



HikCentral Lite V1.0.1

User Manual

Legal Information

About this Document

- This Document includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only.
- The information contained in the Document is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of the Document at the Hikvision website (<https://www.hikvision.com>). Unless otherwise agreed, Hangzhou Hikvision Digital Technology Co., Ltd. or its affiliates (hereinafter referred to as "Hikvision") makes no warranties, express or implied.
- Please use the Document with the guidance and assistance of professionals trained in supporting the Product.

About this Product

This product can only enjoy the after-sales service support in the country or region where the purchase is made.

Acknowledgment of Intellectual Property Rights

- Hikvision owns the copyrights and/or patents related to the technology embodied in the Products described in this Document, which may include licenses obtained from third parties.
- Any part of the Document, including text, pictures, graphics, etc., belongs to Hikvision. No part of this Document may be excerpted, copied, translated, or modified in whole or in part by any means without written permission.
- **HIKVISION** and other Hikvision's trademarks and logos are the properties of Hikvision in various jurisdictions.
- Other trademarks and logos mentioned are the properties of their respective owners.

LEGAL DISCLAIMER

- TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THIS DOCUMENT AND THE PRODUCT DESCRIBED, WITH ITS HARDWARE, SOFTWARE AND FIRMWARE, ARE PROVIDED "AS IS" AND "WITH ALL FAULTS AND ERRORS". HIKVISION MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY, SATISFACTORY QUALITY, OR FITNESS FOR A PARTICULAR PURPOSE. THE USE OF THE PRODUCT BY YOU IS AT YOUR OWN RISK. IN NO EVENT WILL HIKVISION BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INCIDENTAL, OR INDIRECT DAMAGES, INCLUDING, AMONG OTHERS, DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, OR LOSS OF DATA, CORRUPTION OF SYSTEMS, OR LOSS OF DOCUMENTATION, WHETHER BASED ON BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), PRODUCT LIABILITY, OR OTHERWISE, IN CONNECTION WITH THE USE OF THE

PRODUCT, EVEN IF HIKVISION HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES OR LOSS.

- YOU ACKNOWLEDGE THAT THE NATURE OF THE INTERNET PROVIDES FOR INHERENT SECURITY RISKS, AND HIKVISION SHALL NOT TAKE ANY RESPONSIBILITIES FOR ABNORMAL OPERATION, PRIVACY LEAKAGE OR OTHER DAMAGES RESULTING FROM CYBER-ATTACK, HACKER ATTACK, VIRUS INFECTION, OR OTHER INTERNET SECURITY RISKS; HOWEVER, HIKVISION WILL PROVIDE TIMELY TECHNICAL SUPPORT IF REQUIRED.
- YOU AGREE TO USE THIS PRODUCT IN COMPLIANCE WITH ALL APPLICABLE LAWS, AND YOU ARE SOLELY RESPONSIBLE FOR ENSURING THAT YOUR USE CONFORMS TO THE APPLICABLE LAW. ESPECIALLY, YOU ARE RESPONSIBLE, FOR USING THIS PRODUCT IN A MANNER THAT DOES NOT INFRINGE ON THE RIGHTS OF THIRD PARTIES, INCLUDING WITHOUT LIMITATION, RIGHTS OF PUBLICITY, INTELLECTUAL PROPERTY RIGHTS, OR DATA PROTECTION AND OTHER PRIVACY RIGHTS. YOU SHALL NOT USE THIS PRODUCT FOR ANY PROHIBITED END-USES, INCLUDING THE DEVELOPMENT OR PRODUCTION OF WEAPONS OF MASS DESTRUCTION, THE DEVELOPMENT OR PRODUCTION OF CHEMICAL OR BIOLOGICAL WEAPONS, ANY ACTIVITIES IN THE CONTEXT RELATED TO ANY NUCLEAR EXPLOSIVE OR UNSAFE NUCLEAR FUEL-CYCLE, OR IN SUPPORT OF HUMAN RIGHTS ABUSES.
- IN THE EVENT OF ANY CONFLICTS BETWEEN THIS DOCUMENT AND THE APPLICABLE LAW, THE LATTER PREVAILS.

© Hangzhou Hikvision Digital Technology Co., Ltd. All rights reserved.

Contents

Chapter 1 Learn About HikCentral Lite	1
1.1 Recommended Running Environment	2
1.2 Comparison Between Free and Full Version	3
1.3 System Configurations and Performance	4
1.3.1 Detailed Performance	5
1.4 Decoding Performance of Desktop	7
1.4.1 Detailed Performance	8
1.5 Document Guide	9
Chapter 2 Get Started	10
2.1 Configure the System Capability	10
2.2 Activate License	11
2.2.1 Activate the License Online	11
2.2.2 Activate the License Offline	12
2.3 Add Devices	13
2.4 Add a Server and View Server Details	16
2.5 Configure User Preference	17
Chapter 3 Video Monitoring	21
3.1 Preparations	21
3.1.1 Add Encoding Devices	21
3.1.2 View and Configure Details of Encoding Devices	22
3.1.3 Add an Alarm for an Encoding Device	24
3.2 Basic Functions Related to Video Monitoring	25
3.2.1 Start Live View / Playback of Camera	25
3.2.2 PTZ Control During Live View	29
3.2.3 Monitor via Cameras on the Map	29
3.2.4 VCA Configuration	32

3.3 Face Picture Comparison and Human Body Detection	34
3.3.1 Add Face Picture Libraries and Face Pictures	34
3.3.2 View Videos Related to Face and Human Body Recognition	35
3.3.3 Search for Recognized Face Pictures and Human Body Pictures	36
3.3.4 Search Records of Face Picture Comparison and Human Body Recognition by a Picture	38
3.4 Vehicle Monitoring	39
3.4.1 Add Vehicle Lists and Vehicles	39
3.4.2 View Video Related to Vehicle Monitoring	40
3.4.3 Search and Export ANPR Events	41
3.5 Generate and View People Counting Report	42
3.6 (Optional) Local Configurations Related to Video Monitoring	45
Chapter 4 Access Control and Video Intercom	46
4.1 Preparations	47
4.1.1 Add Devices	47
4.1.2 View Details of a Device	48
4.1.3 View Details of a Door	49
4.2 Add Departments and Persons	50
4.2.1 Configure Credential-Related Parameters	53
4.2.2 Protect Profile Pictures	53
4.3 Add and Assign Access Levels	55
4.4 Add an Alarm	58
4.5 Real-Time Monitoring of Doors	60
4.5.1 Monitor Doors and Control Door Status	61
4.5.2 Display and Control Doors on the Map	62
4.6 Video Intercom	65
4.7 Import Person Authentication Events from Devices to the Client	66
4.8 Search for Access Events	68

4.9 Display Statistics of Person&Credentials, Access Levels, and Access Events	70
Chapter 5 Main Panel for Monitoring and Control	73
Chapter 6 Search	75
6.1 Search for Detected Vehicles or Persons by Cameras/Doors	76
6.2 Search for Detected Persons or Vehicles in VCA Areas	79
6.3 Search for Detected Persons/Vehicles by Features	80
Chapter 7 Event and Alarm	81
7.1 Supported Triggering Events	81
7.2 Event Subscription	92
7.3 Add an Alarm	93
7.4 Supported Linkage Actions	94
7.5 Alarm List	95
7.6 Search for and Export Alarms	96
7.7 Local Configuration About Event and Alarm	96
Chapter 8 Management of Users and Roles	97
8.1 Add a User	97
8.2 Supported Operations on the User List	98
8.3 Add a Role	98
8.4 Configure Account Security Rules	101
8.5 Reset Login Password	102
Chapter 9 System Configuration	103
9.1 Configure Email Parameters	103
9.2 Configure Picture/File Storage Location and Data Retention Period	103
9.3 Add or Edit a Holiday	104
9.4 Configure NTP Synchronization / Device Access Protocol / WAN Access / Server Address, and Reset Network Info	105
9.5 Use SSL/TLS Certificate for HTTPS Connections	107
9.6 Configure Service Component Certificate	110

Chapter 10 Maintenance 111

 10.1 Generate and Display Maintenance Report 111

 10.2 Search for Notifications 114

 10.3 Search for System Logs 115

Appendix A. Other System Configurations and Performance 117

Appendix B. Past User Manuals 118

Chapter 1 Learn About HikCentral Lite

The HikCentral Lite is a lightweight architecture product that integrates configuration and application, featuring functions related to video monitoring, access control, and video intercom. Intelligent applications are also supported including license plate No. recognition, human body / face recognition, and people counting.

The system has a simple and clear interaction design and guidance that allows users to quickly get started. It supports quickly importing the configuration file got from the iVMS-4200. The product is compatible with third-party devices.

The Mobile Client is provided with features of live view, playback, alarm checking, etc.

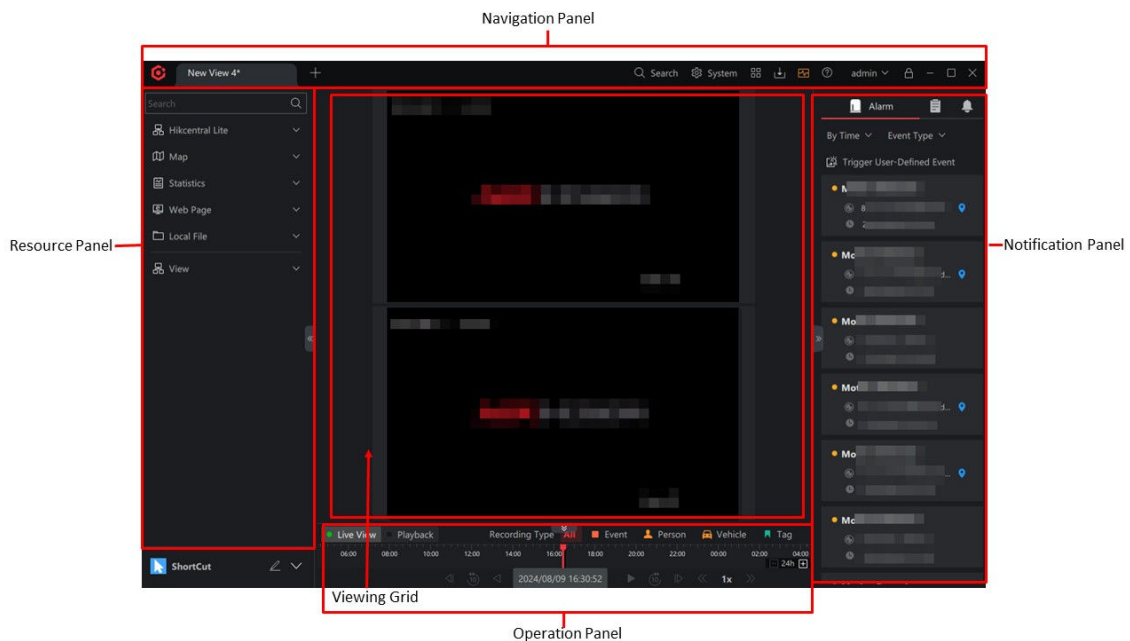


Figure 1-1 Main Page

See **Main Panel for Monitoring and Control** for details about the main page.

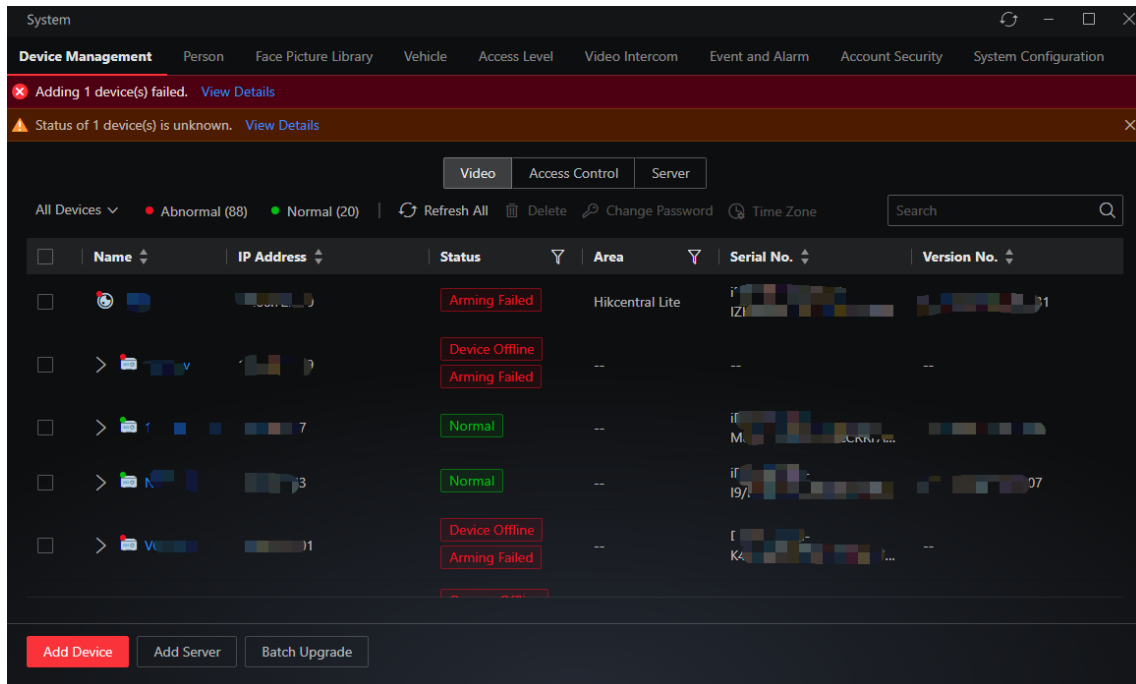


Figure 1-2 System Window

1.1 Recommended Running Environment

Table 1-1 Recommended Running Environment

Platform	OS
Server	- Microsoft® Windows 11 64-bit - Microsoft® Windows 10 64-bit - Microsoft® Windows Server 2019 64-bit - Microsoft® Windows Server 2016 64-bit - Microsoft® Windows Server 2012 R2 64-bit - Microsoft® Windows Server 2012 64-bit - Microsoft® Windows Server 2022 Note For Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.
Desktop	- Microsoft® Windows 11 64-bit - Microsoft® Windows 10 64-bit - Microsoft® Windows Server 2019 64-bit - Microsoft® Windows Server 2016 64-bit

Platform	OS
	- Microsoft® Windows Server 2012 R2 64-bit - Microsoft® Windows Server 2012 64-bit - Microsoft® Windows Server 2022  Note For Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.
Mobile Client	- iOS 12.0 and later - Android 6.0 and later

1.2 Comparison Between Free and Full Version

This topic shows the differences of HikCentral Lite maximum performance between the free version and full version.

Table 1-2 Manageable Resources

Performance	Full Version	Free Version
Total Cameras (Including people counting cameras, ANPR cameras, cameras for face picture comparison, and cameras accessed via ONVIF protocol)	128	16
People Counting Cameras	128	0
ANPR Cameras	8	0
Cameras for Face Picture Comparison	16	0
Cameras Accessed via ONVIF Protocol	128	0
Doors	32	2
External Streaming Servers	64	64

Table 1-3 Others

Performance	Full Version	Free Version
Vehicles	2,000	0

Table 1-4 Access Control

Performance	Full Version	Free Version
Persons	500	500
Credentials	Cards: 1,000 Face Pictures: 500 Fingerprints: 1,000 Irises: 1,000	Cards: 1,000 Face Pictures: 500 Fingerprints: 1,000 Irises: 1,000

Table 1-5 Users

Performance	Full Version	Free Version
Users	128	128
Roles	64	64
Users Logged In Simultaneously via Desktop	64	2
Users Logged In Simultaneously via Mobile Client	64	0

1.3 System Configurations and Performance

The system performance is tested based on the following configurations.

System Configurations

Table 1-6 System Configurations

Feature	Configuration 1	Configuration 2
CPU	Intel® Core™ i3-12500	Intel® Core™ i5-12500
RAM	4 GB	2*8 GB
NIC	GbE Network Interface Card	GbE Network Interface Card
SSD for OS	SATA 7200 RPM Enterprise Class SSD	SATA 7200 RPM Enterprise Class SSD
SSD for Picture Storage	Enterprise-class SSD or high performance network SSD. It should support writing or reading of 10 MB/s.	Enterprise-class SSD or high performance network SSD. It should support writing or reading of 20 MB/s.

Feature	Configuration 1	Configuration 2
SSD Capacity for Database	At least 500 GB	At least 500 GB
OS	Microsoft® Windows 10 64-bit or later	Microsoft® Windows 10 64-bit or later

1.3.1 Detailed Performance

Here shows the performance.

Manageable Resources

The maximum number of all resources supported by configuration 1 is 256, and the maximum number of all resources supported by configuration 2 is 500. See the table below for the number of devices supported across different device types.

Table 1-7 Manageable Resources

Resource Type	Configuration 1	Configuration 2
Cameras (Including cameras accessed by ONVIF protocol and third-party cameras)	64 (No more than 4 ANPR cameras and 8 cameras for face picture comparison are allowed.)	128 (No more than 8 ANPR cameras and 16 cameras for face picture comparison are allowed.)
Doors	16	32
External Streaming Servers	64	

Video

For channels that can be viewed simultaneously, see [***Decoding Performance of Desktop***](#) .

Access Control

Table 1-8 Access Control Related Performance

Parameter	Configuration 1	Configuration 2
Persons	200	500
Cards	600	1,500
Profile Pictures	200	500
Fingerprints	400	1,000
Irises	400	1,000

Performance of Main Panel for Monitoring and Control

Table 1-9 Performance of Main Panel for Monitoring and Control

Parameter	Configuration 1	Configuration 2
Resources in One View	32	64
Resources in Multiple Views	128	256
Areas	128	256
Map	• Total E-Maps: 8 • Maps in One View: 2	• Total E-Maps: 16 • Maps in One View: 4

The following performance are not limited by configurations.

Table 1-10 Performance Not Limited by Configurations

Parameter	Performance
New Windows	4
Views	64
Area Levels	5
Resources on GIS Map or Each E-Map	256

Users, Roles, and Permissions

Table 1-11 Performance of Users, Roles, and Permissions

Parameter	Configuration 1	Configuration 2
Max. Users	64	128
Max. Roles	32	64
Max. Online Users on Desktop	32	64
Max. Online Users on Mobile Clients	32	64

Event and Alarm

Table 1-12 Performance of Event and Alarm

Parameter	Configuration 1	Configuration 2
Events Receiving	10/s	20/s
Number of Alarm Rules	500	1000
Speed of Pushing Alarms/ Events/Notifications from Server to One Client	10/s	20/s

Performance of Data Storage

Table 1-13 Performance of Data Storage

Parameter	Configuration 1	Configuration 2
Retention Period of Captured Faces, ANPR Records, Events, Intelligent Analysis Data, Access Records, and System Logs	3 Years	3 Years
Storage Capacity (including captured faces, ANPR records, events, intelligent analysis data, access records, and system logs)	10 million	10 million

1.4 Decoding Performance of Desktop

The performance is tested in the following configuration.

Table 1-14 Configuration

Feature	Configuration
Recommended Model	DS-VP41D-C/HW5
CPU	Intel® Core™ i5-12500 3.0.0 GHz
RAM	16 (8+8) GB
NIC	Intel® Ethernet Connection (17) I219-LM

Feature	Configuration
Graphics Card	Intel® UHD Graphics 770
OS	Microsoft® Windows 10 (64-bit)

1.4.1 Detailed Performance

This topic introduces the hardware and software decoding performance of different encoding formats including H.264 and H.265.

H.264

Table 1-15 Performance of H.264 with Hardware Decoding

Frame Rate (fps)	Bit Rate (Mbps)	Resolution	Max. Live View Channels
30	6	1080p	35
30	12	8 MP	10

Table 1-16 Performance of H.264 with Software Decoding

Frame Rate (fps)	Bit Rate (Mbps)	Resolution	Max. Live View Channels
30	6	1080p	15
30	12	8 MP	5

H.265

Table 1-17 Performance of H.265 with Hardware Decoding

Frame Rate (fps)	Bit Rate (Mbps)	Resolution	Max. Live View Channels
30	3	1080p	41
30	6	8 MP	11

Table 1-18 Performance of H.265 with Software Decoding

Frame Rate (fps)	Bit Rate (Mbps)	Resolution	Max. Live View Channels
30	3	1080p	13
30	6	8 MP	4

For environments where the iVMS-4200 is running, with a CPU earlier than Intel® Core™i3-8100, 4 GB of RAM, and a SATA 7200 RPM Enterprise Class HDD, see recommendations in **Other System Configurations and Performance** for migrating from iVMS-4200 to HikCentral Lite.

1.5 Document Guide

- **Release Notes** (What's new about the current version and history versions)
- **Data Sheet** (Helps make a buying decision about the product by providing technical specifications)
- **Compatibility List of Devices** (Provides supported Hikvision devices and third-party devices)
- **Hardening Guide** (Informs users of the factors affecting the system security and provides security suggestions for users in terms of system overall security)
- **User Manual** (Gives you detailed guidance of how to use the product)
- **Quick Start Guide of Mobile Client** (Provides simple introduction of functions on different pages for beginners)

Chapter 2 Get Started

This chapter is designed to help you quickly understand and deploy the product as a guideline for setting up and initial use.

2.1 Configure the System Capability

The system supports the configuration of two major service capabilities: **Access Control** and **Video**. Each service capability, once activated, corresponds to a set of features as outlined below.

You can configure the service capability via two options:

- During the initial deployment and setup process.
- On the Home page, go to **System** → **System Configuration** → **Service Capability**.

By default, both capabilities are enabled. At least one business capability will remain operational. If the only active capability is disabled, another capability will automatically activate to maintain system functionality.

If access control and/or video device type in the service capability has been added in the system, disabling the corresponding service capability is not allowed. Once the corresponding devices are removed from the system, the service capability can then be disabled.

Only enable Video

When only enabling **Video**, the following features are disabled:

- Access control and video intercom devices are not allowed to add when adding devices.
- **Access Control** on the device management page, **Person**, and **Video Intercom**.
- The pre-defined **ShortCut** for access control in the main panel for monitoring and control.
- On the Home page, access control-related records in **Alarm**, **Event**, and **Notifications** in the right navigation bar.
- Access control operation in **Permission Item** when adding roles in **Account Security**.
- On the Home page, the corresponding device type filter conditions in **Map** in the left navigation bar.
- The access control events and linkage action in **Event and Alarm**.
- The ISAPI protocol type when manually adding devices.
- The **Save Model Data of Profile Picture Only** feature (person profile picture will be converted to unreadable modeling data for saving) in **Profile Picture**.

Only enable Access Control

When only enabling **Access Control**, the following features are disabled:

- Encoding devices and streaming servers are not allowed to add when adding devices.
- On the system page, hide the entry of **Face Picture Library** and **Vehicle**.
- Video-related operation in **Permission Item** when adding roles in **Account Security**.

- The retrieval of **Vehicle Passing Record**, **Face Capture**, and video-related events in **Alarm** and **Notifications**.
- **Person** and **Vehicle** on the right side of the Main Panel.
- Video-related events and linkage action in **Event and Alarm**.
- On the Home page, the corresponding device type filter conditions in **Map** in the left navigation bar.
- The pre-defined **ShortCut** for video in the Main Panel.

2.2 Activate License

After installing the client, you will have a temporary License for a specified number of devices and limited functions. To ensure the proper use of the client, you can activate the Server to access more functions and manage more devices. If you do not want to activate the Server now, you can skip this chapter and activate it later.



Note

- Only the admin user can perform the activation, update, and deactivation operation.
- If you encounter any problems during activation, update, and deactivation, please send the server logs to our technical support engineers.

On the License Overview page, you can click  to select available resources to configure Facial and Human Body Recognition cameras or ANPR cameras.

2.2.1 Activate the License Online

If your computer can connect to the Internet, you can activate the Server in online mode.

Steps

1. On the Home page, click the user name located at the top right corner, then select **License Management** to open the license management panel.
2. Click the **Activate License** button at the lower left corner to proceed.
3. Select **Online Activate** as the activation type to activate the license in online mode.
4. Enter the activation code received when you purchased your License.

If you have purchased more than one Licenses, you can click **Add** and enter other activation codes.



Note

The activation code should contain 32 characters (except dashes).

-
5. Check **I accept the terms of the agreement Hikvision Software User License Agreement** and **I accept the terms of the agreement Data Protection Statement** to open the License Agreement panel and click **OK**.
 6. Click **Activate**.

2.2.2 Activate the License Offline

If your computer cannot connect to the Internet, you can activate the License in offline mode.

Steps

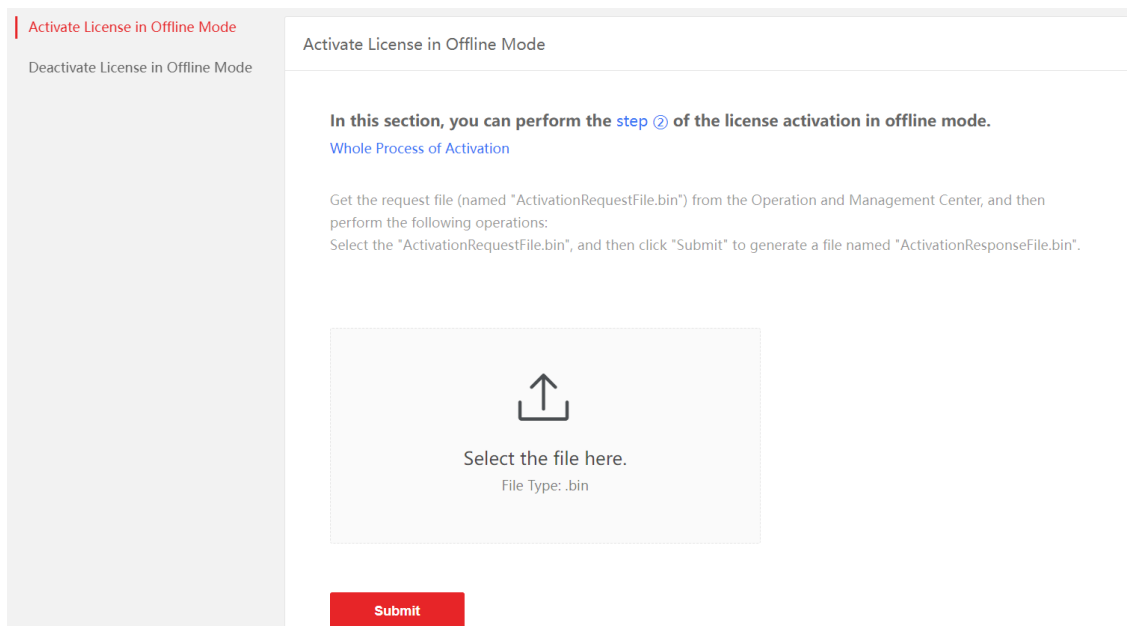
1. On the Home page, click the user name located at the top right corner, then select **License Management** to open the license management panel.
2. Click the **Activate License** button at the lower left corner to proceed.
3. Select **Offline Activate** as the activation type to activate the license in offline mode.
4. Enter the activation code received when you purchased your License.
If you have purchased more than one Licenses, you can click **Add** and enter other activation codes.



Note

The activation code should contain 32 characters (except dashes).

5. Check **I accept the terms of the agreement Hikvision Software User License Agreement** and **I accept the terms of the agreement Data Protection Statement** to open the License Agreement pane and click OK.
6. Click **Generate Request File**.
A request file named "ActivationRequestFile.bin" will be downloaded. Click **View File** to save the request file to the proper directory or the removable storage medium (e.g., USB flash disk) or click  on the home page to view downloading records.
7. Copy the request file to the computer that can connect to the Internet.
8. On the computer which can connect to the Internet, enter the following website: <https://kms.hikvision.com/#/active>.



Activate License in Offline Mode

Deactivate License in Offline Mode

In this section, you can perform the [step ②](#) of the license activation in offline mode.

[Whole Process of Activation](#)

Get the request file (named "ActivationRequestFile.bin") from the Operation and Management Center, and then perform the following operations:
Select the "ActivationRequestFile.bin", and then click "Submit" to generate a file named "ActivationResponseFile.bin".

Select the file here.
File Type: .bin

Submit

9. Click  and then select the downloaded request file.

10. Click **Submit.**

A respond file named "ActivationResponseFile.bin" will be downloaded. Save the respond file to the proper directory or the removable storage medium (e.g., USB flash disk).

11. Go back to the **Activate License panel and click to select the downloaded respond file or drag the file.**

12. Click **Activate.**

2.3 Add Devices

You can add encoding devices, access control devices, and video intercom devices by auto detect, batch import, manually add, as well as data migration from iVMS-4200.

Add Device

On the Home page, go to **System → Device Management → Add Device** to select supported adding modes: **Auto Detect**, **Batch Import**, and **Manually Add**.

You can also add device(s) by right-clicking an area or through a shortcut.

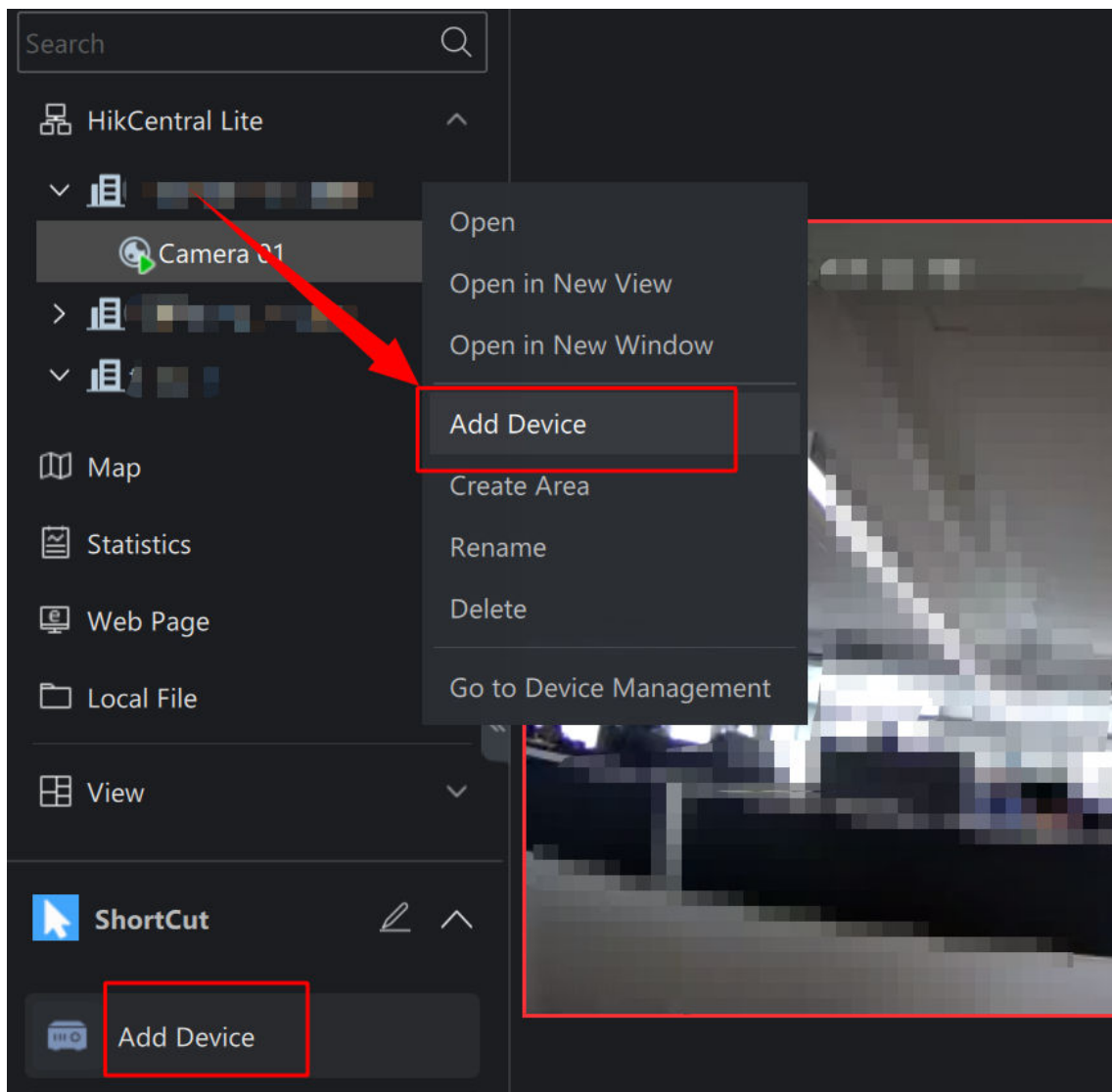


Figure 2-1 Other Entries for Adding Devices

Data Migration

- On the Home page, go to **System** → **Device Management** → **Move Now** .
- (Only supported on the Server) On the Home page, go to **Username** → **Data Migration** .

