



# **HikCentral Professional V2.3**

## **Release Notes**

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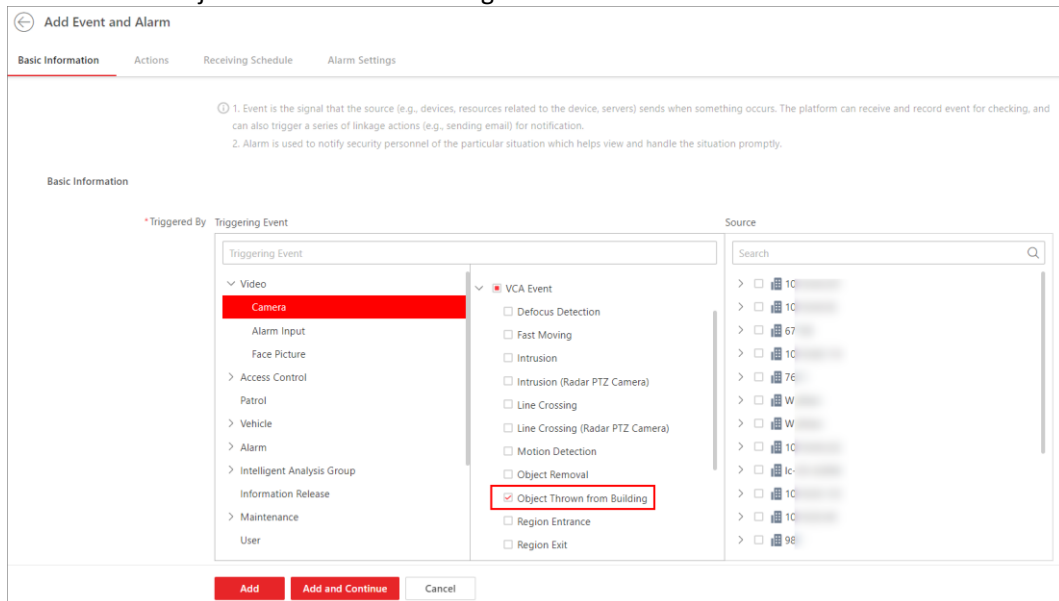
# Introduction

HikCentral Professional is a software platform provided by Hikvision for integrating and managing security systems. It is designed to respond to a variety of security challenges on a single platform. With HikCentral Professional, you can manage multiple individual systems with ease, such as video security, access control, and security alarms, as well as explore cross-system functionalities. Daily operations become more efficient while protection of people and property improve all around. Users of all kinds are making smarter decisions.

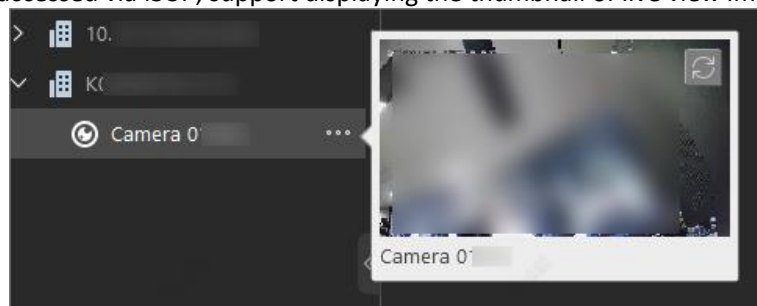
# New Features

## Resource Management

1. Added a new access control device that supports iris authentication.
2. Added the Object Thrown from Building alarm.



3. Support using DS-1005KI keyboard to control the PTZ camera's live view in the E-Map module.
4. Support VCA search for NVRs added to the platform via ISUP.
5. Support adding cameras and DVRs via ISUP.
6. For devices accessed via ISUP, support displaying the thumbnail of live view image.



7. Support displaying copy-back progress and percentage in scheduled copy-back for Hybrid SAN.
8. Support copying back people counting data generated during network disconnection for network cameras of the NVR.
9. Support adding DS-TP50 series terminal servers and video copy-back.
10. Dock Station
  - The name of file to be exported contains device No. and police officer ID.

## Export

Device No.

Police Officer ID

File Information

File Name	Download
G34367362_1235777588_20220705191917	20220705191936
G34367362_1235777588_20220705191941_20220705191954	20220705191954

Format

☒ MP4

☐ AVI

Set Password

Confirm

Save to Evidence Management Center

☐

☒ Download VSPlayer

Save

- Support remote configuration for dock stations.

<div> <span>+</span> Add           <span>✕</span> Delete           <span>🕒</span> Time Zone           <span>🔄</span> Refresh All         </div> <div> <input type="text" value="Search"/> </div>					
Device Name	Device Address	Serial No.	HDD Usage	Network Status	Operation
10.1	10.18.66.206	4047305633333333322ecc89c1aaaa	<div> <div></div> <div>6%</div> </div>	Online	

- Support viewing the maintenance details of the dock station on the remote configuration page.

**Data Search**

File List

System

---

Basic

Time

Network

User

Parameters

Upgrade

Safety

Port

Encryption

HTTPS

Log

FTP

## Digital Evidence Management System

**847**  
All

**847**  
Uploaded Platform

**0**  
Unuploaded Platform

**0**  
Uploading

Lock Unlock Download

Key Word

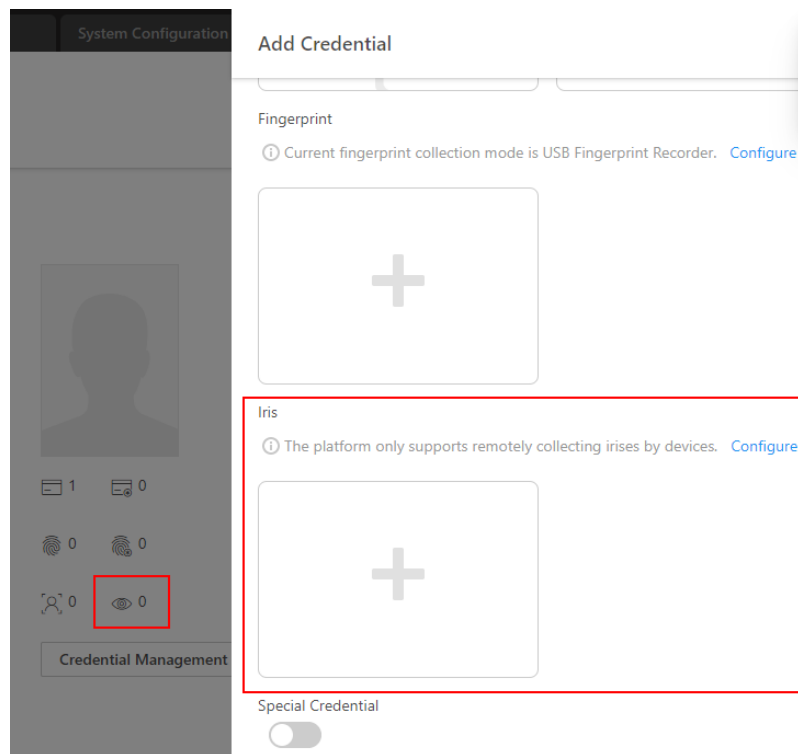
File Type All Lock Status All Archiving Status all

ID	File Name	Person No.	User Name	Device No.	Captured Time	Platform Upload Time	Platform Upload Status
1	2022070611733MEDIA_ID12357...	12357775...		G34367362	2022-07-06 11:17:32	2022-07-06 11:43:31	Uploaded
2	20220705192009MEDIA_ID12357...	12357775...		G34367362	2022-07-05 19:20:09	2022-07-05 19:20:50	Uploaded
3	20220705192003MEDIA_ID12357...	12357775...		G34367362	2022-07-05 19:20:03	2022-07-05 19:20:50	Uploaded
4	20220705192001MEDIA_ID12357...	12357775...		G34367362	2022-07-05 19:20:01	2022-07-05 19:20:50	Uploaded
5	20220705191958MEDIA_ID12357...	12357775...		G34367362	2022-07-05 19:19:58	2022-07-05 19:20:50	Uploaded
6	20220705101041MEDIA_ID12357...	12357775...		G34367362	2022-07-05 10:10:41	2022-07-05 10:10:40	Uploaded

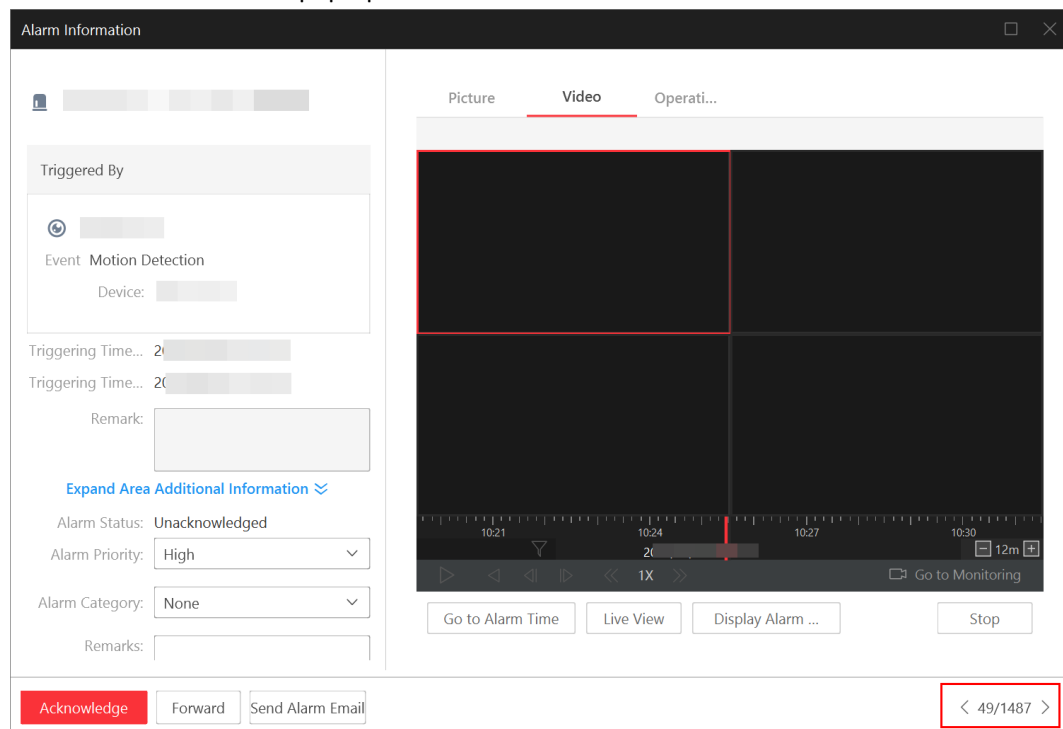
Total 7
20/page
<
1
>
Go to

## General

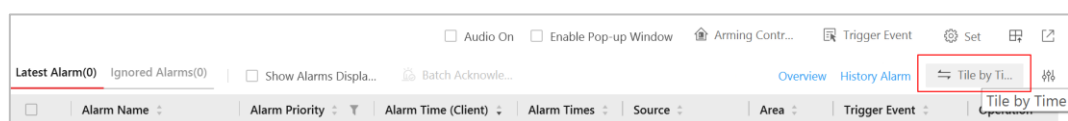
1. Support collecting irises as person credentials and applying irises to devices.

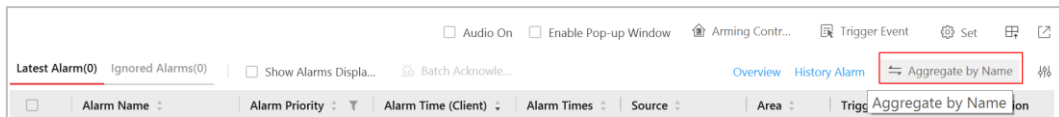


2. Support importing person information from devices by specifying employee IDs.
3. Added the support of displaying multiple unhandled alarms and the number of total unhandled alarms in one pop-up alarm window on the Control Client.

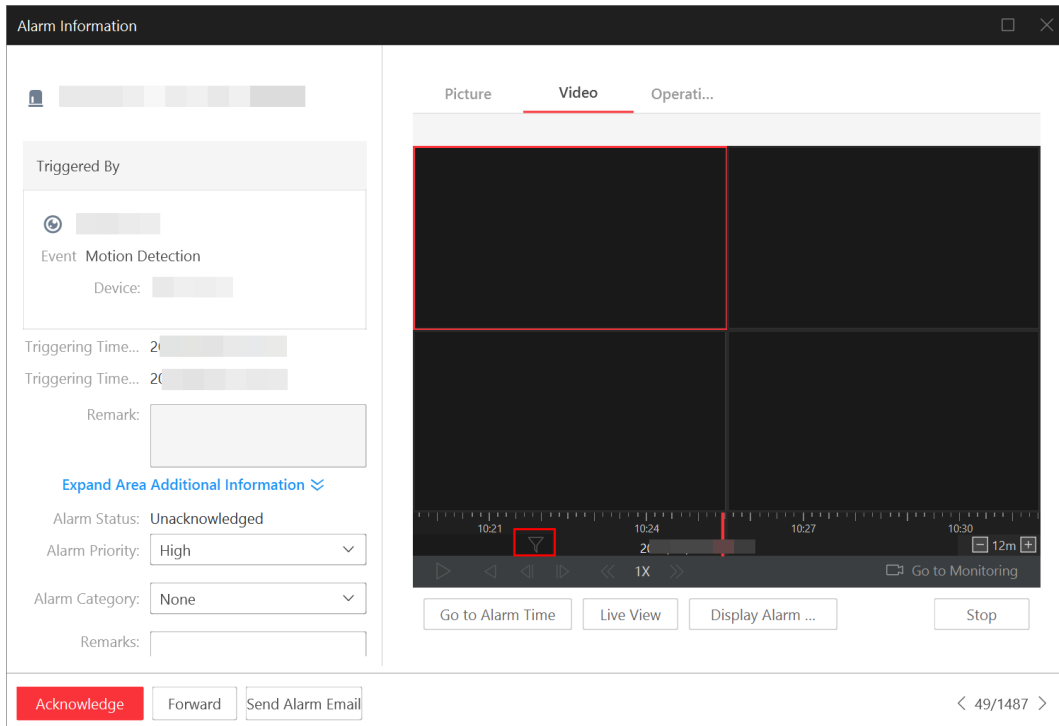


4. Added the support of tiling alarms by time and aggregating alarm by name in the Alarm Center of the Control Client.





5. Added the support of turning on/off the audio when playing the recorded alarm video on the Control Client.
6. Added the support of selecting recorded alarm videos that stored in the main storage or auxiliary storage for playback on the Control Client.



7. Added the support of exporting the face/person/vehicle matched or mismatched alarms with detailed information, such as person information, card number, license plate number, and so on.
8. Support encrypting the transfer of stream and signal between the platform and devices.
9. Support encrypting the stream between the dock station and the body camera.
10. The card template supports entering both first name and last name.
11. Support setting the time range of the events to be synchronized.



Data Interchange

Data Interchange

\*Resource for Card Swiping

+ Add

Delete All

Synchronize Event

<div><div></div><div></div></div>	Name	Resource Type	Area	Operation
<input checked="" type="checkbox"/>	Door	Card Reader	10.	<div><div></div></div>
<input type="checkbox"/>	Door	Card Reader	10.	<div><div></div></div>

Total: 2 10 /Page

Encoding Format of Data Int...

utf-8

Do Not Push Failed Records

☐

Type

☒ Database Synchronization

☐ Access Record Dump

Time Range \*

2022/06/30 14:43:58 - 2022/07/06 14:43:58

You need to set the time range of the events to be synchronized.

Synchronize

Go

12. Support viewing solar camera's used data and battery capacity.
13. Support clearing the password of the previous user when there are different users logging in to the platform.

## Evidence Management

The Web Client, Control Client, and Mobile Client support setting the start time and end time of the evidence event.

6

Add Evidence

\*Evidence Name

\*Evidence ID

Evidence Type

Evidence Tag 

+ Add Tag

On-Site Organization

Result/Conclusion

Evidence Status

Event Time 

2022/07/08 11:02:17 - 2022/07/08 11:02:17

Description  128

Add

Add and Continue

Cancel

## Video Management

- Support redirecting from maintenance page to dock station page to view maintenance details.
- Support getting port numbers via NAT when adding devices to the platform.

