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# **ACTIAMDVR – Fleet management Software**



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# 1. Server installation and uninstallation

Hardware minimum requirements for server:

Operating System: Windows Server2003 or Windows Server2008 64

CPU: XeonE5 (2.4GHz) or above

Memory: 8G or above

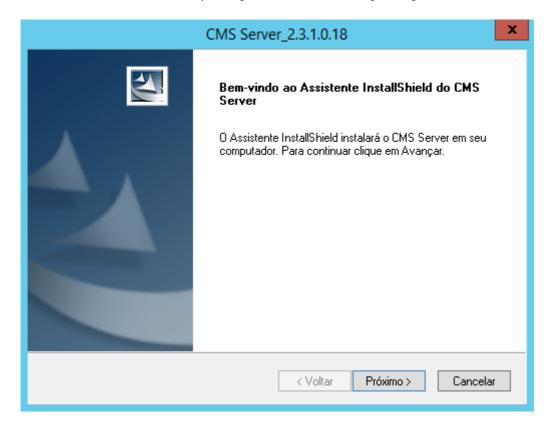
Hard disk: 500G or above (the memory of black box is about 50MB per vehicle per day)

NIC: recommended 1000M Ethernet port

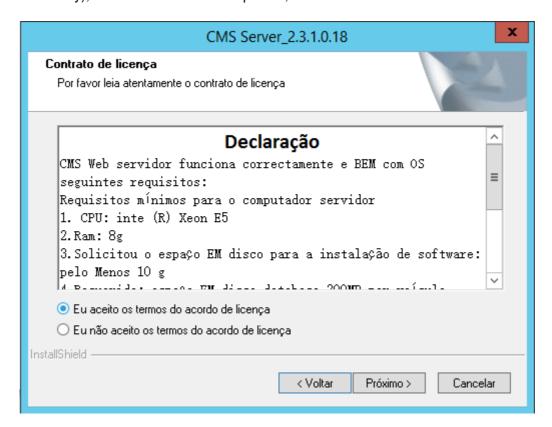
Operating environment: Microsoft .Net Framework v3.5 SP1 or above

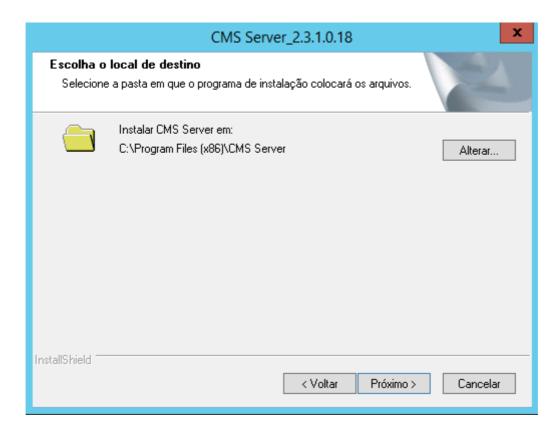
## 1.1. Software installation

1. Double-click the installation package file, in the following dialog box, click **Próximo**.

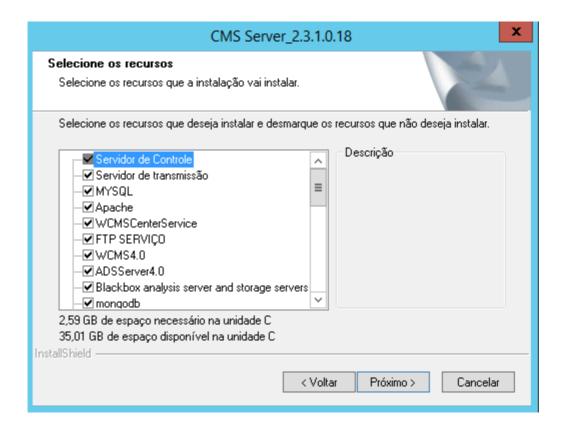


 Accept the license agreement (first checkbox), then click **Próximo** to enter the installation folder path selection, the default installed in the C drive (don't change this directory), click **Próximo** after completion, as follows:

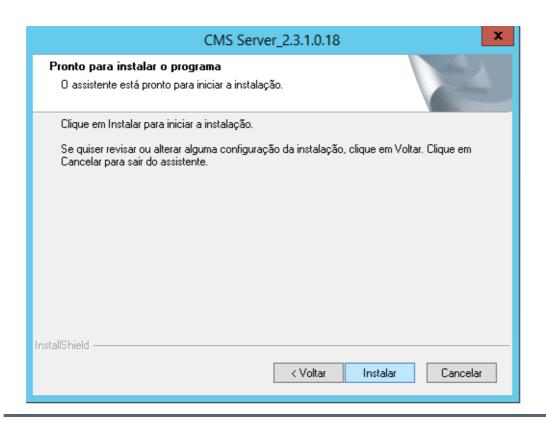




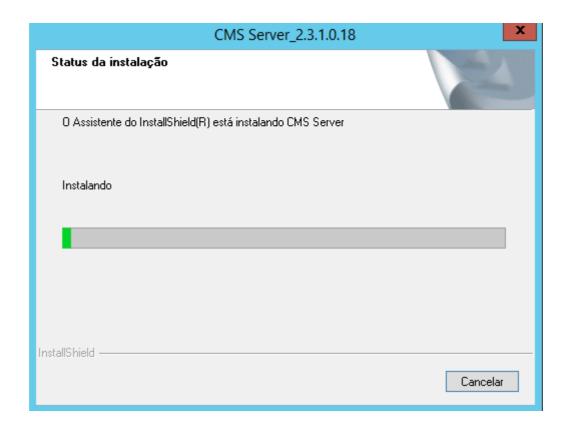
3. Don't change the features and click **Próximo**.



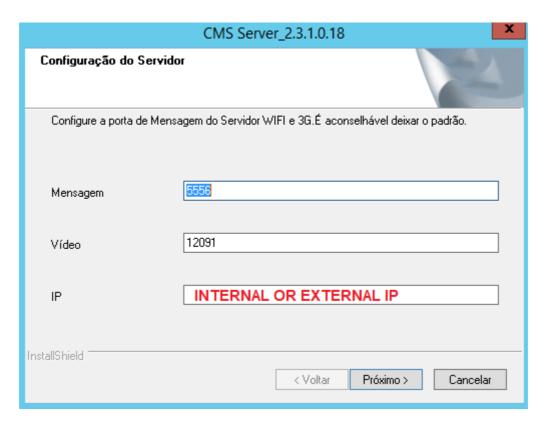
#### 4. Click Instalar.

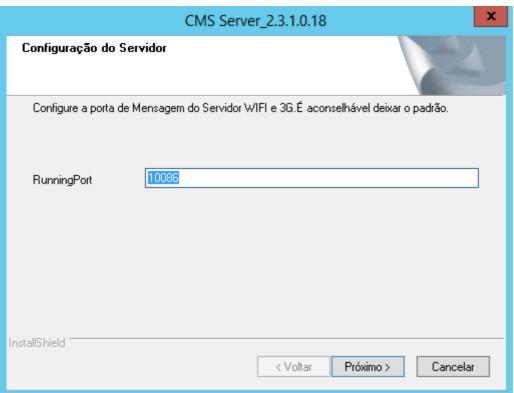


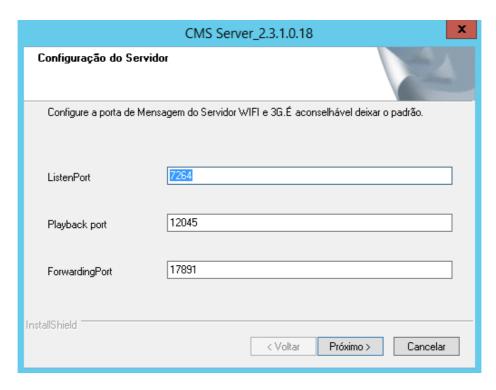
5. After the installation process is completed, it will access to the server port configuration interface, if you use the default port, without modification; if you need to replace the port, please click Edit. IP address is required to complete a fixed IP address of the computer.

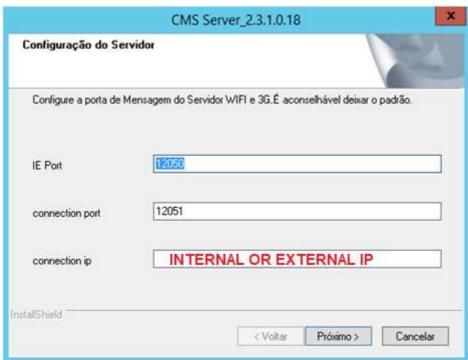


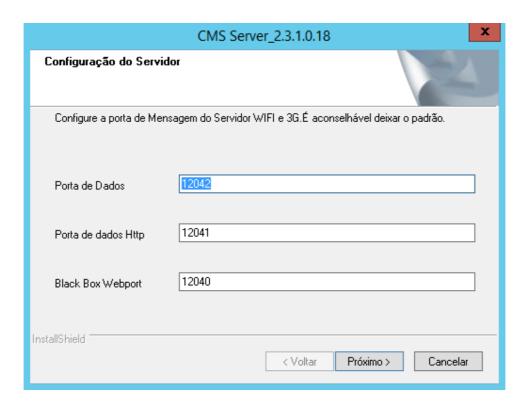
6. When you configure the port, it is recommended to use the default port; if the default port is occupied, please modify to other ports. If a device is connected with internal IP address, please fill in the IP address; if it's external network connections, please fill out the comprehending IP address, as shown below. Click **Próximo** in the following five figures.



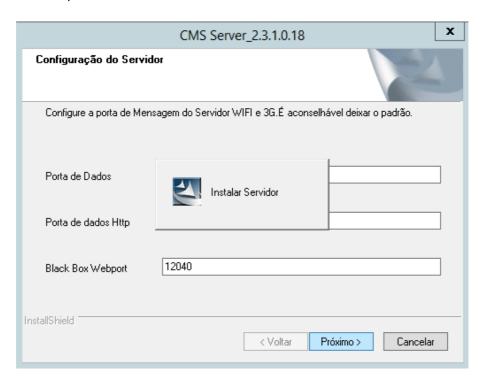




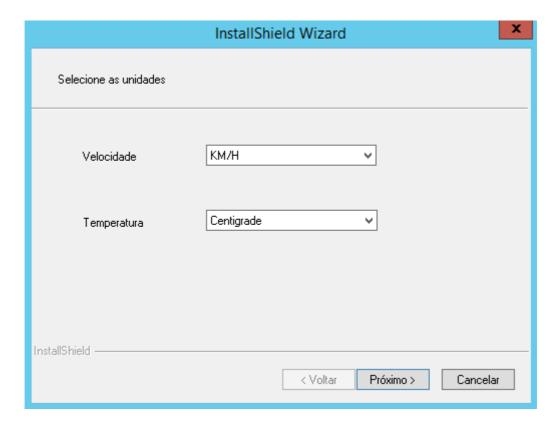




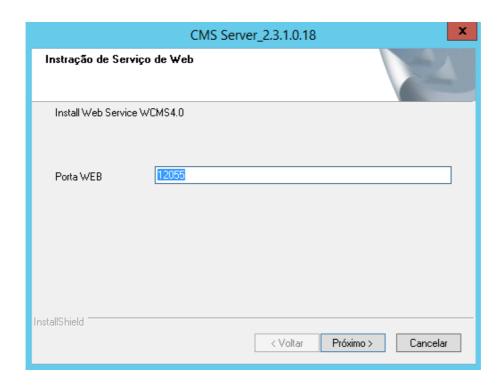
## 7. Wait for the process to finish.



