

**KEDACOM**

**User Manual for  
vStation Pro**

**Version 00  
April 2019**



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# About This Document

## Intended Audience

This document is intended for the personnel who:

- Work with Network Video Recorders (NVRs)
- Know video surveillance basics

## Document Versions

### Version 00 (2019-04-12)

This is a draft.

## Compatibility

The following table provides the products, NVR software version, and vStation Pro version to which this document applies.

<b>Product</b>	All types of V7 NVRs <b>NOTE:</b> Unless otherwise specified, all functions in this document apply to all types of V7 NVRs.
<b>NVR Software Version</b>	All versions
<b>vStation Pro Version</b>	V7R1B2

# Getting Started

## Overview

The vStation Pro uses a server/client architecture, which means a vStation Pro Client (hereinafter referred to as the client) and a vStation Pro Server (hereinafter referred to as the server) are provided when you install the vStation Pro. One server can provide services for multiple clients.

With the client, you can view live videos, play back records, manage cameras, configure NVRs, and find persons of interest using artificial intelligence (AI) functions on maps.

## Installing the vStation Pro

### Preparations

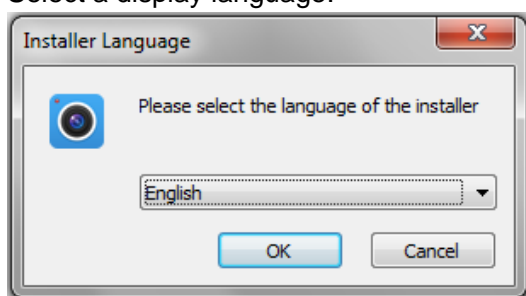
Ensure that your personal computer (PC) has the following configurations:

- Operating system: 32/64-bit Windows 7/10
- Processor: Intel Pentium IV 3.0 GHz or higher
- Memory: 2 GB or larger
- Resolution: 1280\*720 or higher
- NIC speed: 1000 Mbps

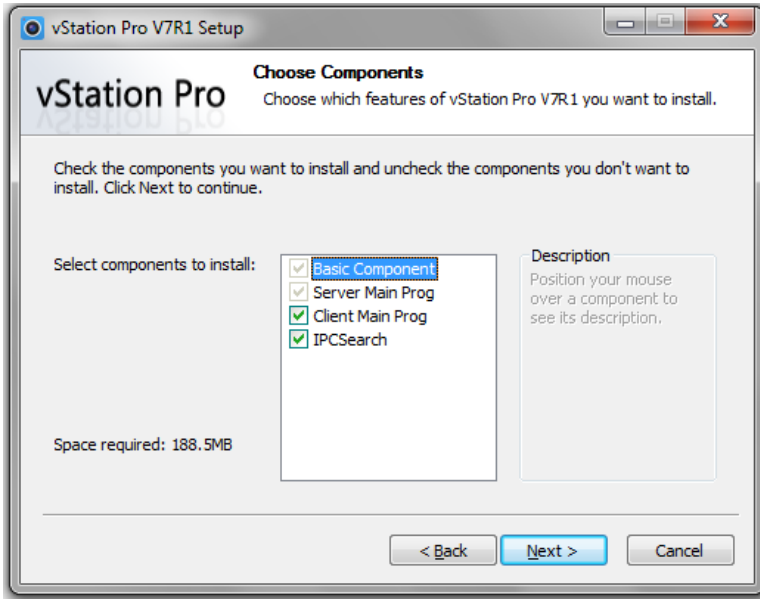
### Procedure

To install the vStation Pro:

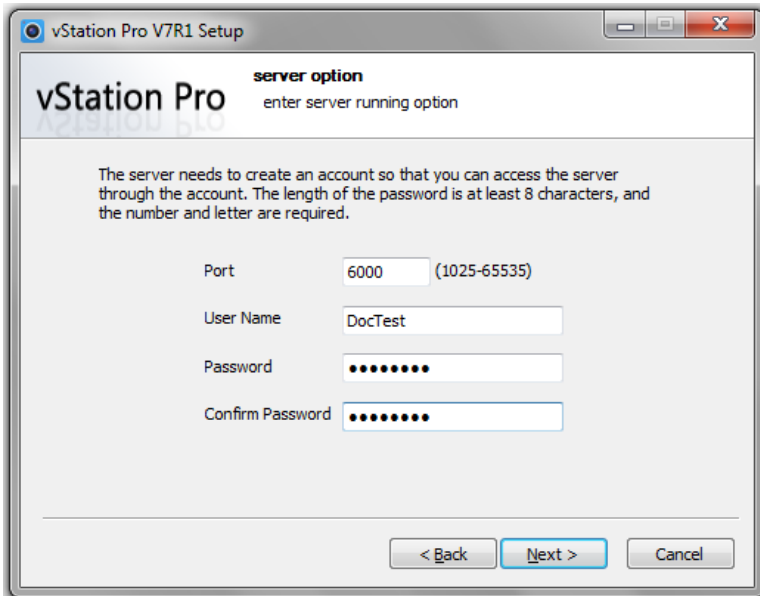
1. Download the **vStationProSetup.exe** from the CD-ROM of the product package.
2. Double-click **vStationProSetup.exe**.
3. Select a display language.



4. Follow the instructions.  
If you want to install only the server, deselect **Client Main Prog** and **IPCSearch**.

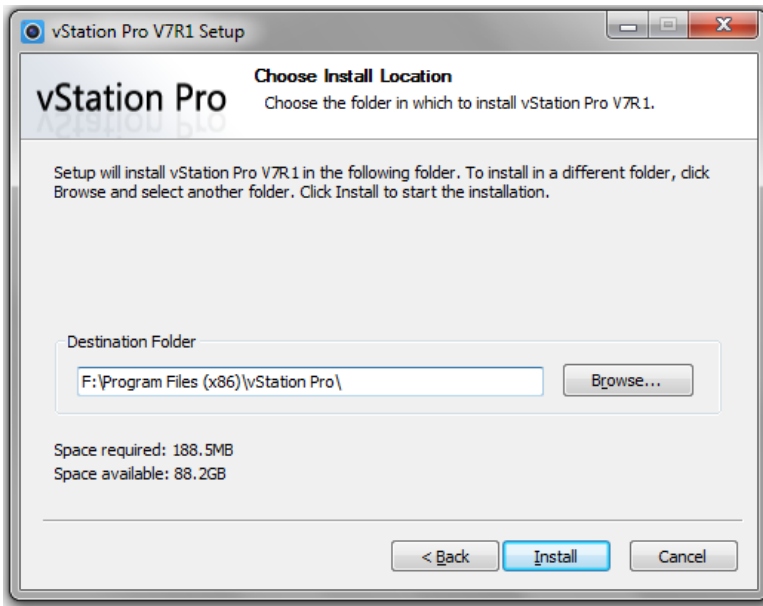


5. Create an account of the server installed on your PC.  
The following is an example.





This account is also the unique administrator of the client. In this document, this account is applied. The **Port** can be any port (from the range 1025-65535) on your PC and this port will be assigned to the server. This port is configurable and details are provided in section "Configuring the Server".

6. Click **Next**.
7. Select a path and click **Install**.




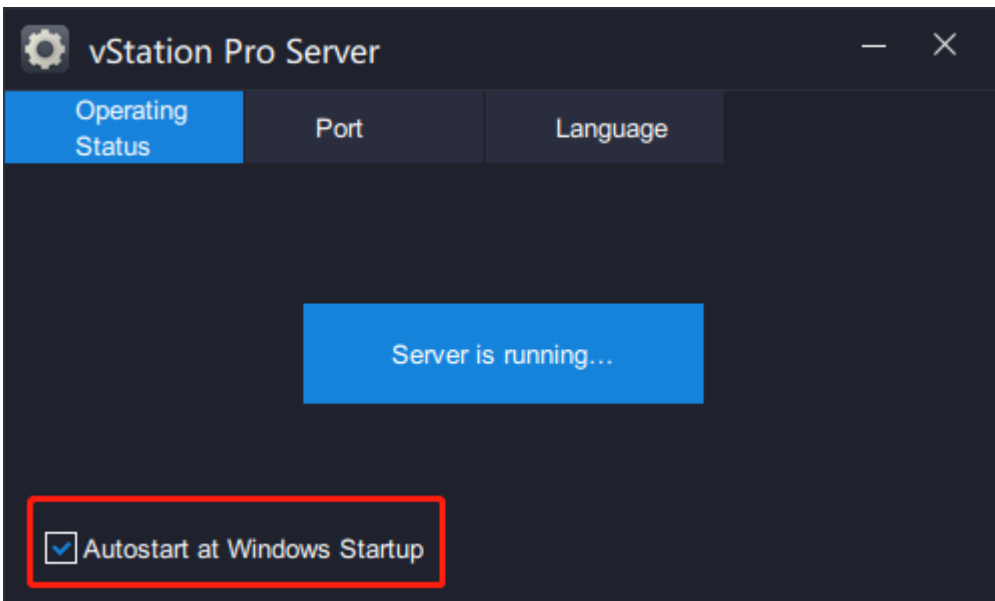
8. Click **Finish** when the installation is completed.

After the preceding steps are performed, you can find the  and  icons on the desktop.

## Configuring the Server

To configure the server:

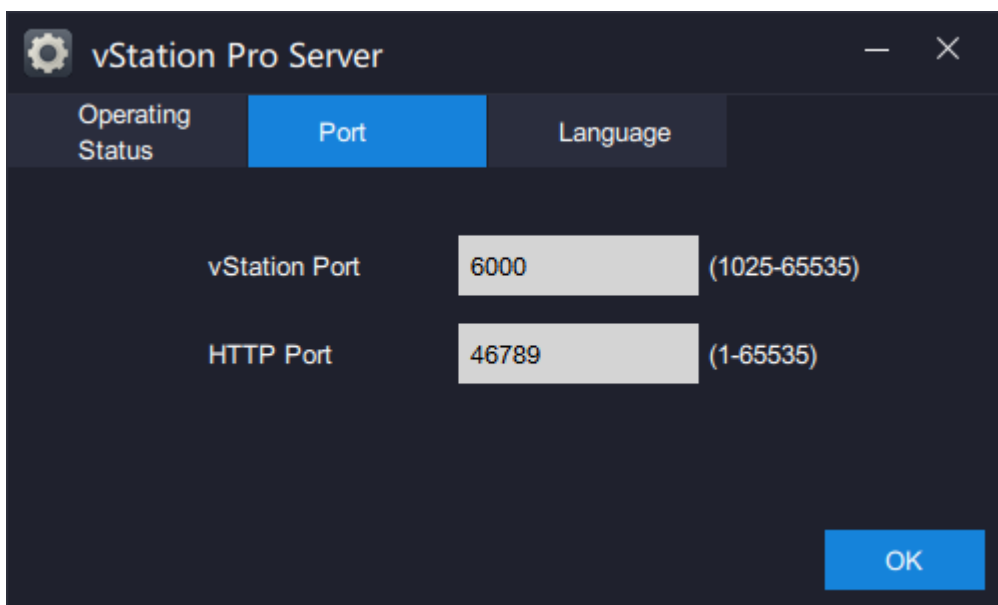
1. Double-click .
2. Under **Operating Status**, determine whether to enable the server to start up together with the Windows startup.



In this step, you can check the server status.

3. Under **Port**, you can configure the server port and HTTP port.

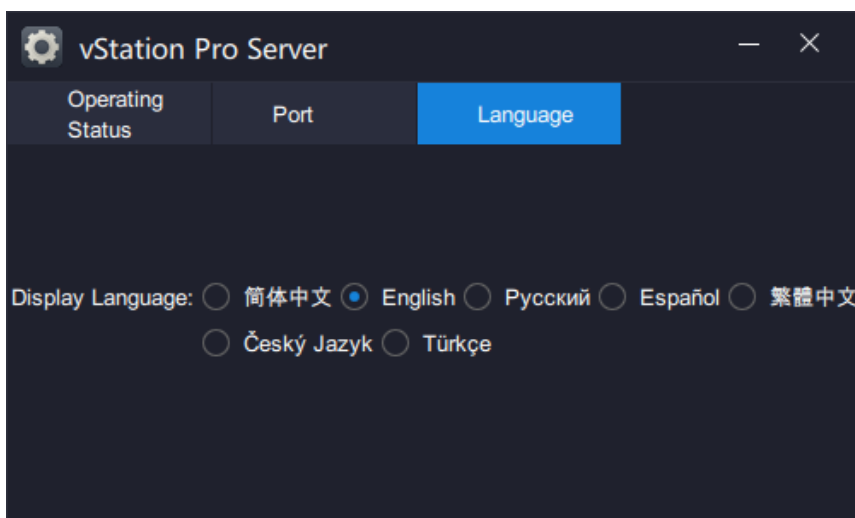




**vStation Port:** This is a port on your PC and it is assigned to the server.

**HTTP Port:** This is also a port on your PC and it is assigned to the server. This port is used to receive face/figure detection captures and face detection alarms pushed from an AI NVR. For details, see step 13 of section "Configuring the AI Functions".


4. Under **Language**, you can choose a display language for the server.

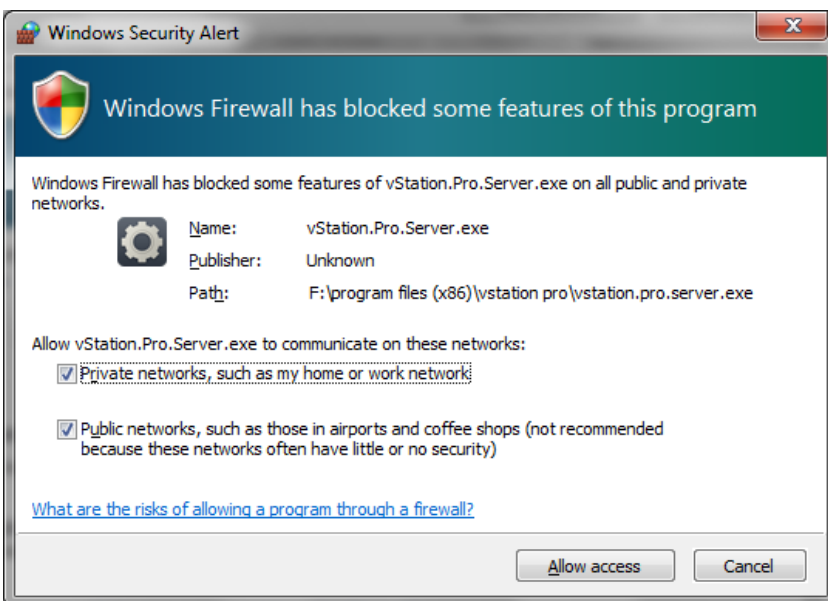
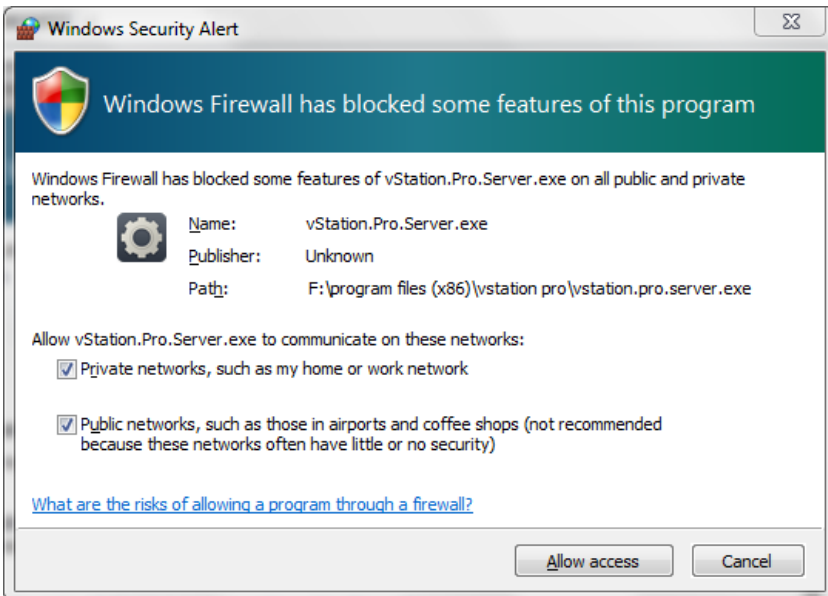
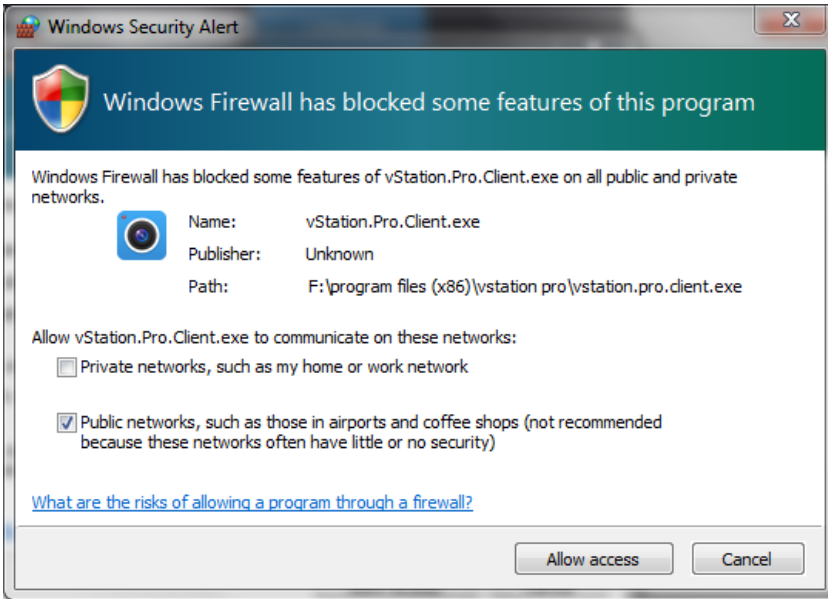


## Logging In to the Client

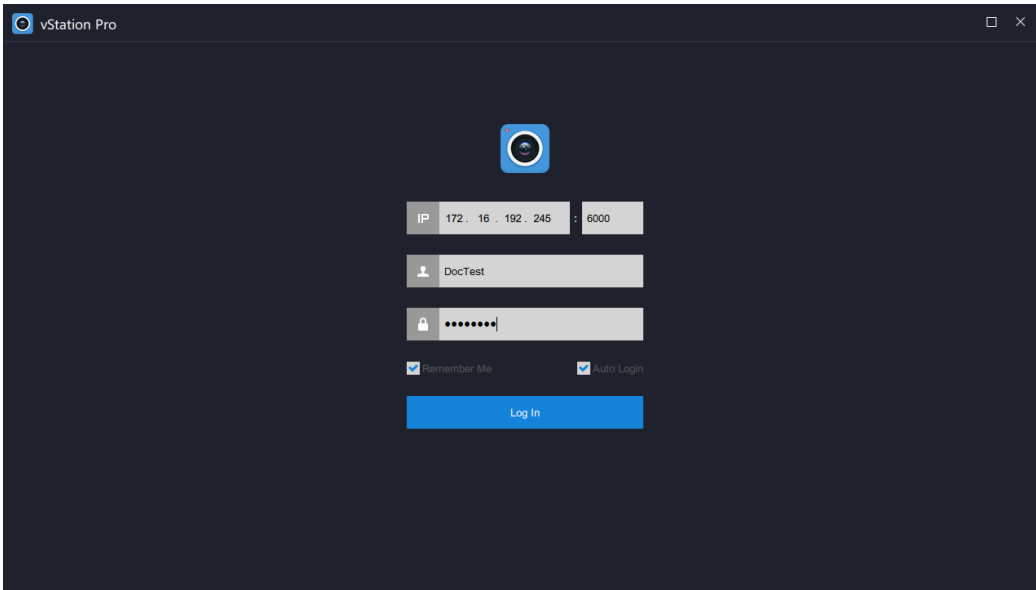
To log in to the client:



1. Double-click .
2. Allow the vStation Pro through the Windows Firewall.



3. In the login dialog box, specify parameters displayed.



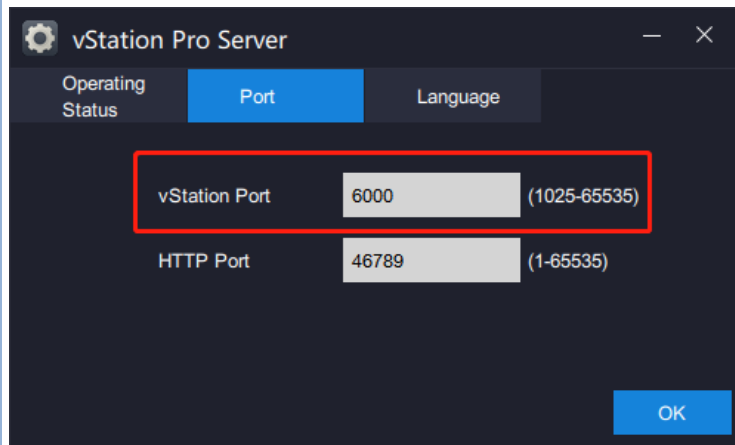
Parameters are described as follows.

IP of the server.

The server IP is the IP address of your PC where the server is installed.

**6000** is the server port, which can be reconfigured on the server.

IP

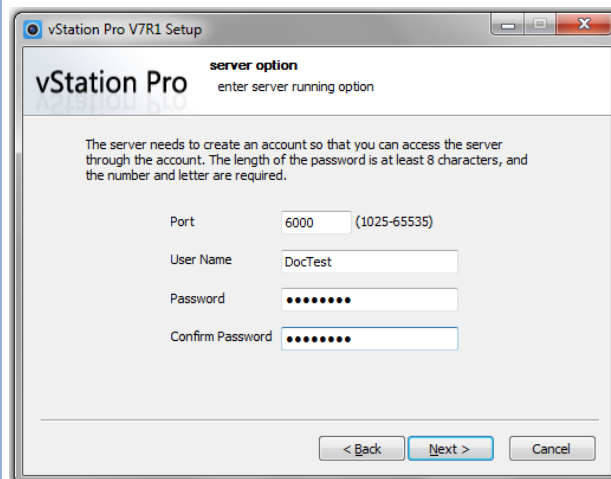


**NOTE:**

If the IP address of your PC is changed, the server IP will be changed automatically.

Account of the server, which is created in step 4 of section "Procedure".

Account





Password of the server account

4. Click **Log In**.

After logged in to the client, do not close the server.

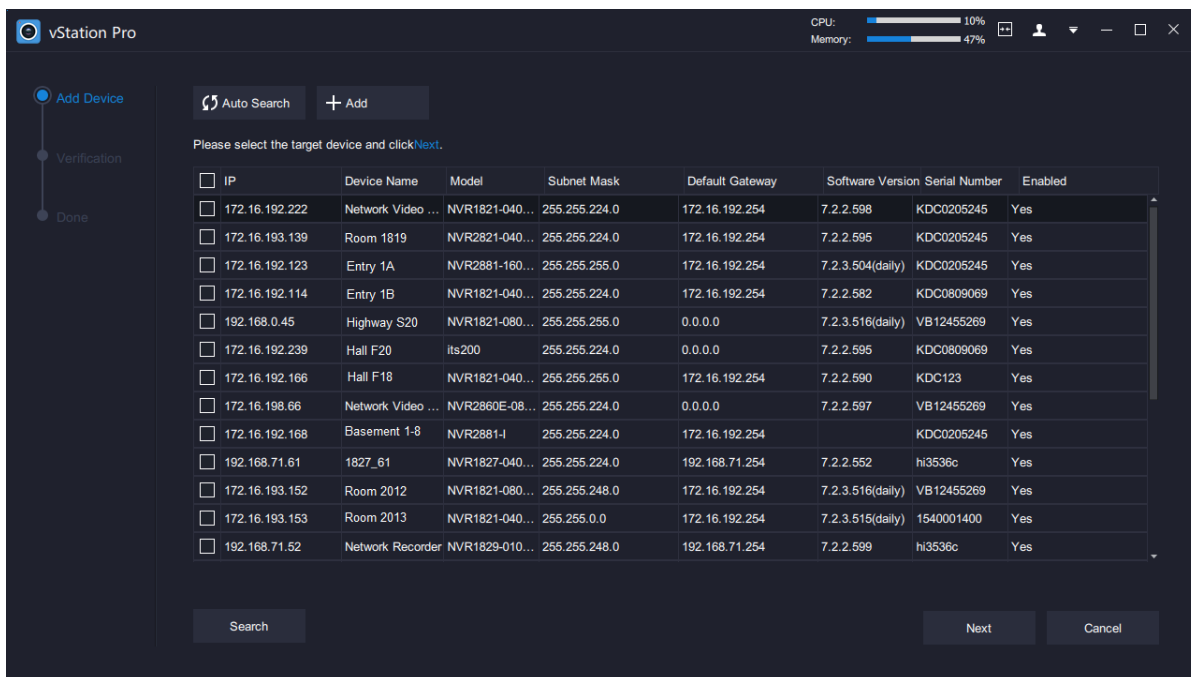
## Setup Wizard

For the first login, the Setup Wizard will show up to guide you to add NVRs as follows.

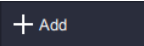
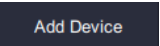
1. On the displayed page, select the target NVR you want to add.

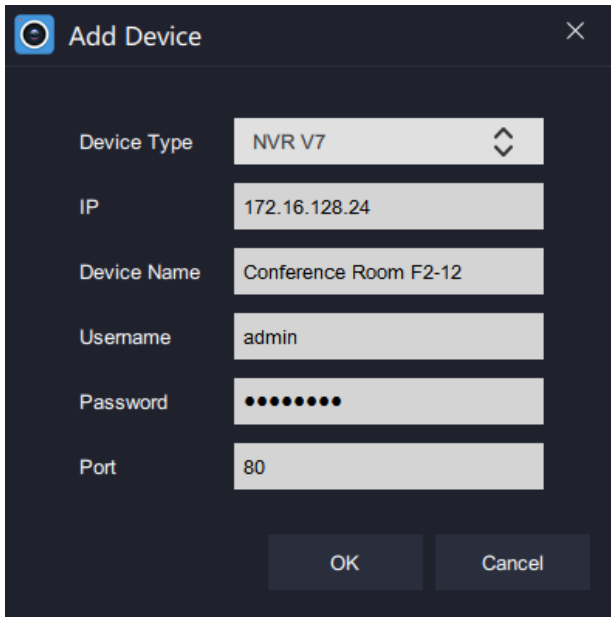
Ensure that the target NVR is located on the same broadcast domain (in a LAN) as your PC.

You can also select multiple target NVRs.

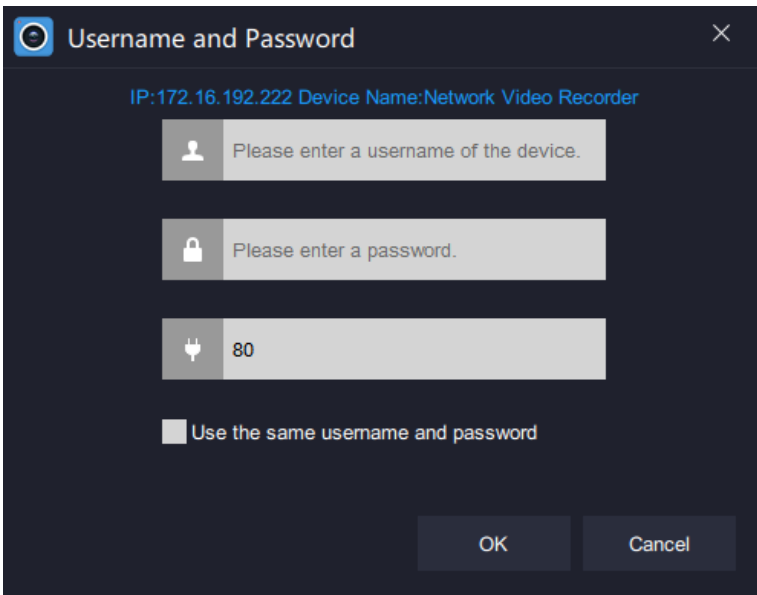


If the target NVR is not located on the same broadcast domain (in a LAN) as your PC but you can ping it from your PC, manually add it as follows:




- 1) Click  > .
- 2) In the **Add Device** dialog box, specify parameters displayed.  
The following is an example.