TCP/IP

DDNS

PPPoE

Port

NAT

Multicast

☒ UPnP™ aktivieren

Spitzname
 

HIKVISION DS-2SE7C124IW-AE

Mapping Port Type

Manuell

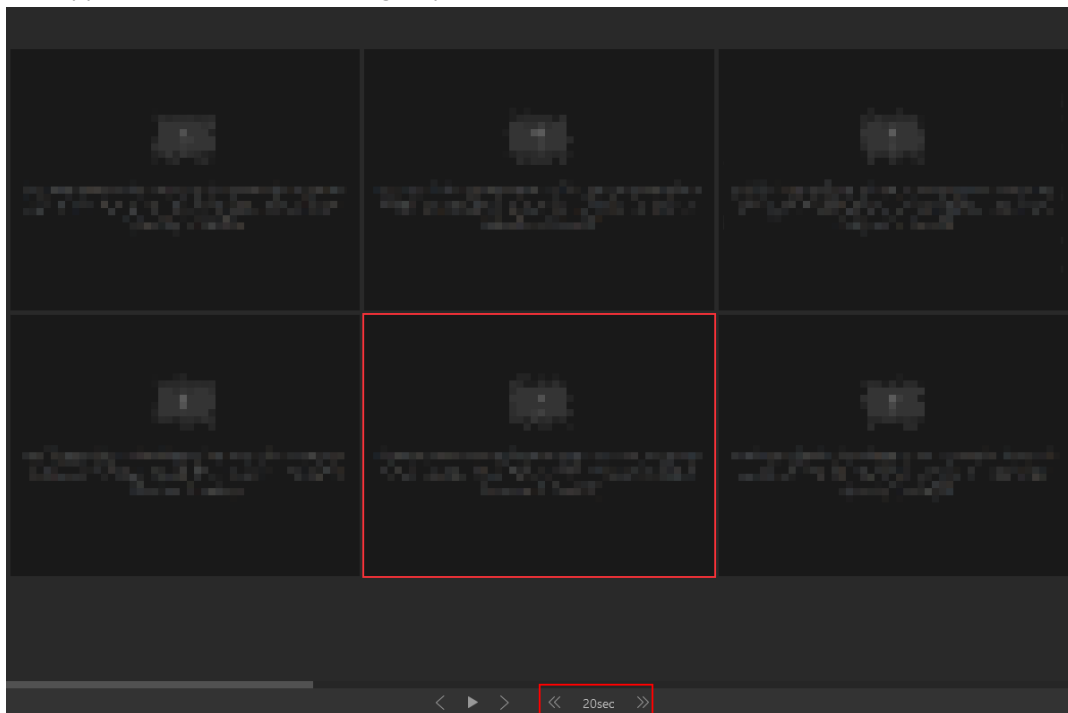
Port Type	Externer Port	Externe IP-Adresse	Interner Port	Status
HTTP	1098	0.0.0.0	80	Ungültig
HTTPS	443	0.0.0.0	443	Ungültig
RTSP	554	0.0.0.0	554	Ungültig
Server Port	8000	0.0.0.0	8000	Ungültig
Erweiterter SDK-S	8443	0.0.0.0	8443	Ungültig
Websocket	7681	0.0.0.0	7681	Ungültig
Websockets	7682	0.0.0.0	7682	Ungültig

- Support PTZ feature of some NVRs and DVRs of older versions.

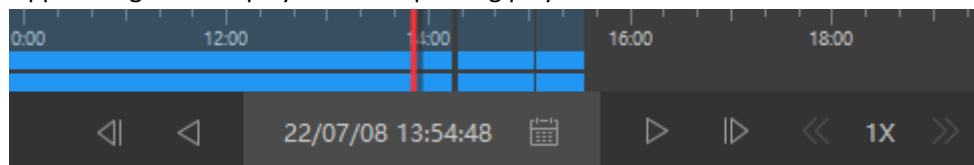
4. Support getting device PTZ information on the platform.



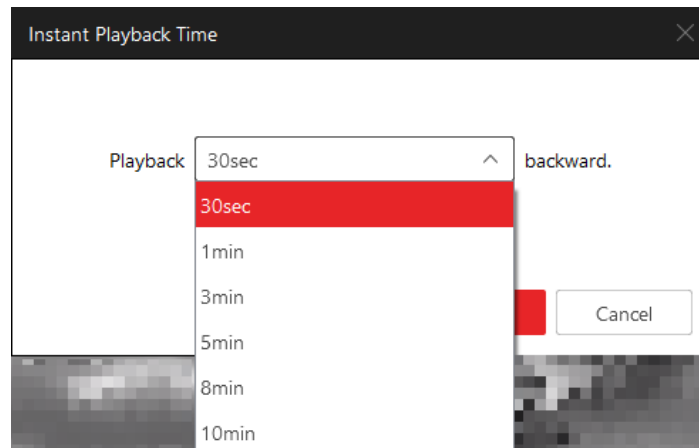
5. Support auto-switch for view groups.



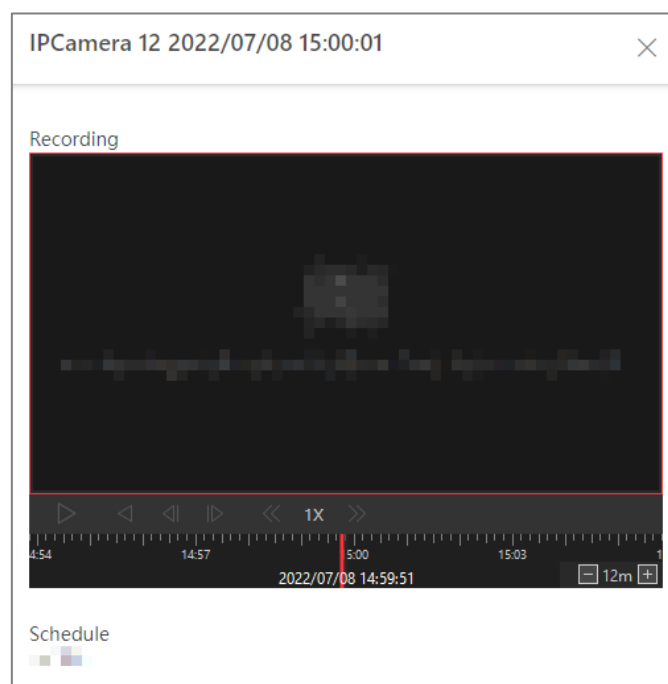
6. Support remaining playback speed when switching between normal playback and reverse playback.
7. Support single-frame playback after pausing playback.



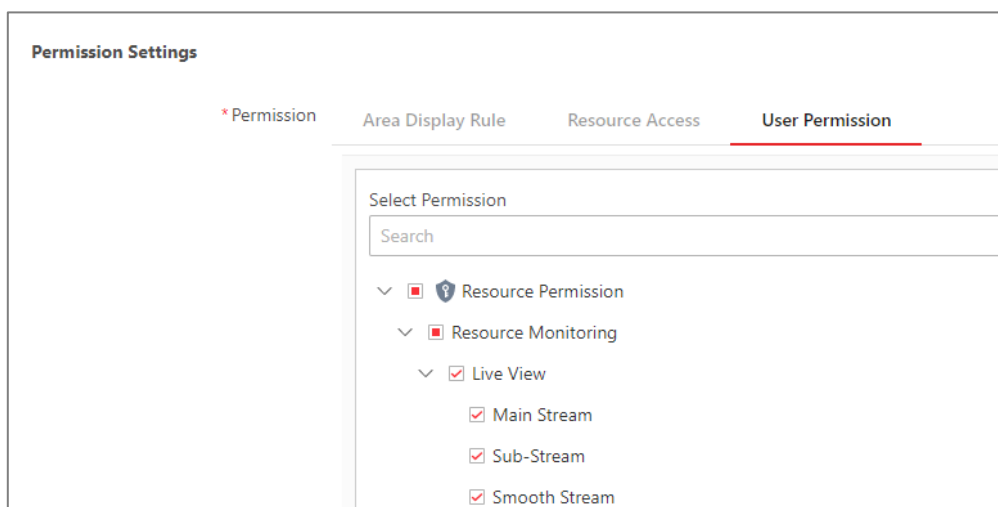
8. Support exporting videos recorded by different cameras of the same time to a single file.
9. Support playing live news on the platform.
10. Added a stream type: fourth stream, which supports EPTZ.
11. Support instant playback (only in live view); support selecting time of playback: 30s, 1 min, 3 min, 5 min, 8 min, and 10 min.



12. Support capturing pictures in real-time, and support clicking the scheduled captures to view related videos.



13. Support configuring stream type permissions in live view: main stream, sub stream, and smooth stream.



14. Support configuring capturing schedules for multiple cameras. For speed domes, support


setting presets and capturing pictures on presets.


**Add Capture Schedule**










\* Schedule Name

Capture Frequency (times/day)

Start Time

\* Camera for Capturing 

▼  HikCentral Professional

-   
-   
-   

**Add** **Cancel**

15. Support sending scheduled capturing reports via email.

**Add Report**


\* Report Name

\* Capture Schedule

▼ ☒ All

☒ test

ⓘ Up to 10 MB files can be attached in an email. If the size of captured pictures exceeds the limit, it may result in delivery failure.




\* Sending Time  

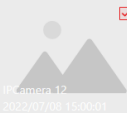
\* Email Template

\* Report Language

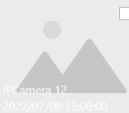
**Add** **Cancel**

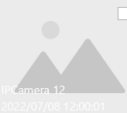
16. Support searching for scheduled captures by schedule, camera, and time. Support viewing and exporting captures and sending captures by email.


 Real-Time Capture  Send Email  Export


 ☒

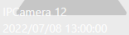
 ☐


 ☐

 ☐

 IP Camera 12  
2022/07/08 15:00:01

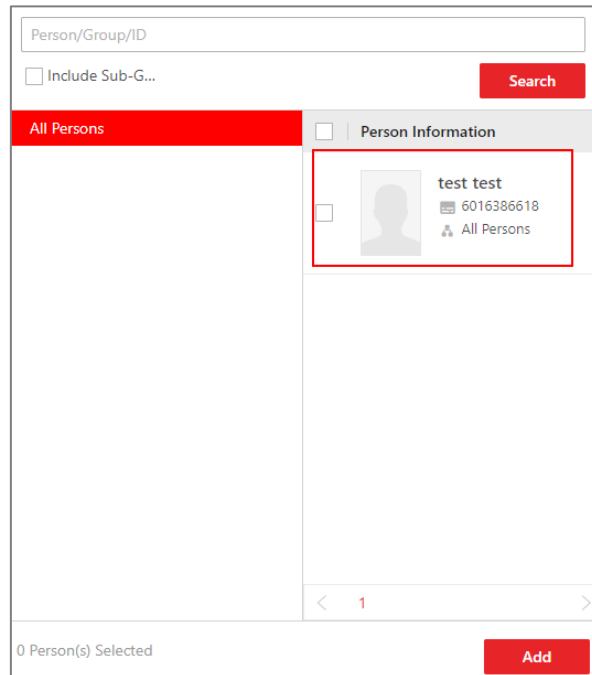
 IP Camera 12  
2022/07/08 14:00:00

 IP Camera 12  
2022/07/08 13:00:00

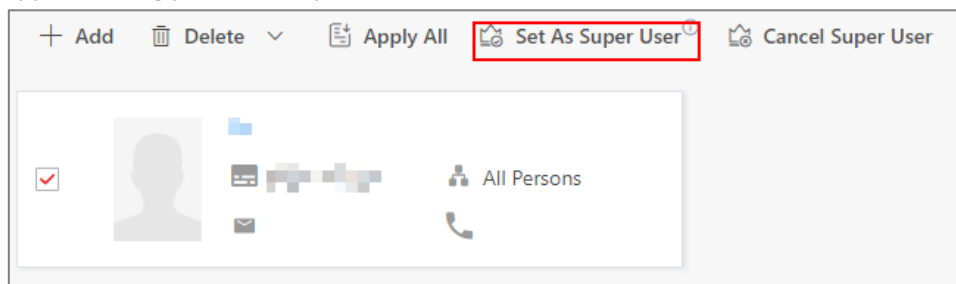
 IP Camera 12  
2022/07/08 12:00:01

17. Support managing dock station groups. Support importing persons and displaying person

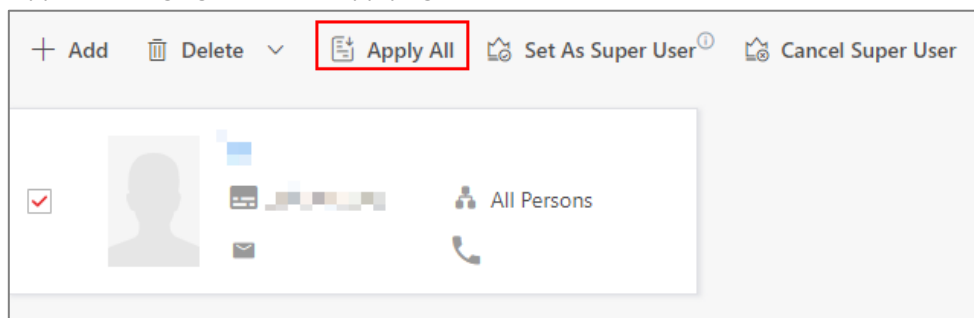
permission levels.



18. Support three-level permission management: dock station group, super user, and person. Support setting person as super user.



19. Support managing cards, and applying card information to dock stations.



20. Support configuring copyback time for dock stations. Support setting storage location to CVR or pStor.

**Storage Information**

File Storage ☒

\*Storage Location pStor None

\*Copyback Time 00:00 00:00

## Intelligent Report

1. Support adding, deleting, and editing stores.

+ ✎ 🗑

HikCentral Professional

Search

▼ HikCentral Professional

test

1

2. Support adding people counting groups to stores. The process includes setting basic information, adding resources, and configuring the map.

1 Basic Configuration 2 Resource for Counting People 3 Add People Counting Group to Map

Basic Configuration

\*Name people counting group for store

Select Site HikCentral Professional

Link to Store

Regularly Clear All ☒

\*Regular Clearing Time 00:00

Maximum Number of Persons ☒

\*Maximum 0

3. Support adding heat analysis groups to stores. The process includes setting basic information, adding resources, and configuring the map.

⌂ Add Heat Analysis Group Save and Continue Cancel

1 Basic Configuration 2 Resource for Heat Analysis 3 Add Heat Analysis Group to Map

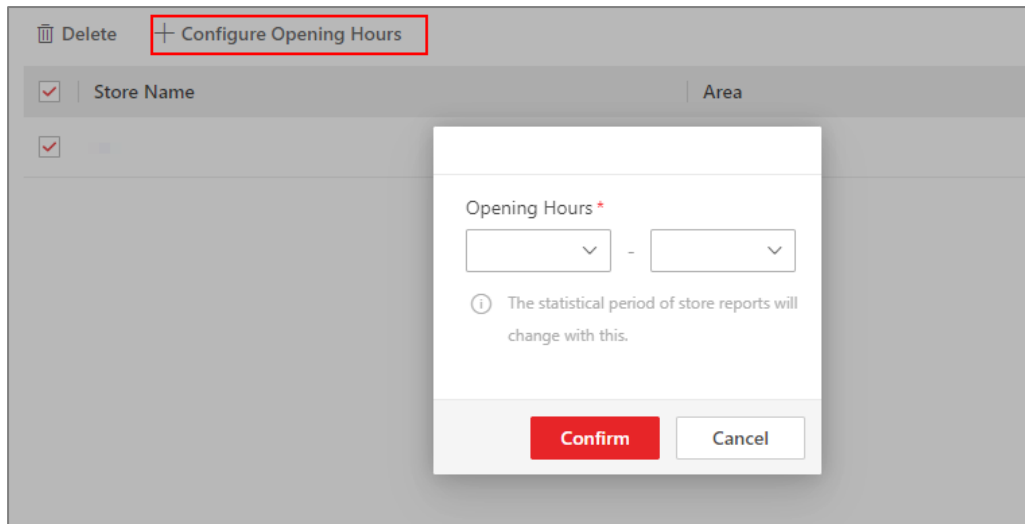
Basic Configuration

\*Name heat group test

\*Select Site Please select.

