Algorithm Warehouse

User Manual

Manual Version: V1.03

About This Manual

Thank you for your purchase. If you have any questions, please do not hesitate to contact your dealer.

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Usage Instructions

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Document Conventions

- The graphics, tables or photos in this manual are only for illustrative purpose. The actual product may be different.
- The mouse operations described in this manual are right-handed operations.
- This manual is a guide for multiple product models instead of for a specific product, and certain contents in this manual may not apply to all products.
- Due to uncertainties such as physical environment, discrepancy may exist between the actual values and reference values provided in this manual. In case of any conflicts or disputes, please refer to our final interpretation.
- Please follow the instructions in this manual when you use the product. Using the product under professional guidance is recommended.
- The symbols in the following table may be found in this manual. Carefully follow the instructions indicated by the symbols to avoid hazardous situations and use the product properly.

Symbol	Description
NOTE!	Indicates useful or supplemental information about the use of product.
CAUTION!	Indicates a situation which, if not avoided, could result in damage, data loss or malfunction to product.
WARNING!	Indicates a hazardous situation which, if not avoided, could result in bodily injury or death.

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1 Usage Instructions

- The supported functions may vary with device models. Please refer to the actual interface.
- Please make sure that the server hosting the system and the client computer are connected via network. For optimal performance, it is recommended to use Google Chrome.

NOTE!
The system has dual network interfaces. By default, the IP address of interface **1** is **192.168.1.30** and interface **2** is **192.168.2.30**.

2 User Login

This chapter describes how to log in, reset password, log out, and change the theme.

2.1 Login

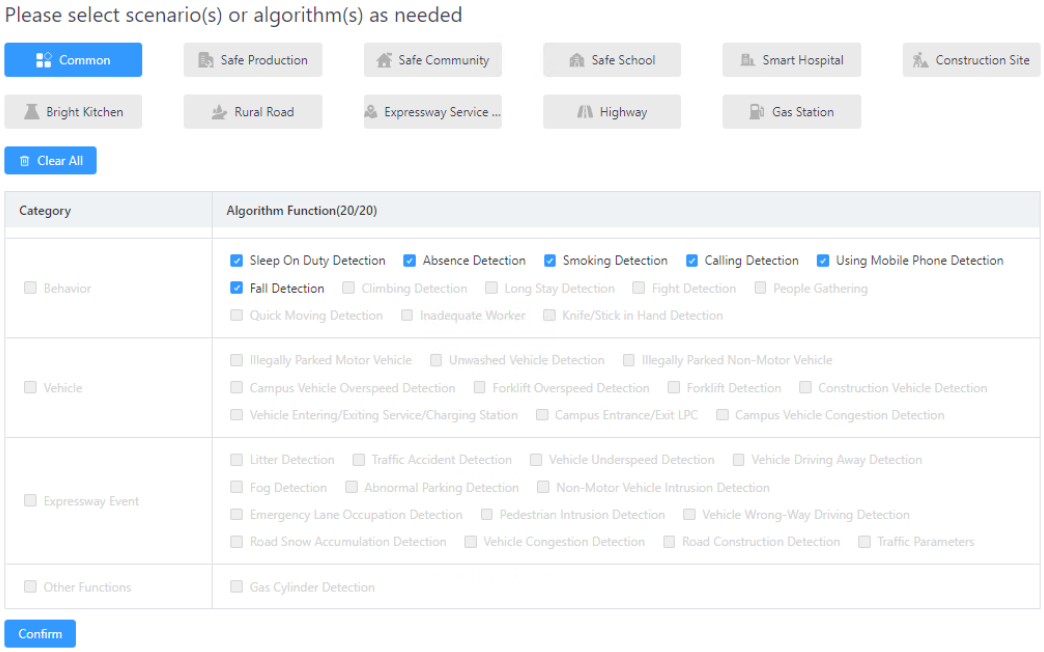
Open the web browser, enter the http://smart box IP, and then press **Enter** to open the **Login** page. Enter the username and password (default: admin/123456), and then click **Login**.

For the first login, follow the on-screen instructions to complete the information.

2.2 Smart Capability Configuration

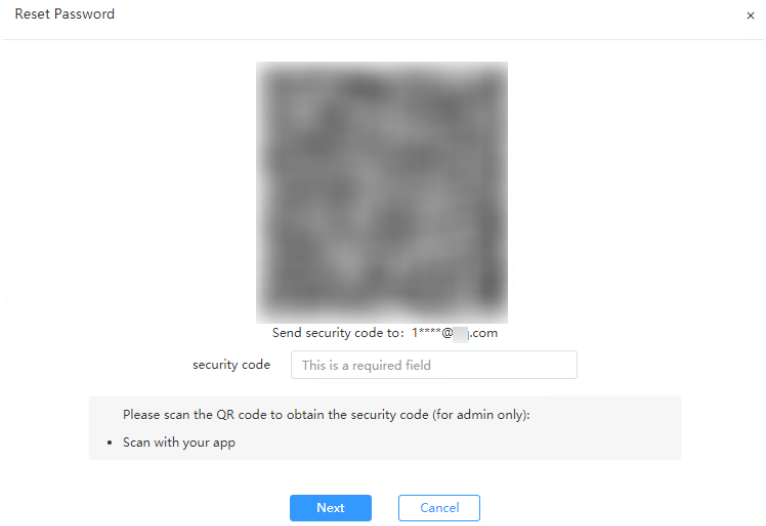
For the first-time login, you need to select the algorithm(s) that you wish to use.

You can later adjust the settings in **System Config** > **Smart Capability Config**. See Smart Capability Configuration.



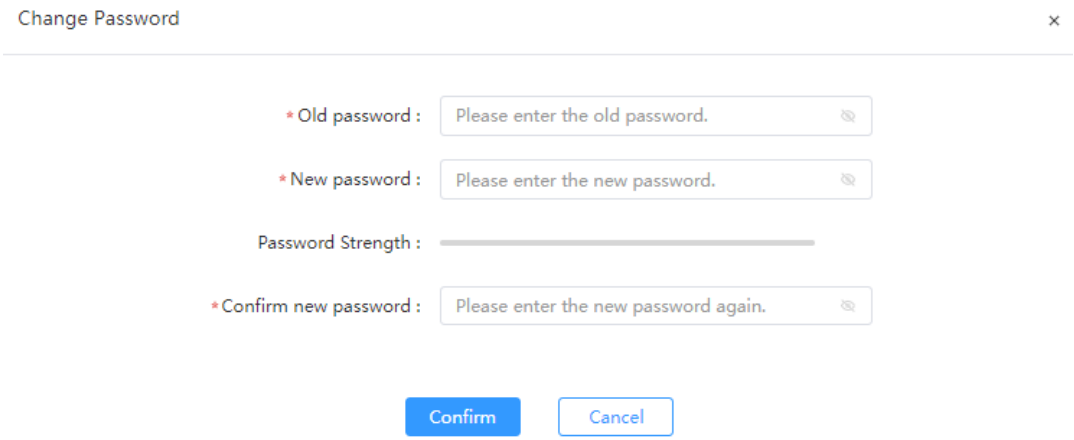
2.3 Reset Password

Click **Forgot Password**. Scan the QR code to obtain a security code, then enter the code and set a new password for admin.



2.4 Change Password

To change the login password, click the username in the top right corner, click **Change Password**, and then follow the on-screen instructions to set the new password.



2.5 Logout

Click the username in the top right corner, and then click **Logout**.

2.6 Change Theme

Click **Change Theme** in the top right corner to personalize the theme.

3 Channel Management

Channel management includes:

- Channel operations: add, edit, delete, search channels.
- Task configuration: choose tasks, draw detection areas.

3.1 Add Channel

Key Operations

- Add manually: Click **Add,** and then configure the parameters.
- Auto search: Click **Auto Search** to search devices on the same LAN as the smart box, and then configure the parameters.
- Video Convergence Platform Import: Click Video Convergence Platform Import to search for cameras within the platform, and then select camera(s) to add.

NOTE!
Before using the Video Convergence Platform Import function, ensure that **Video Convergence Platform** is enabled and properly configured.

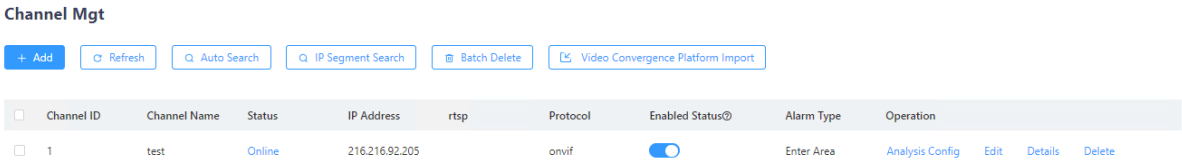
Protocol	Description
Onvif Protocol	Enter the channel name, IP, username, and password, and then choose a stream type.
RTSP Protocol	It is recommended to choose RTSP when: ● The smart box cannot pull streams from the channel directly, but can pull streams via an NVR. In this case, obtain the RTSP URL from the NVR. ● The smart box cannot connect the camera via Onvif. In this case, enter the RTSP URL by referring to the examples below, and then replace parameters ①②③ accordingly; other URLs remain unchanged. **Template ▷** Authentication mode: rtsp://admin:123@204.204.70.67/media/video1 (① admin, ② 123, ③ 204.204.70.67) Non-authentication mode: rstp://192.168.1.10:554//Streaming/1 (③ 192.168.1.10) ① **Username of the channel** ② **Password of the channel** ③ **IP address of the channel** Refer to the following examples for common RTSP stream formats in authentication mode: rtsp://admin:admin@192.168.1.15:554/id=0 rtsp://admin:123456@192.168.1.15:554/1/0 rtsp://admin:123456@192.168.1.15:554/stream1 rtsp://admin:123456@192.168.1.15:8554/profile0 rtsp://admin:123456@192.168.1.15:8554/profile1 rtsp://admin:123456@192.168.1.15:554/live0.264 rtsp://admin:123456@192.168.1.15:554/media/video1 rtsp://admin:123456@192.168.1.15:554/unicast/c1/s0/live rtsp://admin:123456@192.168.1.15:554/LiveMedia/ch1/Media1 rtsp://admin:123456@192.168.1.15:554/Streaming/Channels/101 rtsp://admin:123456@192.168.1.15:554/cam/realmonitor?channel=1&subtype=0

Other Operations

Operation	Description
	Enable intelligent analysis.
Edit	Click Edit to edit the channel information. **Caution:** Be cautious when replacing the channel settings with settings of other channels; it may affect data analysis and retrieval.
Details	Click Details to view the detailed channel information.
Delete	● Delete one by one: Click Delete. ● Delete in batches: Select the channels to be deleted and click Batch Delete.
Refresh	Click Refresh to refresh the channel list.

3.2 Intelligent Analysis Configuration

Configure intelligent analysis for channels.

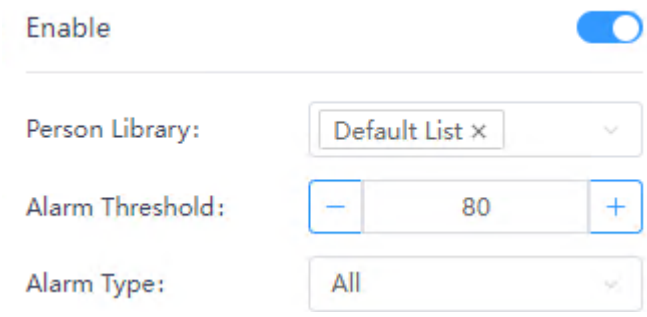


Click **Analysis Config**, click and choose the intelligent analysis service.