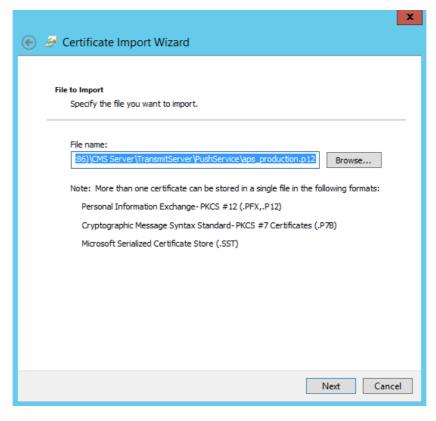
8. After the server port configuration, enter the display unit of configuration platform, choose and click **Próximo**, as shown below:



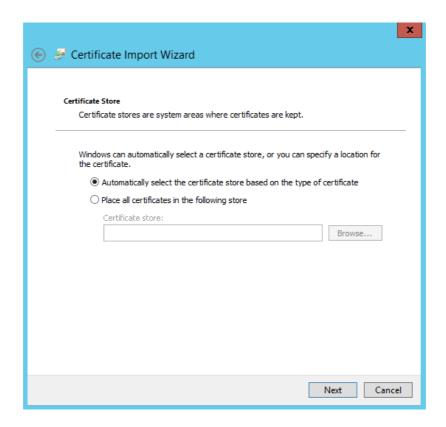
9. Enter the web service installation, the web port is default, please note if modify; enter the Certificate Import Wizard, follow the prompts to click on the **Próximo/Next** step, it will need to type the password, and the password is: **xufei**; click Next after the completion of the operation tips, and finally check whether all programs and services are running, as follows:

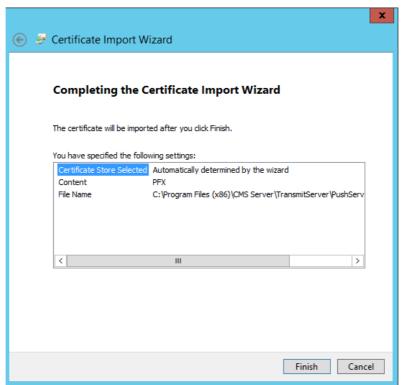


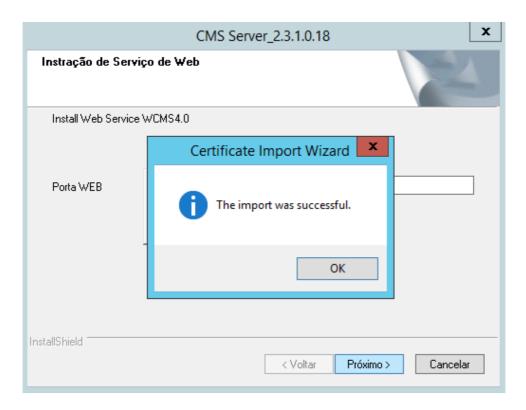




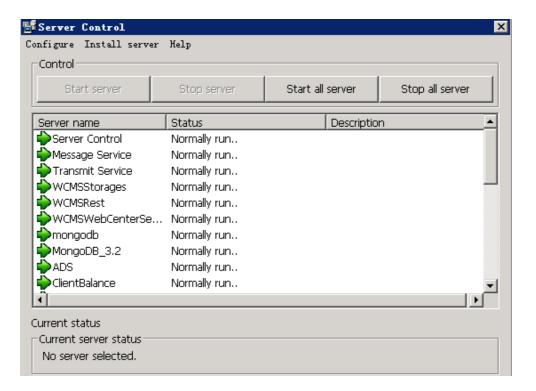






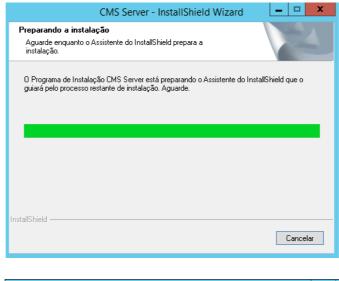


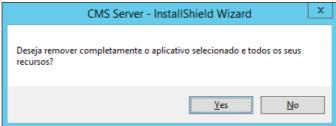
10. Finally check whether the service procedures run normally, as shown below:



# 1.2. Software uninstallation

1 . Access Panel Control -> Programs and Features. Select the **CMS Server** folder and click on "Uninstall", in the following dialog box, select the **Yes** to uninstall.





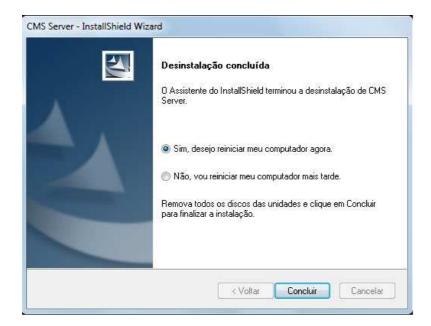
2 . If you want to backup the data click  ${f Sim}$  , choose a directory to store the backup and click  ${f Iniciar\ backup}$ . Wait to finish the process.





3. After the data backup, the uninstall process will continue. After select the first check box, to restart the system, and click **Concluir**.





# 2. Client terminal installation and uninstallation

PC requirements

Operating system: Windows XP, Windows7, Windows8, Windows10

CPU: Intel i3-3220 or above

Memory: 2G or above

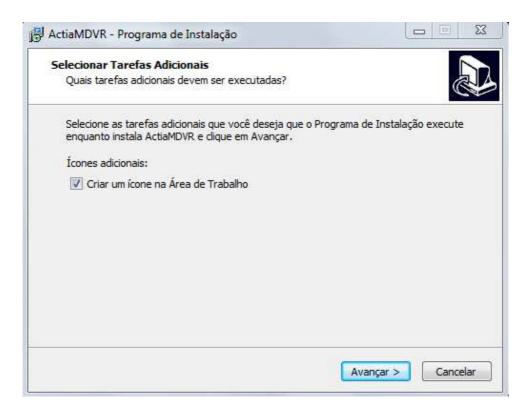
Resolution: 1280 \* 760 or above

Browser: It is recommended IE8, IE10 or above

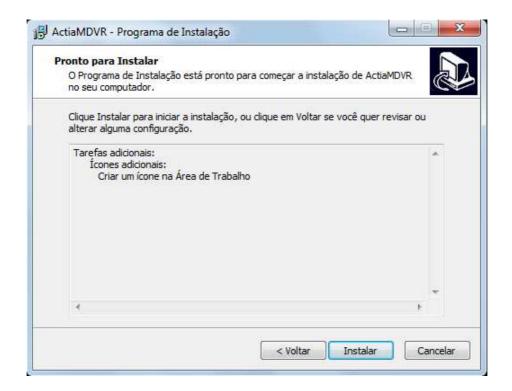
Other: Install flash player

## 2.1. Software installation

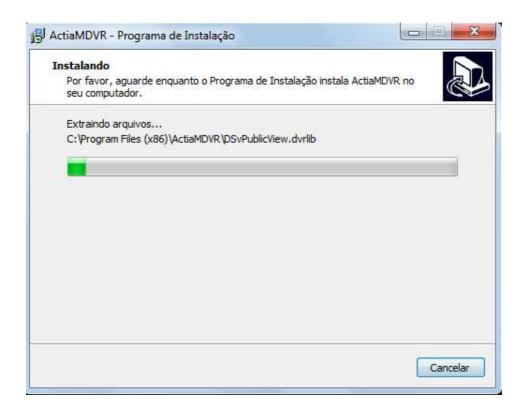
1 . Double-click the installation package file, in the following dialog box, click "Avançar".



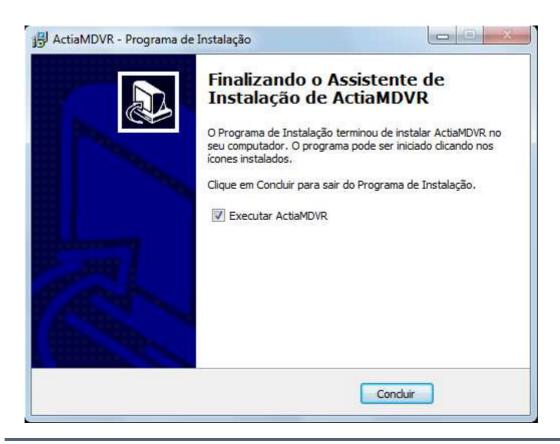
#### 2 . Click Instalar.



## 3. Wait to finish the process:

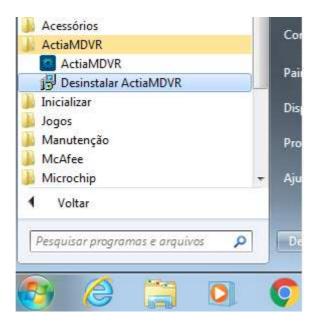


#### 4 . Click Concluir.



# 2.2. Software uninstallation

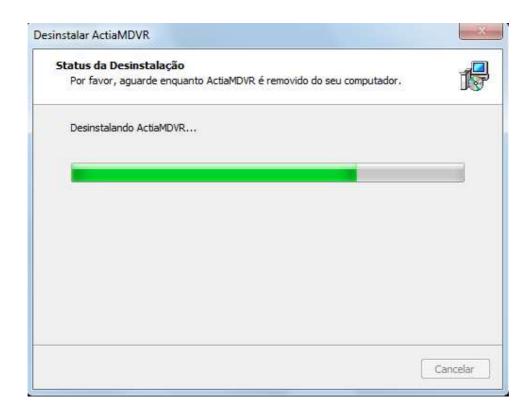
1 . Click the Start menu to find ActiaMDVR folder, click **Desinstalar ActiaMDVR** under the folder, in the following dialog box, click **Sim** button to proceed with the uninstall.



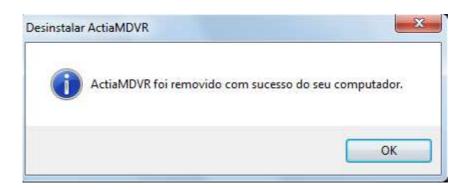
#### 2 . Click Sim.



3. Wait to finish the process.



4 . After to finish the process click Ok.



# 3. Server Login

# 3.1. Login

1. Double-click ActiaMDVR program, the following pop-up login dialog box as it is shown below:



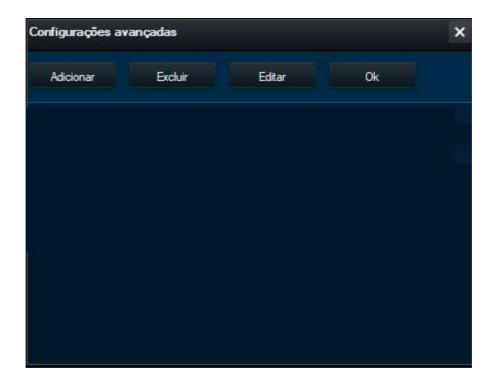
### **Description:**

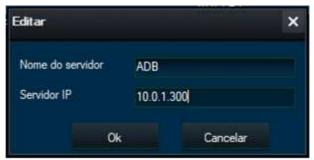
- 1) **Tipo**: Servidor (default), and local options (Only hard disk and directory retrieval playback function when you select "local");
- 2) **Servidor IP**: Enter the server IP address (support domain name) or select the server name that has been added;
- 3) Enter the correct user name and password, the default is admin / admin (admin / null when you select "Local");

Note: The default server port is 7264, if you modify the default port when deploying server, please add new port number after entering the IP.