Link to Store 10.41.7.57

4. Support configuring opening hours for stores.



5. Support configuring multiple promotion days.

+ Add		Delete
<input type="checkbox"/>	Promotion Day Name	Promotion Date
<input type="checkbox"/>	2	2022-07-07~2022-07-07
<input type="checkbox"/>	1	2022-07-07~2022-07-07

6. Support ability test of people counting resources. Support displaying whether to enable algorithm, whether to enable the feature, whether to enable upload data, people statistics in last hour, and remote configuration.

People Counting

Heat Analysis

Refresh

Please enter.

Resource Name	Enable Algorithm	Enable	Enable Upload	People Statistics in Last Hour	Operation
Camera 01-748	Yes	No	Yes	Entered:0 Exited:0 Duplicated:0	
IPCamera 02	Yes	Yes	Yes	Entered:7 Exited:7 Duplicated:0	
Camera 01	Yes	Yes	Yes	Entered:0 Exited:4 Duplicated:0	

7. Support ability test of heat analysis resources. Support displaying whether to enable algorithm, whether to enable the feature, whether to enable upload data, people statistics in last hour, and remote configuration.

People Counting

Heat Analysis

Refresh

Please enter.

Resource Name	Enable Algorithm	Enable	Enable Upload	Operation
Camera 01	Yes	Yes	Yes	

8. Support configuring cameras to analyze walk-in rate.  
9. Support generating people counting reports by store, resource group, and camera.



### People Counting

**Analysis Type**

☒ People Counting in Stores  
☐ People Counting in One Region  
☐ People Counting for One Camera

**Dimension**

☒ Walk-In Rate  
☐ Entry/Exit Analysis

**Store**

Search

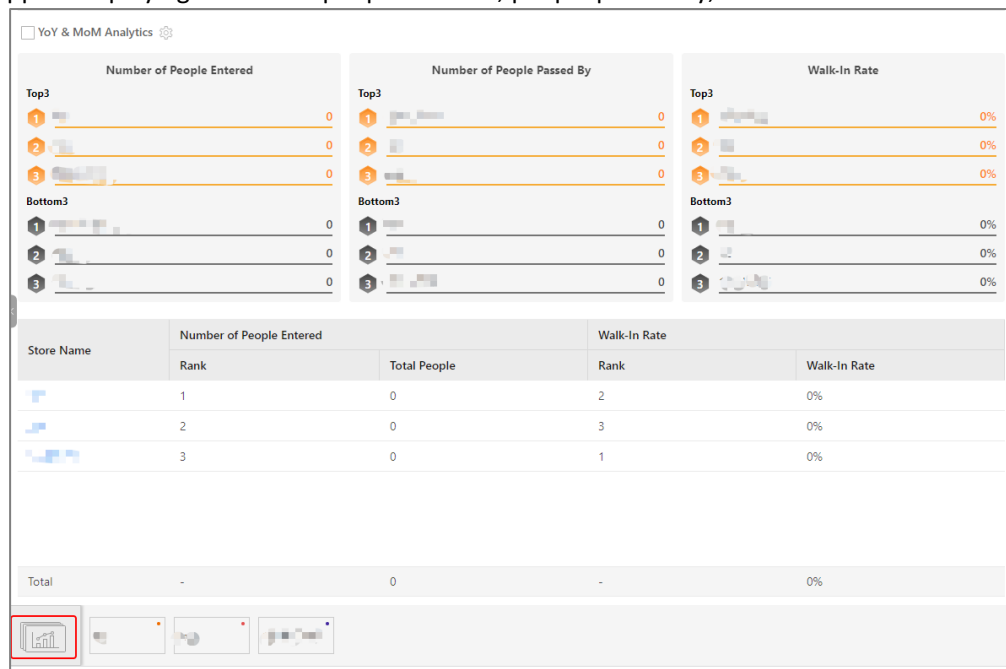
☒ HikCentral Professional  
☐   
☐   
☐

**Staff-Excluded People Count**

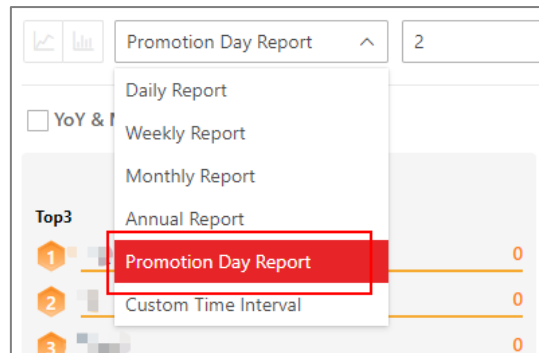
☒

**Generate Report**

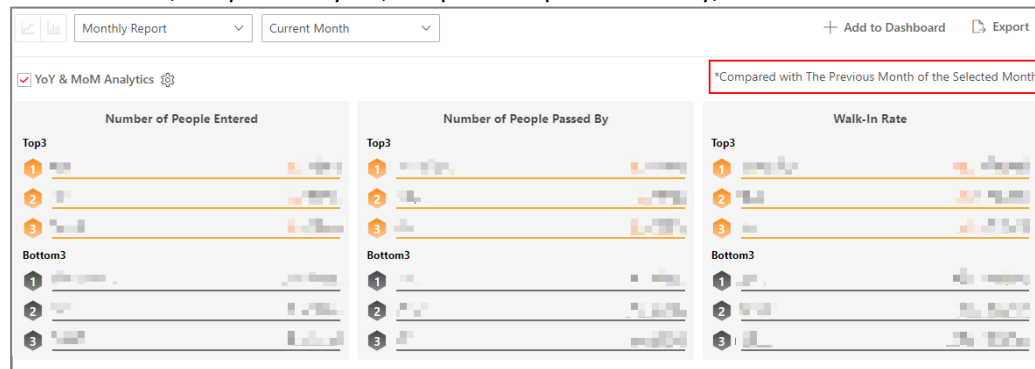
10. Support ranking stores, resource groups, and cameras according to number of people entered, number of people exited, number of people passed by, and walk-in rate
11. Support displaying number of people entered, people passed by, and walk-in rate.



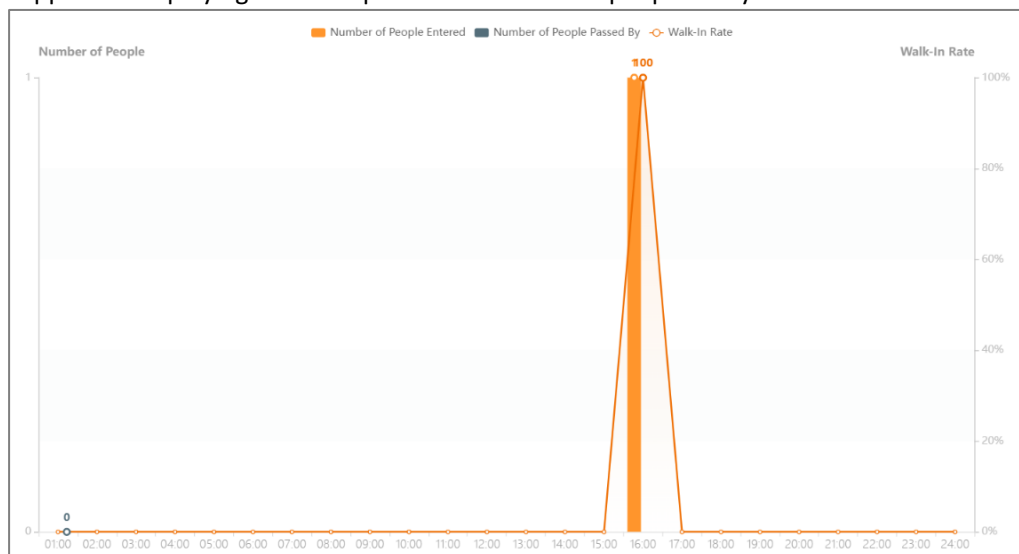
12. Support generating promotion day report.



13. Support displaying YoY & MoM Analytics compared with yesterday, the previous week, the previous month, the previous year, the previous promotion day, and customized time.



14. Support displaying the peak of total people by different dimensions.



15. Support enabling Staff-Excluded People Count.

### People Counting

#### Analysis Type

☐ People Counting in Stores
 ☒ People Counting in One Region
 ☐ People Counting for One Camera

#### Dimension

Walk-In Rate

Entry/Exit Analysis

#### Analysis Group

☒

HikCentral Professional

☒

☒

☒

☒

Staff-Excluded People Count

☒

Generate Report

16. Support displaying person feature reports by age and gender.

All Persons

Male

Female

Infant

Child

Teenage

1/5

+ Add to Dashboard

Export

17. Support generating reports by store, resource group, and camera.

### Heat Analysis

#### Analysis Type

☒ Store Heat Analysis
 ☐ Heat Analysis in One Region
 ☐ Heat Analysis for One Camera

#### Dimension

Dwell Time Analysis

Dwell Rate Analysis

#### Store

☐

HikCentral Professional

☐

18. Support ranking among stores, resource groups, and cameras according to people counting, average dwell time, number of dwell people, and dwell rate.
19. Support displaying dwell rate details of multiple regions in a store. The details include total entries, number of dwell people, and average dwell rate. Support ranking the regions.
20. Support setting how long will be considered as dwell for dwell rate: >0s, >15s, >30s, >60s.

### Heat Analysis

**Analysis Type**

☒ Store Heat Analysis  
☐ Heat Analysis in One Region  
☐ Heat Analysis for One Camera

**Dimension**

**Dwell Duration**

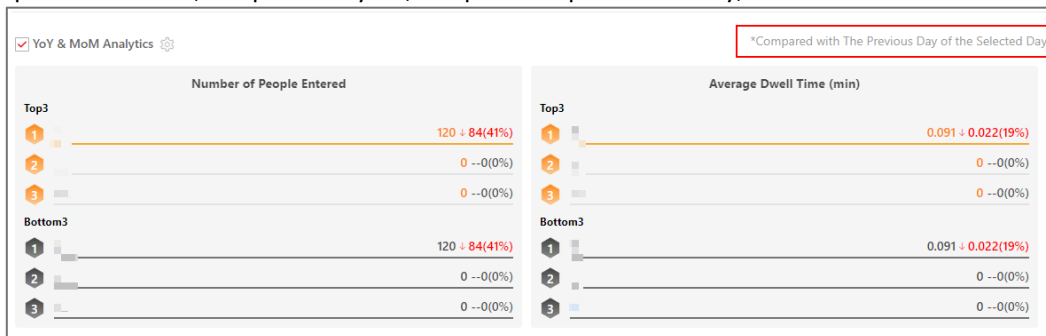
☐ Percentage of People Stayed Longer than Dwell Duration

**Store**

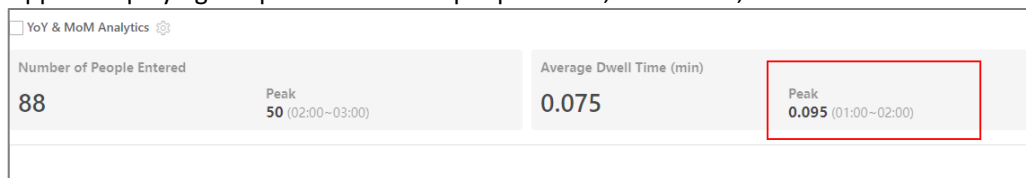
☒ HikCentral Professional

☒

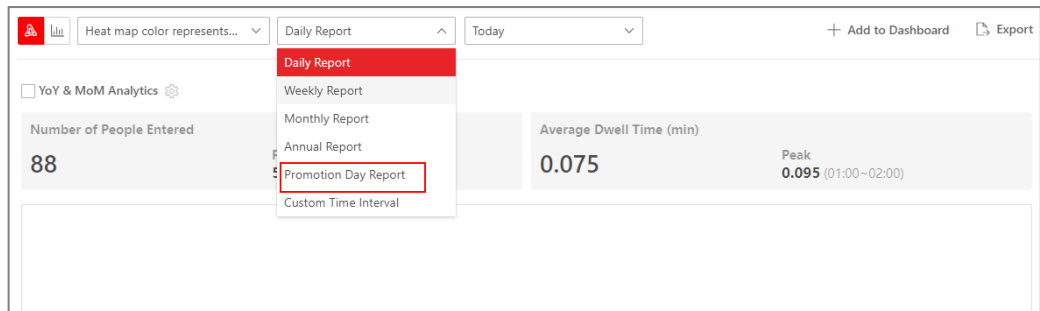
21. Support displaying global heat map. Support linking multiple cameras with a map.
22. Support displaying YoY & MoM Analytics compared with yesterday, the previous week, the previous month, the previous year, the previous promotion day, and customized time.



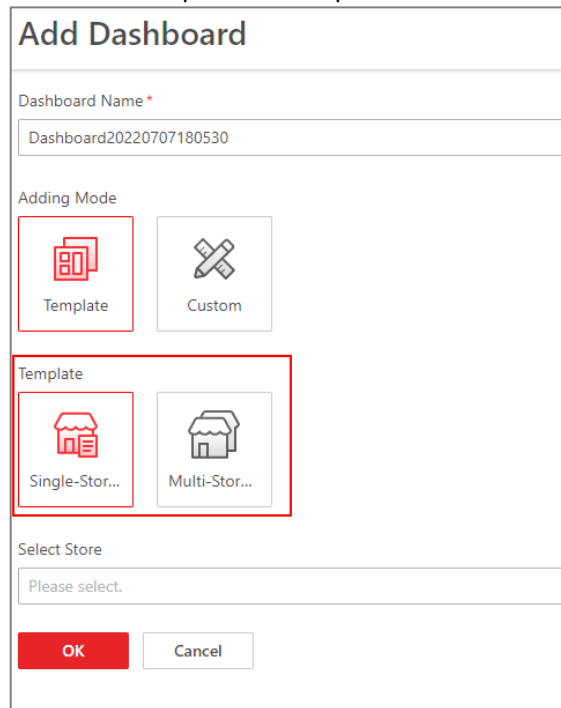
23. Support displaying the peak moment of people count, dwell time, and dwell rate.



24. Support displaying promotion day report.



25. Support selecting single store or multiple store templates.



26. Support Automatic Network Replenishment if cameras linked with NVRs are offline for some time when sending people counting data.

## Mobile Monitoring

### ❖ Driver Management

1. Support automatically switching off streaming after the configured duration.

**Basic Parameters**

Distance Unit ☒ Kilometer (km)  
☐ Mile (mi)

GIS Map [maps.googleapis.com/maps/api/js?key=](https://maps.googleapis.com/maps/api/js?key=) [Edit](#)

GPS Data Retention Period



GPS Reporting Frequency

Stream Auto Switch Off ☒



\*Duration  min

[Save](#) [Cancel](#)


- Support driver list management, including driver's name, ID, gender, email, phone No., remark, driving license (number and picture).

Driver									
Driver Group									
+ Add - Delete Import Export									
<input type="checkbox"/>	Profile Picture	First Name	Last Name	ID	Whether from Pe...	Gender	Phone Number	Driving License	Driver Group
<input type="checkbox"/>		Tom	/	4 [redacted]	No	Female	/	--	/
<input type="checkbox"/>		Taylor	/	4 [redacted]	No	Unknown	/	--	/

- Support driver group management. Supports adding multiple drivers to a group.

Driver									
Driver Group									
+ Add - Delete									
Search									
1 Number of People 2									
<input type="checkbox"/>	Profile Picture	Name	ID	Gender	Phone Number	Driving License	Description		
<input type="checkbox"/>		Tom	4 [redacted]	Female	/		/		
<input type="checkbox"/>		Taylor	[redacted]	Unknown	/		/		

- Support linking a driver / driver group when adding a vehicle for the purpose of getting the driver's statistics.

 Add Vehicle

Vehicle Information

\* License Plate No.