Table 2-1 Add Device

Mode	Description
Auto Detect	Select this one to detect devices that are on the same LAN as the server or client. You can perform the following operations.

Mode	Description
	• Specify IP Range supports discovering all accessible networks by the current client, regardless of whether these networks are on the same network as the client or server.  Note The feature is only effective when the device supports the ONVIF protocol. • Click  to edit Device IP Address and Port number. • Click  to reset the password. • Click  to filter by Activated or Unactivated, as well as device type. • If the device status is unactivated, click Activate to activate the device before adding it.
Batch Import	Select this one if the IP address, port No., ID, and secret key of multiple devices are known. You can quickly add a batch of devices without verifying their validity. Select this one if the device is offline or the device and the server or the client are not on the same LAN.
Manually Add	Select this one if the IP address, port No., ID, and secret key of single device are known. You can choose from the following access protocols and enter the required device information: • Hikvision Private Protocol • Hikvision ISUP Protocol • Hikvision ISAPI Protocol • ONVIF Protocol
Data Migration from iVMS-4200	Only supported on the server when an admin performs the operation. You can import the following information from iVMS-4200: • Devices and resources (encoding devices and access control devices) • Recording schedules • Person information, credentials, and access level permissions • Access control event records

After adding devices, right-click the device to perform further operations on the device list. Viewing the serial number and version number of cameras under NVRs is supported.

Set Time Zone

Select one or more device(s), click **Time Zone** to set / edit the time zone.



Note

You can only set time zone for online devices.

Remote Configuration

Hover on one device, then right-click and select **Device Remote Configuration**.

Apply Settings Manually to Access Control Devices

For offline device(s), parameters are stored on the platform. After the device(s) goes online, the stored parameter configurations need to be manually pushed to the device.

- You need to apply platform access control settings (including multi-factor authentication, multi-door interlocking, first person in, and remaining unlocked/locked) to device manually, after you restore device parameters to default values, restore database, or set doors to remain locked/unlocked.
- On the **Access Control** panel, click **Apply Manually**.

See **System Configurations and Performance** for the number of devices supported by the client.



Note

For devices configured with the linkage action of capturing, and devices added by Hikvision ISUP Protocol, the pictures from the devices may be transmitted to the Server via HTTP.

2.4 Add a Server and View Server Details

You can add an external streaming server to the system for distributing and streaming the media content in real-time to multiple clients or devices. This setup allows for efficient management of video data, ensuring immediate accessibility as needed.

Add a Server

On the Home page, go to **System → Device Management → Add Server**.

The server is for the live view, playback, video intercom, etc. **Max. Streaming Channel** refers to the max. channel of streams that the streaming server can support.

After adding servers, you can perform further operations on the server list.

View Alarm Configuration

Hover on one server, then right-click and select **View Alarm Configuration** to view and edit the alarm configurations of the corresponding server.

Remote Configuration

Hover on one server, then right-click and select **Configure on Device** to open the device's web configuration page.

View Server Details

Hover on the server, then right-click and select **View Details** to view the specific information of the corresponding server.

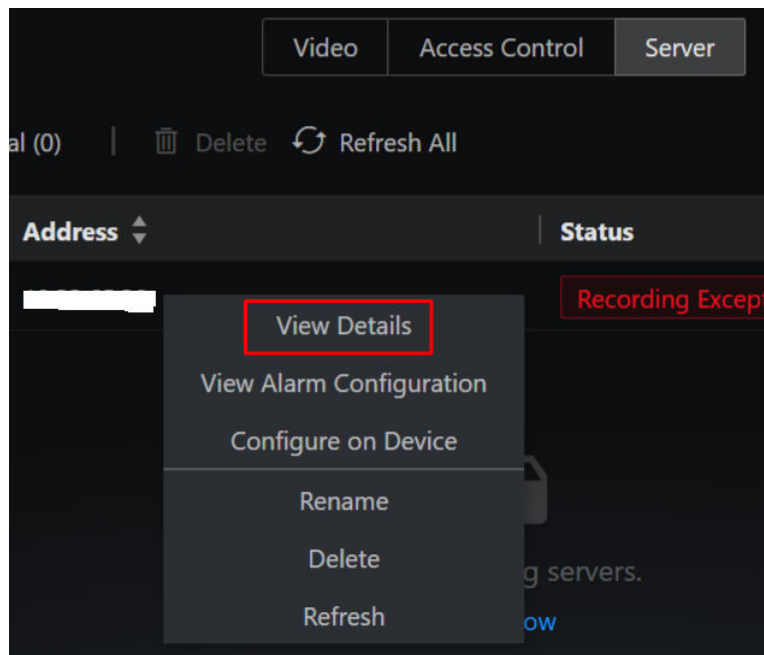


Figure 2-2 View Server Details

You can perform the following operations.

- View the normal and abnormal status under the server name. The abnormal status is displayed by default. Click **More** to view all status information.
- Edit the **Basic Configuration** of the server.

2.5 Configure User Preference

You can configure desktop-specific preferences from different aspects (video playing, alarm notification, and login).

Event and Alarm

In the upper-right corner of the Desktop, go to **User Name** →  → **Local Configuration** .

Display

- **Audio:** Enable/disable all alarm-related audio (audible alarm, alarm sound, etc.) for the current client.
- **Pop-Up Window:** Enable/disable all pop-up windows for the current client. The pop-up window will be displayed in the center by default. If you moved it, the new position will be remembered for the next time.

Note

When **Audio** or **Pop-Up Window** is disabled, you can still add relevant linkage actions but they will not come into effect.

Alarm Sound

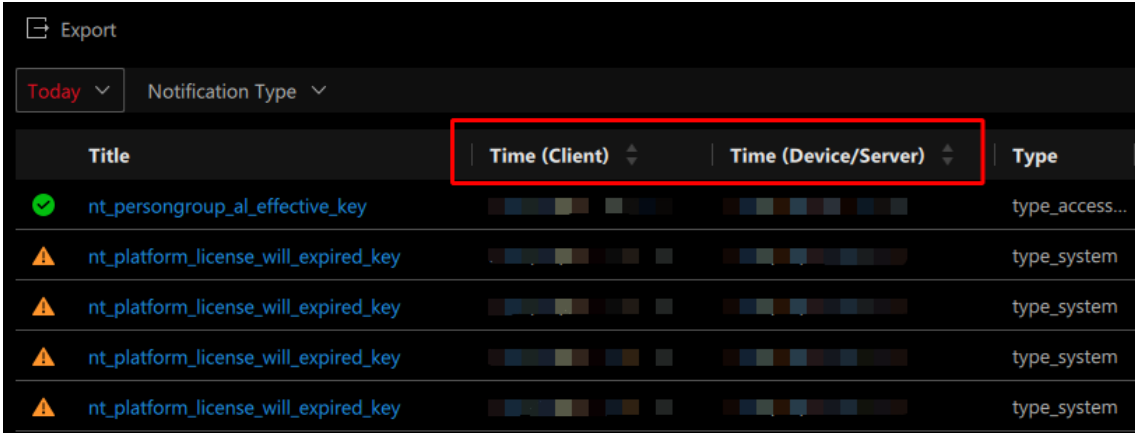
- **Voice Engine (Requires the Operating System's Support):** Play the voice text configured (the audible alarm in **Supported Linkage Actions**), by the voice engine supported by the computer system.
- **Local Audio Files:** Play the uploaded local files. The configured voice text will be irrelevant.

Advanced Settings

In the upper-right corner of the Desktop, go to **User Name** →  → **Local Configuration** .

Time Zone

Enable **Display Multiple Time Zones** to display the client and device/server time zone in the list at the same time. You can view multiple time zones when searching for events such as **Alarm**, **Access Control**, **Vehicle Passing Event**, etc., in the **Investigation** page.



Title	Time (Client)	Time (Device/Server)	Type
 nt_persongroup_al_effective_key			type_access...
 nt_platform_license_will_expired_key			type_system
 nt_platform_license_will_expired_key			type_system
 nt_platform_license_will_expired_key			type_system
 nt_platform_license_will_expired_key			type_system

File Saving Path

Click  and then select a folder as the saving path for files such as images, downloads, manual recordings, etc.

Ringtone

You can customize and preview call ringtones for your device. An audio file, restricted to WAV format, will play as the ringing tone when the device is called.

Note

The feature is available only after access control devices or video intercom devices have been added to the system.

Streaming Access Mode

Define how to access all the added encoding devices and decoding devices.

- **Automatically Judge:** Automatically adjust the access mode according to the domain of devices. If the Desktop is in the same domain as devices, it will get streams directly from devices, otherwise, it will get streams via streaming server.
- **Via Streaming Server:** The Desktop will access devices via streaming servers, which can lower the load of devices. When there are multiple Desktops to get streams from the same device, you can use this mode.

Version Update Notification

Enable this to receive notifications of version updates.

Basic Video Preference

Right-click on any blank area of the main panel for monitoring and control.

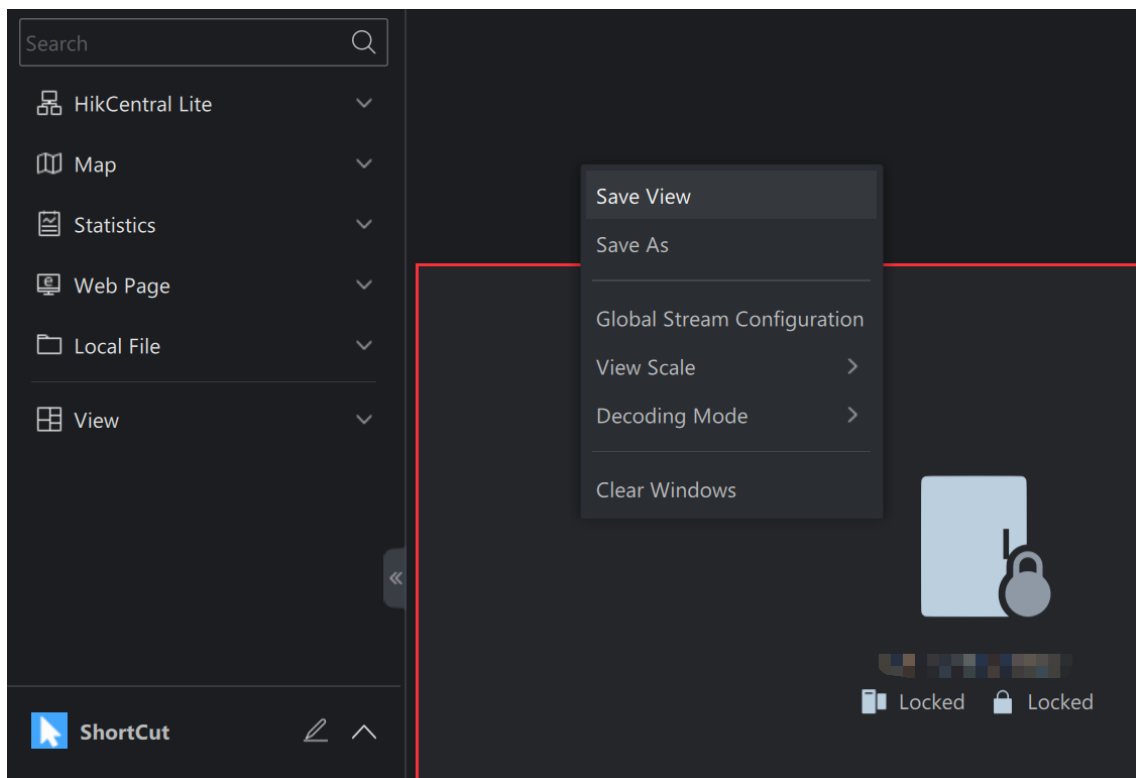


Figure 2-3 Access to Basic Video Preference

Global Stream Configuration

Select the appropriate video resolution based on device and network conditions. When the playback window size is smaller than the selected resolution, the video will automatically switch to a lower sub-stream to ensure performance:

- Extra Large (1920*1080)
- Large (704*576)

- Medium (640*360)
- Small (320*180)

View Scale

Original Resolution indicates to play a video in original size, and the image may not fill the live view / playback window. **Full Screen** indicates that the image is filled the entire live view / playback window.

Decoding Mode

Hardware decoding is to decode based on GPU, while software decoding is on CPU. Choose the decoding mode according to your GPU/CPU performance.

Chapter 3 Video Monitoring

Video monitoring centers on the security based on video-related functions. You can perform real-time monitoring to view the real-time status of monitored places, get the notification of events/alarms, and know the trend of different targets.

Preparations

- **Add Encoding Devices**
- **View and Configure Details of Encoding Devices**
- **Add an Alarm for an Encoding Device**

Basic Functions Related to Video Monitoring

- **Start Live View / Playback of Camera**
- **PTZ Control During Live View**
- **Monitor via Cameras on the Map**

Face Picture Comparison and Human Body Detection

- **Add Face Picture Libraries and Face Pictures**
- **View Videos Related to Face and Human Body Recognition**
- **Search for Recognized Face Pictures and Human Body Pictures**
- **Search Records of Face Picture Comparison and Human Body Recognition by a Picture**

Vehicle Monitoring

- **Add Vehicle Lists and Vehicles**
- **View Video Related to Vehicle Monitoring**
- **Search and Export ANPR Events**

Generate and View People Counting Report

(Optional) Local Configurations Related to Video Monitoring

3.1 Preparations

3.1.1 Add Encoding Devices

Before starting live view, video recording, and event/alarm configurations, you should add encoding devices (e.g., cameras, NVRs, DVRs).

On the top of the Desktop, click **System → Device Management → Add Device** . Refer to **Add Devices** for details.

3.1.2 View and Configure Details of Encoding Devices

The device basic configuration, recording schedule, connected resource (alarm input and alarm output), intelligent capability, alarm output linkage, and advanced configurations (such as transfer protocol and PTZ settings) are displayed according to the device type and capability.

On the top of the Desktop, click **System** → **Device Management** to show the added device list. Click a device name to open the device details page.

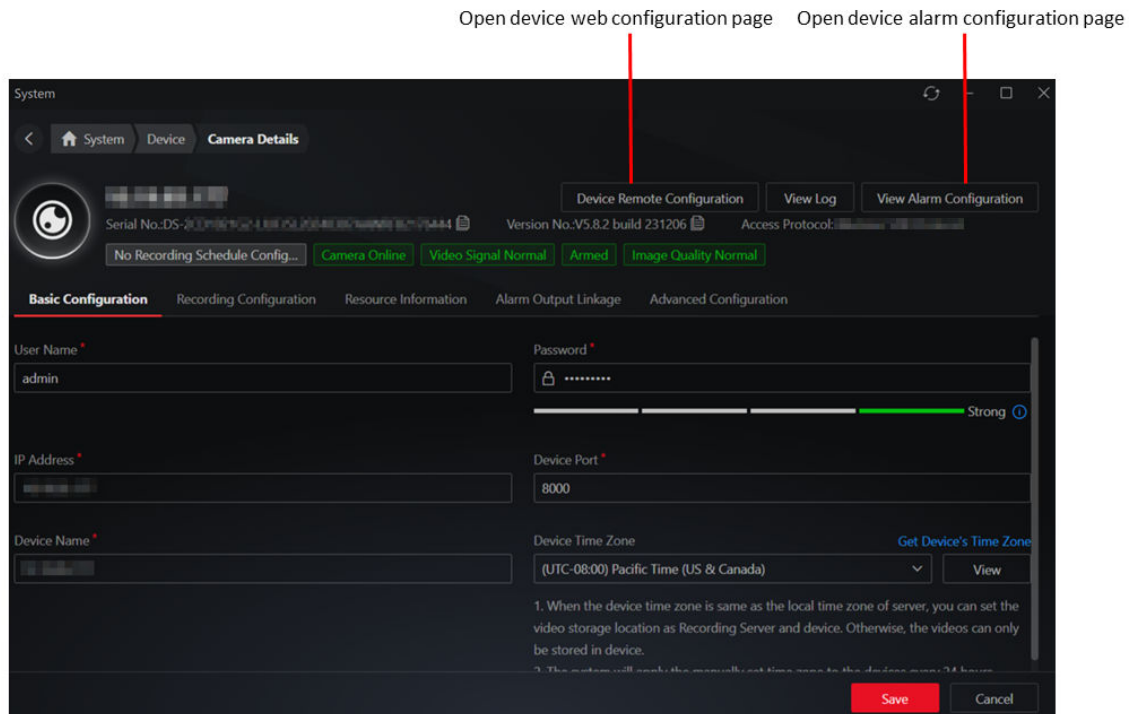


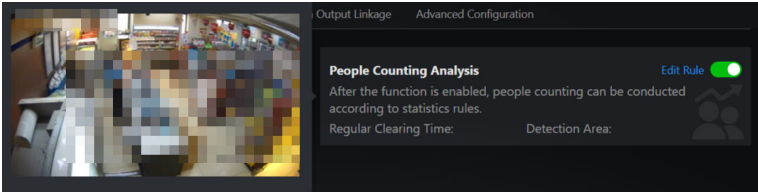
Figure 3-1 Camera Details

Note

The device details vary according to the device type, access protocol, and device adding method. Configurations should be subject to the actual situation.

Device Details Tab Page Introduction

Tab Name	Description
Recording Configuration	It is valid for cameras only.

Tab Name	Description
	Enable/disable the recording and configure recording parameters. Refer to <i>Configure Recording Parameters</i> for details.
Resource Information	- Display resources (such as cameras, alarm inputs, and alarm outputs) that are connected to the device. - Right-click a resource for further operations, that depend on the resource type. For example, if the resource is a camera, you can open the device web configuration page, device log search page, and device alarm configuration page, rename the device, and delete it from the resource list.
Intelligent Capability	Intelligent functions such as face picture comparison, people counting, and ANPR of the camera are displayed according to the camera capability and License. Before applying the intelligent functions of cameras, you need to enable them. In addition, editing intelligent function rules and copying rules to other cameras are supported on the current page. 
Alarm Output Linkage	It is valid for cameras only. Add or edit the alarm outputs of cameras on the live view image.
Advanced Configuration	If the camera has PTZ functionality, you can perform the PTZ control directly on current page. Refer to <i>PTZ Control During Live View</i> for details. Also you can manually set the camera type to PTZ camera in case the PTZ capability recognition is incorrect.

Configure Recording Parameters



Note

- The recording schedule of added encoding devices will be automatically synchronized to the system. That is, if a camera already has recording schedule configured, the system will automatically enable recording according to the configured schedule when the camera is added.
- The stream type for video storage is set to dual-stream by default if the camera supports. You can switch the stream during playback.

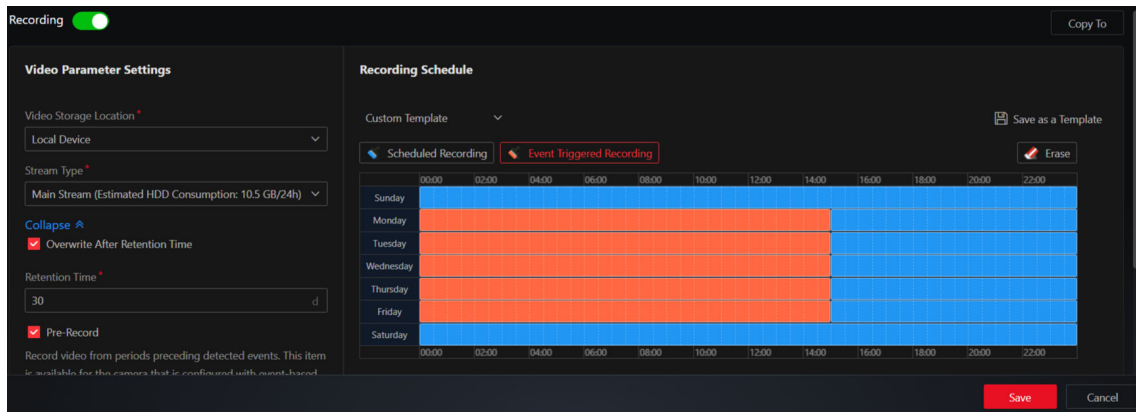


Figure 3-2 Store Videos in Local Device

1. Switch on **Recording**.
2. Set the video recording parameters.

Video Storage Location

The storage location of recorded video files, which can be NVRs/DVRs.

Recording Schedule

You can use the schedule template or define a custom schedule. The scheduled recording is to record continuously within the time duration, while the event triggered recording is to record when alarm occurs.

Overwrite After Retention Time

It is valid when the video storage location is set to local device. Overwrite the old videos after the specified retention time period (unit: day).

3. (Optional) Switch on **Back up Video** to back up videos in another storage location.
4. Click **Save** to apply the recording configurations to the device.
5. (Optional) Click **Copy To** to copy the recording configurations to other devices.

3.1.3 Add an Alarm for an Encoding Device

Before receiving the event/alarm detailed information which helps handle the situation promptly, you need to configure the alarm rule in advance.

On the top of the Desktop, click **System** → **Event and Alarm** → **Alarm Configuration** → **Add Alarm** . Refer to **Add an Alarm** for details.

Supported triggering events and sources for encoding devices are categorized according to their properties. For the complete event list supported by encoding devices, refer to **Supported Triggering Events** .

3.2 Basic Functions Related to Video Monitoring

The video monitoring basic functions include live view, playback, PTZ control, and monitoring on the map.

3.2.1 Start Live View / Playback of Camera

You can start live view or playback of one or multiple cameras.

Start Live View / Playback of One Camera

- Start Live View of One Camera: Double click a camera, or drag a camera from the camera list to the viewing grid, or right click a camera and click **Open** to start live view of the camera.
- Start Playback of One Camera: After starting live view of a camera, draw the timeline backwards on the playback panel to start playback of the camera.

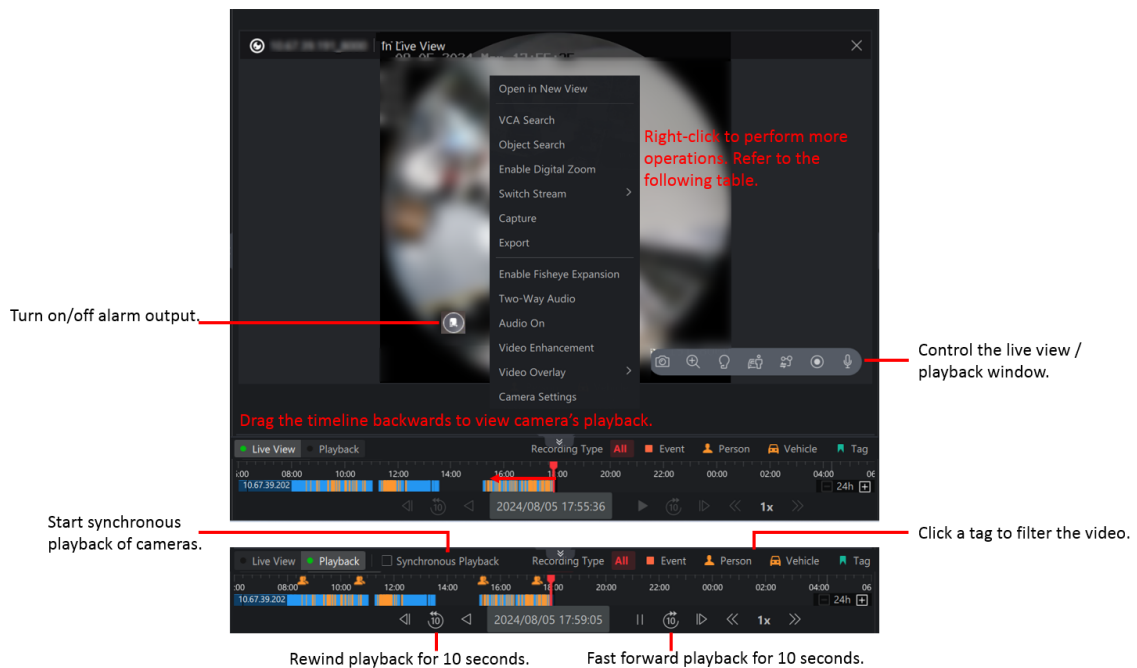


Figure 3-3 Start Live View / Playback of One Camera

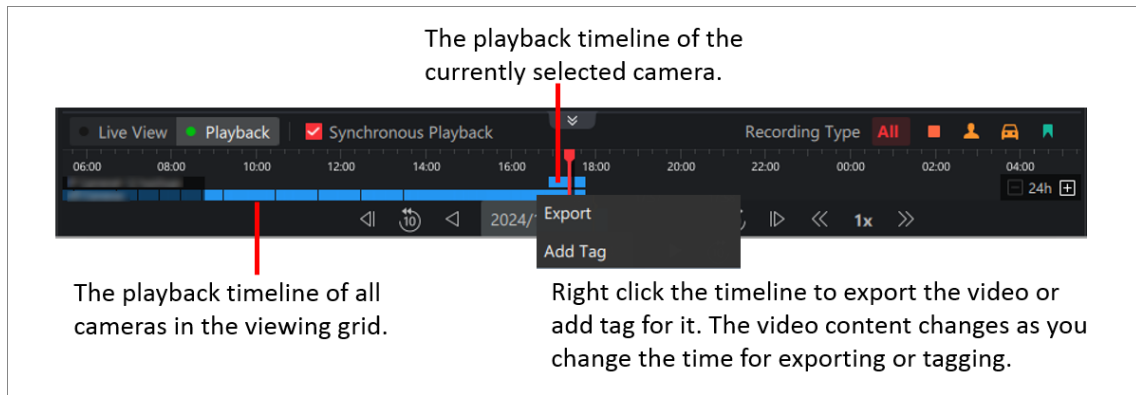


Figure 3-4 Synchronous Playback

During live view or playback, you can right click the window or click the icons in the lower right corner of the window to control the live view or playback window. Refer to the following table for the supported operations.

Function	Explanation	Live View	Playback
Open in New View	Open the live view / playback window in a new view.	√	√
Smart Search / VCA Search	Smart Search: draw an area on the video to detect whether there are persons and/or vehicles entering this area. VCA Search: draw an area on the video to detect whether there are moving objects in this area or objects entering this area. You can view the detected results on the right side of the page. Click a result to view the related video or right click a result to enter the Intelligent Search page. For details about VCA configuration, refer to <u>VCA Configuration</u> .	√	√
Object Search	Detect faces and human bodies in the video and search for the related objects. You can filter the searched results by time and similarity, hover on a search result to view the details, right click a search result to view the related video or enter the Intelligent Search page.	√	√

Function	Explanation	Live View	Playback
Enable Digital Zoom	- Click  and then click on the video image to zoom in. - Draw a frame from left side to right side on the video image to zoom in the selected area; and draw a frame in the opposite direction to zoom out. - Scroll the mouse wheel forwards or backwards to zoom in or out the video image.	√	√
Stream Switch	Switch streams to main stream, sub stream, fourth stream, or smooth stream.	√	√
Capture	Take a snapshot of the current video image.	√	√
Export	Export the video.	×	√
Start Recording	Record a video for the desired time period.	√	×
Enable PTZ Control	Refer to <u>PTZ Control During Live View</u> for details.	√	×
Enable Target Tracking	Continuously track the selected target (person/vehicle) in the video.	√	×
Enable Smart Linkage	Locate the target appeared in the video.	√	×
Enable Fisheye Expansion	The wide-angle view of the camera is displayed. In this mode, the perspective and angles of objects in the video image will be distorted.	√	√
Two-Way Audio	Start two-way audio with the camera or NVR device.	√	√
Audio On/Off	Turn on/off the audio of the video.	√	√
Light On/Off	Turn on/off the light of the camera.	√	×
Video Enhancement	Adjust the video image such as brightness and saturation.	√	√

Function	Explanation	Live View	Playback
Video Overlay	Display the needed information on the live view / playback image.	√	√
Camera Settings	Set camera parameters such as recording parameters. Refer to <i>View and Configure Details of Encoding Devices</i> .	√	√



Note

These functions should be supported by the device: PTZ control, smart linkage, target tracking, two-way audio, audio on/off and light on/off.

Start Live View / Playback of Multiple Cameras

- Start Live View of Multiple Cameras:
 - Press the ctrl key, select cameras, and drag them from the camera list to the right window to start live view of multiple cameras.
 - Press the ctrl key, select cameras, right click the cameras and click **Open** to start live view of multiple cameras.
- Start Playback of Multiple Cameras: Select a live view window, and drag the timeline on the playback panel backwards to start playback of the camera. Repeat the above operations to view playback of multiple cameras.

During live view or playback, you can select multiple live view or playback windows and right click to batch control them. Refer to the following table for the supported operations.

Function	Explanation
Export Video File	Export the video file within the selected time range.
Audio On/Off	Turn on/off the audio of the video.
Close Window	Close the live view / playback windows.

Configure Parameters for Video Monitoring

Right click the blank area in the viewing grid, and configure the following parameters.

View Scale

Original Resolution indicates to play a video in its original size, and the image may not fill the live view / playback window. **Full Screen** indicates that the image will fill the entire live view / playback window.

Decoding Mode

Hardware decoding is to decode based on GPU, while software decoding is on CPU. Choose the decoding mode according to your GPU/CPU performance.

3.2.2 PTZ Control During Live View

You can control cameras with pan/tilt/zoom functionality during live view. You can set the preset and patrol for the cameras on the PTZ control pane.

Double click a PTZ camera, or drag a PTZ camera to the right window, or right click a PTZ camera and click **Open** to start live view of the camera.

Click  in the lower right corner to pop up the PTZ control icons on the right side. See the following figure for the supported operations.

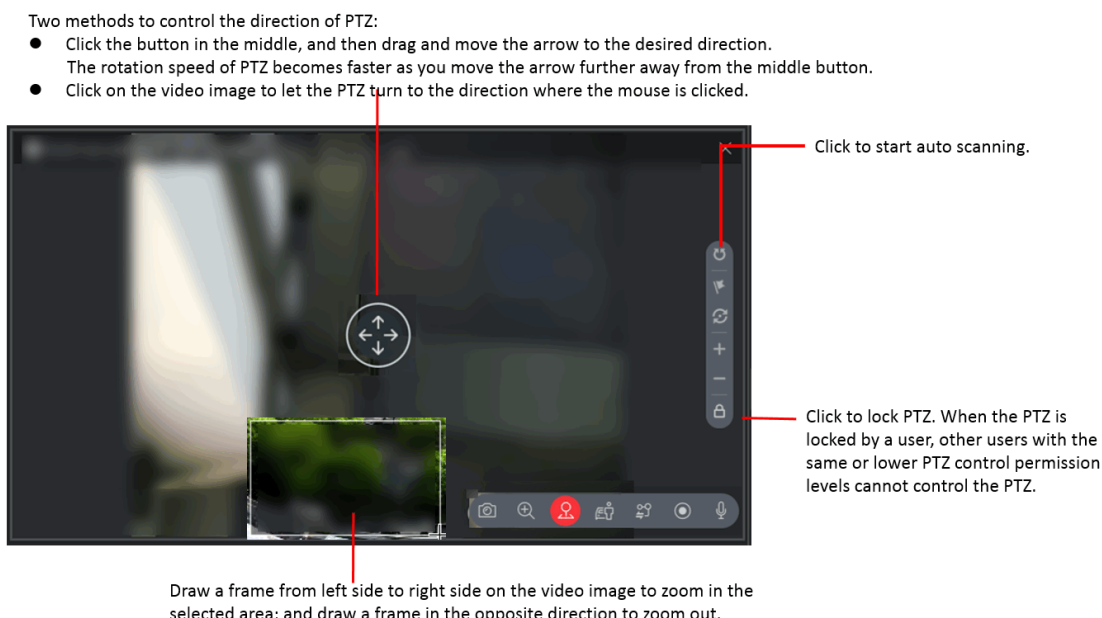


Figure 3-5 PTZ Control

3.2.3 Monitor via Cameras on the Map

After adding cameras to the map, you can view live view and playback of cameras and camera status on the map.

In the **Map** module, double click a map, or drag a map to the right window, or right click a map and click **Open** to view the map and its resources. For details about adding maps, refer to [Add Map](#).

There are two modes for the map. In the Monitoring mode (), you can view live view and playback via cameras on the map. In the Configuration mode (), you can add cameras, marks, and hot regions to the map, set the types of resources to be displayed on the map, etc.