# 3.2. Advanced settings

1. In the login dialog box, click the **Avançado** button, the Advanced Settings dialog box pops up, as shown below:



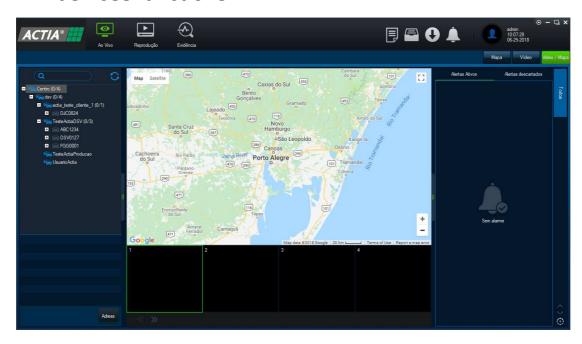


NOTE: The user name and address fields can enter up to 22 characters;

Address field (Servidor IP) support domain name;

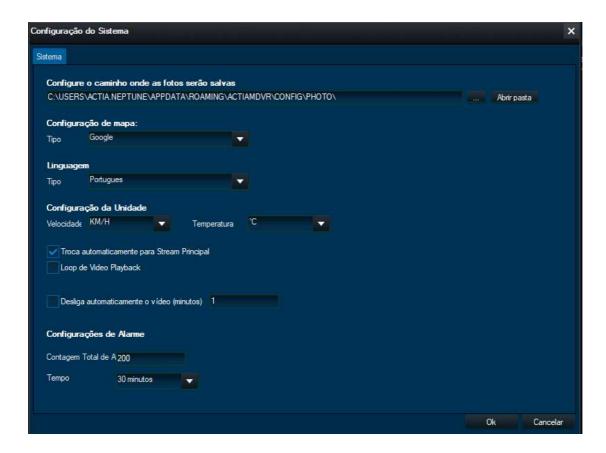
Description: Add: Click the **Adicionar** button, in the following dialog box, enter the server alias (**Nome do servidor**) and IP (**Servidor IP**), and click the OK button to add a new server address.

# 4. Business functions



# 4.1. Systems setting

1. First, click oto enter the system setup interface, there are path for capture, map setup, language, unit setup, alarm settings, as shown below:



#### Note:

- a. Default screenshots path is in the C drive folder, you can choose a different path according to the computer hard drive capacity;
- b. Support Google Map;
- c. Automatically switch to the main stream (it displays the main stream automatically when screen is opened in real-time preview, please choose carefully according to the network bandwidth and SIM card flow);
- d. Loop playback video (during video playback, if a certain video playback is complete, it will automatically jump to the beginning to continue);
- e. Other settings can be set according to actual needs, if no special requirements, you can select the default.

# 4.2. Port instruction

ActiaMDVR port protocol are TCP protocols, you need to enter the same port number **Default** No. Service Memo Condition port Cluster operation and 1 maintenance for server 12000 Internal use cluster heartbeat 2 12001 Internal use Cluster broadcasting 3 Cluster information 12002 Internal use For cluster and Cluster operation and operation and 4 12003 Maintenance for Server Internal use maintenance HTTP message management Cluster operation and 5 maintenance server for 12005 Internal use guardian service Internal use 6 Client access 12011 7 Alarm push 12012 Internal use 8 Alarm server client access Internal use 12125

9	Online Statistics Service	12035		Internal use
10	Mobile push service	12030		Internal use
11	Reservation configuration service	12060		Internal use
12	Black box query service	12041	Used to query	Internal use
13	Black box query service	12042	the black box data	Internal use
14	Device access	5556	Device side and server registry	Equipment use
15	FTP batch upgrade service	21	Used for remote upgrade download files	Equipment use
16	Remote setting for device connection	12051	For remote setting	Equipment use

17	MDVR Forward server mdvr	12091		MDVR Equipment use
18	N9M Forward server n9m	12092		N9M Equipment use
19	One key alarm media server	12065		Equipment use
20	Access load balancing	7264	Used for balancing server	Client use
21	Client signaling service	12020	For client access server	Client use
22	Client media service	17891		Client use
23	Black box query service	12040		Client use

24	Server video playback service	12045	For server video playback	Client use
25	Remote setting	12050		Client use
26	Data base	12055		Client use

## Remarks:

- 1. Device port: equipment came to be mapped to the network through the VPN special network interfaces
- 2. Client port: ActiaMDVR client needs to be mapped from the external network when connected to the external network adapter

## **Explanation:**

Blue font: internal port without mapping

Whippletree: : the port is not yet enabled

Red: external port needs with mapping

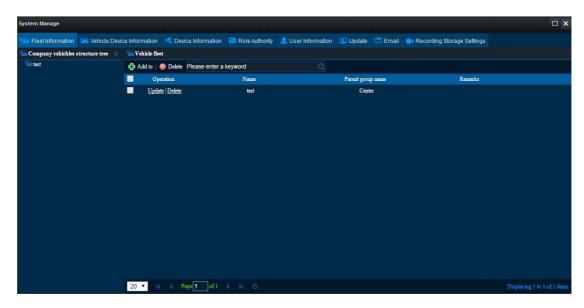
Server	Server	Server short	Server name	Internal
	type	name (2		communication port
	code	bytes)		
Cluster operation	1	om	opmgr	Cluster heartbeats:
and maintenance				12000
management				
managomont				Cluster

Server  Cluster operation and maintenance server for guardian service  Device access 3 dg dagate  Device access:5556  Client access:12011  Alarm access:12012  Access cluster management with dynamic loading balance  Client access server  Alarm server  Device access:5556  Client access:12012  Access cluster management with dynamic loading balance  Client access server  Alarm server  Device access:5556  Client access:12012  Access cluster dampr  Adamgr  T264  Mobile push service  Device access:5556  Client access:12012  Access cluster dampr  T264  Device access:12012  Access cluster dampr  T264  Device access:12012  Alarm access:12012  Access cluster dampr  T264  Device access:12012  Access cluster dampr  T264  Devic		1	I	I	
Cluster operation and maintenance server for guardian service  Device access server  Access cluster management with dynamic loading balance  Client access server  Alarm server  20 as alarmserver  Client access:12125  Mobile push service  Online Statistics Service  FTP batch upgrade service  Od opdaemon 122003  Adagate Device access:5556 Client access:12011 Alarm opdaemon 12200  dagate Device access:5556 Client access:12012  Adamgr 7264  Table 12020  Client access cluster 12020  Service 12035	server				broadcasting:12001
Cluster operation and maintenance server for guardian service  Device access server  Access cluster management with dynamic loading balance  Client access server  Alarm server  20 as alarmserver  Client access:12125  Mobile push service  Online Statistics Service  FTP batch upgrade service  Od opdaemon 122003  Adagate Device access:5556  Client access:12011  Alarm opdaemon 122005  Adagate Device access:5556  Client access:12012  Adamgr 7264  Alarm damgr 7264  Client access:12012  Alarmserver Client access:12125					Cluster
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Cluster operation and maintenance server for guardian service  Device access server  Device access server  Device access server  Device access 3 dg dagate Device access:5556 Client access:12011 Alarm access: 12012  Access cluster management with dynamic loading balance  Client access server  Device access:5556 Client access:12012  Access cluster management with dynamic loading balance  Client access 5 cg ctgate 12020  Alarm server 20 as alarmserver Client access:12125  Mobile push service  Device access:5566 Client access:12012  Alarm server vith dynamic loading balance  Togatha damgr vith damgr vith damgr vith damgr vith damgr vith dynamic loading balance  Client access 12012  Alarm server 20 as alarmserver Client access:12125  Mobile push service  Device access:5566 Client access:12012					
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management with dynamic loading balance  Client access server  Alarm server  20 as alarmserver Client access:12125  Mobile push service  Online Statistics Service  FTP batch upgrade service					Alarm access: 12012
dynamic loading balance  Client access server  Alarm server  20 as alarmserver Client access:12125  Mobile push service  Online Statistics Service  FTP batch upgrade service  Client access:12125  as alarmserver the description of the descrip	Access cluster	4	dm	damgr	7264
Client access 5 cg ctgate 12020  Alarm server 20 as alarmserver Client access:12125  Mobile push service 25 os onlineserver 12035  FTP batch upgrade service for the push service	management with				
Client access server 20 as alarmserver Client access:12125  Mobile push service 25 os onlineserver 12035  FTP batch upgrade service for access:12125	dynamic loading				
Alarm server 20 as alarmserver Client access:12125  Mobile push service 25 os pushserver 12035  Online Statistics 25 os onlineserver 5  FTP batch upgrade service 7  Total control of the push of the pupper service 12035	balance				
Alarm server 20 as alarmserver Client access:12125  Mobile push service ps pushserver 12030  Online Statistics 25 os onlineserver 12035  FTP batch upgrade service ftpupgrade	Client access	5	cg	ctgate	12020
Mobile push service ps pushserver 12030  Online Statistics Service ftp patch upgrade service ftp pushserver ftp	server				
Mobile push service ps pushserver 12030  Online Statistics Service ftp patch upgrade service ftp pushserver ftp	Alarm server	20	as	alarmsonvor	Client access:12125
Service 25 os onlineserver 12035 Service 30 fp ftpupgrade upgrade service	Alailli server	20	as	alaimiservei	Olletti access.12125
Service 25 os onlineserver 12035 Service 30 fp ftpupgrade upgrade service					
Online Statistics 25 os onlineserver 12035  Service 30 fp ftpupgrade upgrade service	Mobile push	22	ps	pushserver	12030
Service	service				
FTP batch 30 fp ftpupgrade upgrade service	Online Statistics	25	os	onlineserver	12035
upgrade service	Service				
	FTP batch	30	fp	ftpupgrade	
Black box query 35 12040	upgrade service				
	Black box query	35			12040

	I	T T	I	1
service				12041
				10040
				12042
Record playback	40			12045
service in server				
Remote	45			Client access: 12050
configuration				
				Device access:12051
Data base	50			12055
Data base	30			12000
Reservation	55	cd		12060
configuration				
service				
One-key alarm	57	ms		<del>12065</del>
media server				
Real-time video	60	st		Storage configuration
storage				access:12070
Commerding commer				Client access 17001
Forwarding server				Client access: 17891
				MDVR:12091
				N9M:12092

# 4.3. System manage

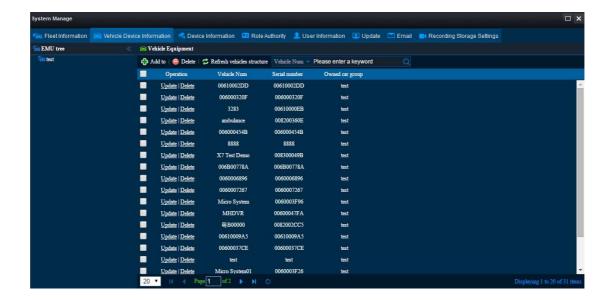
## 4.3.1. Fleet information



Note: you can add, update fleet name, or it will also delete the terminal vehicles under the fleet when you delete the fleet.

## 4.3.2. Vehicle device information

First click on the menu bar of vehicle information configuration, as shown below:

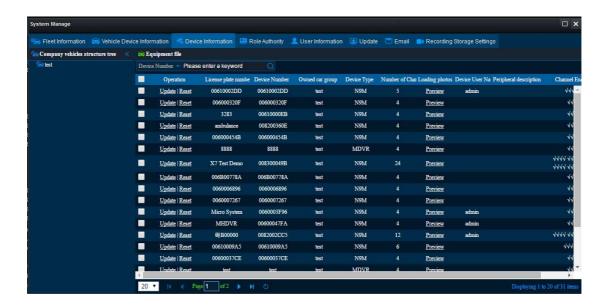


## **Explanation:**

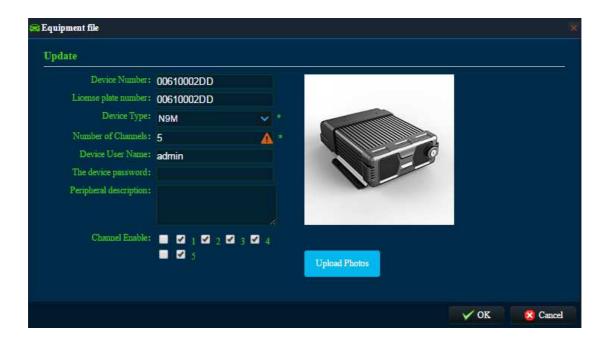
- 1) Add: Click the Add button in the menu bar, enter the plate number and the device number, select the fleet, and click the OK button (Note: items with a star must be filled, do not enter the existing plate number and device number)
- 2) Delete: Select the vehicle you want to delete and click the Delete button or click the Delete button in front of the list.