**Driver / Driver Group**

Vehicle Type

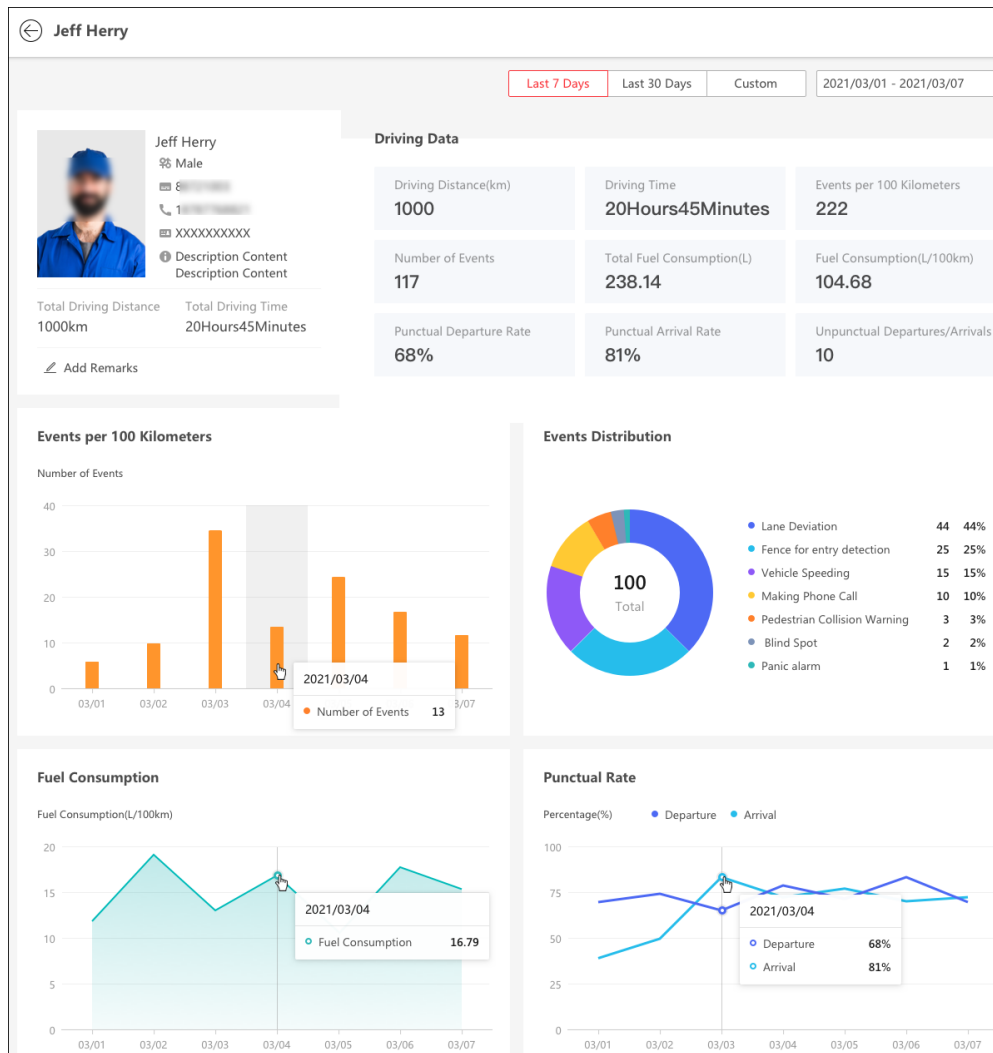
Color

Brand

Fuel Tank Model

Vehicle Picture 

- Support viewing driver statistics, including events per 100 kilometers, events distribution, fuel consumption, and punctual rate, during last 7 days / last 30 days / a custom period.



- Support viewing driver details, including name, profile photo, driving distance, driving duration, events per 100 kilometers, number of events, total fuel consumption, punctual departure rate, punctual arrival rate, unpunctual departures/arrivals, and remark.

Driver Analytics

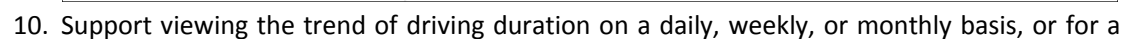
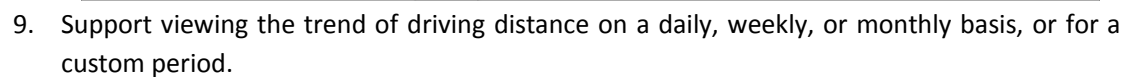
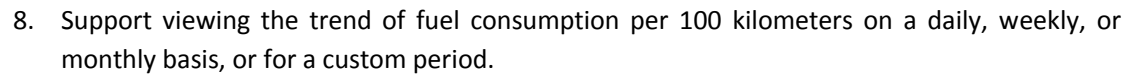
All Drivers Set Event Types for Calculation

Last 7 Days Last 30 Days Custom 2021/03/01 - 2021/03/07

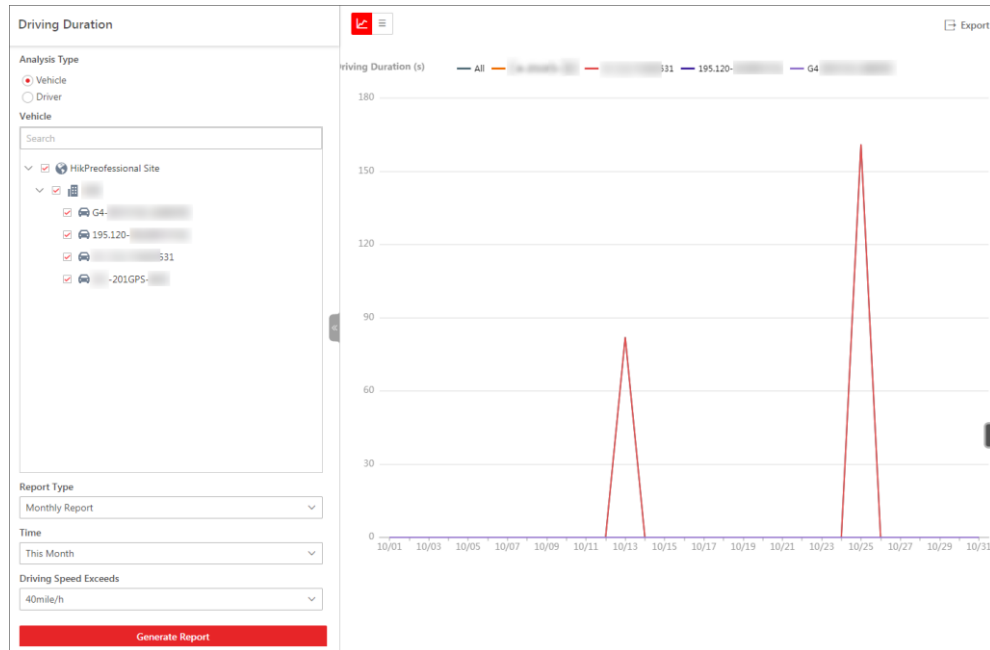
No.	Basic Information	Driving Distance	Driving Duration	Events per 100 Kilometers	Number of Events	Total Fuel Consumption	Fuel Consumption	Punctual Departure	Punctual Arrival Rate	Unpunctual Departures/Arrivals	Remark
1	Tom Male 8 1 XXXXXX										
2	Taylor Male 8 1 XXXXXX										

- Support setting event types for calculation.





custom period.

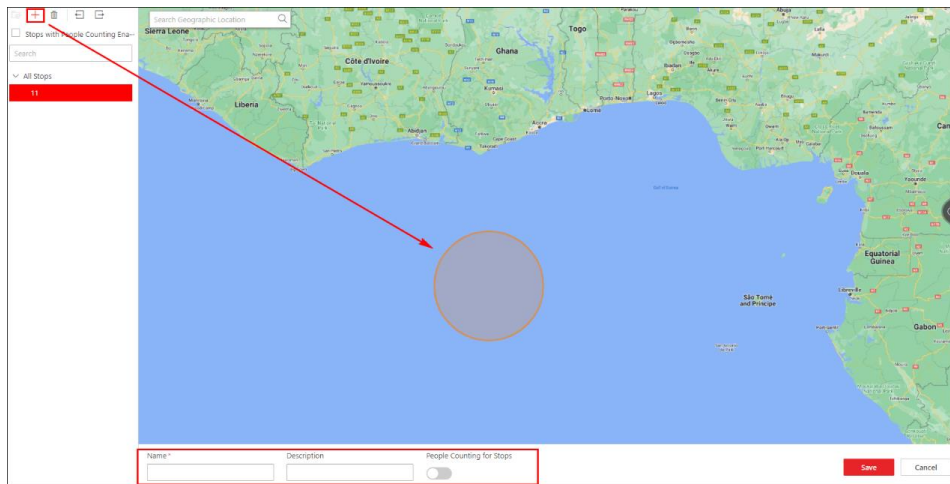


11. Support viewing the trend of driving events on a daily, weekly, or monthly basis, or for a custom period.

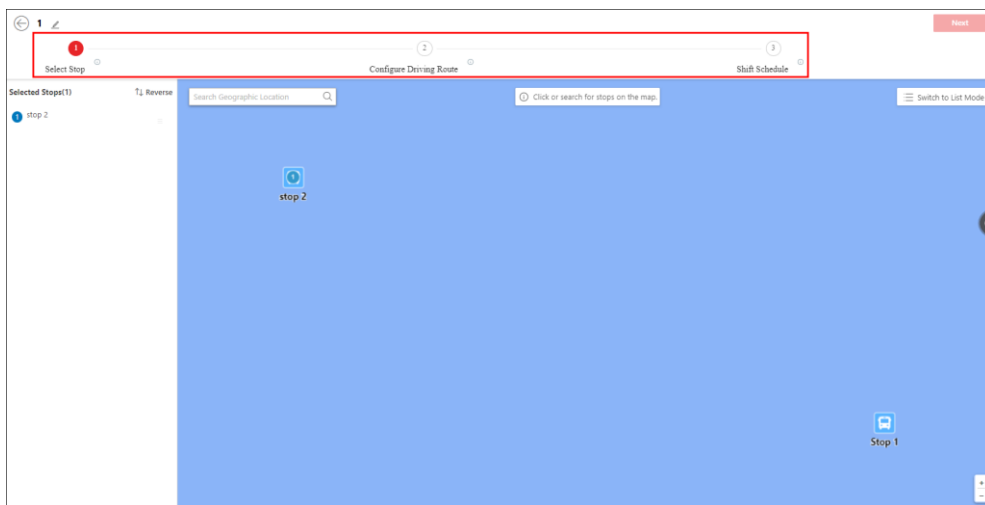


#### ❖ Route Management

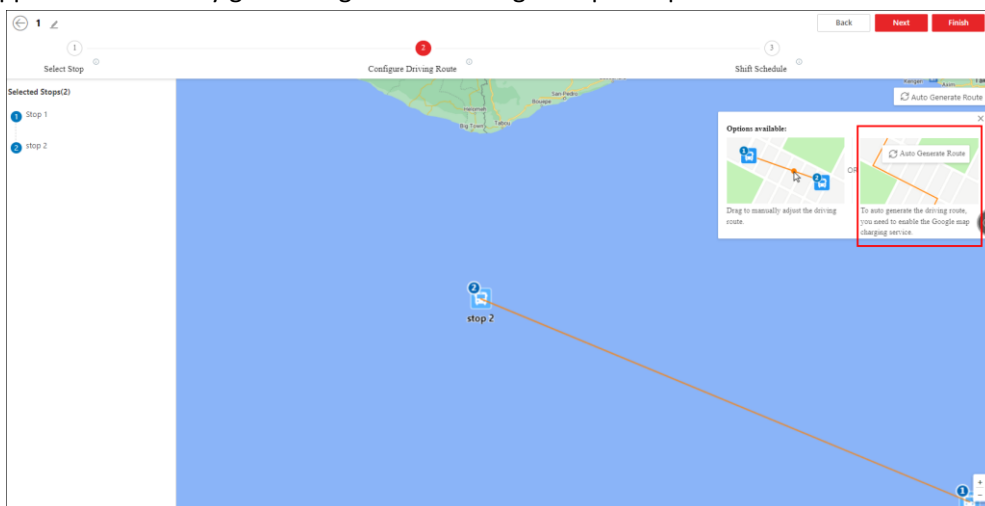
12. Support adding stops on the map. Support setting the name and enabling/disabling people counting for the stop.



13. Support adding driving routes by selecting stops, configuring the route, and setting shift schedules.



14. Support automatically generating a route among multiple stops.



15. Support setting a shift schedule by week. Support setting days of the week for repeating and the start time to take effect. Support setting a shift schedule for a fixed date or for a time period.

**+ Add Shift Schedule**

☐ Select All

Name \*

Copy From  
None

Start Time  
Please select time.

**Time \***

☒ Repeat by Week  
☐ Fixed Date  
☐ Time Period

Days of the Week \*

Monday Tuesday Wednesday  
Thursday Friday Saturday  
Sunday

**Add**

16. Support setting the arrival/departure time for each stop and the time difference allowed (accurate to minute).

**1** **2** **3** **Back** **Finish**

Select Stop Configure Driving Route Shift Schedule

**+ Add Shift Schedule** **Delete Shift Schedule** ☒ Arrival Time ☒ Departure Time

☐ Select All

Stop 1 Stop 2

Arrival Time Departure Time Arrival Time Departure Time

**+ Add Vehicle**

17. Support setting the causes of unpunctual departure/arrival for different routes.

**Route Parameters**

\*Flexible Duration for Departure 3 min

\*Flexible Duration for Arrival 3 min

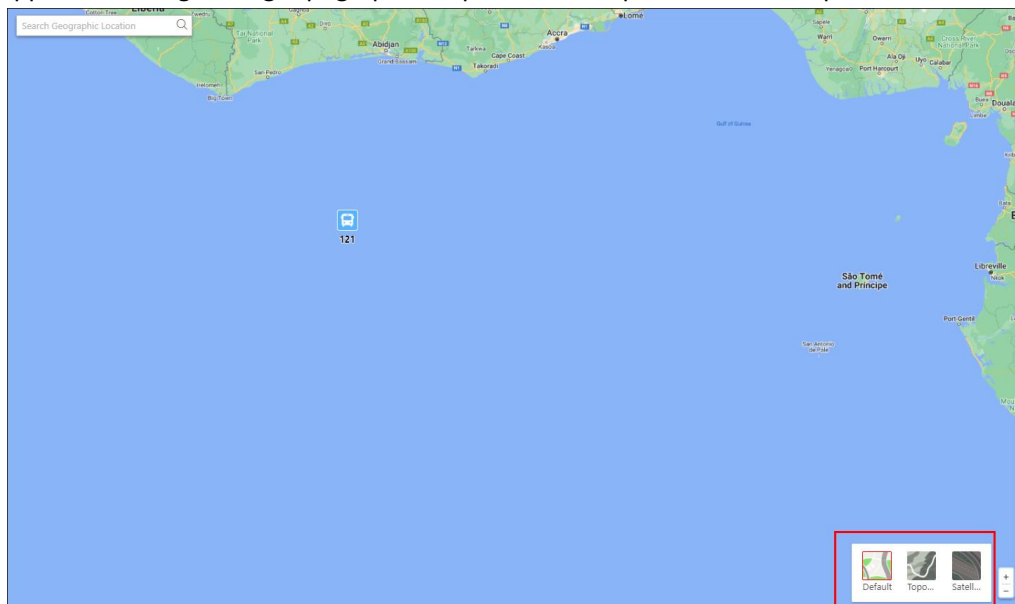
**Cause of Unpunctual Departure/...** **+ Add** **Delete All**

Description	Operation
No data.	

**Save**

18. Support configuring stop/route event rules. Support setting stops allowing/forbidding triggering alarm inputs.

19. Support switching among topographic map, satellite map, and default map.



20. Added alarm input event, unintended alarm input event, abnormal fuel consumption event, abnormal fuel level in tank event, vehicle late arrival/departure event.