Add Map

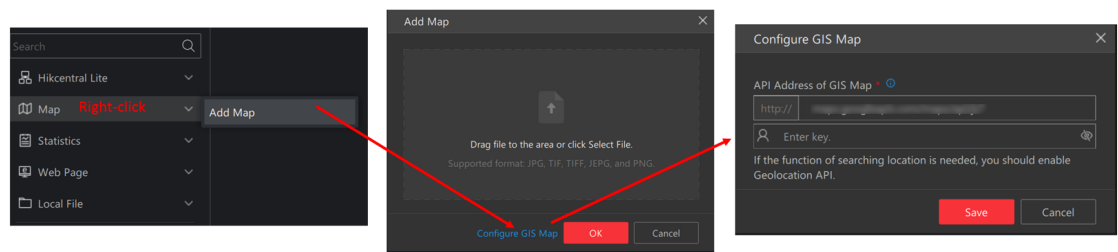


Figure 3-6 Add GIS Map

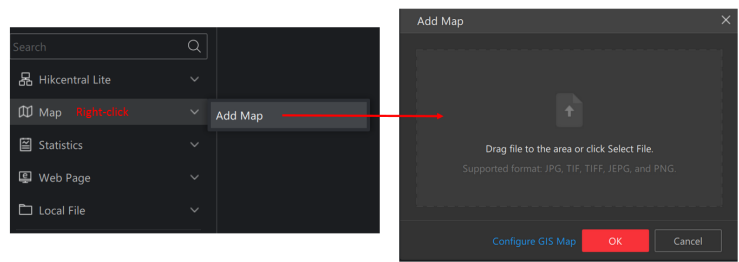


Figure 3-7 Add E-Map

Configuration Mode

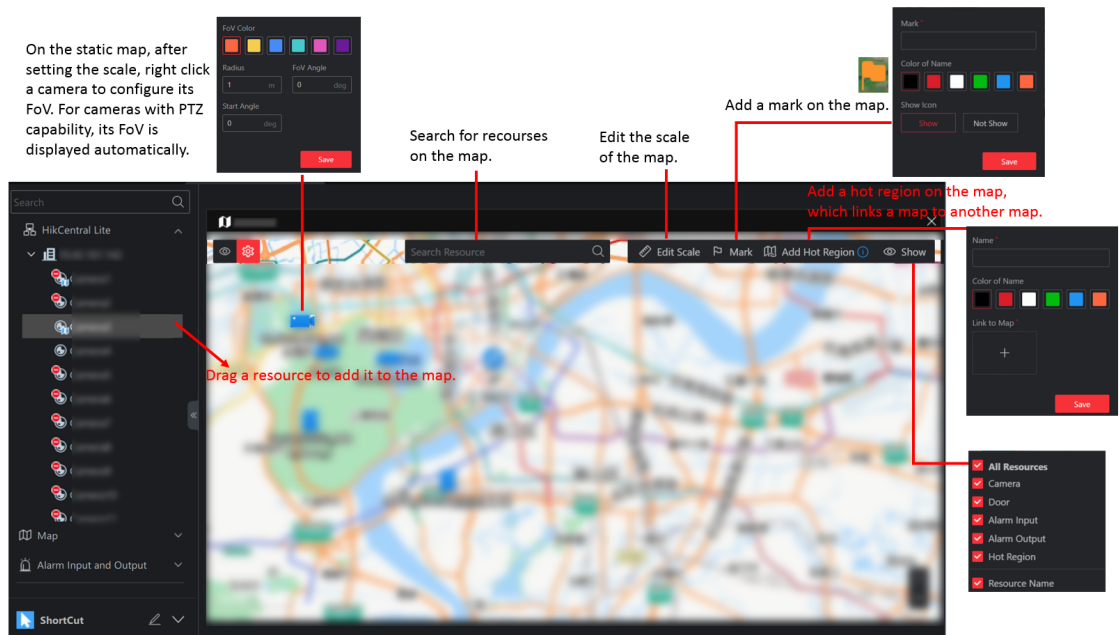


Figure 3-8 Supported Operations in Configuration Mode

Monitoring Mode

You can monitor via cameras on the map.

- Click a camera to view the live view of the camera on the map.

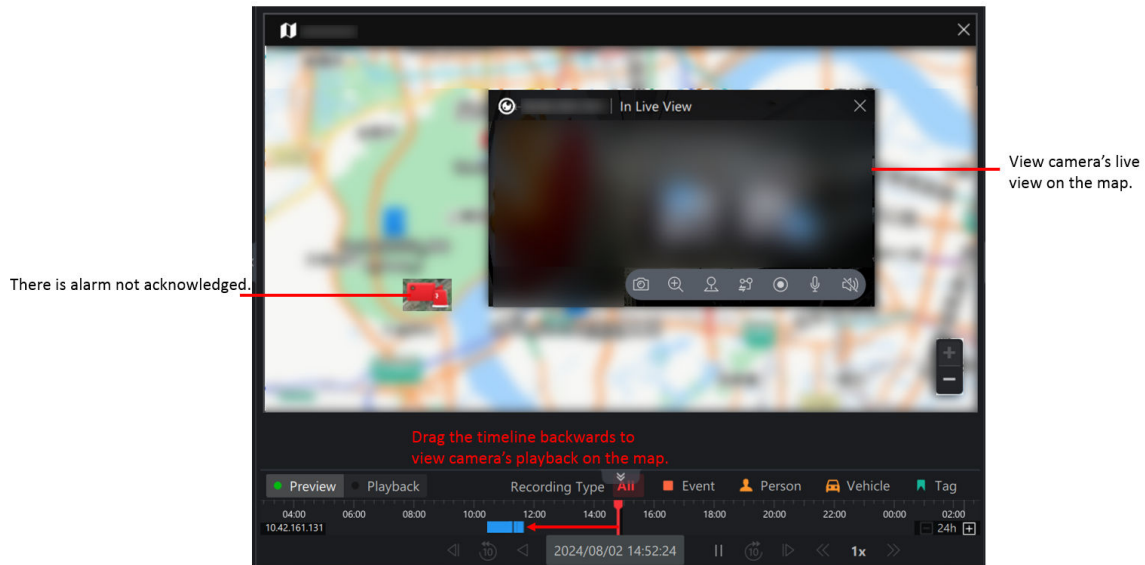


Figure 3-9 View Camera's Live View and Playback on the Map

- Click **Batch Select**, draw an area to select multiple cameras, and click **Batch Play** to view the live view of cameras in a batch.
Press the Ctrl key, select multiple cameras, and drag them to the windows outside of the map to view the live view of cameras in a batch.

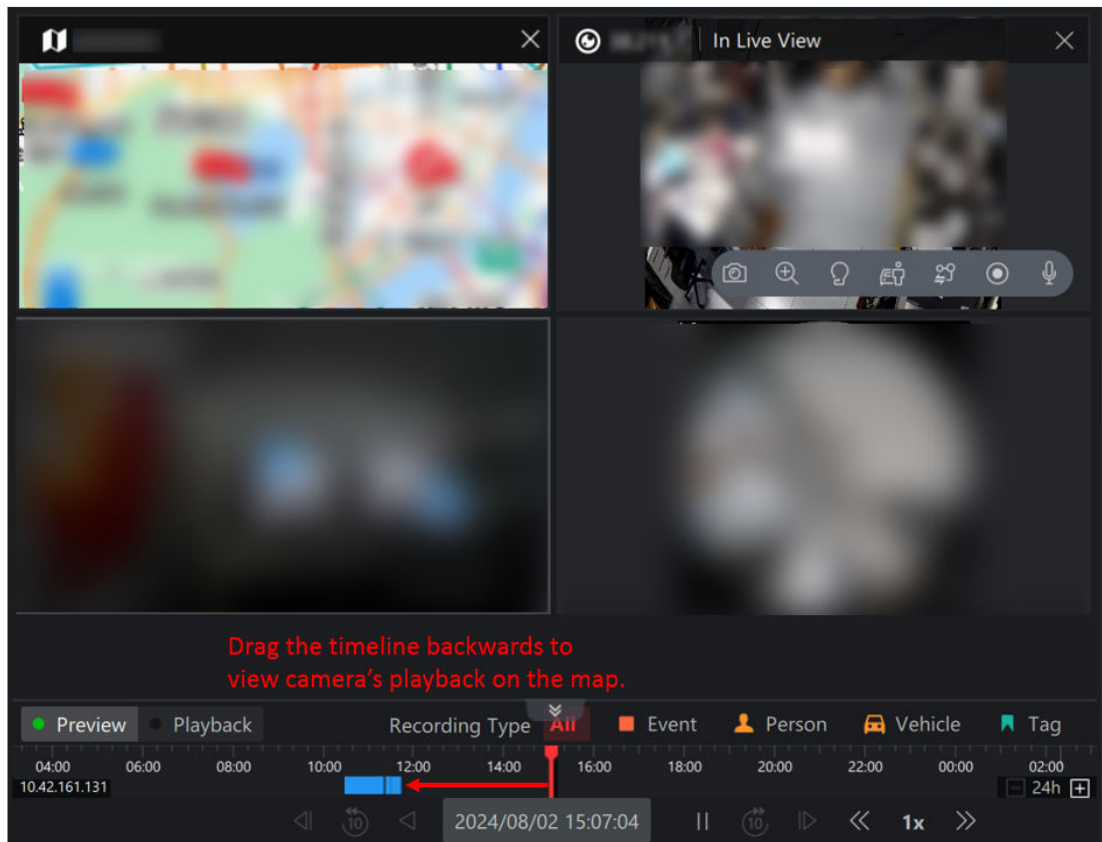


Figure 3-10 Batch View Cameras' Live View and Playback

Note

When viewing the live view or playback of the camera, right click the live view or playback image to perform more operations. Refer to [***Start Live View / Playback of Camera***](#) for details.

3.2.4 VCA Configuration

You can use smart search or VCA search function based on whether your device supports the corresponding function. To use smart search function, make sure you have used the compatible NVRs that support smart search. To use VCA search function, make sure you have completed the configurations on NVR and network cameras.

Compatible NVR Series for Smart Search

The supported series of NVRs that support smart search include: K Series NVR with AcuSense (V4.83.006), I Series NVR with AcuSense (V5.03.020), M-VPro Series (V5.03.020), DeepinMind M

Series (V5.03.020), and DeepinMind Super H Series (V5.03.020). For the detailed compatible firmware versions of NVRs, refer to **Compatibility List** .

Configuration on NVR

On the web page of NVR, enable **Save Smart Analysis Data of Camera**.

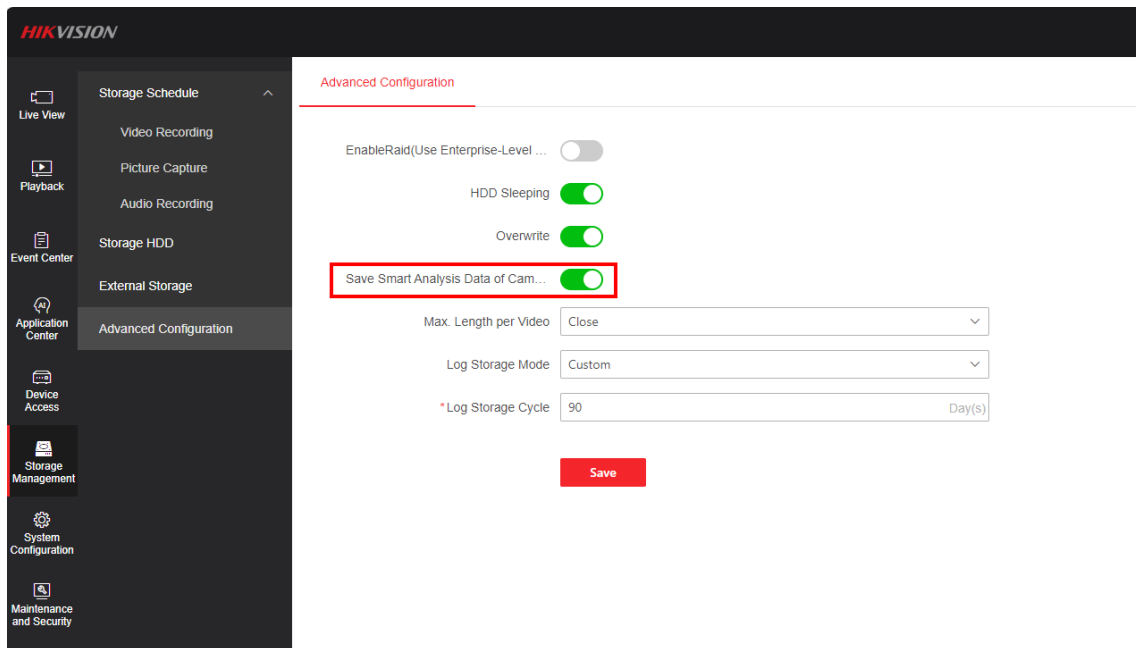


Figure 3-11 Save Smart Analysis Data of Camera

If the firmware version of the NVR is lower than V5.01, besides completing the above, you should enable **Display Info. on Stream** for the network camera.

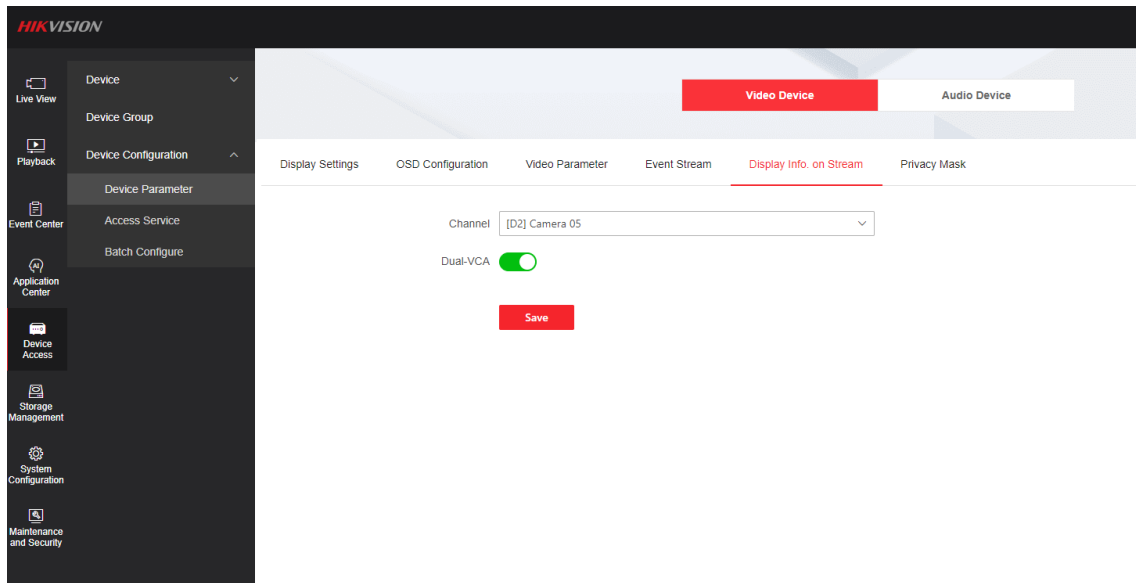


Figure 3-12 Display Info. on Stream

Configuration on HikCentral Lite

You should configure recording schedules for the network cameras. For details, refer to [***View and Configure Details of Encoding Devices***](#) .

3.3 Face Picture Comparison and Human Body Detection

Face picture comparison refers to comparing two face pictures to determine if they belong to the same person. Human body detection focuses on detecting human bodies in different environments. These two functions are crucial for security purposes and are widely used in various sectors such as retail stores and enterprises.

3.3.1 Add Face Picture Libraries and Face Pictures

Face pictures are used to compare with the face pictures of the capture persons. Face picture libraries are used to manage or group face pictures, for example, you can add the face pictures of VIP customers in to a specific face picture library named "VIP Customer".

Click **System → Face Picture Library** to enter the managing face picture libraries and face pictures page.

- Add Face Picture Library:
Click **Add Face Picture Library** in the down left corner to add face picture libraries.
If you link cameras with the face picture library, you can view the number of cameras and the corresponding camera names below the name of face picture library.

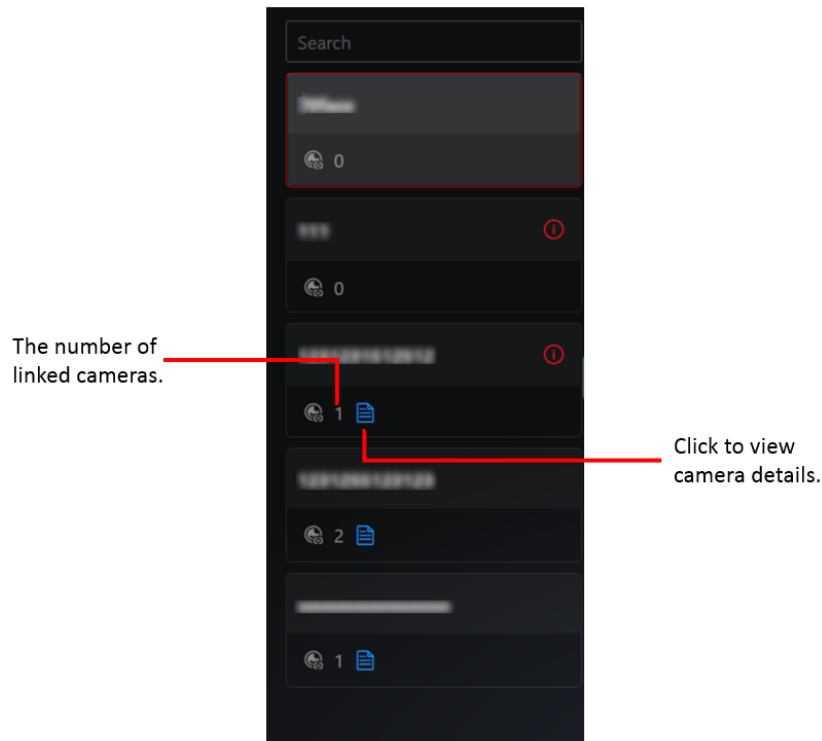


Figure 3-13 Cameras Linked with Face Picture Libraries

- Add Face Picture:
 - Click **Add Face Picture** in the down left corner to add a single face picture.
 - Click **Import → Add from Existing Person** to add face picture(s) of the added person(s).
 - Click **Import → Import Face Picture Information via Excel** to batch import face pictures by a template file.
 - Click **Import → Import Face Pictures** to batch import face pictures after manually packing them.
 - Click **Import Device Face Picture Library** to batch import face pictures in the device face picture libraries.

3.3.2 View Videos Related to Face and Human Body Recognition

After adding face and human body recognition cameras, you can view videos related to face picture comparison and human body detection. At the same time, events related to the current videos will be displayed in real-time. You can view the similarity between the captured face picture and the face picture in the specific library, the name of the matched face picture library, etc. And you can perform more operations such as searching for the related face pictures and human body pictures if needed.

Note

To use this function, make sure you have added face and human body recognition cameras and have added channels for the cameras in **License Management → License Overview →**  .

During live view, the events of face and human body recognition camera(s) on the current view are displayed in real time. Hover on the event to view its details or right-click the event to perform more operations. Refer to the following figure.

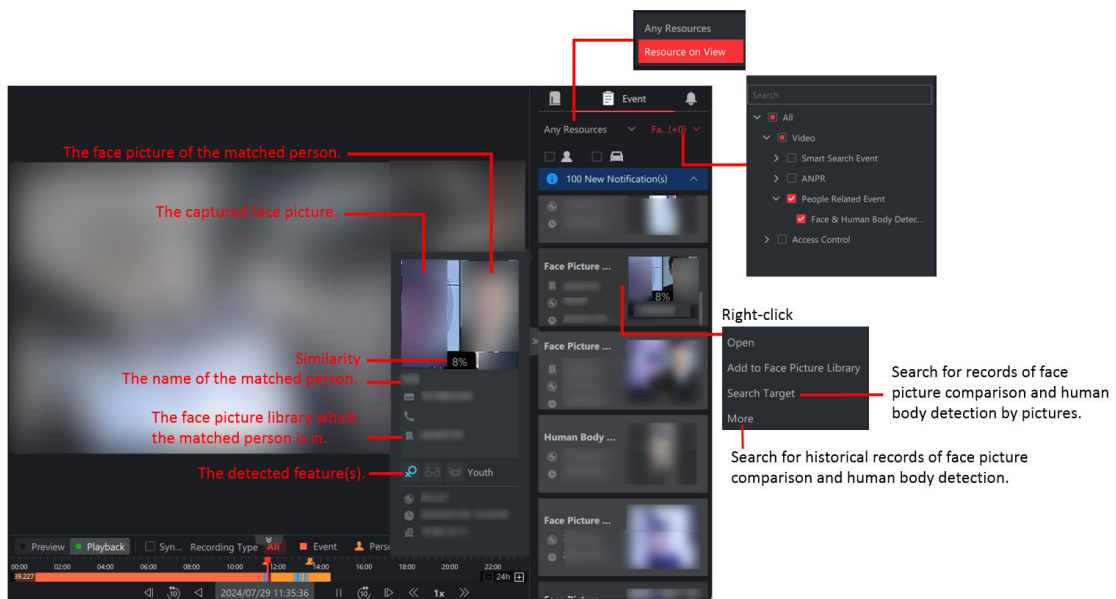


Figure 3-14 Face Picture Comparison Details

Due to the UI similarity of face picture comparison and human body detection, the above only takes face picture comparison as an example.

3.3.3 Search for Recognized Face Pictures and Human Body Pictures

You can set conditions to search for capture records including face capture records, face picture comparison records, and human body detection records. For the searched records, you can view record details, export records, etc.

Note

This function should be supported by device.

Click **Search → Face & Human Body Detection** to view the capture records.

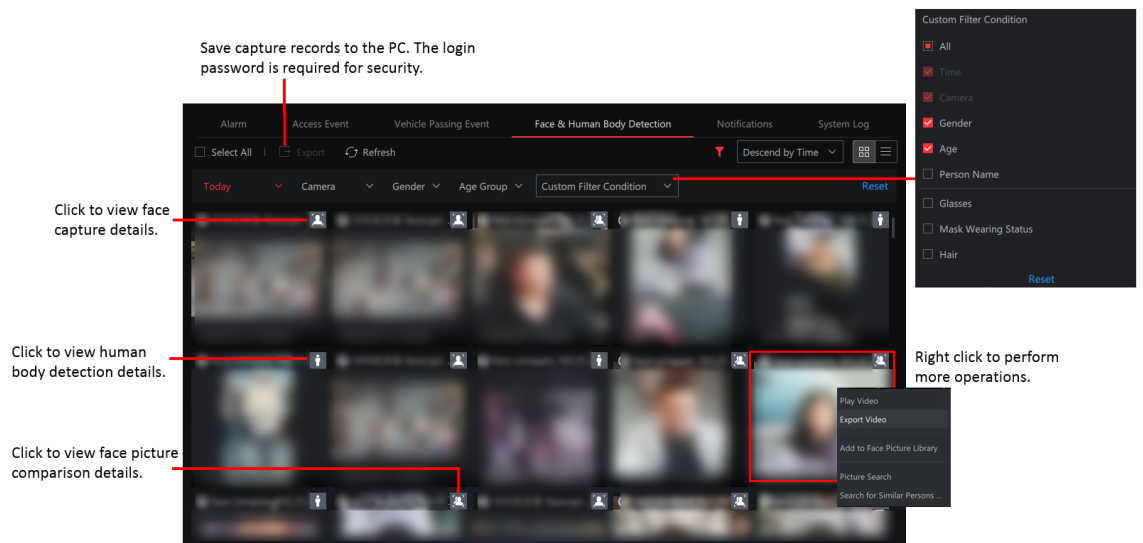


Figure 3-15 Face & Human Body Detection

Basic Information										Face Human Body Detection			
Export Time: 2024/10/17 16:13:15													
Operator:													
Export Content: Data, Capture, Video													
Report Time: 2													
Total Number: 7													
No	Capture Type	Time	Camera	Capture	Partial View with Key Informat	Video	Similarity	Age Group	Gender	Wearing Mask	Glasses	Hair	Tops Type
1	Face Capture			image	image	video	Not supported.	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown
2	Human Body Detection			image	image	video	Not supported.	Unknown	Male	No Mask	Unknown	Short Hair	Long Sleeves
3	Face Picture Comparison			image	image	video	Not supported.	Middle Age	Female	Wearing Mask	No	Unknown	Unknown
4	Human Body Detection			image	image	video	Not supported.	Unknown	Female	Wearing Mask	Unknown	Long Hair	Long Sleeves
5	Human Body Detection			image	image	video	Not supported.	Unknown	Male	No Mask	Unknown	Short Hair	Long Sleeves
6	Face Picture Comparison			image	image	video	Not supported.	Adult	Male	No Mask	Yes	Unknown	Unknown
7	Face Picture Comparison			image	image	video	Not supported.	Adult	Female	Wearing Mask	No	Unknown	Unknown

Figure 3-16 Export Capture Records

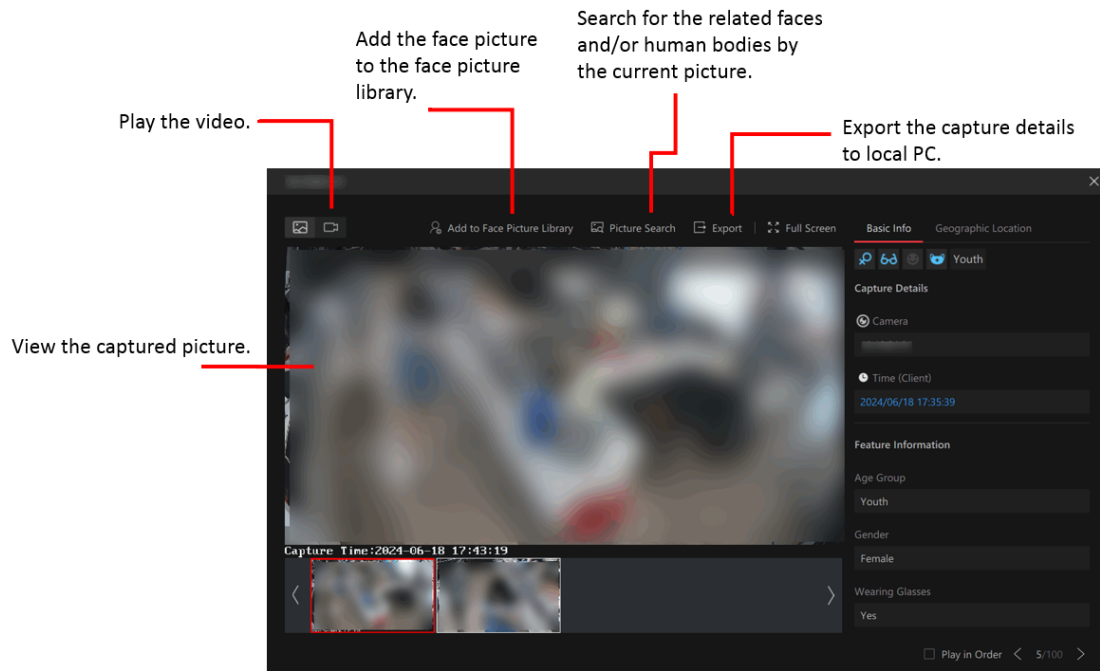


Figure 3-17 Supported Operations on Face Capture Details Page

Due to the UI similarity of face capture / face picture comparison / human body detection details page, the following only explains the face capture details page for an example.

3.3.4 Search Records of Face Picture Comparison and Human Body Recognition by a Picture

You can upload a picture and setting other conditions to search for the corresponding faces and/or human bodies. For the searched results, you can view the capture details, play the related video files, etc.

Note

Make sure you have added DeepinMind or NVR.

Click **Search** → **Intelligent Search** → **Upload Picture** , and select a picture from local PC to start searching.

If there is only one face in the picture, the search results will be automatically displayed. Otherwise, you should select a face and/or a human body in the picture for searching.

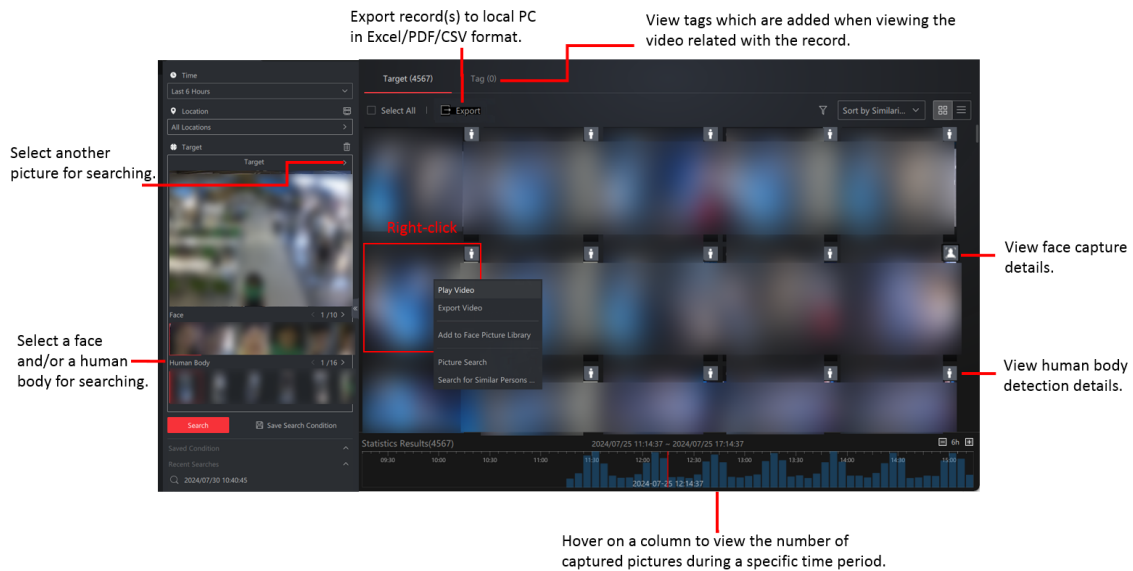


Figure 3-18 Search Conditions and Supported Operations on Search Results Page

3.4 Vehicle Monitoring

You can add vehicle lists and vehicles, and then monitor vehicles by viewing the related videos on ANPR cameras and searching for vehicle passing records.

3.4.1 Add Vehicle Lists and Vehicles

You can manage vehicles in the vehicle lists, including exporting vehicle information in a list, moving vehicles in one list to the other list, and so on.

Click **System** → **Vehicle** .