#### 4.3.3. Device information

First click on the menu bar of the device information configuration button, device information will be in a form of list, as the following chart:

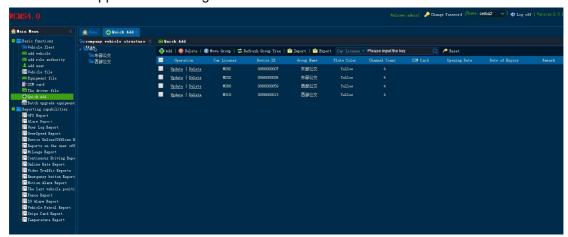


Update: User is supposed to update the internal configuration when adding vehicle device, you need to select the type of device N9M, Select the type of channel count according to the actual machine, input the device user name and password, Check channel enabled.

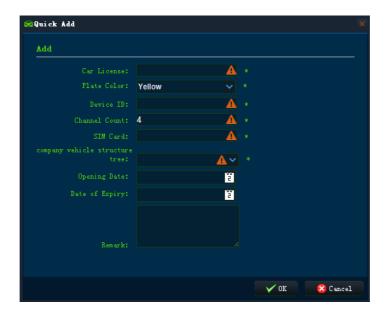


# 4.3.4. Fast adding vehicle

ActiaMDVR supports fast adding vehicle from ActiaMDVR client terminal or web server.

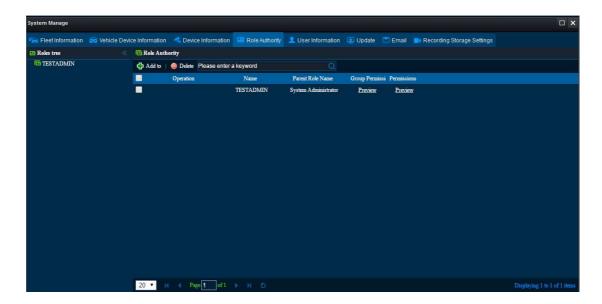


Click "Add to"



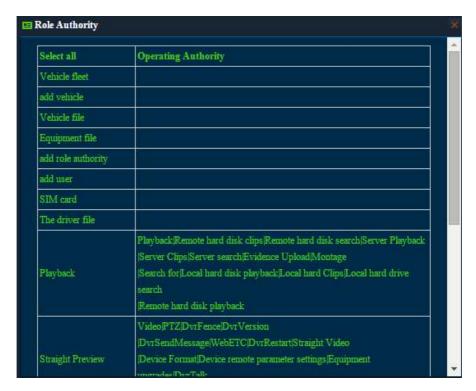
## 4.3.5. Role authority

Interface: After choosing the "Role Authority", the interface will be shown as below:



Preview: use the "preview" to view the authority of vehicle fleets and operation.

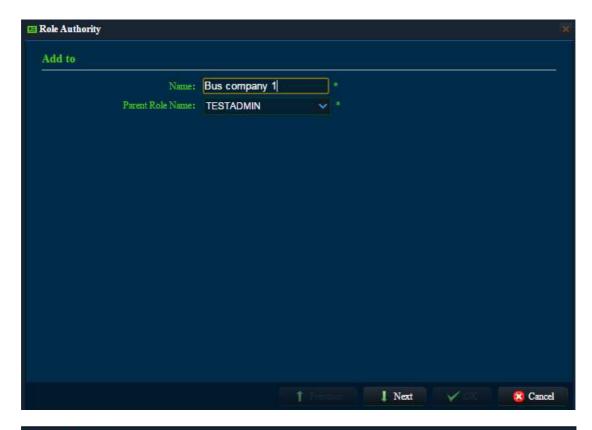


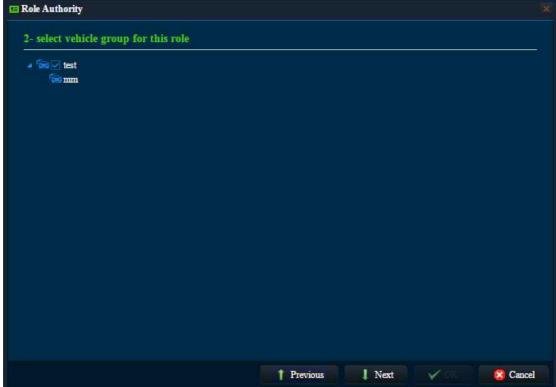


Add to: Click the "add to" and the interface will be shown as below.

Then please fill in the Name and choose Parent role name.

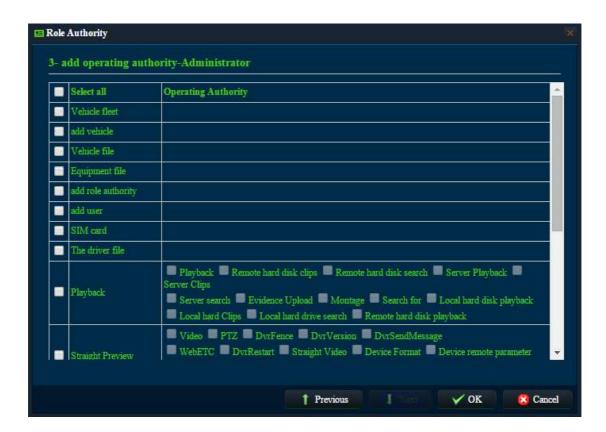
Tip: the blank with asterisk must be filled, already exist name cannot be type in again.





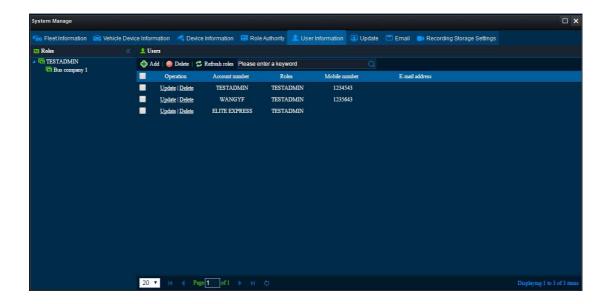
Choose "Next", you can select which vehicle fleet can be managed.

Choose "Next", you can select the operating authorities.

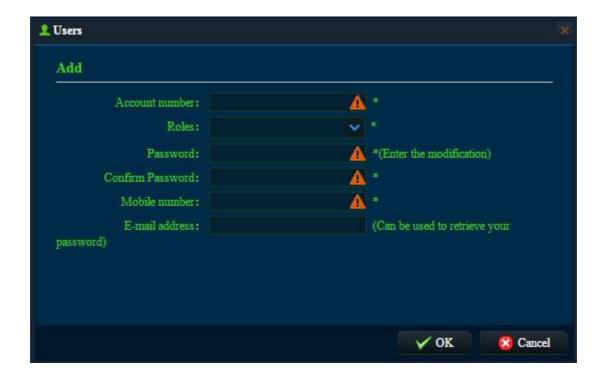


## 4.3.6. User information

Interface: After clicking the "User information" button, the interface will be shown.



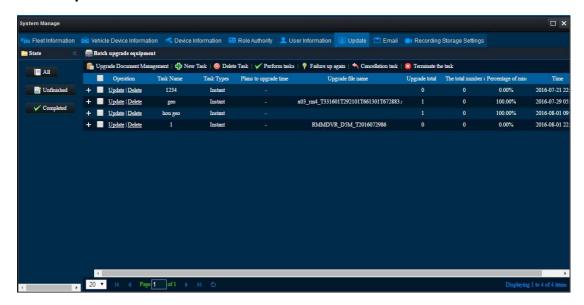
Add to: After clicking the "add to" button, please fill up the blank of the account number, password, E-mail address and choose a role. Confirm it after all has been done.



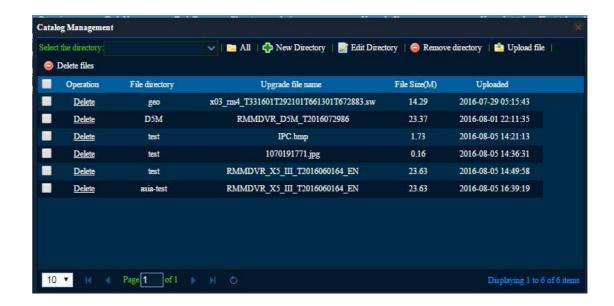
Update: update some settings and will be applied.

Delete: You can use "delete" to delete any user except the initial user.

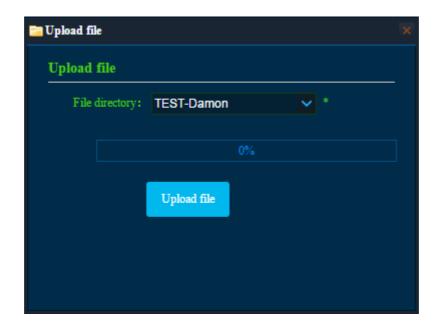
### 4.3.7. Update



1) Update Document Management: click Upgrade Document Management to enter the interface as shown below:



2) Click Upload file to create a new file directory. Update files can be upload into the directory.



3) New Task: click to create a new task.



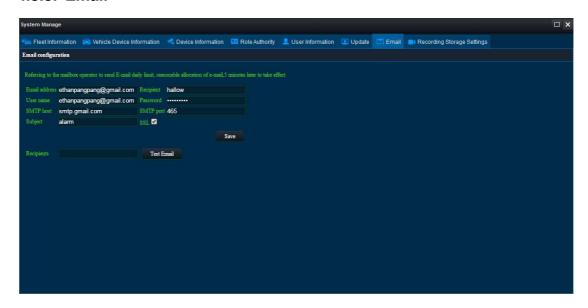
Please fill in Task name, Mandate, choose the file directory and the upgrade file, and then set the task type.

Update process instruction:

1) First add a new upgrade task, and click "perform tasks". Every 5 minutes, the platform

- can operate 20 vehicles at most. Once the operation fails, the platform will operate the failed one again until it success.
- 2) After the MDVR gets the upgrade instruction, it will download the upgrade file from FTP server.
- 3) After the download process finished, the MDVR will upgrade follow the instruction.
- 4) MDVR will return the information whether the upgrade is successful or not.

## 4.3.8. Email



Receive alarm email: first set the server then fill in a receive email address. After the setting has been done, please send a test email to confirm.

### 4.4. Live view

### 4.4.1. Vehicle list

Only display the vehicle which has been report to the platform.



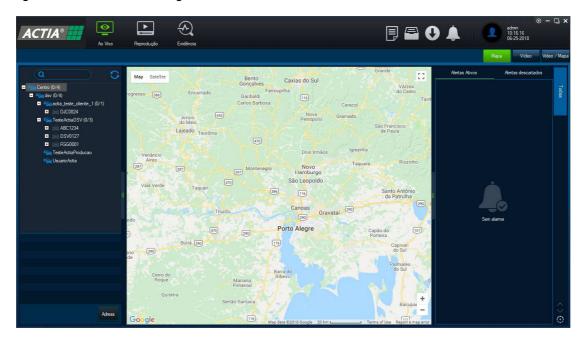
Tip: green means online, Gray means offline.

Refresh: click the button in the upper right corner, which can refresh the vehicle on/offline statement. IF a new vehicle has been added, please re-login the platform.