### Settings

Select Event to Receive

☒ Speeding

☒ Collision

☒ Emergency Alarm

▼

☒ Driver Behavior Event

☒ Smoking

☒ Using Mobile Phone

☒ Fatigue Driving

☒ Distraction

☒ Seatbelt Unbuckled

☒ Video Tampering

▼

☒ ADAS Event

☒ Forward Collision Warning

☒ Headway Monitoring Warning

☒ Lane Deviation Warning

☒ Pedestrian Collision Warning

☒ Speed Limit Warning

☒ Blind Spot Warning

▼

☒ Alarm Input Event

▼

☒ Route Event

☒ Vehicle Late Arrival

☒ Vehicle Late Departure

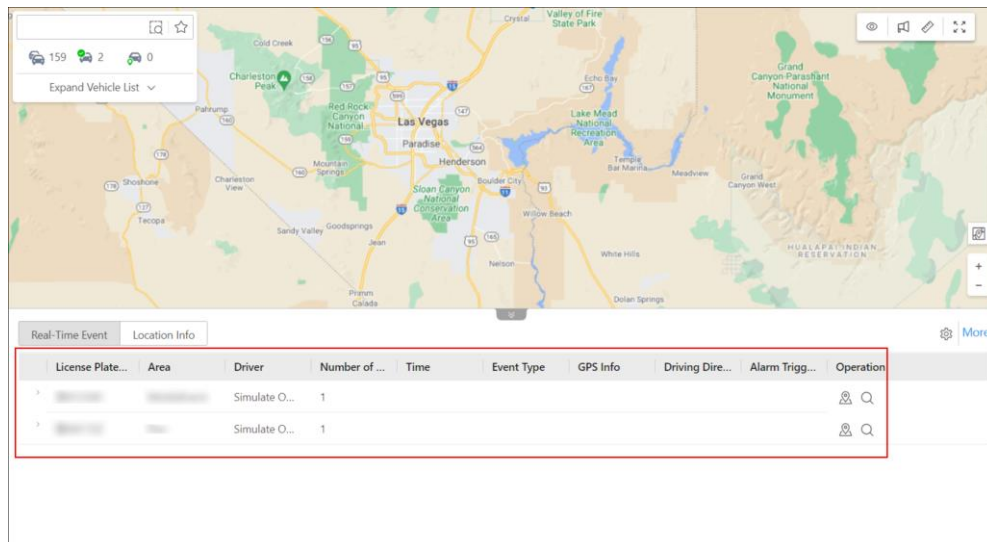
☒ Abnormal Fuel Consumption

☒ Abnormal Fuel Level in Tank

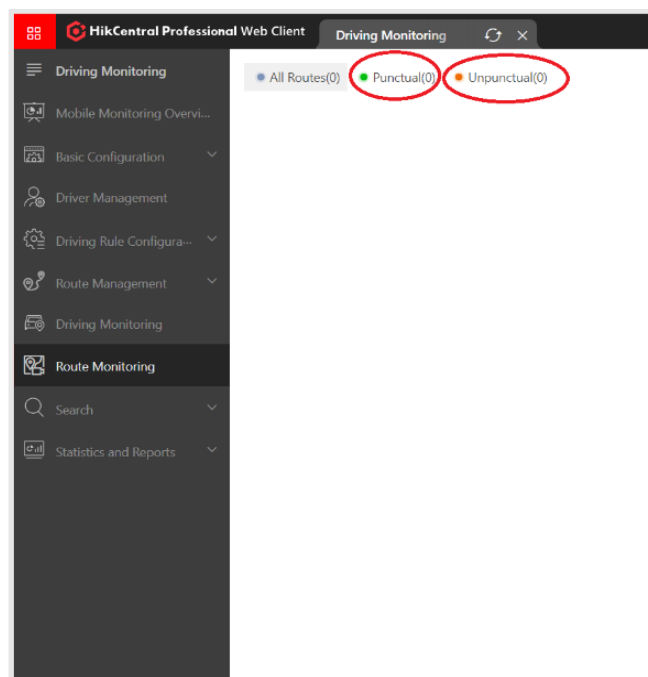
☒ Unintended Alarm Input

Save

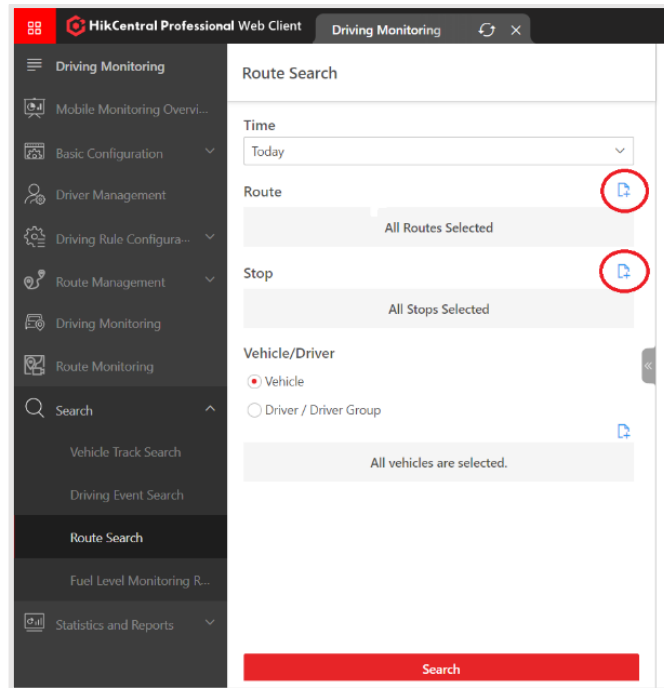
21. Support resuming uploading events/alarms when network recovers.
22. Support displaying event details during driving monitoring. Support saving driving events as evidence on the Control Client.



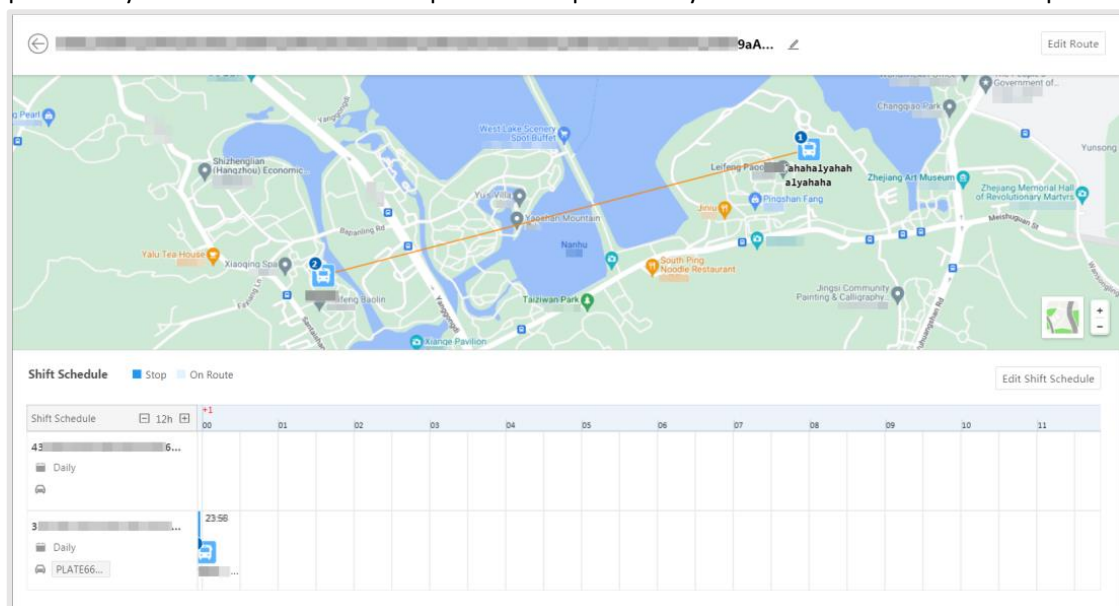
- 23. Support sending texts from the Client to the driver during driving monitoring.
- 24. Support displaying the number of alarms on the vehicles on the map and jumping to alarm detail page.
- 25. Support viewing 7-second alarm videos and jumping to playback page on the Mobile Client.
- 26. When checking the status of all routes, punctual routes and unpunctual ones can both be presented.



- 27. Optimized the function of route filtering to include stops and route names as the parameters.

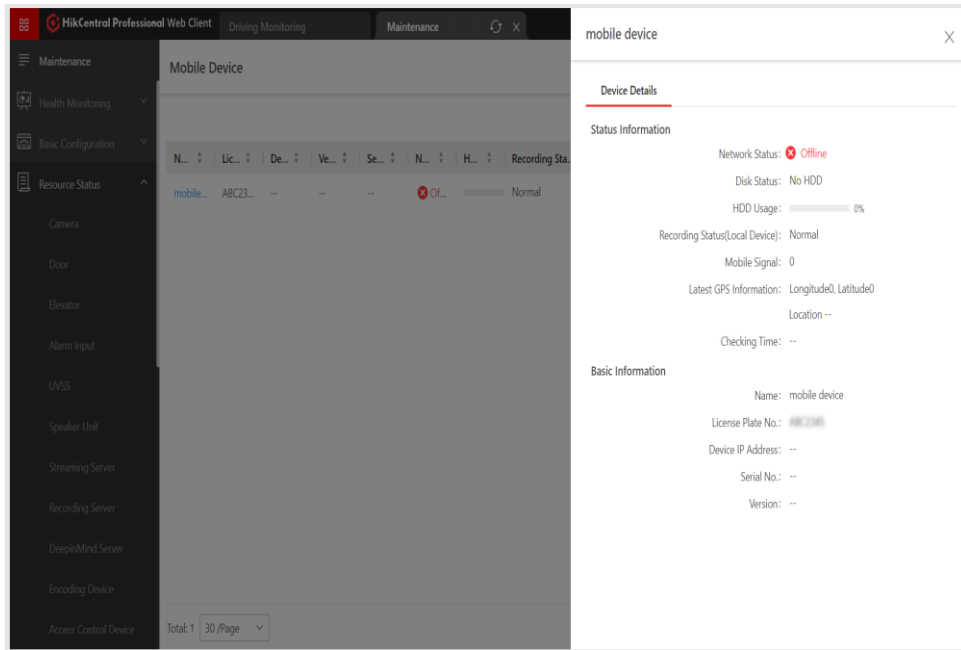


28. Added the feature of displaying the stops of a route and the status of a vehicle (punctual, late, or early arrival).
29. Added the feature of viewing the details of a route by clicking the route including the punctuality of vehicles at one stop and the punctuality of all vehicles at each stop.

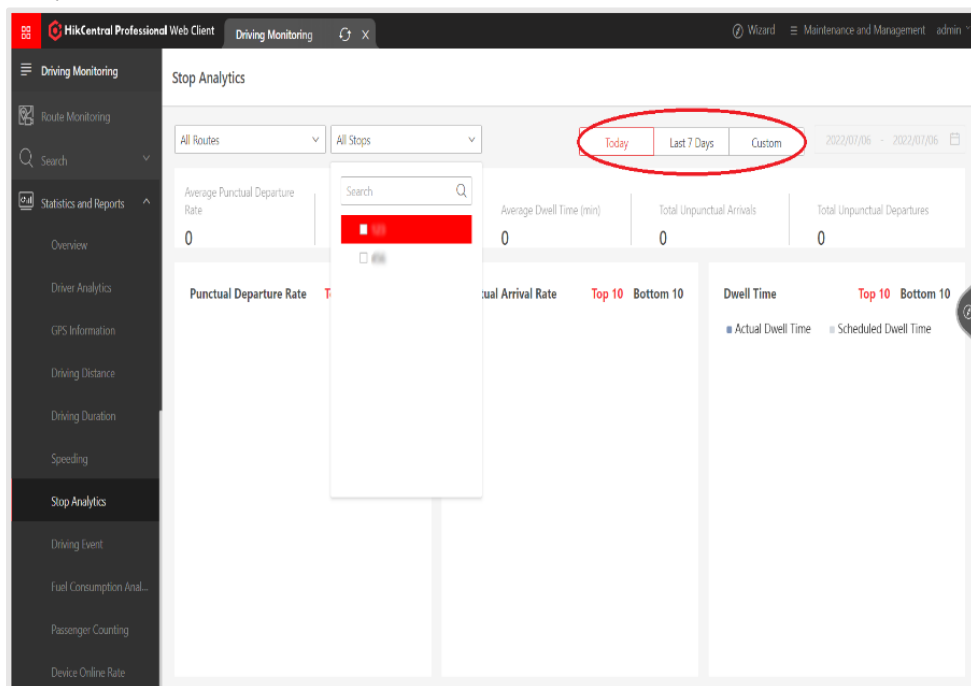


30. Added the feature of adding notes during route monitoring by selecting predefined causes. The added notes will be included in the report.
31. Added the feature of clicking the icon of a specific vehicle to view the driving monitoring information including the real-time location, routes, triggered alarms, drivers' information, and vehicle operations.

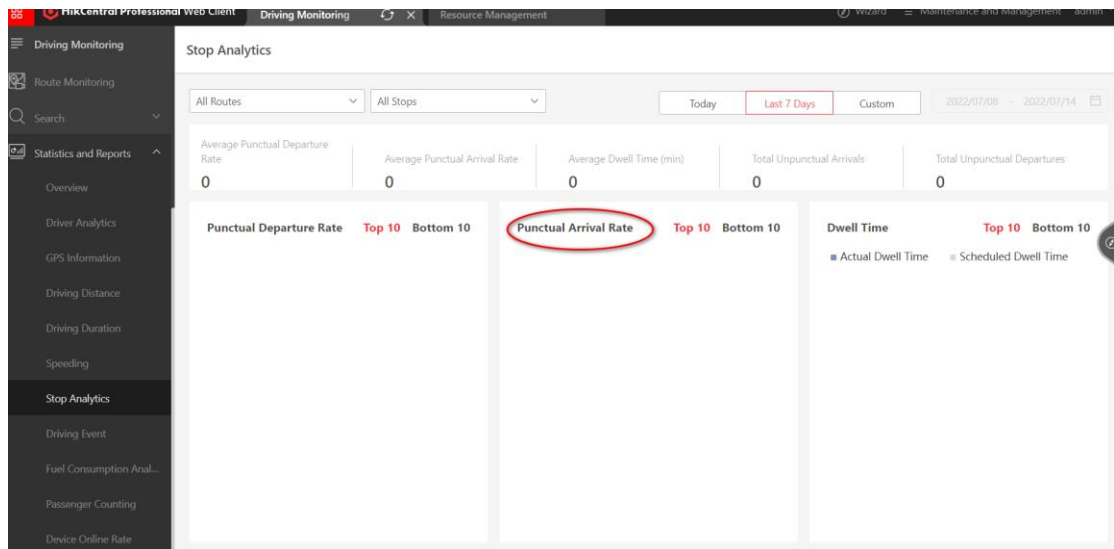




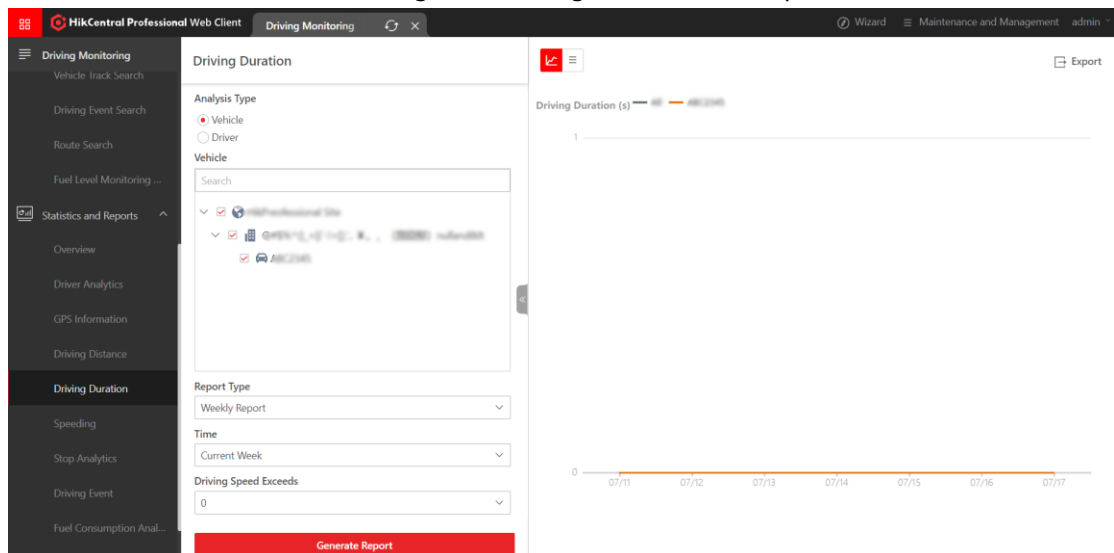
32. Added the feature of generating statistics reports of all stops or selected stops.
33. Added the feature of viewing stop information of the last 7 days, the last 30 days, or a custom period.