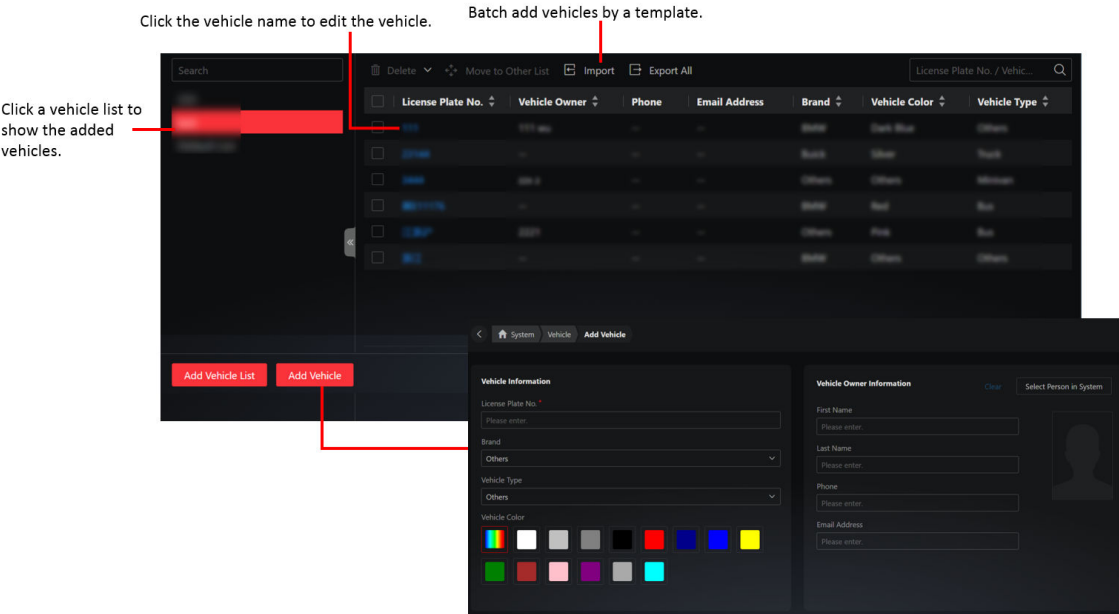


Figure 3-19 Vehicle Page

Basic Information						
Time	2024/10/17 20:21:23					
Operator	[REDACTED]					
Total Records	3					
Rule (Enter corresponding vehicle information according to following No.)						
Brand	0=Others 1=Volkswagen 2=Buick 3=BMW 4=Honda 5=Peugeot 6=Toyota 7=Ford 8=Nissan 9=Audi 10=Mazda 11=Chevrolet 12=Citroen 13=Hyundai 14=Chery 15=KIA 16=Dongfeng 26=BYD 27=Suzuki 28=Jinbei 29=Haima 30=SGMW 31=JAC 32=Subaru 33=Englon 34=GWM 35= Hafei 36=Qingling/suzu 37=SOUEAST 38=Changan 39=50=Kama 51=Zotye 52=Changhe 53=Xiamen King Long (Golden Dragon) 54=Shanghai Huizhong 55=Suzhou Jinglong 56=Higer 57=Yutong 58=CNHTC 59=Beiben Heavy 100=BMW MINI 101=Toyota MARKX 102=HAVAL 103=Acura 104=Venucia 105=BYD Style 2 106=Benz SMART 107=BAW 108=Luxgen 109=Mustang 110=Xzhongxing 111 121=Forday 122=Lotus 123=Nanjun 124=Shuanghuan Motor 125=Hafei Saibao 126=Huatai 127=Yongyuan Feidie 128=Yongyuan Motor 129=Fu Long Ma 130=Hyundai 1 150=GMC 151=SAIC Maxus 152=Beiqi Yinxiang 153=New Qirui 154=Mudan 155=Dayun Motor 156=Dongwo Motor 157=Union Motor 158=Chunzhou Bus 159=Sany Hea 200=Maserati 201=Shuchi Bus 202=Shili Bus 203=Zhongke Huabei 204=SAIC Yizheng 205=Chunlan Motor 206=Dafa Motor 207=Shenye Motor 208=Ferrari 209=Fuxing N 1025=AC Schnitzer 1026=Alfa Romeo 1027=ASTON MARTIN 1029=LA JOYA 1041=BRABUS 1042=BUGATTI 1047=Changfeng Liebao 1049=Changan Saloon 1055=DETRO 1091=KANDI 1092=KOENIGSEGG 1095=Rolls-Royce 1096=LINCOLN 1099=LANCIA 1100=LOTUS NYO 1109=Meiya 1110=McLaren 1111=MAYBACH 1113=MORGAN 1111 1681=Wanda Bus 1682=Changan Suzuki 1683=Guilin 1684=Sichuan Hyundai 1685=Aochi 1686=Denway Bus 1687=FAW-Liut 1688=Wanxiang 1690=Sojen 1692=Zoomlio 1776=Rohens 1783=Proton 1786=Emgrand 1787=HINO 1792=Alfa 1793=Equus 1794=Renault Samsung 1796=Oushang 1797=BONLUCK 1798=Qiling 1799=Wanxiang 1 180=Others 1=Bus 2=Truck 3=Sedan 4=Minivan 5=Light Truck 6=Pedestrian 7=Two-Wheeler 8=Tricycle 9=SUV/MPV 10=Medium-Sized Bus 11=Motor Vehicle 12=Non-Mo					
Vehicle Type	0=Others 1=Bus 2=Truck 3=Sedan 4=Minivan 5=Light Truck 6=Pedestrian 7=Two-Wheeler 8=Tricycle 9=SUV/MPV 10=Medium-Sized Bus 11=Motor Vehicle 12=Non-Mo					
Vehicle Color	0=Other 1=White 2=Silver 3=Gray 4=Black 5=Red 6=Dark Blue 7=Blue 8=Yellow 9=Green 10=Brown 11=Pink 12=Purple 13=Dark-Grey 14=Cyan					
Vehicle Information						
*License plate No.	Vehicle Owner	Vehicle Owner ID	Phone	Email Address	Brand	Vehicle Vehicle Type
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	6	3 3
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	31	9 3
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	22	1 3

Figure 3-20 Export Vehicle Information

3.4.2 View Video Related to Vehicle Monitoring

When you view videos related to passing vehicles, events related to the current videos will be displayed in real-time. You can view the name of the matched vehicle list, the vehicle owner information, etc. And you can perform more operations such as editing the license plate and adding the vehicle to the vehicle list.

Note

To use this function, make sure you have added ANPR cameras and have added channels for the cameras in **License Management** → **License Overview** →  .

During live view, the events of ANPR camera(s) on the current view are displayed in real time. You can hover on the event to view more details, or right click the event to perform more operations.

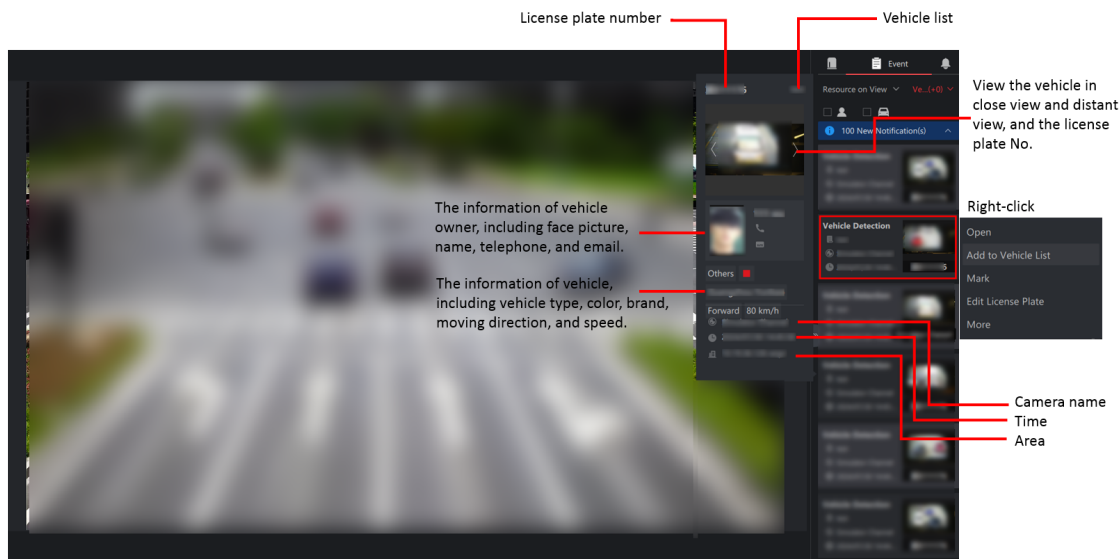


Figure 3-21 ANPR Event Details

3.4.3 Search and Export ANPR Events

You can search for the historic vehicle passing events and export the events to local PC.

Click **Investigation** → **Vehicle Passing Event** to view the historic vehicle passing events.

The following operations are supported on this page.

- Filter vehicle passing events by different conditions such as time, camera, vehicle list, and license plate number.
- Click **Export** to export all the events in the needed format (Excel, PDF, or CSV).

1	ANPR Retrieval Records										
2	SYS:										
3	Export Time: 2024/08/13 17:05:57										
4	Total Number: 17353										
5											
6	License Plate No.	Time	Camera	Vehicle List	Owner	Phone No.	Country/Region	Vehicle Type	Brand	Color	Driving Speed
7											Driving Direction
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											

Figure 3-22 Export Vehicle Passing Events in Excel Format

- Click a license plate number in the License Plate No., column to view the capture details.

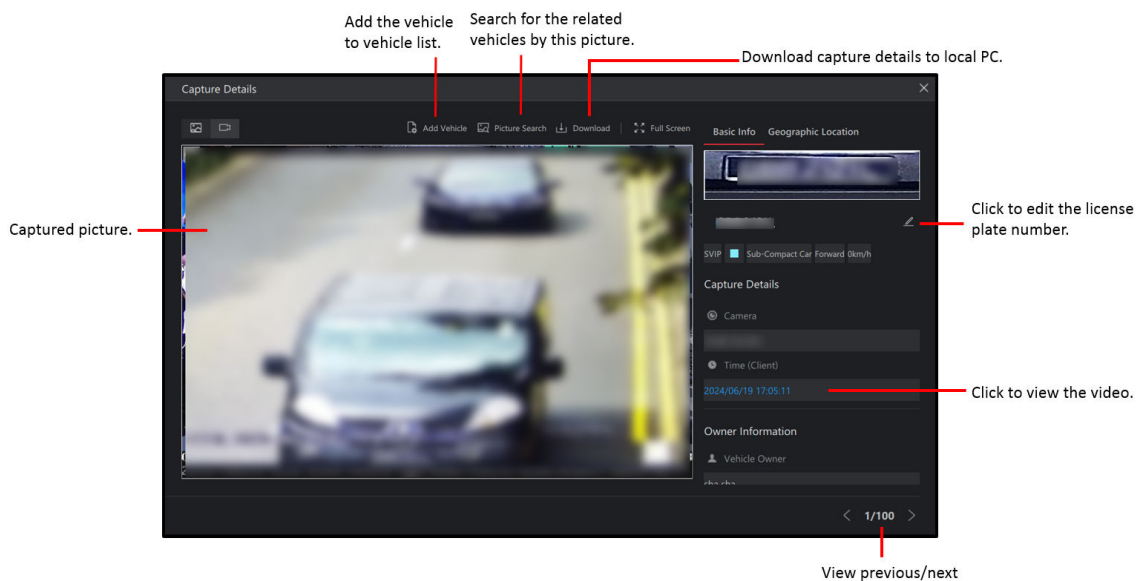


Figure 3-23 Capture Details

3.5 Generate and View People Counting Report

The people counting report of specified cameras provides a visual view of real-time people counting, real-time dwell people quantity, and history people counting in specified locations. And downloading the historical people counting report to the local PC is supported.

Note

Make sure the License for people counting report is purchased before generating the report.

- On Real-Time People Counting pane, today's people counting (in) / visits and real-time dwell people quantity are displayed.
- On Historical People Counting pane, people counting (in) / visits and people counting (out) / visits are displayed.

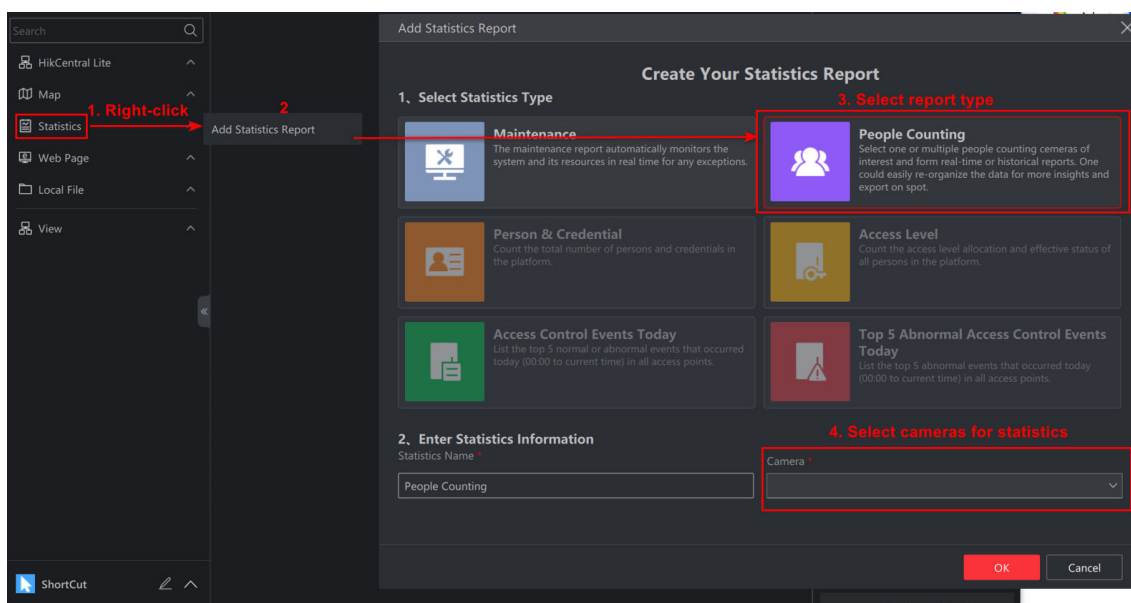


Figure 3-24 Generate People Counting Report

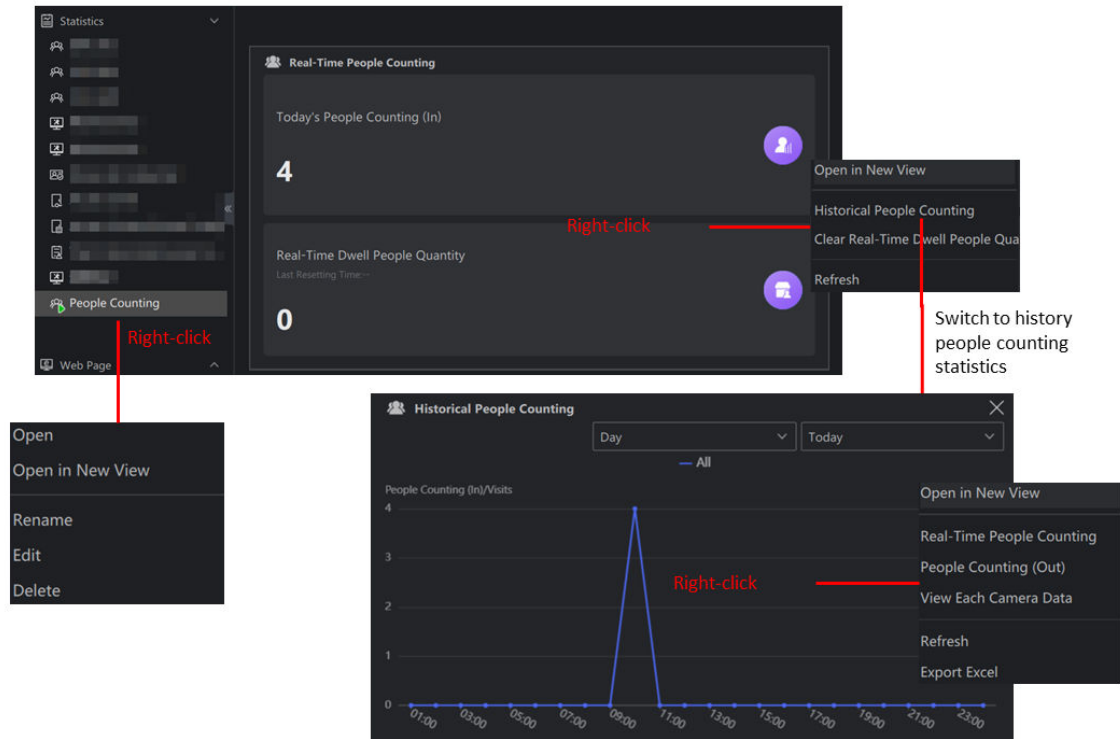


Figure 3-25 View Generated People Counting Report

Historical People Counting																
Basic Information																
Export Time	2024-10-11	10:31:55														
Operator	admin															
Statistics Name	People Counting															
Data Source	Total Cameras: 5(camera1; camera2; camera3; camera4; camera5)															
Data Type	People Counting (In)&People Counting (Out)															
Data Time Period	2024-10-11 00:00:00 - 2024-10-11 23:59:59															
Total People Count	6(Visits)															
Total People Counting																
No.	Date	Time	Total People Counting (In)(Visits)				Total People Counting (Out)(Visits)									
1	2024-10-11	00:00-00:59	0	0	0	0	0	0	0							
2	2024-10-11	01:00-01:59	0	0	0	0	0	0	0							
3	2024-10-11	02:00-02:59	0	0	0	0	0	0	0							
4	2024-10-11	03:00-03:59	0	0	0	0	0	0	0							
5	2024-10-11	04:00-04:59	0	0	0	0	0	0	0							
6	2024-10-11	05:00-05:59	0	0	0	0	0	0	0							
7	2024-10-11	06:00-06:59	0	0	0	0	0	0	0							
8	2024-10-11	07:00-07:59	0	0	0	0	0	0	0							
Details																
No.	Date	Time	camera1	camera2	camera3	camera4										
1	2024-10-11	00:00-00:59	0	0	0	0	0	0	0							
2	2024-10-11	01:00-01:59	0	0	0	0	0	0	0							
3	2024-10-11	02:00-02:59	0	0	0	0	0	0	0							
4	2024-10-11	03:00-03:59	0	0	0	0	0	0	0							
5	2024-10-11	04:00-04:59	0	0	0	0	0	0	0							
6	2024-10-11	05:00-05:59	0	0	0	0	0	0	0							
7	2024-10-11	06:00-06:59	0	0	0	0	0	0	0							
8	2024-10-11	07:00-07:59	0	0	0	0	0	0	0							
9	2024-10-11	08:00-08:59	0	0	0	0	0	0	0							

Figure 3-26 Downloaded Reports

3.6 (Optional) Local Configurations Related to Video Monitoring

Before starting the live view / playback, you can define whether to play video in full screen, the monitoring window size, decoding mode, and streaming access mode.

Refer to **Basic Video Preference** and **Configure User Preference** for details.

Chapter 4 Access Control and Video Intercom

In this module, includes functions including the management of devices and persons, door monitoring, and statistics of persons, credentials, and events, helping you monitor devices and persons via multiple tools.

The following is supported functions:

Device Management

You can **add devices** and **view details of a device** or **details of a door** .

- On the device details page, the following tasks can be performed.
 - Configuring basic parameters, including the device's user name, password, IP address, port, name, and time zone.
 - Viewing resources (doors or cameras) linked with the device, or importing the resources linked to the device.
 - Configuring Wiegand parameters and parameters of serial port number.
 - Configuring card reader protocols, readable card types, and M1 card encryption reading settings.
 - Configuring the uploading and storage of profile pictures.
 - Jumping to the Web page of the device.
 - Configuring multi-factor authentication.
- On the Door Details page, the following tasks can be performed.
 - Configuring basic parameters of the door, including name, door unlocking duration and alarm, auto-locking, duress code, super password, and dismiss code.
 - Linking cameras to the door, and viewing live view of the linked cameras.
 - Enabling the function of automatically capturing pictures for the door.
 - Enabling card readers for the door and configuring parameters of card readers, including name, buzzing duration, card swiping interval, tampering detection, failed card template alarm, and card reader authentication mode.
 - Configuring Remain Unlocked & Remain Locked, multi-door interlocking, and Unlock Doors with First Person.

Manage Departments And Persons

Add/edit/delete departments and persons. On the Person page, you can go to the **Credential Configuration** page to select collecting mode of credentials and configure the collecting devices. For collected profile pictures, if you need to **protect the persons' privacy** , you can disable the function of exporting profile pictures or convert the profile pictures to unreadable models.

Add and Assign Access Levels

Persons with assigned access levels can access to specific doors during defined time periods.

Real-Time Monitoring of Doors

You can view the live view of cameras linked to a door. During the live view, you can **change door status** in real time if necessary. You can also drag doors to a map and **monitor them via the map** so as to know situation of multiple doors quickly. The map supports viewing live view of doors and changing door statuses.

Video Intercom

- View records of missed calls from devices, and call the device back
- Start two-way audio with a device.
- **Configure parameters of two-way audio for the current client.**

Import Person Authentication Events from Devices to the Client

Person authentication events include normal and abnormal authentication records. When the system misses events, you can import events stored in devices to the system.

Search for Access Events

Access events include person authentication events, access control device events, and video intercom call records.

View Statistics

The statistics show an overview of persons, person credentials, access levels of persons, and access events. When viewing the statistics, users can go to corresponding page to configure these items in real time.

4.1 Preparations

4.1.1 Add Devices

The system supports adding access control devices, door stations, and barrier gates.

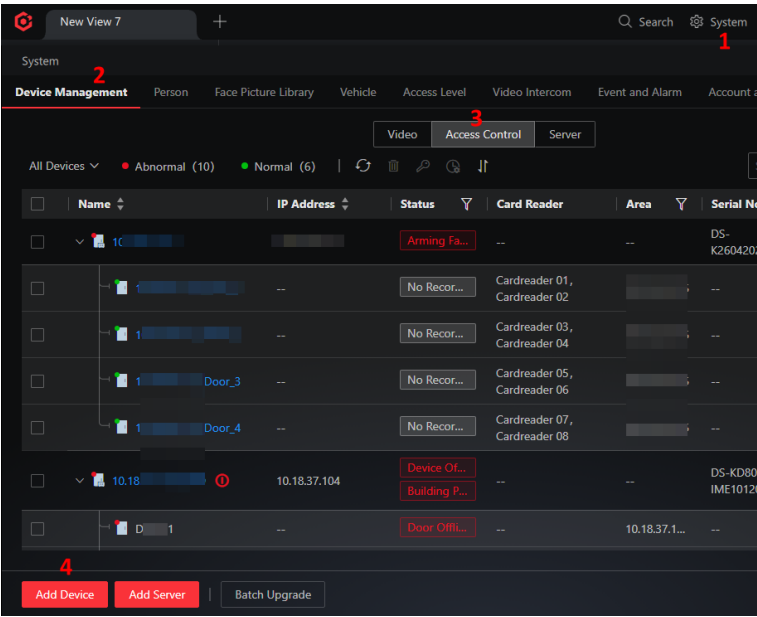


Figure 4-1 Device List

See [Add Devices](#) for details.

4.1.2 View Details of a Device

View configuration and status of a selected device, and edit its configurations.

In the device list, click the name of a device, or right-click a device/door, and then select **View Details**.

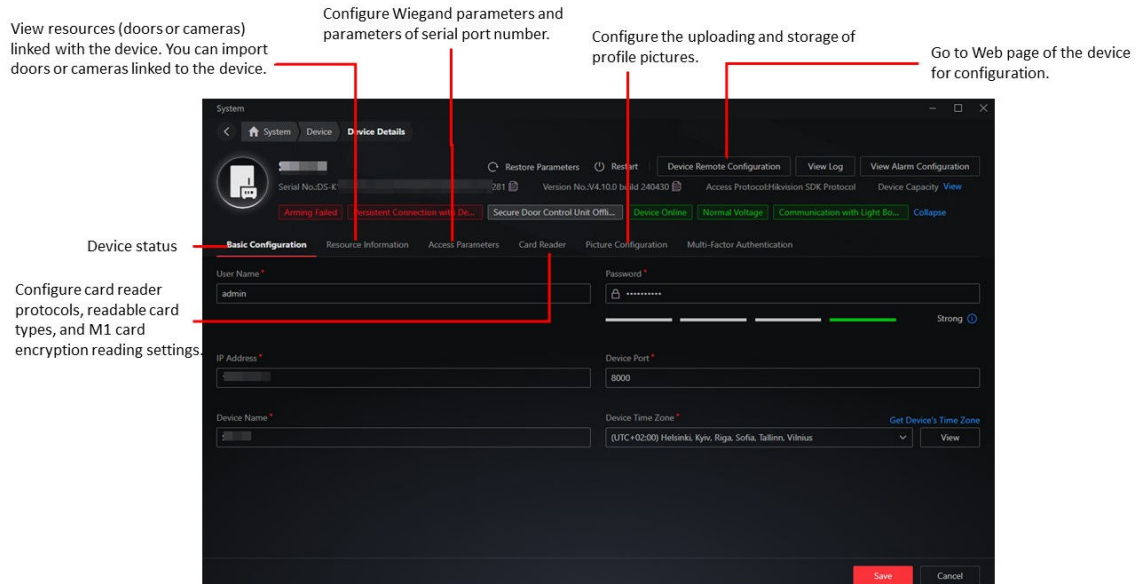


Figure 4-2 Details of an Access Control Device

Multi-Factor Authentication

Authentication Interval

Make sure the interval between two authentications is within this value. For example, when you set the interval as 5s, if the interval between two authentications is longer than 5s, the multi-factor authentication will be invalid, and you should authenticate again from the beginning.

4.1.3 View Details of a Door

In the device list, click the name of a door, or right-click a door, and then select **View Details**.

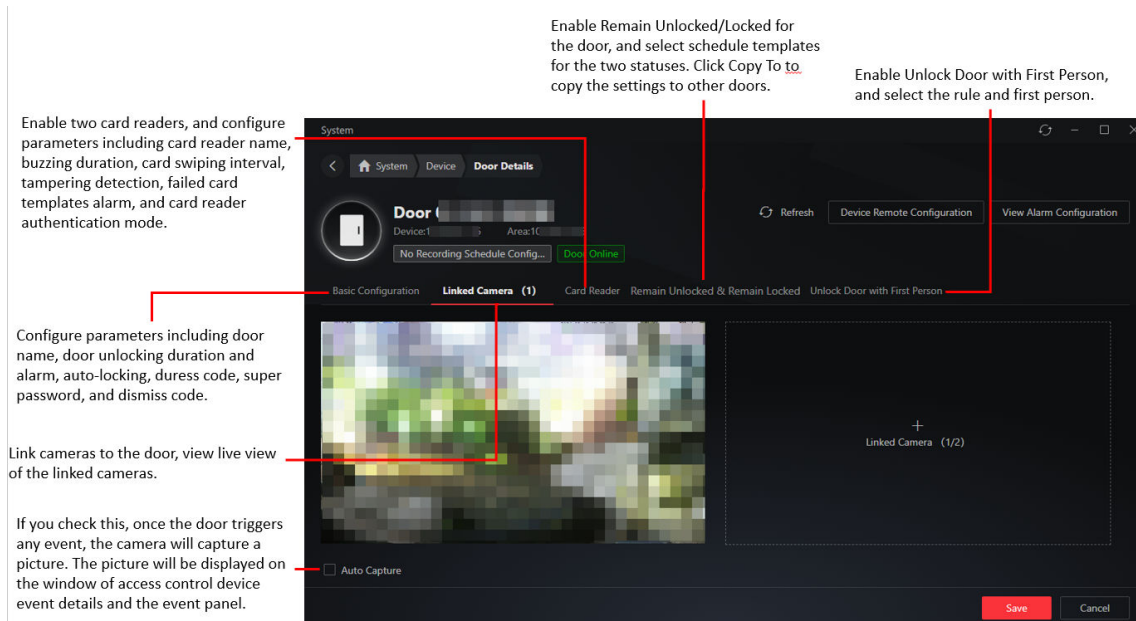


Figure 4-3 Door Details

4.2 Add Departments and Persons

On the Person page, you can add persons via different methods, export person information or profile pictures to the PC, or manage existing persons.

Add a Department

Right-click the root node of department, and select **Add Sub-Department** to add a department.

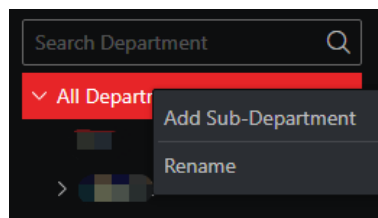


Figure 4-4 Department Tree

Right-click an added department, and select **Add Same-Level Department** or **Add Sub-Department**.

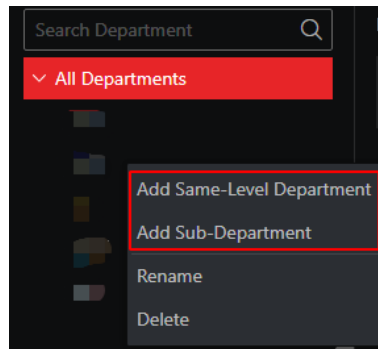


Figure 4-5 Department Tree

In the department tree, drag a department to change its level.

Add Persons

Import person information via an excel file, import person information saved in devices, and import person profile pictures to the client.

Save person information or profile pictures to the PC. The login password is required for security.

Right-click a profile picture to show the following list:

- Identity Access Search
- Edit Person
- Replace Profile Picture
- Delete Person
- Delete Profile Picture

Click a person's name to enter the profile page.

Add and configure cards for the person. Add or edit the PIN. Collects fingerprints or irises.

Adjust Department
Adjust Effective Period
Batch Issue Cards
Batch Report Card Loss
Batch Cancel Card Loss
Forbid Passing
Allow Passing
Configure Additional Information

Configured Credentials
No Credential Configured
Loss Reported
Reset

Expired
Forbid Passing
Normal
Reset

Device Management **Person** Face Picture Library Vehicle Access Level Video Intercom Event and Alarm Account Security System Configuration

Search for department: [Q]

Number of People 500 [Delete] [Import] [Export] [More]

Search for Name / ID / Card No. [Q]

Profile Picture	ID	Given Name	Surname	Department	Access Level	Status	Credential
[Profile Picture]	[ID]	[Given Name]	[Surname]	New Organization	Normal	[Status]	[Credential]
[Profile Picture]	[ID]	[Given Name]	[Surname]	New Organization	Normal	[Status]	[Credential]
[Profile Picture]	[ID]	[Given Name]	[Surname]	New Organization	Normal	[Status]	[Credential]
[Profile Picture]	[ID]	[Given Name]	[Surname]	New Organization	Normal	[Status]	[Credential]
[Profile Picture]	[ID]	[Given Name]	[Surname]	New Organization	Normal	[Status]	[Credential]
[Profile Picture]	[ID]	[Given Name]	[Surname]	New Organization	Normal	[Status]	[Credential]

[Add Department] [Add Person] [Credential Configuration]

Figure 4-6 Person List

<

System

Person

Add Person

Basic Information

Credential

Access Level

Assign New Access Level

No assigned access levels.

Assign Now

☐ Super Access Permission

If you enable this, the person will not be subject to such access rules as remaining locked and first person authorization. The function is exclusive from the extended access function.

☐ Extended Access

If you enable this, the door unlocking duration will be extended and can be configured in door details page in Device Management > Access Control. The function and the access permission function cannot be enabled concurrently.

☐ Device Administrator

If you enable this, the person can log in to the device-related platform for operation.

Add

Add and Continue

Cancel

Figure 4-7 Add Person Page

[illegible]

Figure 4-8 Template for Importing Persons

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Person Information_7													
2	Rule Either first name or last name is required. Once configured, the ID cannot be edited. Confirm the ID rule before setting an ID. Do NOT change the layout or column heading in this template file. Otherwise, importing may fail. You can add persons to existing departments. The department name should be separated by /. For example, to import persons to Department A under All Departments, please enter All Departments/Department A. Start Time of Effective Period: The effective period of the person for access control and access time. Format: yyyy/mm/dd HH:MM:SS. End Time of Effective Period: The effective period of the person for access control and access time. Format: yyyy/mm/dd HH:MM:SS. No more than 3 cards can be applied to each person. Use semicolon (;) to separate if there is more than one card No., e.g., 01,02,03. Extended Access and Super User: cannot be enabled at the same time.													
3	ID	First Name	Last Name	Department	Start Time of Effective Period	End Time of Effective Period	Card	Gender	Email	Phone	Superuser	Extended Access	Device Administrator	Access Level
4				All Departments							Disable	Disable	Disable	
5				All Departments							Disable	Disable	Disable	
6				All Departments							Disable	Disable	Disable	
7				All Departments							Enable	Disable	Disable	
8				All Departments							Disable	Disable	Disable	

Figure 4-9 Exported Person Information

Additional information will be included in the downloaded template if any.

To export person profile pictures, you should enable this function first on the Profile Picture page (**System → System Configuration → Security → Profile Picture**). See *Protect Profile Pictures* .

For deleted persons, their information (including name, ID, validity period, credentials, etc.) will still be kept (Go to **System → Storage → Data Retention Time → Deleted Person Data** to configure data retention time for them.) During the retention time, the data of deleted persons can still be found; otherwise the data will be deleted.

4.2.1 Configure Credential-Related Parameters

Make sure you select the right collecting mode and configure the collecting device properly.

On the Person page, click **Credential Configuration**. Select a collection mode according to the following table.

Table 4-1 Scenarios Applicable for Different Collection Mode

Collection Device	Scenario
• Card Enroller • Fingerprint Enroller	Credentials of persons in different places are needed to collect (so that you should take the devices to different places). You can collect cards anywhere, and persons can come up and sit beside you for collecting fingerprints.
Access Control Device	The collection device is already installed and cannot be moved. So you should add the device to the system first, and then collect credentials remotely. This function should be supported by devices. If you fail to collect the card No., go to the Door Details page and check whether the door is armed.
Enrollment Station	The enrollment station can be used for collecting credentials via USB or network. It supports collecting cards, face pictures, and fingerprints. You can take it to anywhere, and the collected credentials can be stored in the device.

4.2.2 Protect Profile Pictures

Read this topic if you have requirement for protecting profile picture.

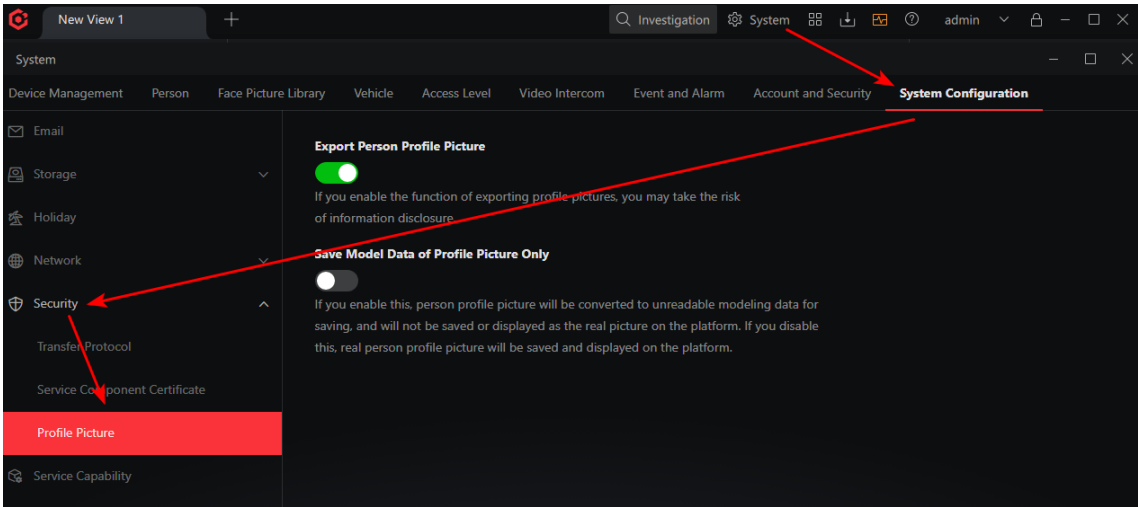


Figure 4-10 Entry of Protect Profile Pictures

Export Person Profile Picture

If you enable this function, you will be able to export persons' profile pictures to the PC. If you disable this, the button for exporting profile pictures will be hidden.