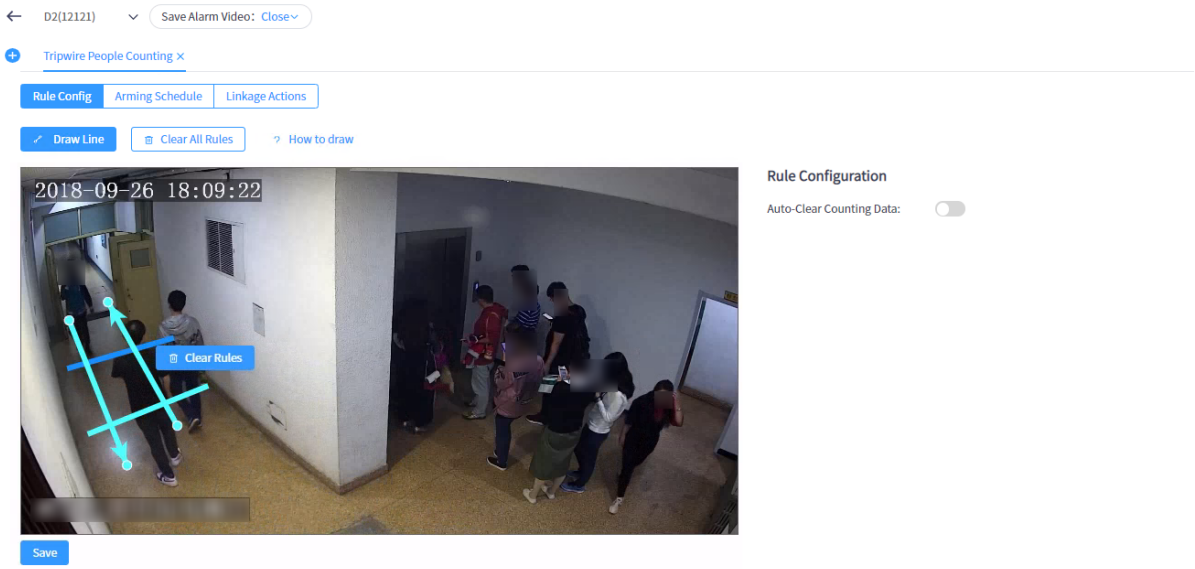
NOTE!

- If the configured analysis tasks exceed the total computing power of the Smart Box, analysis accuracy will be affected. Please pay attention to the remaining computer power during configuration.
- Face recognition cannot be enabled simultaneously with other functions. There are no such limitations for other functions.
- Traffic event service and behavior analysis service cannot be enabled simultaneously.

Operation	Description
Select Channel	Choose the channel to configure.
Save Alarm Video	Set the alarm video length. After being enabled, you can view alarm videos in Data Search.
Face Recognition/ Behavior & Person Identification (displayed based on service type)	When enabled, you can configure the following parameters: ● Person Library: Select one or more person libraries. Detected targets will be compared with persons in the selected libraries. Results can be view on the Data Search page. ● Alarm Threshold: Set the match threshold to trigger an alarm. ● Alarm Type: Choose Match Alarm, Not Match Alarm, or All.

Operation	Description
	

3.2.1 Area Configuration



1. Draw the detection rule.

- Use the default rule: By default, the detection area covers the entire image.
- Customize rules: Click **Clear Rules**, and then draw rules as needed.

  Click to start drawing, right-click to finish.

  Draw a tripwire: Specify two points to set the tripwire, click again to set the detection direction.

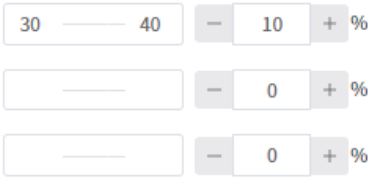
  Draw an area: Specify 3 to 6 points to set the detection area.

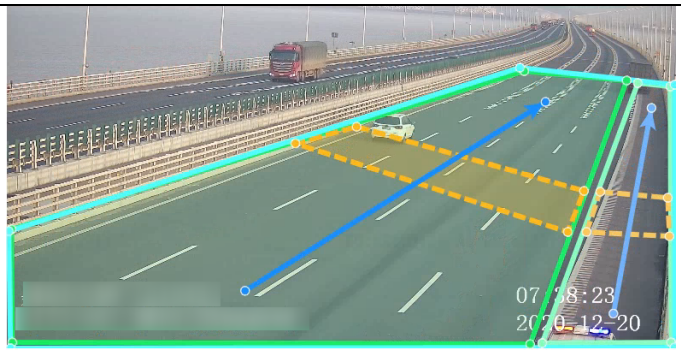
NOTE!
Some algorithms support multiple detection areas.

2. Configure the parameters as needed.

Item	Description	Algorithm
Sensitivity	Set the detection sensitivity. Higher sensitivity triggers alarms more easily, but may also increase false alarms.	General Configuration (required for most algorithms)
Trigger Time	An alarm is triggered when the duration of the behavior reaches the threshold. Range: 1-1800s	

Item	Description	Algorithm
Alarm Interval	Though behavior detections are continuous, alarms will be reported at set time interval.	
Face Capture Mode	● Quality Priority: Reports the best-quality face snapshot from when the face enters the image until it leaves. ● Speed Priority: Reports the best-quality face snapshot from when the face enters the image until a predefined quick reporting time is reached. ● Periodic Selection: Reports a face snapshot at specified intervals from when the face enters the image. ● Quick Report: Immediately reports a face snapshot when the face enters the image. If a higher-quality snapshot is captured later, it will also be reported.	Face Recognition
Min. Face Filtering Size Width/Height	Faces with the size smaller than the set size will not be detected.	
Intrusion Detection Type	Available options: Pedestrian, Non-Motor Vehicle, and Motor Vehicle.	Intrusion Detection
Max./Min. Head & Shoulder Filter Width/Height	Excludes pedestrians with head and shoulder dimensions outside specified limits.	Intrusion Detection, Enter Area, Leave Area
Max./Min. Non-Motor Vehicle Filter Width/Height	Excludes non-motor vehicles with dimensions outside specified limits.	Intrusion Detection
Max./Min. Motor Vehicle Filter Width/Height	Excludes motor vehicles with dimensions outside specified limits.	Intrusion Detection
Work Clothes Library	See Work Clothes Library Management.	No Work Clothes Detection, No Chef Uniform Detection, Illegal Fueling Detection
Background Refresh Interval	The background refresh interval must be greater than the trigger time configured for Lost Items; otherwise, alarm will not be triggered.	Object Removed
Person Number Limit	● Absence Detection, Inadequate Worker: An alarm will be triggered if the number of people in the area is less than the set threshold and the trigger time is met. ● People Gathering, Overcrowding Detection: An alarm will be triggered if the number of people in the area is more than the set threshold and the trigger time is met.	Overcrowding Detection, Absence Detection, People Gathering, Inadequate Worker
Auto-Clear Counting Data	When enabled, the dashboard data will be reset every day. **Note:** Up to 4 tripwires are allowed for a channel. People counting data is based on the sum of the counting data of the 4 tripwires.	Tripwire People Counting
Detour Area	Unwashed vehicle detection supports 2 kinds of detection areas: ● Vehicle Washing Area: The drawn area is the default area for analyzing whether vehicles have been washed. ● Detour Area: Select a drawn area and set **Detour Area** to **Yes**. This function is typically used for areas where vehicle entry is prohibited. Any vehicle passing through this area will be reported.	Unwashed Vehicle Detection
Distance Measurement Line (m)	Enter the actual distance of the straight line displayed in the image.	Campus Vehicle Overspeed Detection, Forklift

Item	Description	Algorithm
Default Speed Limit (km/h)	Set the baseline speed limit.	Overspeed Detection
Speed Limit Ratio of Speeding (%)	An alarm will be triggered if the detected vehicle speed exceeds Default Speed Limit + Default Speed Limit * Speed Limit Ratio of Speeding. The alarm details, including the detected speed, can be view in Behavioral Data.	
Speed Correction (km/h)	Correct speeds within a specified segment. The correction percentage can be either positive or negative; adjust according to the actual conditions. For example, if the speed range is 30-40 km/h and the correction percentage is 10%, and the detected speed is 35km/h, the corrected speed will be 38.5km/h (35+35*10%). 	
Only capture large dogs	Control whether to identify large dogs only.	Dog recognition
Longest distance without a dog's leash	If a dog is off-leash for a distance that exceeds the threshold, it is considered as risky.	
Allow dog walking time period	An alarm will be triggered if a dog is walked outside the designated time period.	
Vehicle Count Threshold	If the number of vehicles in the area exceeds or meets the threshold, the area is considered as congested.	Campus Vehicle Congestion Detection
Time Threshold	An alarm will be triggered if the duration of vehicle congestion exceeds or meets the threshold.	
Shield Area	This area does not trigger alarms. To draw the area, left-click to draw 4-6 points and right-click to finish. The area will automatically close.	All Expressway Event Algorithms **Note:** All expressway event algorithms share the same lane configuration.
Add Lane	• Draw Lane Area: Left-click to draw 4-6 points and right-click to finish. The area will automatically close. • Draw Driving Direction: Left-click to draw 2 points. The direction is from the start point to the end point. • Draw Virtual Coil Area: This area is for vehicle speed testing. Draw the area in the middle of the lane area, ensuring the width matches the lane width and the length equals half of the longitudinal length of a small vehicle. • Lane ID: Used to distinguish between lanes. • Lane Type: Select the lane type based on the actual drawn area. Example:	

Item	Description	Algorithm
		

3.2.2 Arming Schedule

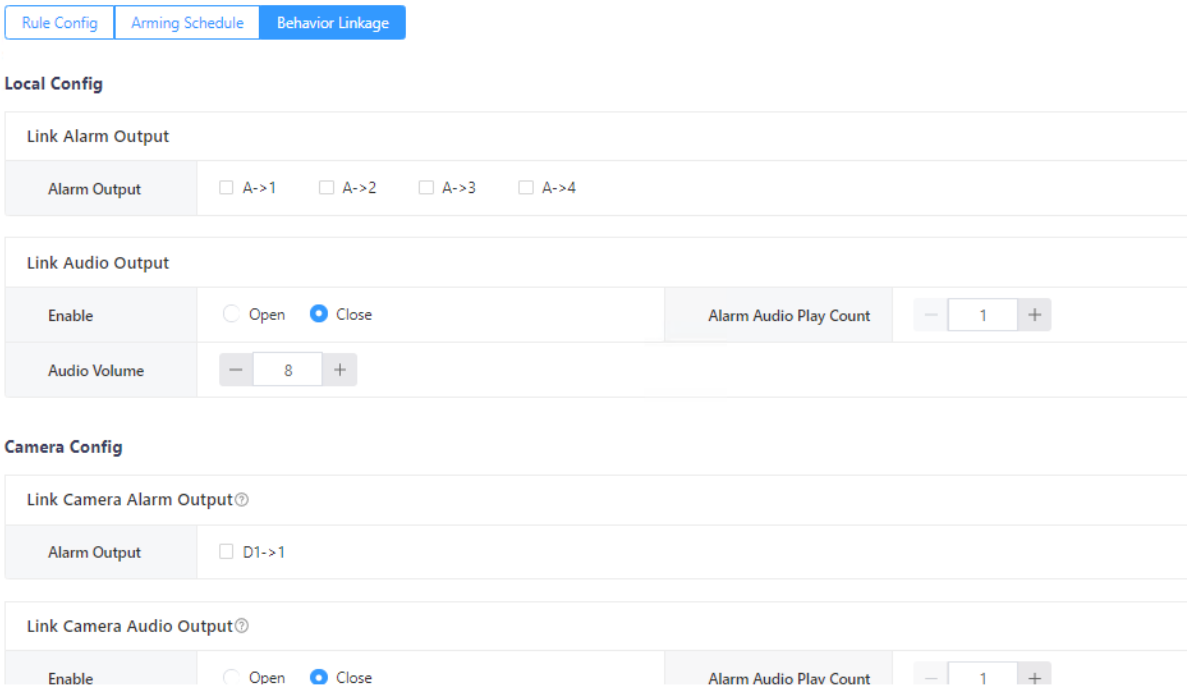
Key Operations

Drag on the timeline to set the arming schedule, and then click **Save**. The default arming schedule is 24h.

