video Player timeline control has been drastically improved for better display of broken video clips (for example, with motion detection recording) from multiple cameras simultaneously.

#### **4.1.95.9 Performance of object lists**

##### **All editions**

All object lists and system records have been improved for greater performance.

#### **4.1.95.10 Time to load and stop the server service**

##### **All editions**

The time to load and stop the server service has been drastically improved, especially for servers with thousands of registered cameras.

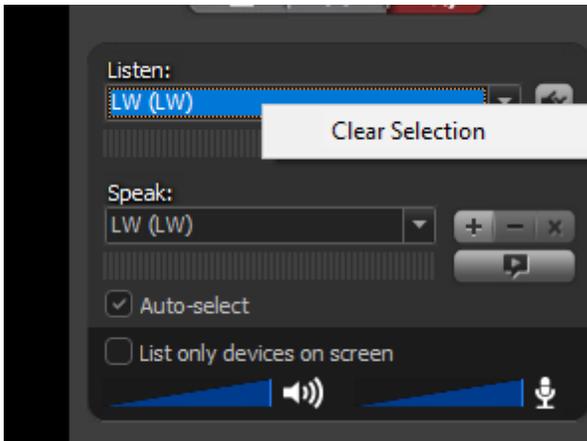
### **4.1.96 Minor improvements**

#### **4.1.96.1 Improvements in live audio control**

##### **All editions**

When manually selecting an audio device (To listen or speak) in the Surveillance Client's audio control, the device will now be selected in both lists (Speak and Listen) when the "Auto-Select" option is enabled.

The audio control now has a context menu that allows you to clear the current device selection.



#### 4.1.96.2 Relay connection status

##### All editions

When the camera is being viewed via Relay (default setting) on the Surveillance Client, the status message will now display the status between the server and the camera and not between the client and the server. Previously the message only reflected the state between the client and the server and could cause confusion when out of order cameras were added on screen and their status was "Receiving media data" even though it was out of service, this is because the connection between the client and the server was functioning normally, but the connection between the server and the camera was not.

The status message between the server and the camera will be displayed with the prefix "(Relay)". If the message does not have this prefix, then it refers to the connection between the client and the server



#### 4.1.96.3 Reuse of multicast addresses via relay

##### All editions

The relay server's multicast addresses will now be reused. Previously the system increased the address for each stream being sent by the server, with this, in some systems with high usage, the addresses increased without control and could cause conflicts with addresses of multiple servers.

#### 4.1.96.4 New shortcuts for selecting cameras in the camera registration

##### All editions

The camera registration screen in the Administration Client now has 2 new shortcuts:

- CTRL + H - Selects all cameras with the same address and port as the selected camera. Useful shortcut to select all cameras on the same device (For example a DVR / NVR)
- CTRL + E - Select all cameras with the same event driver as the selected camera

These 2 shortcuts complete the previous list of existing shortcuts:

- CTRL + M - Select all cameras with the same media driver as the selected camera
- CTRL + S - Select all cameras with the same settings driver as the selected camera
- CTRL + A - Select all cameras

#### 4.1.96.5 I/O Device Port in the register

##### Standard, Professional, Enterprise

The default I/O Device connection port will now be displayed at registration in the Administration Client.

I/O Device

General I/O Events Scheduling

I/O device general data

Name Description

Manufacturer IP Extreme IP Extreme

Model IPX8001 Firmware 1.0.0.0

Inputs 8 Outputs 8 Virtual Ports

Connection address Port (8050) User Password

Latitude 0.000000 Longitude 0.000000

Activate device

OK Cancel

#### 4.1.96.6 CSV files with column header

##### All editions

When exporting a .CSV file in the Administration Client (From registration or status screens), the system will now allow adding or removing the name of the columns in the first line of the file.

#### 4.1.96.7 CSV files with local formatting

##### All editions

The values contained in the CSV (Comma-Separated Values) files can be delimited either with a comma (",") or semicolon (";"). This lack of standard can cause problems when reading the file in certain software. Previously the system assumed a semicolon (";") as the default delimiter, however the exported file could become incompatible with some readers, so now, when exporting a CSV file, the system will use the local system settings, defined in Settings Windows Regionals.

#### 4.1.96.8 Preset list can be completely deleted

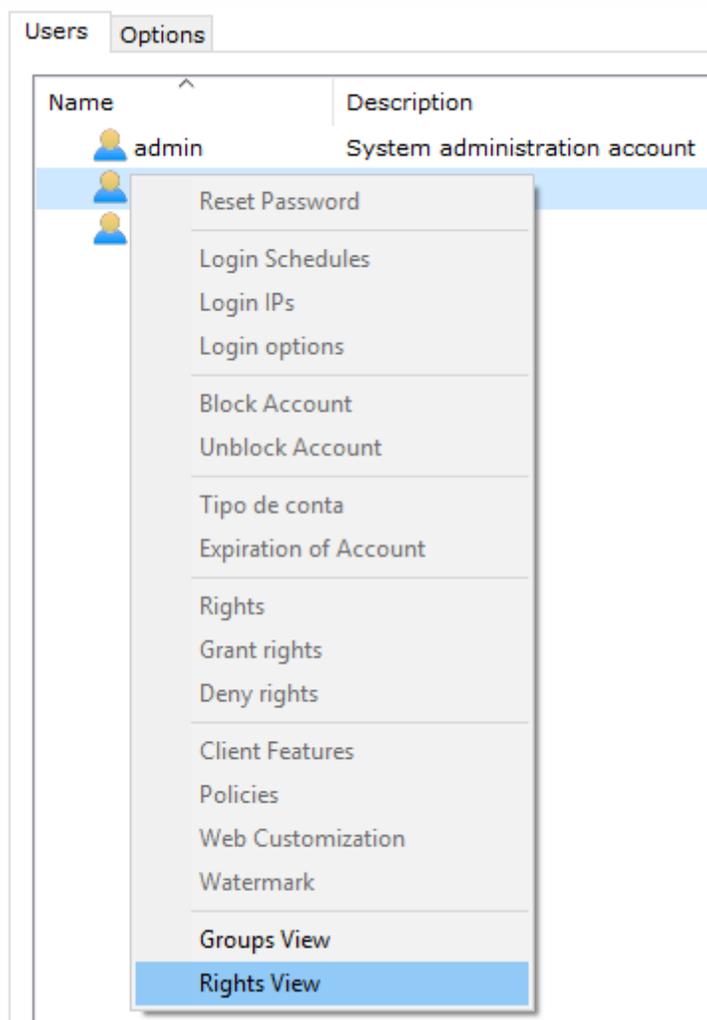
##### All editions

The list of presets for a camera (In the camera settings in the Administration Client) now allows multiple selection to delete all presets defined simultaneously. Previously, to delete the preset list, it was necessary to delete one at a time.

#### 4.1.96.9 Viewing user rights to objects on a Slave server

##### All editions

When connecting to a slave server in the Administration Client, it is not possible to make changes to user or group accounts, changes are made only on the master servers, however it is now possible to open the rights view of users and groups to display the rights access to a user's objects on the slave server. To access the viewer, just right-click on the user and select the desired option.



#### 4.1.96.10 Keep user / password when importing users from AD

##### Professional, Enterprise

The screen for importing users from Active Directory will now keep the information provided in the Domain, User, Password and Filter fields in a temporary cache. Previously this information was lost when closing the screen, and if a new import from another user was needed, it was necessary to provide everything again. The cache will not be saved to disk, that is, if the Administration Client is closed, the cache will be lost.

Active Directory users

Active Directory

User search

Domain

Username for domain authentication

Password for domain authentication

Filter

(&(sAMAccountName=\*)(cn=\*))

Search users

User	Full name	Description
------	-----------	-------------

All None Invert

OK Cancel

#### 4.1.96.11 New formats for saving snapshots

##### All editions

The system now also supports saving snapshots from live and video playback in TIFF format, completing the list of supported formats:

- JPEG
- PNG
- BMP
- WMF
- GIF
- TIFF

#### 4.1.96.12 Alarm popup maps with default resizing

##### Standard, Professional, Enterprise

When a Synoptic Map is displayed in an alarm popup, it will now be displayed by default with the Proportional Resizing option and with the toolbar closed to provide a larger map viewing area.

#### 4.1.96.13 Summary in the event report

##### All editions

The Surveillance Client event report now has a summary with the total occurrences of each event

EVENT COUNT	
Event	Amount
Alarm input	2
Motion Detection	3829
Manual Event	2
Scheduled Event	24

#### 4.1.96.14 Columns ordered by numeric values

##### All editions

The lists of objects in the Administration Client (For example in the Register of Cameras, Registration of Users among others) allow the ordering of values by any column, however, previously this ordering was done only by text, which made columns with values numbers were ordered as text instead of numbers. All numeric columns will now be ordered according to the record's numerical value.

#### 4.1.96.15 Extended column with user type

##### Professional, Enterprise

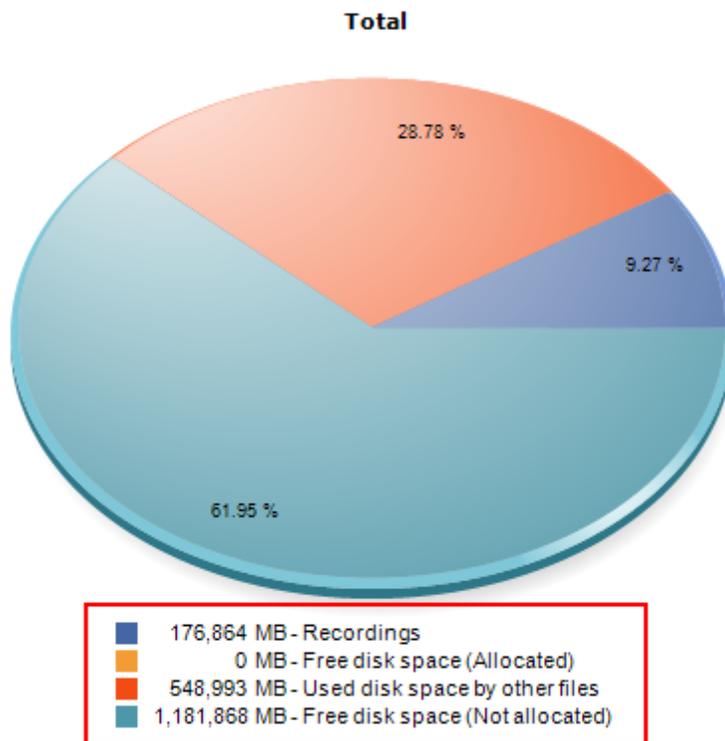
A new extended column with the type of user account is now displayed in the user registry. If the user is an Active Directory user, the domain name will also be displayed.