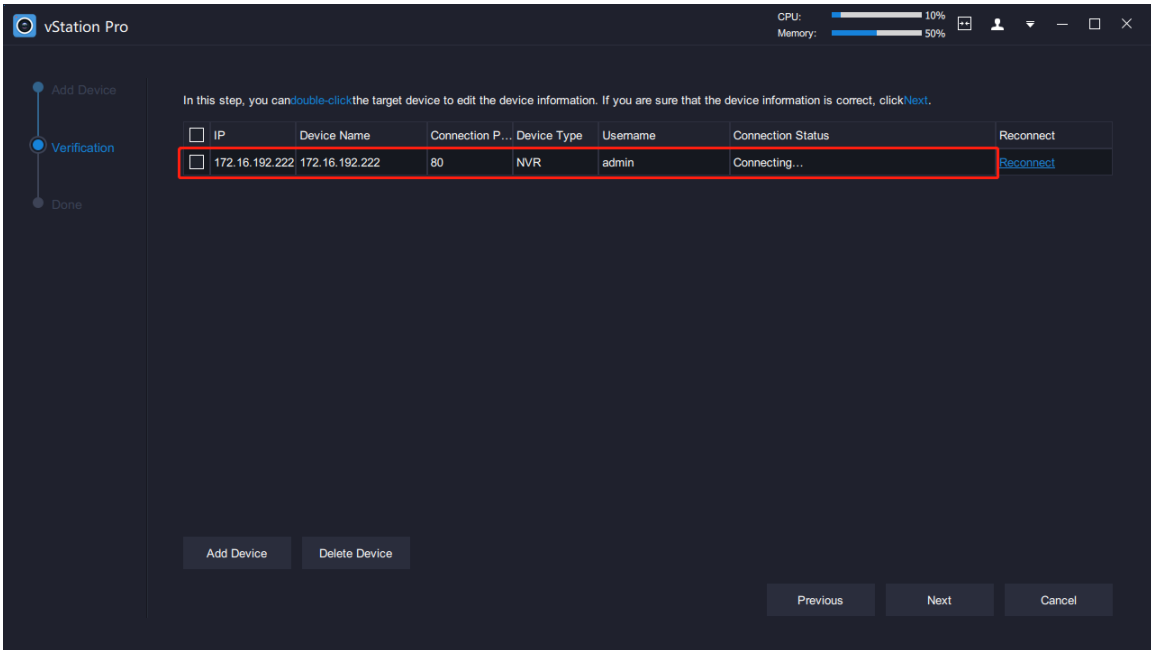
- 3) Click **OK**.
- 4) Skip to step 5.
2. Click **Next**.
3. In the displayed dialog box, specify parameters displayed.



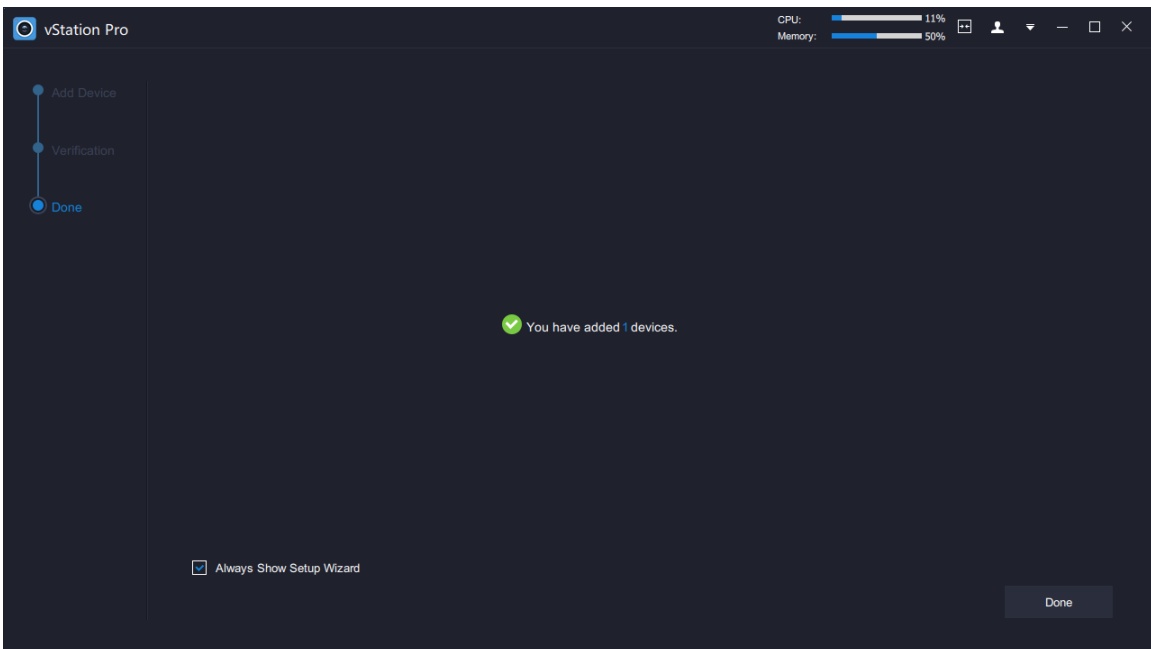
Parameters are described as follows.

	Username of the target NVR
	Password of the username
	Connection port of the target NVR
<b>Use the same username and password</b>	If the target NVRs have the same account and password, you can check this option to add these NVRs in a shorter time. If you do not check this option, you need to enter a username and password for each target NVR.

- Click **OK**.
- (Optional) On the displayed page, you can double-click anywhere in the red box to change the target NVR information, such as the IP or port number.



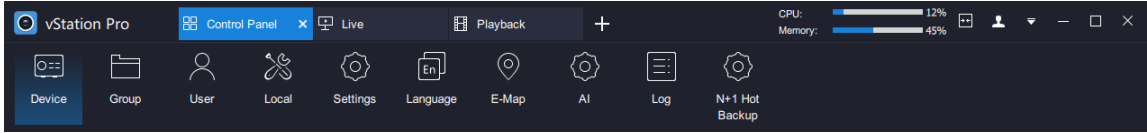
- Click **Next**.
- (Optional) Determine whether to show the Setup Wizard every time the client is started.



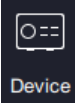
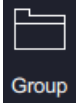
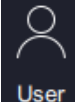

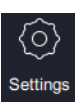

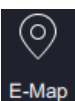



- Click **Done**.

# Control Panel

Under **Control Panel**, you can configure the following items.

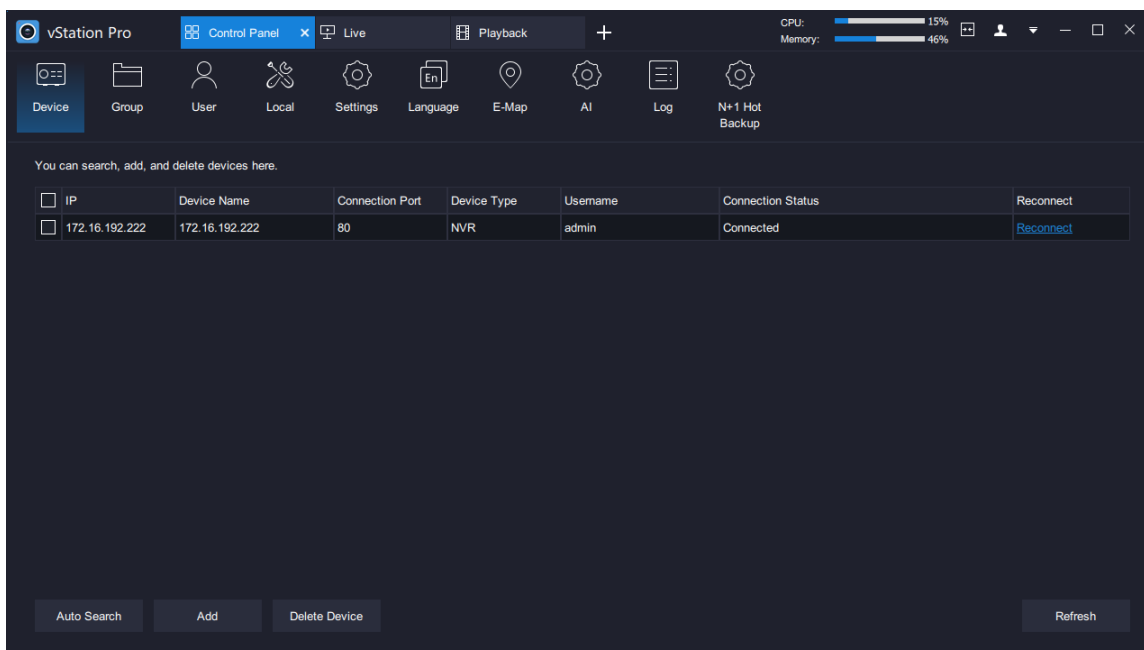


These items involve the following actions.

 Device	Adding NVRs	 Group	Creating Camera Groups
 User	Adding Client Accounts	 Local	Configuring Client Settings
 Settings	Configuring NVR Settings	 Language	Choosing the Display Language
 E-Map	Configuring E-Map	 AI	Using AI Functions
 Log	Querying Logs	 N+1 Hot Backup	Configuring N+1 Hot Backup

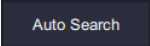
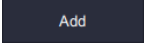
## Adding NVRs

Under **Device**, you can add NVRs.



### Method 1

To add a target NVR from searching results:

1. Click .
2. Select the target NVR from the search results and click .  
You can also select multiple target NVRs you want to add.
3. In the displayed dialog box, enter a username, a password, and a port number.  
In this step, you can check the following option if the multiple target NVRs use the same username, password, and port number.

Use the same username and password

4. Click **OK**.

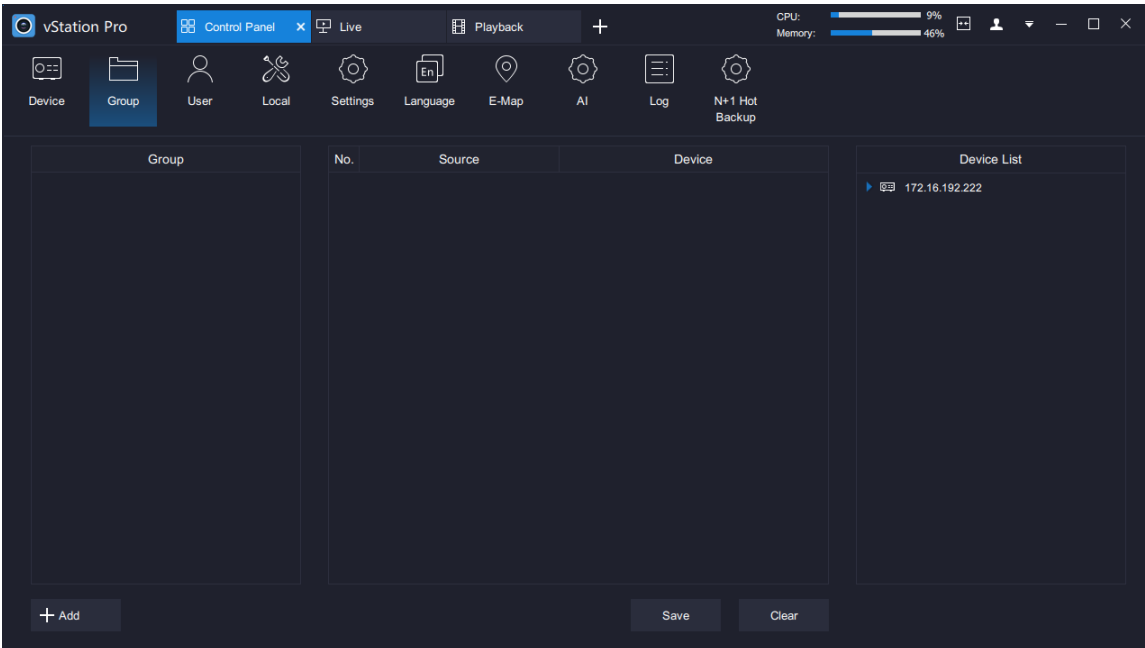
### Method 2

To manually add a target NVR, see step 1 of section "Setup Wizard".

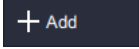
## Creating Camera Groups

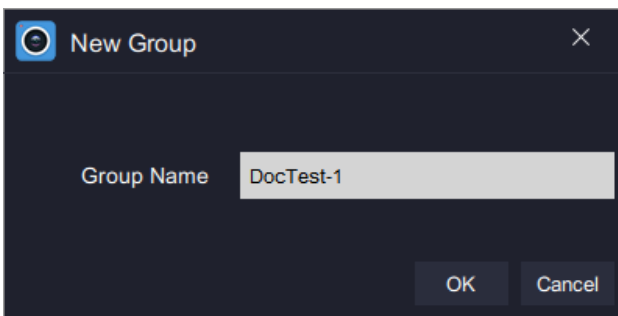
Under **Group**, you can group cameras registering with different NVRs. A maximum of 32 camera groups can be created.



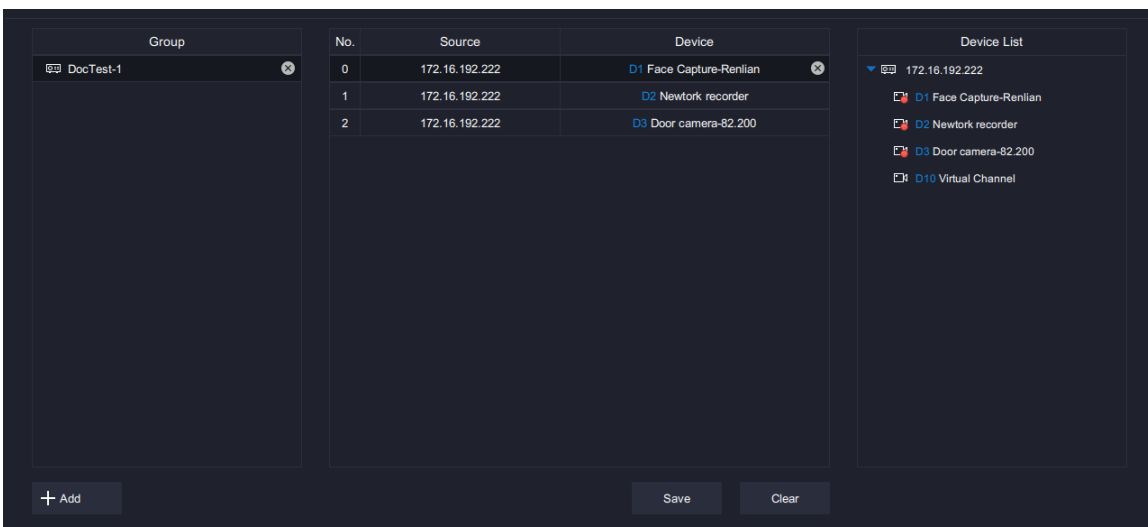


To create a camera group:

1. Click .
2. In the displayed dialog box, enter a group name.  
The following is an example.




3. Click **OK**.
4. Drag cameras under the **Device List** to the middle pane.  
The following is an example.



5. Click **Save**.

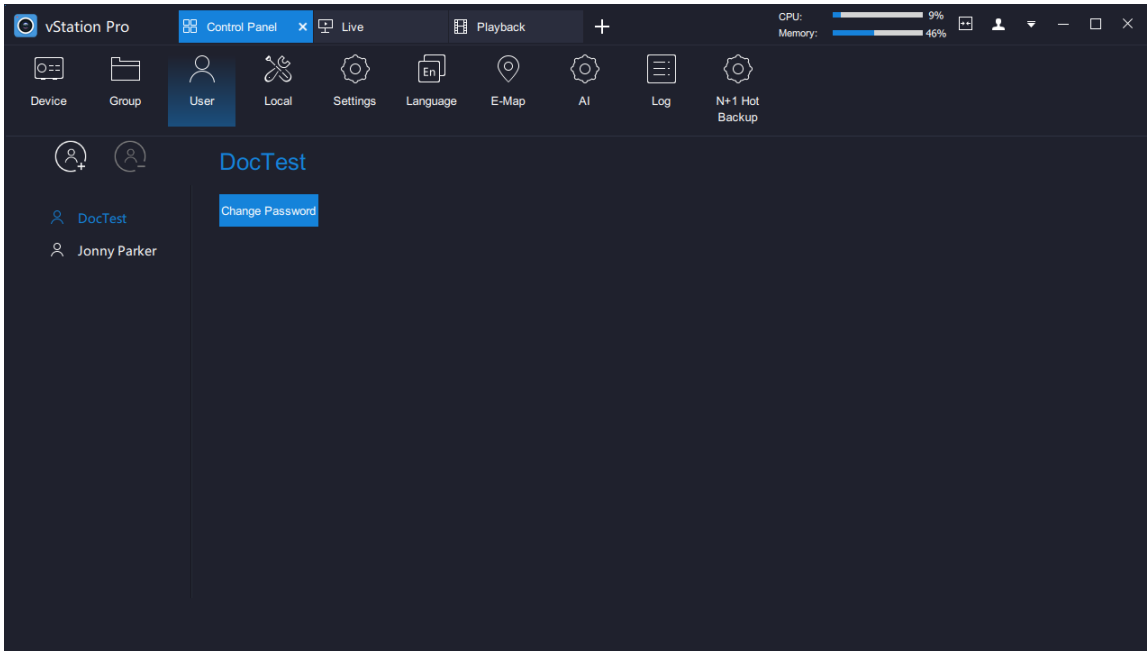
To rename a camera group, double-click it and enter a new name.

To delete a camera group, click  and confirm your operation.

To remove a camera from a camera group, click  and confirm your operation.

## Adding Client Accounts

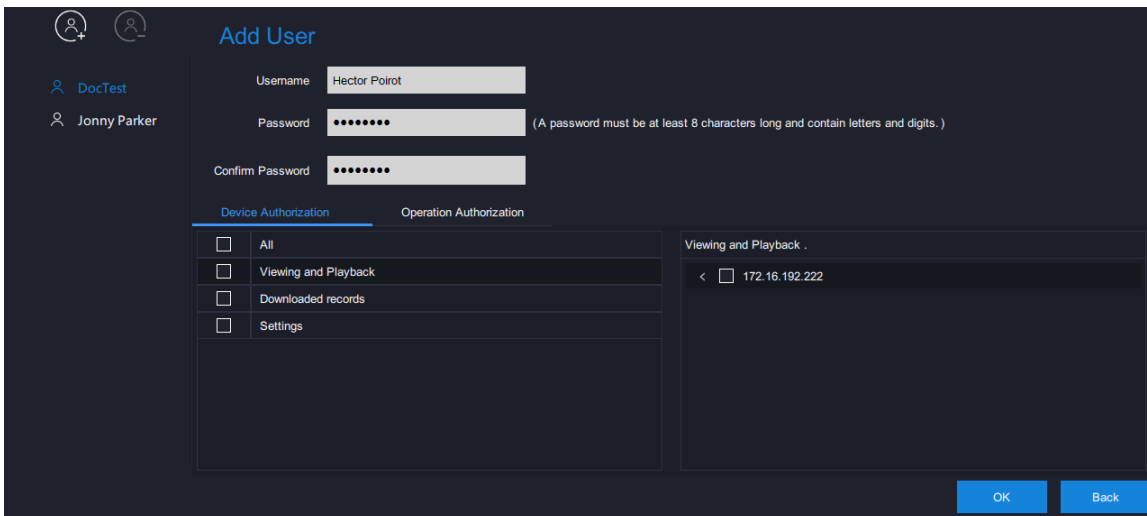
Under **User**, you can add client accounts.



To add a client account:

1. Click .
2. Enter a username and password and confirm the password.

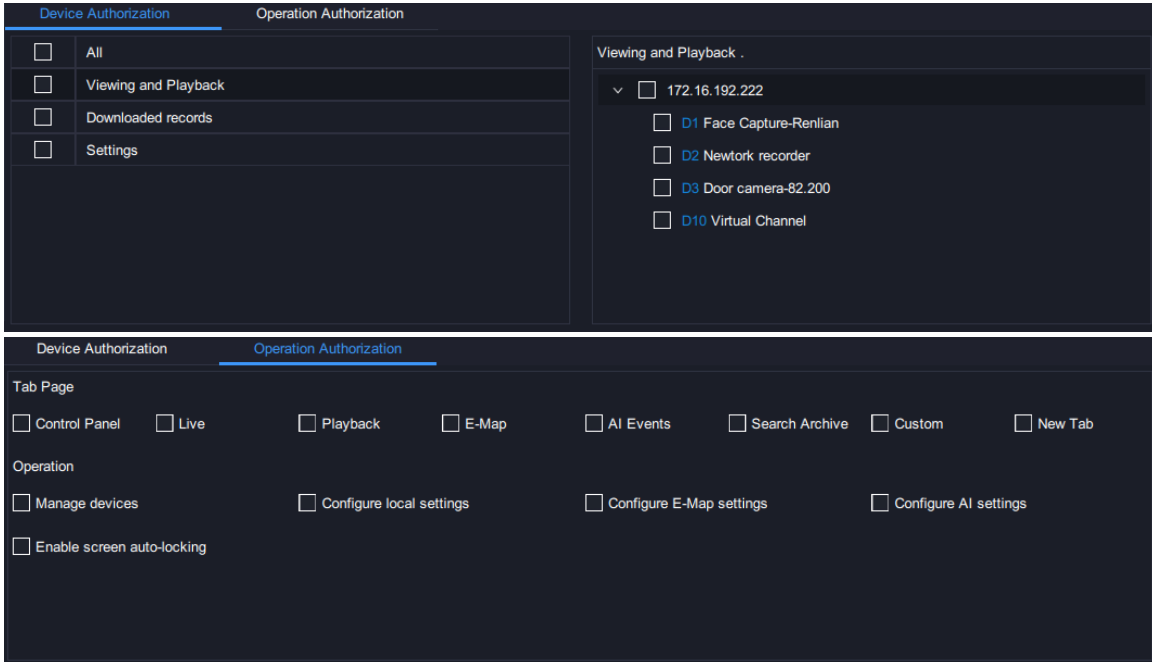
The following is an example.

The screenshot shows the 'Add User' form. It includes fields for Username (Hector Poirot), Password, and Confirm Password. A note states: '(A password must be at least 8 characters long and contain letters and digits.)'. Below the password fields, there are two sections: 'Device Authorization' and 'Operation Authorization'. The 'Device Authorization' section has checkboxes for 'All', 'Viewing and Playback', 'Downloaded records', and 'Settings'. The 'Operation Authorization' section is currently empty. At the bottom right, there are 'OK' and 'Back' buttons.

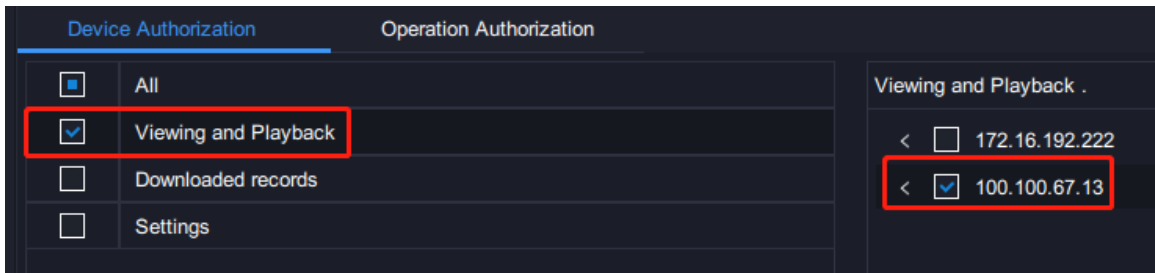
The more complex a password is, the stronger it is. You are advised to use a strong password to ensure your data safety. Periodically changing your password at 3-month intervals would be

appreciated. If your network environment is risky, you should change your password at weekly or monthly intervals. Additionally, do not leak your username and password.

### 3. Grant the account device/operation authorization.



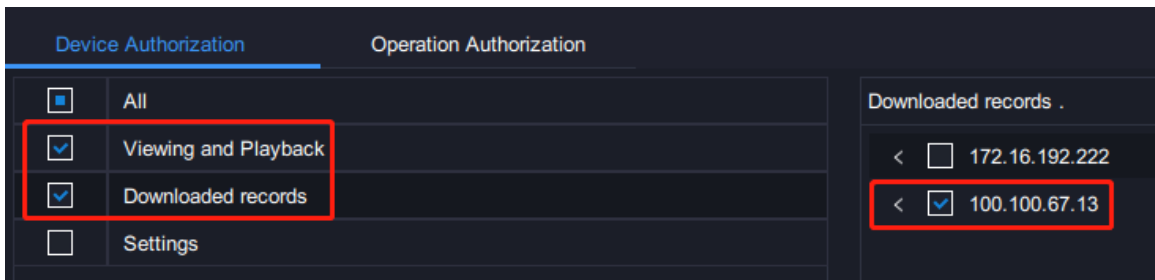
- If you want to grant the account the **live video viewing** and **playback** authorization for all cameras under NVR A (for example, 100.100.67.13), check the following:



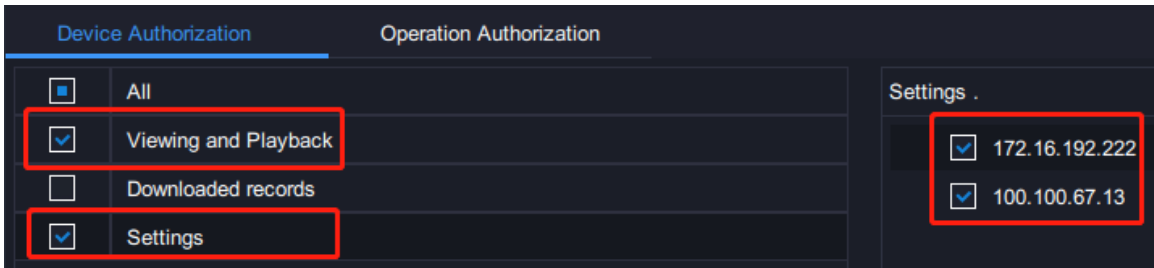
#### NOTE:

If you want to grant the account the authorization for all cameras under all NVRs, select all NVRs.