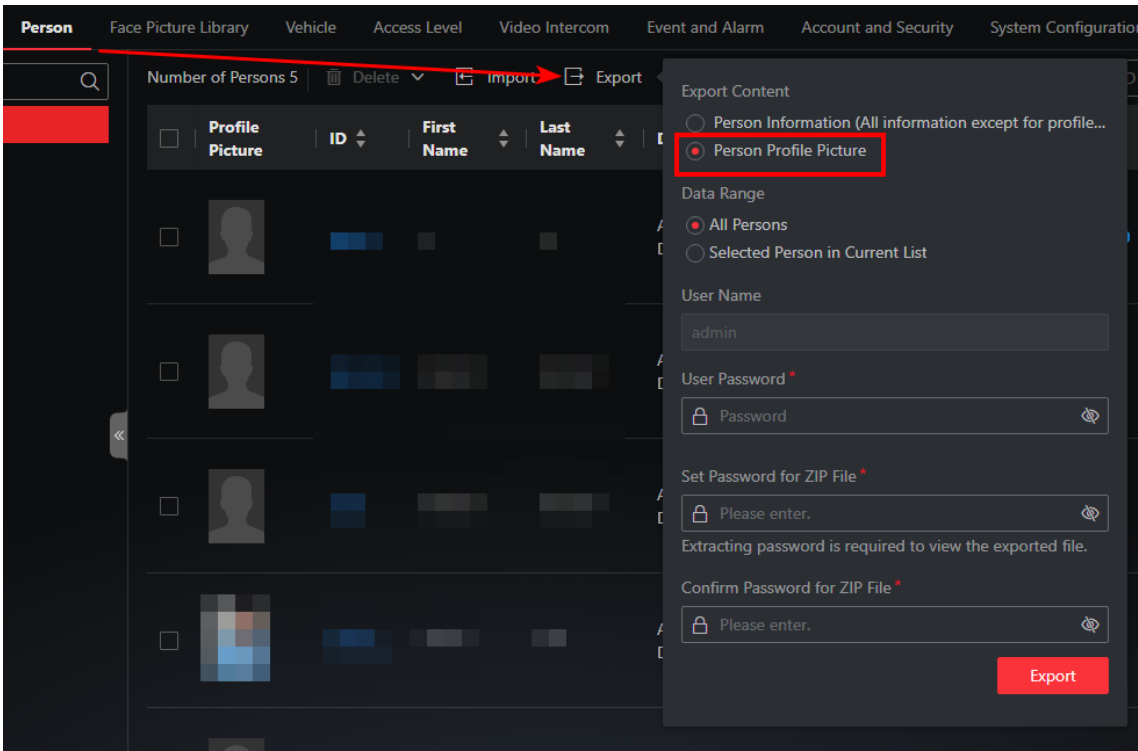


Figure 4-11 Entry of Exporting Profile Pictures

4.3 Add and Assign Access Levels

By selecting doors and an access schedule, you can add an access level. After this, you can assign the access level to persons or departments. In this way, the persons can authenticate and open the selected doors during the defined time periods.

What is the Access Level?

The access level is a group of doors sharing the same access schedule. Assigning access level to persons or departments can define the access permission that which persons can get access to which doors during the authorized time period.

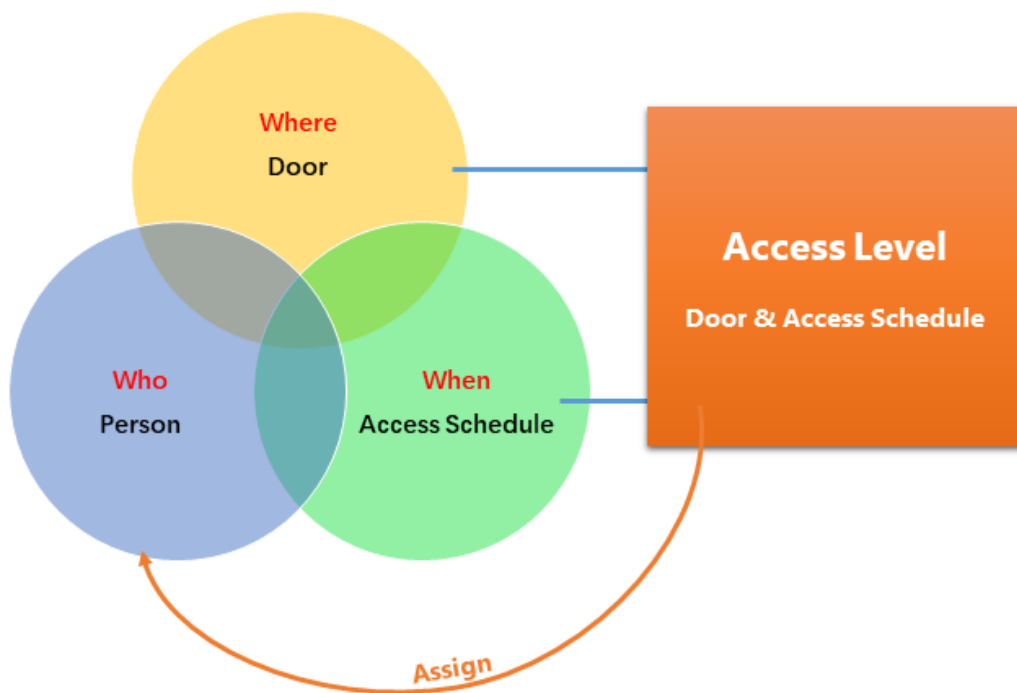


Figure 4-12 Access Level

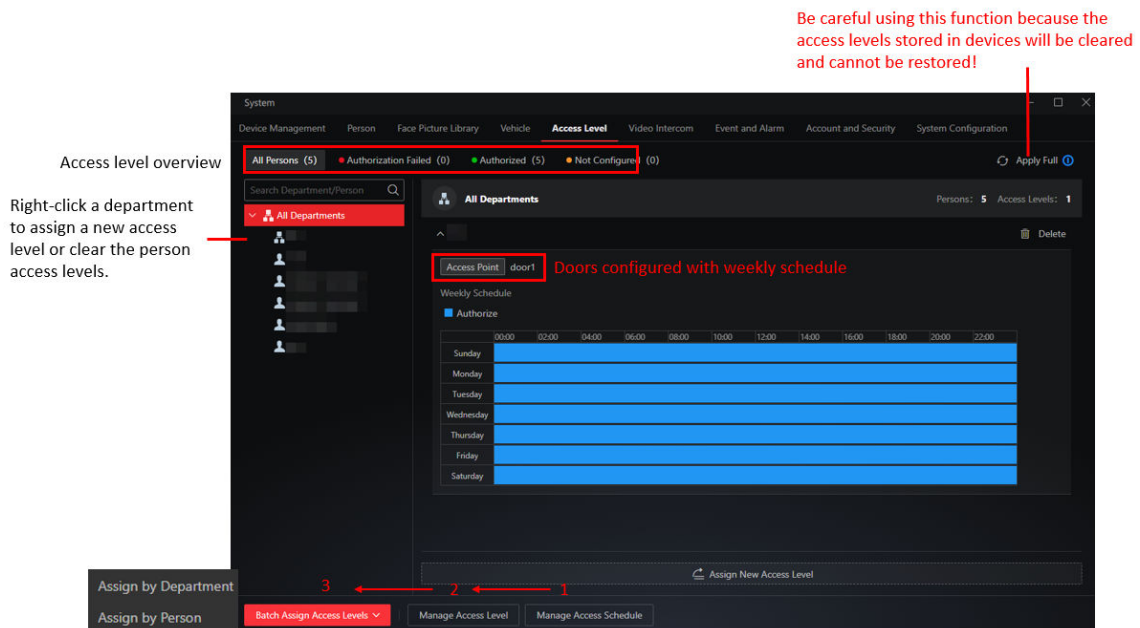


Figure 4-13 Access Level Page

Add an Access Schedule

An access schedule defines when people can open the door. Three default access schedule templates are provided: all-day template, workday template, and weekend template.

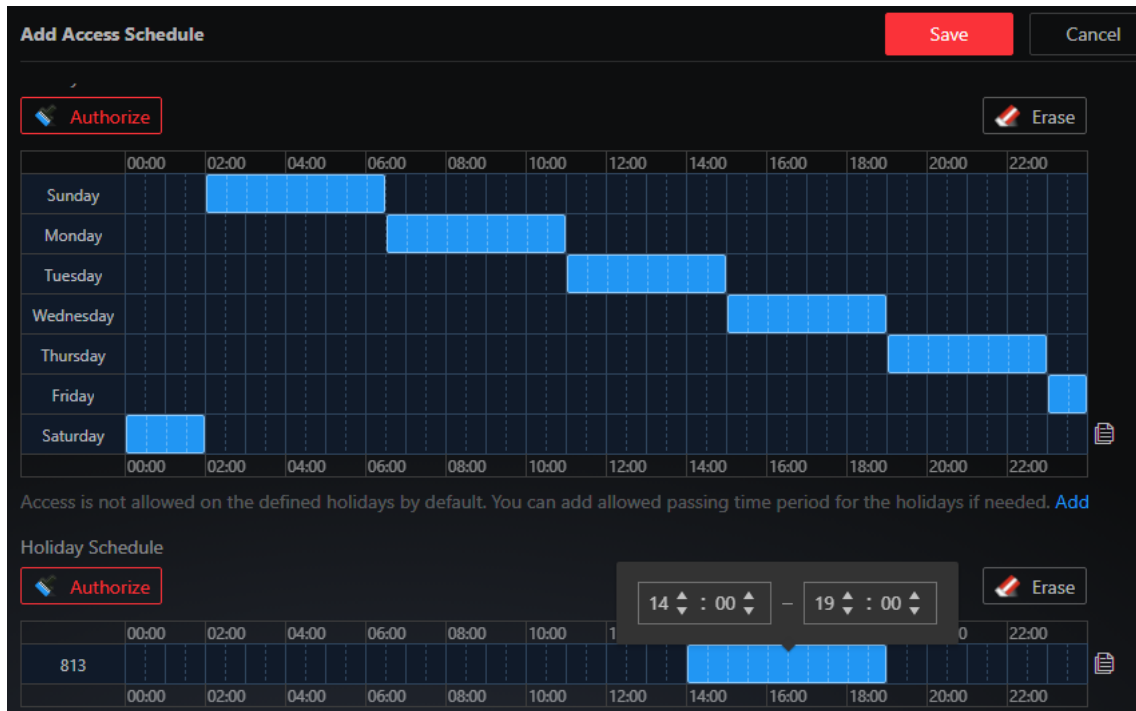


Figure 4-14 Add an Access Schedule

Click **Authorize**, and then drag on the time bar to draw authorized time periods. After drawing, you can hover the cursor on the blue area and enter a time or adjust the time by clicking the arrows in the box popped up. For details about adding or editing a holiday, see [Add or Edit a Holiday](#).

Add an Access Level

When creating an access level, users can select multiple doors. A door can be added to different access levels.

About the Assignment of Access Levels

Assign Access Level by Department

Used for scenarios where persons need to authenticate for entering fixed places (such as offices). After assigning an access level to a department, newly-added persons will be automatically assigned with the same access level.

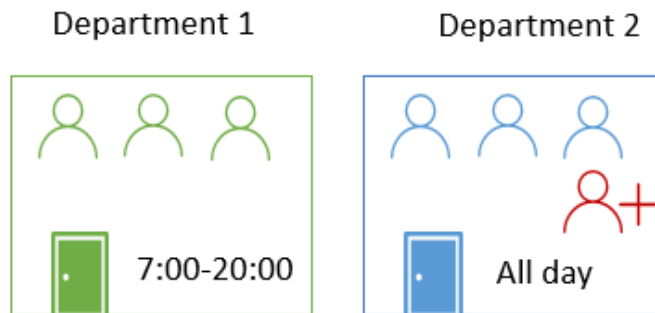


Figure 4-15 Assign Access Level by Department

Assign Access Level by Person

Used for scenarios where a person needs the access level of a special door, or a person needs a temporary access level of a door.

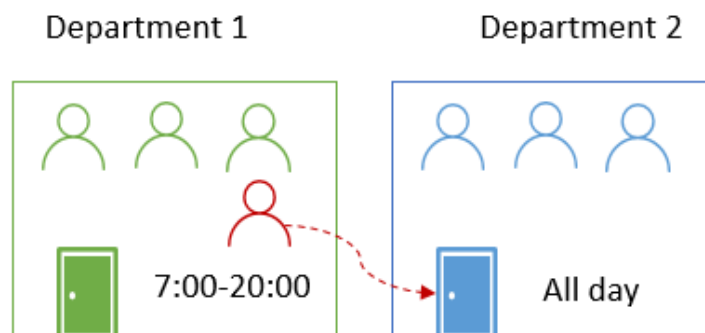


Figure 4-16 Assign Access Level by Person

Apply Assigned Access Levels to Devices

After assigning access levels to persons via the client, the assignment will be automatically applied to devices. The following reasons may cause the failure of access level assignment:

1. The device to which the access level is applied is offline.
2. The network connection is unstable.

4.4 Add an Alarm

You can add an alarm for a specified device, or all resources in the system.

Both doors and access control / video intercom devices can trigger alarms. You can go to the Add Alarm page from the device details page, or the Event and Alarm module. See **Add an Alarm** for details about adding an alarm.

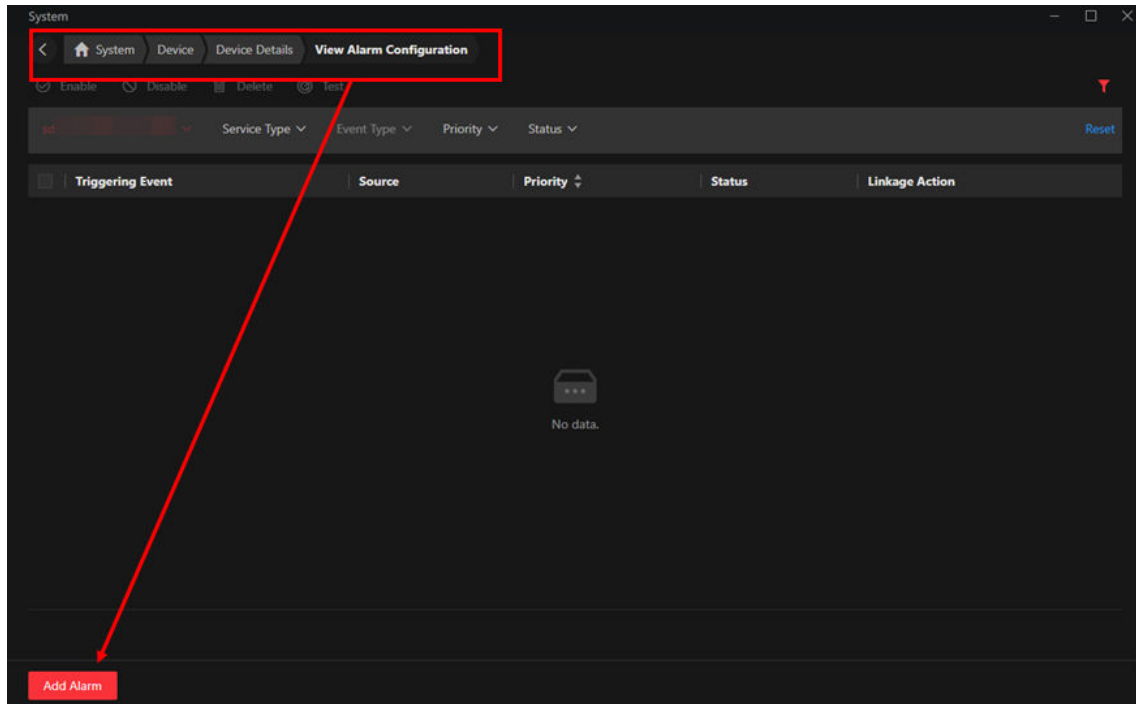


Figure 4-17 Alarm Configuration Page

Supported alarm categories are as follows. See **Supported Triggering Events** for details.

Resources that Can Trigger Alarms	Alarm Category
Door	• Normal Card Swiping • Abnormal Card Swiping • Other Door Events
Access Control / Video Intercom Device	• Device Security • Device Network • Device Battery • Device Record Reporting • Device Disk/HDD • Device Component Communication • Local Operation on Device • Remote Operation on Platform

4.5 Real-Time Monitoring of Doors

You can monitor doors and control door status in real time. Refer to the following table for the explanations of door status.

Table 4-2 Explanations of Door Status, Door Contact Status, and Door Lock Status

Status	Icon	Explanation
Door Status		Door Locked Door Lock Locked
		Door Locked Door Lock Remain Locked
		Door Locked Door Lock Unlocked
		Door Locked Door Lock Remain Unlocked
		Door Unlocked Door Lock Locked
		Door Unlocked Door Lock Remain Locked
		Door Unlocked Door Lock Unlocked
		Door Unlocked Door Lock Remain Unlocked
		Unknown
Door Contact Status		Door Contact Unlocked
		Door Contact Locked
Door Lock Status		Door Lock Unlocked
		Door Lock Locked

4.5.1 Monitor Doors and Control Door Status

After adding doors, you can control door status such as locking and unlocking doors. For the doors with build-in cameras or doors linked with cameras, you can also monitor doors and perform more operations during monitoring such as capturing and recording.

For the detailed explanations of door status, refer to [***Real-Time Monitoring of Doors***](#).

- Control one door: double click a door or drag a door to the viewing grid, and then right click a door or click the icons in the lower right corner to control the door.

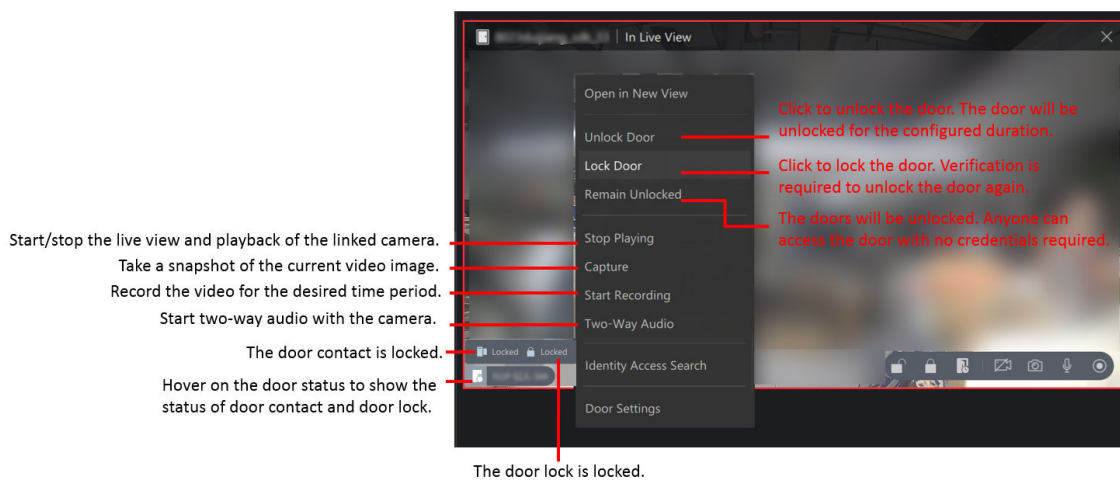


Figure 4-18 Supported Operations to Control One Door

These operations are only available for the doors with build-in cameras or doors linked with cameras: playing / stop playing video, capturing, recording, and two-way audio.

- Control doors on the current view: draw a frame to select doors and then right click the window to control the selected doors, or click the door status on the top of the viewing grid to batch control door status.

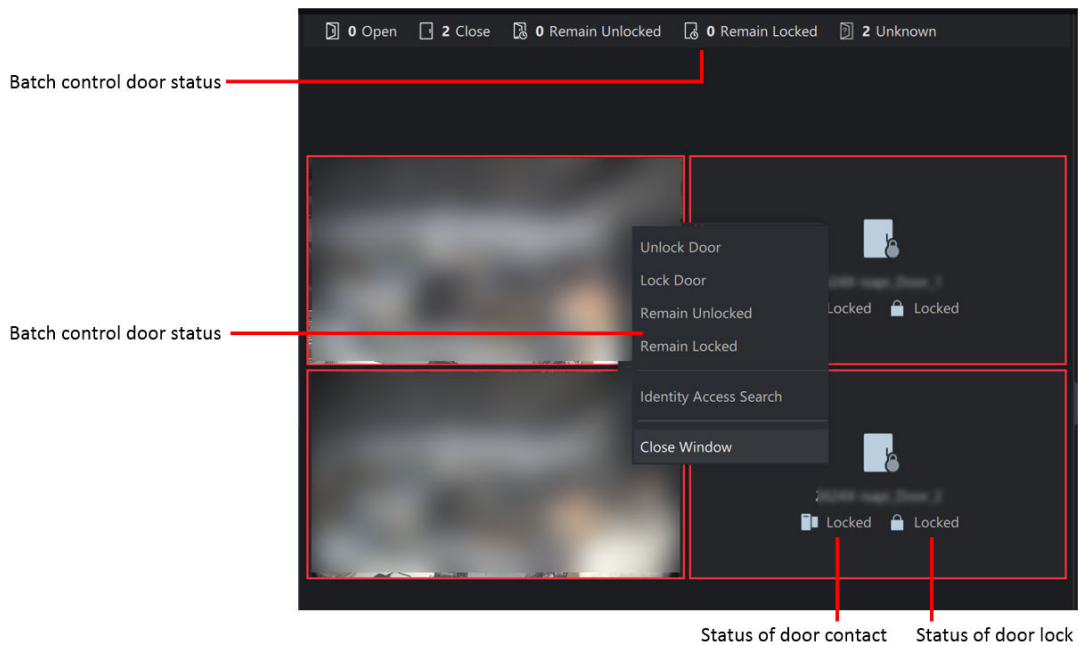


Figure 4-19 Select a Way to Control Doors on The Current View

- Control all the doors: in the **Shortcut** area, click **Quick Lock/Unlock**, and then you can batch unlock/lock all doors, or remain all doors unlocked/locked.

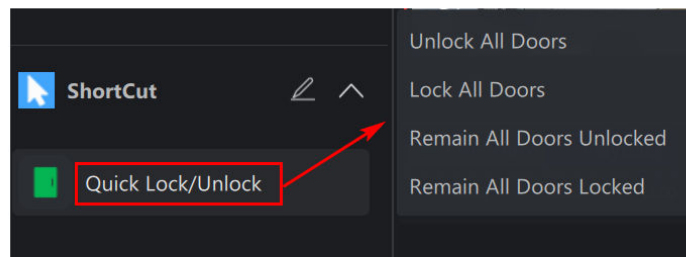


Figure 4-20 The Entry to Control All Doors

4.5.2 Display and Control Doors on the Map

After adding doors to the map, you can control door status such as locking and unlocking doors. For the doors of MinMoe face recognition terminal or doors linked with cameras, you can also monitor doors and perform more operations during monitoring such as capturing and recording.

For the detailed explanations of door status, refer to [***Real-Time Monitoring of Doors***](#).

In the **Map** module, double click a map, or drag a map to the right window, or right click a map and click **Open** to view the map and the doors added to the map. For details about adding maps, refer to **Add Map**.

There are two modes for the map. In the Monitor mode (), you can monitor and control doors on the map. In the Configuration mode (), you can add doors, marks and hot regions to the map, set the types of resources to be displayed on the map, etc.

Add Map

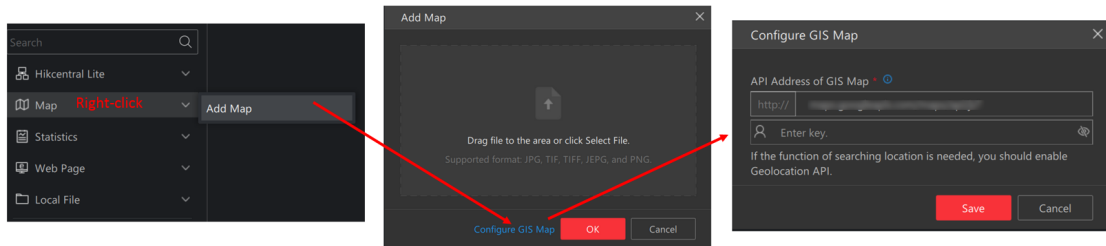


Figure 4-21 Add GIS Map

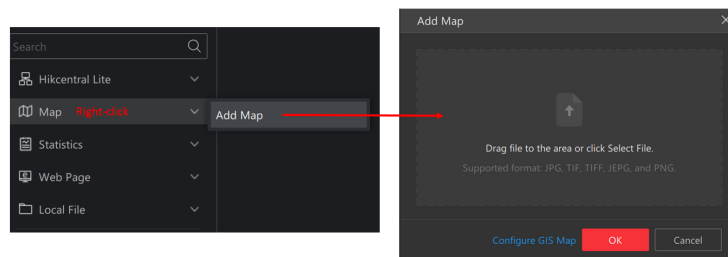


Figure 4-22 Add E-Map

Configuration Mode

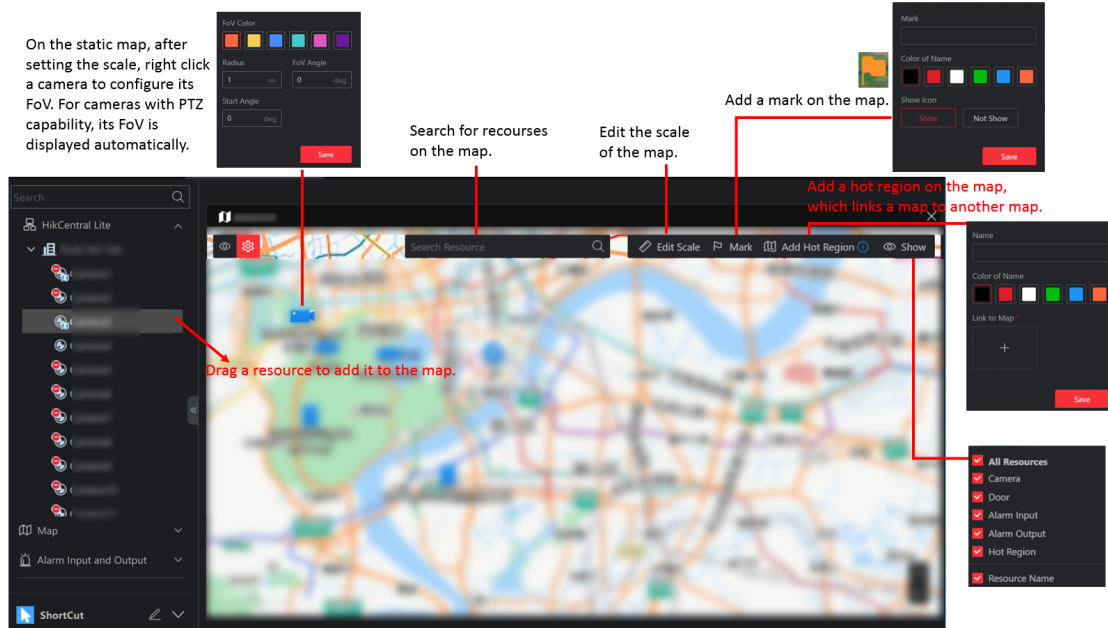


Figure 4-23 Supported Operations in Configuration Mode

Monitoring Mode

You can perform the following to monitor and control doors on the map.

- Monitor One Door: click a door to view the live view of its linked camera.
- Monitor Doors: click **Batch Select**, draw an area to select multiple doors, and click **Batch Play** to view the live view of its linked cameras in a batch.
- For details about supported operations when monitoring door(s), refer to **Monitor Doors and Control Door Status**.
- Control One Door: click the door or right click the door.

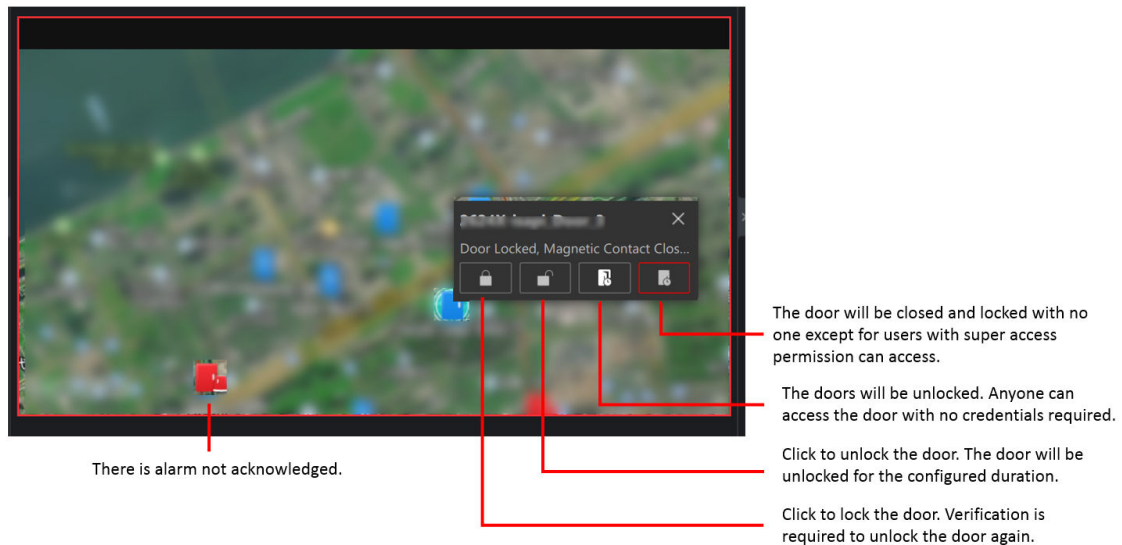


Figure 4-24 Control One Door

4.6 Video Intercom

People can call the system users via access control devices (including MinMoe face recognition terminals) and video intercom devices, and users can also call the device via the client.

Configure Parameters

Before two-way audio, you can configure parameters of calls from devices to the current client, and configure call recipients for different devices.

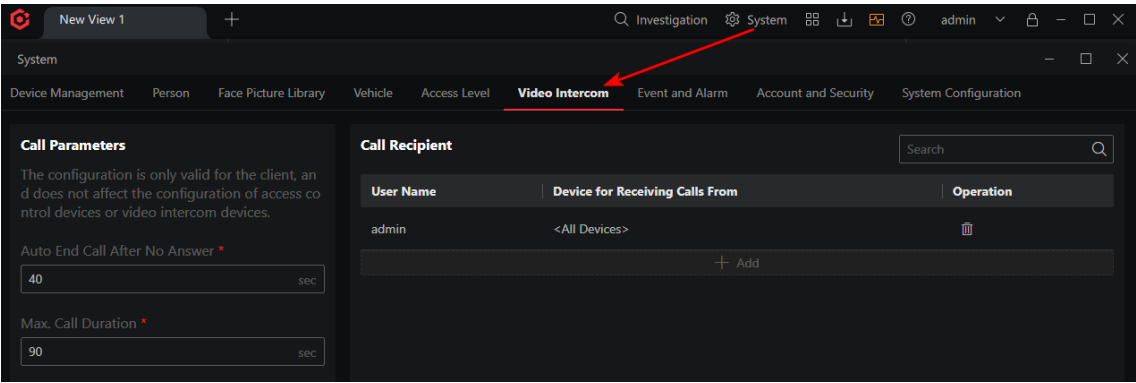


Figure 4-25 Entry of Video Intercom

Automatic Call End Time After No Answer

If a device calls the client and no one answers the call, the call will be ended automatically after the duration you set.

Max. Call Duration

The Max. duration of a talk between the client and a device.

Call Recipient

Select different devices for different users so that they can receive calls from different devices.

Video Intercom Call

You can call the device by the following two ways:

1. If a person called the client and the call was not answered, a notification will be displayed on the notification panel. Right-click the notification and select **View Details** → **Call Again** to call the device.