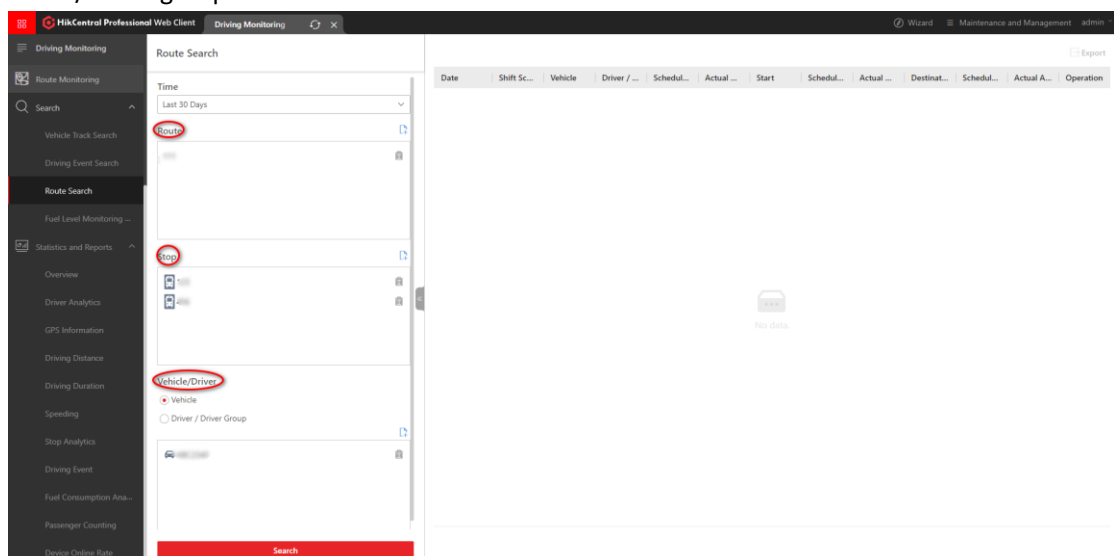
34. When showing the overall analytics of each stops, the average punctual departure rate, average punctual arrival rate, average dwell time (in minutes), total unpunctual arrivals, and total unpunctual departures will all be included.
35. Support showing the top 10 / bottom 10 stop rankings for punctual departure rate, punctual arrival rate.
36. Support showing the top 10 / bottom 10 stop rankings for punctual arrival rate.



37. Added the feature of searching for driving duration of specific vehicles/drivers.

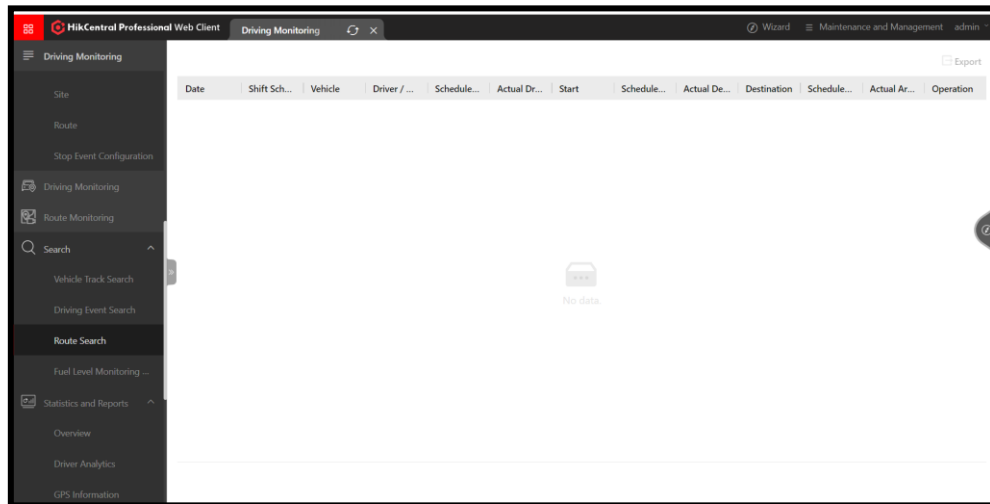


38. Added the feature of searching for travelled routes according to route names, stop names, driver/driver group and vehicle information.



39. Added the feature of displaying route time, shift schedule, vehicle, driver/driver group, vehicle

departure time, driving duration. Managing each route record is now supported.

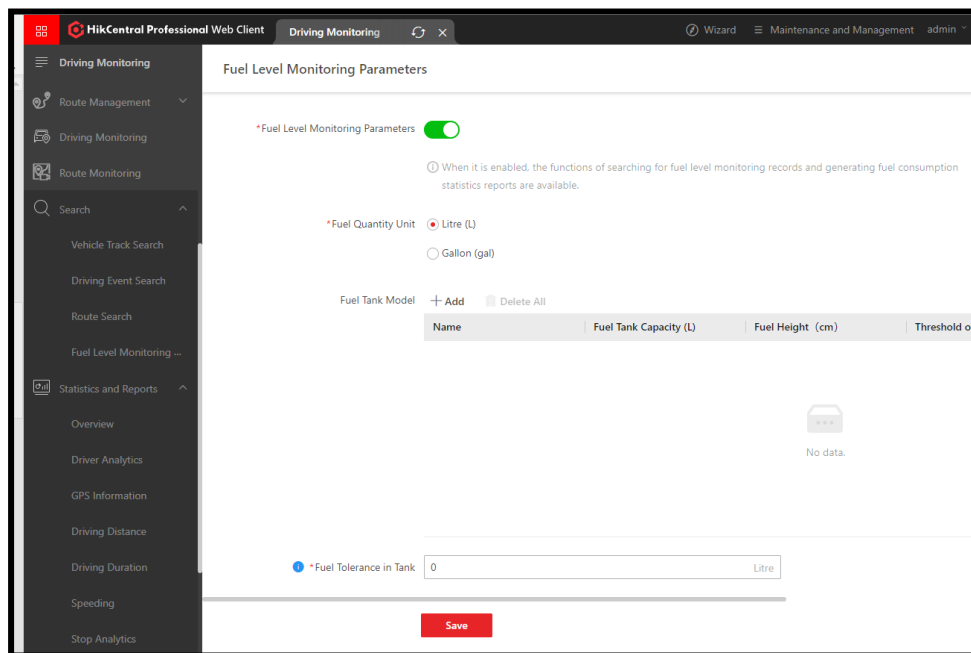


40. Added the feature of displaying route information of each shift schedule including scheduled driving time, actual driving time, scheduled departure time at a stop, actual departure time at a stop, scheduled arrival time at a stop and actual arrival time at a stop.

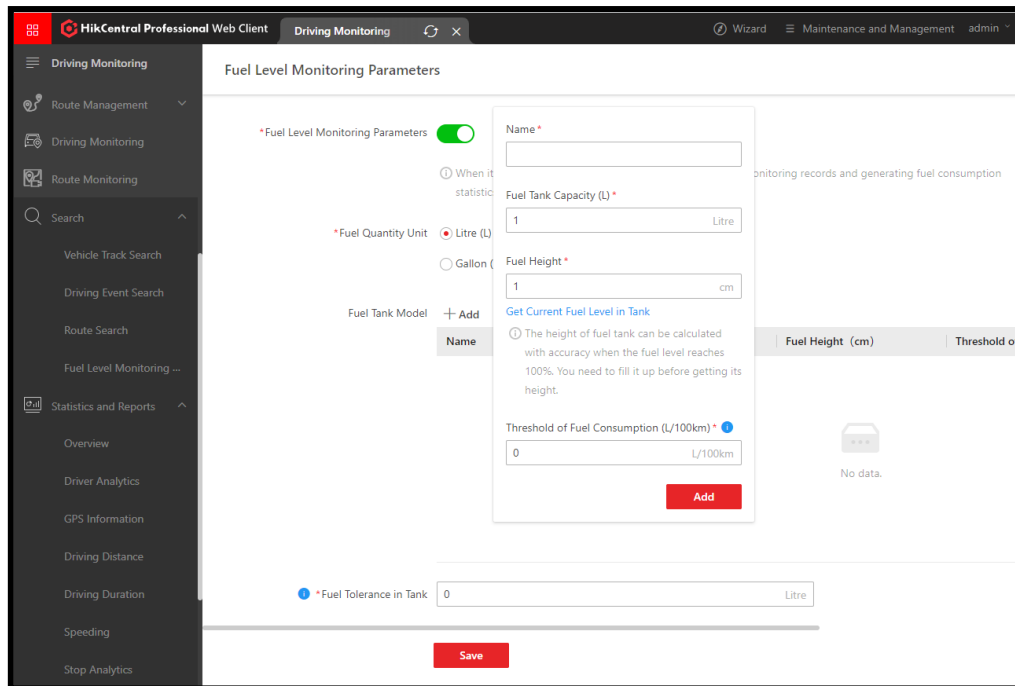
41. Added the feature of exporting the travelled route records.

❖ Fuel Consumption Management

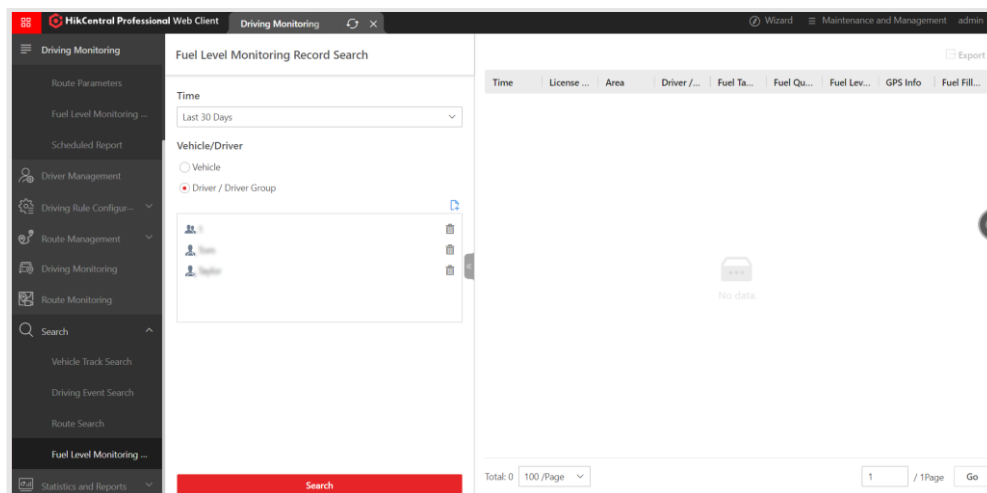
42. Added the feature of configuring fuel consumption unit.



43. Added the feature of configuring fuel tanks including names, tank capacity, fuel level, threshold of fuel consumption.



44. Added the feature of having an overview of fuel levels according to the parameter of tank types of different vehicles.



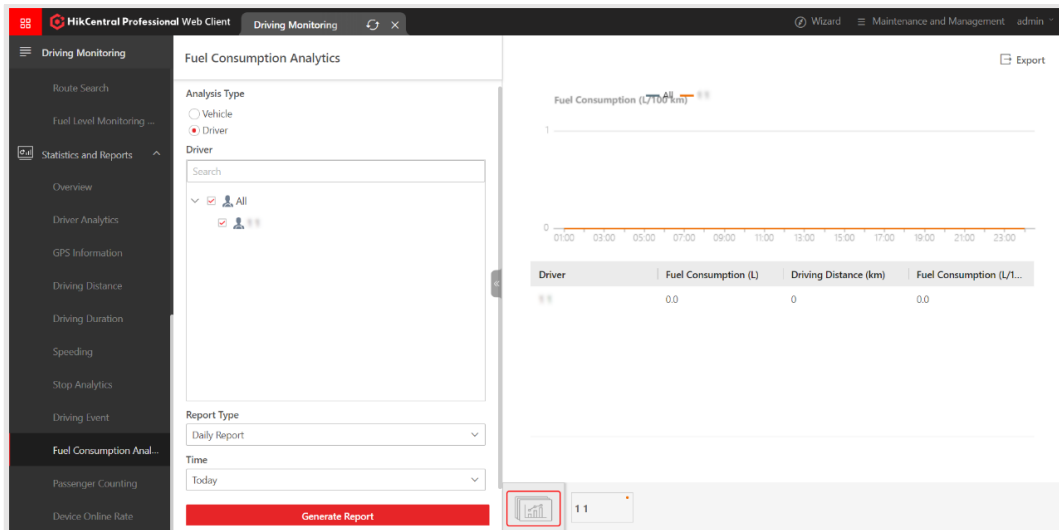
45. Added the feature of configuring a fuel level difference threshold. When the difference exceeds the configured value, an alarm will be triggered.

The screenshot shows the 'Fuel Level Monitoring Parameters' configuration page in the HikCentral Professional Web Client. The left sidebar contains navigation options: Driving Monitoring, Route Management, Driving Monitoring, Route Monitoring, Search, Vehicle Track Search, Driving Event Search, Route Search, Fuel Level Monitoring, Statistics and Reports, Overview, Driver Analytics, GPS Information, Driving Distance, Driving Duration, Speeding, and Stop Analytics. The main content area is titled 'Fuel Level Monitoring Parameters' and includes a toggle switch for 'Fuel Level Monitoring Parameters' (currently on). Below this, there are fields for 'Fuel Quantity Unit' (set to 'Litres (L)'), 'Fuel Tank Capacity (L)' (set to 1), 'Fuel Height' (set to 1), and 'Threshold of Fuel Consumption (L/100km)' (set to 0). A 'Get Current Fuel Level in Tank' button is present. A 'Fuel Tolerance in Tank' field is also visible. A 'Save' button is at the bottom right. A modal window is open, showing a 'Name' field and a description: 'The height of fuel tank can be calculated with accuracy when the fuel level reaches 100%. You need to fill it up before getting its height.' The modal also has an 'Add' button.

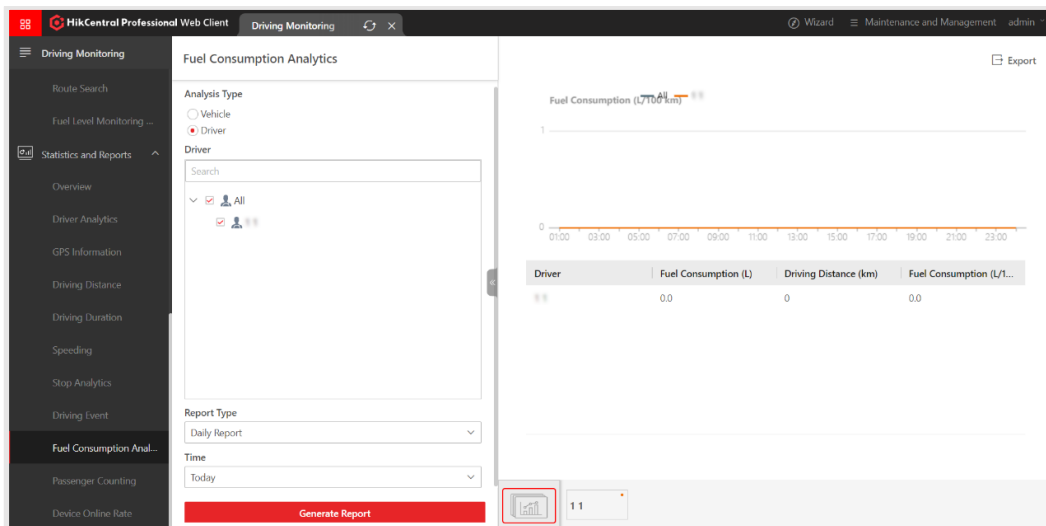
46. Added the feature of searching for fuel level records according to time, vehicle, driver/driver group.

The screenshot shows the 'Fuel Level Monitoring Record Search' page in the HikCentral Professional Web Client. The left sidebar is the same as in the previous screenshot. The main content area is titled 'Fuel Level Monitoring Record Search' and includes a 'Time' dropdown menu (set to 'Today') and a 'Vehicle/Driver' section with radio buttons for 'Vehicle' and 'Driver / Driver Group'. A message 'All vehicles are selected.' is displayed. A 'Search' button is at the bottom left, and an 'Export' button is at the top right. The main area shows 'No data.'.