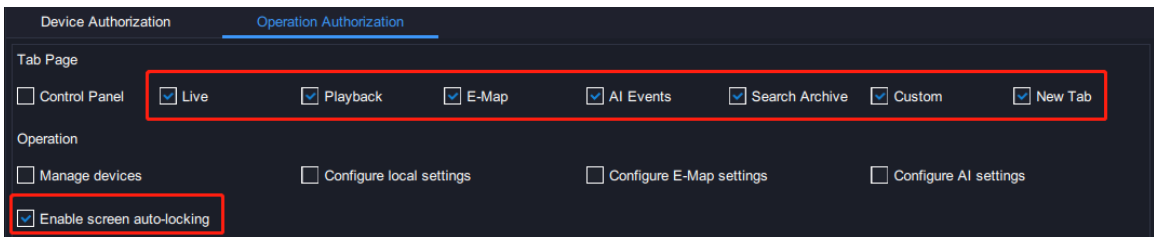
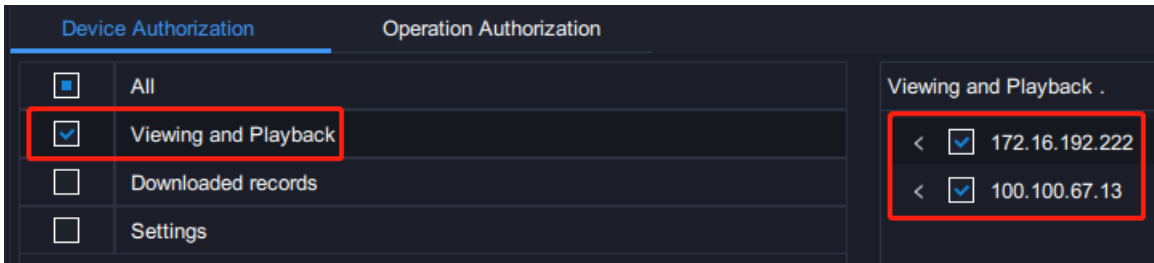
- If you want to grant the account the **record download** authorization for all cameras under NVR A, check the following:



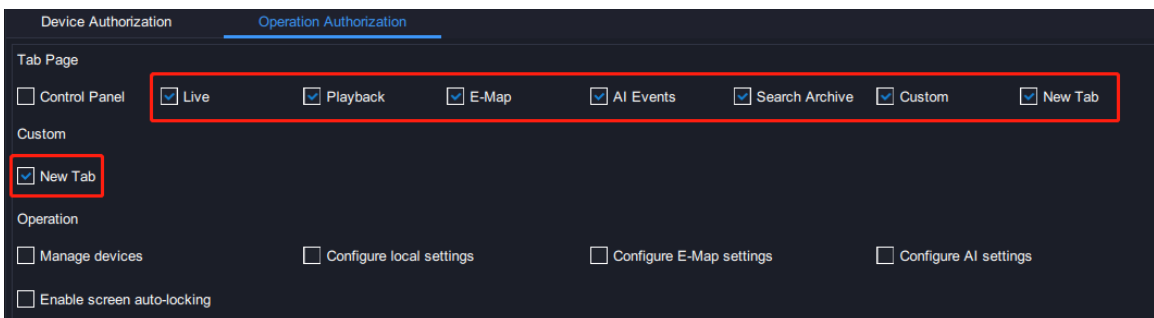
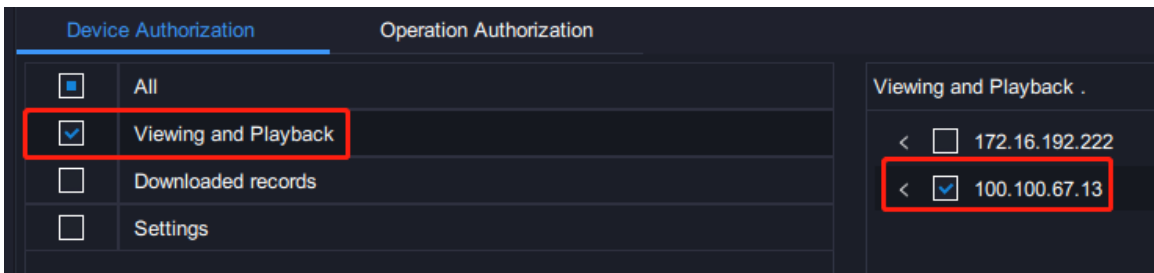
- If you want to grant the account the **NVR configuration** authorization for all NVRs on the vStation Pro, check the following:



- If you want to grant the account the **screen auto-locking** authorization for the vStation Pro, check the following:

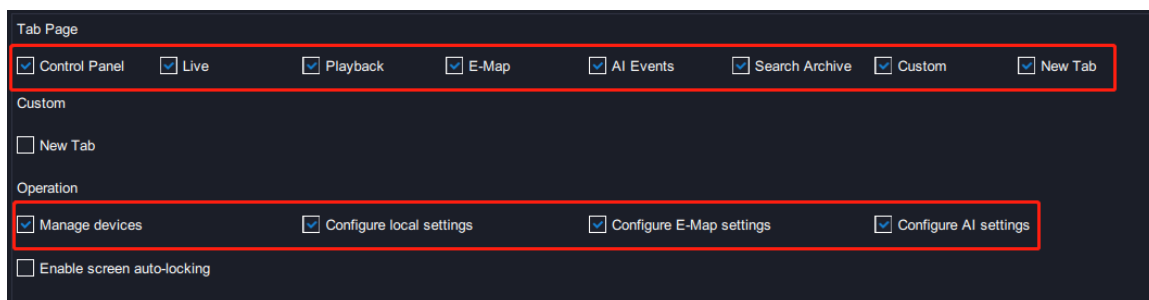
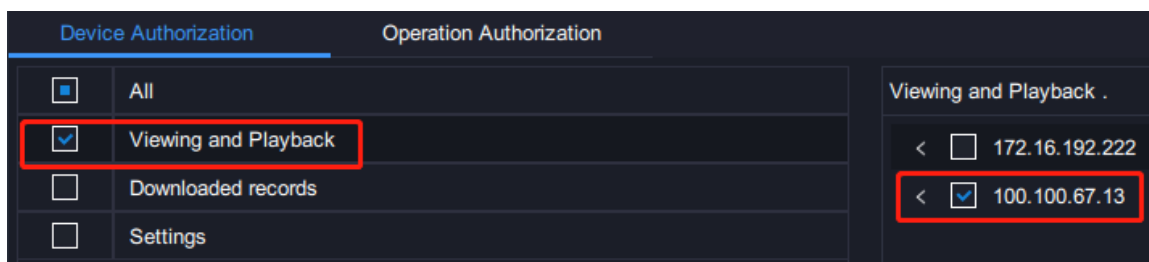


- If you want to grant the account the **creating a custom tab page** authorization for NVR A, check the following:

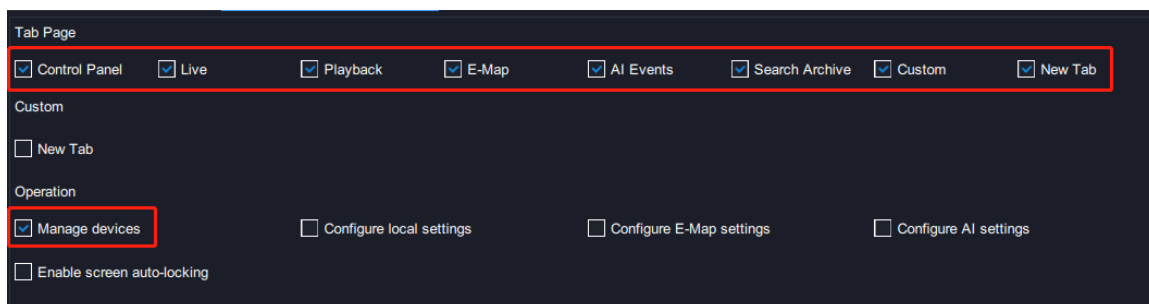


- If you want to grant the account the authorization of **managing devices, configuring local**

settings, configuring E-Map settings, and configuring AI settings for NVR A, check the following:



- If you want to grant the account the authorization of only **managing devices** for NVR A, check the following:



**NOTE:**

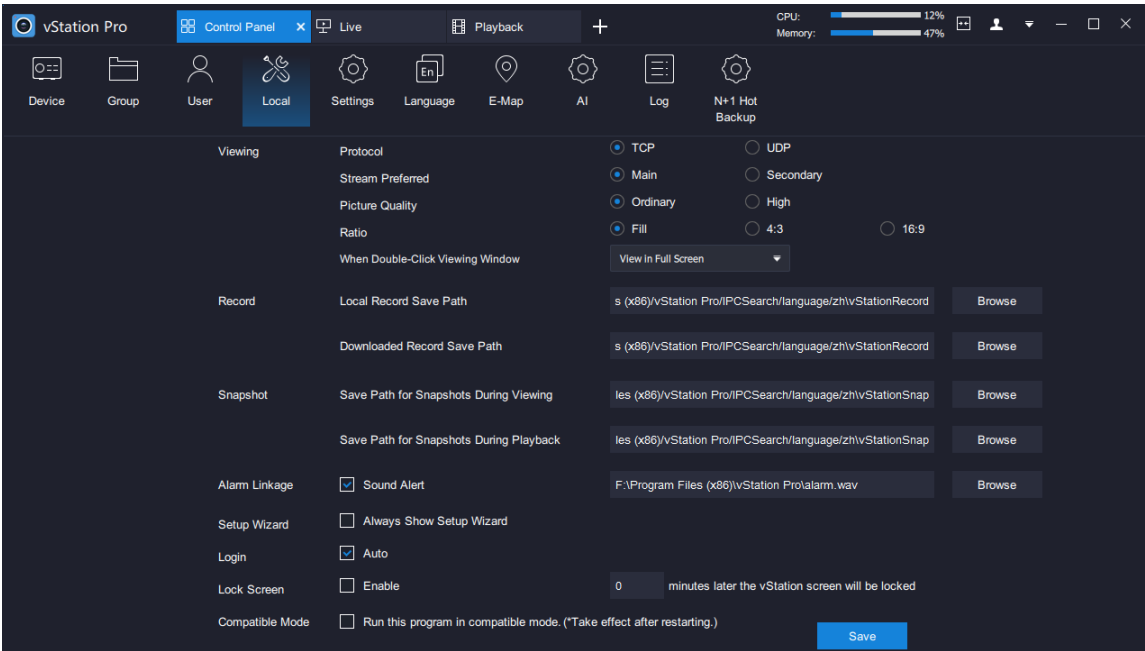
This method also applies to the authorization granting of **configuring local settings, configuring E-Map settings, and configuring AI settings.**

4. Click **OK**.

## Configuring Client Settings

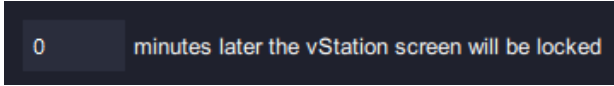
Under **Local**, you can configure client settings.

## User Manual for vStation Pro



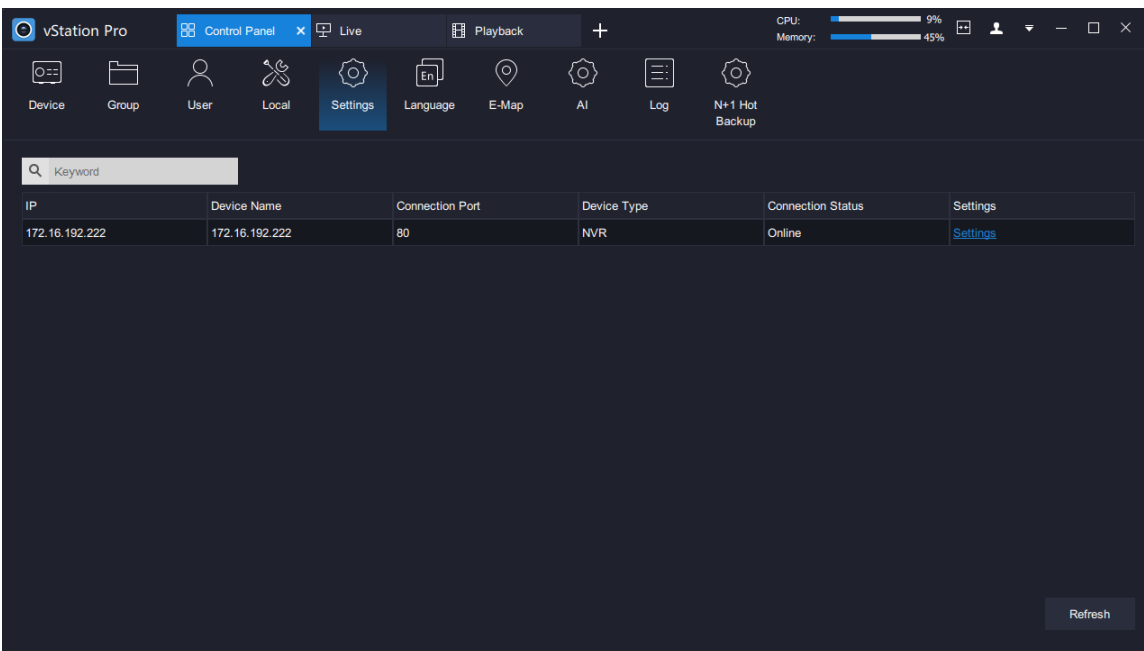
Parameters displayed are described as follows.

<b>Viewing</b>	Protocol	Viewing protocol
	Stream Preferred	Stream preferred for viewing
	Picture Quality	Picture quality
	Ratio	Video ratio
	When Double-Click Viewing Window	<p>The available values are as follows:</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Switch Between Main/Secondary Stream</p> <p>Push Viewing Contents</p> <p style="background-color: #007bff; color: white; padding: 2px;">View in Full Screen</p> </div> <ul style="list-style-type: none"> <li><b>View in Full Screen</b> This option enables the video played in the viewing window to be viewed in full screen mode.</li> <li><b>Switch Between Main/Secondary Stream</b> This option switches between the main/secondary streams in the viewing window.</li> <li><b>Push Viewing Contents</b> This option pushes the video played in a viewing window to viewing windows configured to receive pushed contents. For details, see section "Receiving Pushed Contents".</li> </ul>
<b>Record</b>	Local Record Save Path	Path for saving local records. For details, see section "Viewing Control".
	Downloaded Record Save Path	Path for saving downloaded camera records. For details, see section "Downloading Records".
<b>Snapshot</b>	Save Path for Snapshots During Viewing	Path for saving local captures. For details, see section "Viewing Control".
	Save Path for Snapshots During Playback	Path for saving captures made during playbacks. For details, see section "Playback Controls".
<b>Alarm</b>	Sound Alert	When this option is checked, the sound alert will be raised

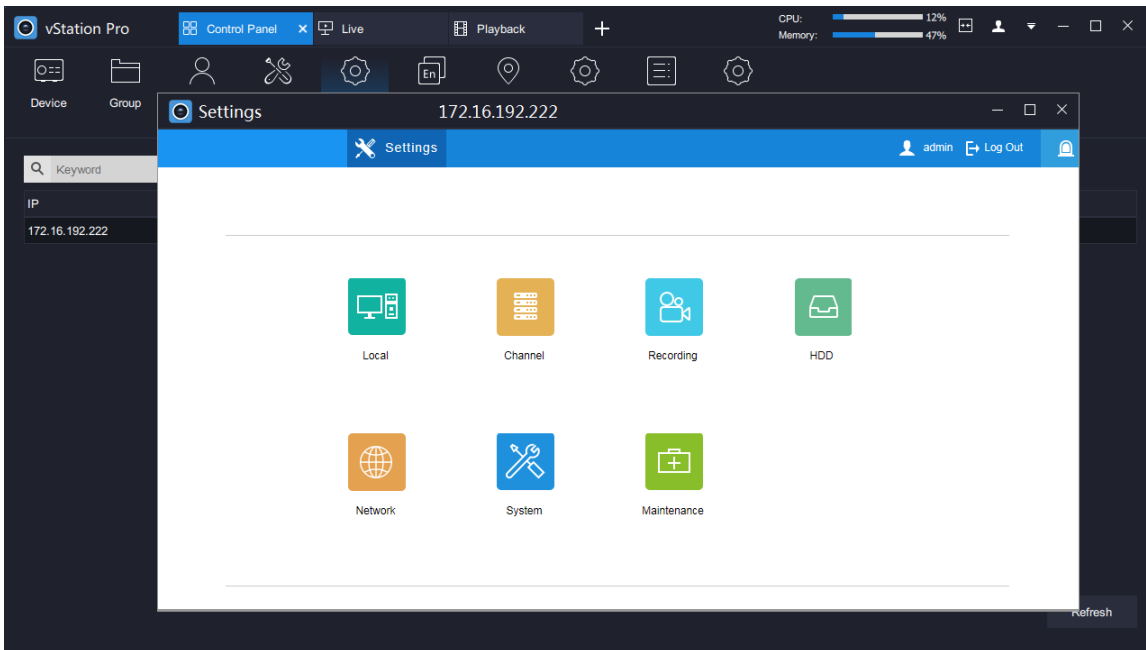
<b>Linkage</b>		if the client receives an alarm from an NVR or camera. The sound alert will stop when the related alarm is cleared.
<b>Setup Wizard</b>	Always Show Setup Wizard	Whether to show the Setup Wizard every time the vStation Pro is started
<b>Login</b>	Auto	Whether to enable automatic login
<b>Lock Screen</b>	Enable	Whether to enable screen auto-locking. If check <input type="checkbox"/> Enable, you need to enter a value in the following text box. 
<b>Compatible Mode</b>	Run this program in compatible mode.	You are advised to check this option if you cannot run the vStation Pro on a PC using the Windows 7/10 operating system. If the problem persists, contact the local authorized Kedacom agent.

## Configuring NVR Settings

Under **Settings**, you can configure NVRs.

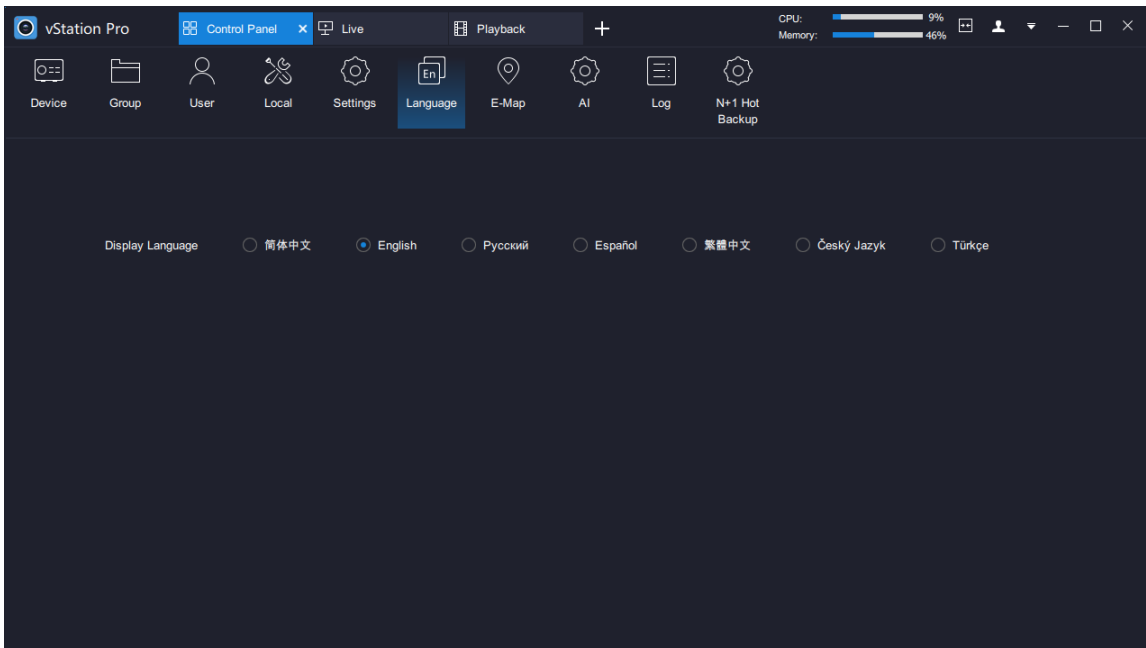


To configure an NVR, double-click it and configure settings on the displayed page. For details on how to configure an NVR, see the related user guide.



## Choosing the Display Language

Under **Language**, you can configure the display language of the client.

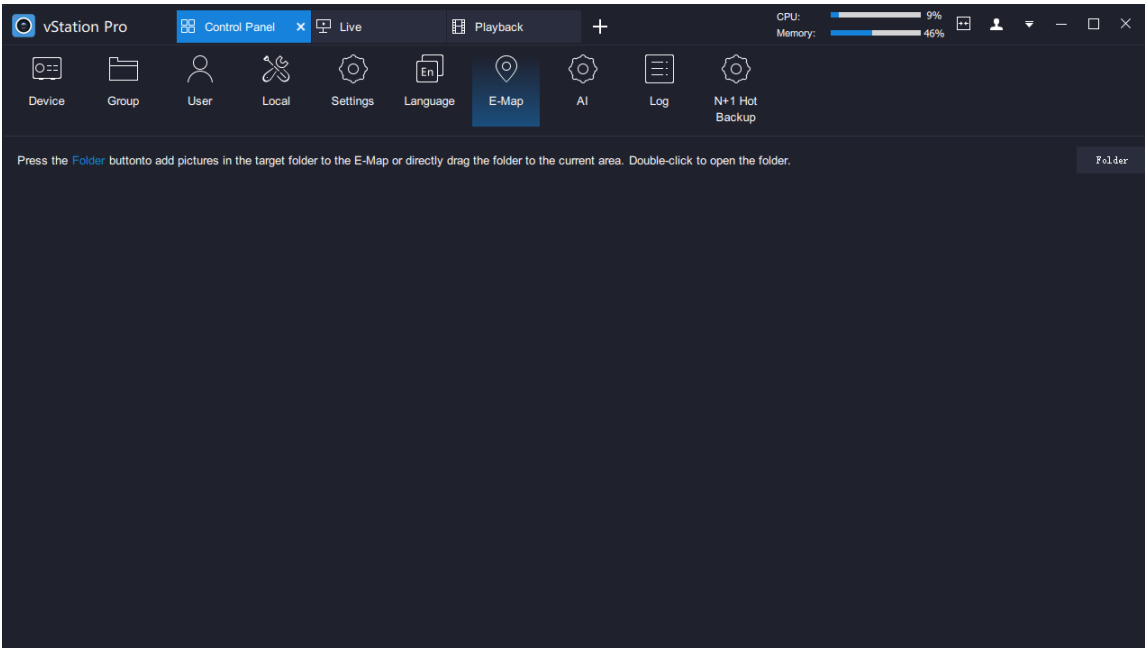


## Configuring E-Map

Under **E-Map**, you can drag AI cameras to a map and query alarm information on the map.



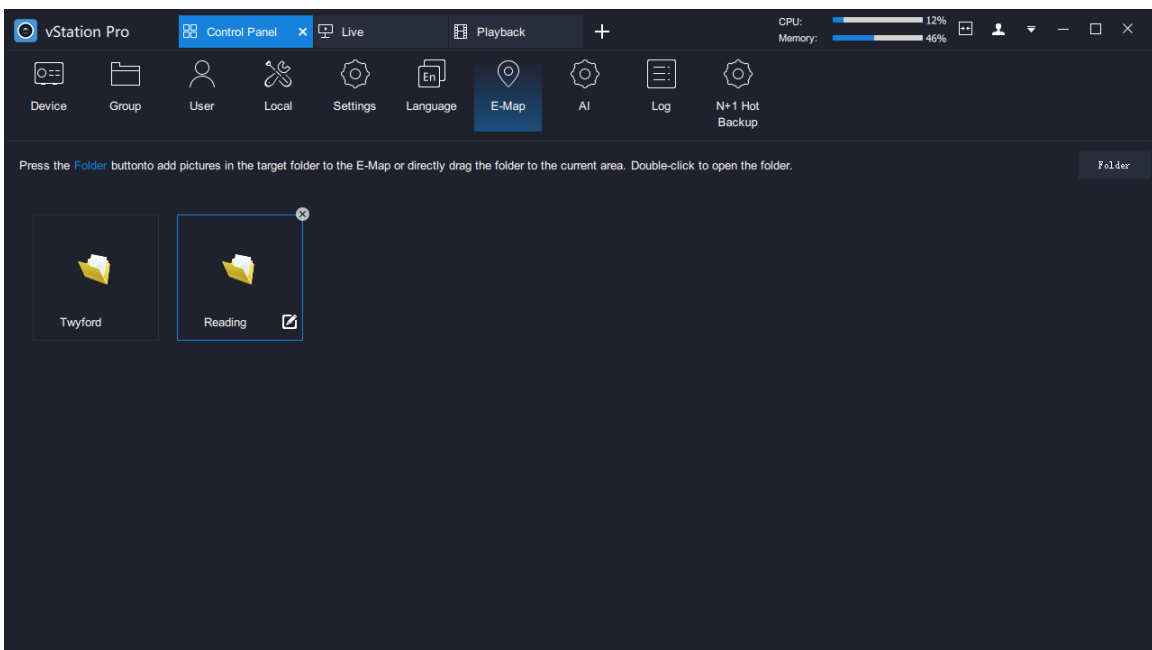
## User Manual for vStation Pro



To use the E-map function:

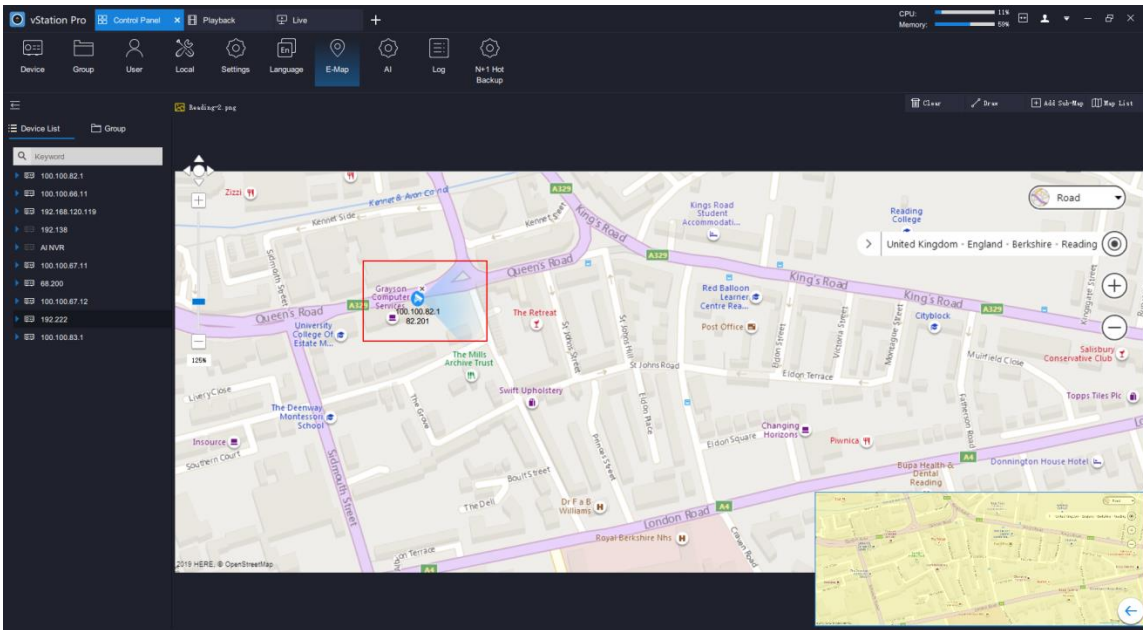
1. Click **Folder**.
2. Upload the target map folder.

The following is an example.

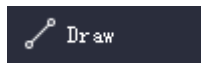


3. Double-click the target map folder and then the target map.
4. Drag AI cameras to the map.

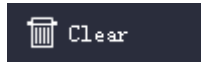
The following is an example.



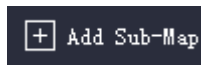
In the preceding figure, the AI camera is dragged to the spot where it is installed. You can press and hold the left mouse button and change its direction.



Draw lines to connect AI cameras on the map to form a camera network.

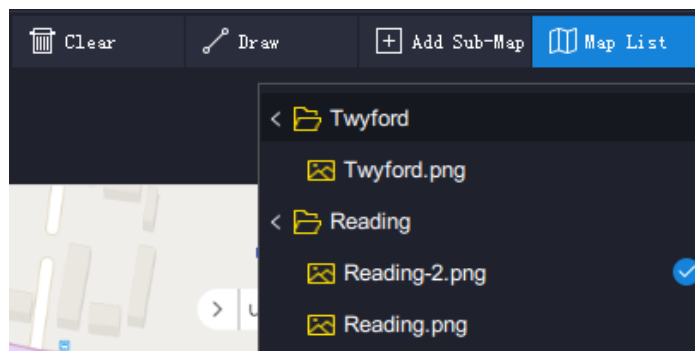
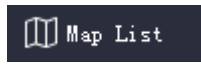


Clear all lines.




Add a sub-map to a map. Sub-maps will be placed above maps.

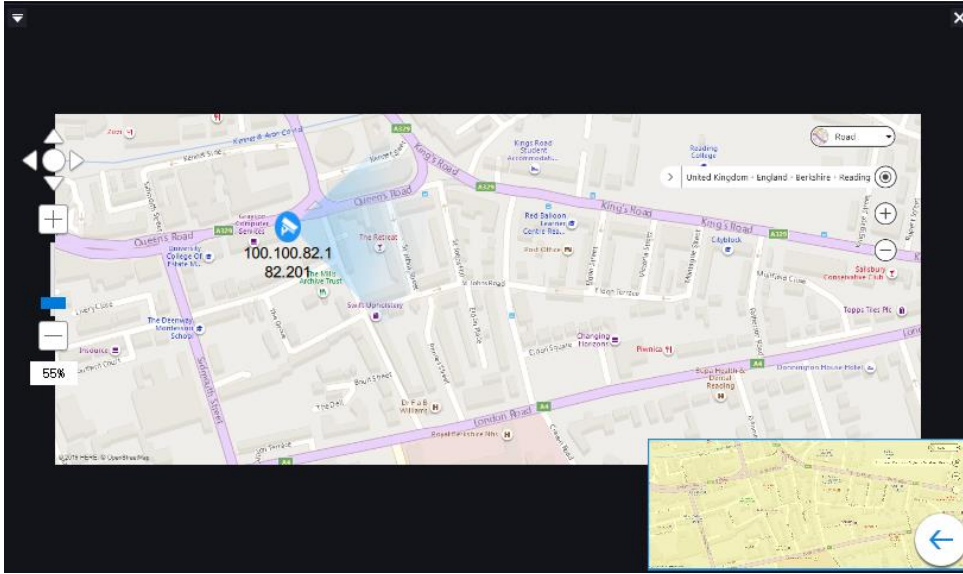
Show the map list. The following is an example.




The maps are listed in an ascending order of time they are created. This means the firstly created map tops the list.

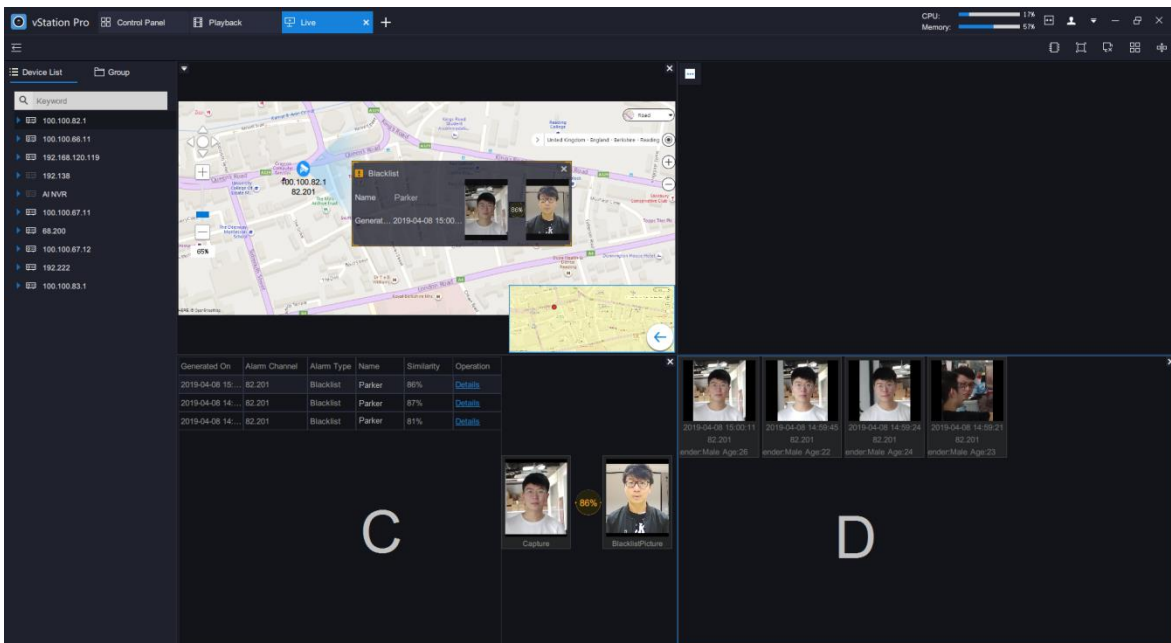
5. On an idle viewing window of the **Live** page, choose  > **E-Map**.