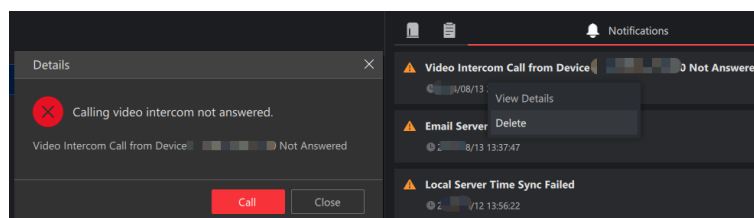


Figure 4-26 Call Device

2. In the live view window of a camera linked to a door, click 

For details about how to search for video intercom call records, see [**Search for Video Intercom Call Records**](#).

4.7 Import Person Authentication Events from Devices to the Client

Person authentication events include normal and abnormal authentication records. When the system misses events, you can import events stored in devices to the system.

Click **System** → **Access Event** → **Person Authentication Event**.

For online devices, you can import events by selecting devices. Specifying the time range of generating events is supported.

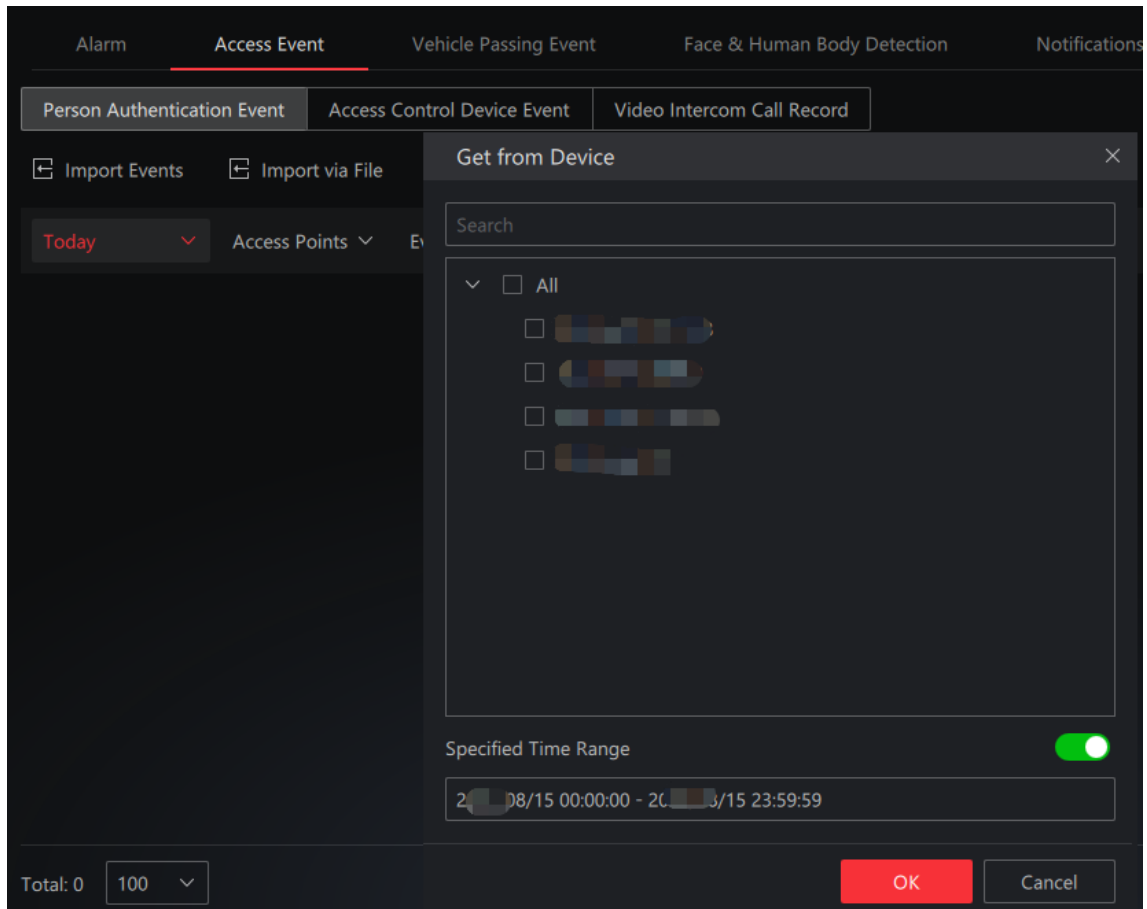


Figure 4-27 Get Events from Device

For devices that are unable to connect to the network, or devices are disconnected from the network which cannot restore for a long time, events can be imported via a CSV file. Plug a flash drive in the device, and start exporting events to the flash drive from the device. When the exporting finishes, plug the flash drive to the PC, and start importing the file.

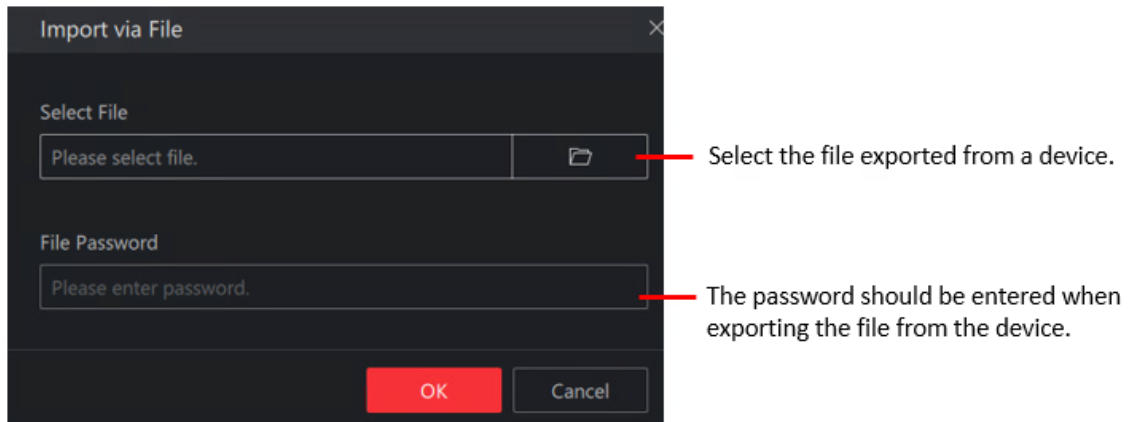


Figure 4-28 Import Events via File

Note

- Only encrypted files can be imported.
 - The file name should meet the format requirement, e.g. recordlist_ device serial No. For example, recordlist_FC2922753.
-

4.8 Search for Access Events

Access events include person authentication events, access control device events, and video intercom call records.

Click **System** → **Access Event** .

Search for Person Authentication Event

Person authentication events include normal and abnormal authentication records.

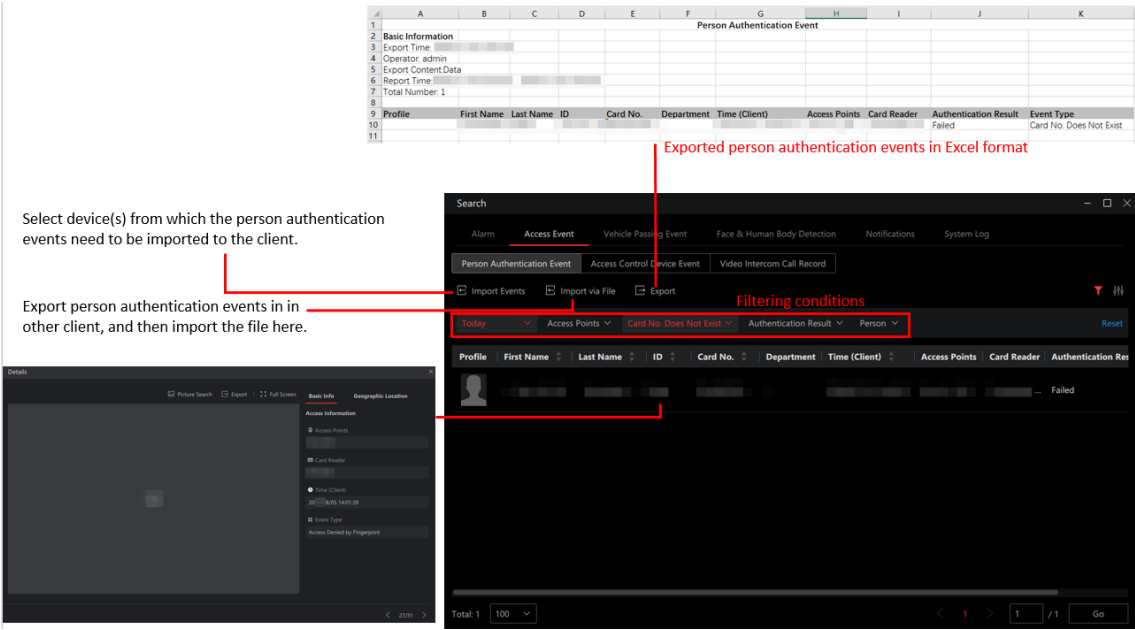


Figure 4-29 Person Authentication Event

Search for Access Control Device Event

Access control device events are events triggered when there is something happens to doors, access control devices, or video intercom devices, such as low battery voltage, door unlocked.

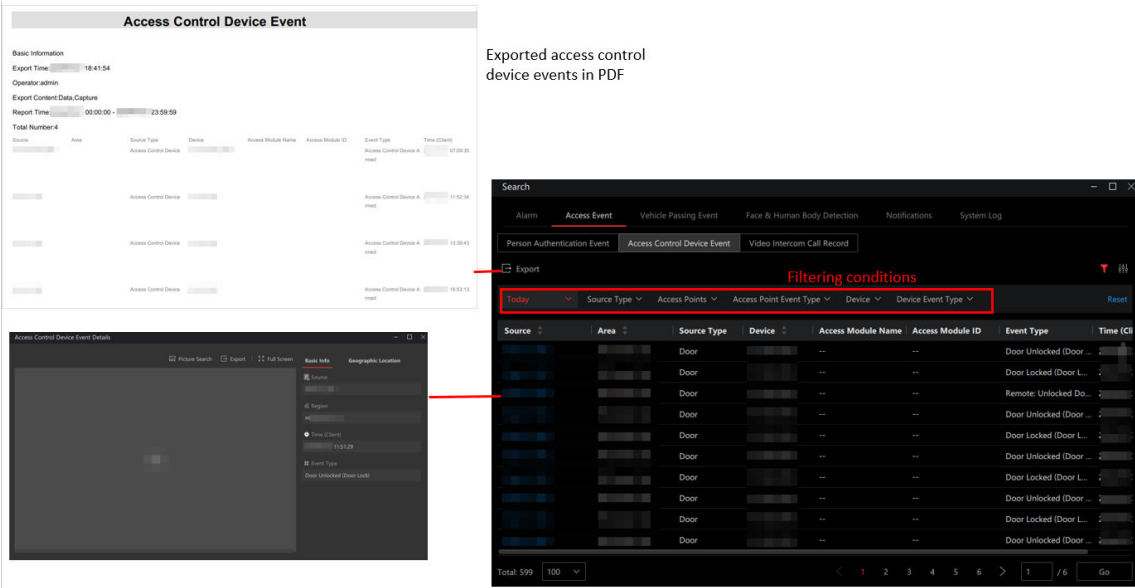


Figure 4-30 Access Control Device Event

Search for Video Intercom Call Records

The video intercom call record refers to the record of devices calling the client. Click **Export** to save all of the searched records to the PC, or select one record and then click  to download it.

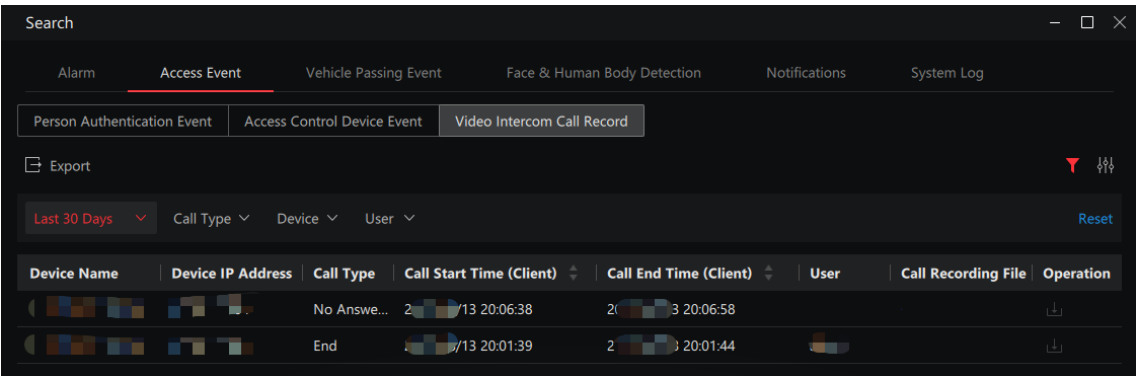


Figure 4-31 Video Intercom Call Records

	A	B	C	D	E	F	G
1	Video Intercom Call Record						
2	Basic Information						
3	Export Time:						
4	Operator:						
5	Export Content:	Data					
6	Report Time:	1/06 00:00:00					
7	Total Number:	84					
8	Device Name	Device IP Address	Call Type	Call Start Time	Call End Time	User	Call Recording File
9			No Answered				
10			Answered				10.18.36.101_2024073118
11			No Answered				k
12			End				

Figure 4-32 Exported Video Intercom Call Records

4.9 Display Statistics of Person&Credentials, Access Levels, and Access Events

The statistics show an overview of persons, person credentials, access levels of persons, and access events. When viewing the statistics, users can go to corresponding page to configure these items in real time.

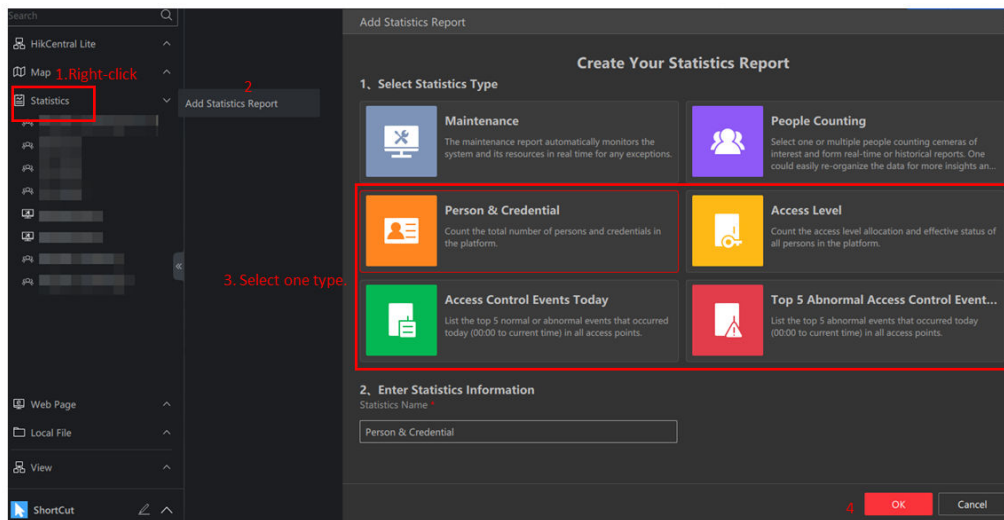


Figure 4-33 Add Statistics Report

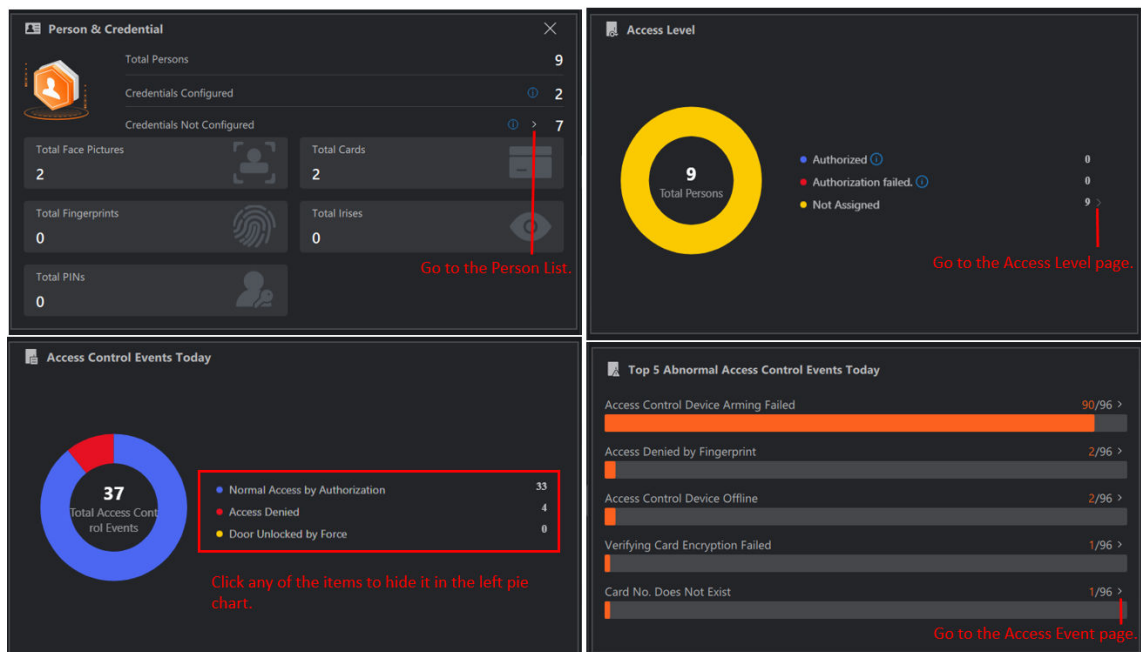


Figure 4-34 Statistics

Access Control Events Today

Normal Access by Authentication

Persons successfully unlocked doors via authentication of different credentials.

Access Denied

Persons' authentications failed, and doors were not unlocked.

Right-click a report to display the report in a new view, refresh the report, or export the report as a PDF file.

Chapter 5 Main Panel for Monitoring and Control

The following is the introduction of main panel for monitoring and control.

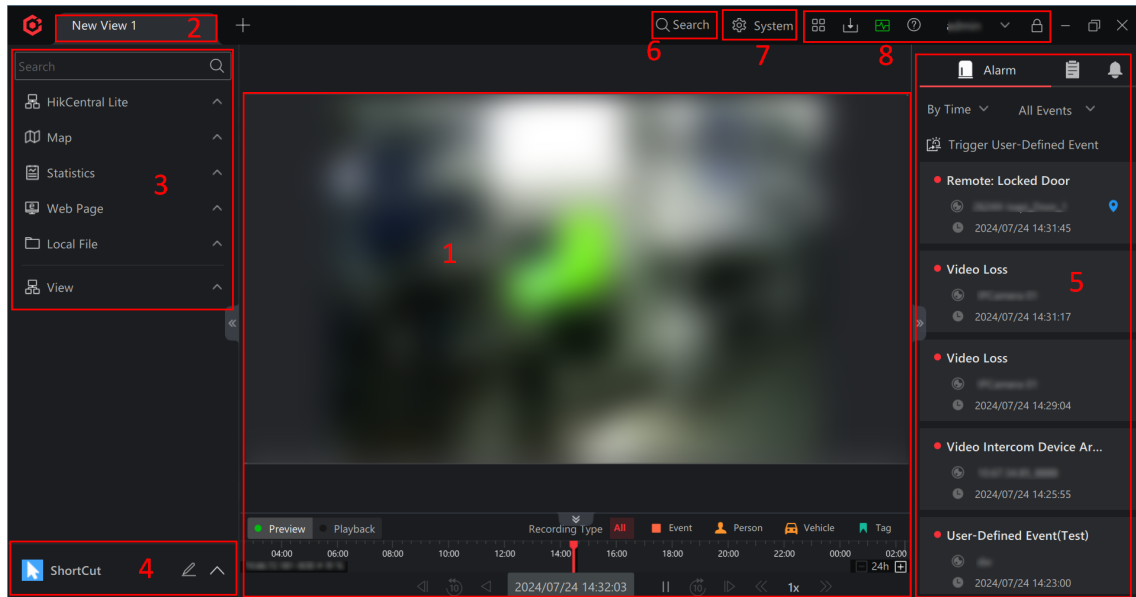


Figure 5-1 Main Panel for Monitoring and Control

Table 5-1 Main Panel Introduction

No.	Function
1	Display resources, maps, statistics reports, web pages, local files, and views in the viewing grid. Local files include captured pictures and recorded videos during live view and playback. You can also drag a picture or video from local PC to the viewing grid.
2	Drag a view upwards or downwards, or right-click a view and click Open in New Window to open the current view in a new window.
3	Right-click to add areas, resources, maps, statistics reports, web pages, local files, and views. You can double-click an area, a resource, a map, a statistics report, a web page, a local file or a view for display, or drag them one by one to the viewing grid for display.
4	Click  to pop up the menu of the client, and click  to add a module to the Shortcut, which provides a quick access to the corresponding module.

No.	Function
	You can drag the added modules to adjust their sequences.
5	Alarm: View the alarm list in real time. If there is no alarm added, click Configure to add alarms. For details, refer to Add an Alarm . At most 100 alarms can be displayed in the list. You can hover on an alarm to view alarm details, drag an alarm to view the related video. Also, you can enable/disable certain alarm types. The enabled types of alarm will be displayed here. Refer to Alarm List . You can display alarms by time or priority order, and filter alarms by event types. You can right-click an alarm to view the alarm details, acknowledge the alarm, mark the alarm, export the alarm, view alarm configuration, etc. Event: View all the events configured in the client. You can view events related with the resources on the current view or events related with all resources. You can hover on an event to view event details, drag an event to view the related video, and right-click an event to perform more operations.  Note Operations after right clicking are different according to different event types. Notification: View the system notifications which indicate status or operations. VCA: View the VCA search results. You can filter by time and click a picture to view the corresponding video at the specific time. Object Search: View object search results. You can filter by time and similarity, view the similarity between the captured face picture with that in the face picture library and view the comparison details.
6	The entry to the Search module, where you can search for historical alarms, person access records, vehicle passing records, etc. For details, refer to Search .
7	The entry to the System module, where you can add and manage devices, persons, face picture libraries, vehicles, access levels, events and alarms. Also, you can set parameters related with account and security, and configure system parameters.
8	 : Install and manage third-party integration applications.  : Enter the Download Center.  : View the performance of PC on which the client is installed.  : Get the User Manual of the client.  : View the information of the login user, manage Licenses, back up data, change password, etc.  : Lock the client.

Chapter 6 Search

The Search module allows to search for alarms, access events, ANPR events, detected face & human body pictures, system notifications, and system logs. In addition, it provides an intelligent search function, which combines video search, person search, vehicle search, and VCA search.

On the top of the Desktop, click **Search**.

General Search

Table 6-1 General Search Content

Search Type	Description
Alarm	Search for historical alarms by time, area, source type (i.e., event category), event name, priority, and source name (device name). Refer to <u>Search for and Export Alarms</u> for details.
Access Event	Access Event: Search for person authentication events, access control device events, and video intercom call records. Refer to <u>Search for Access Events</u> for details.
Vehicle Passing Event	Refer to <u>Search and Export ANPR Events</u> .
Face & Human Body Detection	Refer to <u>Search for Recognized Face Pictures and Human Body Pictures</u> .
Notifications	Refer to <u>Search for Notifications</u> .
System Log	Refer to <u>Search for System Logs</u> .

Intelligent Search

To implement the quick search of targets, the supported search conditions can be used in a flexible combination according to actual needs.

Table 6-2 Intelligent Search Condition

Search Condition	Scenario
Location	• Search for persons/vehicles captured by specified cameras or accessed doors. Refer to <u>Search for Detected Vehicles or Persons by Cameras/Doors</u>. • Search for specific targets related to line-crossing / intrusion event by drawing a VCA area on the video. Refer to <u>Search for Detected Persons or Vehicles in VCA Areas</u> for details.
Target	Upload a picture to search for persons. Refer to <u>Search Records of Face Picture Comparison and Human Body Recognition by a Picture</u> .
Features	Search for persons/vehicles by specific features (such as face picture library or vehicle license plate number). Refer to <u>Search for Detected Persons/Vehicles by Features</u> .

6.1 Search for Detected Vehicles or Persons by Cameras/Doors

Search for videos captured by specified devices, detected vehicles/persons, and access records within specified time period.

Location	Search Result
Camera	• Regular videos captured by the camera. • Passing vehicles. • Captured face pictures. • Video tags that are configured during playback or the event/alarm linkage tags.
Door	• Regular videos. • Captured face pictures. • Card-swiping records.

Search for Vehicles by Cameras

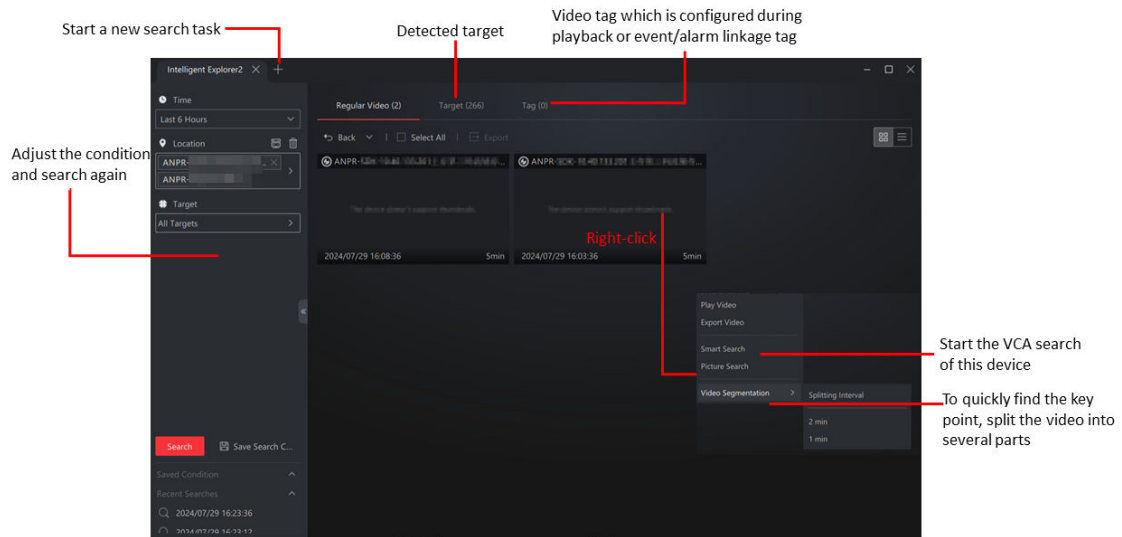


Figure 6-1 Result of Searched Videos

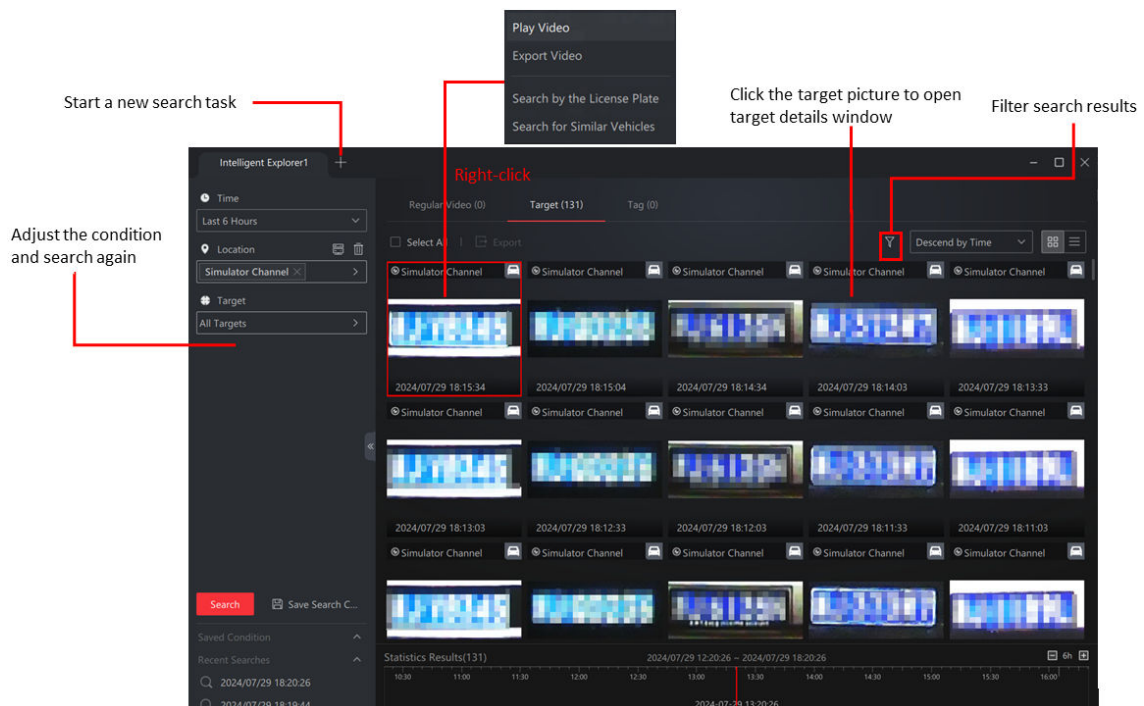


Figure 6-2 Result of Searched Vehicles

Search for Persons by Cameras

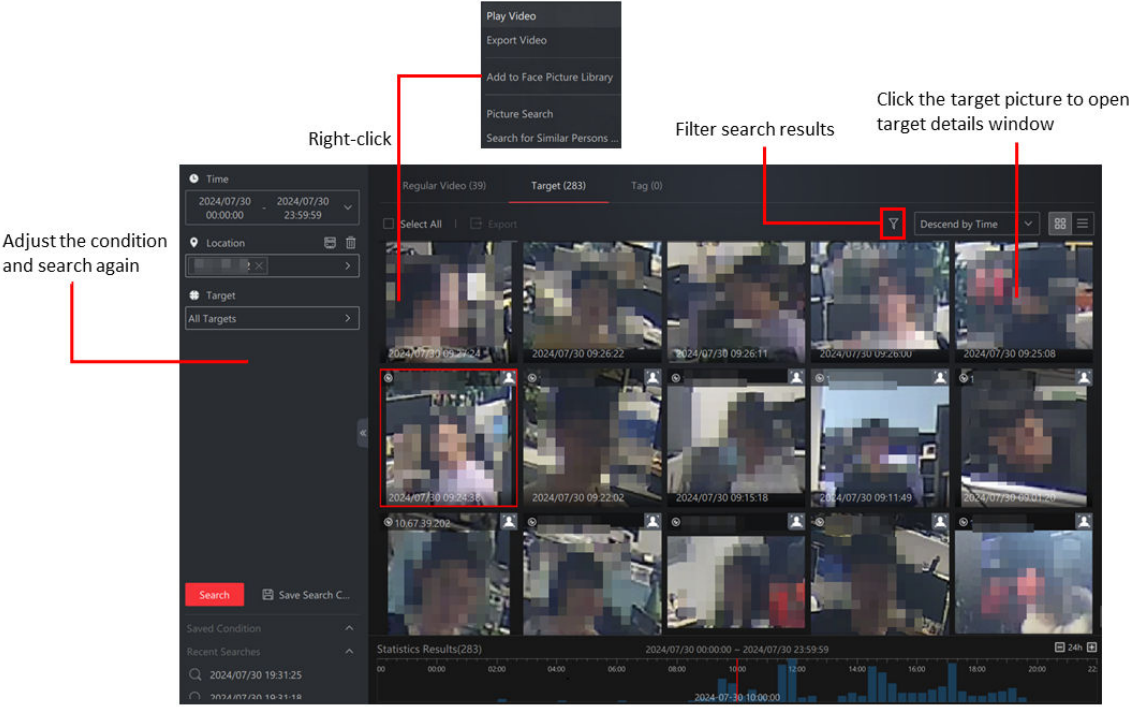


Figure 6-3 Search for Persons by Cameras

Search for Persons by Doors

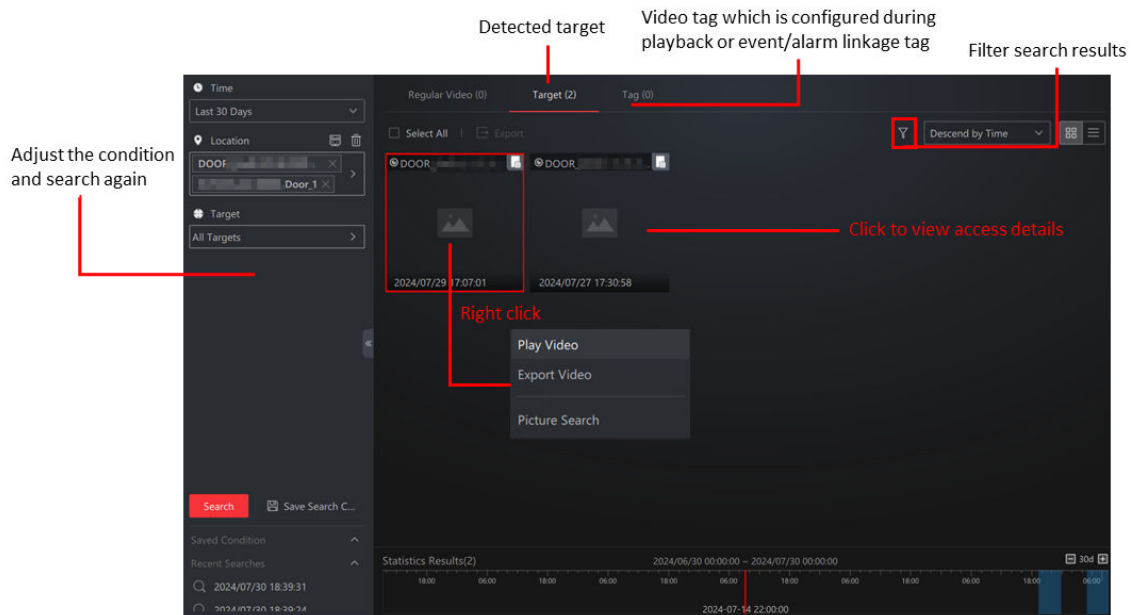


Figure 6-4 Search for Persons by Doors

6.2 Search for Detected Persons or Vehicles in VCA Areas

You can search for VCA events related videos, and filter the them by targets (persons/vehicles). The VCA events include intrusion detection and line crossing detection.