General Memo	Type	Account blocked
	Digifort user	No
	Active Directory user (MY_DOMAIN)	No

#### 4.1.96.16 Larger font on disk graphics

##### All editions

The font on the disk graphics in the Administration Client has been increased for better readability.



#### 4.1.96.17 Server management in the Administration Client

##### All editions

The Administration Client can manage several types of system services such as the recording server, the LPR server, the analytics server, among others. Previously the categories of all servers were displayed in the object tree, now the server category will be displayed only if a server of that type is registered.

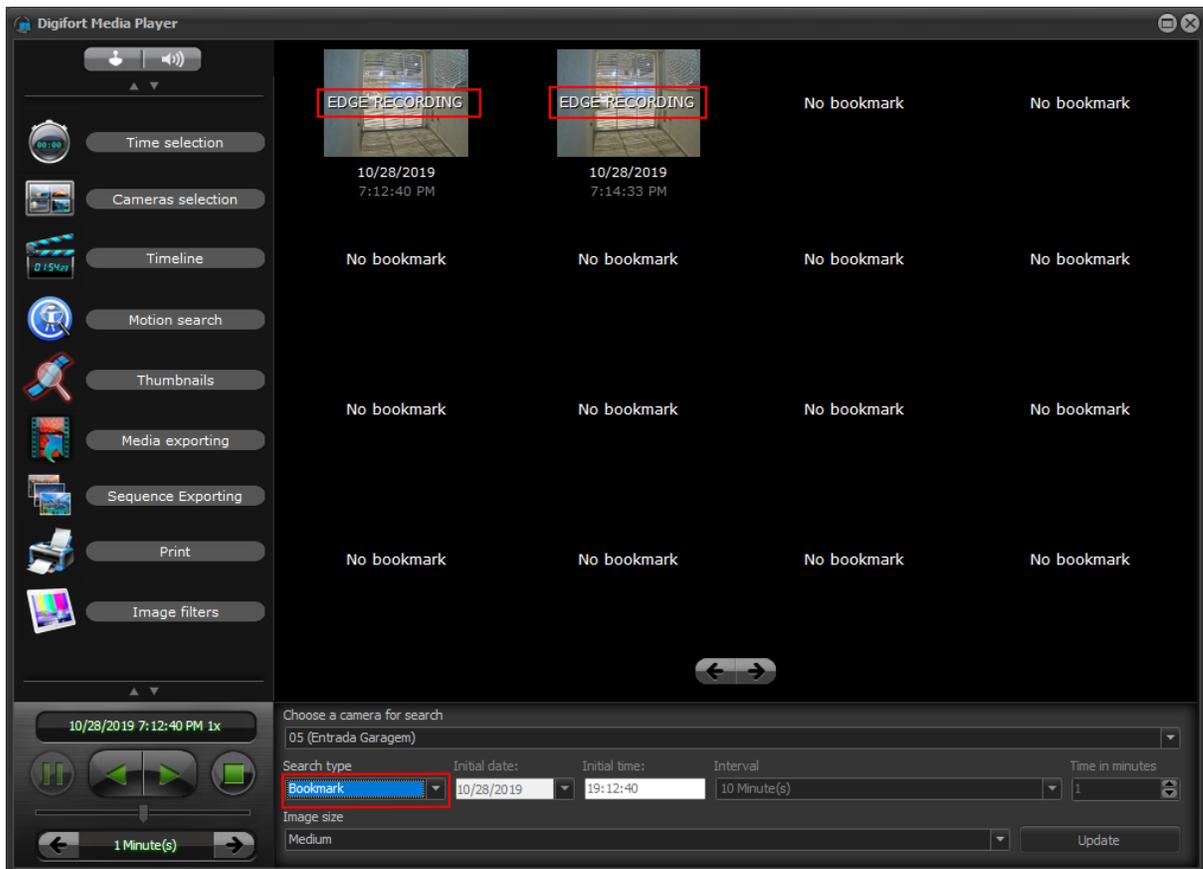
To register a server previously it was necessary to click on the add button, selecting the server type from the list of objects, now the server type will be available to be selected on the registration screen:

The image shows a software dialog box titled "Add Server". At the top left, there is a tab labeled "Server". Below the tab, there is a header area with a computer icon and the text "Add Server". The main content area contains several input fields: a "Server Type" dropdown menu with "Digifort" selected (this dropdown is highlighted with a red border), a "Server Name" text box, a "Server IP" text box, and a "Port" spinner box set to "8600". There is also an unchecked checkbox labeled "Use SSL". Below these fields is a large empty rectangular area labeled "Servers". At the bottom of the dialog, there are two buttons: "OK" (highlighted with a blue border) and "Cancel".

#### 4.1.96.18 Bookmark name in video playback thumbnails

##### Professional, Enterprise

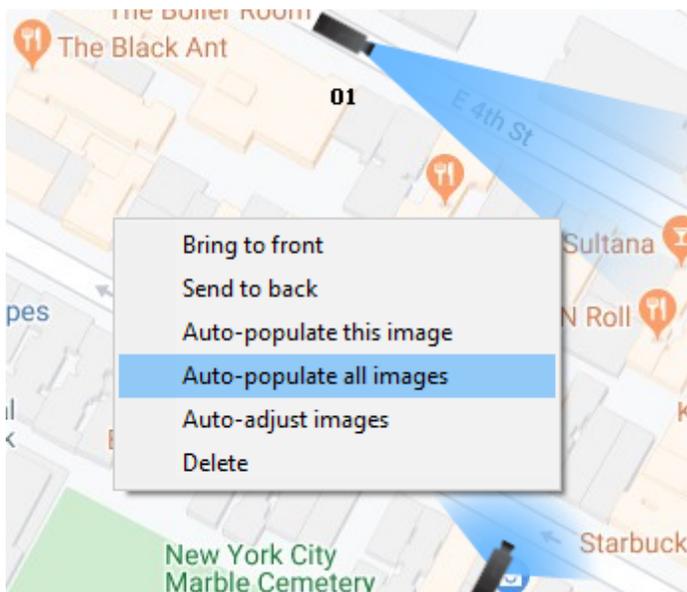
The Video Player Thumbnails function will now display the name of the bookmark associated with the thumbnail image when the search type is set to "Bookmark"



#### 4.1.96.19 Auto-Populate maps on synoptic maps

##### Standard, Professional, Enterprise

The "Auto-Populate Images" function of the Synoptic Map Editor in the Administration Client will now also add links to other synoptic maps that have defined geolocation coordinates.



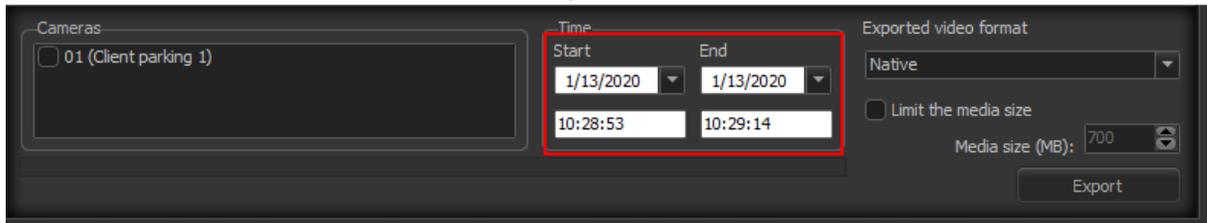
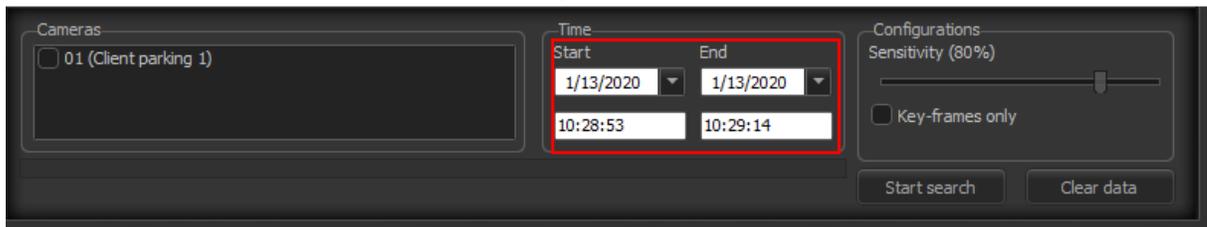
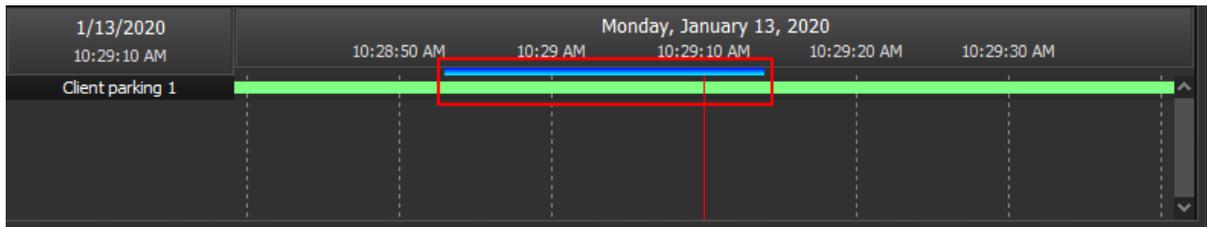
#### 4.1.96.20 Synchronized time selection in the media player

##### All editions

Screens with time selection in the Media Player are now synchronized. When the selected time is changed on one screen, it will be automatically changed on the other screens.