Other Operations

Operation	Description
Copy to Other Days	Used to apply the settings of a day (e.g., Monday) to other days of the week. 1. Select the day (e.g., Monday). 2. Click **Copy to Other Days**, and then click **Save**.
Clear All	Click to clear all.

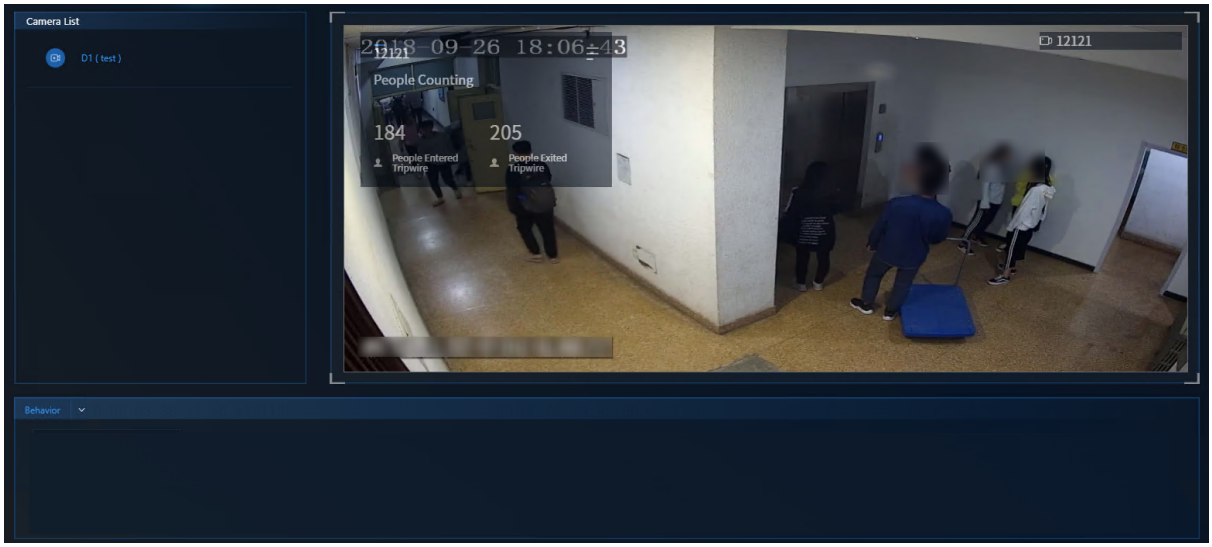
3.2.3 Linkage Actions



Item	Parameter	Description
Local Config	Link Alarm Output	The 4 options correspond to the 4 alarm output terminals on the device. After connecting a terminal to an output device, please select the corresponding option for linkage.
	Link Audio Output	You can enable/disable audio output linkage and set alarm audio play count and audio volume. For linkage audio, you can configure it in Upload Audio.
Camera Config	Link Camera Alarm Output	Link with camera's alarm output terminal.
	Link Camera Audio Output	You can enable/disable camera audio output linkage and set alarm audio play count.

4 Data Dashboard

Click **Data Dashboard** in the top right corner to view live videos and alarms. For information about how to configure intelligent analysis, see Intelligent Analysis Configuration.

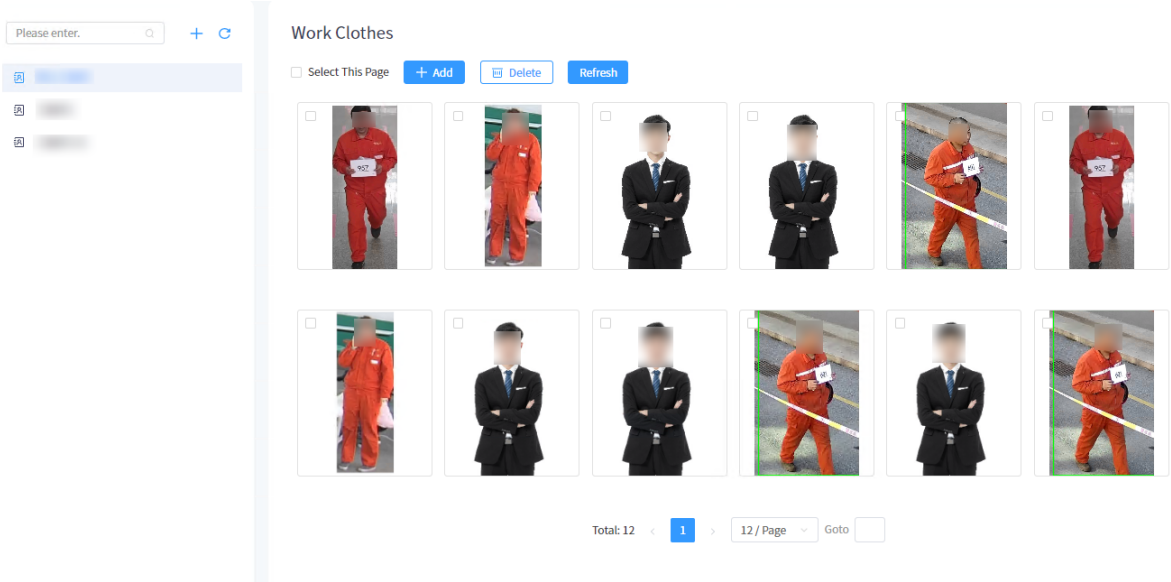


Operation	Description
Switch layout	Hover the mouse over the live video, and then click **Switch to 1-Window**/**Switch to 4-Window** to switch the window layout.
Switch channel	1-window: Click a channel on the left-side list to switch the channel. 4-window: Select a window, and then click the desired channel on the left-side list.

5 Library Configuration

5.1 Work Clothes Library

This section describes how to manage work clothes photos in different work clothes libraries. Up to eight work clothes libraries are allowed, and each allows 50 photos. The photos are used for no work clothes detection.



5.1.1 Work Clothes Library Management

- Add a work clothes library: Click + on the left, and then enter a name for the work clothes library.
- Edit a work clothes library: Hover over the work clothes library, and then click **Edit** to change the library name.
- Delete a work clothes library: Hover over the work clothes library, and then click **Delete**.
- Search for a work clothes library: Enter keywords in the search box, and then click or press **Enter**.
- Refresh work clothes libraries: Click to refresh the work clothes library list.

NOTE!
Deleting a work clothes library will also delete all the work clothes data in it.

5.1.2 Work Clothes Management

1. Requirements of Work Clothes Photos

Work clothes must have collars and sleeves, such as suits, white coats, security uniforms, and factory work clothes. Special work clothes such as reflective vests, reflective aprons, and reflective strips are not supported.

NOTE!
- Photos downloaded from the Internet or taken by a mobile phone are not supported.
- The photo resolution should be in this range: 95px*285px to 200px*600px.

2. Add Work Clothes

Key Operations

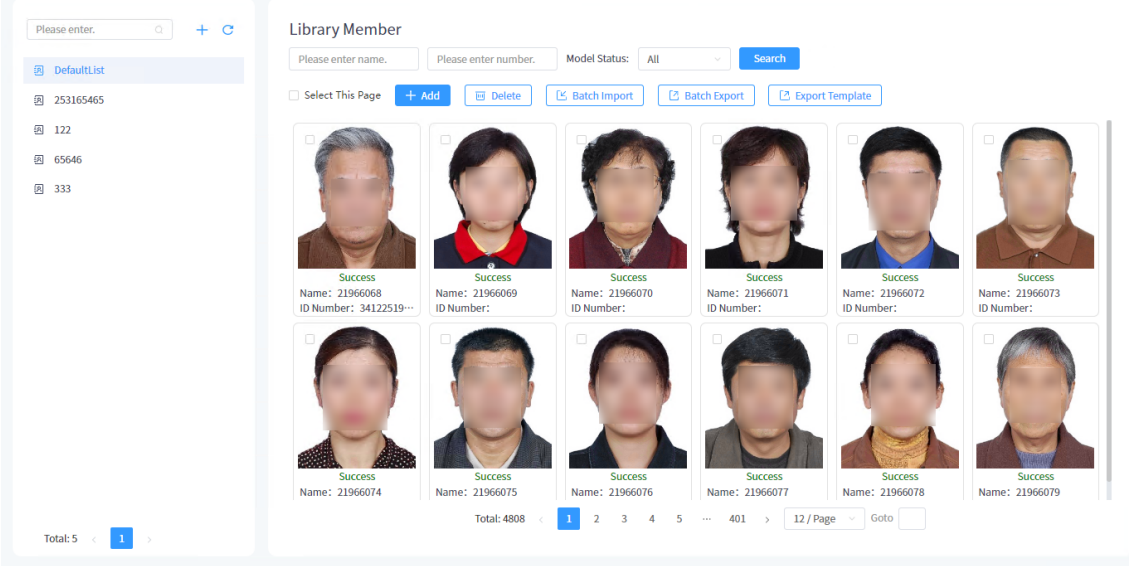
- Import One by One
  (1) Click **Add**. Import a work clothes photo from local.
  (2) Click **Confirm**.
- Import Automatically: Automatically analyzes the selected channel's live video and captures potential work clothes. Then, you need to manually select the desired snapshots to import them to the work clothes library.
  (1) Click **Auto Import**. Select a channel, and then click **Analyze**.
  (2) Wait for the analysis results.
  (3) (Optional) If no usable images are available, click **Re-analyze**.
  (4) Select the desired snapshot(s), and then click **Import**.

Other Operations

Operation	Description
Delete	● Delete one by one: Hover over the work clothes photo, and then click Delete. ● Delete in batches: Select the work clothes photos to delete, and then click Delete.
Search	Search by criteria.

5.2 Person Library

Manage persons in different person libraries.