By default, the first map which tops the map list is displayed. The following is an example.



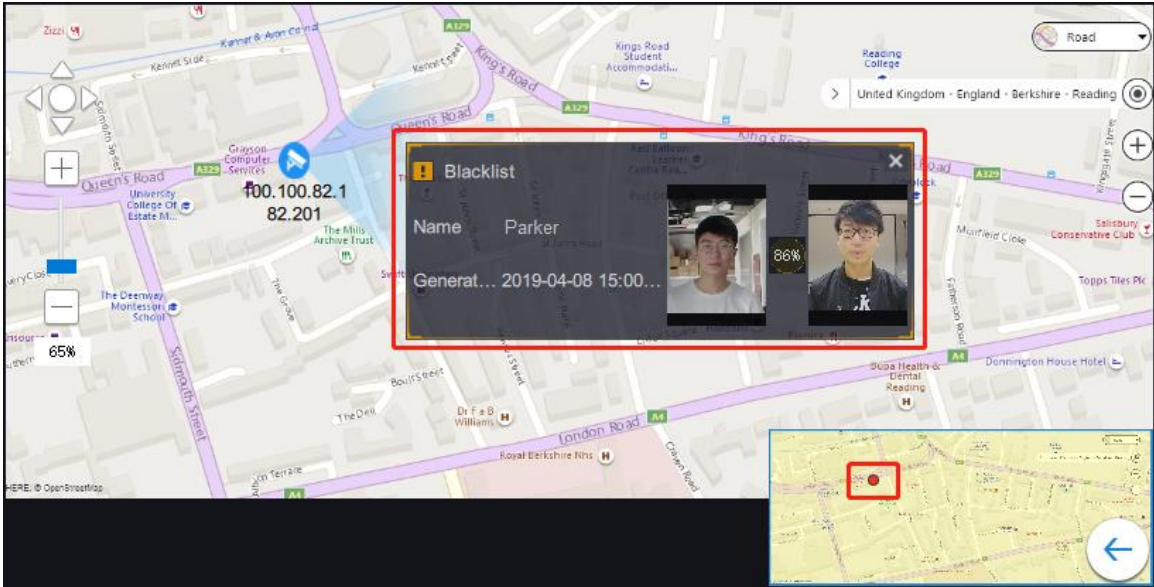
6. On two idle viewing window (for example, windows C and D) of the **Live** page, choose  > **Face Detection Alarm** and **Face Detection Real-Time Information**, respectively.

When a face detection alarm is generated, you can find the following on these viewing windows.



As shown in the preceding figure, the face detection alarm is displayed in window C and face detection captures related to the alarm are displayed in window D.

Additionally, you can find a prompt and a blinking red spot in the viewing window where the E-map function is enabled, as shown in the following figure. Note that the prompt and the red spot will show only for 10s, regardless of whether the alarm is cleared or not.



## Using AI Functions

The AI functions include the face/figure/vehicle detection functions and apply only to the NVR2881-B of V7 and NVR2821 of V7. The sub-models are as follows.

Table 1 Sub-models of the NVR2881-B

4 Intelligent Channels	8 Intelligent Channels	16 Intelligent Channels
NVR2881-16016B/4HI	NVR2881-16016B/8HI	NVR2881-16016B/16HI
NVR2881-16032B/4HI	NVR2881-16032B/8HI	NVR2881-16032B/16HI
NVR2881-16064B/4HI	NVR2881-16064B/8HI	NVR2881-16064B/16HI
NVR2881-16128B/4HI	NVR2881-16128B/8HI	NVR2881-16128B/16HI

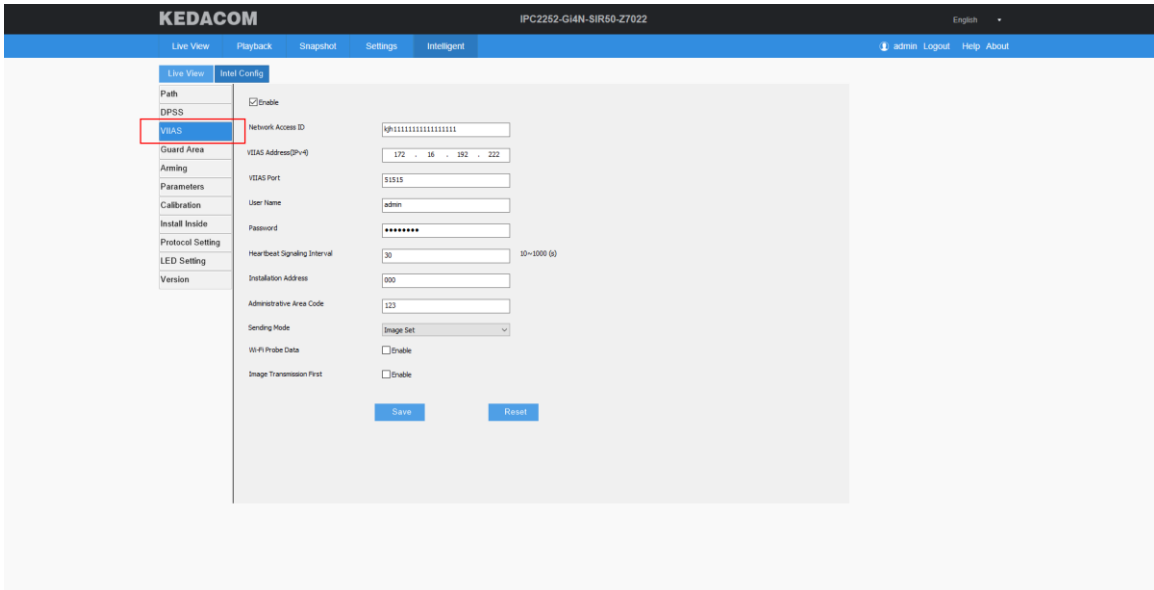
Table 1 Sub-models of the NVR2821

2 Intelligent Channels	4 Intelligent Channels	8 Intelligent Channels
NVR2821-04009B/2LI	NVR2821-04009B/4HI	NVR2821-04009B/8HI
NVR2821-04016B/2LI	NVR2821-04016B/4HI	NVR2821-04016B/8HI
NVR2821-04032B/2LI	NVR2821-04032B/4HI	NVR2821-04032B/8HI

## Configuring the AI Functions

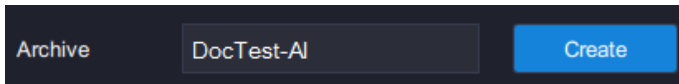
To configure the AI functions:

1. Under **AI**, select an AI NVR from the **Device List** and ensure that AI cameras have been added to this NVR.
2. Ensure that the VIAS settings of the AI cameras have been configured.



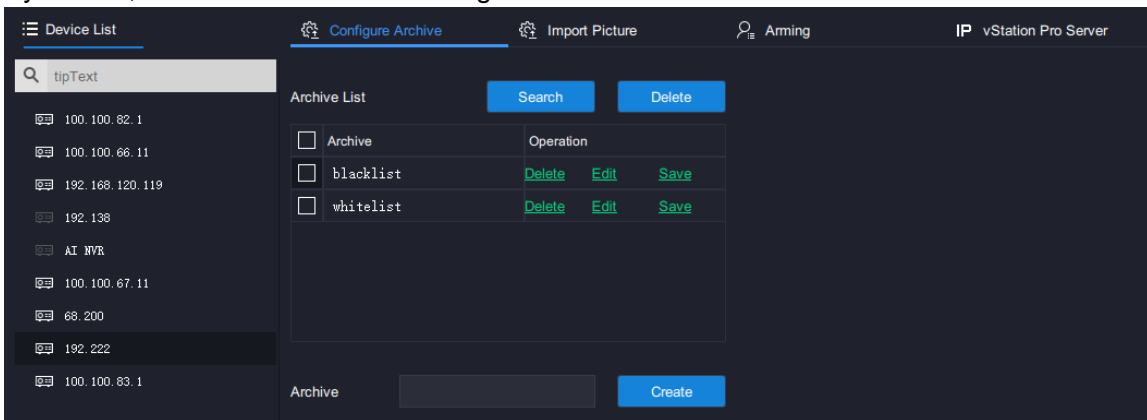
The AI cameras are capable of detecting faces, figures, and vehicles by default. You cannot enable or disable their detection capability.

3. (Optional) Create an archive.
  - 1) Enter an archive name.



- 2) Click **Create**.

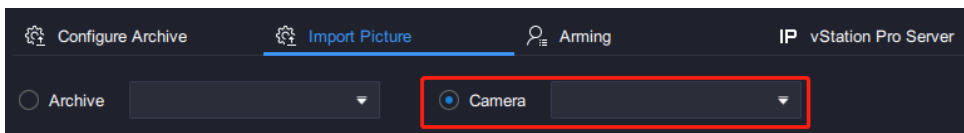
By default, an AI NVR has the following two archives: **blacklist** and **whitelist**.



4. Import person pictures.

To import person pictures to AI cameras:

- 1) Choose **Import Picture** > **Camera**.



- 2) (Optional) Upload pictures one by one.
 

Before uploading pictures, note the following:

  - Only .jpg and .jpeg pictures can be uploaded.
  - A maximum of 50,000 pictures can be uploaded.
  - The picture size should not be greater than 2 MB.
  - Each picture must include the head and shoulders.

- a) Under **One by One**, click **Upload**.



- b) Specify the following parameters.  
The following is an example.

A screenshot of a form with two tabs: 'One by One' (selected) and 'Batch'. The form contains the following fields:

Name	Punch Roger
Gender	Male
Place of Origin	Los Angeles
Occupation	Actor
Identity Type	Identity Card
Identity ID	294561209
Date of Birth	1978-04-26
Phone	001-862-2103452
Address	Hall Avenue 4, Los Angeles

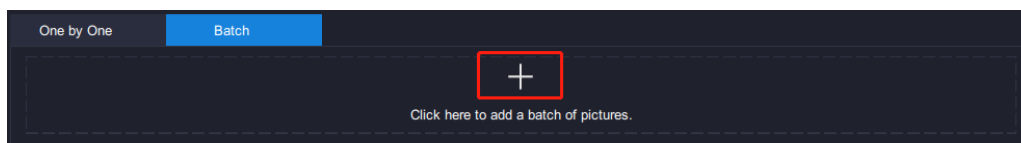
At the bottom of the form is a blue 'Import' button.

- c) Click **Import**.

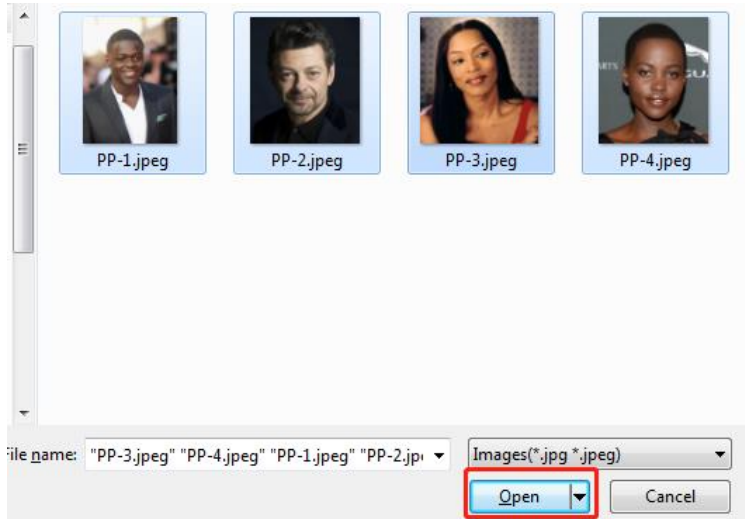
After the preceding steps are performed, pictures are uploaded to the AI cameras. However, the upload has nothing to do with the face and figure detections performed on the AI NVR.

3) (Optional) Upload pictures in batch.

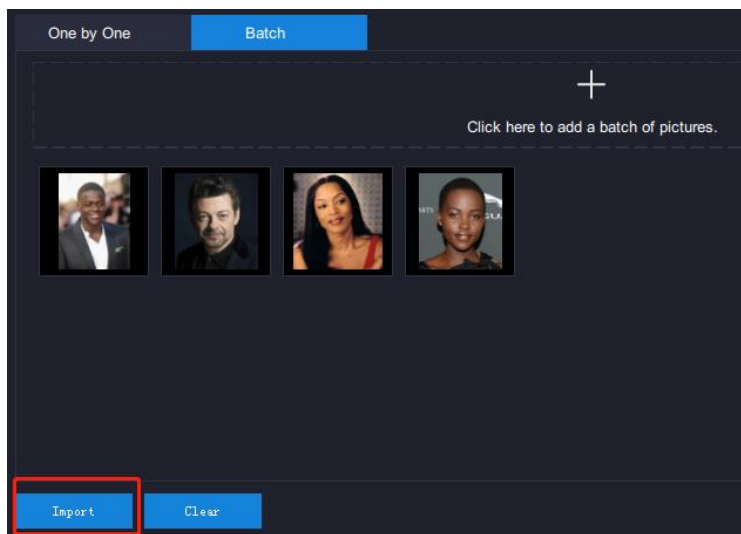
- a) Under **Batch**, click .



- b) Open the target folder and select pictures you want to upload.
- c) Click **Open**.



d) Click **Import**.



To import person pictures to an archive, take the preceding steps for reference. The upload to the archive is required for face and figure detections to be performed on the AI NVR.

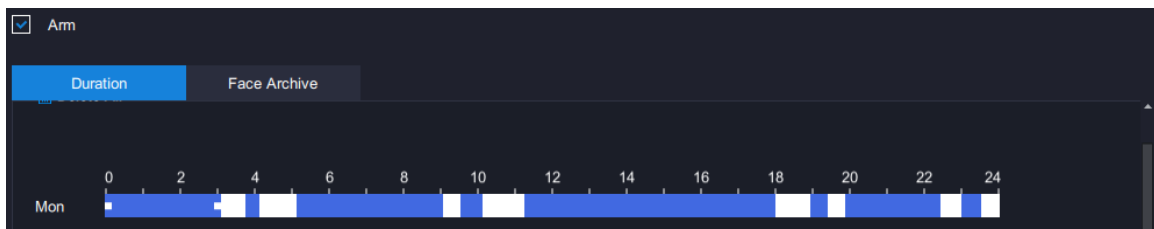
5. Under **Arming**, select AI cameras to be armed.


These AI cameras are to be armed for face and figure detections to be performed on the AI NVR.

6. Click **Arm**.

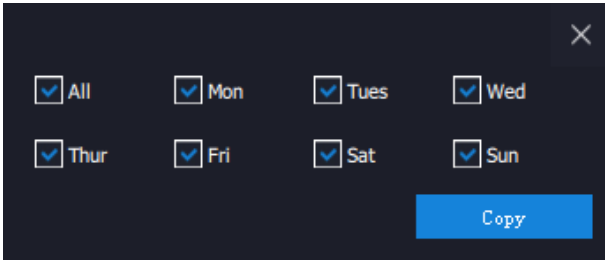
7. Select arming durations.

In this step, you can drag the duration sliders to select specific durations. The following is an example.

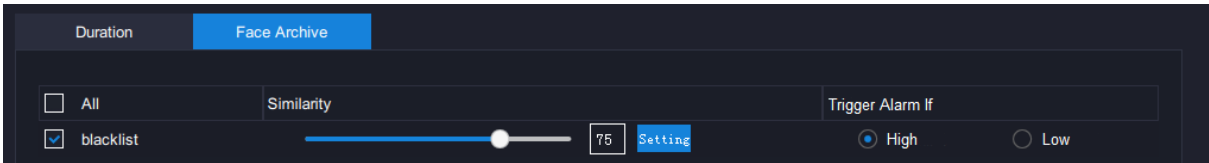


8. (Optional) Click  to copy the durations of a day to other days.

The following is an example.



9. Click **Save**.
10. Under **Face Archive**, select the archive to which you have imported person pictures in step 4.
11. Determine the similarity and whether to trigger an alarm if the similarity threshold is exceeded or not exceeded.



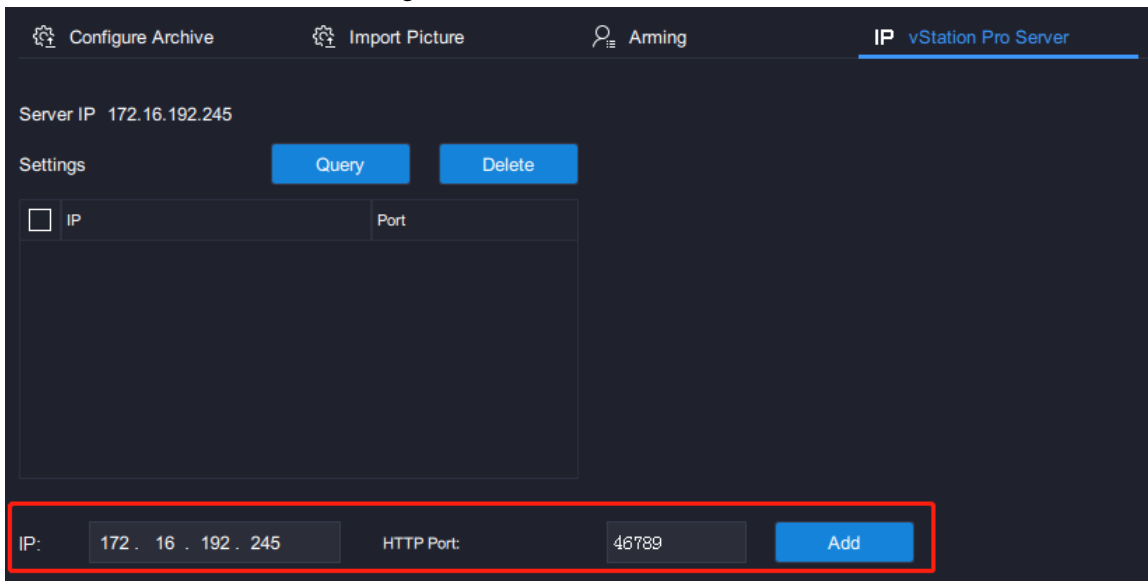
For example, if you are hunting for Person A, you can select **High**, assuming that you have uploaded Person A's picture to the archive. After this, if a face capture with a similarity exceeded the similarity threshold is reported, an alarm is triggered to alert you that Person A has appeared on the capture location.

If you are preventing strangers from entering a private property, you can select **Low**, assuming that you have uploaded pictures of people who are allowed to enter the property to the archive. After this, if a face capture with a similarity not exceeded the similarity threshold is reported, an alarm is triggered to alert you that a stranger has entered the property.

12. Click **Save**.
13. Under **vStation Pro Server**, add servers to which you want the AI NVR to push face/figure detection captures and face detection alarms.

You can add a maximum of 32 servers.

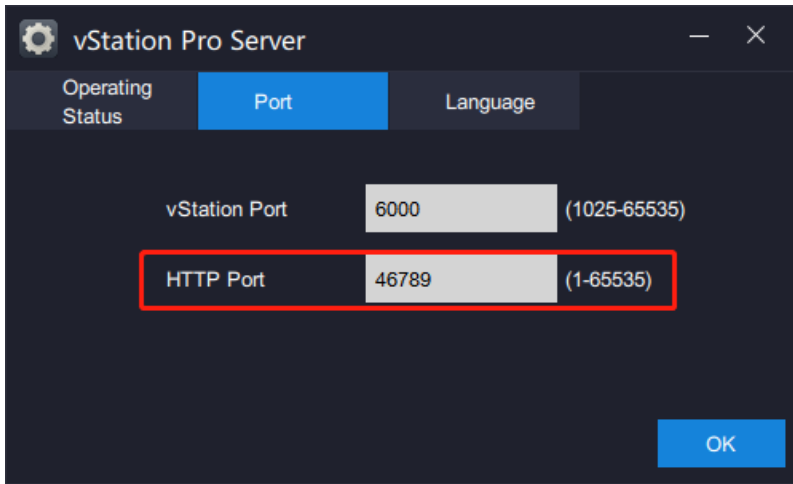
- 1) Enter the IP address of each target server in the **IP** text field.



The default value is the local server's IP address.

- 2) Enter the HTTP port of each target server in the **HTTP Port** text field.  
The **HTTP Port** can be configured on the server.

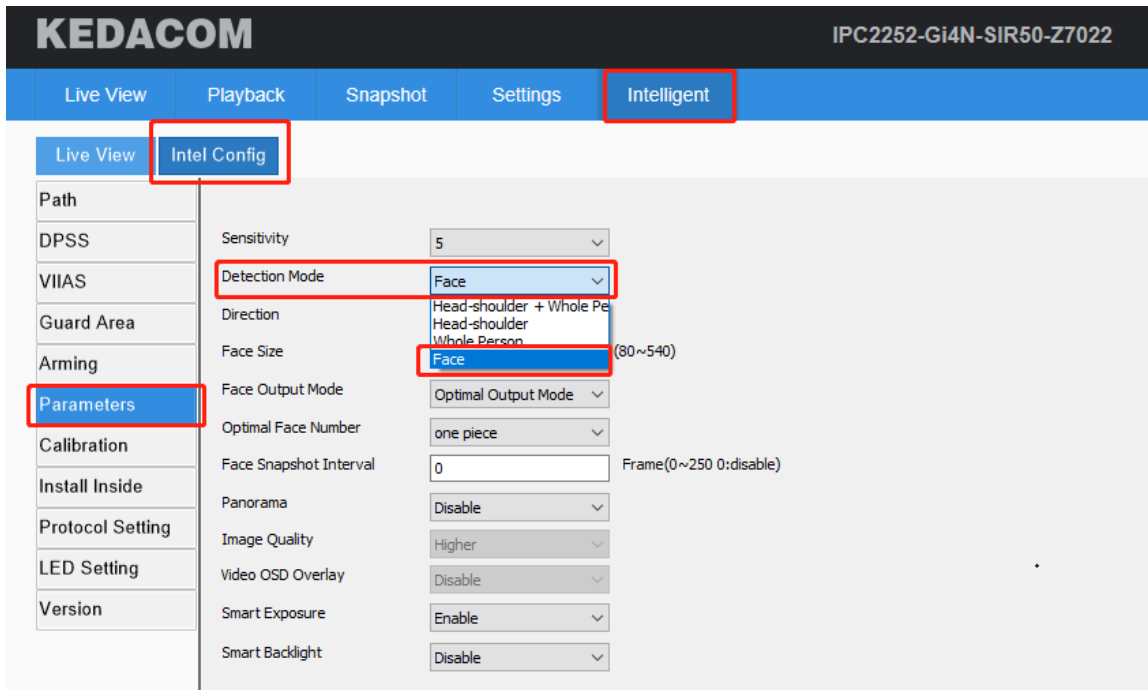




3) Click **Add**.

## Querying Face Detection Captures

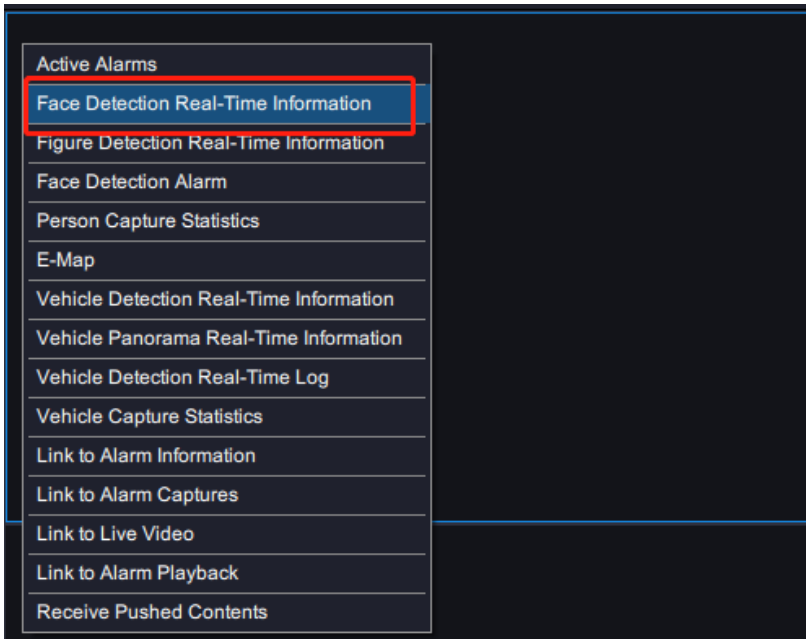
Ensure that the target AI camera uses the following settings (**Detection Mode** is set to **Face**).



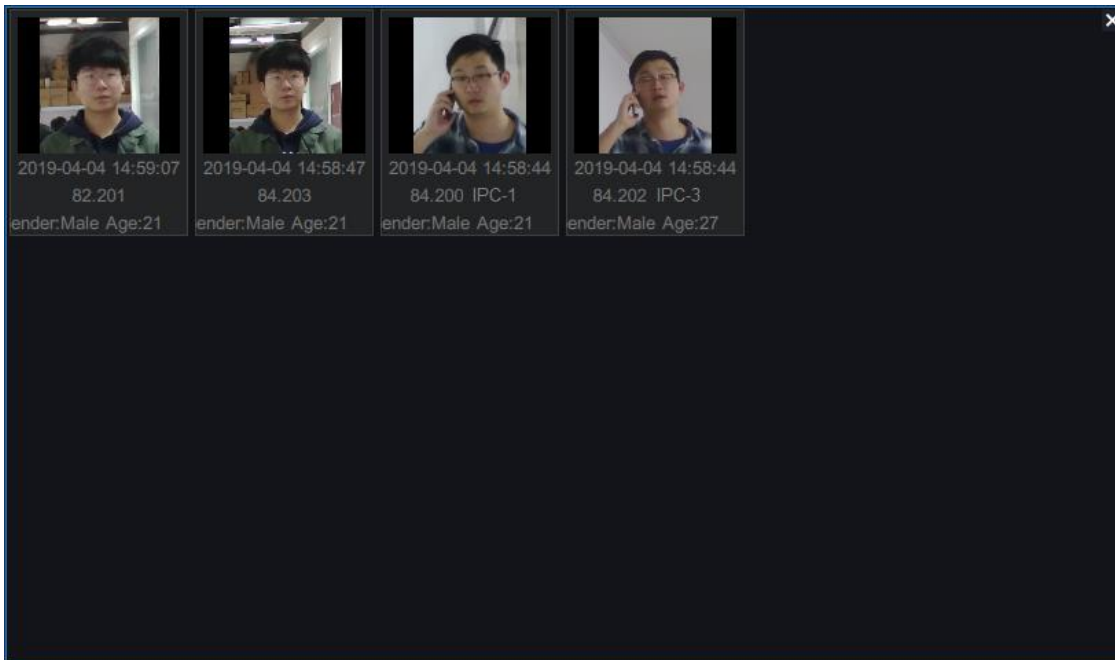
To query the real-time face detection captures on the **Live** page, on an idle viewing window, choose



> **Face Detection Real-Time Information**.