Note

Make sure that the VCA functions are already enabled on the device.

1. On the Intelligent Search page, set the time period and set the **Location** to **VCA Area**.
2. Select a camera to search for the VCA event related videos.
3. Select the VCA event type (**Intrusion Detection** or **Line Crossing Detection**), and draw a detection area/line for search.
4. Click **Search**.

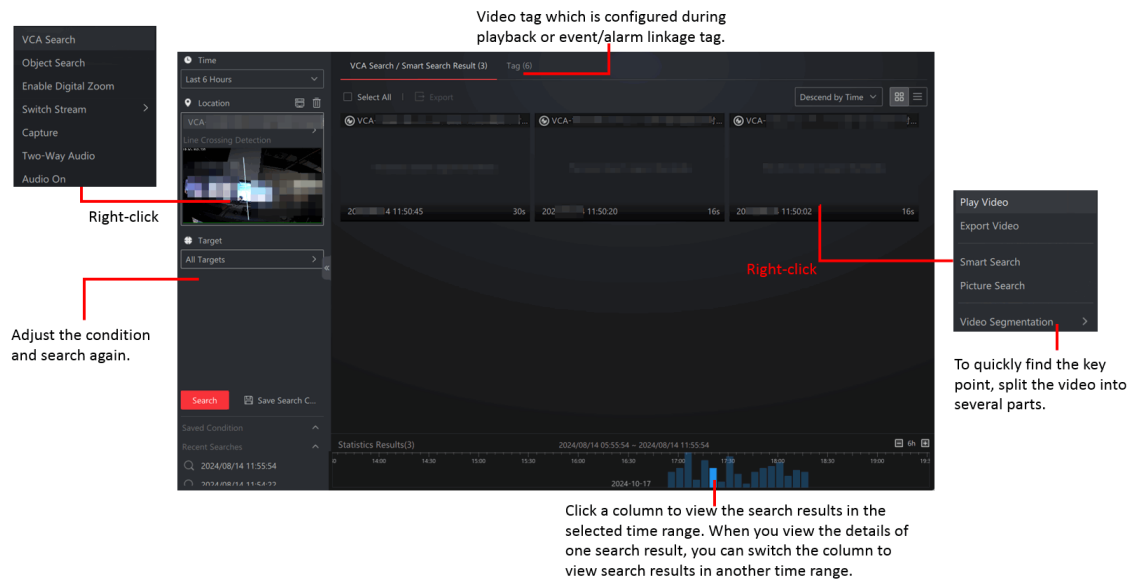


Figure 6-5 VCA Search

6.3 Search for Detected Persons/Vehicles by Features

On the Intelligent Search page, set the time and target features for search.

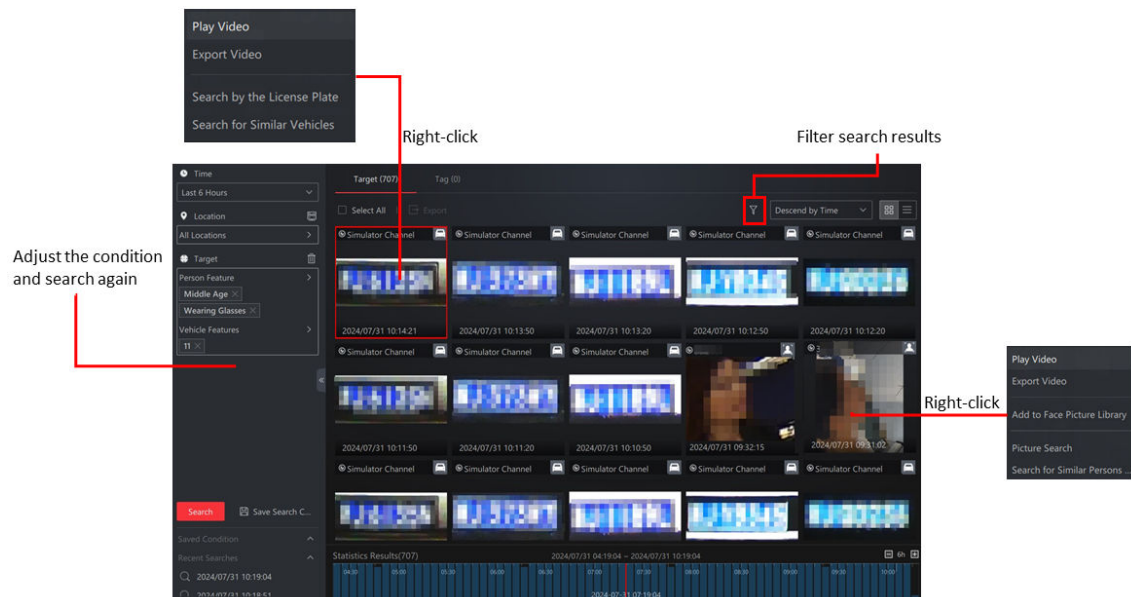


Figure 6-6 Search for Persons/Vehicles by Features

Chapter 7 Event and Alarm

In the Event and Alarm module, you can add and configure alarms, view the list of triggered alarms, searching for and export alarms, subscribe to events, etc.

Event is the signal that resource (e.g., device, camera, server) sends when something occurs. Some events can be subscribed directly for records.

Alarm is used to notify security personnel of the particular situation which helps handle the situation promptly. The triggering event should be configured for an alarm for further notification and linkage actions. You can check the received real-time alarm information and search for history alarms.

Go to **System → Event and Alarm** to enter the Event and Alarm module.

7.1 Supported Triggering Events

Go to **Alarm Configuration → Add Alarm**. In the Add Alarm window, you can view all supported triggering events in the **Triggering Event** list:

Alarms of Video

Table 7-1 Video

Category	Specific Event
VCA Event	Fast Moving
	Intrusion
	Line Crossing
	Motion Detection
	Object Removal
	Object Thrown from building
	Region Entrance
	Region Exiting
	Reverse Entering Alarm
	Unattended Baggage
ANPR	Vehicle Type Matched Event
	Vehicle Matched Event
	Vehicle Mismatched Event

Category	Specific Event
	No License Plate
People Related Event	Face Matched Event
	Face Mismatched Event
	Multi-Target-Type Detection
	Frequently Appeared Person
	Loitering
	Face Detection
	Face Capture
	People Queuing-Up Alarm
	Waiting Time Detection Alarm
	People Gathering
	People Density
Thermal-Related Event	PIR
	Ship Detection
	Temperature Difference Alarm
	Temperature Alarm
	Temperature Pre-Alarm
	Fire and Smoke Detection
Alarm Input	Alarm Input

Alarms of Access Control

Table 7-2 Door

Category	Specific Event
Normal Card Swiping	Access Granted by Card and Fingerprint
	Access Granted by Card, Fingerprint, and PIN
	Access Granted by Valid Card
	Access Granted by Card and PIN
	Access Granted by Fingerprint

Category	Specific Event
	Access Granted by Fingerprint and PIN
	Duress Alarm
	Access Granted by Face and Fingerprint
	Access Granted by Face and PIN
	Access Granted by Face and Card
	Access Granted by Face, PIN, and Fingerprint
	Access Granted by Face, Card, and Fingerprint
	Access Granted by Face
	Access Granted by Employee ID and Fingerprint
	Access Granted by Employee ID, Fingerprint, and PIN
	Access Granted by Employee ID and Face
	Access Granted by Employee ID and PIN
	Access Granted via Combined Authentication Modes
	Skin-Surface Temperature Measured
	Access Granted by PIN
	Access Granted by Iris
Abnormal Card Swiping	Verifying Card Encryption Failed
	Max. Card Access Failed Attempts
	Card No. Expired
	Authentication via Card + PIN Timed Out
	Access Denied (Door Remained Locked or Inactive)
	Access Denied (First Person Not Authorized)
	Access Denied by Card and PIN
	Authentication via Card + Fingerprint + PIN Timed Out
	Access Denied by Card, Fingerprint, and PIN
	Access Denied by Card and Fingerprint
	Authentication via Card + Fingerprint Timed Out
	No Access Level Assigned

Category	Specific Event
	Card No. Does Not Exist
	Invalid Time Period
	Fingerprint Does Not Exist
	Access Denied by Fingerprint
	Access Denied by Fingerprint and PIN
	Authentication via Fingerprint + PIN Timed Out
	Access Denied by Face and Fingerprint
	Authentication via Face + Fingerprint Timed Out
	Access Denied by Face and PIN
	Authentication via Face + PIN Timed Out
	Access Denied by Face and Card
	Authentication via Face + Card Timed Out
	Access Denied by Face, PIN, and Fingerprint
	Authentication via Face + PIN + Fingerprint Timed Out
	Access Denied by Face, Card, and Fingerprint
	Authentication via Face + Card + Fingerprint Timed Out
	Access Denied by Face
	Face Capture Failed
	Interlocking Door Not Closed
	Access Denied by Employee ID and Fingerprint
	Authentication via Employee ID + Fingerprint Timed Out
	Access Denied by Employee ID, Fingerprint, and PIN
	Authentication via Employee ID + Fingerprint + PIN Timed Out
	Access Denied by Employee ID and Face
	Authentication via Employee ID + Face Timed Out
	Access Denied by Employee ID and PIN
	Authentication via Employee ID + PIN Timed Out
	Person Not in Multi-Factor Authentication Group

Category	Specific Event
	Person Not in Multi-Factor Authentication Time Period
	Combined Authentication Timed Out
	Access Denied by Invalid M1 card
	Verifying CPU Card Encryption Failed
	Access Denied (NFC Card Reading Disabled)
	EM Card Reading Not Enabled
	M1 Card Reading Not Enabled
	CPU Card Reading Disabled
	Authentication Mode Mismatch
	Lost Card Authenticated
	Authentication Attempts via Card + PIN Exceeded Limit
	Password Mismatch
	Employee ID Does Not Exist
	Failed Password Attempts Alarm
	Verifying DESFire Card Encryption Failed
	DESFire Card Recognition Disabled
	Authentication Failed Due to Abnormal Features
	Access Denied via Iris
	Iris Anti-Spoofing Detection Failed
Other Door Events	Door Unlocked (Door Lock)
	Door Locked (Door Lock)
	Exit Button Pressed
	Exit Button Released
	Card Reader Tampering Alarm
	Door Abnormally Open (Door Contact)
	Remote: Unlocked Door
	Remote: Locked Door
	Door Bell Rang

Category	Specific Event
	Remote: Remained Unlocked (Free Access)
	Remote: Remained Locked (Credential Failed)
	Remaining Unlocked Status Started
	Remaining Unlocked Status Ended
	Remaining Locked Status Started
	Remaining Locked Status Ended
	First Person In Started
	First Person In Ended
	First Person Authorization Started
	First Person Authorization Stopped
	Door Open (Door Contact)
	Door Closed (Door Contact)
	Unlocking Timed Out
	Face Recognition Terminal Online
	Face Recognition Terminal Offline
	Tailgating
	Reverse Passing
	Force Access
	Climbing Over Barrier
	Passing Timed Out
	Intrusion
	Access Denied When Free Passing
	Barrier Blocked
	Barrier Restored
	Multi-Factor Authentication: Access Denied by Super Password
	Multi-Factor Authentication: Access Denied by Remote Authentication
	Multi-Factor Authentication: Access Granted

Category	Specific Event
	Multi-Factor Authentication: Remotely Open Door
	Multi-Factor Authentication: Super Password Access Granted
	Multi-Factor Authentication: Repeated Authentication
	Multi-Factor Authentication: Timed Out
	Card Reader Lid Closed
	Secure Door Control Unit Lid Opened
	Enter Dismiss Code
	Fire Alarm Relay Triggers Door Remain Open
	Fire Alarm Relay Recovered and Door Recovered
	Blocklist Event
	Opening Door via Exit Button Failed When Door Remaining Closed or in Sleep Mode
	Opening Door by Linkage Failed When Door Remaining Closed or in Sleep Mode
	Overstay
	Unlock by Center
	Door Not Open
	Door Not Closed
	Secure Door Control Unit Disconnected
	Secure Door Control Unit Connected
	Motion Detection

Table 7-3 Access Control Device

Category	Specific Event
Device Security	Device Tampering Alarm Restored
	Secure Door Control Unit Tampering Alarm
Local Operation on Device	Local: Login Locked
	Local: Login Unlocked
	Local: Login

Category	Specific Event
	Local: Logout
	Local: Upgrade
	NTP Auto Time Synchronization
	Local: Restored Default Parameters
	Edit Network Center Configuration
	Edit GPRS Parameters
	Edit Central Group Configuration
	Import Normal Configuration File
	Export Normal Configuration File
	Import Card Permission Parameters
	Export Card Permission Parameters
	Local: Upgrade Device Firmware via USB Flash Drive
	Local: Upgrading Failed
Device Component Communication	Lane Controller Fire Input Alarm
	Pedestal Temperature Too High
	Communication with Light Board Exception
	Indicator Turned Off
	Lane Controller Disconnected
	Lane Controller Connected
	CAN BUS Recovered
	Lane Controller Fire Input Recovered
	Communication with IR Adaptor Recovered
	Active Infrared Intrusion Detector Recovered
	Extension Module Offline
Device Disk/HDD	No Memory Alarm for Unreported Events
	No Memory for Unreported and Access Granted Events
Device Battery	AC Power On
	Battery Voltage Recovered

Category	Specific Event
	Battery Voltage Restored
	Device Power On
Device Record Reporting	Access Control Device Armed
	Video Intercom Device Armed
Device Network	Access Control Device Online
	Video Intercom Device Online
Remote Operation on Platform	Remote: Login
	Remote: Logout
	Remote: Arming
	Remote: Disarming
	Remote: Restart
	Remote: Upgrade
	Remote: Export Configuration File
	Remote: Import Configuration File
	Alarm Output On
	Alarm Output Off
	Remote: Manual Time Synchronization
	Remote: Clear Card No.
	Remote: Restored Default Parameters
	Remote: Capture
	Remote: Upgrading Failed
	Remote: Extension Module Upgraded
	Remote: Extension Module Upgrading Failed
	Remote: Fingerprint Module Upgraded
	Remote: Fingerprint Module Upgrading Failed
	SOS

Alarms of Maintenance

Table 7-4 Access Control Device

Specific Event
Device Tampered
Lane Controller Tampering Alarm
Secure Door Control Unit Tampering Alarm
Access Control Device Offline
Video Intercom Device Offline
AC Power Off
Device Power Off
Low Storage Battery Voltage
Battery Voltage Restored
Low Battery Voltage
Arming Device failed
Video Intercom Device Arming Failed
Memory Card Full
Flash Writing/Reading Exception
Motor or Sensor Exception
CAN BUS Exception
Active Infrared Intrusion Detector Exception
Communication with IR Adaptor Exception
Indicator Turned On
Lane Controller Disconnected
Lane Controller Connected
Extension Module Offline

Table 7-5 Camera

Specific Event
Camera Online
Camera Offline
Channel Armed
Channel Arming Failed
Defocus Detection
Video Loss
Camera Recording Exception
Camera Recording Recovered
Image Exception Event
Video Tampering Detection
Scene Change Detection
Vibration Detection Alarm
Audio Exception Detection

Table 7-6 Server

Category	Specific Event
System Management Server	CPU Exception
	CPU Warning
	RAM Exception
	RAM Warning
	System Service Abnormally Stopped
Storage Server	Server Offline
Streaming Server	Server Offline

Table 7-7 Encoding Device

Specific Event
Device Reconnected
Device Offline

Specific Event
HDD Full
HDD High Temperature
HDD Impact Detection
HDD Server Failure
R/W HDD Failure
Array Exception
Illegal Login
Device Armed
Arming Device Failed

Alarms of Custom Event

Table 7-8 Custom Event

Category	Specific Event
User-Defined Event	User-Defined Event
Generic Event	Generic Event

7.2 Event Subscription

You can subscribe to some events to receive them for records on the platform. Batch subscription or unsubscription is supported.

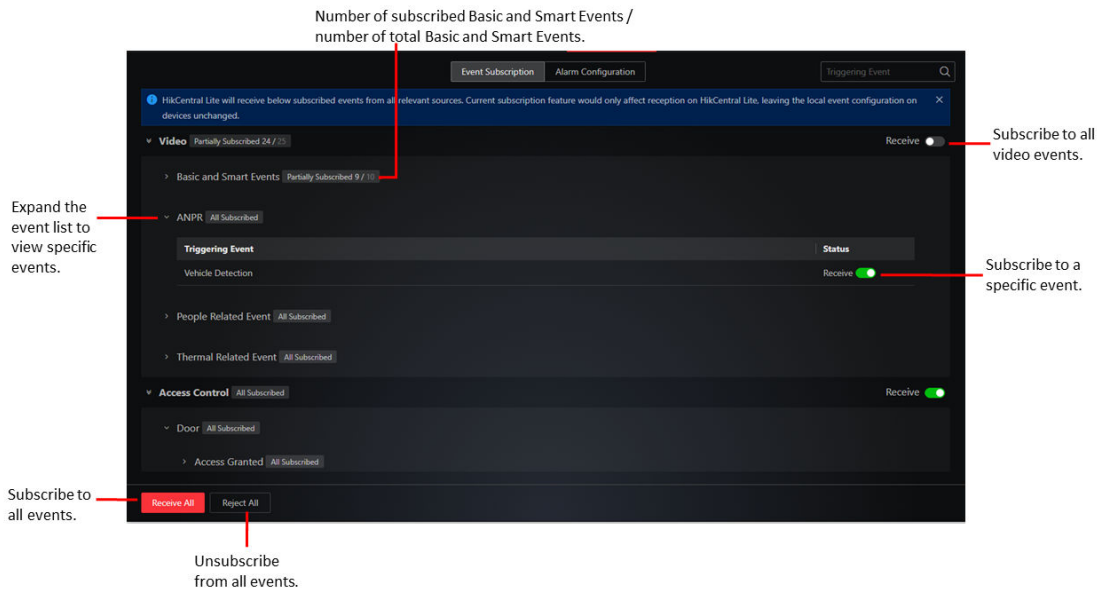


Figure 7-1 Event Subscription

- You can receive alarms without subscribing to events.
- If an event is unsubscribed, you will not be able to find the event in the Search module, or receive the event on the main panel for monitoring and control.

7.3 Add an Alarm

The platform provides multiple triggering event types for you to configure rules for detection or triggering alarms.

Steps

1. In the **Event and Alarm** module, click **Alarm Configuration** → **Add Alarm** to open the Enter the Add Alarm window.
2. Select the triggering event (**Supported Triggering Events**) and source(s), and set the alarm priority. Click **Next**.
3. Configure the receiving schedule. Click **Next**.
For holiday schedules, see details in **Add or Edit a Holiday** .
4. Select the alarm recipient(s). Click **Next**.
5. **Optional:** Add linkage action(s) as needed. See detail in **Supported Linkage Actions** .
6. Click **Complete**.

7.4 Supported Linkage Actions

The supported linkage actions are **Trigger Recording**, **Trigger Pop-up Window**, **Trigger Audible Alarm**, **Capture Picture**, **Create Tag**, **Trigger PTZ**, **Link Access Point**, **Link Alarm Output**, **Send Email**, and **Trigger User-Defined Event**.

For **Trigger Recording**, **Capture Picture**, and **Create Tag**:

If you have selected **Source Camera** and the source is a door without a linked camera, the linkage action can still be added but will not come into effect.

Trigger Recording

Select the camera to record the alarm video when the alarm is triggered.

- **Source Camera:** Record videos by the camera that triggered the alarm and storing the video files in the selected storage location (i.e., Store in Main Storage, Store in Auxiliary Storage, and Not Store).
- **Specified Camera:** Record videos by other cameras and storing the video files in the selected storage location(s) for specified camera(s) respectively.



Note

- The recording will start from 3 seconds before to 15 seconds after the alarm triggering.
 - The recording will be kept for 7 days at least and then will be processed following the overwriting mechanism of device.
-

Create Tag

To add this linkage action, **Trigger Recording** should be configured as well. The tag will be added to the event-triggered video footage for convenient search.

You can customize the tag name as desired or select existing ones (\$Event Name / \$Event Time / \$Event Source).



Note

- The tag will be placed from 3 seconds before to 15 seconds after the alarm triggering.
 - After tags are created, you can perform playback by tag, and search for triggered alarms by tag (***Search for and Export Alarms***).
-

Capture Picture

Select cameras to capture pictures during the alarm.

- **Source Camera:** Capture picture by the camera that triggered the alarm.
- **Specified Camera:** Capture picture by other cameras.



Note

Only one picture will be captured by each camera.

Trigger PTZ

Call the preset, patrol, or pattern of the selected cameras when the alarm is triggered.

Link Access Point

The selected door(s) will be locked, be unlocked, remain locked, or remain unlocked as configured when the alarm is triggered.

Link Alarm Output

Link alarm output device(s) (peripherals such as speaker).

Trigger User-Defined Event

Before adding this linkage action, you should configure alarm(s) for user-defined event(s) first. As the user-defined event(s) cannot be automatically detected, it needs to be manually triggered by clicking **Trigger User-Defined Event** on the notification panel of the main page, or added as a linkage action for another alarm.

Trigger Audible Alarm

Play the voice text on the PC in case the monitoring personnel is not looking at the screen. The voice text will come into effect only when the audio function is enabled and the system voice engine is selected as the alarm sound. See details in [Event and Alarm](#) .

Trigger Pop-up Window

Display the alarm window to show the alarm details, alarm linked cameras' live videos and playback, etc. when the alarm is triggered.

7.5 Alarm List

After you configure the alarm, it is enabled by default. You can manually disable the alarm so that the alarm will not be triggered and the linkage action(s) will not happen, either.

Test-trigger selected alarm(s) to check if the alarm has been properly configured. The alarm will be triggered and displayed in the list of triggered alarms (**Search > Alarm**).

Click the event name to edit the alarm.

Hover over a linkage action to view the action details

Event Subscription

Alarm Configuration

Enable

Disable

Delete

Test

All Events

Source

Priority

Status

Reset

Triggering Event	Source	Priority	Status	Linkage Action
☒ Motion Detection	Camera 01	High	Enable	
☒ Vehicle Mismatched Event	All Sources: Camera	Medium	Enable	
☐ Access Granted by Valid Card	All Sources: Door	Medium	Enable	
☒ Face Detection	All Sources: Camera	Low	Enable	
☐ Region Entrance	All Sources: Camera	High	Enable	
☐ Vehicle Type Matched Event	All Sources: Camera	High	Enable	
☐ Motion Detection	10.81.101.24	High	Disable	
☐ Line Crossing	All Sources: Camera	High	Enable	

Total: 8

100

<

>

X

1 / 1

Go

Add Alarm

Figure 7-2 List of Configured Alarms

7.6 Search for and Export Alarms

Go to **Search → Alarm** to view the list of triggered alarms.

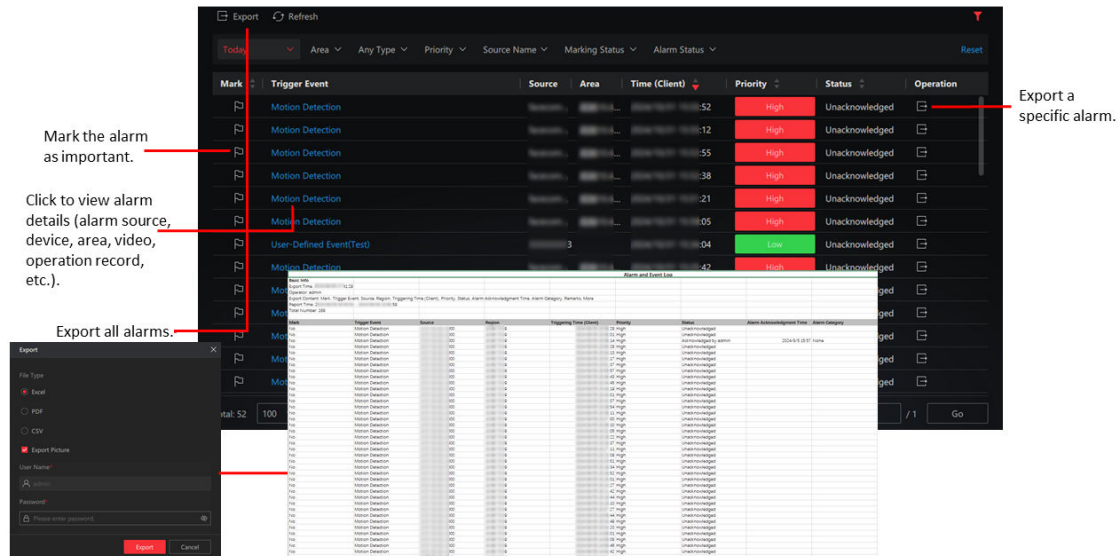


Figure 7-3 Triggered Alarm List

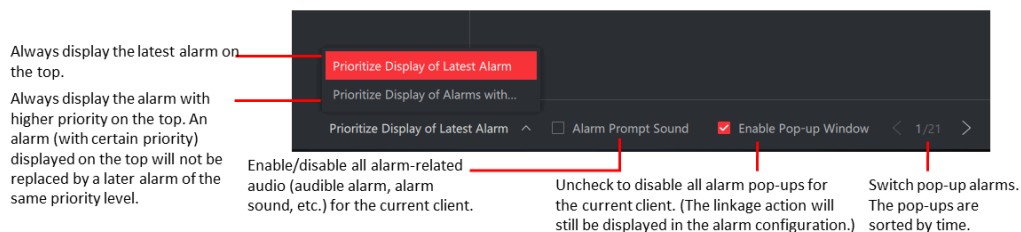


Figure 7-4 Alarm Pop-up Window

You can also enable/disable the alarm prompt sound by enabling/disabling the audio in **Local Configuration → Event and Alarm → Display**.

7.7 Local Configuration About Event and Alarm

You can configure event and alarm related parameters including display type, alarm sound, whether to play the audio repeatedly, and times of playing.

See details in ***Event and Alarm***.

Chapter 8 Management of Users and Roles

In the Account and Security module, you can manage users and roles, configure account security rules, resetting login password, etc.

Go to **System → Account and Security** .

8.1 Add a User

You can add normal users and assign roles to them for accessing the system. Normal users refer to all users except the super user.

Enter the Add User page and set the basic information.

Status and Login

User Status

If you select Inactive, you will not be able to log in with the user account.

Configure permission settings for the user.

PTZ Control Permission

Enter a number that stands for the permission level. Operation from a user with lower permission level can be interrupted by that from another user with higher permission level.

During PTZ control for live view, you can also lock the PTZ so that other users with the same or lower PTZ control permission levels cannot perform PTZ control at all.

Assign Role

Select the roles that you want to assign to the user.

You can hover over a role on the list and then click **View Role Details** to view the basic information and permission settings of the role.

8.2 Supported Operations on the User List

Only user(s) assigned with the Administrator role can inactivate or activate a user. If a user is inactivated, login with the user account is not allowed.

The screenshot shows the 'Account and Security' section of the HikCentral Lite interface. The 'User' tab is selected, displaying a table of users. Annotations point to various features:

- Force log out an online user:** Points to the 'Force Logout' button in the top toolbar.
- Click user name to view and edit user settings:** Points to the 'User Name' column header.
- Get the latest status of all users:** Points to the 'Refresh All' button in the top toolbar.
- Enter a keyword of the user name to search for users:** Points to the search bar in the top right.
- For users whose account is locked due to too many failed login attempts, user(s) assigned with the Administrator role can unlock their accounts for login:** Points to the 'Unlock for Login' button in the top toolbar.

User Name	Type	Role	Connection Number	Login Status	User Status	Expiry Time
admin	Super User	Administrat...	2 >	Online	Active	59
User 1	Normal User	Operator	0 >	Offline	Active	59

Add User

Figure 8-1 User List

8.3 Add a Role

Role is a group of platform permissions. You can add roles and assign permissions to roles, so that users can be assigned with different roles to get different permissions.

Note

The platform has predefined two default roles: Administrator and Operator. You can click the role name to view details. The two default roles cannot be edited or deleted.

Administrator

Role that has all permissions of the platform.

Operator

Role that has all permissions for accessing resources and operating the applications.

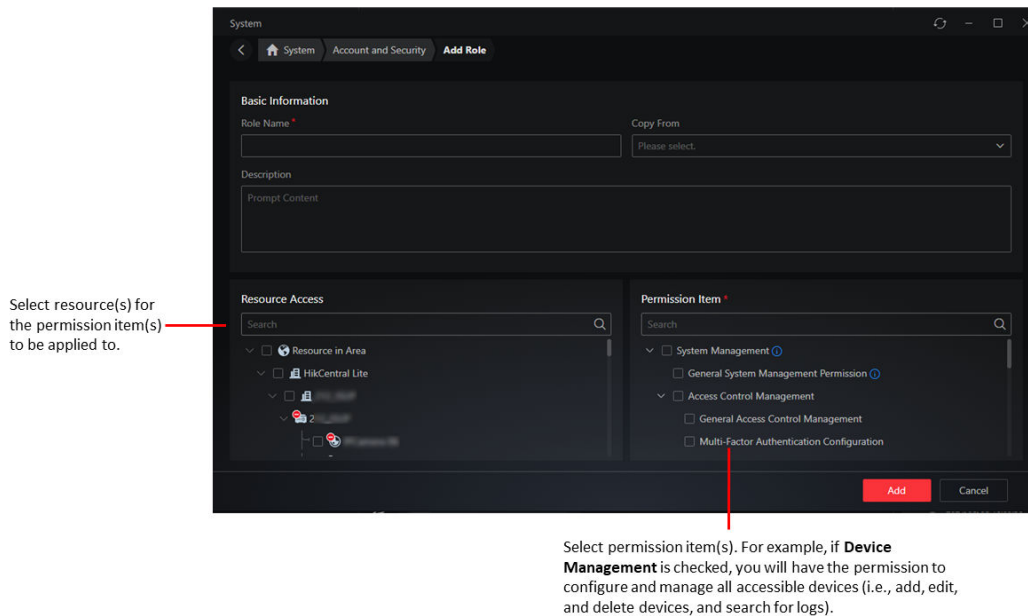


Figure 8-2 Add a Role

Table 8-1 Permission Items

Category	Sub-Category	Specific Permission
System Management	General System Management Permission	Permission for system configuration, management of face pictures and human bodies, ANPR, persons, managing events and alarms, managing users and roles, viewing permissions, configuring security settings, and adding/deleting/editing permission for maps.
	Access Control Management	General Access Control Management: Entry to the Access Level module in System: applying access levels by department/person; entry to access schedule management and configuring schedules; entry to access level management and configuring access levels; re-applying access level when applying failed; statistics and details by access level status. For this permission, the resource permission for department(s) and persons within the department is required, and the specific

Category	Sub-Category	Specific Permission
		permission items are assigned according to the resource.
		Multi-Factor Authentication Configuration: Entry to the multi-factor authentication configuration and configuring multi-factor authentication. For this permission, the resource permission for door(s) is required, and the specific permission items are assigned according to the resource.
		Multi-Door Interlocking Configuration: Entry to the multi-door interlocking configuration and configuring multi-door interlocking. For this permission, the resource permission for door(s) is required, and the specific permission items are assigned according to the resource.
		Configuration of First Person In: Entry to the first person in configuration and configuring first person in. For this permission, the resource permission for door(s) is required, and the specific permission items are assigned according to the resource.
	View Sharing	Permission for sharing views with other persons and viewing the list of sharees.
Device Management	Permission for adding/deleting/editing all accessible access control and video intercom devices, monitoring the resources' status in real time, checking the maximum capacity and current number of persons, cards, fingerprints, face pictures, irises, and events under the device, editing the device configuration, importing alarm output/input resources, managing areas and resources under areas, adjusting the hierarchy of areas and belonged resources, and searching for device logs.	
Operation Permission	General Surveillance Permission	Permission for controlling alarm outputs: The resource permission for relevant devices is required, and the specific

Category	Sub-Category	Specific Permission
		permission items are assigned according to the resource. • Permission for accessing and controlling all maps. • Permission for creating/viewing/exporting statistics and reports of access control and video intercom service: The resource permission for relevant reports is required, and the specific permission items are assigned according to the resource. • Permission for receiving and handling events and alarms: The permission for relevant resources and alarms is required, and the specific permission items are assigned according to the resource.
	Search Permission	
	Video Operation	Playback
		Export Video
		Tag Management
	Access Control Operation	Remote: Unlock Door
		Remote: Lock Door
		Remote: Remain Unlocked
		Remote: Remain Locked
		Quick Control All Doors: This permission item only exists in the Administrator role, therefore only available to users assigned with the Administrator role.