5.2.1 Person Library Management

- Add a person library: Click + on the left, and then enter a name for the library.
- Edit a person library: Hover over the person library, and then click **Edit** to change the library name.
- Delete a person library: Hover over the person library, and then click **Delete**.
- Search a person library: Enter keywords in the search box, and then click or press **Enter**.
- Refresh the person library list: Click to refresh the person library list.

NOTE!
Deleting a person library will also delete all the person data in it.

5.2.2 Person Management

1. Photo Requirements

- Overall requirements: Bareheaded (no hats) and unobstructed (no masks) frontal photos.
- Range requirements: The photo must show the contours of both ears, and the top of the head (including all hair), and down to the bottom of the neck.
- Color requirements: True color photos.
- Makeup requirements: No makeup such as hair dye and eyelashes that may affect the real appearance are allowed.
- Background requirements: A solid-colored background, such as white and blue.
- Light requirements: The photo should be taken with adequate light. There should be no overly dim, overly bright, or uneven lightness (i.e., half shadow and half bright) on the face.
- Photo timeliness requirements: The age depicted in the photo should not be significantly different from the current actual age. The photo should not exceed one year. For individuals with significant changes in hairstyle or bangs, it is recommended to take the photo on the spot.
- Photography equipment requirements: The photo should be taken with a high-quality smartphone or a single-lens reflex camera.
- Photo requirements: JPG format, file size 50KB-2MB; the resolution of the face should be in the range of 640px*640px to 200px*200px; no image alterations such as beautification.

Correct

Wrong

① Dim light

② Blurry face

③ Black and white photo

④ Face too small

⑤ Low resolution

⑥ Side face

⑦ With mask

⑧ With heavy make-up

2. Add Person

Key Operations

1. Add persons one by one or in batches.

- Add one by one: Click **Add**, select a face photo, and complete the required information.
- Batch import: Click **Download Template**, complete the required information in the **.csv** file according to instructions in the faceTemplate file, and then click **Upload** to upload the **faceTemplate.tar** file.

2. The system starts modeling when the import is complete. Modeling status include

Status	Description
Ongoing	The face photo is modeling.
Success	The face photo meets the requirements and can be detected and analyzed in live video.
Failed	The face photo does not meet the requirements and cannot be detected or analyzed in live video. You can delete the face photos that failed to be modeled.

Other Operations

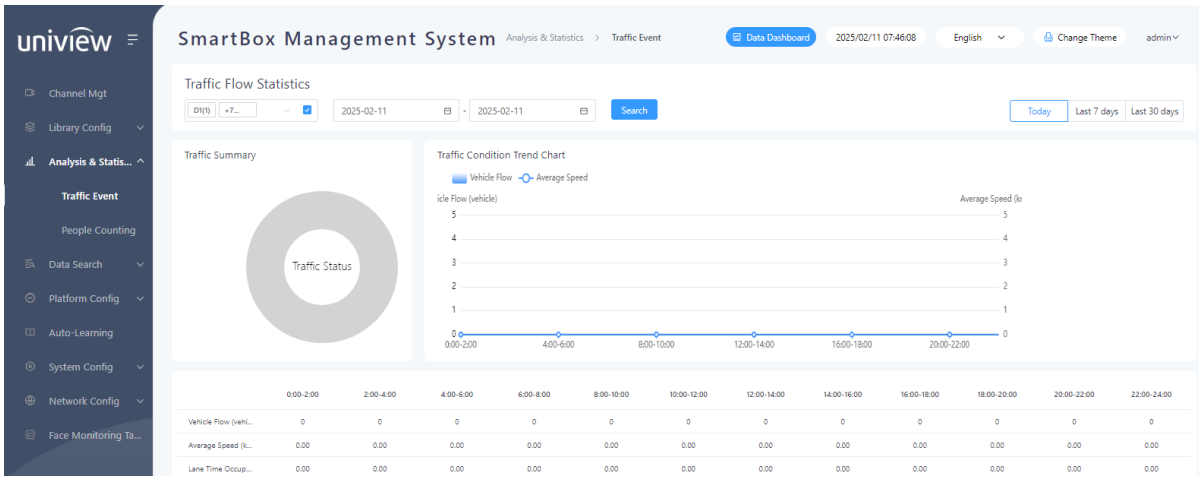
Operation	Description
View	Hover over a face photo and then click **View**.
Edit	Hover over a face photo and then click **Edit**.
Delete	● Delete one by one: Hover over a face photo and click Delete . ● Delete in batches: Select the face photos to delete and then click Delete.
Search	Search face photos by name, ID number, and modeling status.
Export	Export search results. Choose **Export This Page** or **Export Selected** and then click Confirm.

6 Analysis & Statistics

6.1 Traffic Event

You can filter data by channel and statistical time. The analysis results of traffic events are displayed in charts.

NOTE!
Before using this function, please enable traffic parameters in Smart Capability Config.

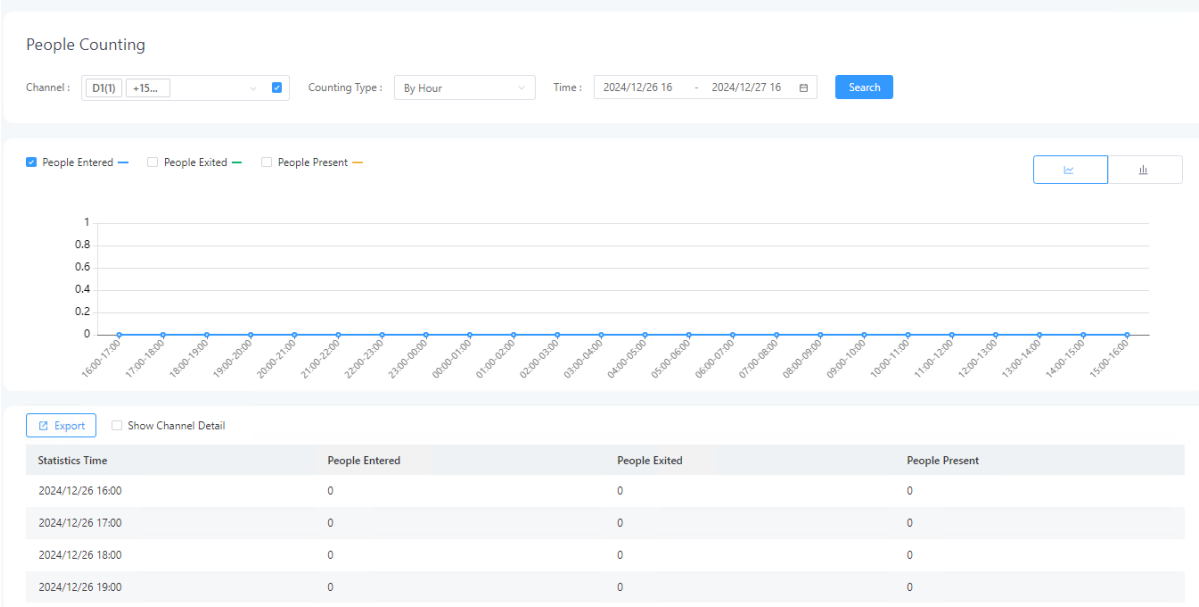


6.2 People Counting

You can filter data by channel, statistical type, and statistical time.

NOTE!
The unit of time (minute, hour, day, month) is determined by the selected statistical type. The time range cannot exceed 60 units of time.

- Search results are displayed in charts, which can be exported for each unit of time.
- Select **Show Channel Detail** to view data from each channel, which can also be exported.

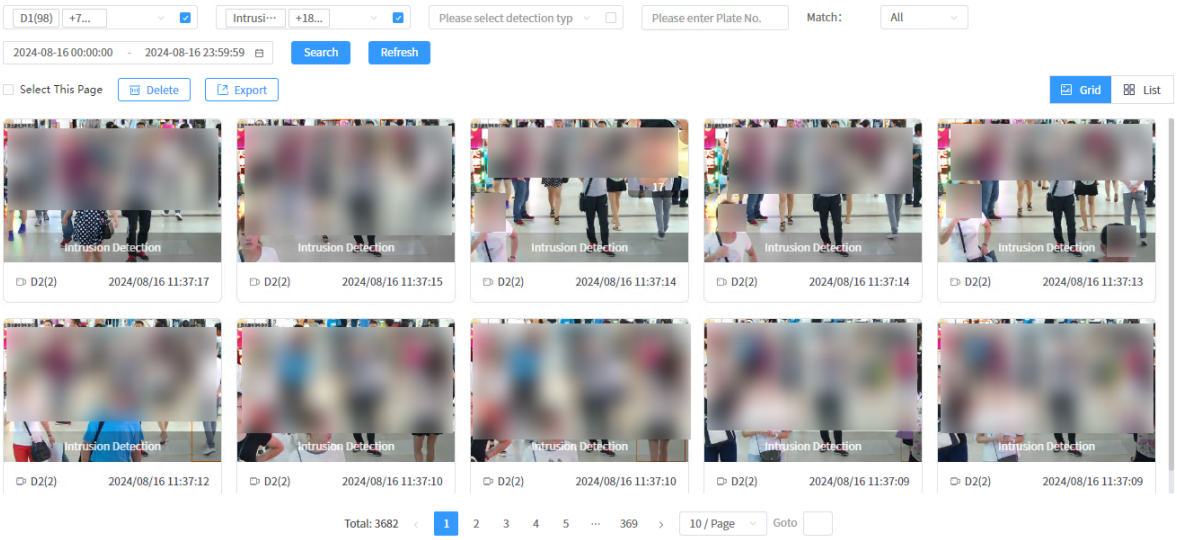


7 Data Search

7.1 Data Search

7.1.1 Behavioral Data

Search analysis results from channels configured with behavior analysis services.



Key Operations

- Search filters: Channel, event type, object type, plate number, time, and match status.

NOTE!

Match status can be configured only when you select face detection algorithm in Smart Capability Configuration.

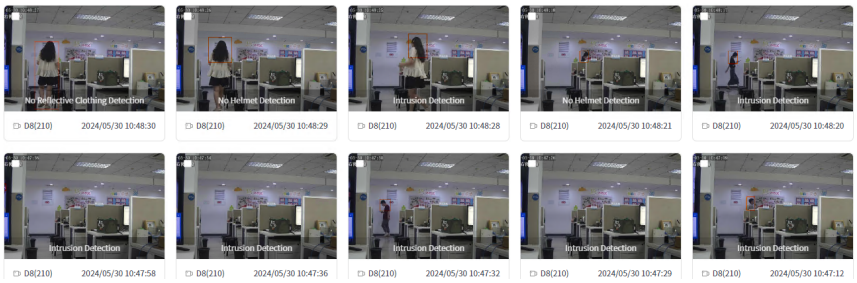
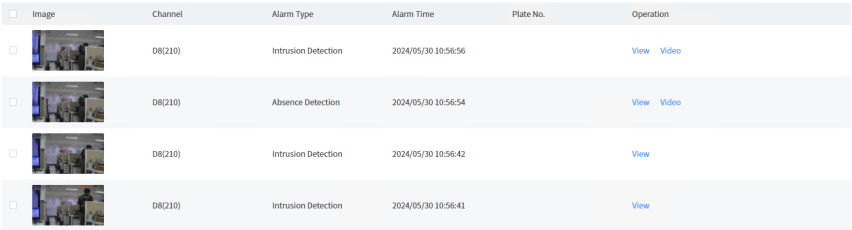
- For channels with behavior and person identification function enabled, if the behavioral data comparison exceeds the set threshold, the matching image from person library will be displayed on the right side.
- Click View (hover over the image in **Grid** layout) or double-click the search result to view the snapshot of the analysis result.
- Click Video (hover over the image in **Grid** layout) to view the alarm video.