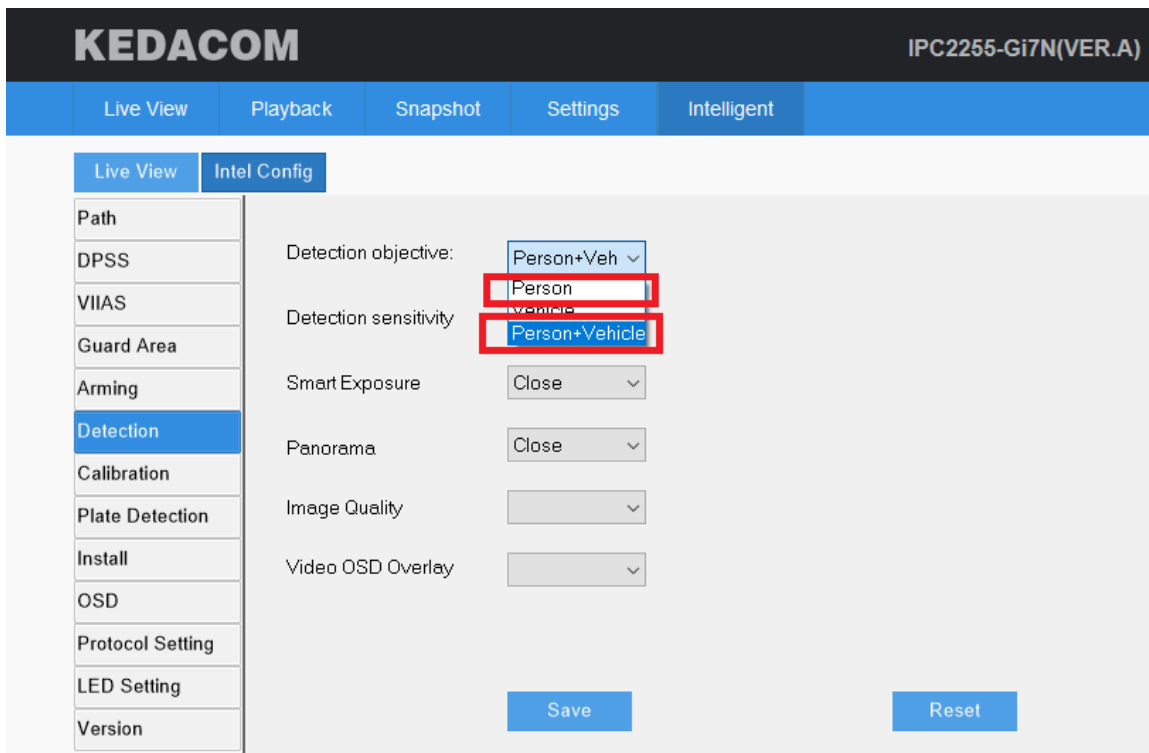
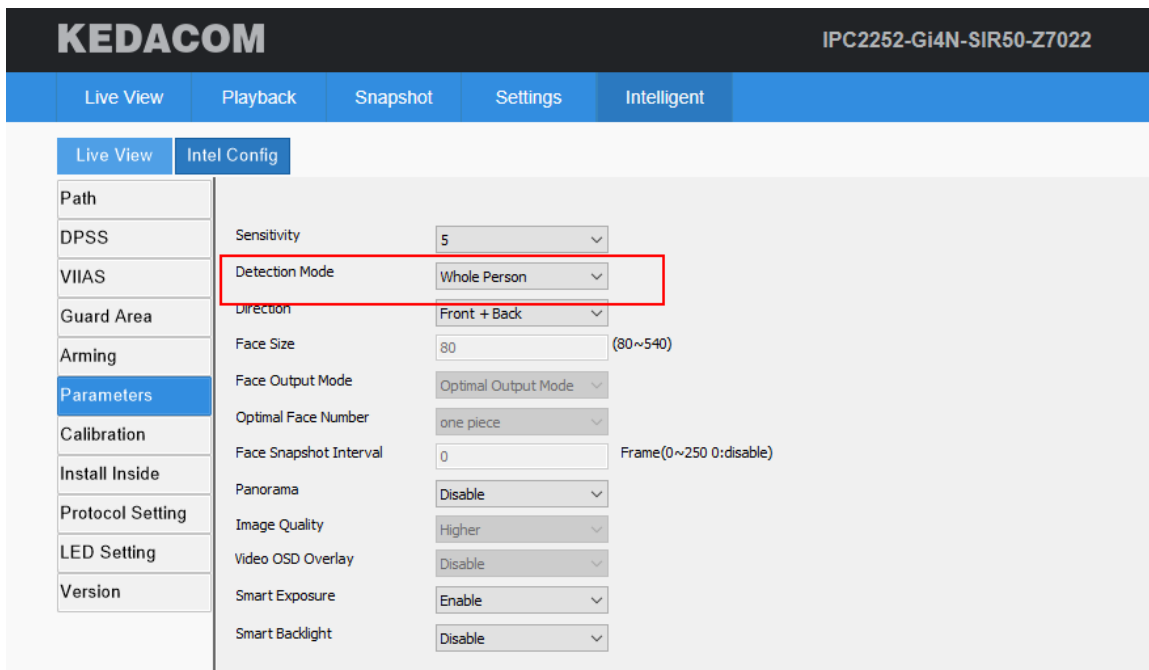


After this, you can find the following.



## Querying Figure Detection Captures

Ensure that the target AI camera uses the following settings (**Detection Mode** is set to **Whole Person** or **Detection objective** to **Person** or **Person+Vehicle**).

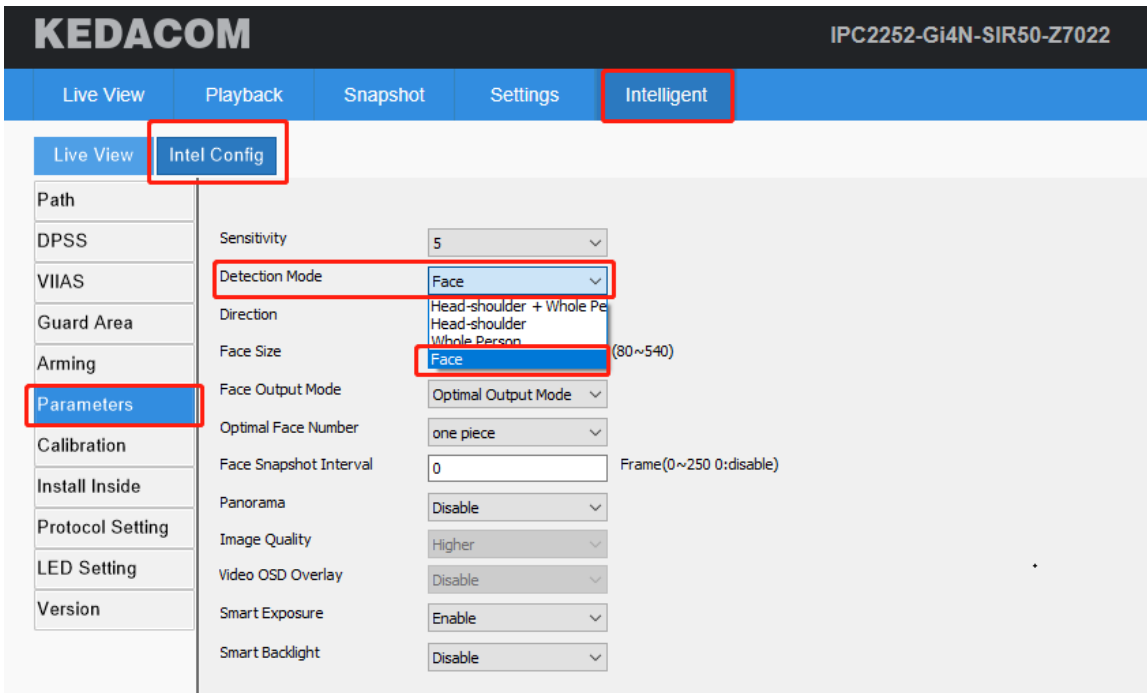


To query the real-time figure detection captures on the **Live** page, on an idle viewing window, choose

 > **Figure Detection Real-Time Information.**

## Querying Face Detection Alarms


Ensure that the target AI camera uses the following settings (**Detection Mode** is set to **Face**).



To query the real-time face detection alarms on the **Live** page, on an idle viewing window, choose  >

**Figure Detection Alarm.** The following is an example.

Generated On	Alarm Channel	Alarm Type	Name	Similarity	Operation
2019-04-04 15:...	82.201	Blacklist	Dr. W	83%	<a href="#">Details</a>
2019-04-04 15:...	Face Detection-1	Blacklist	Unknown	93%	<a href="#">Details</a>
2019-04-04 15:...	Face Detection-1	Blacklist	Unknown	97%	<a href="#">Details</a>
2019-04-04 15:...	Face Detection-1	Blacklist	Unknown	95%	<a href="#">Details</a>
2019-04-04 15:...	Face Detection-1	Blacklist	Unknown	95%	<a href="#">Details</a>
2019-04-04 15:...	Face Detection-1	Blacklist	Unknown	93%	<a href="#">Details</a>
2019-04-04 15:...	82.201	Blacklist	Sheppard P.	84%	<a href="#">Details</a>

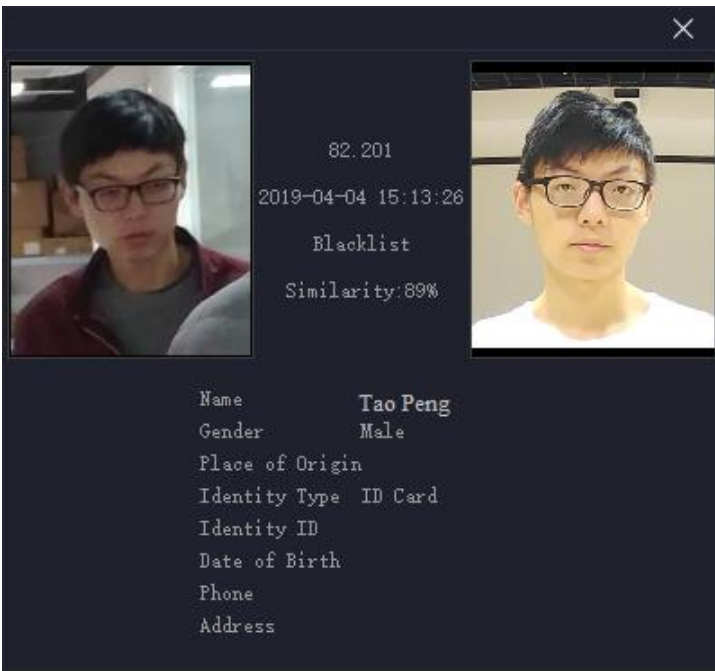


Capture



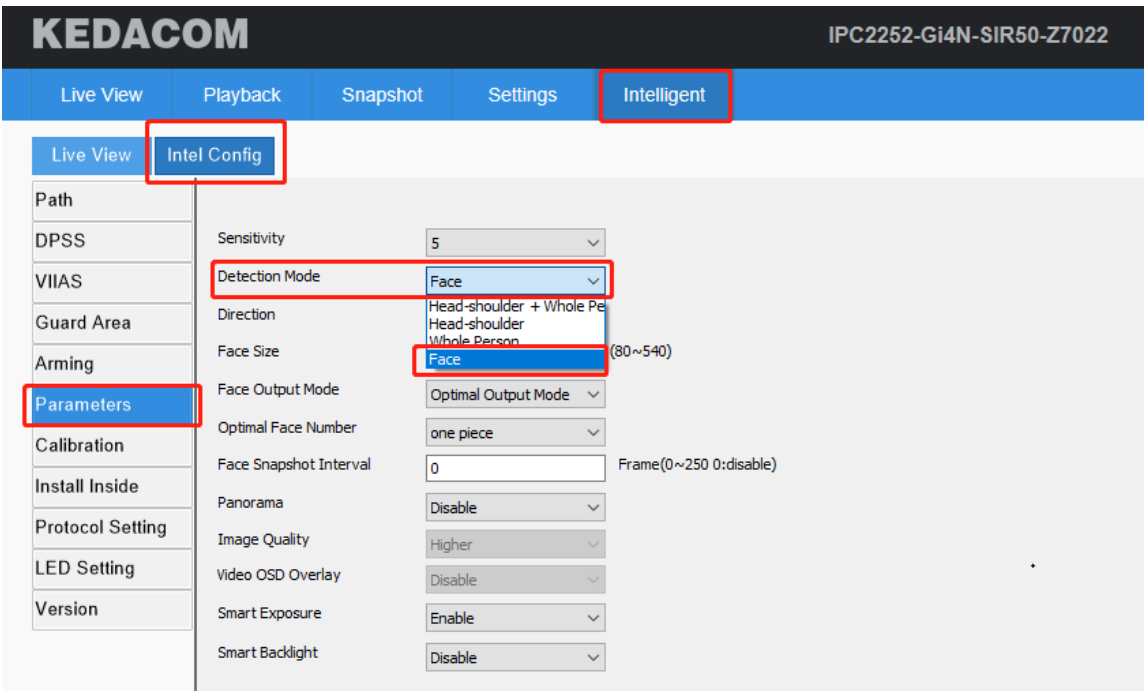
83%  
BlacklistPicture


Clicking **Details** will show you the following.

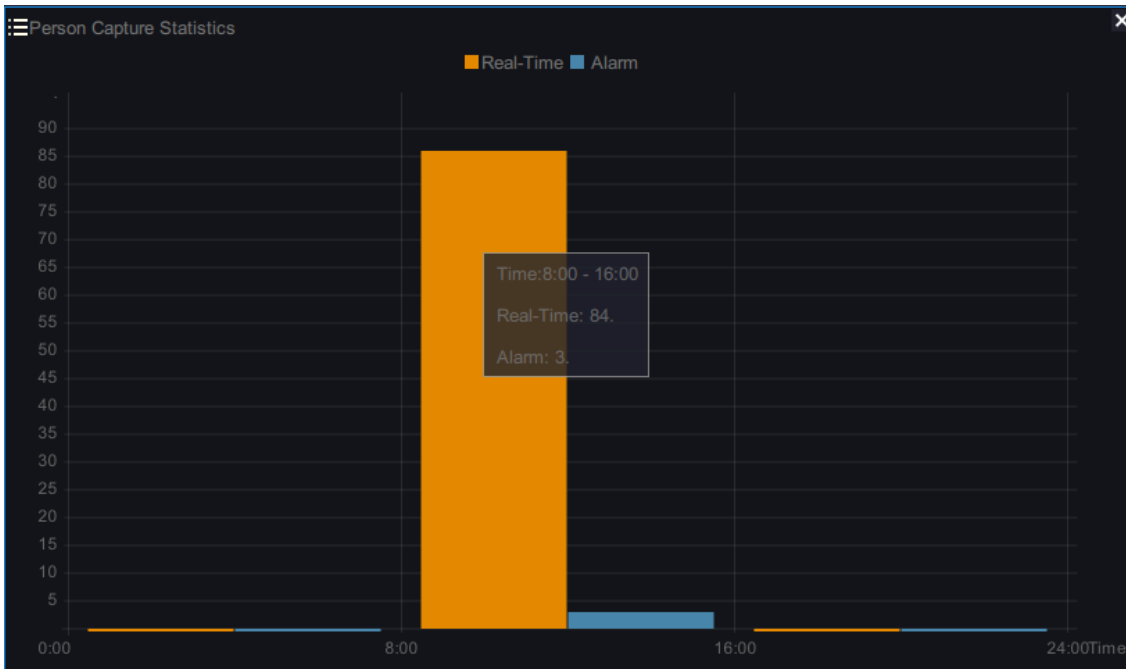


## Querying Face Detection Capture Statistics

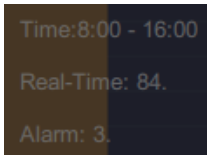
Ensure that the target AI camera uses the following settings (**Detection Mode** is set to **Face**).



To query the face detection capture statistics of a day on the **Live** page, on an idle viewing window, choose  > **Person Capture Statistics**. The following is an example.

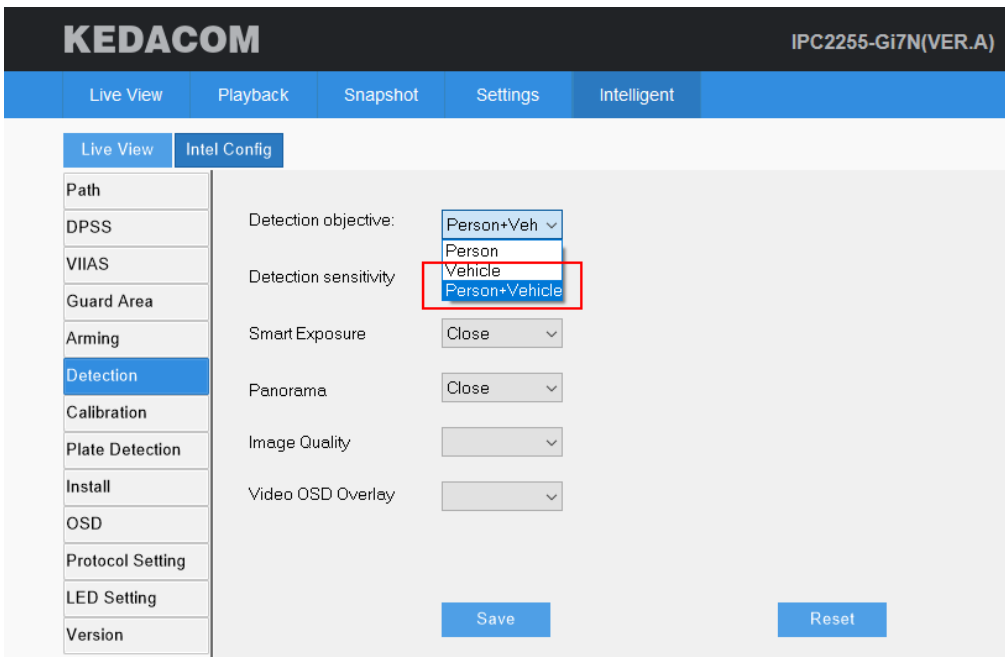


Clicking any section of a day will show you the preceding pane.



## Querying Vehicle Detection Captures

Ensure that the target AI camera uses the following settings (**Detection objective** is set to **Vehicle** or **Person+Vehicle**).



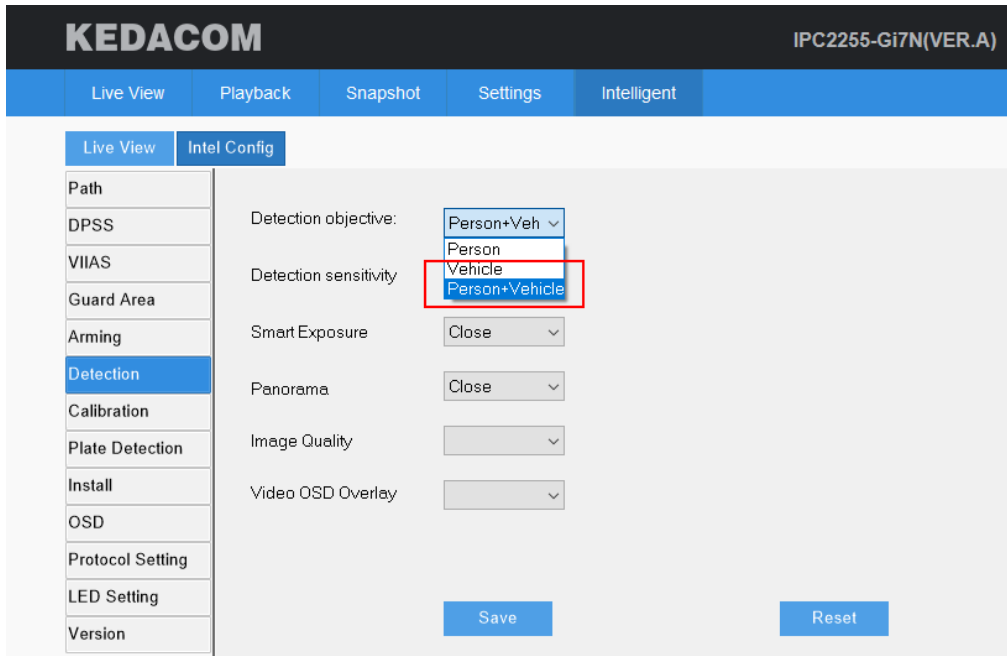
To query the real-time vehicle detection captures on the **Live** page, on an idle viewing window, choose


 > **Vehicle Detection Real-Time Information**. For details on how to configure vehicle detection

settings, see the related camera user guide.

## Querying Vehicle Panorama Detection Captures

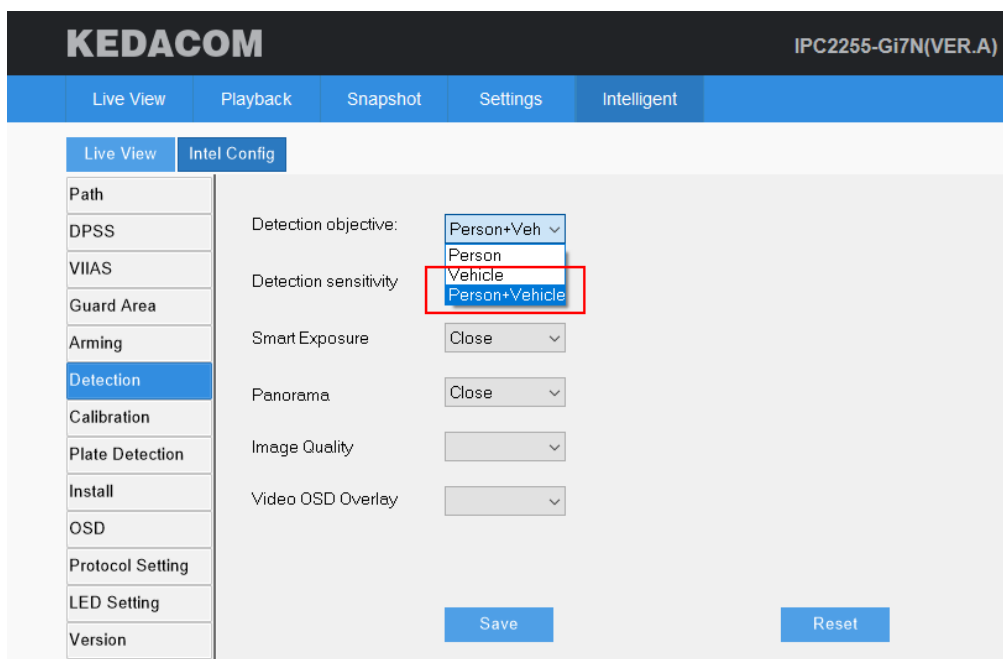
Ensure that the target AI camera uses the following settings (**Detection objective** is set to **Vehicle** or **Person+Vehicle**).




To query the real-time vehicle panorama detection captures on the **Live** page, on an idle viewing window, choose  > **Vehicle Panorama Real-Time Information**. For details on how to configure vehicle detection settings, see the related camera user guide.

## Querying Vehicle Detection Logs

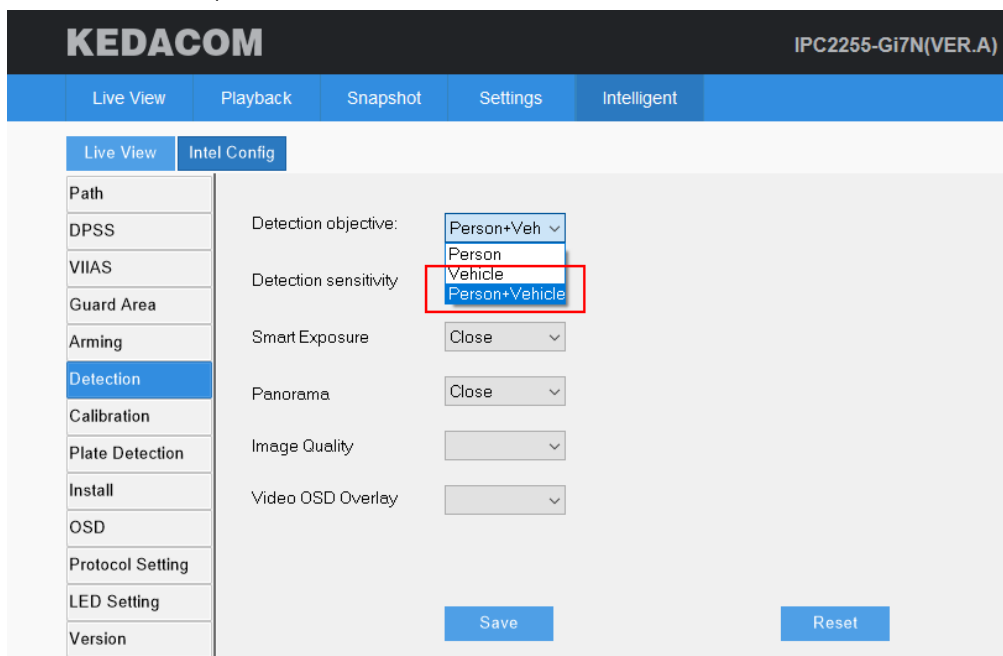
Ensure that the target AI camera uses the following settings (**Detection objective** is set to **Vehicle** or **Person+Vehicle**).




To query the real-time vehicle detection logs on the **Live** page, on an idle viewing window, choose  > **Vehicle Detection Real-Time Log**. For details on how to configure vehicle detection settings, see the related camera user guide.

## Querying Vehicle Detection Capture Statistics

Ensure that the target AI camera uses the following settings (**Detection objective** is set to **Vehicle** or **Person+Vehicle**).

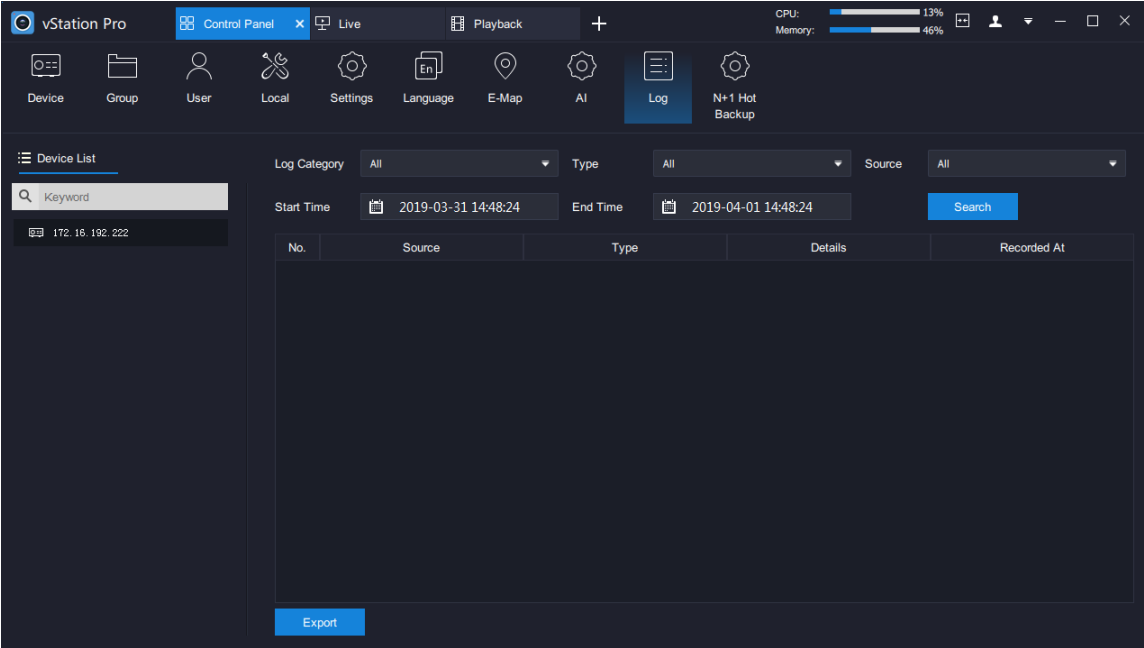


To query the vehicle detection capture statistics of a day on the **Live** page, on an idle viewing window, choose  > **Vehicle Capture Statistics**. For details on how to configure vehicle detection settings, see the related camera user guide.



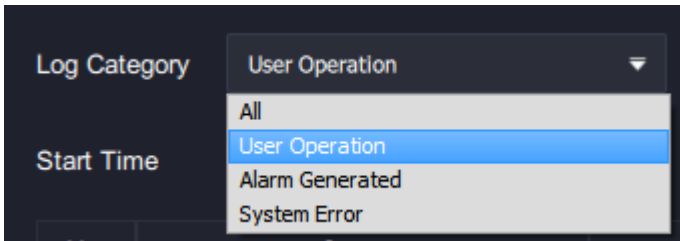
## Querying Logs

Under **Log**, you can query logs.

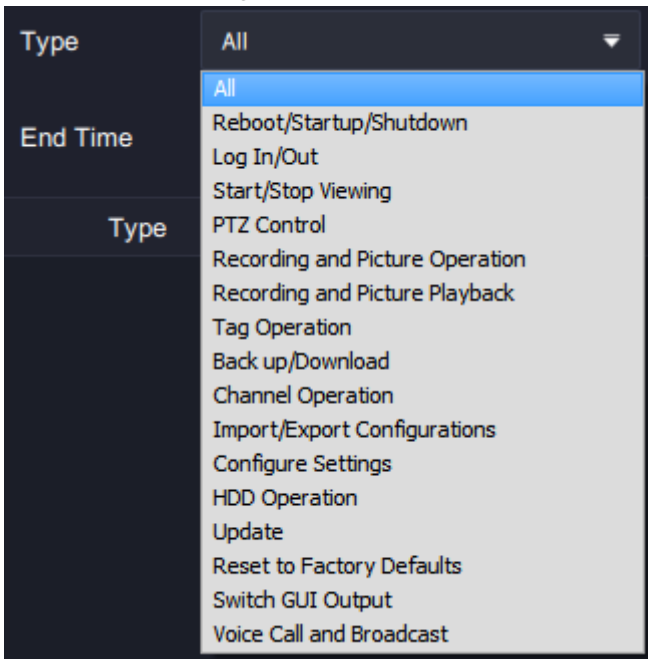


To query logs:

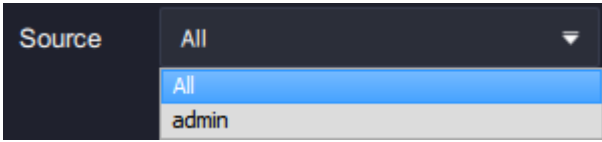
1. Specify **Log Category**.