8.4 Configure Account Security Rules

Account security is crucial for your system and property. You can lock IP address to prevent malicious attacks, enable auto lock the Client, and set other security settings to increase the system security.

In the Account and Security module, click **Security Settings**.

Login and Lock

Allowed Consecutive Login Attempts

Failed login attempts only refer to failed password attempts (failed verification code attempts excluded).

Lock Duration

When the number of allowed failed login attempts is reached, the current account on the current IP address will be locked. Set the lock duration.

Security Question Settings

Security questions are valid to the super user (admin user) only. They are used to verify the identity when the super user forgets the password. The answers to security questions are case-insensitive.

8.5 Reset Login Password

You can reset the password when you forget your password, or change the password of your currently logged-in user account.

- On the login page, click **Forget Password** to reset your password.
 - The admin user can reset password by answering security questions or verifying via activation code (license code): when the license is activated, you can find the license code in the license file, and enter the code to retrieve password; when the license is not activated, the password can be retrieved by verification code sent to the configured email.
 - Non-admin users can reset password by entering verification code sent to the configured email, or asking users with higher-level role (users with administrator role can ask the admin user; users without administrator role can ask users with administrator role) to retrieve their password.
- Click the logged-in account name on the top right corner, and select **Change Password**.

Chapter 9 System Configuration

In the upper-right corner of the Desktop, click **System → System Configuration** .

- Email account configuration: **Configure Email Parameters** .
- Configure the storage location and quota of pictures and files, and the data retention time: **Configure Picture/File Storage Location and Data Retention Period** .
- Configure holidays: **Add or Edit a Holiday** .
- Configure network related configurations such as the time synchronization, device access protocol, and WAN access: **Configure NTP Synchronization / Device Access Protocol / WAN Access / Server Address, and Reset Network Info** .
- Configure account security parameters: **Configure Service Component Certificate** , **Use SSL/TLS Certificate for HTTPS Connections** , and **Protect Profile Pictures** .
- **Configure the System Capability**

9.1 Configure Email Parameters

The email account is used to receive a verification code when you forgot your account password and send the message to the designated email account(s) as the email linkage.

1. In the upper-right corner of the Desktop, click **System → System Configuration → Email** .
2. Configure the parameters according to actual needs.

SMTP Server Address

The SMTP server's IP address or host name (e.g., smtp.gmail.com).

Cryptographic Protocol

It is used to protect the email content if required by the SMTP server.

Server Authentication

If your mail server requires authentication, check this checkbox to use authentication to log in to this server.



Note

For users of Google email, you should log in to your Google account, enable the 2-step verification function, generate the APP password, and enter here.

3. Click **Test** to verify whether the email settings take effect.
4. Click **Save**.

9.2 Configure Picture/File Storage Location and Data Retention Period

The system pictures are stored on the local disk by default. You can change the pictures storage location to the other local disk, allocate the storage quota for pictures, and add a storage location

for files. In addition, you can specify how long to keep the data (such as logs, events, records, and analysis data) on the system.

- Pictures mentioned here include video monitoring related images (such as VCA/ANPR related pictures and face pictures) and pictures captured by access control devices, security control devices, and alarm linkages.
- Files include audio and video files of video intercom and firmware upgrade files.

Configure Storage Location

In the upper-right corner of the Desktop, click **System → System Configuration → Storage → Picture and File Storage**.

The default local storage pool is used to store pictures and files of all added devices and cannot be deleted.

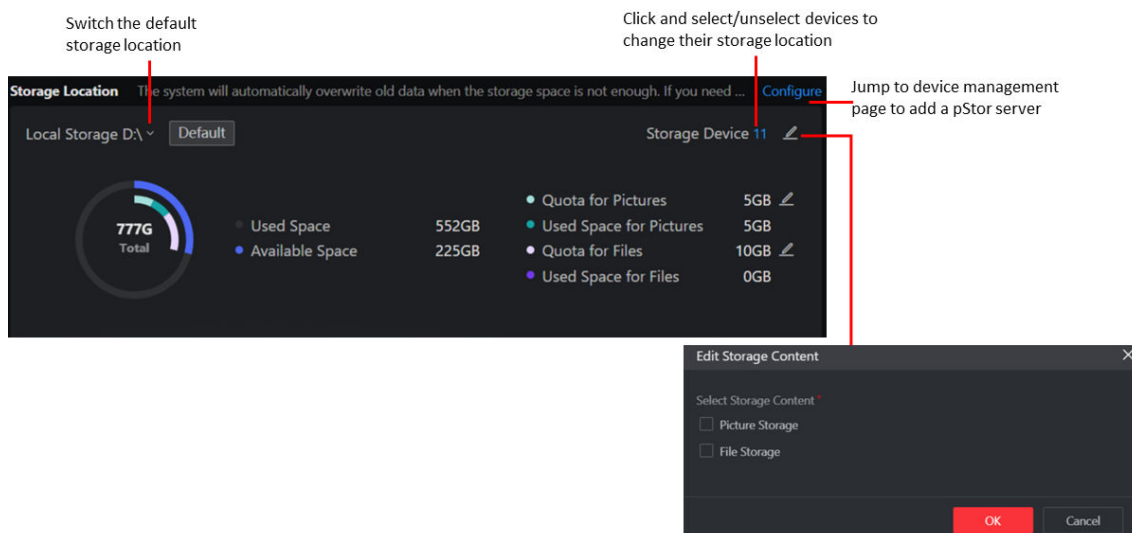


Figure 9-1 Default Storage Location Configuration

Configure Data Retention Period

In the upper-right corner of the Desktop, click **System → System Configuration → Storage → Data Retention Time**.

Define the retention period to keep the data as desired according to the data type.

9.3 Add or Edit a Holiday

The Holiday templates are mainly used for access control and event and alarm service. You can add holidays to define the special days.

In the **System Configuration** module, select **Holiday**.

Add Holiday

Click **Add**, enter the holiday name, and set the following parameters.

Holiday Type

Select **Regular Holiday** or **Irregular Holiday** according to the actual scene. The regular holiday is suitable for the holiday that has a fixed date. For example, Christmas is on December 25th of each year; the irregular holiday is suitable for the holiday that is calculated by the weekdays, and the specified date might be different in a different year. For example, Mother's Day is on the second Sunday of each May.

Edit Holiday

In the holiday list, select a holiday and directly click a parameter of the holiday to edit it as needed.

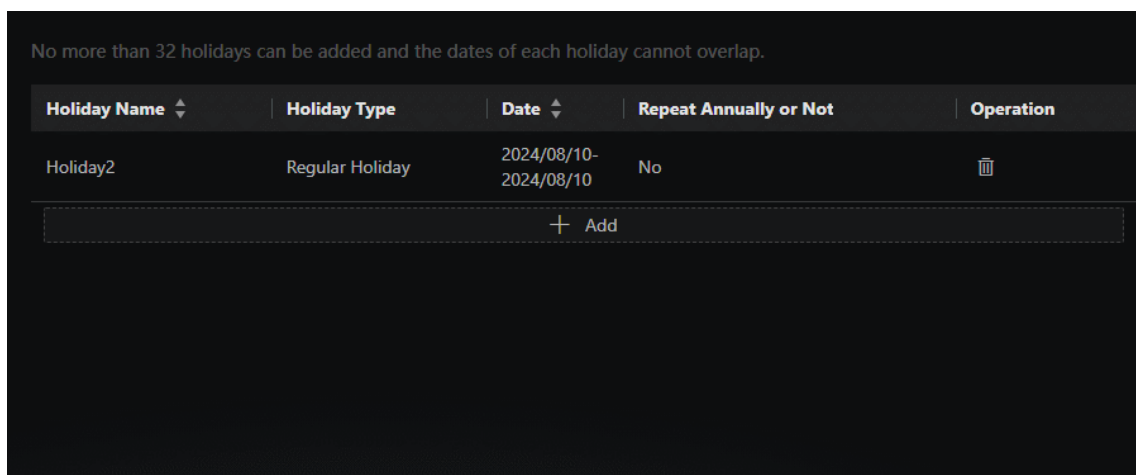


Figure 9-2 Edit Holiday Parameters (.gif)

9.4 Configure NTP Synchronization / Device Access Protocol / WAN Access / Server Address, and Reset Network Info

The network settings provided by the client encompass configuring NTP synchronization, device access protocols, WAN access, server addresses, and resetting network information. These settings are essential for ensuring devices operate correctly within network environments.

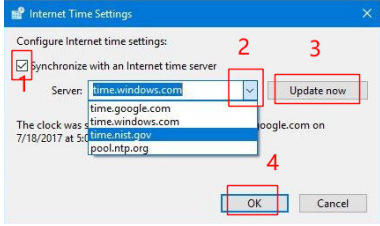
On the Home page, go to **System** → **System Configuration** → **Network** .

Configure NTP Synchronization

You can set NTP parameters for synchronizing the time between resources managed on the platform and the NTP server. Three system time sync modes are supported. See the table below for details.

Select **Internet Time Sync**.

Table 9-1 System Time Sync Mode

Mode	Description
Operating System Time Sync	1. You need to configure Internet time settings before configuring Operating System Time Sync. Go to Control Panel → Clock and Region → Data and Time → Internet Time → Change settings .  2. - Select Operating System Time Sync and enter the synchronization Interval, which is set to 60 minutes by default. - Click Test to test the communication between resources and the NTP server.  Note During the initial deployment, if the operating system has an NTP server configured and the NTP client is running, the system will choose the Operating System Time Sync mode by default.
Local Server Time Sync	• Select Local Server Time Sync, and enter the synchronization Interval, which is set to 60 minutes by default. • There will be a server providing time synchronization for devices, which only supports Hikvision devices.
NTP Time Sync	• Select NTP Time Sync and enter the synchronization NTP Server Address, NTP Port, and Interval • For the local NTP server, you can enable Configure WAN Mapping to synchronize time and enter the IP address and port No. for WAN mapping. • Click Test to test the communication between resources and the NTP server.

Configure Device Access Protocol

Before adding devices supporting ISUP and/or ONVIF protocol to the platform, you need to set the related configuration to allow these devices to access the platform.

Go to **Device Access Protocol** → **Access via ONVIF Protocol / Allow ISUP Registration** to allow devices to access the platform via the ONVIF protocol or ISUP.



Note

- After enabling or disabling **Allow ISUP Registration**, the Server will be restarted.
 - Only ISUP protocol 5.0 is supported.
-

Configure WAN Access

In some complicated network environments, you need to set a static IP address or a domain name and ports for the client to access WAN (Wide Area Network).

Go to **WAN Access** and enable the button.

You can select one or more application scenario(s) and click **Export** to export an Excel file about the port information for WAN configuration, including port name, LAN port, WAN port, protocol, etc.



Note

When changes to the LAN port occur, it is necessary to adjust the port mapping configuration on the router correspondingly.

Configure Server Address

You can select the NIC of the current Server so that the platform can receive the alarm information of the device connected via ONVIF protocol, and to perform live view and playback for the devices connected via ISUP.

Go to **Address for Receiving Device Info**.

Get from NIC

Select the currently used NIC name of the Server in the drop-down list. The NIC information including description, MAC address, and IP address will be displayed.

Reset Network Info

When system network domain changes (such as server migration), you must reset the network information of the added device to adapt to the new network environment. Otherwise the live view or playback will be affected.

Go to **Reset Network Information** → **Reset**.

9.5 Use SSL/TLS Certificate for HTTPS Connections

As a digital certificate issued by the Certificate Authority (CA), the SSL/TLS certificate secures all types of information transferred to and from the server and proves the identity of the server owner. Compared with the platform provided certificate, the SSL/TLS certificate has a higher security level.

Get Your SSL/TLS Certificate



Note

The SSL/TLS certificate is purchased from a certificate authority.

1. Choose a CA that you trust.
2. Generate a certificate signing request (CSR) and a private key.
There are multiple methods to generate a CSR and a private key: via Microsoft IIS, OpenSSL, or a trusted website.
3. Send the generated CSR to the CA to get the authorized SSL/TLS certificate.

Certificate Details

Type	Standard SSL Certificate
Status	Certificate issued (Revoke)
Domain name	██████.org.uk
Certificate Issuer	Starfield SHA-2
Request Date	7/10/2021 14:55
Request Submission Type	Rekey
Current Certificate Validity Period	7/10/2021 - 28/8/2022

Download Certificate

To secure your site that's hosted elsewhere, download the Zip file that matches your hosting server type. Then, install all of the certificates in the Zip file on your hosting server, including any intermediate certificates that might be needed for older browsers or servers.

First time installing a certificate?

[View Installation Instructions for the selected server.](#)

Server type

Other

Download Zip File

Figure 9-3 SSL/TLS Certificate Example

4. Download your SSL/TLS certificate to your local PC.
Make sure that the certificate is in PEM format. You can try to edit the file extension to **.pem** or use a tool to convert its format to PEM.

Upload Your SSL/TLS Certificate to the System

1. Check your SSL/TLS certificate.
Generally, the issued SSL/TLS certificate contains the certificate file in PEM format, certificate chain in PEM format, and certificate file in other formats (such as CRT and PLCS-7).
2. Get the certificate file in PEM format, the private key which is generated together with the CSR, and the certificate chain in PEM format. And concatenate them into one PEM file in order.
You can use the CertTool provided by Hikvision to concatenate a certificate. (Tool download address: <https://www.hikvision.com/en/support/download/software/hikcentral-professional-v2-6-0/> .)



Note

- The PEM file encoding method should be UTF-8.
- The order of contents in the PEM file should be certificate file -> private key -> certificate chain.

```
-----BEGIN CERTIFICATE-----
MIIGbzCCBVegAwIBAgIMUIt4TG0LEB4xyfNBMA0GCSqGSIb3DQEBCwUAMFAxCzAJ
tAqm/TgWlV8dwimlwc6t525+Hr13lOnHA3FF78cwWML5x5dNKhwf632dxMQz4IpB
8XMkRHge9AIdnlVMp2HUB7iOZW3K4Cv9O/YCwuHsnnFCibwWpXZUY2KSi52lRxBJ
0/gC3Cr/WyI5fRzHqnrxnHmEqQ==
-----END CERTIFICATE-----

-----BEGIN RSA PRIVATE KEY-----
MIIEowIBAAKCAQEApG3HSjP4zoyFCii+Ct2f7501VmzdnYdxEVqBdQtMie27pJk6
G4e5YQKBgCE/n8nqGm9spvRz6GW59tboV8eByZePkyn+8ydv4VeSg19q5uTbHKTQ
N9VTtuYxmAyUQ46EDWKHAU5445uEUFsby6X+77zPEvuNpqUSdsEsOjm9s4XmpibK
ptsahzxpzPKCKalnN2nnGpvJ60ailfEMYzP5zMNiEQPbtEZ734yR
-----END RSA PRIVATE KEY-----

-----BEGIN CERTIFICATE-----
MIIHajCCBOqgAwIBAgIQBeEL6xHDBPMqVc/6KaEeljANBgkqhkiG9w0BAQsFADBx
MQswCQYDVQQGEwJVUzErMCkGA1UEChMlVm10YWx3Z3ZlJrcyBJbnRlcm5ldCBTb2x1
0y3ryvnrPxtYleAljYaHoa08klpIbWlOUZHL5T4DTFj6ko0J15MjGSTOanrvme52
oVOgwr1GPAUBRQyqbNA/N5PgYvnbYnP+3zLjV2fcsTQd9Ryk7ulSbK5ZTjds3PCC
Z/aCk1NiNYigUKZmFSniwaFMpojLdiBmKZjgepFJxMTiITr8ZqBG+lkJSZB88Pof
AAyK5ka+CpCndiSV/gQnsMagCmeyhw==
-----END CERTIFICATE-----

-----BEGIN CERTIFICATE-----
MIIF4DCCBMigAwIBAgIQAtzIUa9xYrr53z9V1ROxXjANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMRRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
FrgGtfXlRKPst8yZpX6jBLHy5eUUGJmG3VCGWRDrri1lWSajBC6RffzR7vzb0/wB
QOXi74AB8YHtYlzmjGGA7IY5Mjdur4CgcUWPlpq4nlgPvzRdRDvD01g3rvpF/ma
ySyHlhO/+GHwldxQRb0QdhyF4g=
-----END CERTIFICATE-----

-----BEGIN CERTIFICATE-----
MIIDjjCCAnagAwIBAgIQAzrx5qcRqaC7KGSxHQn65TANBgkqhkiG9w0BAQsFADBh
MQswCQYDVQQGEwJVUzEVMBMGA1UEChMRRGlnaUNlcnQgSW5jMRkwFwYDVQQLExB3
d3cuZGlnaWNlcnQuY29tMSAwHgYDVQDExdEaWdpQ2VydCBHbG9iYWwgUm9vdCBH
Fdtom/DzMNU+MeKNhJ7jitrAlj41E6Vf8PlwUHBHQRFXGU7Aj64GxJUTFy8bJZ91
8rGOMAfvE7FBcf6IKshPECBV1/MURexGrPTqh5Uykw7+U0b6LJ3/iYK5S9kJRaTe
pLiaWN0bfVKfjllDiIGknibVb63dDcy3fe0Dkhvld1927jyNxFlWW6LZzm6zNTfl
MrY=
-----END CERTIFICATE-----
```

Figure 9-4 Example of Concatenated Certificate

3. On the top of the Desktop, click **System** → **System Configuration** → **Security** → **Certificate Management**.
4. Click **New Certificate** → to upload the concatenated certificate.



Note

The Desktop will restart automatically when the certificate is uploaded.

5. (Optional) In the Upper-Level Certificate section, you can click **Add** to upload the certificate chain to the server.

The invalid or incomplete certificate chain of operating system will result in SSL/TLS certificate verification failure. In this case, users can download the certificate chain, convert it to CRT format, and double-click to install it on their PCs.

9.6 Configure Service Component Certificate

For data security, before adding the Streaming Server, you should generate the service component certificate stored in the Server and input the certificate information to the Streaming Server you want to add, so that the certificates of the Streaming Server and the Server are the same.

On the Home page, go to **System → System Configuration → Security → Service Component Certificate**.

Certificate between Services in System

Required certificate when adding the streaming server.

Click  to follow the specific instructions.

After completing the service component certificate, see [***Add a Server and View Server Details***](#) for further operations on adding the streaming server.

Chapter 10 Maintenance

Maintenance is responsible for the real-time monitoring of devices and servers. This ensures swift response to alerts and efficient issue resolution for enhanced security and operations.

In this chapter, detailed information about **Generate and Display Maintenance Report** , **Search for Notifications** , and **Search for System Logs** is provided.

10.1 Generate and Display Maintenance Report

The maintenance report automatically monitors the system and its resources in real time for any exceptions. You can add and display the maintenance report for all device types, video devices, access control devices, and servers.

Generate Maintenance Report

To add a maintenance report, navigate to the Home page, right-click **Statistics** in the Resource Panel and click **Add Statistics Report**.

Select statistics type as **Maintenance** and customize the **Statistics Name** for the selected **Device Type**.

Create Your Statistics Report

1. Select Statistics Type

 Maintenance The maintenance report automatically monitors the system and its resources in real time for any exceptions.	 People Counting Select one or multiple people counting cameras of interest and form real-time or historical reports. One could easily re-organize the data for more insights and export on spot.
 Person & Credential Count the total number of persons and credentials in the platform.	 Access Level Count the access level allocation and effective status of all persons in the platform.
 Access Control Events Today List the top 5 normal or abnormal events that occurred today (00:00 to current time) in all access points.	 Top 5 Abnormal Access Control Events Today List the top 5 abnormal events that occurred today (00:00 to current time) in all access points.

2. Enter Statistics Information

Statistics Name *

Device Type *

Figure 10-1 Generate Maintenance Report

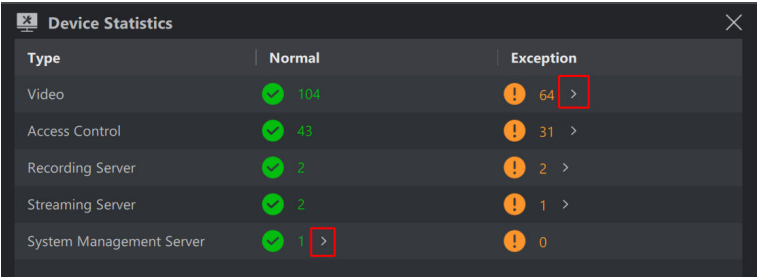
Display Maintenance Report

After adding the maintenance report(s), click  to see the statistics report list and double-click the maintenance report to view details.

The styles of reports displayed can vary across different device types. See below for details.

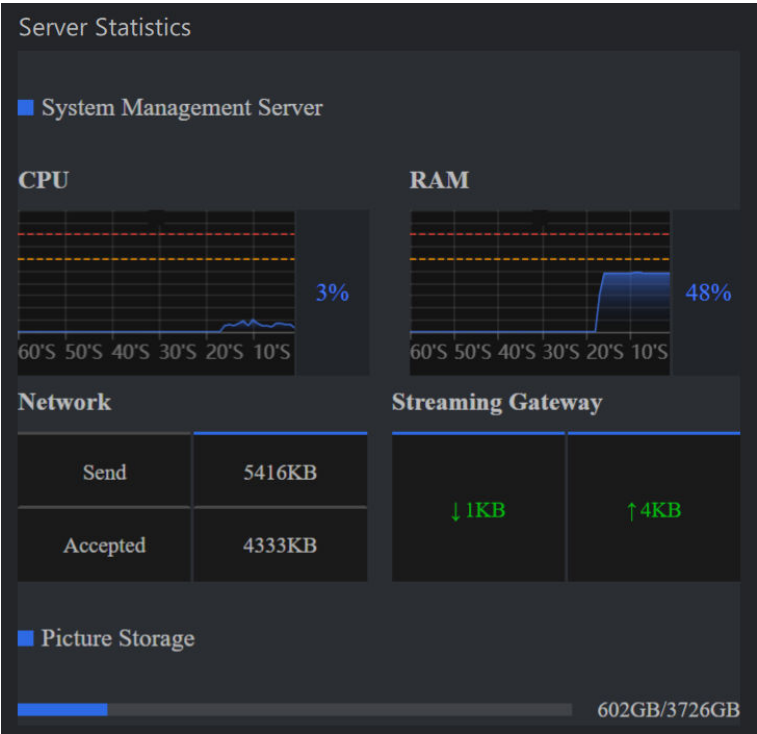
All Device Types

- The page provides counts for both  **Normal** and  **Exception** statuses, encompassing all device types, including video devices, access control devices, and servers.



Type	Normal	Exception
Video	 104	 64 
Access Control	 43	 31 
Recording Server	 2	 2 
Streaming Server	 2	 1 
System Management Server	 1 	 0

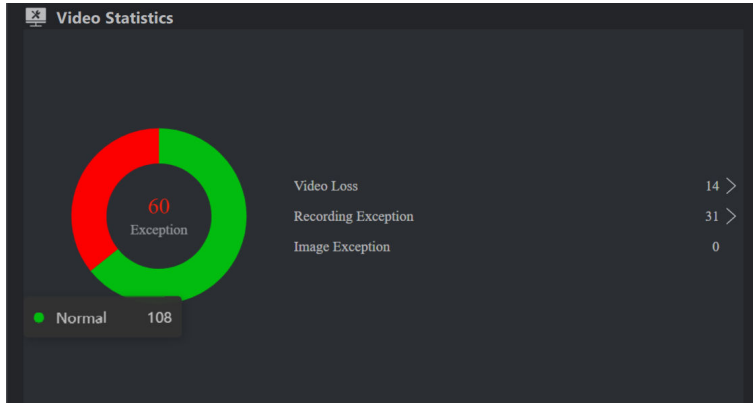
- Click  beside the green number to view server status, which includes metrics for CPU, RAM, network, streaming gateway, and picture storage.



- Click  beside the orange number to navigate to the device management page. Here, you can inspect detailed information about devices or servers that are in an exception state.

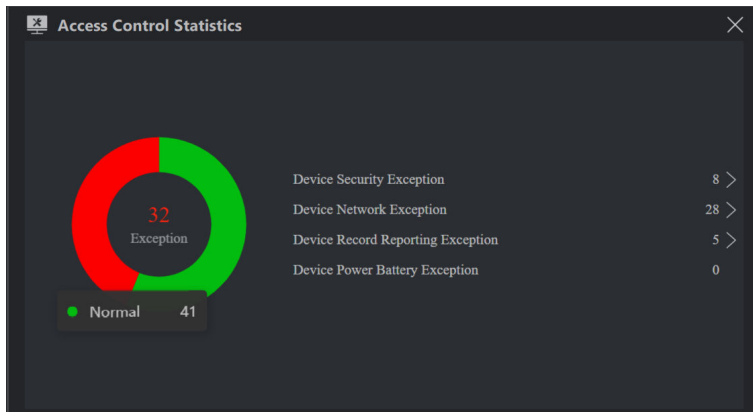
Video

- Click  beside the number to navigate to the device management page. Here, you can inspect detailed information about video devices that are in video loss/recording exception/image exception state.
- Hover on the pie chart to view the number of normal or exception devices.



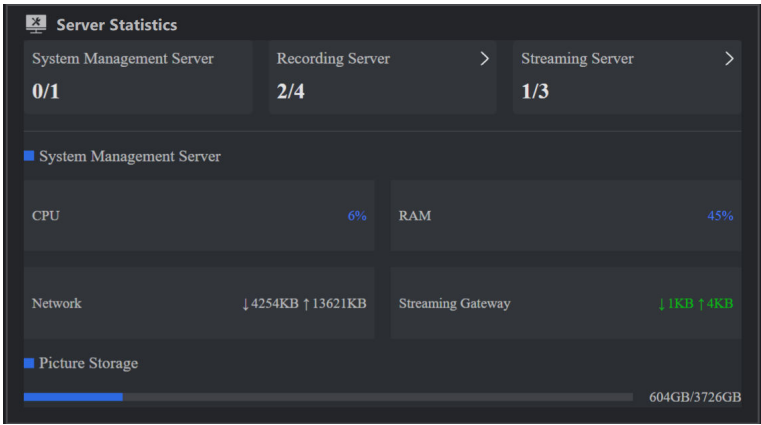
Access Control

- Click  beside the number to navigate to the device management page. Here, you can inspect detailed information about access control devices that are in device security exception/device network exception/device record reporting exception/device power battery exception state.
- Hover on the pie chart to view the number of normal or exception devices.



Server

- Click  to navigate to the device management page to view details about the server(s).



10.2 Search for Notifications

You can search for notification information to promptly detect and respond to alerts or updates, ensuring swift action on security incidents.

On the Home page, go to **Investigation → Notifications** .

You can filter the information by selecting **Date** and **Notification Type**. These notifications primarily consist of:

- System-related alerts, such as "device type not supported".
- User operation prompts, such as "calling video intercom not answered".

Based on the filter criteria you set, click **Export** in the upper-left corner to export notification files to **Excel**, **PDF**, or **CSV** formats.

Notification Retrieval			
SYS: [blurred]			
Export Time: [blurred]			
Total Number: 159			
Title	Time	Type	Description
Upgrading [blurred]	[blurred]	System	Upgrading [blurred]
Cardreader [blurred]	[blurred]	System	Cardreader [blurred]
Upgrading Cardreader [blurred]	[blurred]	System	Upgrading Cardreader [blurred]
Upgrading Cardreader [blurred]	[blurred]	System	Upgrading Cardreader [blurred]
Upgrading Cardreader [blurred]	[blurred]	System	Upgrading Cardreader [blurred]
Device Type Not Supported	[blurred]	System	Adding device failed. The device type i
Device Type Not Supported	[blurred]	System	Adding device failed. The device type i
Upgrading [blurred]	[blurred]	System	Upgrading [blurred]
Upgrading [blurred]_cameraguanlian	[blurred]	System	Upgrading [blurred]_cameraguanlian
Upgrading [blurred] Failed	[blurred]	System	Upgrading [blurred] fail
Upgrading [blurred] Failed	[blurred]	System	Upgrading [blurred] fail

Figure 10-2 Notification Retrieval Excel Template

10.3 Search for System Logs

You can search for server and/or device logs to promptly identify and address issues, enhancing the efficiency of incident response. Server logs and device logs respectively refer to the logs generated by the server that are stored on the server and the logs stored on the device.

Access is available via two options:

To search server logs and device logs

On the Home page, go to **Investigation → System Log**.

To search local device logs

1. On the Home page, go to **System → Device Management**.
2. Hover on one device then right-click and select **View Log** to search local device logs.



Note

- This feature should be supported by the device.
- You can also view logs when viewing device details. On the Device Details page, hover on one device then right-click and select **View Details**. Click **View Log** in the upper-right corner.

For Server Log

- You can filter the event type by **Information**, **Warning** and **Error**. For instance, an Information event could be an Add Generic Event notification, a Warning could indicate a License Expiration, and an Error could signify a Door Lock Failure.
- Click **Resource Name** to quickly search the resource.
- Click **Export** in the upper-left corner to export server log in **Excel** or **CSV** file.

Server Log					
Basic Information					
Export Time:					
Operator: admin					
Export Content: Data					
Report Time:					
Total Number: 5671					
Level	Time (Client)	Source	Event	Resource Name	Area
Information		admin	Add View	New View 1	
Information		admin	Start Live View	_8000	HikCer
Information		admin	Start Live View	_8000	HikCer
Information		admin	Start Downloading Video File	3686	keliu N
Information		admin	Start Downloading Video File	IPCamera 01	keliu N
Information		admin	Search Notification Record		
Information		admin	Start Downloading Video File	6825	keliu N
Information		admin	User Login		
Information		admin	User Logout		
Information		admin	Delete Encoding Device		
Information		chenqi	Search Alarm Log		

Figure 10-3 Server Log Excel Template

For Device Log

Click **Export** in the upper-left corner to export device log in **Excel** or **CSV** file.

Encoding Device Operation Log				
Basic Information				
Type:	Encoding Device Operation Log			
Exporting Time:				
Searched by:	admin			
Report Time:				
Total Number:	9607			
Level	Device Time	User	Event	Channel No.
Information			Online	
Exception			Offline	
Operation		admin	Remote: Get Status	0
Operation		admin	Remote: Get Status	0
Operation		admin	Remote: Get Status	0
Operation		admin	Remote: Get Status	0
Operation		admin	Remote: Get Status	0

Figure 10-4 Device Log Excel Template

Appendix A. Other System Configurations and Performance

For environments where iVMS-4200 is running, with a CPU earlier than i3-8100, 4 GB of RAM, and a SATA 7200 RPM Enterprise Class HDD, the following configurations are recommended for migrating from iVMS-4200 to HikCentral Lite.

It is recommended that the configuration be no less than the following:

Table A-1 System Configurations

Feature	Configuration
CPU	8 th Generation of Intel® Core™ i3-8100
RAM	4 GB
NIC	GbE Network Interface Card
HDD	SATA 7200 RRM Enterprise Class HDD
HDD Capacity for Database	At least 500 GB
OS	Microsoft® Windows 10 64-bit or later

Under this configuration, the performance is as follows:

Table A-2 System Performance

Feature	Performance	
Cameras	64	
Events Receiving	1/s	
Storage Capacity of Captured Faces / ANPR Records / Events / Intelligent Analysis Data / Access Records / System Logs	2 million	

Table A-3 Performance of H.264 with Software Decoding

Frame Rate (fps)	Bit Rate (Mbps)	Resolution	Max. Live View Channels
30	2	1080p	2

Appendix B. Past User Manuals

- [V1.0.1](#)
- [V1.0.0](#)



See Far, Go Further