NOTE!
To view alarm video, you need to enable **Save Alarm Video** in Intelligent Analysis Configuration.

- Click Edit to handle the search result. If it is marked as **False Alarm**, this item will be synced to Sample Library, helping to reduce future false alarms.

NOTE!
Intrusion Detection (human), Cross Line Detection, Climbing Detection, Long Stay Detection, Absence Detection support false alarm optimization.

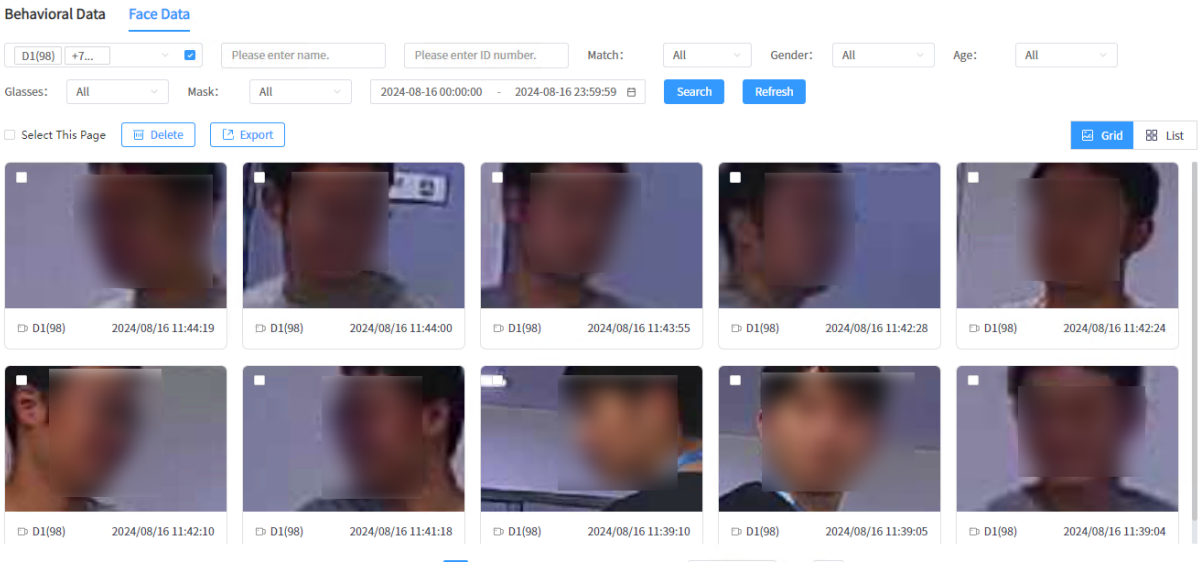
Other Operations

Operation	Description
Layout	● Grid layout  ● List layout 
Refresh	Click **Refresh** to update search results.
Delete	Select the search result(s) to delete and click **Delete**.
Export	Export search results. Choose **Export This Page** or **Export Selected** and then click **Confirm**

7.1.2 Face Data

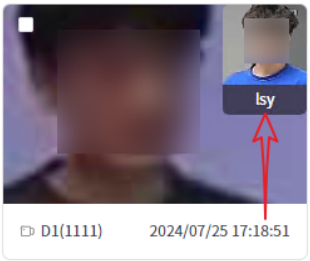
Search snapshots from channels configured with face snapshot services.

NOTE!
You need to select face detection algorithm in Smart Capability Configuration.



Key Operations

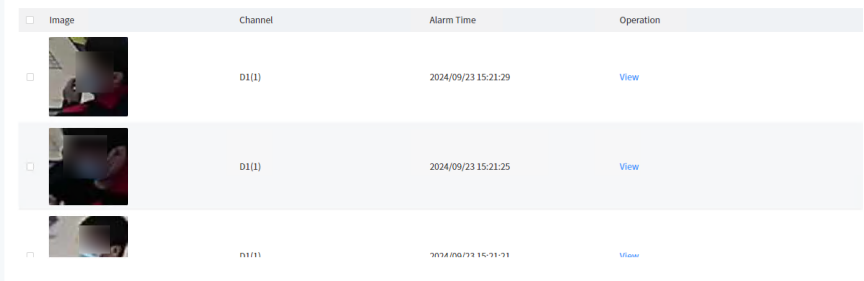
- Search filters: Channel, time, and face attributes.
- For channels with face recognition function enabled, the matching image from person library will be displayed on the right side.



- Click View (hover over the image in **Grid** layout) or double-click the search result to view the snapshot of the analysis result.

Other Operations

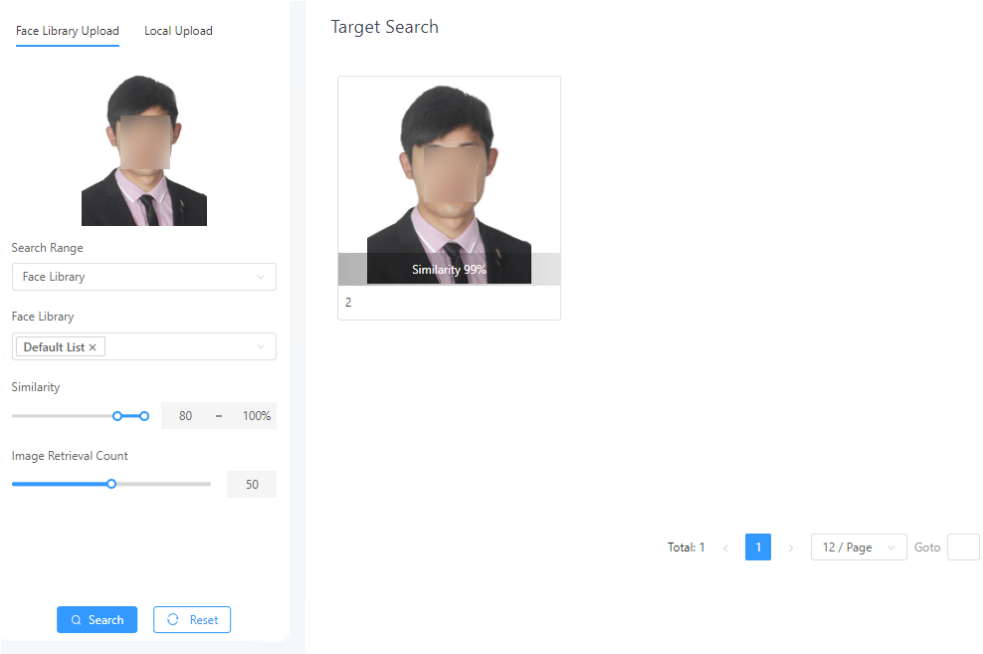
Operation	Description
Layout	● Click **Gird** to switch to the grid layout. ● Click **List** to switch to the list layout.

Operation	Description
	
Refresh	Click **Refresh** to update search results.
Delete	Select the search result(s) to delete and click **Delete**.
Export	Export search results. Choose **Export This Page** or **Export Selected** and then click **Confirm**

7.2 Target Search

You can search for targets using the Search Image by Image method.

3. Select a source image.
   - Face Library Upload: Select a face image from the face library. You can search for the image by face library, person name, and ID number.
   - Local Upload: Upload an image from local.
4. Specify the search range.
   - Face Library: Choose the face library where the target is located.
   - Face Snapshots: Select the snapshot channel and time.
5. Set the similarity threshold between the target and the source image and maximum number of images can be retrieved.
6. Click **Search**. The search results are displayed on the right. You can also hover the mouse over an image and click **View** to view details.



8 Platform Configuration

8.1 Alarm Center

8.1.1 Platform Configuration

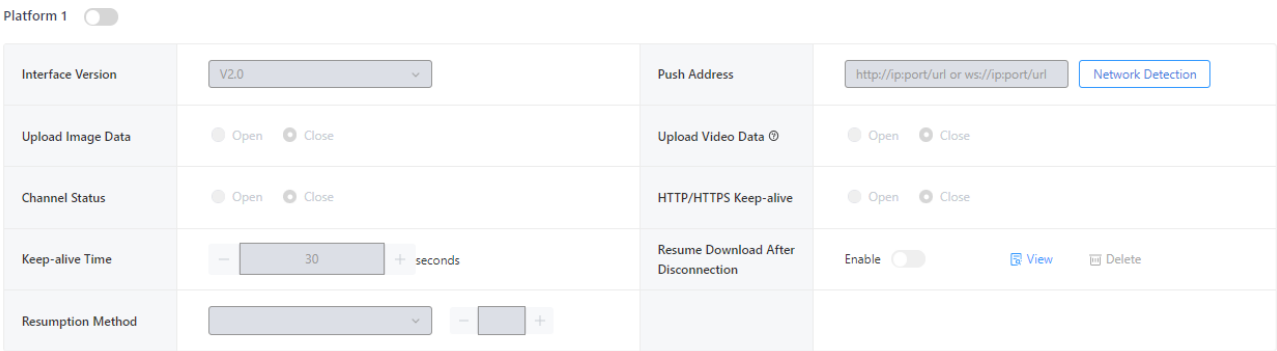
When data integration is configured, alarms will be uploaded to the third-party platform by default. For detailed configuration steps, please contact technical support.

- Interface version: Choose the correct interface version.
- Push address: Third-party platform address used to receive data from the smart box.
- Alarm Video Push Address: Only supported in version V1.0; fill as needed.
- Reporting Mode: Choose United or Separate as needed.
- Upload image data: When enabled, the smart box can upload images to the third-party platform.
- Upload video data: When enabled, the smart box can upload videos to the third-party platform.
- Upload channel status: When enabled, the smart box can upload channel status to the third-party platform.
- HTTP/HTTPS keep-alive: When enabled, the smart box will send keep-alive messages to the third-party platform.
- Keep-alive time: Set the interval for the smart box to send keep-alive messages.
- Resume upon disconnection: When enabled, alarms that failed to be reported to the third-party platform due to a disconnection will be re-reported according to the rules set in **Resume mode** after the network is restored.

NOTE!

- If disabled, the alarms that failed to be reported will be retained.
- You can click **View** to view the number of alarms that failed to be reported. After the network is restored, the number of alarms not reported will decrease accordingly.
- You can click **Delete** to remove all alarms that failed to be reported to the third-party platform.