**Search:** enter the key word of the vehicle into the search blank then click the research button to get the relative vehicle. If only has one result, which will be chosen automatically.

## 4.4.2. Map display

After selecting the online vehicle, the vehicle icon on the map will be marked with a red circle. Under the vehicle tree it will display the basic information, and meanwhile you can right-click the vehicle and get more functions like below:

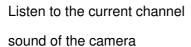


### 4.4.3. Service function

### 4.4.3.1. Listen and Two-way audio

Click the camera icon under the vehicle can open the video channel. When the icon turns to [2], right-click it can open the Listen box and the two-way audio box. Like below:



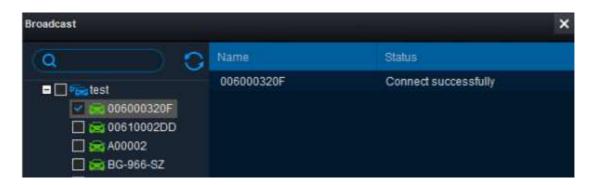




Two-way audio between the vehicle and ActiaMDVR

### 4.4.3.2. Broadcast and Setting

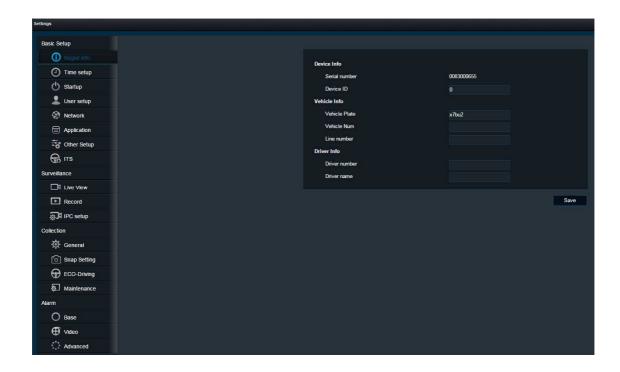
In the service function box, click the Broadcast and Setting, the interface will be shown below:



The broadcast function between platform terminal and vehicles, means that the platform terminal can make a broadcast while the vehicles could only hear it.

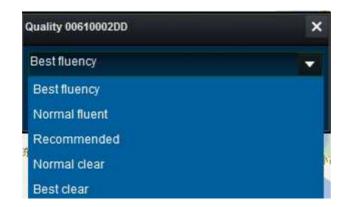
### 4.4.3.3. Remote parameters setting

Settings of MDVR, more specific information can be found in N9M Software Setting Instruction



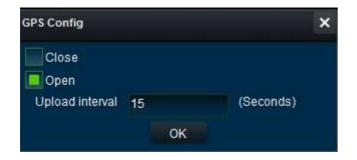
## 4.4.3.4. Quality and GPS configuration

Choose the Quality and the GPS Configuration button:



The video quality based on the net and requirement.

Usually choose the Recommended.



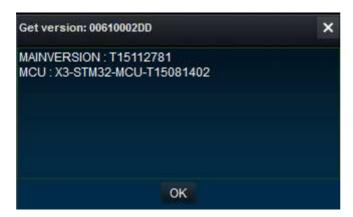
The GPS report setting based on the requirement and network situation.

(Each GPS data is less than 1KB)

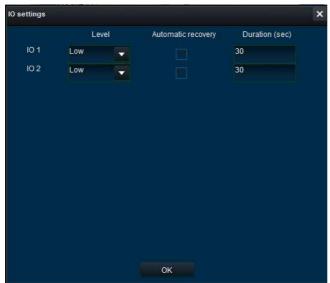
### 4.4.3.5. Version and IO Setting

You can get version information from "Get Version".

Click the "IO Setting":



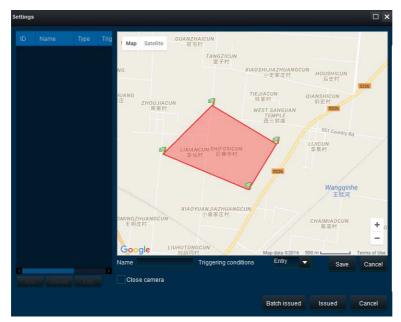
You can get version information here and facilitate the upgrade process in the future.



You can set 2 IO out, either high or low are all OK, the duration is 30 seconds.

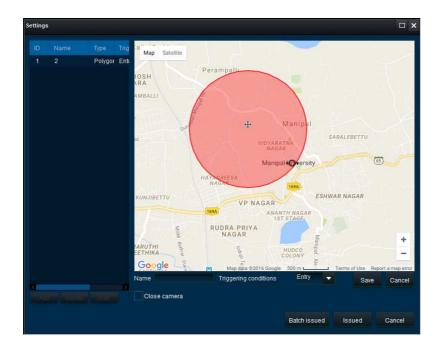
### 4.4.3.6. Fence

In the Service box, you can choose the "Fence" to set geological fence, either round or polygon. Shown as below:



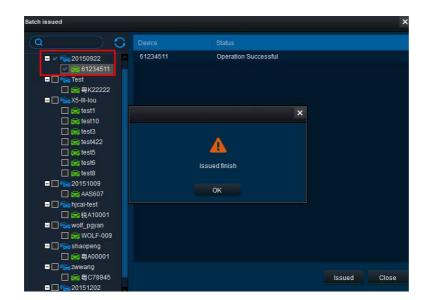
Use mouse to draw a polygon region.

Trigger condition can be selected to enter/leave/enter and leave.



Use mouse to draw a circle region.

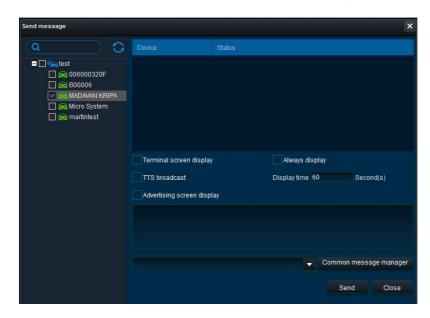
Trigger condition can be selected to enter/leave/enter and leave.



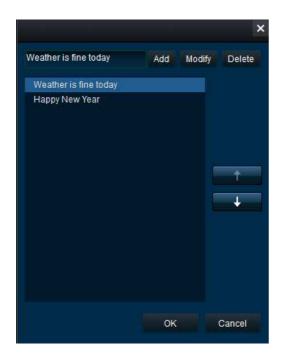
After finished, the setting can be applied to single vehicle or multiple vehicles.

### 4.4.3.7. Send Message

In the Service function box, choose the "Send Message". Shown as below:



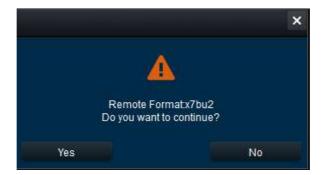
- Choose the vehicle and decide the way it will display.
- 2. Enter the message.
- Common message can be saved as a template.



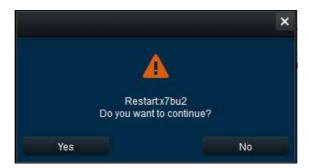
Add, edit, and delete frequently used text messages.

### 4.4.3.8. Remote format Restart

You can choose the "Remote Format" button in the Service function box to format the MDVR.

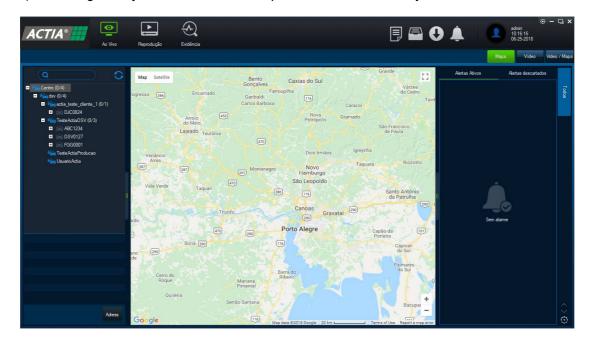


You can choose the "Restart" button in the Service function box to restart the MDVR.

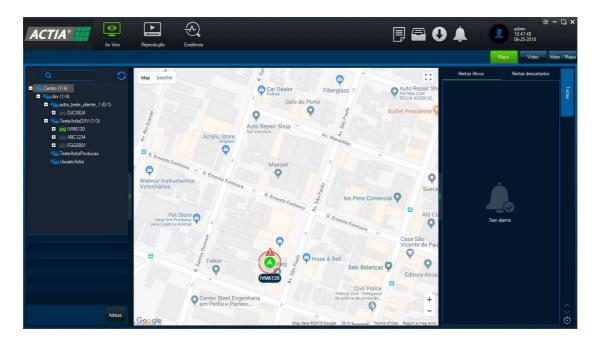


## 4.4.4. Real-time map

1) After login in by server mode, the map will be showed directly.

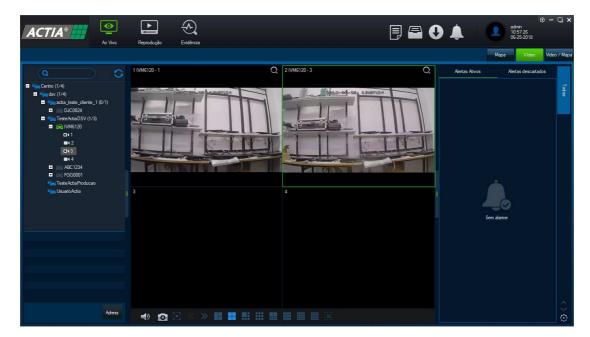


- 2) Double click the vehicle in the left list to turn on the video/map mode. The map resource can be changed in the System Setting.
- 3) Choose the vehicle in the left, the map will show the geographic information, and shown with a red circle. Click the green car icon can get more information and can change to Satellite map. As shown below:



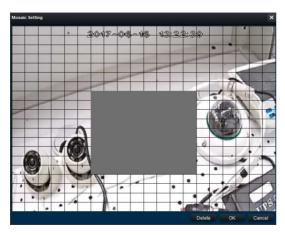
## 4.4.5. Real-time video

Click the "video" button to enter the video mode, as shown below:



## 4.4.5.1. Mosaic Setting

Clock the button to set, as shown below:





You can set the mosaic region by mouse, each window support 20 mosaic point at most.

The mosaic can only be seen in live view. It also can be erased.

## 4.4.5.2. Digital enlarge

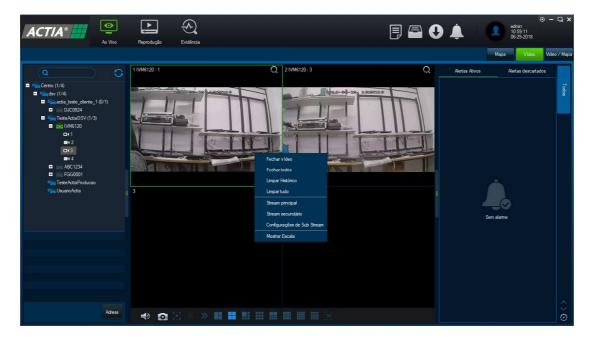
Click and then drag the mouse left key, select the district need to be enlarge, double click enlarge area, will back to normal playback.





## 4.4.5.3. Video channel setting

Right-click one of channels video, it will show a box. As shown below:

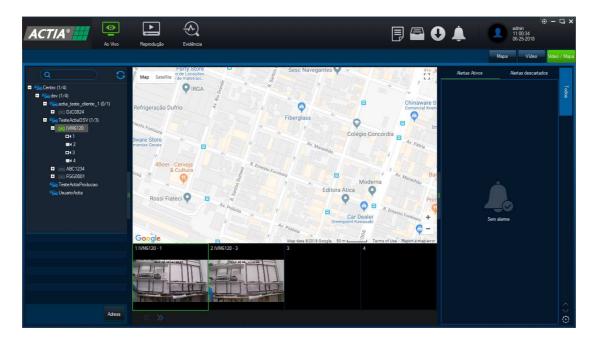


### Note:

Sub-stream settings: HD is default for the VGA format, you can set as VGA / CIF; analog is default for CIF, you can set as D1 / CIF.