2. Select a specific log type.

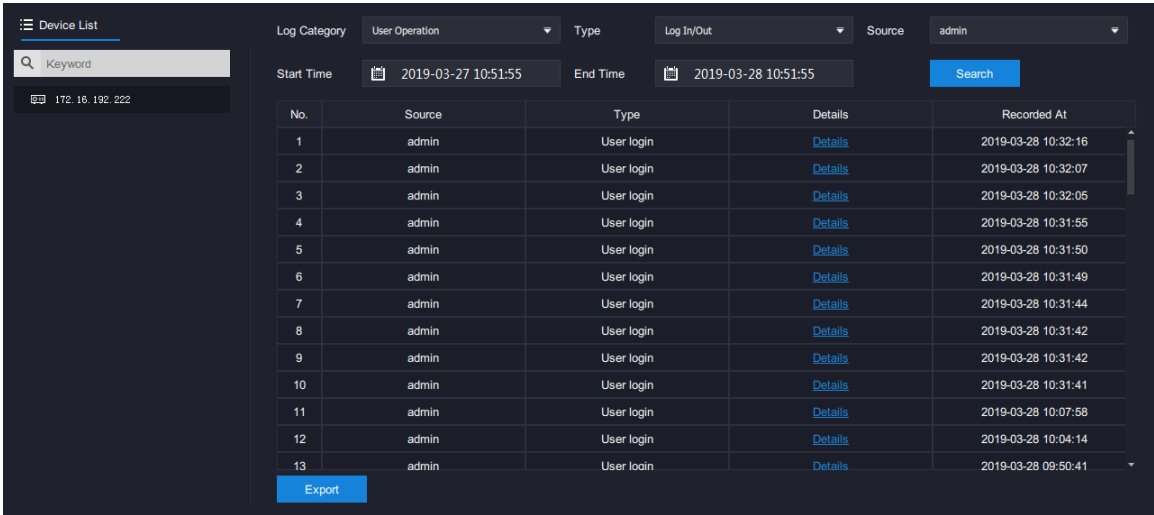


3. Specify **Source**.



4. Select a start time and an end time.
5. Click **Search**.

The following is an example for search results.



6. Click **Export** to export search results.

## Configuring N+1 Hot Backup

**NOTE:**

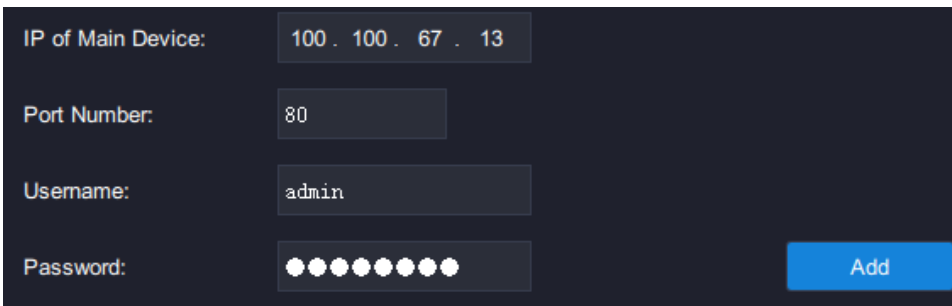
The N+1 hot backup function applies only to the NVR2860E of V7.

The N+1 hot backup function enables one standby NVR to work for multiple main or standby NVRs to prevent service interruption. By default, an NVR works in standby mode.

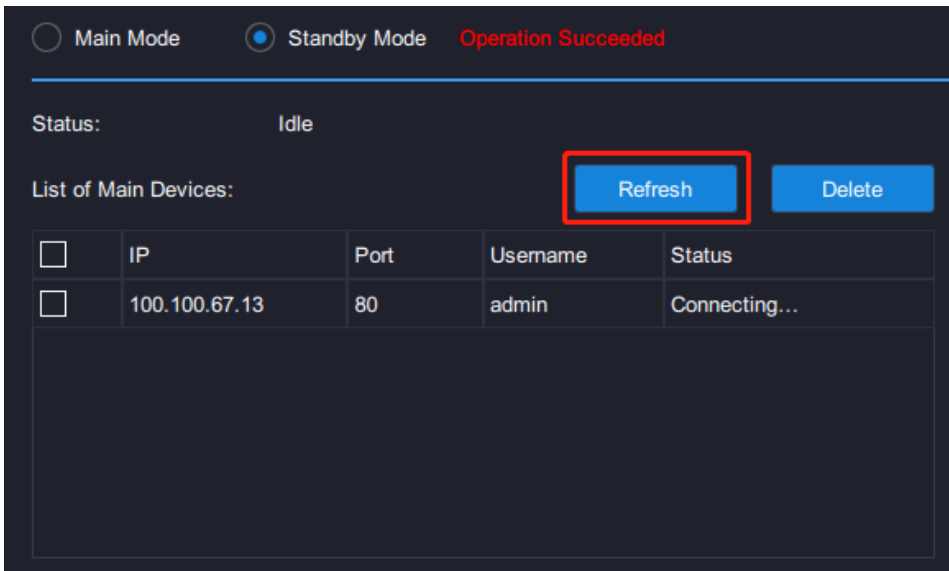
To enable a standby NVR to work for other NVRs:

1. Select the NVR from the **Device List**.
2. Add the following information for each target NVR.

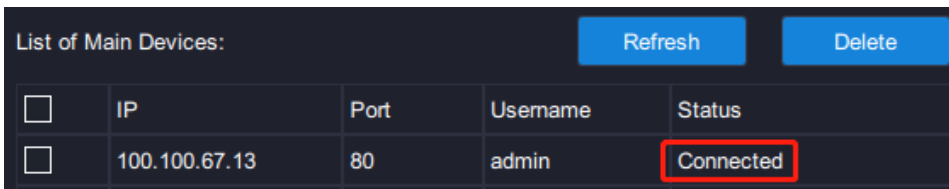
The following is an example.



3. Click **Add**.
4. Click **Refresh**.

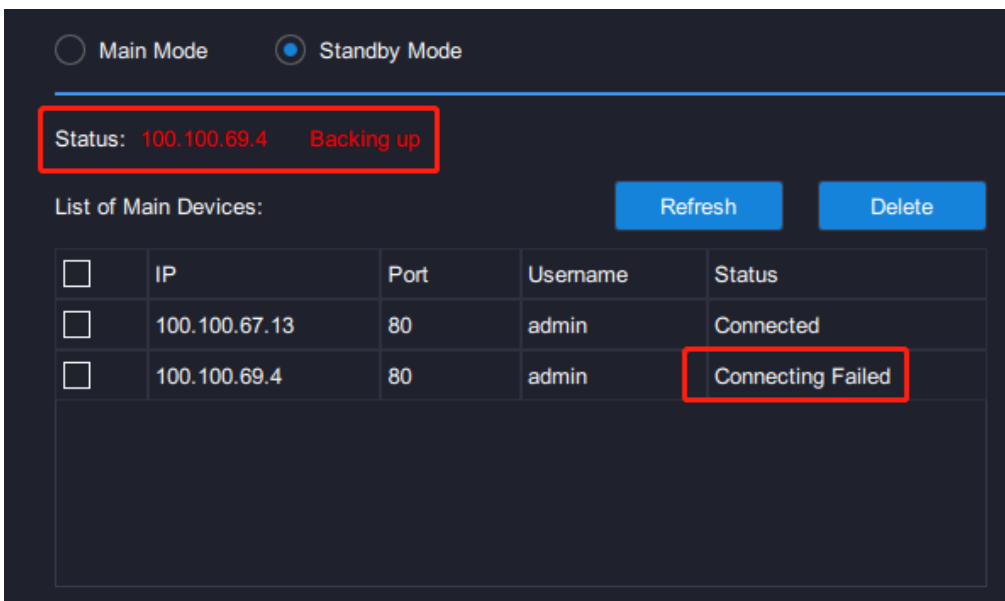


Then, you can find the following.



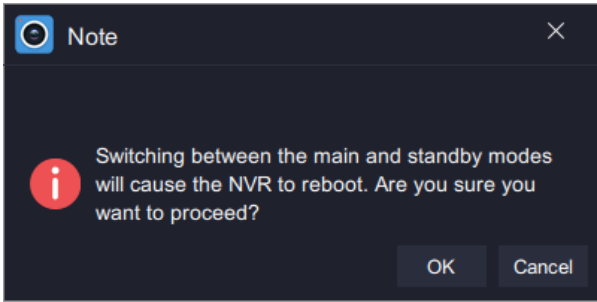
The status **Idle** indicates that the standby NVR is not processing services for any NVR.

If the status turns to **Backing up**, the standby NVR is processing services of an NVR. The following is an example.



To set a standby NVR to work in main mode:

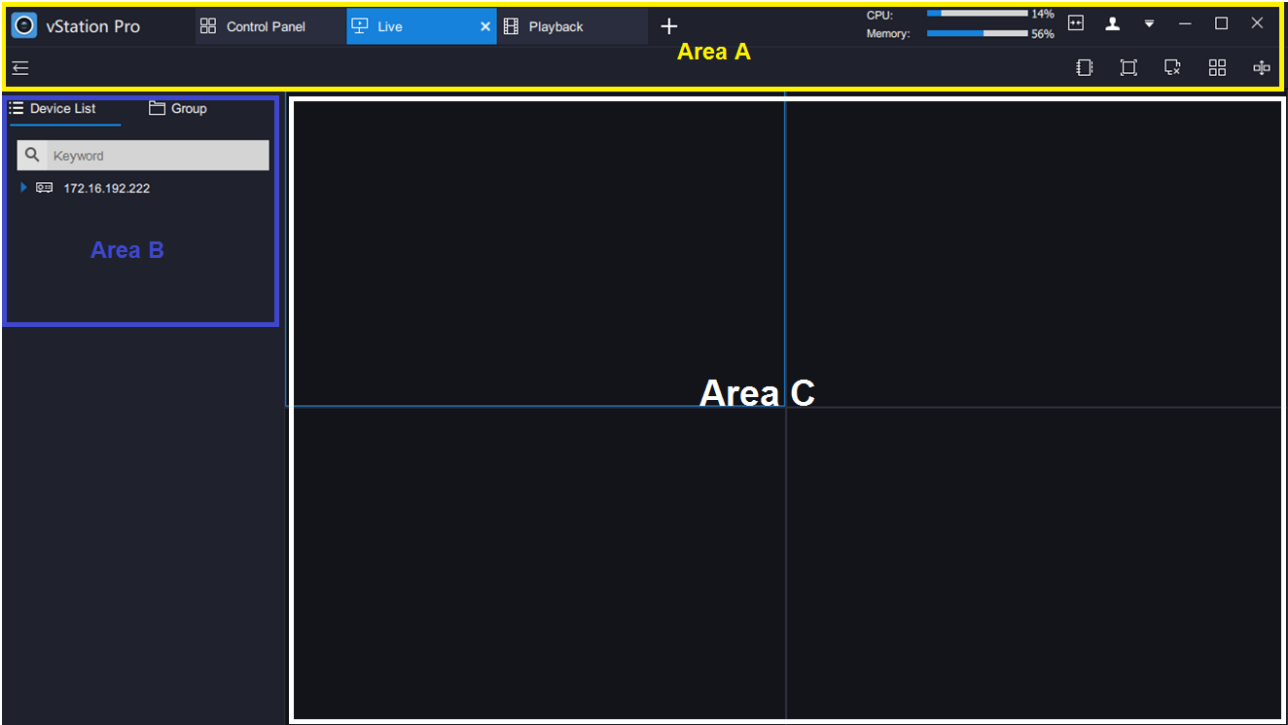
1. Select the NVR from the **Device List**.
2. Select **Main Mode**.
3. Click **OK** to confirm your operation.



# Live Viewing

## Main Interface

The following is the main interface of the **Live** page.



The items in area A are described as follows:

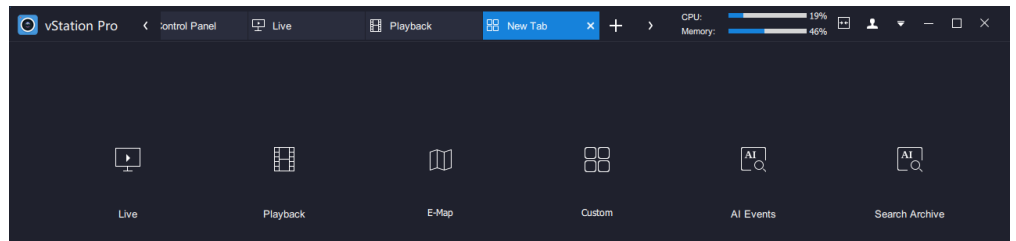


Real-time CPU/memory usage



Stop splitting the main screen.

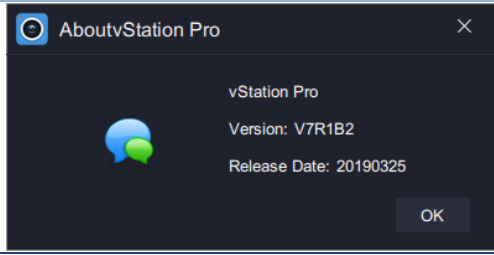
Create a new tab.



Current user



Log out or query the client version



Create or tour schemes. For details, see section "Creating or Touring Schemes".

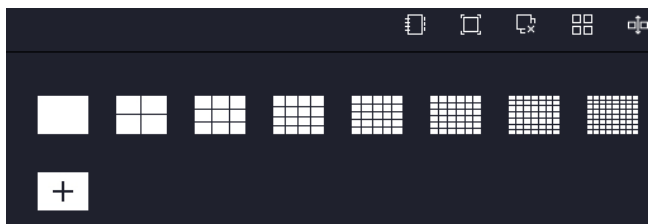


View Area C in full screen mode.

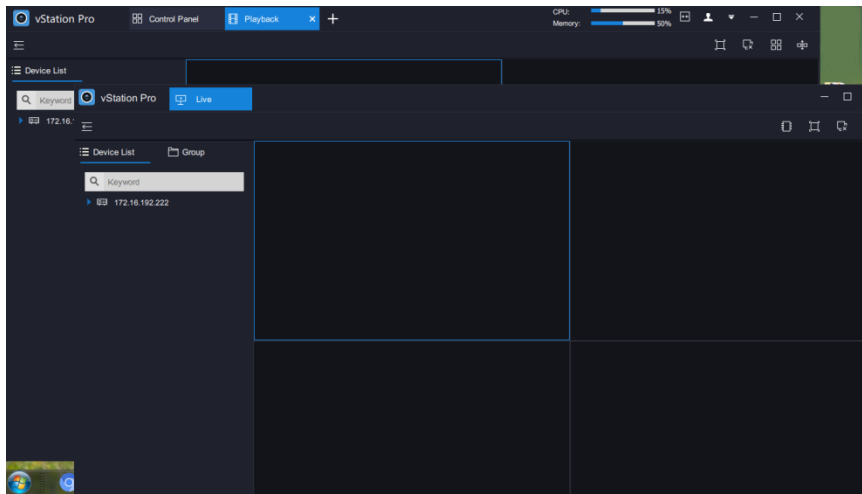


Stop all viewings.

Select a screen layout.

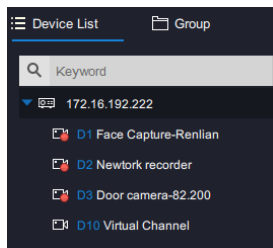


Split the main screen and the tab page in operation will be separated from the main screen. The following is an example.

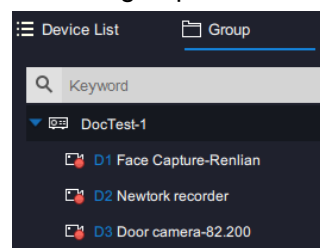


The items in area B are described as follows:




Device list



Camera group list



The table helps you read icons in Area B.

	The NVR is online		The NVR is offline.
	Recordings are in progress on the camera.	-	-


The items in area C are described as follows:

Active Alarms	Showing Active Alarms
Face Detection Real-Time Information	Showing Face Detection Real-Time Information
Figure Detection Real-Time Information	Showing Figure Detection Real-Time Information
Face Detection Alarm	Showing Face Detection Alarms
Person Capture Statistics	Showing Person Capture Statistics
E-Map	Showing E-Map
Vehicle Detection Real-Time Information	Showing Vehicle Detection Real-Time Information
Vehicle Panorama Real-Time Information	Showing Vehicle Panorama Real-Time Information
Vehicle Detection Real-Time Log	Showing Vehicle Detection Real-Time Logs
Vehicle Capture Statistics	Showing Vehicle Capture Statistics
Link to Alarm Information	Linking to Alarm Information
Link to Alarm Captures	Linking to Alarm Captures
Link to Live Video	Linking to Live Videos Viewing
Link to Alarm Playback	Linking to Alarm Playbacks
Receive Pushed Contents	Receiving Pushed Contents

## Viewing Control

When a viewing is started, you can find the following viewing controls.

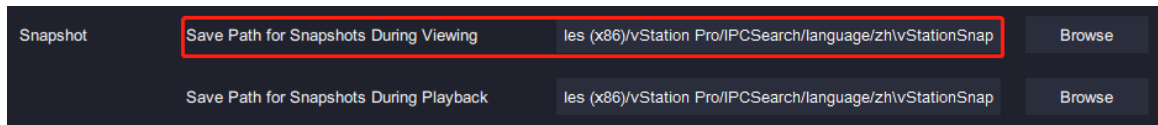


 Starting an Instant Playback

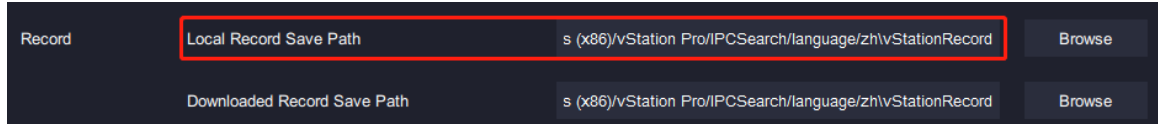


PTZ Controls

Make a local capture and the capture will be saved in the path specified by **Save Path for Snapshots During Viewing (Control Panel > Local > Snapshot)**.

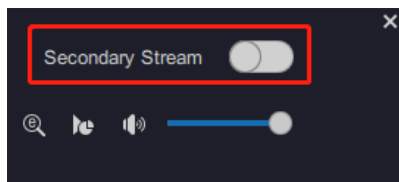


Start a local recording and the records will be saved in the path specified by **Local Record Save Path (Control Panel > Local > Record)**.





- **Viewing Secondary Streams**

Enabling **Secondary Stream** will **switch** to the secondary stream viewing.




- **E-PTZ**

Click  to electronically zoom in or out a video. To do so, click  and draw a pane starting from a top left corner. The following is an example.

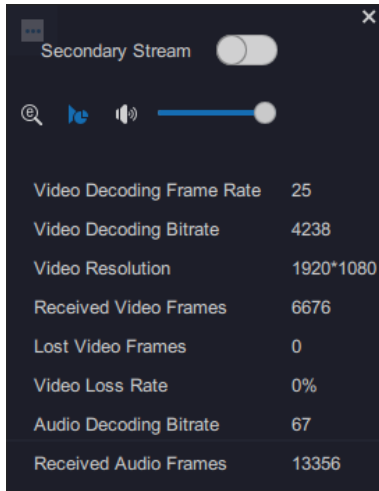


After this, the selected area will be zoomed in.  
To cancel the zooming, draw a pane in the reverse direction.

- **Viewing Streaming Details**

Click  to view streaming details.





- **Adjusting the Output Volume**  
Adjust the output volume by dragging the volume slider.



## PTZ Controls

### Basic Controls

**NOTE:**

PTZ controls take effect on only PTZ cameras.

PTZ controls are described as follows.

	<p>Direction buttons. You can click  to reset the camera to the factory position.</p>		<p>Increase or decrease the focus. Alternatively, use the automatic focus. Increase or decrease the aperture. Alternatively, use the automatic aperture.</p>
	<p>Adjust the PTZ speed.</p>		<p>Enable or disable the backlight.</p>
	<p>Zoom in or out.</p>		<p>Enable or disable the wiper.</p>

## Presets and Paths

### Creating a Preset

**NOTE:**

Only ONVIF/VSIP cameras support this operation.

To create a preset for a camera:

1. Move the camera in operation to a position using arrow buttons.

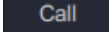


2. Enter a preset number in the **Preset** text field.

The following is an example.



3. Click **Save**.

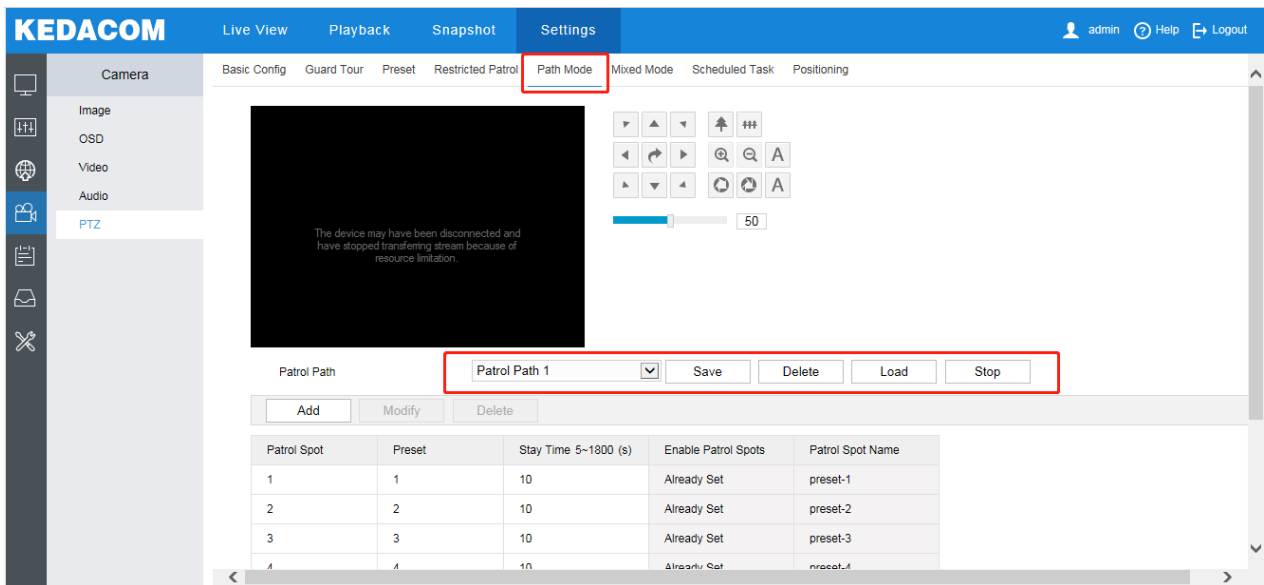
After the preceding steps are performed, a preset is saved. Clicking  will enable the camera to go to the preset.

### Touring Presets

Go to the IPC Web of the camera in operation to tour its presets. For details, see the camera user manual.

### Touring Paths

You can only tour paths and these paths can be configured only on the IPC Web of the camera in operation.



To tour paths of a camera:

1. Enter a path number in the **Tour Path** text filed.  
The following is an example.

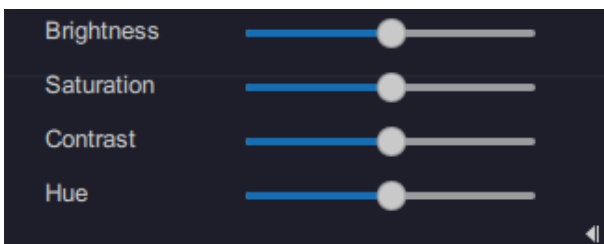


2. Click **Call**.

To stop the tour, click **Stop**.

## Adjusting a Video



To adjust a video, drag the following sliders.

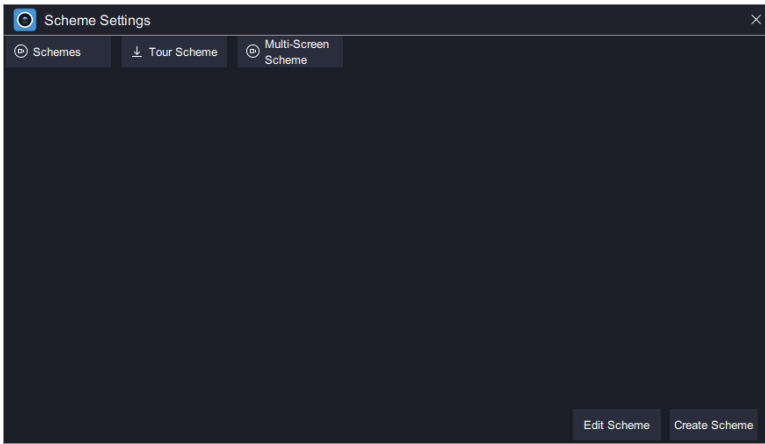


## Creating or Touring Schemes

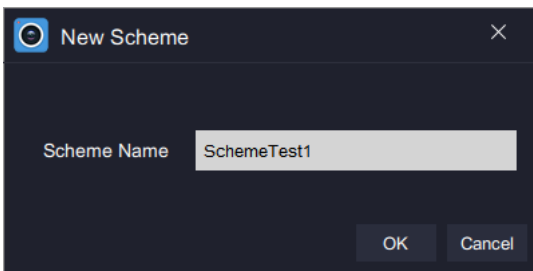
### Creating a Single Screen Scheme

To create a single screen scheme:

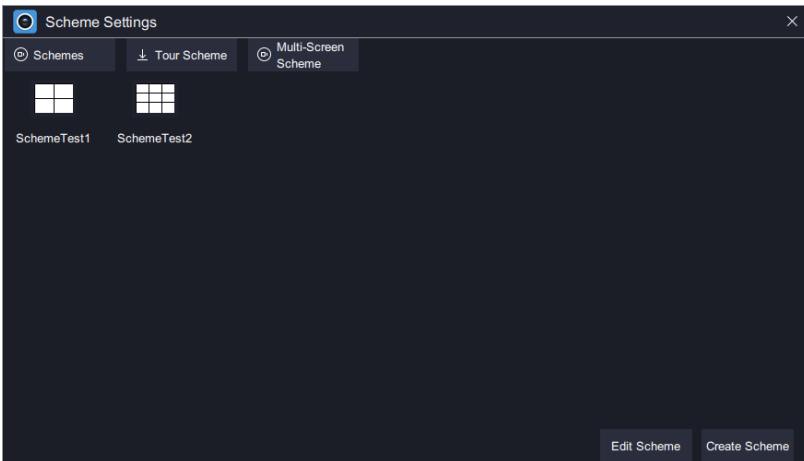
1. On the **Live** page, select a screen layout using  and bind cameras and viewing windows together.
2. Choose  > **Create Scheme**.



3. Enter a scheme name.  
The following is an example.



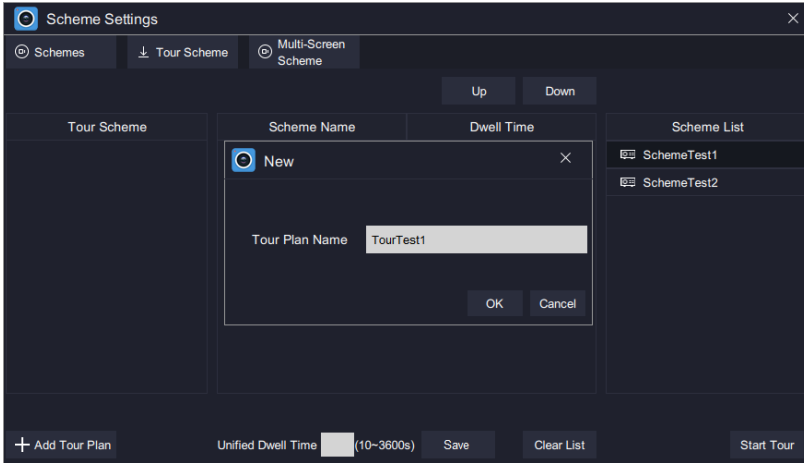
4. Click **OK**.  
After the preceding steps are performed, a scheme is created.  
The following is an example.



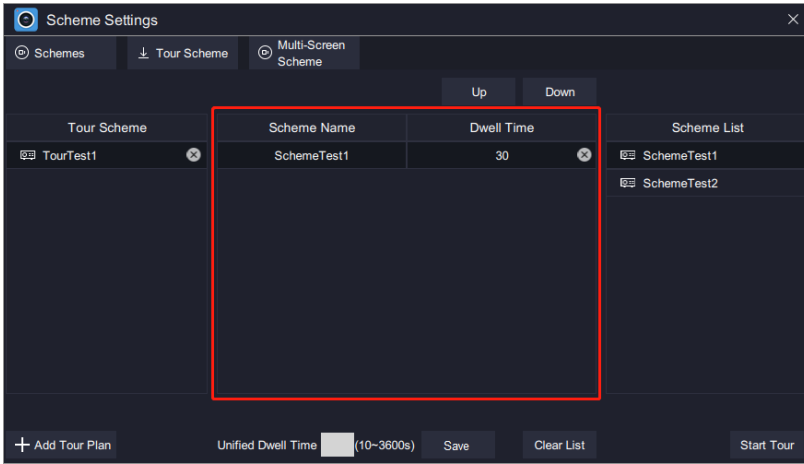
## Touring Single Screen Schemes

To tour single screen schemes:

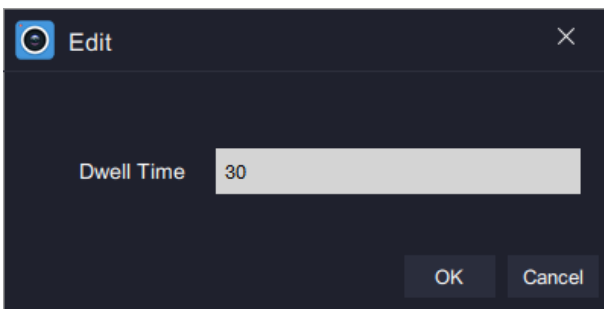
1. Choose **↓ Tour Scheme** > **+ Add Tour Plan**.
2. Enter a tour plan name.