Connected screens:

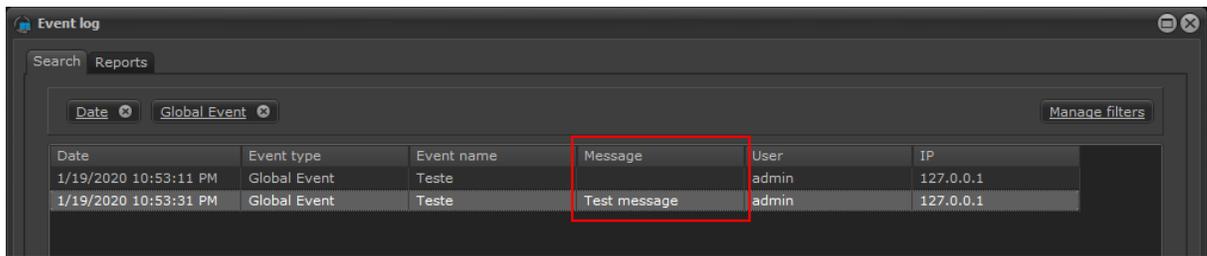
- Timeline
- Motion Search
- Export



#### 4.1.96.21 Displaying the global event message in search

##### Standard, Professional, Enterprise

Searching for Global Event records will now include the event message in the results. This message can be customized when triggering a global event via API, for integration with external systems.

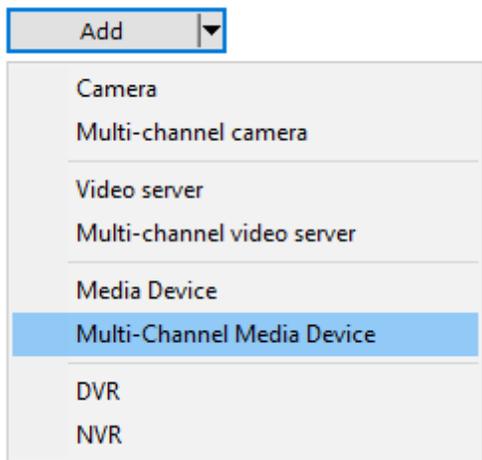


Date	Event type	Event name	Message	User	IP
1/19/2020 10:53:11 PM	Global Event	Teste		admin	127.0.0.1
1/19/2020 10:53:31 PM	Global Event	Teste	Test message	admin	127.0.0.1

#### 4.1.96.22 New filter in the device register

##### All editions

By clicking the button on the arrow next to the add button, the context menu now has a new option to display and filter only "Multi-Channel Media Devices".



#### 4.1.96.23 Custom email footer

##### All editions

Personalization of the title of emails sent by the system (To add a company name, for example), will now also be added at the bottom of the email.

**E-mail customization message****CONFIGURATIONS TEST**

If you have received this e-mail then your SMTP configurations are correct.

Event data:

Date: 3/18/2020

Hour: 11:14:26 AM

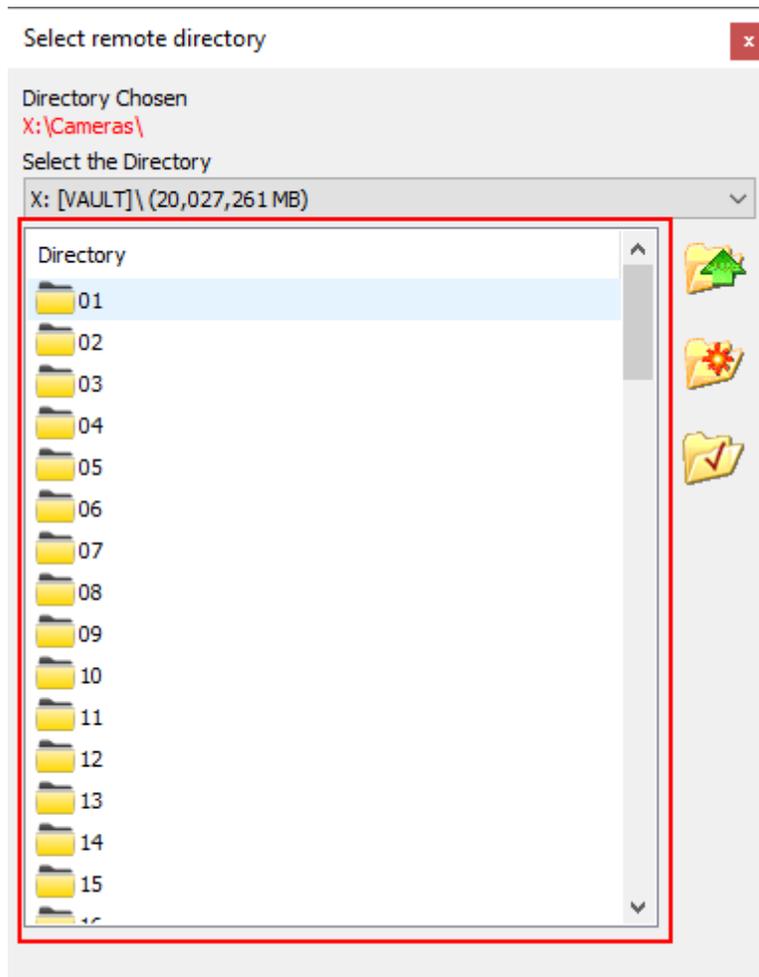
This e-mail was sent to: [REDACTED]

**E-mail customization message****4.1.96.24 Immervision library update****All editions**

The system has been updated to include the latest version of Immervision's Panomorph lens dewarping library.

**4.1.96.25 Directory selection screen****All editions**

The style of the directory list, in the directory selection screen for recording, will now be displayed in the "Report" format, which allows better visualization of long folder names.



#### 4.1.96.26 UTC server time

##### All editions

The Server Information screen on the Administration Client will now provide the server's local and UTC time.

**Local Server Time:** 1/20/2020 12:33:13 PM

**Server Time in UTC:** 1/20/2020 5:33:13 PM

**Active Time:** 1 Hour(s), 28 Minute(s) and 45 Second(s)

#### 4.1.96.27 Delete objects in the map editor with delete key

##### Standard, Professional, Enterprise

The Administration Client's Synoptic Map Editor now allows you to delete the selected object by pressing the Delete button on the keyboard, previously it was only possible to remove the object with the right-click context menu.

#### 4.1.96.28 DirectDraw Renderer option removed

##### All editions

The option of rendering by DirectDraw in the Surveillance Client has been removed and now the rendering will always be done by GDI or GDI + for better compatibility.

## 4.2 New supported devices

### 4.2.1 Media Devices

3S Security N5600  
3S Security N6010L  
3S Security N6019M  
AeroGuard DJI  
AGNI MB-51R2F  
AGNI MB-51R2SI  
AGNI MB-51R3B  
AGNI MB-51R3SL  
A-MTK AH5911D-20X  
A-MTK AH5911D-22X  
A-MTK AH5911D-32X  
Arecont AV02CID-100  
Arecont AV02CLB-100  
Arecont AV02CLD-100  
Arecont AV02CMB-100  
Arecont AV20CPD-118  
AvGlobal HDVRDH-7216A  
AviCam AV6001  
AviCam AV6003  
Avigilon 2.0C-H4A-B1-B  
Avigilon 2.0C-H5A-B1  
Avigilon 5.0-H4  
Axis Companion Cube L  
Axis D2050-VE  
Axis FA54  
Axis M1045-LW  
Axis M1065-LW  
Axis M1135  
Axis M1137  
Axis M3015  
Axis M3037  
Axis M3047-P  
Axis M3057-PLVE  
Axis M3058-PLVE  
Axis M3064-V  
Axis M3066-V  
Axis M3075-V  
Axis M3115-LVE  
Axis M3116-LVE  
Axis M3206-LVE  
Axis M4206-LV  
Axis M5054  
Axis M5055

Axis M5525-E  
Axis Open Platform  
Axis P1244  
Axis P1245  
Axis P1254  
Axis P1264  
Axis P1265  
Axis P1275  
Axis P1290  
Axis P1367  
Axis P1368-E  
Axis P1375  
Axis P1378  
Axis P1378-LE  
Axis P1425-LE Mk II  
Axis P3227-LV  
Axis P3227-LVE  
Axis P3235-LVE  
Axis P3245-LVE  
Axis P3245-VE  
Axis P3374-LV  
Axis P3374-V  
Axis P3375-V  
Axis P3375-VE  
Axis P3717-PLE  
Axis P3719-PLE  
Axis P3807-PVE  
Axis P5655-E  
Axis P9106-V  
Axis Q1637  
Axis Q1645  
Axis Q1647-LE  
Axis Q1700-LE  
Axis Q1786-LE  
Axis Q1941-E  
Axis Q1942-E  
Axis Q3504  
Axis Q3505 MKII  
Axis Q3515  
Axis Q3517  
Axis Q3615  
Axis Q6000-E MK II  
Axis Q6054 Mk II  
Axis Q6054-E Mk III  
Axis Q6074-E  
Axis Q6075-E  
Axis Q6124-E  
Axis Q6125-LE  
Axis Q6154-E  
Axis Q6155-E  
Axis Q8641-E PT  
Axis Q8742-E  
Ayrus AY-ECU-TC40PS-100F