## 4.4.5.4. Video/Map

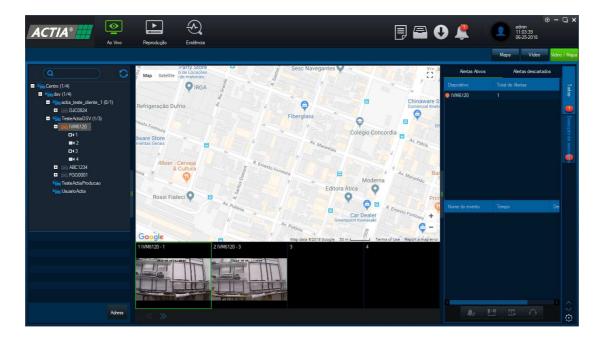
Click the "video/Map" button to enter the video/map mode:



Tip: double click the channel can show the whole picture, double click the map can see more details.

## 4.4.6. Real-time alarm

When the alarm happens, the alert will be shown in the right window and the car icon becomes red:



### Tips:

- 1) Alarm setting need to be done in advance (through the MDVR).
- 2) The window on the right will show the alarm vehicle and amount.
- 3) Click the device name to scan the alarm and more details.
- 4) When alarm happens, the vehicle icon turns red (normal is green).

### 4.4.7. PTZ Control

Audio: open/close; Screenshot: Saving path is system's path, default path is C Disk.

Click PTZ: Click the PTZ button pop-up the PTZ operation dialog window



Control the PTZ turn 360°rotation

Automatic aperture control

Automatic focusing control

Zoom in/out control

Presets setting

Speed setting

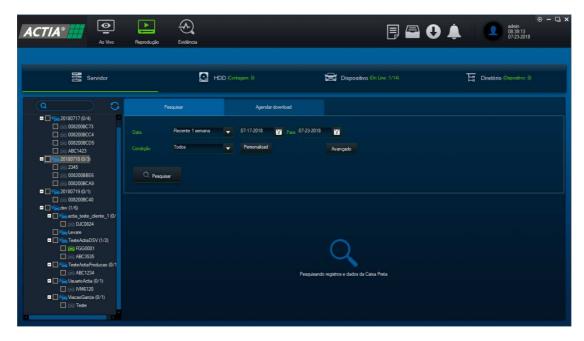
# 4.5. Reprodução/Playback

### 4.5.1. Server playback

The Server's playback sources: through automatic downloading download the video data and black box to the server.

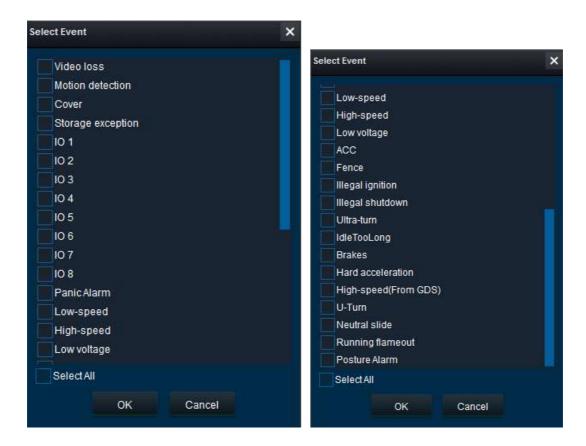
Clicking the icon—playback on the upper-left will enter into the server playback interface. On the left is vehicle terminal tree, only display the terminals which is under the sheet of

the management range, as follows:



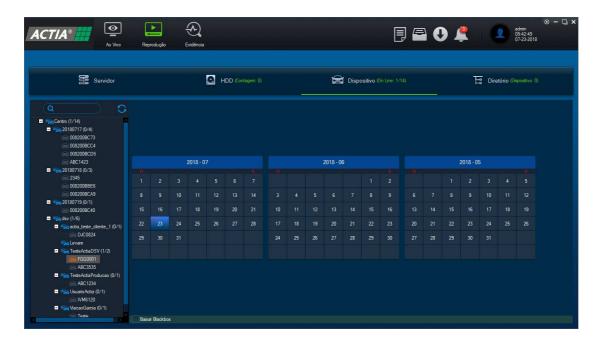
### 4.5.1.1.Search

- 1) Search condition: According to time/speed/GEO-fence/events/etc.
  - > Check the checkbox (speed, fence, event), and then set the search conditions;
  - > Set the fence, the map will be positioned by default to the last operation of the area;
    - > The relationship of speed, fence and event is "and";
  - > The retrieval conditional relationship of each event is "and", as shown below:



## 4.5.1.2. Single vehicle searching

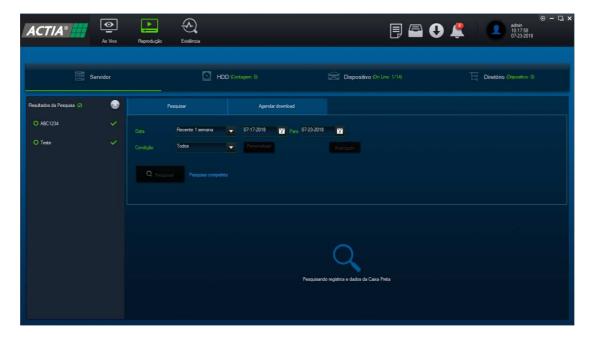
- 1) Selecting one vehicle, then choose date (default last one month) and condition.
- 2) Double click or click Search button, the interface back to the calendar with data. If it exceeds the current month, it will have scroll bar, as follows:



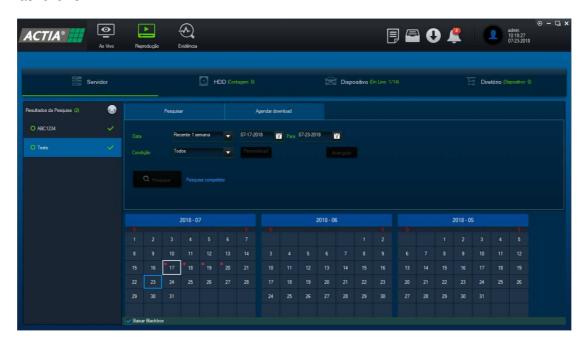
Remark: Green means normal videos; Orange means alarm videos; Red spot means black box data; Double-click one day in the calendar will enter into the playback interface.

## 4.5.1.3. Multi-vehicle Searching

- 1) Select multi-vehicles, then choose date(default last one month)and condition;
- 2) After clicking Search button, the platform back 2 pieces of data each time, until back all conditioned data, as follows:



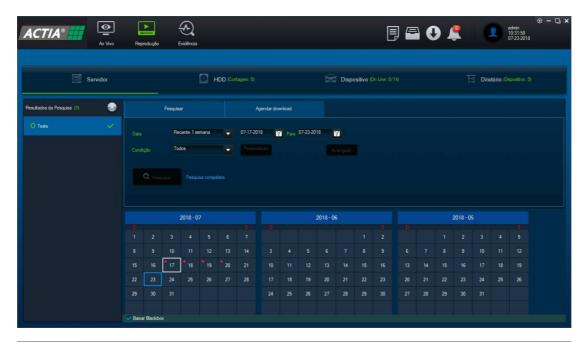
3) Click vehicle terminal in the search result, the platform will return calendar with data, as follows:

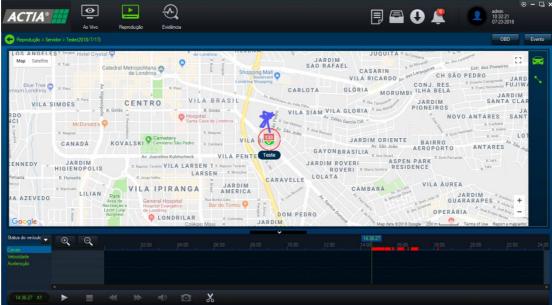


- 4) Double click one day in the calendar will enter into the playback interface.
- 5) When multi-vehicle searching, cannot operate other interface, click button end the operation.

## 4.5.1.4. Playback Interface

1) After server searching, double click the date in the calendar; If there is video data, it will enter channel selection interface, selecting the channel needed playback(default select all channels with data); If have only black box data will enter into the map directly, as follows:





Clicking the play button, enter into video playback interface, as follows:



### 4.5.1.5. Curve controls

1) Channel display: Only display the channel with data, as follows:



Remark: Blue means normal video; orange means alarm video.

- 2) Zoom in/out channel axis: Click or roll the mouse wheel up can enlarge the channel's time axis(the minimum is 0.1 second); Click or roll the mouse wheel down can narrow the channel's time axis(the maximum is 24h);
- 3) Play progress: Green means play progress; you can click anywhere when you want to skip to the position and can change the paly progress by moving the progress bar.

### 4.5.1.6. Speed curve

If has no black box data, the speed curve will be empty; If has, as follow:



### 1) Zoom in/out channel axis:

Click or roll the mouse wheel up can enlarge the channel's time axis (the minimum is 0.1 second); Click or roll the mouse wheel down can narrow the channel's time axis (the maximum is 24h).

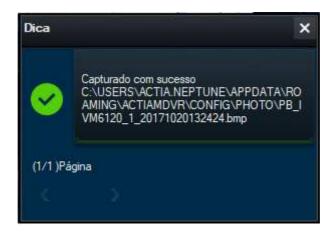
### 2) Maximum & minimum

When playback the video, we can see the GPS speed & pulse speed's maximum and minimum values, as follows:



### 4.5.1.7. Playback control

- 1) Slow play: Click can realize slow play (1/2; 1/4; 1/8; 1/16, the min. is 1/32), if the playback has only black box data, this function won't be supported.
- 2) Quick play: Click can realize quick play(X2; X4; X8; X16, the max. is X32), if the playback has only black box data, this function won't be supported.
- 3) Audio: Click to change the audio value during the playback process.
- 4) Screenshot: Click can screenshot the selected image and save to the appointed path (default C Disk folder), and pop up the prompt window. The window will be shut down after around 5 second, as follows:



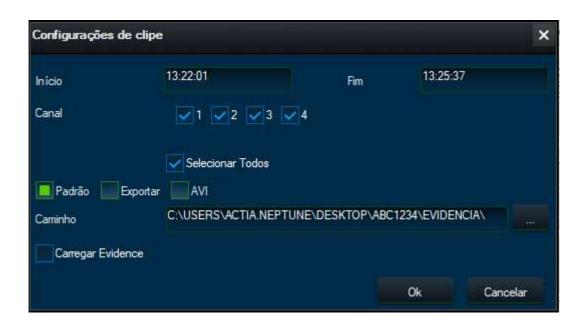
## 4.5.1.8. Playback clip

1) Clip: Click when playback will pause the video, and the "Curve Controls"& "playback control" will have the following change:

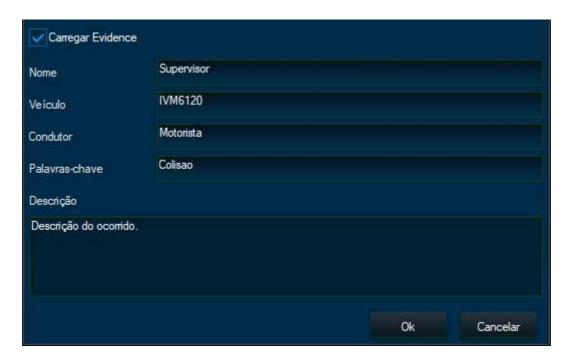


Remark: The left dotted line is the beginning time of clip. The middle one is playback progress. The right one is the end time of clip.