3. Click **OK**.
4. Drag schemes listed under **Scheme List** to the middle pane. The following is an example.



5. (Optional) Change the order of a scheme by clicking **Up** or **Down**.
6. (Optional) Double-click a scheme to change its dwell time.





7. (Optional) Enter a value for **Unified Dwell Time**. After this, all schemes in a tour plan use this unified dwell time.
8. Click **Save**.
9. Click **Start Tour**.

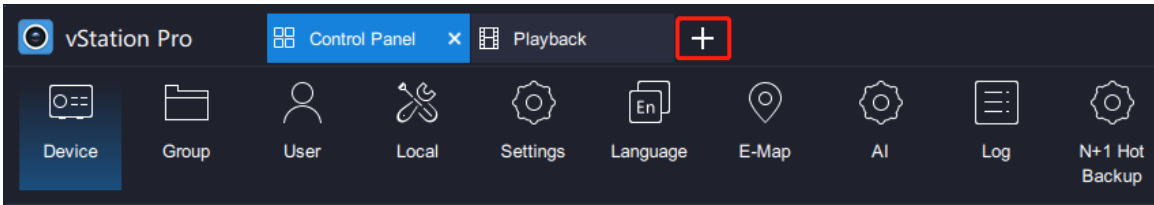
After the preceding steps are performed, you can find the following two icons in the top right corner of the screen.



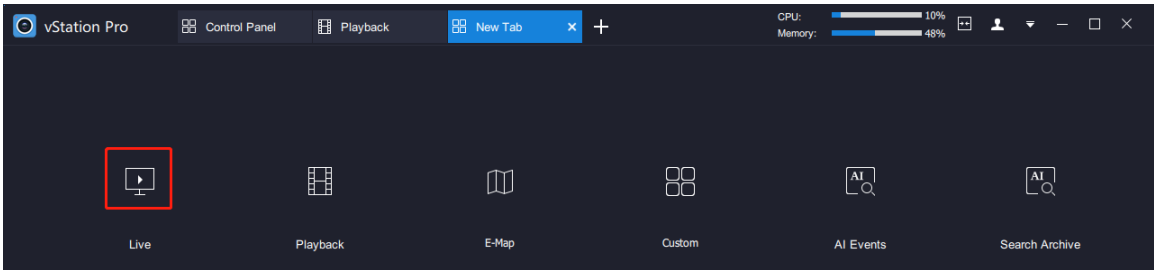
## Creating a Multi-Screen Scheme


To create a multi-screen scheme:

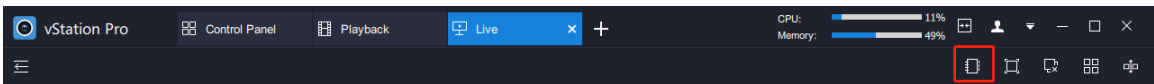
1. On the **Live** page, select a screen layout and drag cameras to viewing screens.
2. Click  to send the screen to a display (for example, display 1).
3. Click  to add a new tab page.



4. Click .

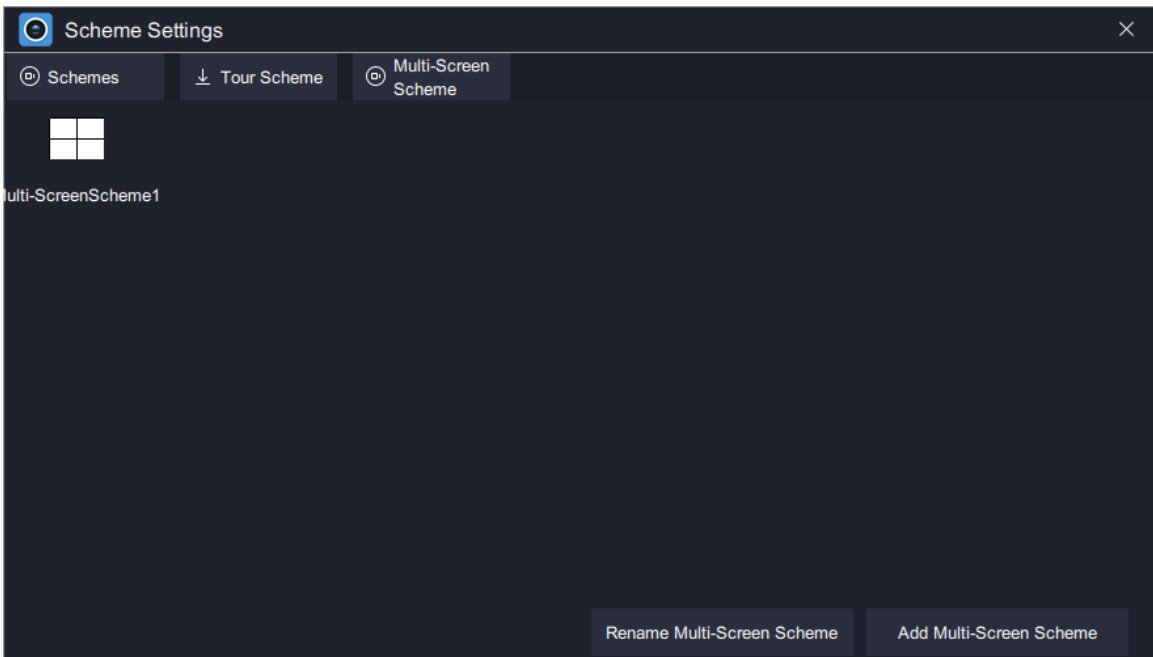


5. Repeat steps 1 and 2.  
In this step, send the screen to another display (for example, display 2).
6. Repeat steps 3, 4, and 1 in sequence.
7. Choose  > **Multi-Screen Scheme** > **Add Multi-Screen Scheme**.



After this, the current multi-screen settings (on display 1, display 2, and the local) are saved as a multi-screen scheme.

The following is an example.

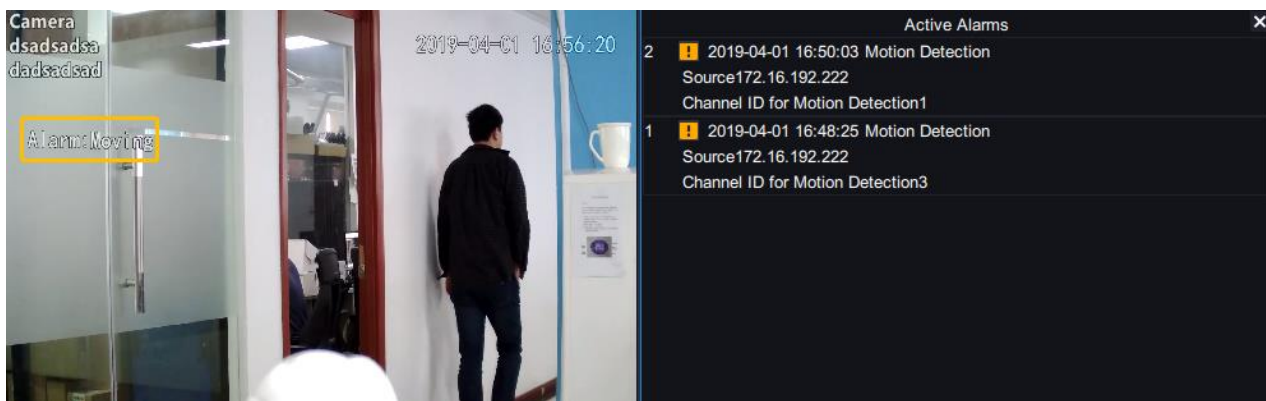


You can double-click a multi-screen scheme to load it.

# Using Idle Viewing Windows

## Showing Active Alarms

On an idle viewing window, you can choose  > **Active Alarms** to show active alarms on this window. The following is an example.



## Showing Face Detection Real-Time Information

For details, see section "Querying Face Detection Captures".

## Showing Figure Detection Real-Time Information

For details, see section "Querying Figure Detection Captures".

## Showing Face Detection Alarms

For details, see section "Querying Face Detection Alarms".

## Showing Person Capture Statistics

For details, see section "Querying Face Detection Capture Statistics".

## Showing E-Map

For details, see section "Configuring E-Map".



## Showing Vehicle Detection Real-Time Information

For details, see section "Querying Vehicle Detection Captures".

## Showing Vehicle Panorama Real-Time Information

For details, see section "Querying Vehicle Panorama Detection Captures".

## Showing Vehicle Detection Real-Time Logs

For details, see section "Querying Vehicle Detection Logs".

## Showing Vehicle Capture Statistics

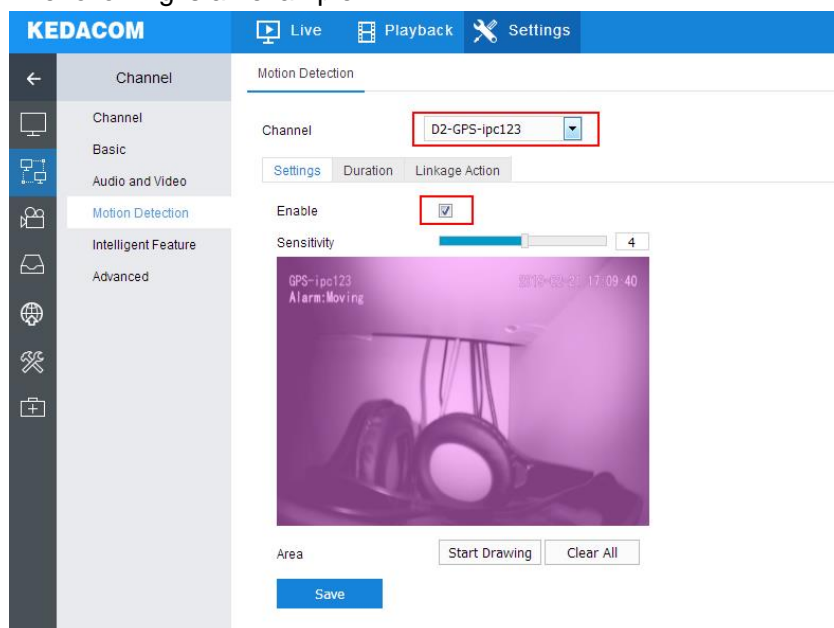
For details, see section "Querying Vehicle Detection Capture Statistics".

## Linking to Alarm Information

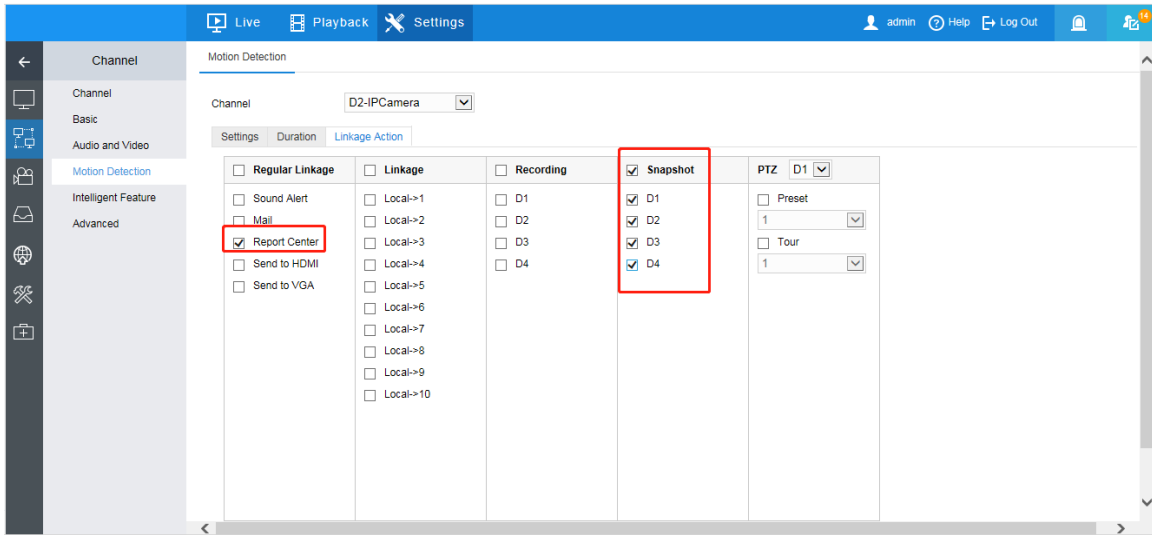
Before using the function, ensure the following:

- The target NVR has HDDs installed and the HDDs have been formatted.
- The target camera registers with the target NVR using the ONVIF protocol and the camera registers only with this NVR.
- The motion detection and intelligent feature detections are enabled and configured for the target camera.

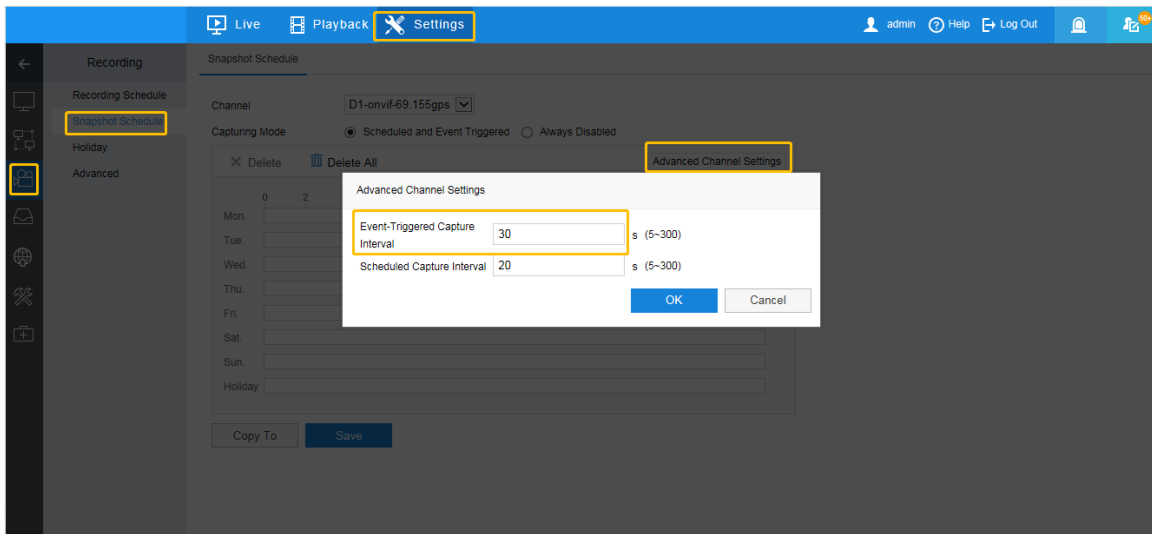
The following is an example.



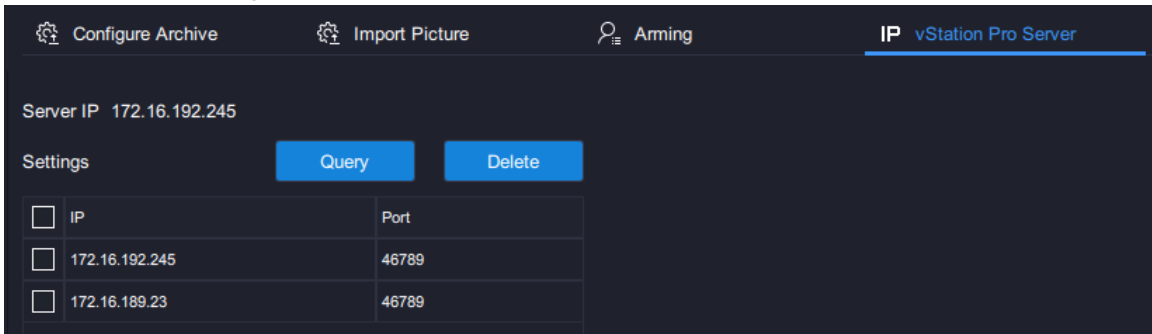
Additionally, the alarm linkage must include "**Report Center**" and "**Snapshot**" (since there are no restrictions on snapshot channels, you can select any channels you want).




- The event-triggered capture interval is 30s.




- The vStation Pro servers to which you want the target NVR to push alarms information have been added. The following is an example.




To query the alarm information on the **Live** page, on an idle viewing window, choose  > **Link to Alarm Information**. The following is an example.

Generated On	Alarm Channel	Alarm Type	Oper...
2019-04-04 09:33:22	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:22	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:20	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:13	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:12	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:10	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:03	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:33:02	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:32:59	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:32:53	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:32:51	IPCamera	Motion Detection	<a href="#">Pic...</a>
2019-04-04 09:32:49	IPCamera	Motion Detection	<a href="#">Pic...</a>

Clicking **Pic...** will show you the alarm capture on the viewing window where **Link to Alarm Captures** is selected.

If you choose  > **Link to Live Video**, the live video of the target camera where a motion detection or intelligent feature alarm is generated will be pushed to the viewing window in operation. The live video viewing will last for only 10s.

If you choose  > **Link to Alarm Playback**, the pre-10s video of the target camera where a motion detection or intelligent feature alarm is generated will be pushed to the viewing window in operation. The playback will last for only 10s. For example, an alarm is generated at 16:00:00, the alarm playback starts at 15:59:50 and ends at 16:00:00.

## Linking to Alarm Captures

For details, see section "Linking to Alarm Information".


## Linking to Live Videos Viewing

For details, see section "Linking to Alarm Information".

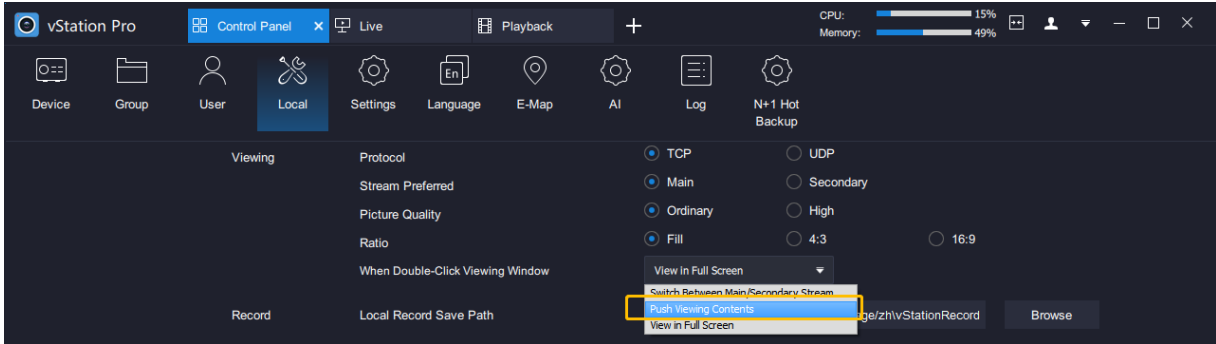
## Linking to Alarm Playbacks

For details, see section "Linking to Alarm Information".


## Receiving Pushed Contents

On an idle viewing window, you can choose  > **Receive Pushed Contents** to receive pushed viewing contents, which are pushed in the following way:

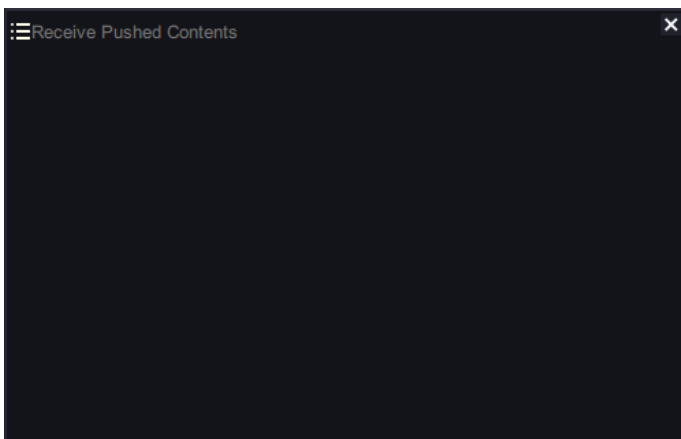
1. Set **When Double-Click Viewing Window to Push Viewing Contents**.



2. Click **Save**.

3. Select an idle viewing window and choose  > **Receive Pushed Contents**.

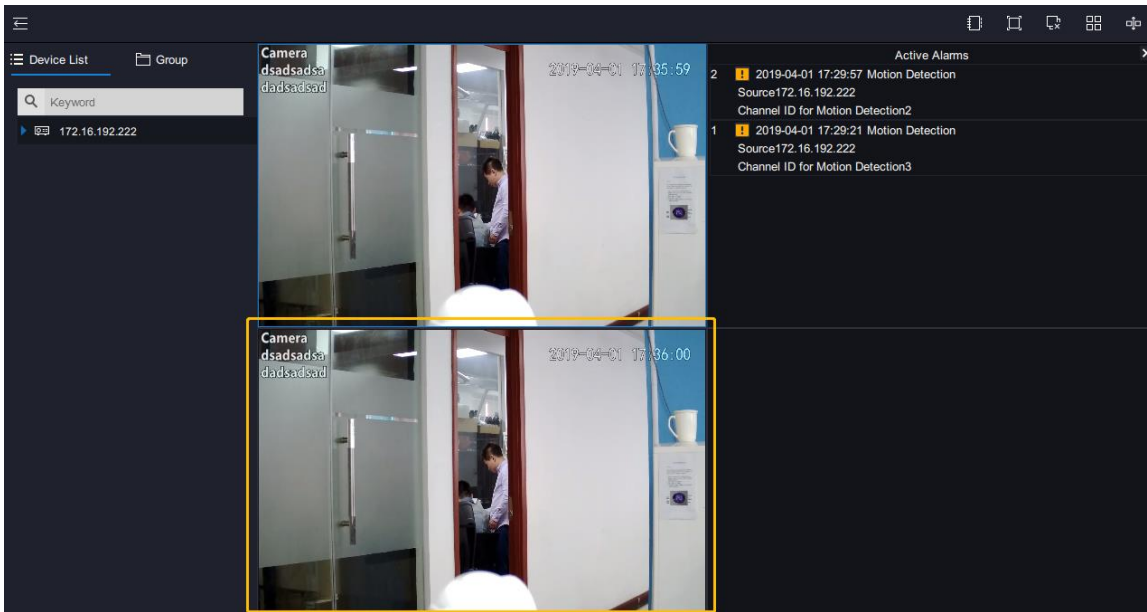
After this, you can find the following on the idle viewing window.



You can push viewing contents to multiple idle viewing windows.

4. On the **Live** page, double-click any viewing window with videos being viewed.

After the preceding steps are performed, you can find the pushed viewing contents on the idle viewing window. The following is an example.




To stop receiving pushed viewing contents, click  in the top right corner.

# Playing Back


**NOTE:**

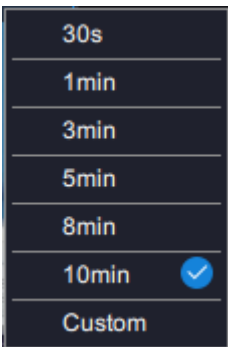
When a record is played back for the first time, the playback will start from the very beginning.

## Starting an Instant Playback

On the **Live** page, clicking  in the top right corner allows you to start an instant playback.



You can click  to choose the instant playback length. For example, if you choose **10 min** and the current time is 16:30, the instant playback will start at 16:20.



After the instant playback is started, you can find the following controls.



Resume the live video viewing.



Stop the instant playback.



Pause the instant playback.



Play back frame by frame.

If you click this button at an interval of 500 ms, one frame will be played back. To go back to

the normal playback, click .



Electronic zooming

- -

## Starting a Multi-Record Playback


### NOTE:

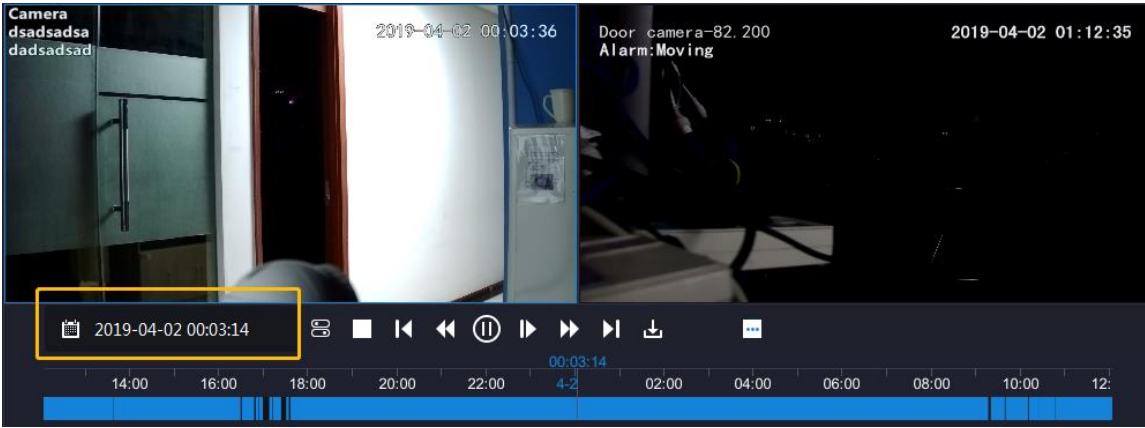
A maximum of 16 channels can be played back at the same time.

To start a channel playback, on the **Playback** page, drag the target channel from the **Device List** on the left panel to the target playback window. You can also drag multiple channels to playback windows.

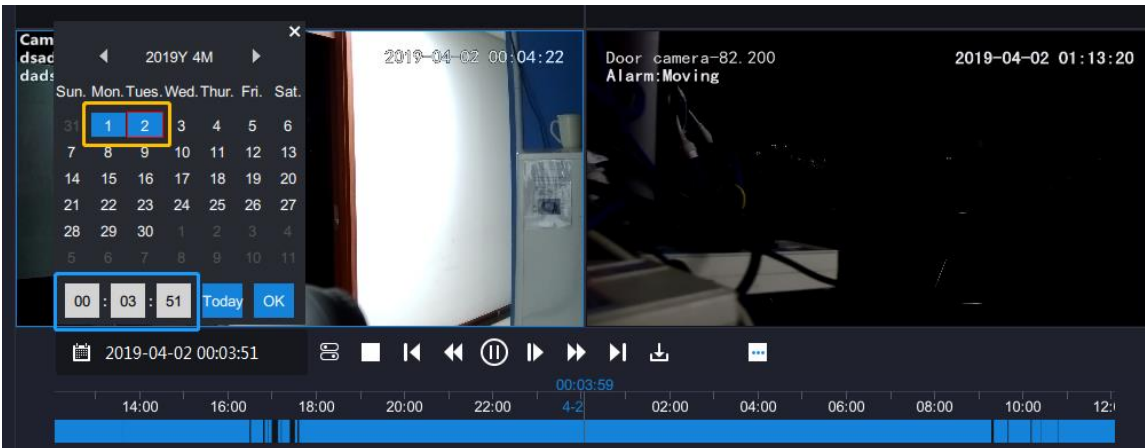
## About the Playback Start Time

A playback is started immediately after the target channel is dragged to the target playback window. By default, the playback starts from the current day's earliest time when the record is available. For example, if a recording is started at 1:00, the playback will be started from 1:00 by default.

You can click  to change the playback start time.



A blue date indicates a record-available date and the timeline at the bottom is accurate to the minute.



## Playback Controls

Playback controls on the top of the page are described as follows.



View the playback page in full screen mode.



Stop all playbacks.



Change the screen layout.



Separate the **Playback** page from the main screen.

Playback controls at the bottom of the page are described as follows.



Starting a Synchronous Playback



Stop the playback.



Go backward 30s with each click.



Slow the playback down. Every click will slow down the speed from 1/2X to 1/4X and then 1/8X and finally 1/16X. When the speed is 1/16X, clicking it will make the speed normal again.





Pause the playback.



Play back frame by frame.

If you click this button at an interval of 500 ms, one frame will be played back. To go back to

the normal playback, click .



Accelerate the playback. Every click will increase the speed from 2X to 4X and then 8X 16X 32X and finally 64X. When the speed is 64X, clicking it will make the speed normal again.




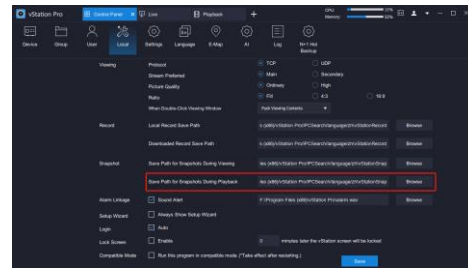
Go forward 30s with each click.



Downloading Records



Take a capture. This icon displays after you click . Captures are saved in the path specified by **Save Path for Snapshots During Playback**.



Click it to start a recording during a playback. Click it again to stop the recording. The record is saved in an external storage unit.



Electronically zoom in or out. To zoom in, draw a pane in the target area starting from a top left corner. To cancel the zooming, draw a pane in the reverse direction.



Adjust the speaker volume or mute the speaker.





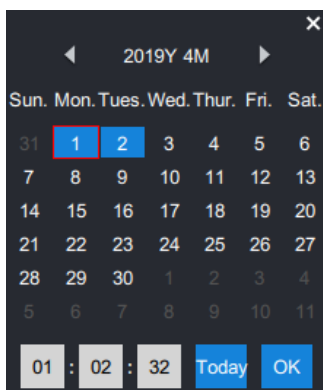
## Starting a Synchronous Playback

### NOTE:

The synchronous playback function applies only to the NVR2860E of V7.