Ayrus AY-ECU-TC40PS-25X4M  
Ayrus AY-ECU-TC41VO-30X5M  
Ayrus AY-NANO-IP-01D2MS  
Ayrus AY-NANO-IP-06D2M  
Ayrus AY-NANO-IP-16DZ2M20X  
Ayrus AY-NANO-IP-17DZ2M36X  
Ayrus AY-NANO-IP-21DZ5M20X  
Ayrus AY-NANO-IP-22D4M  
Ayrus AY-NANO-IP-4K-I20  
Ayrus AY-NANO-IP-55B4M  
Ayrus AY-NANO-IP-87B2M  
Ayrus IPD-C36Y02-BS  
Bosch Dinion IP 4000i IR  
Camopix CAMX-PLRTH09M  
Camopix CAM-XPLRTH13M  
Camopix CAMX-PLRTH20M  
Canon VB-C50FSi  
Clear 7316-N  
CP Plus CP-VNC-B21-VMD  
CP Plus CP-VNC-B4K-VM  
CP Plus CP-VNC-D4KR3-D  
CP Plus CP-VNC-E41R1C-MD  
CP Plus CP-VNCT21R3-V2  
CP Plus CP-VNC-T21ZR20-VMD  
CP Plus CP-VNC-T41FR3-VMD  
CP Plus CP-VNC-T41R3  
CP Plus CP-VNC-T41ZR3-VMD-2812  
CP Plus CP-VNC-T51ZR5-VMD  
CP Plus CP-VNC-V21R3  
CP Plus CP-VNC-V41R3  
CP Plus CP-VNC-V4KZR3-VMD  
CP Plus CP-VNC-V51R3-VMD  
CP Plus CP-VNP-3021L15  
CP Plus CP-VNP-3321R50-DAS  
CP Plus CP-VNP-4K22L25  
Cygnus IPC-2M-DWS  
Cygnus IPC-2M-FZ10X  
Cygnus IPC-4K-FEYE  
Cygnus IPC-4M-DZS  
Cygnus NVR7216-AI  
Cygnus NVR7864-AI  
Cygnus PTZ-2M-X22U  
Dahua DH SD60225U-HNI  
Dahua DHI-HCVR4104HS-S3  
Dahua DHI-HCVR4108HS-S3  
Dahua DHI-HCVR4116HS-S3  
Dahua DHI-MPT210  
Dahua DHI-MPT310  
Dahua DHI-NVR2104HS-P-S2  
Dahua DHI-NVR2104HS-S2  
Dahua DHI-NVR2104-P-S2  
Dahua DHI-NVR2104-S2  
Dahua DHI-NVR2108-8P-S2

Dahua DHI-NVR2108HS-8P-S2  
Dahua DHI-NVR2108HS-S2  
Dahua DHI-NVR2108-S2  
Dahua DHI-NVR2204-P-S2  
Dahua DHI-NVR2204-S2  
Dahua DHI-NVR2208-S2  
Dahua DHI-NVR4208-8P-4KS2  
Dahua DHI-NVR4416-4KS2  
Dahua DHI-NVR4432-4KS2  
Dahua DHI-NVR5208-4KS2  
Dahua DHI-NVR5208-8P-4KS2  
Dahua DHI-NVR5216-16P-4KS2  
Dahua DHI-NVR5216-16P-4KS2E  
Dahua DHI-NVR5216-4KS2  
Dahua DHI-NVR5216-8P-4KS2  
Dahua DHI-NVR5232-16P-4KS2  
Dahua DHI-NVR5232-4KS2  
Dahua DHI-NVR5232-8P-4KS2  
Dahua DHI-NVR5416-16P-4KS2  
Dahua DHI-NVR5416-4KS2  
Dahua DHI-NVR5424-24P-4KS2  
Dahua DHI-NVR5432-16P-4KS2  
Dahua DHI-NVR5432-4KS2  
Dahua DHI-NVR5464-16P-4KS2  
Dahua DHI-NVR5464-4KS2  
Dahua DHI-NVR5816-16P-4KS2  
Dahua DHI-NVR5816-4KS2  
Dahua DHI-NVR5832-16P-4KS2  
Dahua DHI-NVR5832-4KS2  
Dahua DHI-NVR5864-16P-4KS2  
Dahua DHI-NVR5864-4KS2  
Dahua DHI-NVR608-32-4KS2  
Dahua DHI-NVR608R-128-4KS2  
Dahua DHI-NVR608R-64-4KS2  
Dahua DHI-NVR616-128-4KS2  
Dahua DHI-NVR616-64-4KS2  
Dahua DHI-NVR616D-64-4KS2  
Dahua DHI-NVR616DR-128-4KS2  
Dahua DHI-NVR616DR-64-4KS2  
Dahua DHI-NVR616R-128-4KS2  
Dahua DHI-NVR616R-64-4KS2  
Dahua DH-IPC-HDBW1431EN-S  
Dahua DH-IPC-HDBW4231EN-ASE  
Dahua DH-IPC-HDBW4231FN-AS-S2  
Dahua DH-IPC-HDBW4231FN-M12-S2  
Dahua DH-IPC-HDBW4231FN-M-S2  
Dahua DH-IPC-HDBW4239RN-ASE-NI  
Dahua DH-IPC-HDBW4431EN-ASE  
Dahua DH-IPCHDBW4431EN-AS-S2  
Dahua DH-IPC-HDBW4431FN-AS-S2  
Dahua DH-IPC-HDBW4431FN-M12-S2  
Dahua DH-IPC-HDBW4431FN-M-S2  
Dahua DH-IPC-HDBW4631EN-ASE

Dahua DH-IPC-HDBW4631EN-AS-S2  
Dahua DH-IPC-HDBW4830EN-AS  
Dahua DH-IPC-HDBW4831EN-ASE  
Dahua DH-IPC-HDBW5231EN-Z-S2  
Dahua DH-IPC-HDBW5431EN-ZE  
Dahua DH-IPC-HDBW5431EN-Z-S2  
Dahua DH-IPC-HDBW5631EN-ZE  
Dahua DH-IPC-HDBW5830EN-Z-S2  
Dahua DH-IPC-HDBW5831EN-ZE  
Dahua DH-IPC-HDBW8242EN-Z4FR  
Dahua DH-IPC-HDBW8242E-Z4FD  
Dahua DH-IPC-HDW1020SN-0280B-S3  
Dahua DH-IPC-HF5431EN-S2  
Dahua DH-IPC-HF8242F-FD  
Dahua DH-IPC-HF8242F-FR  
Dahua DH-IPC-HFW2230RN-ZAS-IRE6  
Dahua DH-IPC-HFW2230RN-ZS-IRE6  
Dahua DH-IPC-HFW2230TN-VFAS  
Dahua DH-IPC-HFW2230TN-VFS  
Dahua DH-IPC-HFW2230TN-ZAS  
Dahua DH-IPC-HFW2230TN-ZS  
Dahua DH-IPC-HFW2231RNVFAS-IRE6  
Dahua DH-IPC-HFW2231RNVFS-IRE6  
Dahua DH-IPC-HFW2231RNZAS-IRE6  
Dahua DH-IPC-HFW2231RNZS-IRE6  
Dahua DH-IPC-HFW2231TN-VFAS  
Dahua DH-IPC-HFW2231TN-VFS  
Dahua DH-IPC-HFW2231TN-ZAS  
Dahua DH-IPC-HFW2231TN-ZS  
Dahua DH-IPC-HFW2231T-ZS  
Dahua DH-IPC-HFW2421R-VFS/ZS-IRE6  
Dahua DH-IPC-HFW2431RN-VFAS-IRE6  
Dahua DH-IPC-HFW2431RN-VFS-IRE6  
Dahua DH-IPC-HFW2431RN-ZAS-IRE6  
Dahua DH-IPC-HFW2431RN-ZS-IRE6  
Dahua DH-IPC-HFW2431TN-VFAS  
Dahua DH-IPC-HFW2431TN-VFS  
Dahua DH-IPC-HFW2431TN-ZAS  
Dahua DH-IPC-HFW2431TN-ZS  
Dahua DH-IPC-HFW2431T-VFAS  
Dahua DH-IPC-HFW2431T-ZAS  
Dahua DH-IPC-HFW2531TN-VFAS  
Dahua DH-IPC-HFW2531TN-VFS  
Dahua DH-IPC-HFW2531TN-ZAS  
Dahua DH-IPC-HFW2531TN-ZS  
Dahua DH-IPC-HFW4231EN-SE  
Dahua DH-IPC-HFW4231SN-S2  
Dahua DH-IPC-HFW4231TN-ASE  
Dahua DH-IPC-HFW4239TN-ASE-NI  
Dahua DH-IPC-HFW4431EN-SE  
Dahua DH-IPC-HFW4431SN-S2  
Dahua DH-IPC-HFW4431TN-ASE  
Dahua DH-IPC-HFW4631EN-SE

Dahua DH-IPC-HFW4631TN-ASE  
Dahua DH-IPC-HFW4831EN-SE  
Dahua DH-IPC-HFW4831TN-ASE  
Dahua DH-IPC-HFW5231EN-Z12-S2  
Dahua DH-IPC-HFW5231EN-ZE  
Dahua DH-IPC-HFW5231EN-ZHE  
Dahua DH-IPC-HFW5231EN-ZH-S2  
Dahua DH-IPC-HFW5231EN-Z-S2  
Dahua DH-IPC-HFW5431EN-ZE  
Dahua DH-IPC-HFW5431EN-ZHE  
Dahua DH-IPC-HFW5431EN-ZH-S2  
Dahua DH-IPC-HFW5431EN-Z-S2  
Dahua DH-IPC-HFW5631EN-ZE  
Dahua DH-IPC-HFW5831ENF  
Dahua DH-IPC-HFW5831EN-ZE  
Dahua DH-MNVR1104  
Dahua DH-MNVR4104  
Dahua DH-SD10A248VN-HNI  
Dahua DH-SD22204T-GN-W  
Dahua DH-SD50131U-HNI  
Dahua DH-SD50230U-HNI  
Dahua DH-SD50430U-HNI  
Dahua DH-SD52C131U-HNI  
Dahua DH-SD52C225U-HNI  
Dahua DH-SD52C230U-HNI  
Dahua DH-SD59131U-HNI  
Dahua DH-SD59225U-HNI  
Dahua DH-SD59430U-HNI  
Dahua DH-SD60131U-HNI  
Dahua DH-SD60230U-HNI  
Dahua DH-SD60230U-HNI-SL  
Dahua DH-SD65F230F-HNI  
Dahua DH-SD6AE240V-HNI  
Dahua DH-SD6AE530U-HNI  
Dahua DH-SD6C430U-HNI  
Dahua DH-TPC-BF-2120  
Dahua DH-TPC-SD8420-TC  
Dahua DH-TPC-XF2120  
Dahua HCVR4224AN  
Dahua IPC-HDW2431R-ZS  
Dahua IPC-HDW8341X-3D  
Dahua IPC-HDW8341XN-3D  
Dahua IPC-HDW8341XP-3D  
Dahua IPC-HF5231EN-S2  
Dahua IPC-HF5231E-Z  
Dahua IPC-HF5431E-Z  
Dahua IPC-HFW1431S  
Dahua IPC-HFW2431R-ZAS/VFAS-IRE6  
Dahua IPC-HFW2431R-ZS/VFS-IRE6  
Dahua IPC-HFW2431TN-VFS  
Dahua IPC-HFW2431TN-ZS  
Dahua IPC-HFW2431TP-VFS  
Dahua IPC-HFW2431TP-ZS