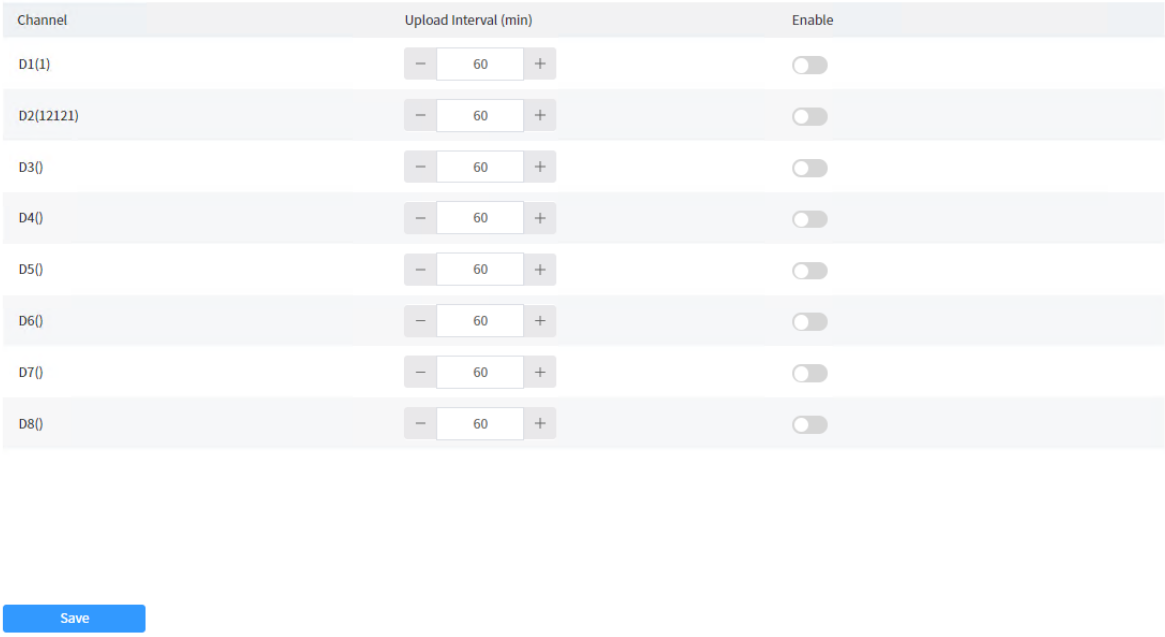
- Resume mode:
  - Resume all: Re-report all alarms that failed to be reported.
  - Resume by day: Set a range of 1-30 days and re-report alarms that failed to be reported within that period.
  - Resume by item: Set a range of 100-20,000 items and re-report the most recent X number of alarms that failed to be reported.
- Push address: Third-party platform address used to receive data from the server.



8.1.2 Upload Time Interval Config

When it is needed to upload data to the third-party platform, you need to configure the platform first (see Platform Configuration). You can set the time interval for uploading alarm analysis results and enable/disable data upload for the channels.

- Upload interval is enabled:
- Upload interval is disabled:



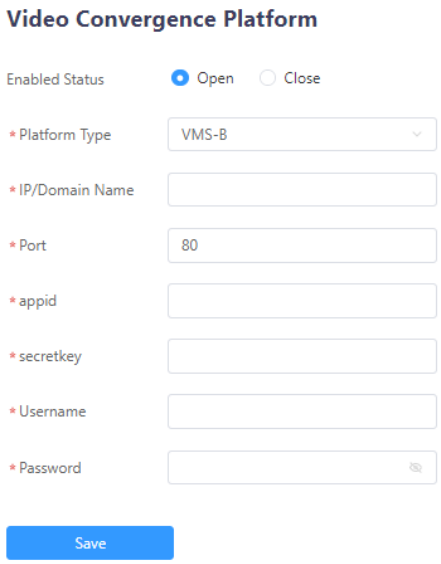
8.1.3 Camera Audio Config

Set the camera used for audio output linkage for each channel.

By default, a channel links with its current camera. To link with other cameras, please configure the camera information for the corresponding channel. You can also use the toggle switch to control whether to enable the linkage.

8.2 Video Convergence Platform

Set the target platform for local data reporting.

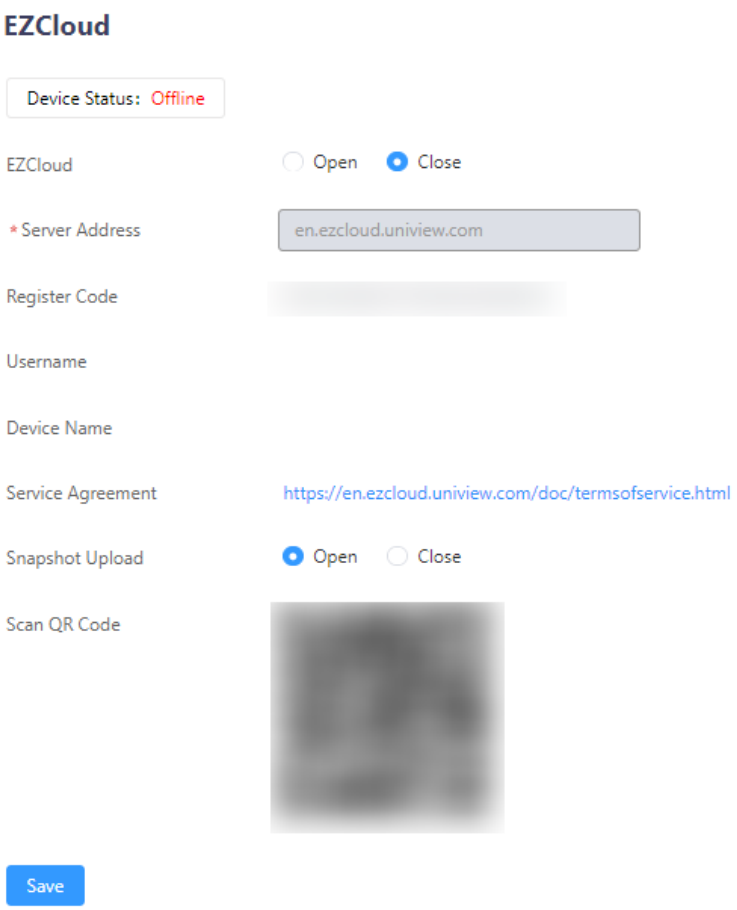


Parameter	Description
Platform Type	Please select as needed.
IP/Domain Name	Enter the IP address or domain name of the target platform.
Port	Use the default port number (80) or enter the actual port number.
appid	Obtain from the target platform.
secretkey	Obtain from the target platform.
Username	Enter the username of the target platform.
Password	Enter the password of the target platform.

8.3 EZCloud

Enable EZCloud and then click **Save** to manage the smart box on the EZCloud platform. Information that can be uploaded to EZCloud includes alarm records and snapshots (can be enabled or disabled as needed).

Scan the QR code using the UNV-Link app to add the device to the app quickly.



9 Auto-Learning

9.1 Sample Library

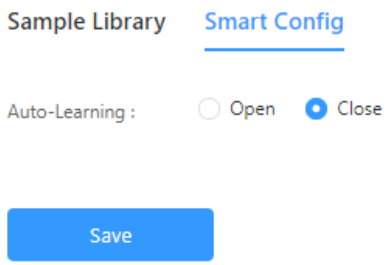
The sample library collects samples for algorithm's self-learning, which helps reduce future false alarms.

NOTE!
Currently, only Intrusion Detection (human), Cross Line Detection, Absence Detection, Climbing Detection, and Long Stay Detection support self-learning sample library.

Item	Description
Add	Behavioral data marked as a false alarm are automatically added to the sample library.
Delete	If a data is mistakenly marked as a false alarm, you can select it and click **Delete** to remove it from the sample library.
Refresh	Refresh the sample library.

9.2 Smart Configuration

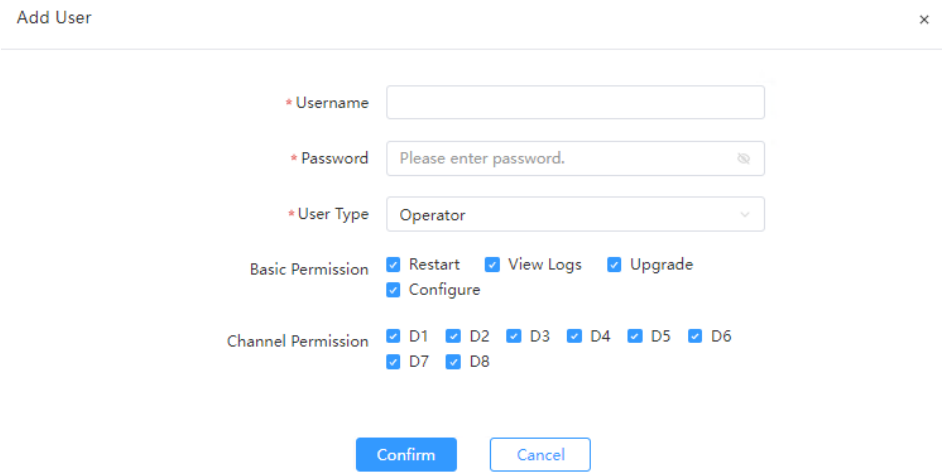
Choose whether to enable Auto-Learning. If enabled, when an alarm is triggered, the algorithm will determine whether to report the alarm according to the samples in the library.



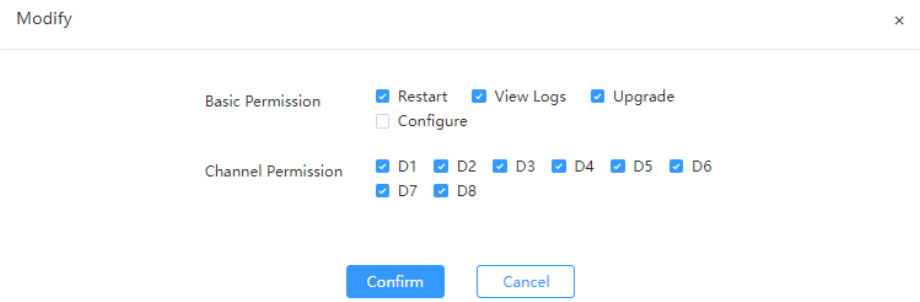
10 System Configuration

10.1 User Configuration

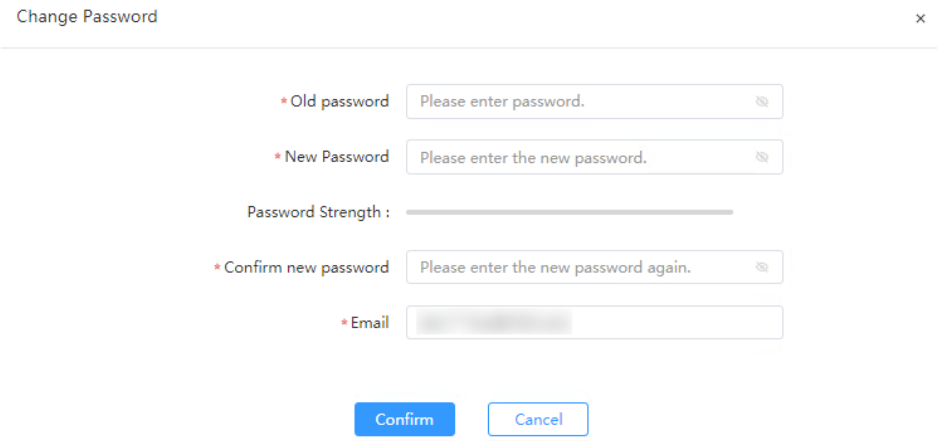
- Add user: Click **Add**, and then configure the parameters.



- Modify permissions



- Change password:



NOTE!
Only admin can modify the email address.