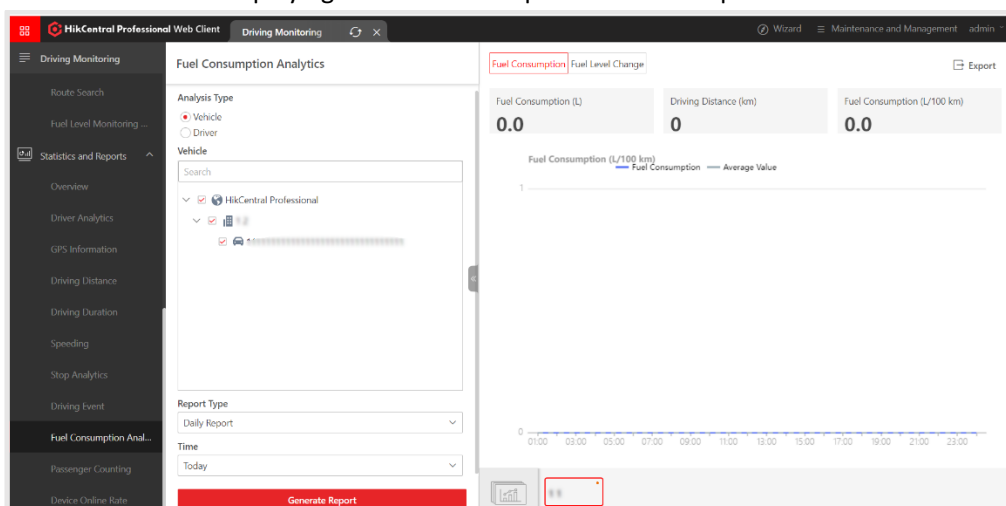
47. Added the feature of displaying fuel consumption per 100 kilometers of a selected driver and fuel consumption of every driver.



48. Added the feature of displaying the reported fuel consumption records of every driver including driver, fuel consumption, driving distance, and fuel consumption per 100 km.



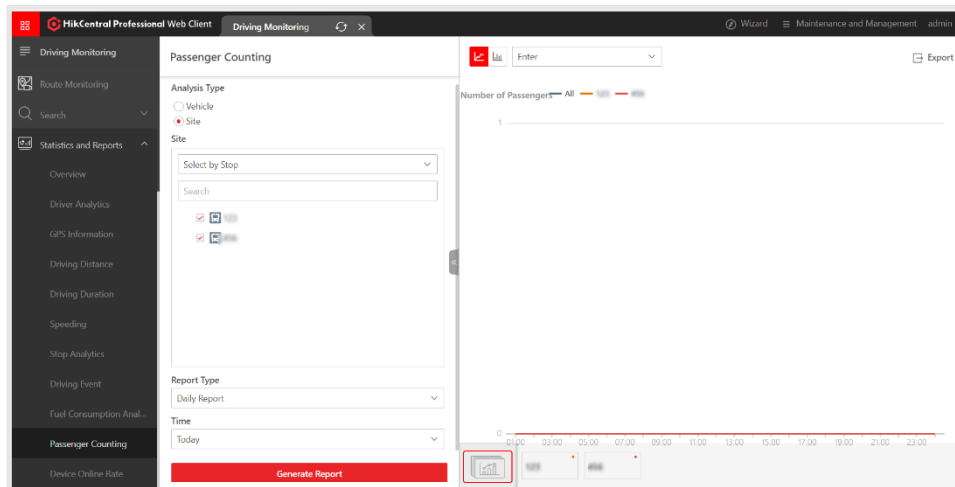
49. Added the feature of displaying the fuel consumption trend of a specified vehicle.



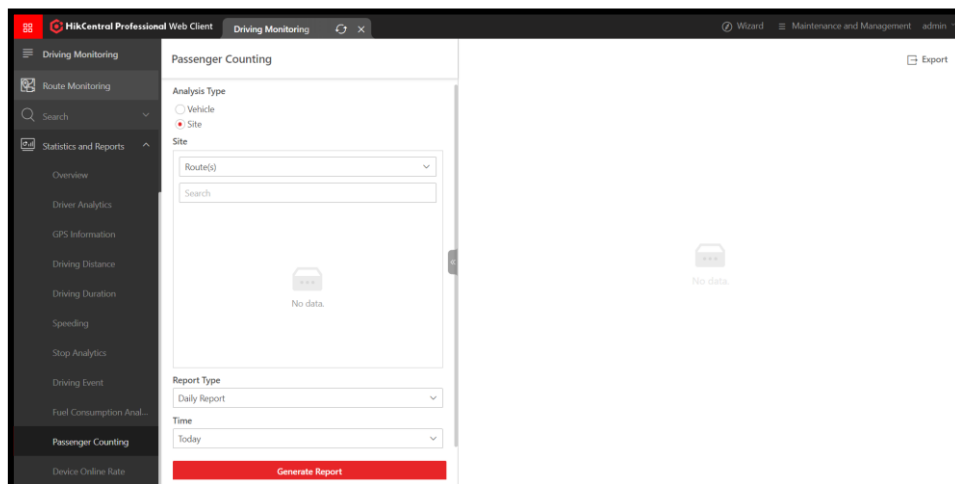
50. Added the feature of displaying the reporting location of real-time fuel consumption on the map.
51. Added the feature of displaying vehicle, driver, fuel consumption, total tank capacity and GPS information linked to a certain level of fuel consumption.

## ❖ Statistics and Report

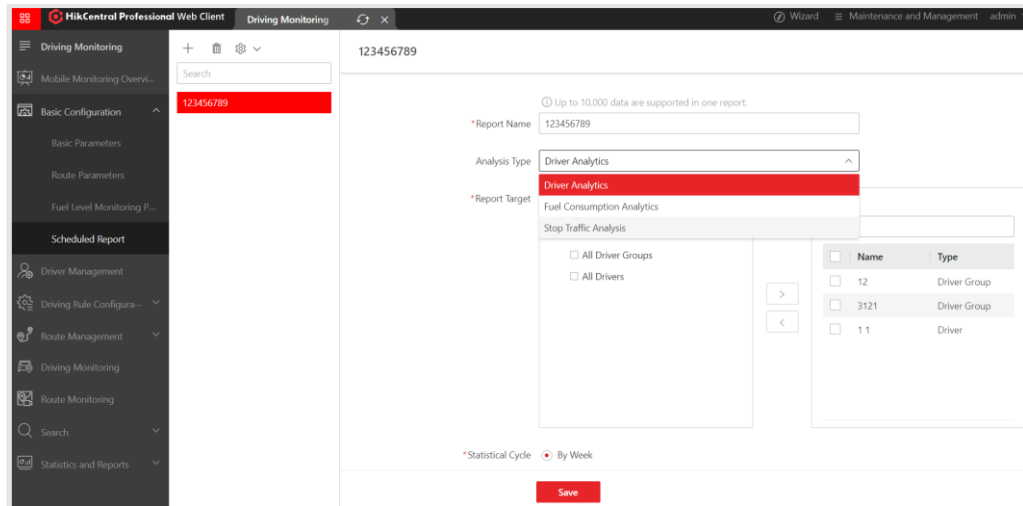
52. Added the feature of calculating passenger traffic of different stops or time periods: displaying the people counting data in a specified period of different vehicles or all vehicles at the same time or separately, including passenger arriving, leaving or both.



53. Added the feature of calculating passenger traffic of different routes or time periods: displaying the people counting in a specified period of different vehicles or all vehicles at the same time or separately, including passenger arriving, leaving or both.

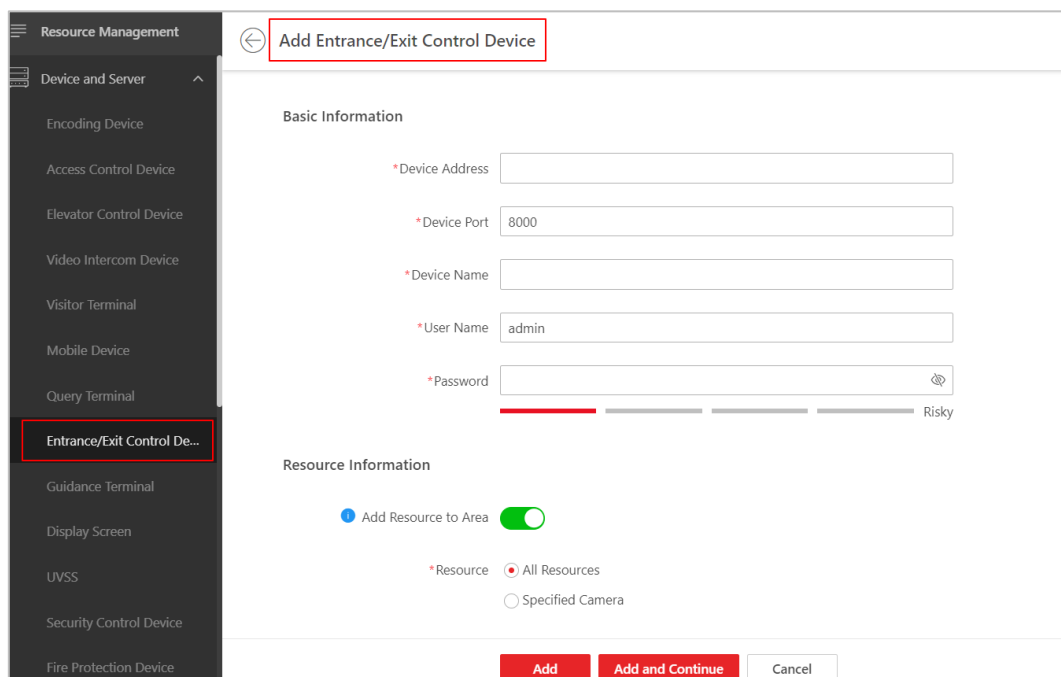


54. Added the feature of sending weekly or monthly reports regularly in the Mobile Monitoring module, including driver analysis, fuel level analysis and passenger traffic analysis report.



## Vehicle and Parking Management

55. Added the support of adding all-in-one entrance & exit machines to the platform on the Web Client.



56. Added the support of managing outdoor parking spaces and configuring outdoor parking guidance on the Web Client.

57. Added the support of linking one ANPR camera with two lanes to be applicable to the entrance & exit without barrier gate installed.



**Basic Information**  


\*Lane Name

Lane Type

**Available Time Range**  
Available Time Range

**Link Device**  
Device Link capture units, card readers, etc., to control the barrier gate.  


Relate Device

 S

Device Type	Device Address	Port No.
Capture Unit	17.53	8002

Entry and Exit Rule

Driving Direction



Save

**Basic Information**  


\*Lane Name

Lane Type

**Available Time Range**  
Available Time Range

**Link Device**  
Device Link capture units, card readers, etc., to control the barrier gate.  


Relate Device

 Si

Device Type	Device Address	Port No.
Capture Unit	17.53	8002


Entry and Exit Rule

Driving Direction




Save

**Entrance Lane 1**  
Available Time Range: **All-Day**      Entry & Exit Rule for Te... **Manual**      Entry & Exit Rule for Re... **Automatic&All-Day**  
Entry & Exit Rule for Visi... **Automatic&All-Day**      Entry & Exit Rule for Ve... **No Rule**  

 Sim

Device Type	Device Address	Port No.
Capture Unit	17.53	8002

**Exit Lane 2**  
Available Time Range: **All-Day**      Entry & Exit Rule for Te... **Manual**      Entry & Exit Rule for Re... **Automatic&All-Day**  
Entry & Exit Rule for Visi... **Automatic&All-Day**      Entry & Exit Rule for Ve... **No Rule**  

 Sim

Device Type	Device Address	Port No.
Capture Unit	17.53	8002

58. Added the support of setting entry mode as Person and License Plate Match on the Web Client.

## Entry & Exit Mode and Account Deduction

Entry Mode

No Repeated Entry

License Plate and Card Match

Person and License Plate Match

Exit Mode

License Plate and Card Match

Person and License Plate Match

Auto Account Deduction

Yes

No

When Parking Fee is 0

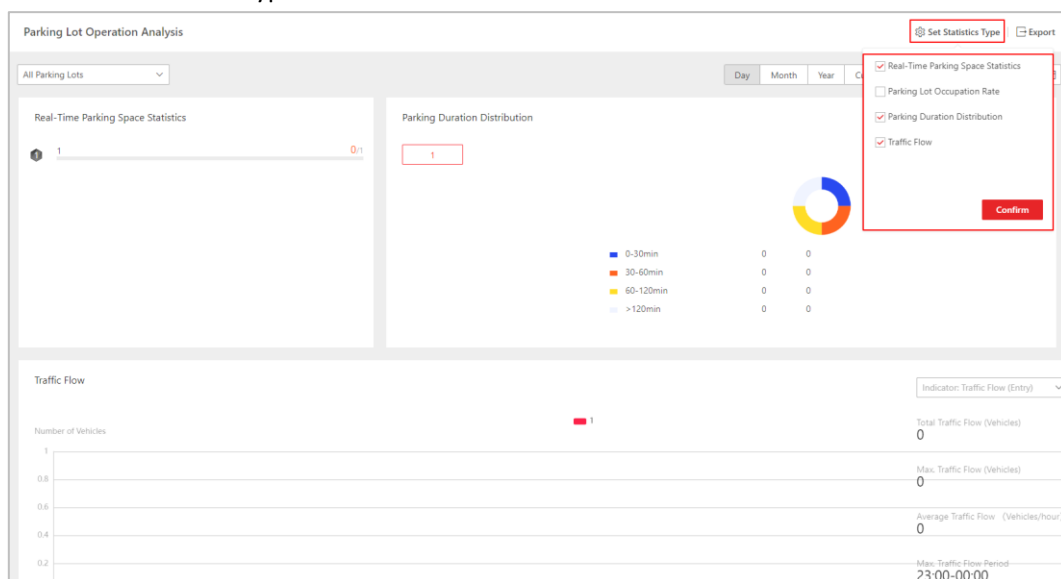
Allow

Not Allow

Save

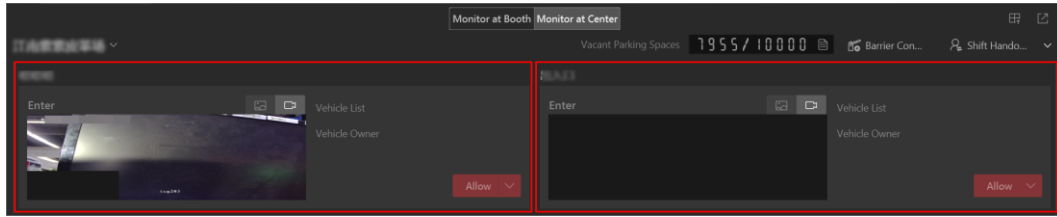
Cancel

59. Added the support of customizing the display layout of operation analysis report by selecting different statistics types.



60. Added the support of controlling multiple entrances and exits at the same time on the Control

Client.

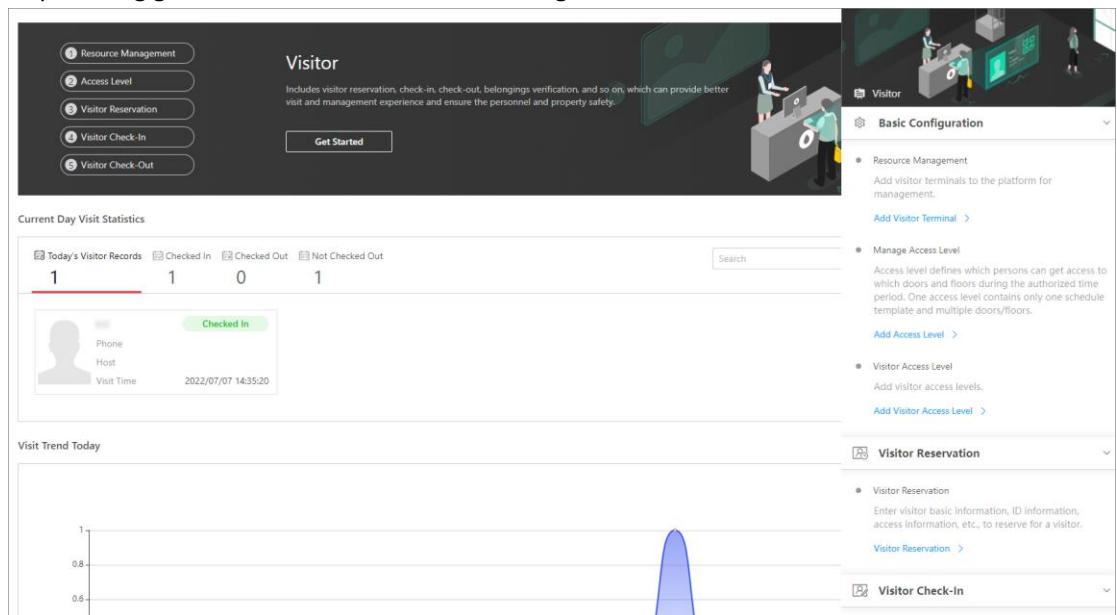


## Access Control

1. If you link a facial recognition terminal to the barrier gate, the platform will set the authentication mode of the facial recognition terminal as Face.
2. For the barrier gated linked with facial recognition terminals in the upgraded platform, if you have changed RS-485 mode to access control mode, you need to start an initial application for the barrier gate.
3. Due to the support of barrier gate for Anti-passback, no more than 8 card readers can be accessed.
4. The Identity Access Search page supports customizing column items to be displayed.