Dahua IPC-HFW2431T-ZS  
Dahua IPC-HFW2531T-ZS  
Dahua IPC-HFW7442H-Z4  
Dahua IPC-PDBW8800-A180  
Dahua IPC-PF83230-A180  
Dahua IPC-PFW8601-A180  
Dahua IPC-PFW8800-A180  
Dahua ITC215-PW4I-LZF27135  
Dahua ITC237-PW1B-IRZ  
Dahua ITC352-RF2D-IR  
Dahua PSD81602-A360  
Dahua PTZ12230FN-IRB-N-S2  
Dahua SD29204T-GN  
Dahua SD29204T-GN-W  
Dahua SD60430UN-HNI  
Dahua VTO2101E-P-S1  
Digifort Live Witness Server  
D-Link DCS-960L  
DMZ DVR-7608AV  
Dynacolor R2SD-G  
Dynacolor R3SD-F  
Dynacolor R3SL-6  
Dynacolor R3V6-B  
Dynacom WQ5ZV  
Dynacom WQ950ZV  
Dynatek HD-3220WI-DE4  
Dynatek HP-1080H-V560D  
Dynatek MS-2961-4G  
Dynatek MV-3220WI-4G  
Dyno DYCAAI-BM236-H1  
Dyno DYCAAI-BM4K36-H1  
Dyno DYCAAI-BM536-H1  
Dyno DYCAAI-DM236-H1  
Dyno DYCAAI-DM4K36-H1  
Dyno DYCAH-DM536-H1  
Dyno DYCAIP-BM2212-H1  
Dyno DYCAIP-BM236-H1  
Dyno DYCAIP-BM536-H1  
Dyno DYCAIP-BP236-H1  
Dyno DYCAIP-DM2212-H1  
Dyno DYCAIP-DM236-H1  
Dyno DYCAIP-DM536-H1  
Elsys ESC-WB2F  
Elsys ESC-WR2  
Elsys ESC-WY2  
Flexwatch FW7707-FNR  
Flexwatch FW7930-PSM  
Flexwatch FW7930-TVM  
Flexwatch FWR228-01N  
Flir DH3902MP843  
Flir FB-309 ID  
Flir FB-309 O  
Flir FB-312 ID

Flir FB-312 O  
Flir FB-324 ID  
Flir FB-324 O  
Flir FB-349 ID  
Flir FB-349 O  
Flir FB-393 ID  
Flir FB-393 O  
Flir FB-618-ID  
Flir FB-618-O  
Flir FB-632-ID  
Flir FB-632-O  
Flir FB-650-ID  
Flir FB-650-O  
Flir FB-695-ID  
Flir FB-695-O  
Foscam FI8910E  
Foscam FI9800P  
Foscam FI9803EP  
Foscam FI9816P  
GeoVision GV-EBD4700  
Gerp IP NMBE4M-3.6-A  
Gerp IP NMDE4M-2.8  
Gerp IP NSDE2MIR-30X-A  
Giga GS0120  
Giga GS0180  
Giga GS0181  
Giga GS0182  
Giga GS0191  
Giga GS0192  
Hanwha Techwin LND-6010R  
Hanwha Techwin LND-6020R  
Hanwha Techwin LND-6030R  
Hanwha Techwin LND-6070R  
Hanwha Techwin LNO-6010R  
Hanwha Techwin LNO-6020R  
Hanwha Techwin LNO-6030R  
Hanwha Techwin LNO-6070R  
Hanwha Techwin LNV-6010R  
Hanwha Techwin LNV-6020R  
Hanwha Techwin LNV-6030R  
Hanwha Techwin LNV-6070R  
Hanwha Techwin PND-9080R  
Hanwha Techwin PND-A8081RV  
Hanwha Techwin PND-A9081RF  
Hanwha Techwin PND-A9081RV  
Hanwha Techwin PNF-9010R  
Hanwha Techwin PNF-9010RV  
Hanwha Techwin PNF-9010RVM  
Hanwha Techwin PNM-7000VD  
Hanwha Techwin PNM-9000VD  
Hanwha Techwin PNM-9000VQ  
Hanwha Techwin PNM-9020V  
Hanwha Techwin PNM-9030V

Hanwha Techwin PNM-9080VQ  
Hanwha Techwin PNM-9081VQ  
Hanwha Techwin PNM-9320VQP  
Hanwha Techwin PNO-9080R  
Hanwha Techwin PNP-9200RH  
Hanwha Techwin PNV-9080R  
Hanwha Techwin QNB-6000P  
Hanwha Techwin QNB-6002  
Hanwha Techwin QNB-7000P  
Hanwha Techwin QNB-8002  
Hanwha Techwin QND-6010R  
Hanwha Techwin QND-6011  
Hanwha Techwin QND-6012R  
Hanwha Techwin QND-6020R  
Hanwha Techwin QND-6022R  
Hanwha Techwin QND-6030R  
Hanwha Techwin QND-6032R  
Hanwha Techwin QND-6070R  
Hanwha Techwin QND-6072R  
Hanwha Techwin QND-6082R  
Hanwha Techwin QND-7010R  
Hanwha Techwin QND-7020R  
Hanwha Techwin QND-7020RN  
Hanwha Techwin QND-7030R  
Hanwha Techwin QND-7030RN  
Hanwha Techwin QND-7080R  
Hanwha Techwin QND-7082R  
Hanwha Techwin QND-8010R  
Hanwha Techwin QND-8011  
Hanwha Techwin QND-8020R  
Hanwha Techwin QND-8021  
Hanwha Techwin QND-8030R  
Hanwha Techwin QND-8080R  
Hanwha Techwin QNE-7080RV  
Hanwha Techwin QNE-8011R  
Hanwha Techwin QNE-8021R  
Hanwha Techwin QNF-8010  
Hanwha Techwin QNF-9010  
Hanwha Techwin QNO-6010R  
Hanwha Techwin QNO-6020R  
Hanwha Techwin QNO-6030R  
Hanwha Techwin QNO-6070R  
Hanwha Techwin QNO-6072R  
Hanwha Techwin QNO-6082R  
Hanwha Techwin QNO-7010R  
Hanwha Techwin QNO-7010RN  
Hanwha Techwin QNO-7020R  
Hanwha Techwin QNO-7020RN  
Hanwha Techwin QNO-7030R  
Hanwha Techwin QNO-7030RN  
Hanwha Techwin QNO-7080R  
Hanwha Techwin QNO-8010R  
Hanwha Techwin QNO-8020R

Hanwha Techwin QNO-8030R  
Hanwha Techwin QNO-8080R  
Hanwha Techwin QNP-6230  
Hanwha Techwin QNP-6230H  
Hanwha Techwin QNP-6230RH  
Hanwha Techwin QNP-6320  
Hanwha Techwin QNP-6320H  
Hanwha Techwin QNV-6010R  
Hanwha Techwin QNV-6020R  
Hanwha Techwin QNV-6022R  
Hanwha Techwin QNV-6024RM  
Hanwha Techwin QNV-6030R  
Hanwha Techwin QNV-6070R  
Hanwha Techwin QNV-6072R  
Hanwha Techwin QNV-6082R  
Hanwha Techwin QNV-7010R  
Hanwha Techwin QNV-7020R  
Hanwha Techwin QNV-7030R  
Hanwha Techwin QNV-7080R  
Hanwha Techwin QNV-8010R  
Hanwha Techwin QNV-8020R  
Hanwha Techwin QNV-8030R  
Hanwha Techwin QNV-8080R  
Hanwha Techwin SNB-5000A  
Hanwha Techwin SNB-5003  
Hanwha Techwin SNB-5004  
Hanwha Techwin SNB-5004N  
Hanwha Techwin SNB-6003  
Hanwha Techwin SNB-6003N  
Hanwha Techwin SNB-6004  
Hanwha Techwin SNB-6004F  
Hanwha Techwin SNB-6004N  
Hanwha Techwin SNB-6005  
Hanwha Techwin SNB-6010  
Hanwha Techwin SNB-6010B  
Hanwha Techwin SNB-6011  
Hanwha Techwin SNB-6011B  
Hanwha Techwin SNB-6011N  
Hanwha Techwin SNB-7000  
Hanwha Techwin SNB-7001P  
Hanwha Techwin SNB-7002  
Hanwha Techwin SNB-7002N  
Hanwha Techwin SNB-7004P  
Hanwha Techwin SNB-8000  
Hanwha Techwin SNB-8000N  
Hanwha Techwin SNB-9000  
Hanwha Techwin SND-1011  
Hanwha Techwin SND-1080  
Hanwha Techwin SND-3080  
Hanwha Techwin SND-3080F  
Hanwha Techwin SND-3082  
Hanwha Techwin SND-3082F  
Hanwha Techwin SND-5010