- Delete user

10.2 Time Configuration

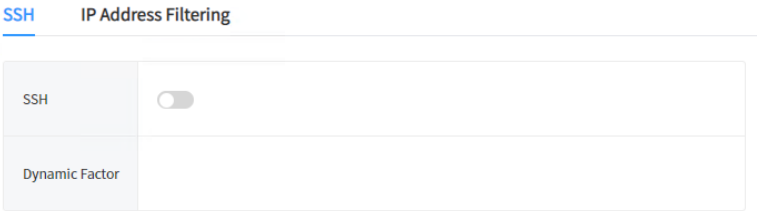
The system's default time zone is UTC +00:00.

- Set Time Manually: Set the date and time manually, or click **Sync with Computer** to sync with the computer time.
- Sync with NTP Server: Enable this function and set the NTP server address, port, and time sync interval.

10.3 Security

10.3.1 SSH

When enabled, you can access the smart box's background to perform management operations via the SSH protocol.

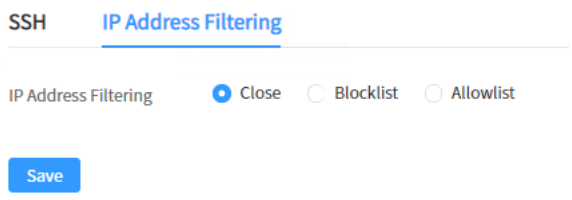


10.3.2 IP Address Filtering

Use IP address to allow or forbid access to the smart box.

- Off: IP address filtering is disabled.
- Blocklist: Access from IP addresses on the blocklist is forbidden. Up to 64 IP addresses are allowed on the blocklist.

- Allowlist: Only access from IP addresses on the allowlist is allowed. Up to 64 IP addresses are allowed on the allowlist.



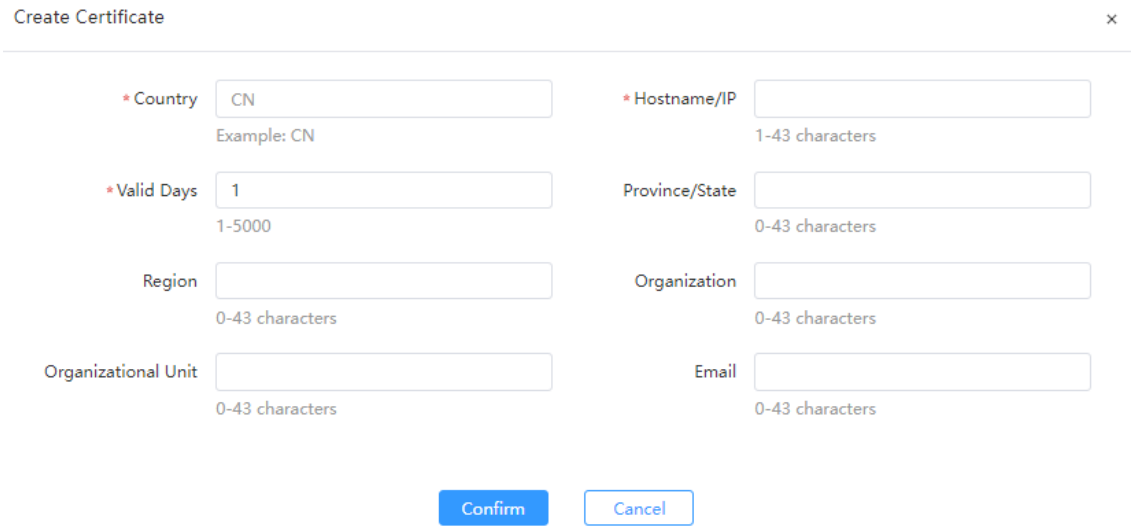
10.3.3 HTTPS

When enabled, the system can be accessed via HTTPS. A certificate is a unique electronic document on the Internet representing individuals and resources, ensuring secure and confidential communication between entities. Please select a certificate type as needed. Installed certificates can also be deleted.

Certificate Type	Application Scenarios
Private Certificate: Fill in the certificate information and install a digital certificate created by the software developer.	Suitable for scenarios with low security requirements.
Install Signed Certificate: Directly install a certificate signed and certificated by a professional institution.	Suitable for scenarios with high security requirements.
Request, Install Signed Certificate: You need to manually create a certificate request and get it signed by a professional institution, and then install it.	

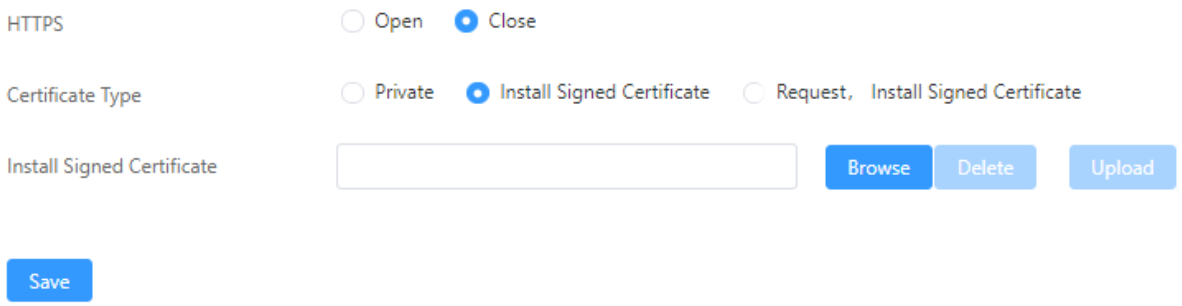
Private Certificate

Click **Create**. Fill in the certificate information, and then click **Confirm**. Click **Save**.



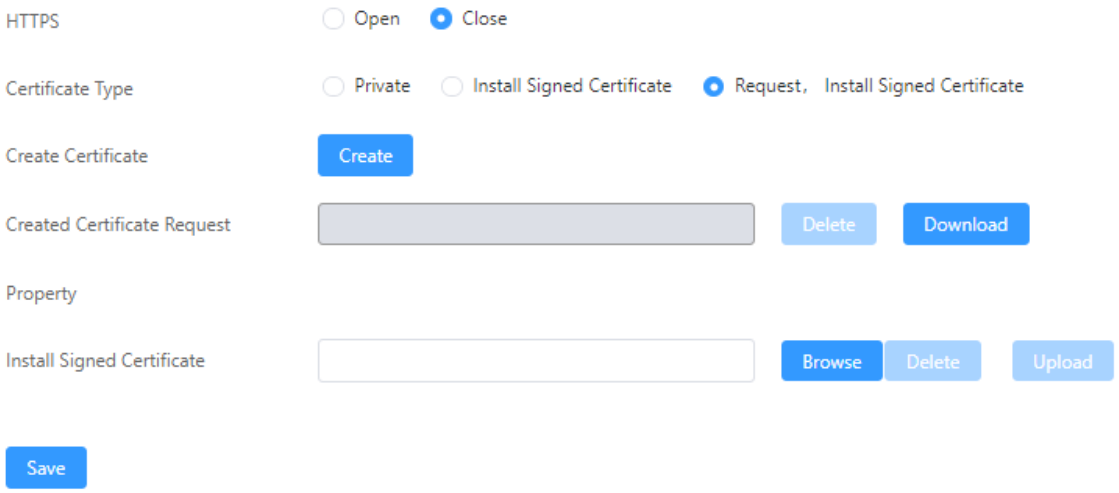
Install Signed Certificate

Click **Browse**. Select a certificate from local, and then click **Upload**. Click **Save**.



Request, Install Signed Certificate

1. Click **Create**. Fill in the certificate information, and then click **Confirm**.
2. Click **Download** to obtain the certificate request. Then, get it signed by a professional institution.
3. Click **Browse**. Select a certificate from local, and then click **Upload**. Click **Save**.

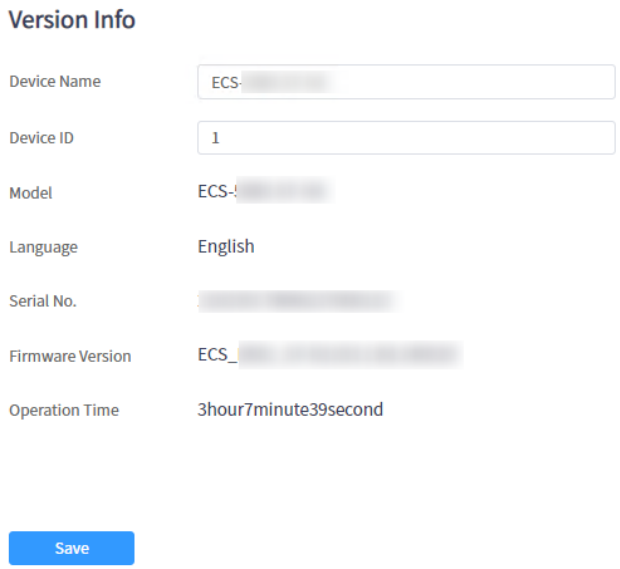


10.4 Maintenance

- Upgrade the version: Click , locate the upgrade package (contact technical support for the package), and then click **Upgrade** or **Complete Upgrade**.
  - Upgrade: The configuration and alarm data of the current version will be kept.
  - Complete Upgrade: All the configuration and alarm data of the current version will be deleted.
- Restore default settings: Click **Restore** to restore default settings. You may choose whether to keep the current network settings and user settings.
- Restart the device: Click **Restart** to restart the device
- Import or export configuration: Click , set the path, and then click **Import** or **Export**.
- Export diagnosis information: Click **Export** to export diagnosis information.
- Hard disk management: You can format the hard disk when encountering issues such as disk mounting failure, disk offline, full storage, etc.

10.5 Version Information

You can view the version information, and set the device name and device ID.

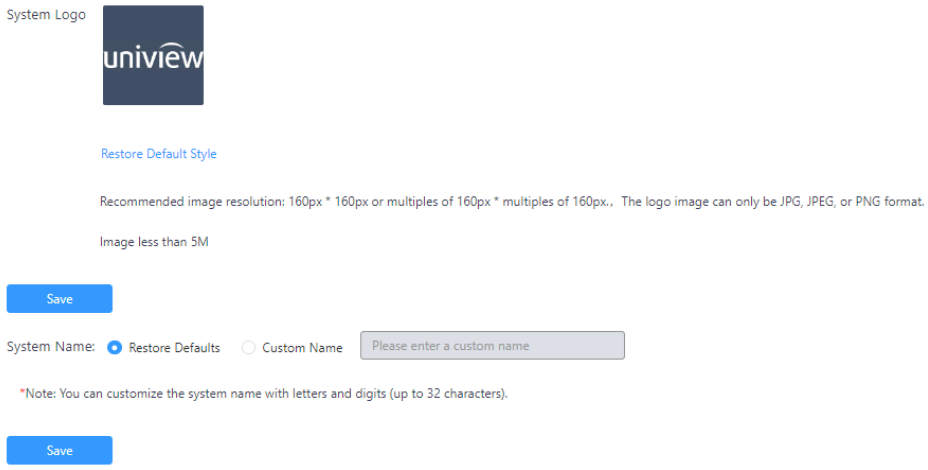


10.6 Personalization

10.6.1 Logo and Name

Set a custom logo and system name.