- 2) Modify the clip time: The default time is 10 min video near the progress bar. Move the bar and select the beginning and end time.
- 3) Clip setting: After selecting clip time, click OK into setting dialog window, as follows:



- Default is standard clip, after clicking OK can download the selected video to the appointed path;
- All channels with data will be selected in default, and select the channel need to clip;
- Can modify the local saving path, default is C disk desktop folder;
- After clicking OK enter into download interface, and check the downloading progress in local downloading center.
- > Standard clip only export video files (The format is H.264) which can be played by the miniplayer.
- > If select Export, it will export not only video files but miniplayer.
- If select AVI, the video format will be changed into AVI, which can be played by normal player.
  - 4) Upload evidence: Only standard clip can select upload evidence, the pop-up dialog window as follows:

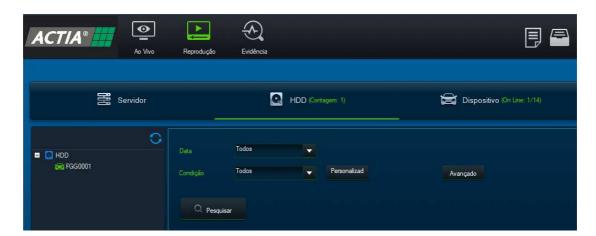


Remark: After selecting uploading evidence, the video file will be downloaded into evidence center, which can be checked in the evidence center.

## 4.5.2. Local playback

### 4.5.2.1. HDD playback

First we connect the HDD or SD card to the computer by the USB. We can see HDD inserted in the HDD list on the upper-left. If has no list, we can refresh manually by this button .



### The rule of HDD display

1) N9M HDD: Display vehicle plate in default; if the vehicle plate is empty display device

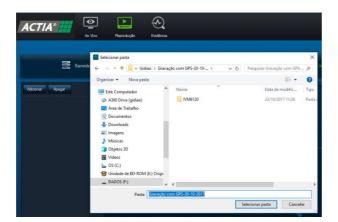
- serial number; if the serial number is empty display as RMN9M.
- 2) MDVR HDD (3515 old system): Display vehicle plate in default. If the vehicle plate is empty display device's ID.

### The HDD cannot loading solutions

- 1) It is always the unstable USB voltage that make the HDD cannot be recognized. We can change another USB connect to the computer and try again.
- 2) Maybe the HDD is broken and cannot be read, we can recover the data by the HDD data recovery tool.

### 4.5.2.2. Directorio playback

1) Click on the upper-left and will pop-up the selection directory dialog window; the dialog window will point to last time selected path in default.





- Select the vehicle plate at the upper level in the dialog window.
- 3) Click selection folder button in the dialog window.

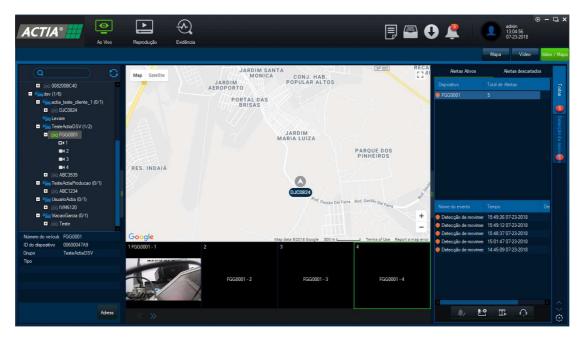
### 4.5.3. Device playback

We can remote the video and black box data on the device. Because this process needs more data, so according to the real need to playback.

### 4.5.3.1. Search

- 1) Remote device playback not support conditional searching;
- 2) Double click the vehicle on the left list, search device and return the calendar with

## data (display 1 month in default)



3) If double click the N9M online vehicle without data, but has data when playback via the device. Please check out whether the server IP and register IP are alike.

# 4.5.3.2. Time shit playback

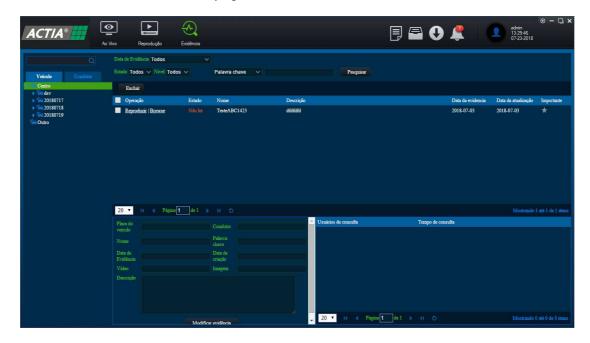
Enter the time shift playback interface, it will playback the video 3 minutes before the alarm occurs by default.



Curve control, speed curve, playback control or playback clips setting, please refer to

# 4.6. Evidence center

Click the evidence center page.



## 4.6.1. Evidence retrieval

1) Vehicle Search: Select the vehicle on the left "vehicle" tab, it will show evidence that belongs to this car, or enter keyword query in the upper left

- 2) Driver search: Select the vehicle by "driver" tab in the left side, it will show evidence belongs to this driver, or input the keyword to find the driver in the upper left corner;
- 3) Search by date, status, rank and keyword.

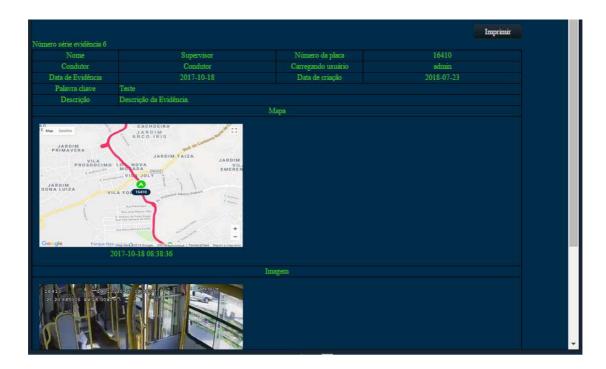
## 4.6.2. Evidence playback

In the evidence center page, select the evidence which is required to playback, click on the "Reproduzir/Playback" to enter the playback page, as shown below:



# 4.6.3. Evidence report

Click "Browse" to view the evidence report, as shown below:



# 4.6.4. Evidence edit

Fields can be edited are: driver, keywords, description, and click on the "evidence described Edit" button after modification.



# 4.6.5. Record of evidence access

Select evidence, you can view record of playback evidence, it could be displayed in user query column.

# 4.6.6. Level setting

Click on the right side , it can set the level of evidence as "important."

# 4.7. Download center

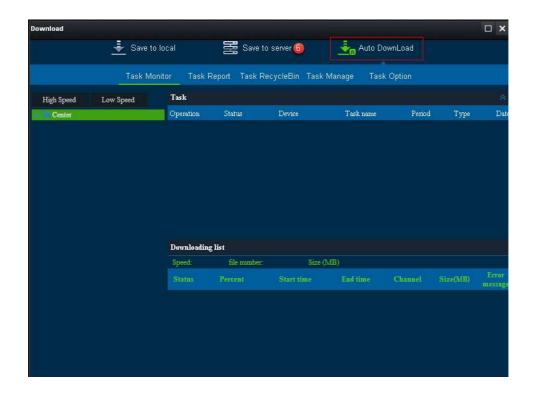
Click into download center.



- 1) Download center divide into local download and server download
- 2) The local download each time only allow one record in download

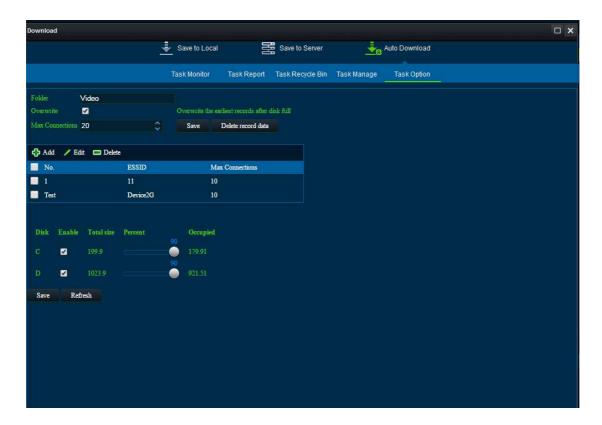
## 4.7.1. Auto download

Click the auto download button into the download page, will enter into monitoring page, as shown below:



## 4.7.2. Task option

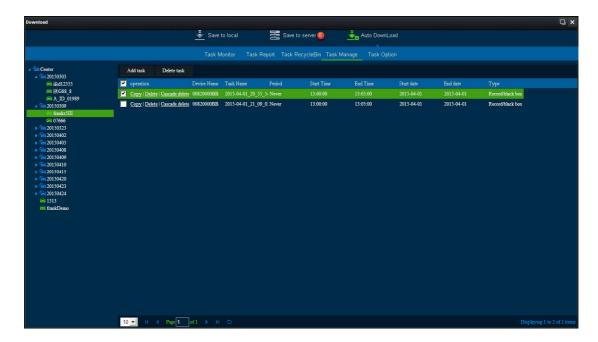
Click "setting" under auto download page, as shown below:



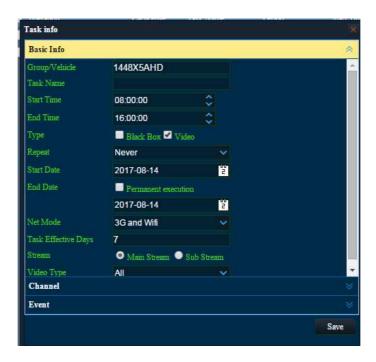
- Basic configuration: the folder is the path to save the file , the default name is
   "Video", can be changed manually;
- 2) Overwrite: it will delete the oldest file when disk is full. If you not choose overwrite option, the full disk will not delete oldest file, however, there is no space left to download new files, which is recommended to choose.
- 3) Max connections: the quantity of device allow to download simultaneously, manual download is not limited, click the save button to save the change.
- 4) Disk Configuration: the download file will be conserved into the disk selected.; the storage percentage is available to adjust, for example a disk total 100G, if we set 50%, it will allow 50G download space; reset the disk will clear previous configuration data. Click save button could save the changes.

## 4.7.3. Task management

Click on" task configuration" in the menu bar enter into configuration page, as shown below:



1) Add tasks automatically: first select vehicle in left bar, and then click the button of add the task automatically, it will come out the dialog box shown as below:

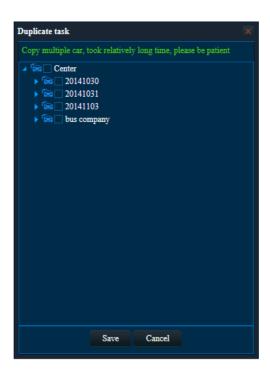


Repeat: divided into single, daily, weekly and monthly, a single task will only execute

one time, daily tasks within the specified date will be executed every day, Weekly tasks will be executed in assigned days of week. Same rule as for monthly tasks.