Hanwha Techwin SND-5010P  
Hanwha Techwin SND-5061  
Hanwha Techwin SND-5061N  
Hanwha Techwin SND-5080  
Hanwha Techwin SND-5080F  
Hanwha Techwin SND-5083  
Hanwha Techwin SND-5084  
Hanwha Techwin SND-5084R  
Hanwha Techwin SND-6011R  
Hanwha Techwin SND-6083  
Hanwha Techwin SND-6083N  
Hanwha Techwin SND-7011  
Hanwha Techwin SND-7011P  
Hanwha Techwin SND-7061  
Hanwha Techwin SND-7080  
Hanwha Techwin SND-7080F  
Hanwha Techwin SND-7082  
Hanwha Techwin SND-7082F  
Hanwha Techwin SND-7082N  
Hanwha Techwin SND-7084  
Hanwha Techwin SND-7084N  
Hanwha Techwin SND-7084R  
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Hanwha Techwin SND-L6013P  
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Hanwha Techwin SNO-8081RN

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Hanwha Techwin SNV-3082

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Hanwha Techwin TNV-7010RC

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Hanwha Techwin XND-8081RF  
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Hanwha Techwin XND-L6080RV  
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Hanwha Techwin XNO-6120

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Hanwha Techwin XNP-6371RH  
Hanwha Techwin XNP-6550RH  
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Hanwha Techwin XNV-6085  
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Hanwha Techwin XNV-6120RS  
Hanwha Techwin XNV-8010R  
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Hanwha Techwin XNV-8040R  
Hanwha Techwin XNV-8080R  
Hanwha Techwin XNV-8080RN  
Hanwha Techwin XNV-8080RS  
Hanwha Techwin XNV-8081R  
Hanwha Techwin XNV-8081Z  
Hanwha Techwin XNV-L6080  
Hanwha Techwin XNV-L6080R  
Hanwha Techwin XNZ-6320

Hanwha Techwin XNZ-L6320  
HBTech HB-6208  
Hikvision DS-2CD1023-G0I  
Hikvision DS-2CD1121-I  
Hikvision DS-2CD1323-G0I  
Hikvision DS-2CD2021G1-I  
Hikvision DS-2CD2123G0-IS  
Hikvision DS-2CD2145FWD-I(S)  
Hikvision DS-2CD2455FWD-I  
Hikvision DS-2CD2623G1-IZS(C)  
Hikvision DS-2CD2625FHWD-IZS  
Hikvision DS-2CD2643G0-IZS  
Hikvision DS-2CD2720F-I  
Hikvision DS-2CD2763G0-IZS  
Hikvision DS-2CD2935FWD-IS  
Hikvision DS-2CD2T23G0-I8  
Hikvision DS-2CD2T25FWD-I5  
Hikvision DS-2CD3643G1-IZS  
Hikvision DS-2CD3743G1-IZS  
Hikvision DS-2CD4B25G0-IZSC  
Hikvision DS-2CD5A26G0-IZS  
Hikvision DS-2CD5A85G0-IZHS  
Hikvision DS-2DE4215W-DE  
Hikvision DS-2DE4225W-DE  
Hikvision DS-2DE4425W-DE3  
Hikvision DS-2DE4A225IW-DE  
Hikvision DS-2DE5225W-AE  
Hikvision DS-2DE7232IW-AE  
Hikvision DS-2DF5225X-AE3  
Hikvision DS-2DF5225X-AEL  
Hikvision DS-2DF5232X-AE3  
Hikvision DS-2DF5232X-AEL  
Hikvision DS-2DF6225X-AEL  
Hikvision DS-2DF6236X-AEL  
Hikvision DS-2DF6A225X-AEL  
Hikvision DS-2DF6A236X-AEL  
Hikvision DS-2DF6A425X-AEL  
Hikvision DS-2DF6A436X-AEL  
Hikvision DS-2DF6A825X-AEL  
Hikvision DS-2DF6A836X-AEL  
Hikvision DS-2DF7225IX-AEL  
Hikvision DS-2DF7225IX-AELW  
Hikvision DS-2DF7232IX-AEL  
Hikvision DS-2DF7232IX-AELW  
Hikvision DS-2DF8236IX-AELW  
Hikvision DS-2DF8236IX-AEL  
Hikvision DS-2DF8425IX-AEL  
Hikvision DS-2DF8425IX-AELW  
Hikvision DS-2DF8436IX-AELW  
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Hikvision DS-2DF8825IX-AEL  
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Hikvision DS-2DF8836I5X-AELW  
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Hikvision DS-2DF8836IX-AELW  
Hikvision DS-2PT3326IZ-DE3  
Hikvision DS-2TD1217B-3/PA  
Hikvision DS-2TD1217B-6/PA  
Hikvision DS-2TD2617B-6/PA  
Hikvision DS-2TD2636B-13/P  
Hikvision DS-2TD2636B-15/P  
Hikvision DS-2TD2637B-10/P  
Hikvision DS-7104NI-Q1/4P/M  
Hikvision DS-7108NI-Q1/8P/M  
Hikvision DS-7204HQHI-K/P  
Hikvision DS-7204HQHI-K1  
Hikvision DS-7204HQHI-K1/P  
Hikvision DS-7204HUHI-K2  
Hikvision DS-7208HQHI-F1/N  
Hikvision DS-7208HQHI-K1  
Hikvision DS-7208HUHI-K2  
Hikvision DS-7216HQHI-F1/N  
Hikvision DS-7216HQHI-K1  
Hikvision DS-7216HUHI-F1/N  
Hikvision DS-7216HUHI-K2  
Hikvision DS-7224HQHI-K2  
Hikvision DS-7232HQHI-K2  
Hikvision DS-7332HUHI-K4  
Hikvision DS-7604NI-E1/4P  
Hikvision DS-7604NI-K1  
Hikvision DS-7608NI-K1  
Hikvision DS-7608NI-Q2/8P  
Hikvision DS-7616NI-K2/16P  
Hikvision DS-7616NI-Q2/16P  
Hikvision DS-7716NI-K4/16P  
Hikvision DS-7732NI-E4  
Hikvision DS-7732NI-E4/16P  
Hikvision DS-7732NI-K4 / 16P  
Hikvision DS-9608NI-I8  
Hikvision DS-96128NI-I16  
Hikvision DS-9616NI-I8  
Hikvision DS-9632NI-I8  
Hikvision DS-9664NI-I8  
Hikvision DS-MH2111  
Hikvision DVR-104G-F1  
Hikvision DVR-108G-F1  
Hikvision DVR-116G-F1  
Hikvision Gateway DS-GWAS0101  
Hikvision Hikconnect 128  
Hikvision Hikconnect 16  
Hikvision Hikconnect 32  
Hikvision Hikconnect 64  
Hikvision iDS-2CD8426G0/F-I  
Hikvision IDS-2VS235-F836  
Hikvision iDS-TCM203-AR

Hikvision iDS-TCM403-AI  
HiLook DVR-104G-F1  
HiLook DVR-108G-F1  
HiLook DVR-116G-F1  
Honeywell H4D8PR1  
Honeywell H4W2PRV2  
Honeywell H4W4PER2  
Honeywell H4W4PRV2  
Honeywell H4W4PRV3  
Honeywell HBD8PR1  
Honeywell HBW2PR2  
Honeywell HBW4PR2  
Honeywell HDZP252DI  
Honeywell HDZP304DI  
Honeywell HED8PR1  
Honeywell HEN04113  
Honeywell HEN08113  
Honeywell HEN16113  
Honeywell HEW2PR2  
Honeywell HEW4PR2  
Honeywell HFD5PR1  
Idis DC-D3533RX  
Idis DC-D4213WRX  
Idis DC-D4233WRX  
Idis DC-S3283WHX  
Idis DC-S3583HRX  
Idis DC-T3233HRX  
Idis DC-T3533HRX  
Idis DC-T4233WRX  
Idis DC-Y3C14WRX  
Illustra IFS03B1BNWIT  
Illustra IFS03D1ICWTT  
Illustra IPS02CFOCWST  
Illustra IPS03CFOCWST  
Inova BH20IR60IP-VF  
Inova BHSP20IR30-IP  
Inova INMBM2O-IP  
Inova IPD-C34Y02-BS  
Intelbras iMHDX 5008  
Intelbras iMHDX 9008  
Intelbras iMHDX 9016  
Intelbras MHDX 1032  
Intelbras MHDX 1104  
Intelbras MHDX 1108  
Intelbras MHDX 1116  
Intelbras MHDX 1132  
Intelbras MHDX 3004  
Intelbras MHDX 3008  
Intelbras MHDX 3016  
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Intelbras MHDX 3108  
Intelbras MHDX 3116  
Intelbras MHDX 3132

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Intelbras NVD3208-P  
Intelbras NVD-5016 4K  
Intelbras NVD-5124  
Intelbras NVD-7132  
Intelbras SVR-7116 IA  
Intelbras SVR-7132 IA  
Intelbras SVR-7164 IA  
Intelbras VIP 1020 B  
Intelbras VIP 1020-B-G2  
Intelbras VIP 1020-D-G2  
Intelbras VIP 1220B  
Intelbras VIP 3212 SD IP  
Intelbras VIP 3220 B  
Intelbras VIP 3220 D  
Intelbras VIP 3230 DW  
Intelbras VIP 3230 W  
Intelbras VIP 3250 MIC  
Intelbras VIP 3260Z  
Intelbras VIP 3430 B  
Intelbras VIP 3430 D  
Intelbras VIP 3430 DW  
Intelbras VIP 3430 W  
Intelbras VIP 5450DZ-G2  
Intelbras VIP 5450Z-G2  
Intelbras VIP 5850B  
Intelbras VIP 7180B  
Intelbras VIP 7180D  
Intelbras VIP 7208-LPR-G2  
Intelbras VIP 7223-LPR  
Intelbras VIP 7237 SD  
Intelbras VIP E5212  
iVSEC NC-512XA  
iVSEC NC-512XB  
JFL Alarmes CD-2230 IP  
JFL Alarmes DHD-2104N  
JFL Alarmes DHD-2108N  
JFL Alarmes DHD-2116N  
JFL Alarmes DHD-3204  
JFL Alarmes DHD-3208