- To customize the logo, click the current logo and select an image from local.
- To customize the name, select **Custom Name** and enter a custom name in the entry box.

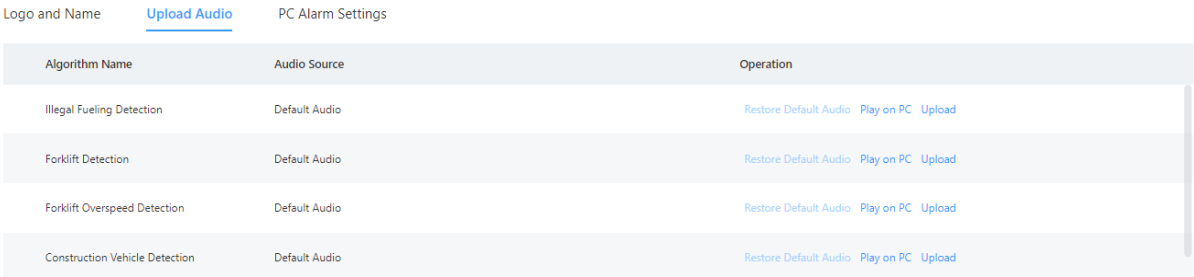


10.6.2 Upload Audio

You can customize alarm audio for different intelligent services. The custom audio supports WAV format only, with 16-bit or 32-bit depth, and a sampling rate of 16000-48000.

1. Click **Upload** for an algorithm and select an audio file from local.
2. Click **Play on PC** to output the audio file through the local PC for checking.

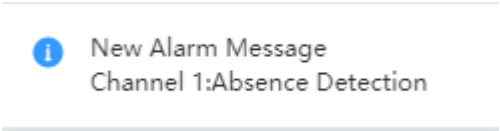
3. (Optional) If a custom audio is no longer needed, you can click **Restore Default Audio** to revert to the system's default alarm audio.



10.6.3 PC Alarm Settings

Set channel's alarm linkage with PC.

- Alarm Pop-up Window: When enabled, if an alarm is triggered on the channel, a pop-up window containing alarm information will be displayed on the lower-right corner.



- Alarm Audio: When enabled, if an alarm is triggered on the channel, the PC will play a notification sound to notify you.

10.7 Network Information

10.7.1 Packet Capture

Choose the NIC whose packets you want to capture, and then set the packet size, IP address, port number, and select **All/Specify/Filter** as needed, and then click **Start Capture** to start capturing packets. When finished, you can click **Export** to export the captured packets and analyze them using Wireshark.

NOTE!

- The maximum size of the captured packets is 65535 bytes or 100MB.
- When **Specify** is selected, only packets of the specified port/ IP will be captured.
- When **Filter** is selected, packets of the specified port/IP will be filtered and not captured; while other packets will be captured.

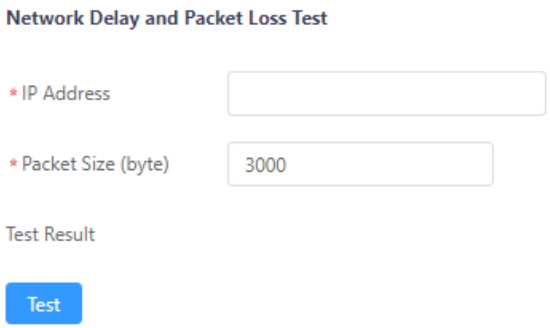
10.7.2 Network Resource Statistics

The page displays information about the smart box's network resources. The information refreshes every 5s.

Type	Bandwidth
IPC Connection	10Mbps
Remote Live View	0bps
Idle Receive Bandwidth	150Mbps
Idle Send Bandwidth	160Mbps

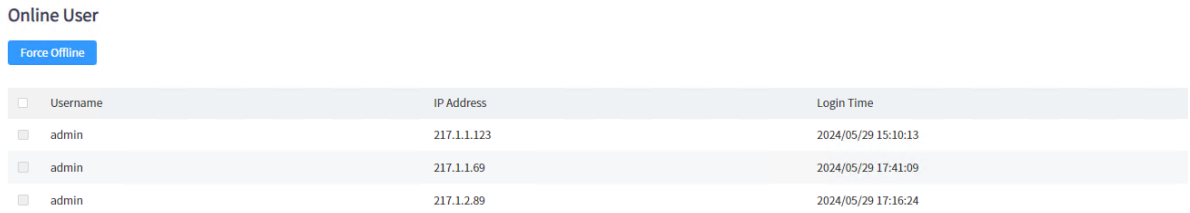
10.7.3 Network Test

Test network conditions between Smart Box and the target IP address. Packet size can be adjusted based on the actual network conditions.



10.8 Online User

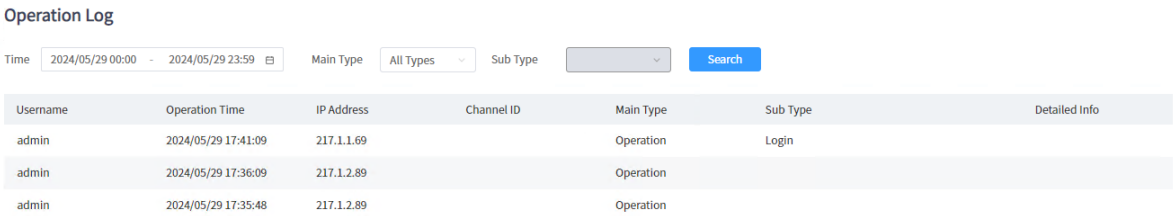
View the online users and the corresponding login IP and login time.



NOTE!
Only admin can force a user to go offline.

10.9 Operation Logs

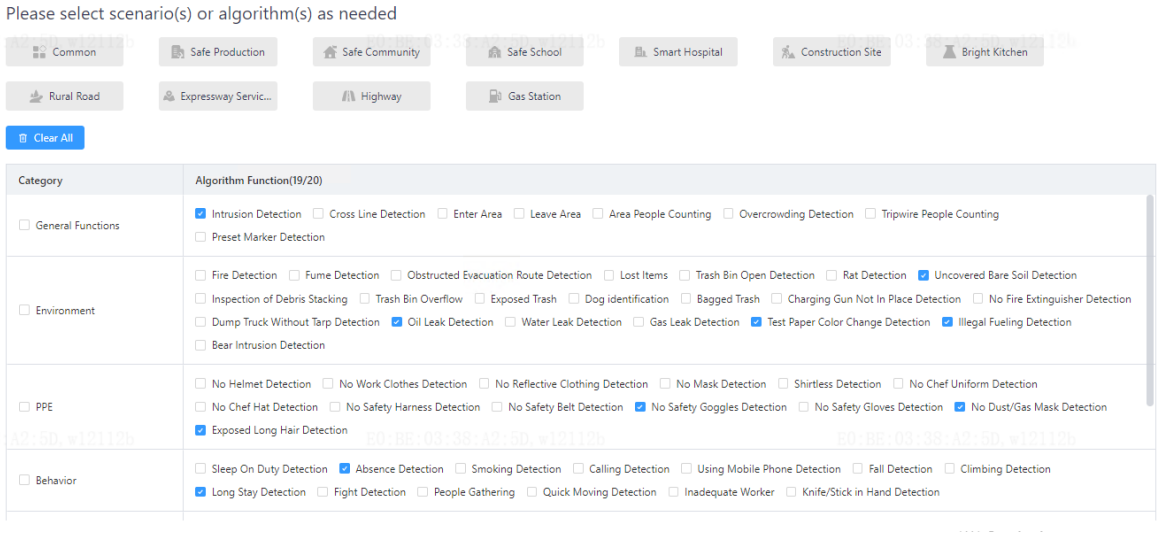
Search operation logs by time range and log type (main type and sub type).



10.10 Smart Capability Configuration

1. Select a scenario or algorithm(s) based on your actual needs.

   After selecting a scenario, the commonly used algorithms for that scenario will be automatically selected. You can also manually add or remove algorithms as needed.
2. Click **OK**.
3. Go to Intelligent Analysis Configuration and configure the corresponding algorithms.



11 Network Configuration

11.1 TCP/IP

Basic Information

Click **Edit** to edit the basic network information.

- Static: Click **Static**, and then set the IP address, subnet mask, and default gateway manually.
- DHCP: Use DHCP to automatically assign the IP address, subnet mask, and default gateway.

NOTE!
If the smart box needs to connect to both the WAN and LAN, you need to set up a dual-NIC configuration.

DNS Server

Choose a reliable and trustworthy DNS server to avoid security risks. If the preferred DNS server is unavailable, the alternate server will take over automatically.

Default NIC

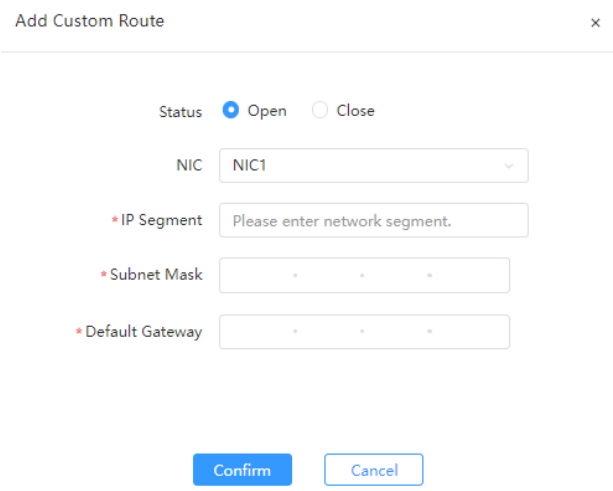
Choose a preferred NIC for network communication and data transmission, and then click **Save**.

11.2 Port

You can configure the HTTP port, HTTPS port, and SSH port as needed. For subsequent accesses, you need to add the corresponding port number, for example, http://ip:80.

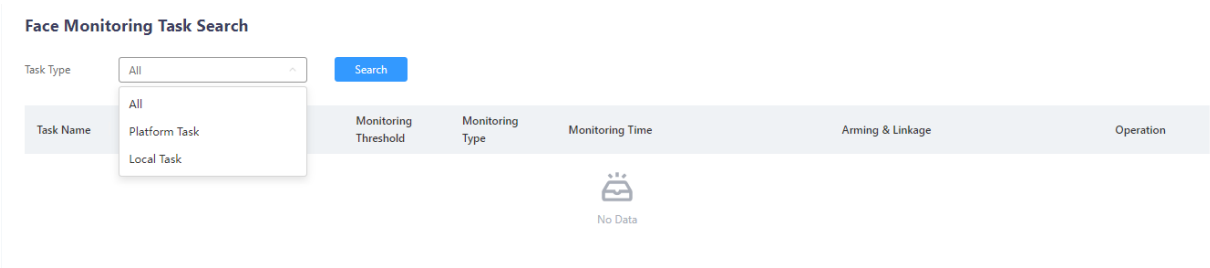
11.3 Custom Route

Click **Add** to add a custom route.



12 Face Monitoring Task Search

Search for face monitoring tasks by task type, whether they are configured locally or by the upper-level platform. Up to 16 monitoring tasks can be configured for a channel. You can also deleted tasks that are no longer needed.



NOTE!

- For local task configuration, please refer to Intelligent Analysis Configuration.
- The upper-level platform cannot access the tasks configured locally.