- Permanent execution: if selected, the single task will be executed permanently, if not select, the task will only last till the deadline.
- > Channel: only the selected channel will download video, default configuration all channels are selected.
- > Event: Select event to download alarm files related:
- The task execution status could be seen in monitoring part below.
- 2) Duplicate task: Click the Copy button in front of the task list, it appear the following dialog box, select the vehicle to copy task,

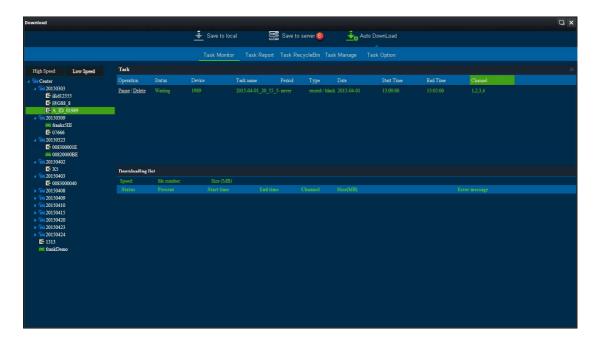
If you select a car group, it will copy to all vehicles under the car group, and then click the Save button. The task could be copied to these vehicles in successfully, see as photo below:



3) Delete task: Select the tasks and then click the Delete button in the menu bar or click the Delete button in front of the list. Will come out a confirmation dialog box, select OK or Cancel. 4) Cascade Delete: Click the correlative delete button in front of the list, come out the confirmation dialog box, select confirm or cancel. (Note: correlative delete will remove all the associated tasks through copying, use in caution)

## 4.7.4. Task monitor

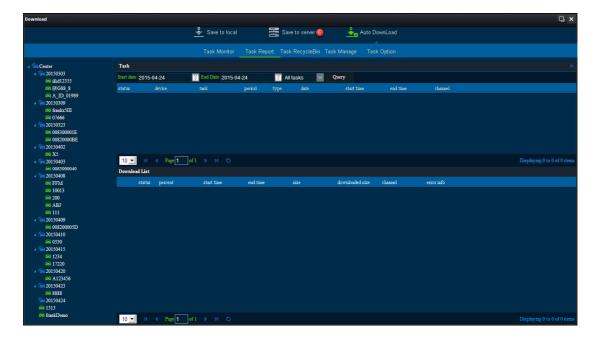
After the task addition completed, you can view the task download status in the task monitoring interface, as shown below:



- 1) Stop task: Click the Pause button in front of the task list, you can pause the current task and will keep it in a wait status.
- 2) Start Task: After pausing the task, click the Start button in front, you can continue to download the task.
- 3) Clear task: Click the Delete button in front of the task list, appear a confirmation dialog box to select whether to delete the task.
- 4) High-speed download: when task is downloading, device will not record during this period.
- 5) Low-speed downloading: Device could downloading and recording at the same period.

# 4.7.5. Task report

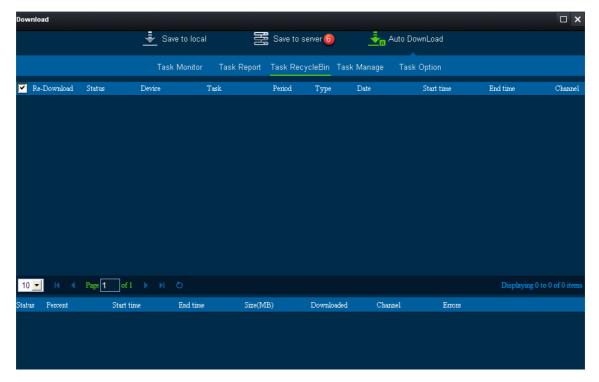
Click the Download Report button on the menu bar, will show the report download interface same as photo below: 11



- 1) Query: click on the selected vehicle to display the status of the vehicle as well as the completion of the task;
- 2) Playback: Click the Playback button before the download list, can playback the video finished.

# 4.7.6. Tasks recycle bin

Click the task recycle button in the menu bar to display records of fail downloads as shown below:



NOTE: click the download button can reactivate the task.

## 4.7.7. Automatically download notes.

- 1) Download priority
- Among Multiple devices: according to the number of connections limit, first come, first down (equipment on-line order). More than the number of connections limit, in a wait state. (Note: the number of connections can be configured in the configuration, the above mentioned)
- Single Device: depending on the type of task priority (from big to small): manual tasks, single task, daily tasks (weekly and monthly tasks) (daily, weekly, and monthly level).
- Peer download task order: the start time and end time, task id (The minimum task gets down first at the same level; the one complete fast gets down first with the same start time; the minimum id gets down first with the same end time.)

## 2) Rules of task starting time and ending Time

If the starting and ending time of task intersect with the starting and ending time of video file, then cut the record file between the tasks. For example: the starting and ending time of task is 8:01:00-8:02:00, and record file is 8:00:00-8:03:00, then cut the data between 8:01:00 and 8:02:00.

#### 3) File server storage

- Video file server storage directory structure: drive: \ user-defined directory \ plate \ Date \ Recond \ video files.
- Coverage strategy: the software will automatically identify those free disk on the server in each time running, then set out for the user select. Users can configure the disk usage based on his need, then the user-defined directory, so it will automatically generate video file storage structure. Could be use normally after configuration.
- For example: the server has C, D, E, users just chose C drive, D drive, so the available at this time only two disks, starting with C to recording storage, stored in the designated usage, it will automatically switch to the D drive.
- 4) Cases about fail to download
- After select the disk, it will not download video when the configuration space usage less than 500M.
- > Did not choose the available disk.
- Did not select overwrite automatically, when the disk storage space is insufficient and less than 1G after recording, or bigger than the disk storage minus 1G disk usage.
- 5) Automatically delete conditions
- When recording disk storage is bigger than the configure usage rate minus 1G, start delete; such as: 100G disk, usage rate is 50%, when using till 49G it will no longer write video files.
- When space left for video storage less than disk usage rate, it will start delete when remaining storage less than 1G, such as: 100G disk, usage rate is 50%, currently

already exist 60G files, the remaining storage less than 1G, start delete.

The delete will start with configured which can be stored inside the drive to search for the earliest recording file directory, it will start delete when the earliest directory is found, when the remaining space is not satisfied with delete condition, will stop delete. For example: Configuring the C drive, D drive size 100G usage rate is 50G, when the remaining space on the C drive is not enough will skip to disk D to save the video, if D disk still not sufficient, it will find earliest video file in C and delete. In result neither C nor D are sufficient, it will keep searching and delete, until C or D disk have available space to recording and stop delete.

## 6) Disk usage

Disk Usage: the storage space available for record, such as 100G hard disk usage rate of 50%, then there will be 50G space can be used.

7) Why start delete when reach usage rate minus 1G?

Usage space need to subtract 1G space, is because if configured to use 100% to start, it will be no sufficient space to record, therefore it must start delete when still have certain space. Without affecting the stored video.

### 8) The earliest directory

According to the date inside the route to find earliest date, which will be defined as the earliest directory. If all the vehicles stored video file consistent with file directory time, then will define the first created directory as the earliest one, and will delete the directory as well as all the files belongs to it. If fail to delete will mark in this directory and searching for other earlier.

### 9) Task status description

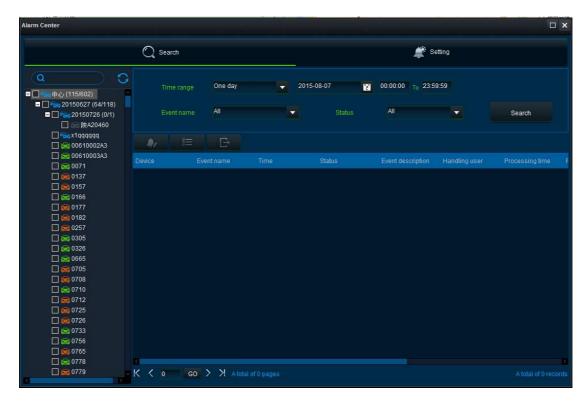
Status	Instructions
Suspended	The task is in suspension.
Limited number of	

connections	Vehicle downloaded has exceeded the limit of connection.
Parsing	According to task parsing to download record file.
Task has not been finished	Download is completed, but over time is greater than the current system time.
Insufficient space on the disk	There is not enough space in the recording disk.
Loading	Task is waiting to be downloaded.
Parsing successfully	Complete to parse the file needed to be downloaded.
Downloading	Record file is downloading.
No record file	No record file according to task parsed. (No qualified record file.)
Download successfully	Task download successfully and there is record file that fails to download.
Task failed	There is something wrong when parsing task. (Such as fail to visit data, abnormal data)
Task deleted	Task has deleted by user.
Download failed	Task download successfully but there is record file that fails to download.

# 4.8. Alarm queries

## 4.8.1. Search

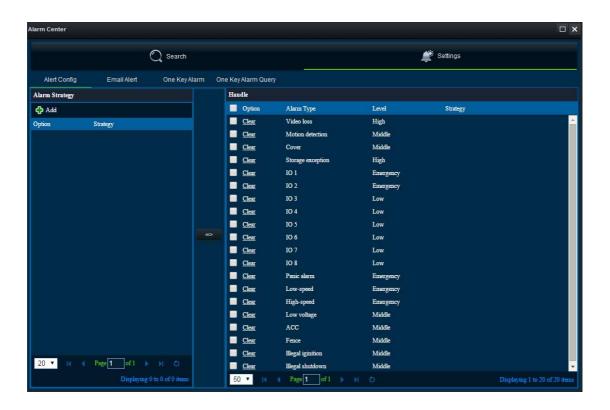
Click the button to enter the alarm center page, as shown below:



# 4.8.2. Search conditions

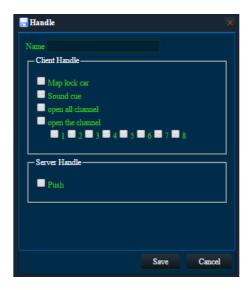
- 1) Time range: One day, the last three days, the last 5 days ,last week, last 2 weeks , last month, all, customize
- 2) Event Name: All , video loss, motion detection, blocking, abnormal storage, IO1 \ IO2 \ IO3 \ IO4 \ IO5 \ IO6 \ IO7 \ IO8 emergency alarm, low speed, high speed, low voltage, acceleration, electronic fence, illegal power outages, illegal shutdown;
  - 3) Event Status: All, processed, unprocessed;
  - 4) Event processing: processing, batch processing, Alarm exportation.

# 4.8.3. Alarm setting



## 4.8.3.1. Alarm strategy

1) Add alarm handing forms



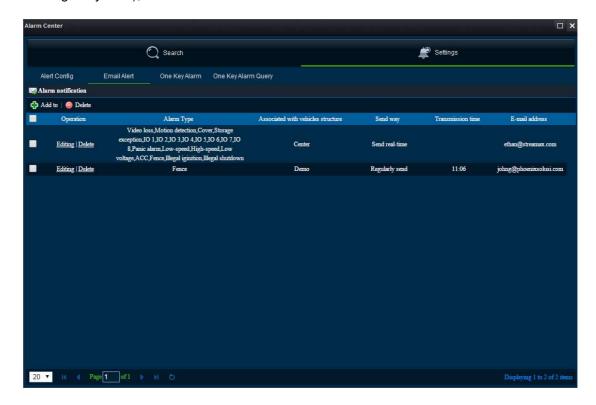
- Lock car via map: the alarm lock the car on the map automatically
- **Voice remind**: the alarm sounds and open all channels of video

**Open all channels video**: the car alarm linkage equipment open all video channels.

- Open specified channel video: Car alarm linkage equipment open some specified channel
- > Server handling: only the administrator has the authority to set up this, non-administrator inactive in this function.
- Push: when car alarm, the alarm linkage send the information to phone APP.
- 2) After add alarm processing strategy, select the left alarm strategy and right side alarm type, grade in corresponding, click button to add, it indicates that when the device generate the alarm, will make linkage alarm strategy as lock the car in map, sounds remind, or open the video.

### 4.8.3.2. Email alert

Select the alarm type, associated with vehicle groups, delivery method (sent immediately and regularly sent), the transmission time and email address.



NOTE: Only the administrator has the authority to set up, a non-administrator login will not be available to use this feature, as below shown:



# 4.9. Check software version information

Click open "about", you can view the software version from a dialog box interface, same as photo below.



# 4.10. Teste de Servidor/Server test

Click open server test, it will come out a dialog box, click test could check the connection status, same as photo below