JFL Alarmes DHD-3216  
JFL Alarmes DHD-3304  
JFL Alarmes DHD-3308  
JFL Alarmes DHD-3316  
JFL Alarmes DHD-8008  
JFL Alarmes DHD-8016  
JFL Alarmes SP-3500  
JFL Alarmes WD3004  
JFL Alarmes WN2016  
JL Protec JL-IP6110  
JL Protec JL-IP6120  
JL Protec JL-NVR3009  
JL Protec JL-NVR3016  
Lenel ICT-510  
Longse LIN605XSL200  
Longse LMDES600  
LuxVision LV-NVR-5316  
Milesight MS-C2961-EPB  
Milesight MS-C5341-X23HPB  
Milesight MS-C9674-PB  
Mobotix M16  
Mobotix Q26  
Mobotix T25  
Motorola MTIB202M  
Motorola MTIB205M  
Motorola MTIB302MV  
Motorola MTIB402MV  
Motorola MTIB405MV  
Motorola MTID202M  
Motorola MTID205M  
Motorola MTID402MV  
Motorola MTIPM052631  
Motorola MTIPM152631  
Motorola MTIPM153651  
Motorola MTR04A1080L  
Motorola MTR04AFHD  
Motorola MTR08A1080L  
Motorola MTR08AFHD  
Motorola MTR08IP  
Motorola MTR08IPOE  
Motorola MTR16A1080L  
Motorola MTR16AFHD  
Motorola MTR16IP  
MTW VM0614M  
NVS NVM-262(310)  
NVS NVM-262(310R)  
NVS NVM-262(722)  
NVS NVM-263  
NVS NVM-263RF  
NVS NVM-272(310)  
NVS NVM-272(722)  
NVS NVM-273  
NVS NVM-281

NVS NVM-282  
NVS NVM-362  
NVS NVM-363  
NVS NVM-363RF  
NVS NVM-372  
NVS NVM-462  
NVS NVM-463  
NVS NVM-463FR  
NVS NVM-472  
NVS NVM-473  
NVS NVM-481  
NVS NVM-482  
NVS NV-NB425Z  
NVS NV-NB426NP/HIZA  
NVS NV-NB426NP/IZ  
NVS NV-NB426NP/IZA  
NVS NV-NB426NP/LZA  
NVS NV-NB625  
NVS NV-ND622  
NVS NV-ND722  
NVS NV-ND725  
NVS NV-NM230  
NVS NV-NM236W  
NVS NV-NM520I  
NVS NV-NR704I  
NVS NV-NR708I  
Ominiware Omini Sentry  
Oncam EVO-180-WID  
Oncam EVO-180-WJD  
Panasonic WV-SUD638  
Panasonic WV-V1330LK  
Panasonic WV-V6430L  
Pelco IMP831-1ER  
Pelco IMP831-1ERS  
Pelco IMP831-1RS  
Pelco Sarix IBP131-1ER  
Pelco Sarix IBP231-1ER  
Pelco Sarix IBP232-1ER  
Pelco Sarix IBP235-1ER  
Pelco Sarix IBP331-1ER  
Pelco Sarix IBP335-1ER  
Pelco Sarix IBP531-1ER  
Pelco Sarix IBP532-1ER  
Pelco Sarix IMP131-1ERS  
Pelco Sarix IMP131-1IRS  
Pelco Sarix IMP231-1ERS  
Pelco Sarix IMP231-1ES  
Pelco Sarix IMP231-1IRS  
Pelco Sarix IMP231-1IS  
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Pelco Sarix IMP331-1IRS  
Pelco Sarix IMP331-1IS

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Pelco Sarix IMP531-1IS  
Pelco Sarix IWP133-1ERS  
Pelco Sarix IWP232-1ERS  
Pelco Sarix IWP233-1ERS  
Pelco Sarix IWP234-1ERS  
Pelco Sarix IWP236-1ERS  
Pelco Sarix IWP333-1ERS  
Pelco Sarix IWP532-1ERS  
Pelco Sarix IWP533-1ERS  
Pelco Sarix IXP13  
Pelco Sarix IXP23  
Pelco Sarix IXP33  
Pelco Sarix IXP53  
Pelco Spectra Enhanced D6230  
Pelco Spectra Pro 4K P2820  
Pelco Spectra Pro 4K P2820-ESR  
Pelco Spectra Pro IR P2230  
Pelco Spectra Pro IR P2230-ESR  
Pelco Spectra Pro IR P2230L-ESR  
Proimage PROI-0505  
Proimage PROI-5012U  
Proimage PROI-810W  
Provision-ISR I8-340IP5MVF  
Redvision RVX2  
Relm RC-EH15  
Reolink RLC-422  
Safety IPD-H21M05  
Safire SF-HTVR6232-HEVC  
Safire SF-HTVR8104H  
Samsung HRD-1641  
Samsung HRD-1642  
Samsung LND-6020R  
Samsung LND-6030R  
Samsung LND-6070R  
Samsung LNO-6010R  
Samsung LNO-6020R  
Samsung LNO-6030R  
Samsung LNO-6070R  
Samsung LNV-6010R  
Samsung LNV-6030R  
Samsung LNV-6070R  
Samsung PNM-7000VD  
Samsung PNM-9000VQ  
Samsung PNM-9030V  
Samsung PNM-9320VQP  
Samsung QNE-7080RV  
Samsung QNP-6230H  
Samsung QNP-6320  
Samsung QNP-6320H  
Samsung QRN-810S

Samsung SDR-C75300  
Samsung SNP-L6233  
Samsung SNP-L6233H  
Samsung SNV-6012  
Samsung SNV-6013M  
Samsung SPE-110  
Samsung SPE-1610  
Samsung SPE-410  
Samsung SPE-410N  
Samsung SRD-493  
Samsung SRN-1673S  
Samsung TNU-6320  
Samsung XNB-6001  
Samsung XNB-6005  
Samsung XNB-6005N  
Samsung XND-6010  
Samsung XND-6081F  
Samsung XND-6081FZ  
Samsung XND-6081RF  
Samsung XND-6081RV  
Samsung XND-6081V  
Samsung XND-6081VZ  
Samsung XND-6085  
Samsung XND-6085V  
Samsung XND-8081FZ  
Samsung XND-8081RF  
Samsung XND-8081RV  
Samsung XND-8081VZ  
Samsung XND-L6080R  
Samsung XND-L6080RV  
Samsung XND-L6080V  
Samsung XNF-8010R  
Samsung XNF-8010RV  
Samsung XNF-8010RVM  
Samsung XNO-6085R  
Samsung XNO-6085RP  
Samsung XNO-8040R  
Samsung XNO-L6080R  
Samsung XNP-6040H  
Samsung XNP-6550RH  
Samsung XNV-6010  
Samsung XNV-6022R  
Samsung XNV-6022RM  
Samsung XNV-6080RS  
Samsung XNV-6081  
Samsung XNV-6081R  
Samsung XNV-6081Z  
Samsung XNV-6085  
Samsung XNV-6120RS  
Samsung XNV-8080RS  
Samsung XNV-8081R  
Samsung XNV-8081Z  
Samsung XNV-L6080

Samsung XNV-L6080R  
Samsung XNZ-6320  
Samsung XRN-3010A  
Siquira 8xx-9xx Series  
Sunell IPR57/20AKDN/T/Z2.7-12/13  
Tanz THC2524IR4B  
Tanz THC522BLS3A  
Tanz THC8229B  
Tanz THC8229IR1A  
Tanz THC822KIR5A  
Tanz THC8829IR5A  
Tattile F01761 - VegaSmart 2HD  
TecVoz TTV\_E504h  
TecVoz TTV-E508h  
TecVoz TTV-E516h  
TecVoz TTV-L104h  
TecVoz TTV-L108h  
TecVoz TTV-L116h  
TecVoz TTV-P5004h  
TecVoz TTV-P5008h  
TecVoz TTV-P5016h  
TecVoz TTV-P5432  
TecVoz TV-ICB102  
TecVoz TV-ICB202VM  
TecVoz TV-ICB206V  
TecVoz TV-ICB212  
TecVoz TV-ICB212vp  
TecVoz TV-ICB22v  
TecVoz TV-ICB23  
TecVoz TV-ICB23P  
TecVoz TV-ICB312VM  
TecVoz TV-ICB412VM  
TecVoz TV-ICB413  
TecVoz TV-ICB43  
TecVoz TV-IDM102  
TecVoz TV-IDM212vpp  
TecVoz TV-IDM22  
TecVoz TV-IDM22V  
TecVoz TV-IDM23P  
TecVoz TV-IDM412VMS  
TecVoz TV-IDM42  
TecVoz TV-ISP220IR  
TecVoz TV-ISP230IR  
TecVoz TV-P5432  
TecVoz TV-U2004  
TecVoz TV-U2008  
TecVoz TV-U2064  
TecVoz TW-ICB100  
TruVision TVF-3101  
Uniview IPC-2122SR3-PF40-C  
Uniview IPC-2122SR3-PF60-C  
Uniview IPC-2125SR3-ADUPF40  
Uniview IPC-2125SR3-ADUPF60