To start a synchronous playback:

1. During a playback, click .
2. Drag target cameras to playback windows.
3. (Optional) Click  to change the playback start time.



Usually, cameras have different record-available dates. For synchronous playbacks, all these dates are blue, for example, **2**. From the view of the set theory, these blue dates are the union of the selected cameras' record-available dates. For example, records are available on March 1 for camera 1 and records are available on March 2 for camera 2. In such a case, the dates March 1 and 2 are blue. Additionally, all these blue dates are displayed no matter which playback window is currently selected, which means you cannot see the record-available dates of a specific camera. By default, the playback starts from the very beginning of the first record-available date


4. Click .

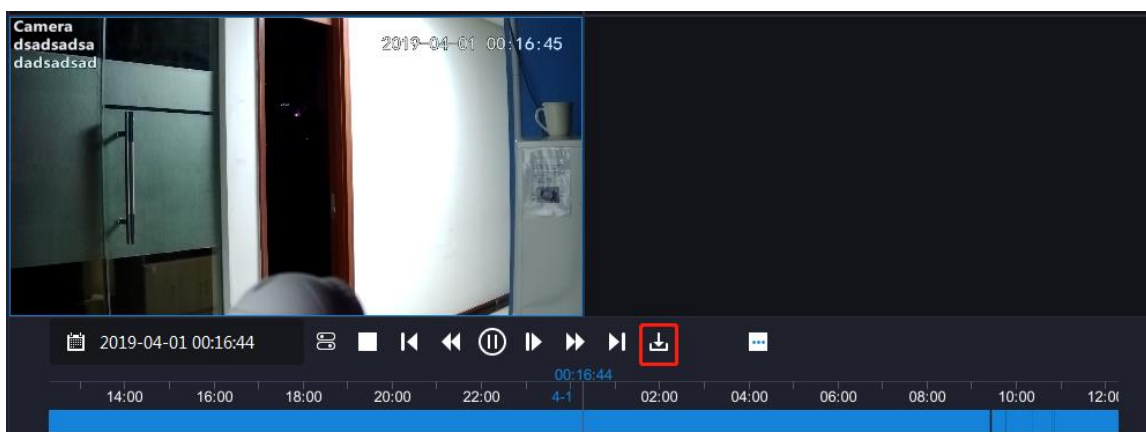
## Downloading Records

NOTE:

If you cannot download records, check whether you have the record download authorization. For details, see section "Adding Client Accounts".

To download records of a camera:

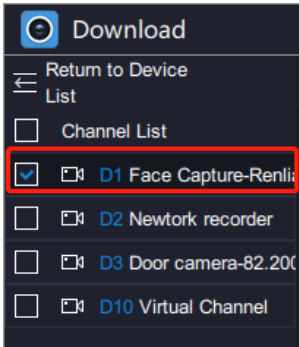
1. During a playback of the camera, click .



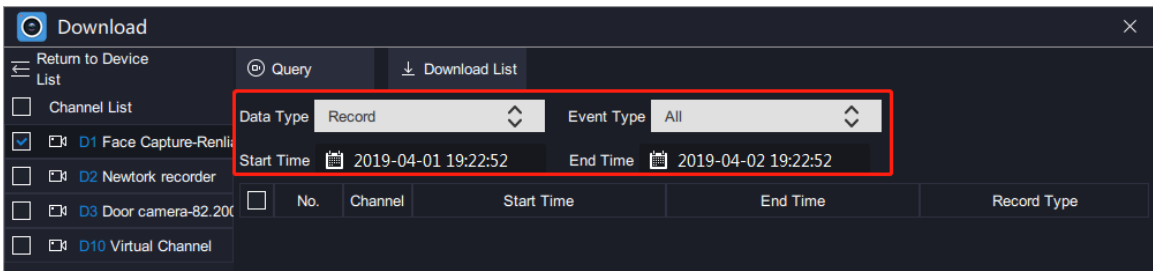
2. Click the NVR with which the camera registers.



3. Select the camera from the **Channel List**.

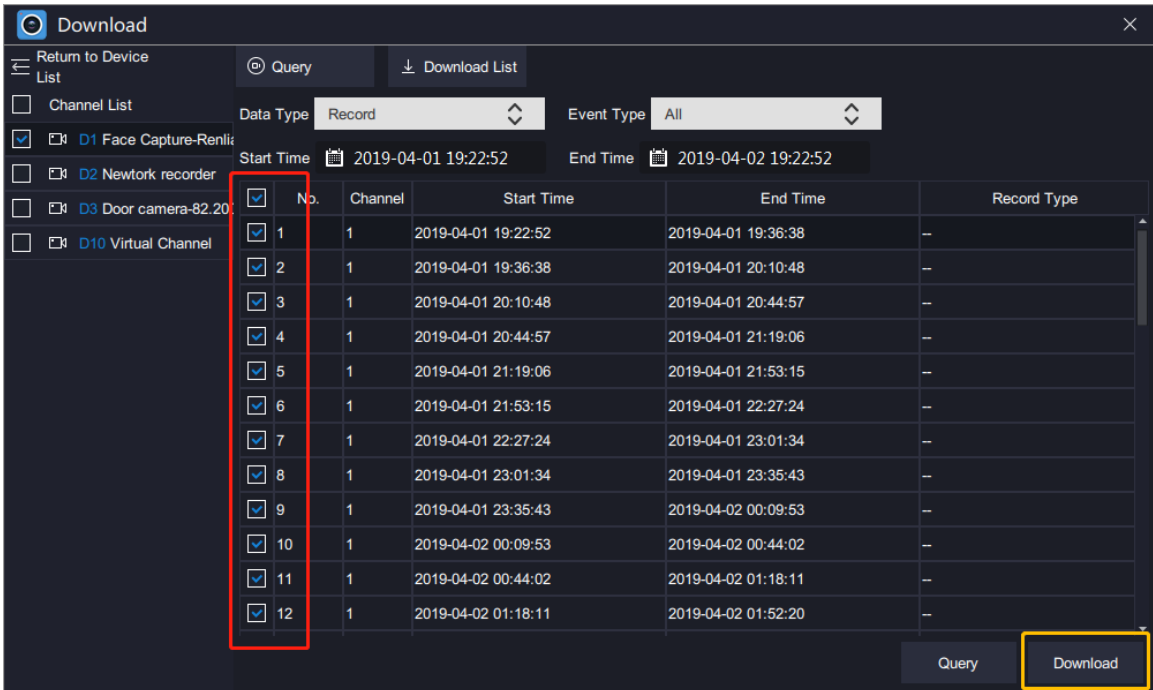


4. Specify **Data Type**, **Event Type**, **Start Time**, and **End Time**.

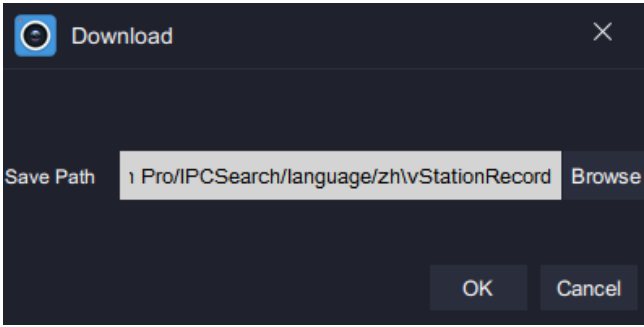


5. Click **Query**.

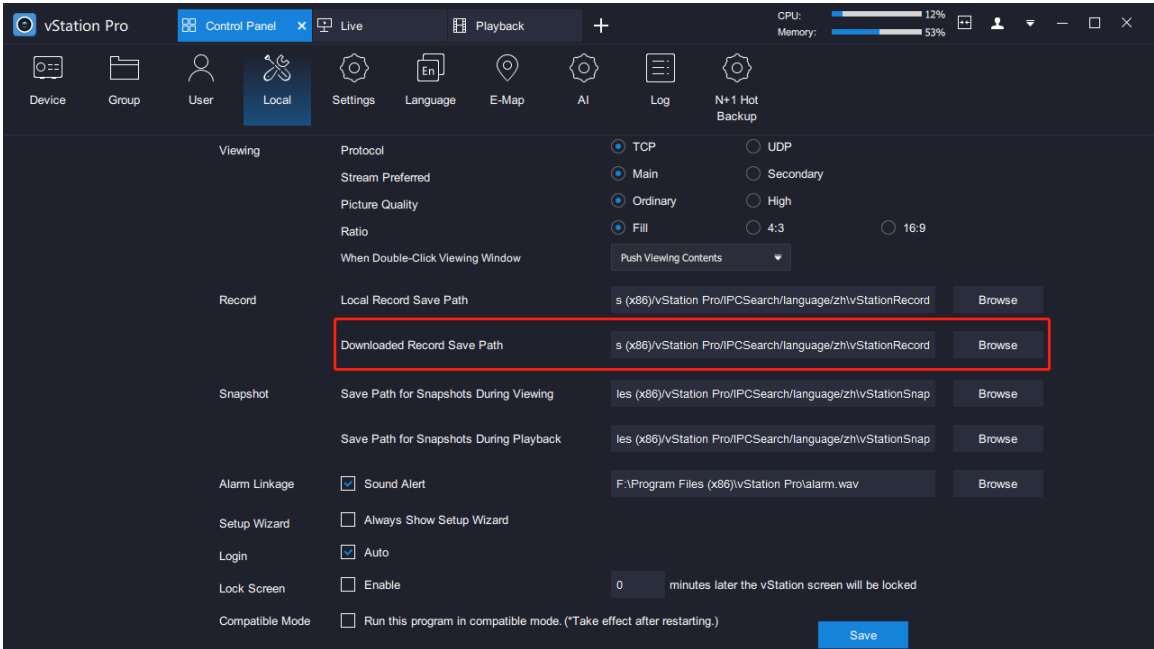
6. Select records you want to download and click **Download**.



7. Select a save path or use the default one.

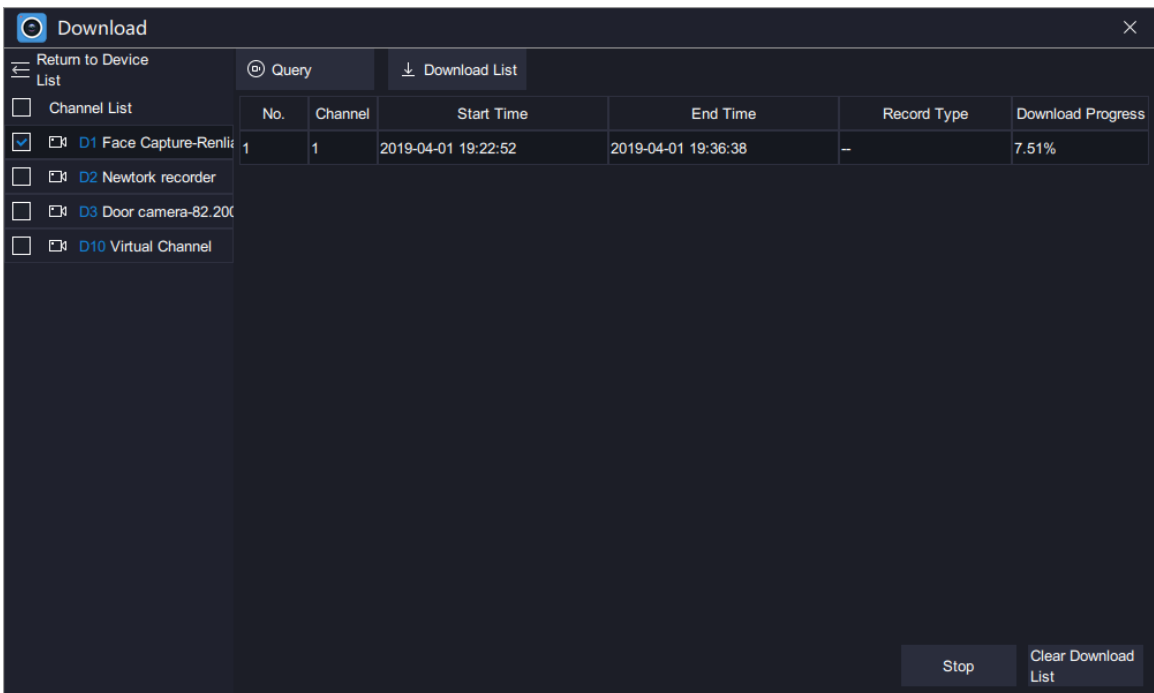


The save path can be configured under **Local**.



8. Click **OK**.

After this, you can find the following.




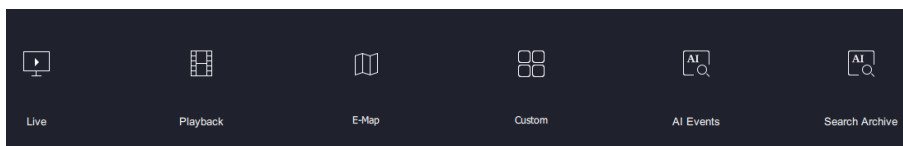
In this step, you can stop the download.

# Adding a New Tab Page

You can add new tab pages to show interested information.

To add a new tab page:

1. Click .
2. Choose an option.



Live Viewing



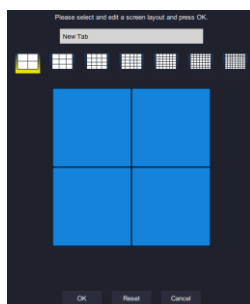
Playing Back



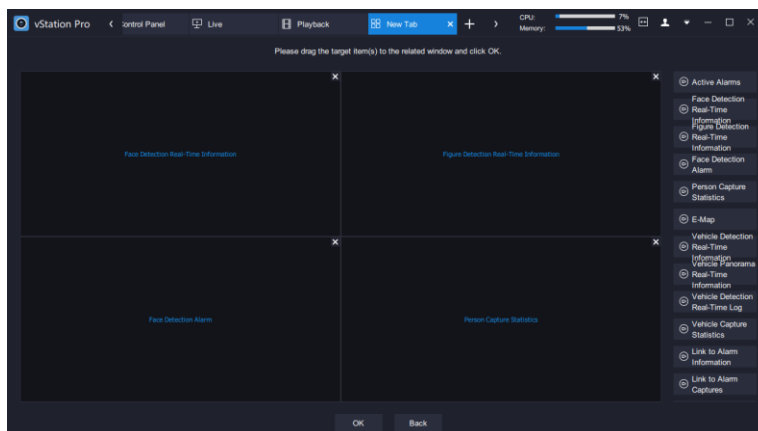
Configuring E-Map

To create a custom tag page:

1. Select a screen layout.



2. Drag topics on the right pane to viewing windows.  
The following is an example.



3. Click **OK**.



Searching AI Events

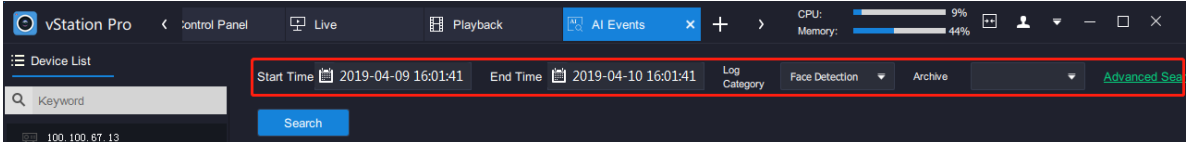


## Searching Archived Pictures

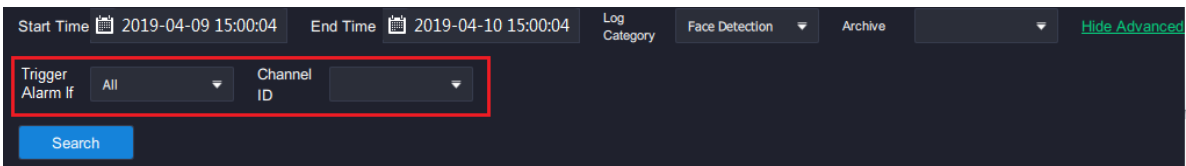
### Searching AI Events

To search AI events:

1. Specify the search criteria.

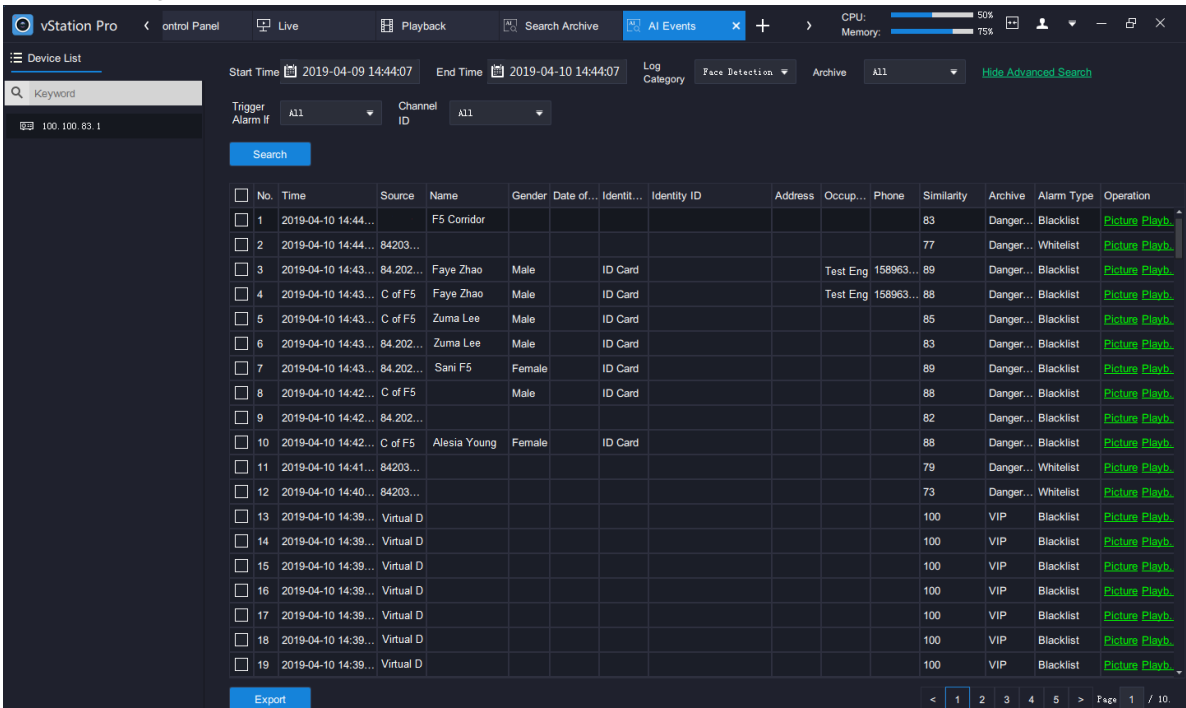


In this step, you can click **Advanced Search** to add more conditions.



2. Click **Search**.

The following is an example.



In this step, you can click **Picture** to see the archived picture and the capture. The following is an example.



If you click **Playback**, you can find the following.

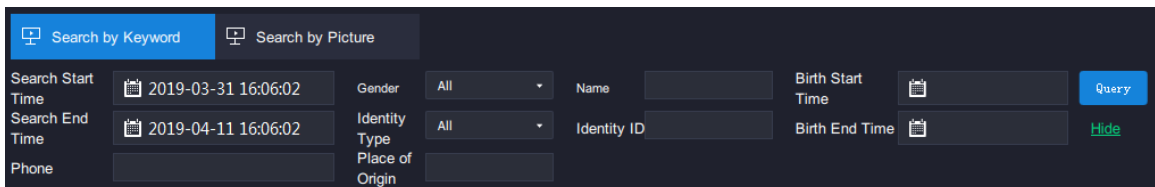


You can drag the timeline to see previous videos.

## Searching Archived Pictures

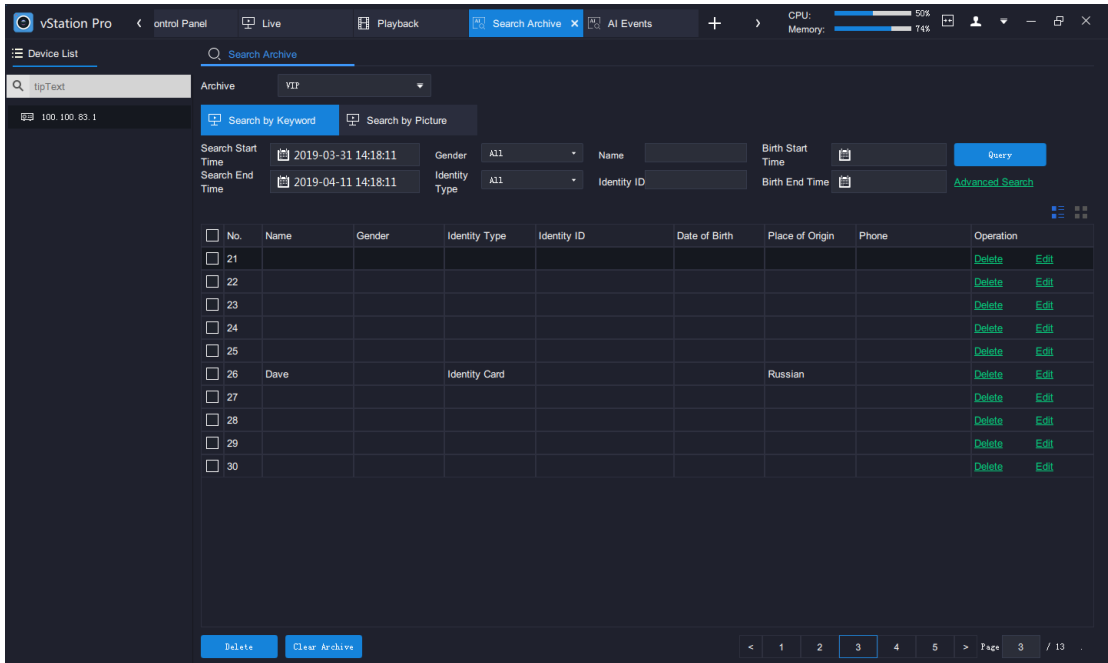
To search archived pictures:

1. Select the target archive.  
You can select **Face Real-Time** to search real-time face captures.
2. (Optional) Click **Search by Keyword**.
  - 1) Specify the search criteria.




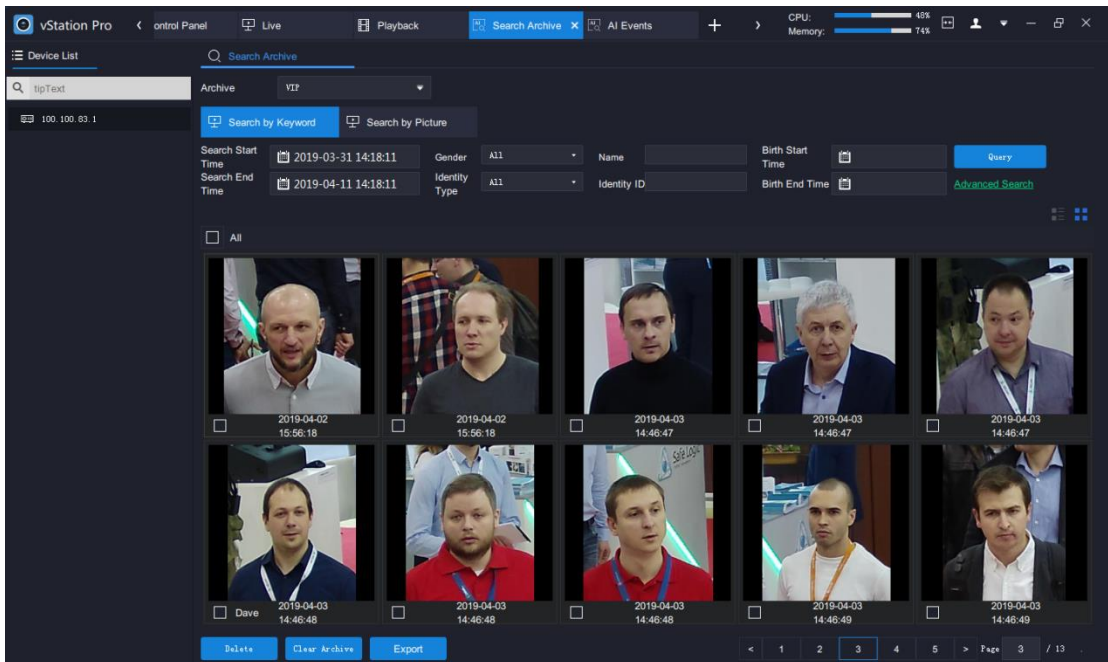
- 2) Click **Query**.  
The following is an example.


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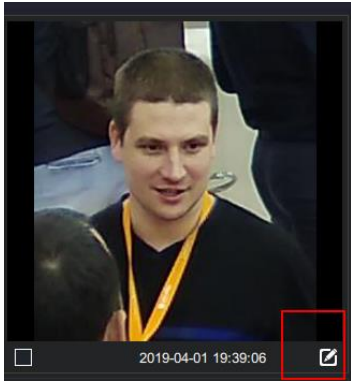
If you enter no information when archiving a picture, you will find no information displayed, as shown in the preceding figure. In this step, you can click **Edit** to add information for the picture.

You can click  to show archived pictures. The following is an example.




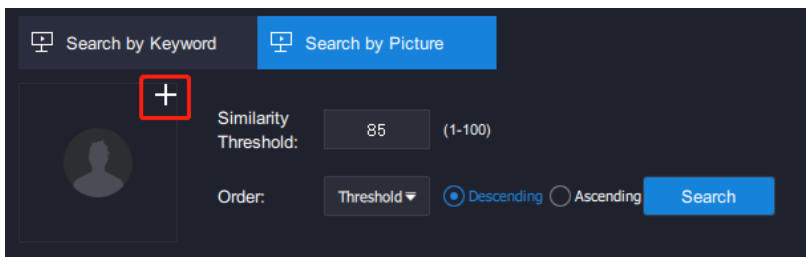
If you move your cursor to a picture, you can find the  editing button, as shown in the following figure. In such a case, you can add information for the picture.



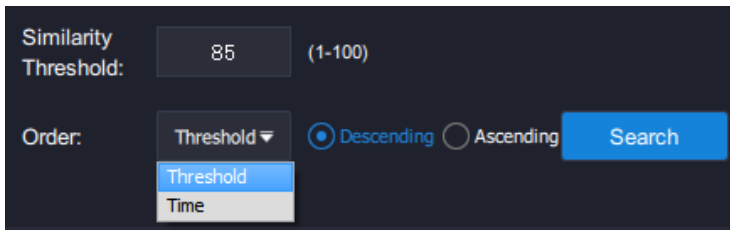


3. (Optional) Click **Search by Picture**.

1) Click  to upload a picture.



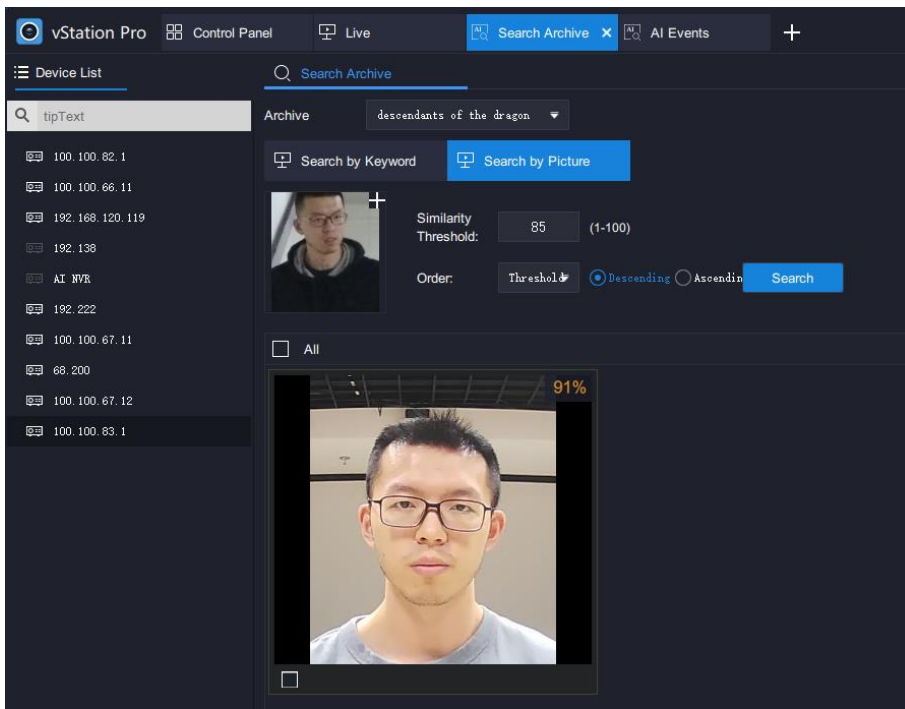
2) Specify **Similarity Threshold** and **Order** and choose the **Descending** or **Ascending** order.



The **Time** value indicates the archived time.

3) Click **Search**.

The following is an example.



# Abbreviations and Acronyms

AI	Artificial Intelligence
NVR	Network Video Recorder
PC	personal computer