Uniview IPC-2222ER5-DUPF40-C  
Uniview IPC-2222ER5-DUPF60-C  
Uniview IPC-2322EBR5-HDUPZ  
Uniview IPC-6222E-X33UP  
Uniview NVR202-16E-P  
Uniview NVR202-32E  
Uniview NVR302-08E-P8  
Uniview NVR304-32E-P  
Uniview NVR308-64E-B  
Uniview NVR516-128  
Venetian FY-2300  
Venetian IP-51076  
Venetian IP-61077  
Venetian IP-62030  
Venetian IP-62351  
Venetian IP-63031  
Venetian IP-65441  
Venetian TD-2316ME-2W  
Vid8 VD0412D  
VideoTec UCHD11UAZ00B  
Videoteknika VB7475  
Videoteknika VB774A  
Videoteknika VS7355  
Viotec VTB57-30HDN-CS  
Viotec VTP-B20RF  
Viotec VTP-B20RZ  
Viotec VTP-B50RF  
Viotec VTP-B50RZ  
Viotec VTP-D20RF  
Viotec VTP-D20RZ  
Viotec VTP-D50RF  
Viotec VTP-D50RZ  
Viotec VTP-DE20-A600  
Viotec VTP-P120R  
Viotec VTP-Z20R23  
Viotec VTP-Z50R30  
Viotec VTR57-20AKDN-Z  
Viotec VTR57-20BYDN  
Viotec VTR57-41AKDN-Z  
Viotec VTR57-41BSDN  
Viotec VTRM-C4461-EB  
Viotec VTT-BT24M  
Viotec VTV57-20FDR  
Viotec VTV57-20UDR  
Viotec VTV57-41FDR  
Viotec VTV57-41UDR  
Viotec VTZ56-30BDR-ZSD30  
Visionbras VB-XVR5116HS-S3  
Vivotek FD8167A-S  
Vivotek FD9167-H  
Vivotek FD9187-H  
Vivotek FD9187-HT  
Vivotek FD9365-EHTV

Vivotek FD9365-HTV  
Vivotek FD9365-HTVL  
Vivotek FD9367-HTV  
Vivotek FD9387-EHTV  
Vivotek FD9387-EHV  
Vivotek FD9387-HTV  
Vivotek FD9389-HV  
Vivotek FD9389-HVM  
Vivotek FE9180-H  
Vivotek FE9181-H  
Vivotek FE9391-EV  
Vivotek IB8360  
Vivotek IB8377-HT  
Vivotek IB9365-EHT  
Vivotek IB9365-HT  
Vivotek IB9367-HT  
Vivotek IB9368-HT  
Vivotek IB9391-EHT  
Vivotek IP9165-HT  
Vivotek IP9165-LPC  
Vivotek IP9167-HT  
Vivotek IP9172-LPC  
Vivotek IP9191-HP  
Vivotek IP9191-HT  
Vivotek IT9389-H  
Vivotek IT9389-HT  
Vivotek MA8391-ETV  
Vivotek MA9321-EHTV  
Vivotek MD9561-H  
Vivotek MD9581-H  
Vivotek MS9321-EHV  
Vivotek MS9390-HV  
Vivotek TB9330-E  
Vivotek TB9331-E  
VTV DVR 16 ch AHD  
Vumii Sii AT FD  
Vumii Sii Op  
WAMA FW-38036  
WAMA NF4-B22S  
WAMA NF4-B36W  
WAMA NF4-D32S  
WAMA NF4-D62S  
WAMA NF4-V56W  
WAMA NM2-B22S  
WAMA NM2-B34W  
WAMA NM2-D22S  
WAMA NM2-D34W  
WAMA NM2-V54W  
WAMA NM8-B36W  
WAMA NM8-V26W  
WAMA NS12-F22W  
WAMA NS8-B36W  
WAMA NS8-V36W

WAMA NV2-B36W  
WAMA NV2-B66W  
WAMA NV2-V26W  
WAMA NV2-V36W  
WAMA NV2-V56W  
WAMA PZ2-T133  
WAMA PZ2-T210  
WAMA PZ2-T310  
WCA B60X307  
WCA B60X327  
WCA F60X323X5  
WCA F60X327  
WCA F90X2905X  
WCA FISHX226  
WCA FISHX326  
WCA H30F23  
WCA H30X290  
WCA H30X307  
WCA H30X323  
WCA H30X327  
WCA H30X327A  
WCA IPDE24Y00BS  
WCA LIR30X323  
WCA LIRX178  
WCA LIRX307  
WCA PTZ5E122X307  
XSecurity XS-XVR3108A

#### 4.2.2 I/O Devices

Aviosys IP Power 9823 GP  
Axis A1001  
Axis A9161  
Bosch B9412GV4  
Fiber SenSys FD-504  
Generic Ping  
Generic TCP Connection Test  
Moxa E2210  
MTW TelemetryHub  
NSE MTCP-1E1S  
NSE MTCP-3E8S  
Optex RLS-2020I  
Optex RLS-2020S

#### 4.3 Fixes

- The microphone on the Surveillance Client could stop working if the workstation has 2 or more audio input devices and the selected microphone is disconnected and reconnected again
- Fixed an issue in the analytics event list where the list could flicker when updating items.
- Fixed an issue that could crash and close the Monitoring Client when opening the LPR search screen, clicking on the "Trace map route" tab and closing the screen quickly.
- When analytics were configured to work via presets, some events might not be recorded in the database and the events in the Live Analytics control could be overwritten with new events instead of creating a new entry in the event list.

- Fixed a small memory leak that could occur in the connection socket between client and servers and analytics configuration
- When trying to add a camera after adding another camera via the camera finder, the screen for adding "multi-cameras" was displayed instead of a single camera
- When the server ID is changed (for example, after adding a hard key), objects could be duplicated in the Surveillance Client if it was open and connected to the server
- Fixed an issue in the transmission of JPEG through the RTSP server where a malformed JPEG could crash the server
- An internal problem could occur in the LPR settings if an associated peripheral camera is disabled
- The LPR report with Report Authentication enabled could crash the Surveillance Client
- The Surveillance Client could hang when sending authenticated reports to servers if the user has manually disconnected from a server
- Fixed issue in QuickSync that could cause the Monitoring Client to close
- Fixed an issue with the Operational Map when clicking with Ctrl + Double Click on a synoptic map, an Access Violation error could occur
- Fixed translation of LPR route screen messages
- Fixed an issue with the NVidia GPU decoder with the new NVidia drivers.
- Fixed an issue with calling HTTP events over HTTPS
- The explorer edition will now no longer display Google Maps settings
- Sequence Export is no longer available for export in edge video playback sessions
- Fixed an issue that could crash the Surveillance Client when generating reports
- Fixed I/O drivers for UDP Technology devices where I/O monitoring could stop working
- Fixed an issue in the LPR reporting screen where the grouping items by LPR Configuration and Reliability were being displayed inverted
- Fixed an issue with analytics configuration configured for imperial measurements
- License plate registration will now sort the records by expiration correctly
- The audit system was not registering the visualization of LPR, Analytics, Maps, Operational Maps and Web Pages objects
- Backward Video playback with multi-thread decoder showed jumps in the image
- Fixed an error in searching analytics records where the results could be inconsistent if there were spaces in the filter values
- Authenticated reports were being saved outside the appropriate folder
- The camera image filter screen in the camera preview in the Administration Client was getting hidden behind the camera
- Validation of the SMTP HELO field to not allow invalid characters
- The "Server Information" screen was leaking operating system handles on the server with each query
- When the camera was recording by event and was out of order (Disconnected) and an event was started via API, the camera became In Operation momentarily even though it was disconnected and the downtime could be inconsistent
- The option to stop video streaming from superimposed cameras in the Surveillance Client was not disabling the video from LPR Settings and Analytics Configurations
- It was not possible to control cameras 1, 2 and 3 in dewarping the cameras in quad (4 quadrants of the same camera) for the ACTi and Vivotek dewarping engines
- Bookmarks are now deleted from the database based on their end date, not start date
- Analytics reports were being grouped by date and time, now grouped by date only
- Close button of the report export screen in the Surveillance Client was not working
- The charts of disk usage in the Administration Client could report negative values
- Fixed an issue with the Surveillance Client object list that could become inconsistent
- Videos recorded at less than 1 frame per second were playing at very high speed
- Sending video playback to the virtual matrix (via the mobile app) to a multi-monitor station was not working properly
- Keyword filter was not working when searching for bookmarks
- Fixed a condition that could have object speed 65535 in analytics metadata

- Bookmark search was not returning the name of the cameras in the list
- Fixed display of Arabic characters in LPR results
- The list of camera status, when an item was selected, it was not possible to scroll through the list, as every time the client received an update (every 1 second) the list would return to the top, displaying the selected item
- Restored communication event was not being sent via SNMP
- If the motion detection engine on the server stops working, the camera will now be marked as out-of-order and the engine will be restarted. There are cases where the engine was stopping and no movement was being recognized.
- Database queries associated with a user connection will now stop when the connection is closed
- Internal control of messages and system timers could stop if the PostMessage message queue becomes too large, which could cause cameras to stop
- When creating a new user group, the associated user list was not saved, it was necessary to open the saved group and re-associate users
- Fixed data parsing in JSON format
- Connection control with Dahua devices was sending excessive commands to start or stop streaming images, which could cause DVRs / NVRs to crash
- Fixed an issue in the ONVIF PTZ driver that could stop working due to expired authentication
- Fixed memory performance bottleneck in the motion detection system
- The list of presets for a camera in the Surveillance Client was getting out of order if new presets were added
- Fixed a memory access violation issue on the Analytics and LPR servers that could cause services to crash
- Privacy Mask was not being applied to video playback by iOS and Android mobile apps
- It was not possible to correctly resize analytics counters in the Administration Client Analytics Editor
- Disk write error was not being triggered until the Operating System had been running for more than 1 hour
- The Archiving system could be trying to resynchronize the archiving folders at all times if the archiving root directory was a disk drive with no subdirectory.
- Video playback from Archiving was not playing the last 30 minutes of the day
- When a USB microphone was disconnected while the Surveillance Client was open, if it reconnected, it was necessary to restart the Surveillance Client for the microphone to function again
- The video player timeline was not accepting the mouse scroll (for zoom) on some computers
- Alarm input event name was not being displayed in the event list
- The Surveillance Client was not downloading images from surrounding cameras for LPR reports if a report without the surrounding camera option was issued before a report with the option enabled
- When the camera became out of order, the analytics and LPR settings associated with the camera were not becoming out of order either, even without input images
- Fixed a problem that could cause memory leak in the H.265 parser