## Visitor Management

1. Added a wizard for the Visitor module, which is hidden on the right and will appear on mouse hover, providing guidance for users on how to manage visitors.



2. Added the feature of customizing information for self-service reservation.

**Basic Parameters**

Basic Information   Visit Purpose   Visitor Email Template   **Custom Configuration**

1 Send Email when Checked In   Check-In For Visitor

2 Send Email when Reservation ...   Reservation Rejected For Host

**Custom Configuration**

Custom Visitor Attribute   + Add   Search

Name	Type	Operation
1	General Text	

Custom Field for Reservation ...

Available

Search

☐ All

>

<

Selected

Search

<input type="checkbox"/>	Field	Set as Required
<input type="checkbox"/>	Host	<input checked="" type="checkbox"/>
<input type="checkbox"/>	ID No.	<input type="checkbox"/>
<input type="checkbox"/>	Certificate Pic...	<input type="checkbox"/>
<input type="checkbox"/>	Gender	<input type="checkbox"/>
<input type="checkbox"/>	License Plate ...	<input type="checkbox"/>
<input type="checkbox"/>	Email	<input type="checkbox"/>

Save

3. Added the feature of generating different QR codes for self-service reservation by different users so that different users can manage their own visitors (which is applicable to multi-tenant office buildings).
4. Added the feature of reading the passport information via KR420 passport reader.

## Time and Attendance

1. Added daily overtime report and weekly overtime report.



**Attendance**

- Time & Attendance Overview
- Basic Configuration
  - Attendance Check Point
  - General Rule
  - Overtime
  - Leave Type
- Shift Settings
  - Break Timetable
  - Timetable
  - Shift
- Shift Schedule
  - Shift Schedule Overview
- Assign to Person Group
  - Assign to Person
  - Temporary Schedule
- Records and Handling
  - Export Report

**All Persons**

The shift schedule settings will be applied to the newly added persons in the person group.

Set Shift Schedule ☒

\*Effective Period 2022/07/07 - 2022/07/07

Check-In Not Required ☐

Check-Out Not Required ☐

Effective for Overtime ☐

Shift < None > View

Add

Attendance Check Point

All Attendance Check Points Selected

Save

5. The General Rule page supports setting the time of recalculating historical attendance data.

**Attendance**

- Time & Attendance Overview
- Basic Configuration
  - Attendance Check Point
  - General Rule
  - Overtime
  - Leave Type
- Shift Settings
  - Break Timetable
  - Timetable
  - Shift
- Shift Schedule
  - Shift Schedule Overview
- Assign to Person Group
  - Assign to Person
  - Temporary Schedule
- Records and Handling
  - Export Report

**General Rule**

Authentication Mode

\*Customize Authentication Mode ☐

Auto-Calculate Attendance

\*Calculate at 04:00

Recalculate Historical Data ☒

6. The Raw Records page supports editing the handling type for records that have been handled.

**Attendance**

- Time & Attendance Overview
- Basic Configuration
  - Attendance Check Point
  - General Rule
  - Overtime
  - Leave Type
- Shift Settings
  - Break Timetable
  - Timetable
  - Shift
- Shift Schedule
  - Shift Schedule Overview
- Assign to Person Group
  - Assign to Person
  - Temporary Schedule
- Records and Handling
  - Export Report

**Raw Records**

Export Import Records Handle Records Edit Handling Type

Time Last 3 Months Name ID Person Group All Data Source All

Select Additional Information Filter Reset

Name	ID	Skin-Surfac...	Date	Time	Day of We...	Person Gr...	Sta...	Attendance Check Point	Customi...	Data So...	Handlin...
			2022-05-31	09:00:00	Tuesday	All Persons/jz...	/	/	/	Handle Reco...	Check-In

7. The Data Interchange page of the System Configuration supports sending person additional information if you have configured the additional information.
8. The Data Interchange page of the System Configuration supports configuring the time interval of sending records failed to be pushed.

**System Configuration**

- Normal
  - User Preference
  - Holiday Settings
  - Printer Settings
  - Card Template
- Network
- Storage
- Email
- Security
- Third-Party Integration
  - Integrate via Optimus
  - Open API
- Data Interchange**
- Advanced
- Company Information

### Data Interchange

\*Resource for Card Swiping + Add Delete All Synchronize Event

Name	Resource Type	Area
No data.		

Total: 0 10 /Page < 1 >

Encoding Format of Data Int... utf-8

Do Not Push Failed Records ☐

Type ☒ Database Synchronization  
☐ Access Record Dump

\*Auto Push Failed Record ☒

\*Push Mode ☐ Push at Fixed Time  
☒ Push at Fixed Interval

\*Interval Time 60 min

Database Type PostgreSQL

\*Server IP Address/Domain Name

## Video Intercom

1. Support applying software packages to indoor stations in a batch.

×

Apply Software Package

Select Indoor Station

☐ All Indoor Stations
 ☒ Specified Indoor Station(s)

Select Indoor Stations

Available

Search

☐
☐

Selected

Search

☐ | Name

No data.

>

<

Application Type

☒ APK
 ☐ URI

Apply

Cancel

- When video intercom devices call the Center, the earliest and unanswered call will be listed as the first one to be answered.
- In the Video Intercom module, the two-way audio volume of microphone and loudspeaker will be saved and used in the following two-way audio.

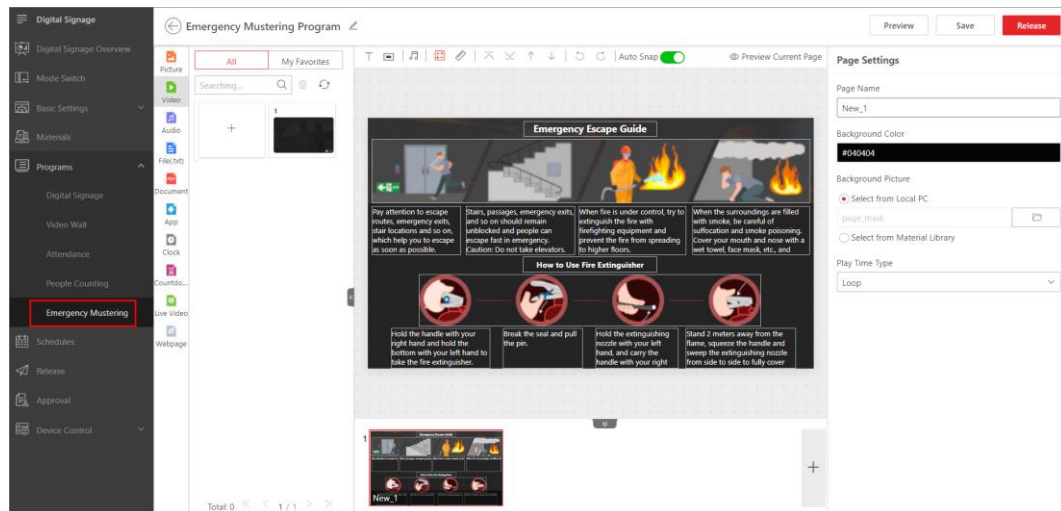
## Alarm Detection

Support adding solar panic alarm devices.

## Digital Signage

- Support playing the emergency mustering program (configured in advance) when the emergency is triggered. The program stops playing when the emergency ends.

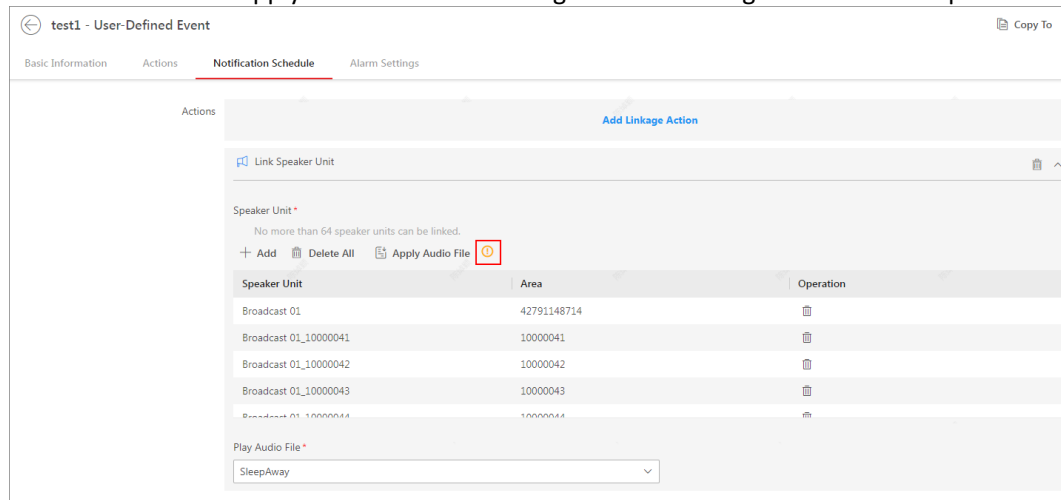




- Support remotely managing interactive flat panels, including remotely shutting down, rebooting, timed startup/shutdown, setting the screen saver password, restoring to factory settings, etc.

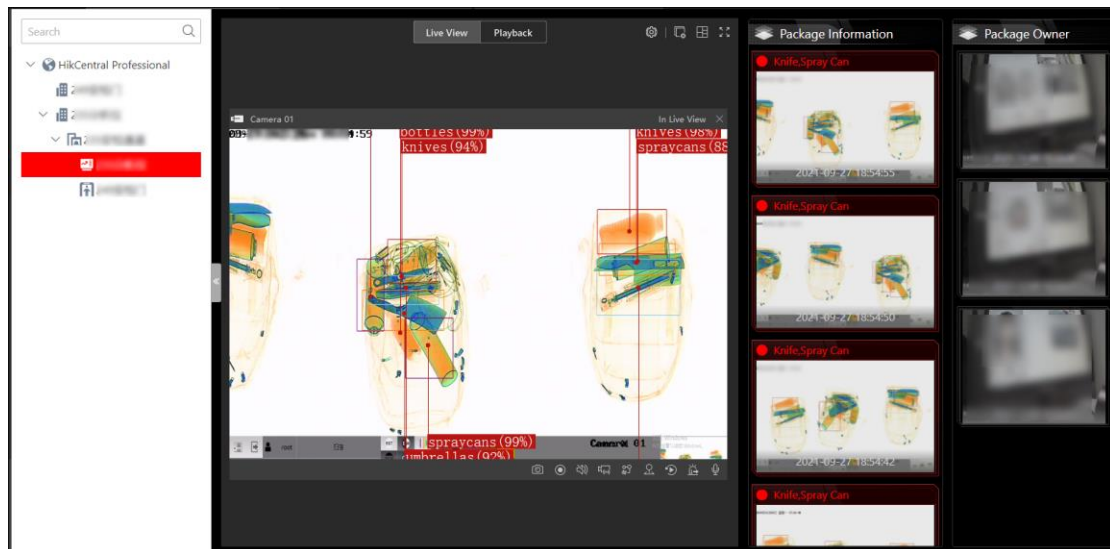
## IP Speaker

Added an icon beside Apply Audio File after setting the alarm linkage action as Link Speaker Unit.



## Security Inspection

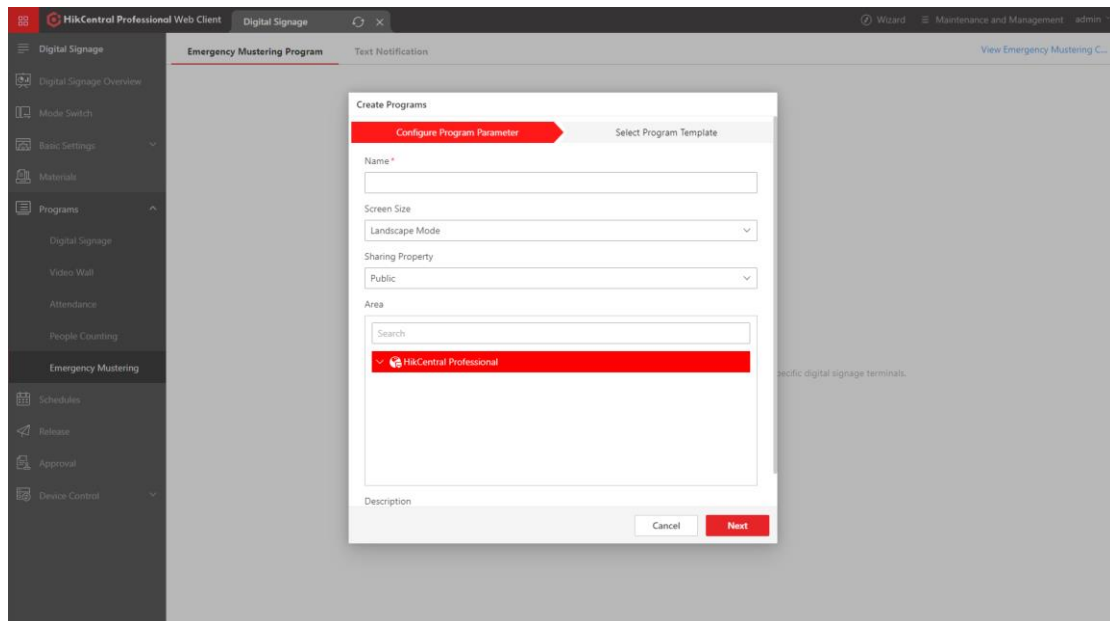
- Support live view and playback of the security inspection system's inspection videos.
- Support marking detected articles in the checked package pictures in video streams. Support magnifying pictures, capturing, recording, and switching between main stream and sub stream.
- Support viewing the package's pictures and the package owner's picture.



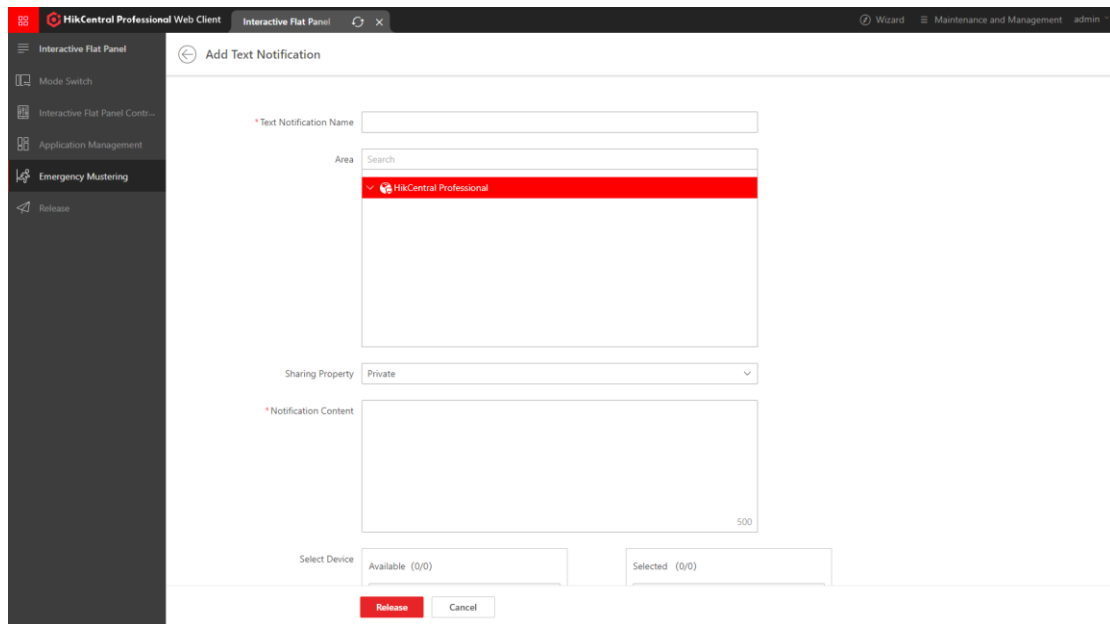
## Emergency Mustering

Added the tab of emergency mustering notification in Emergency Solution Settings.

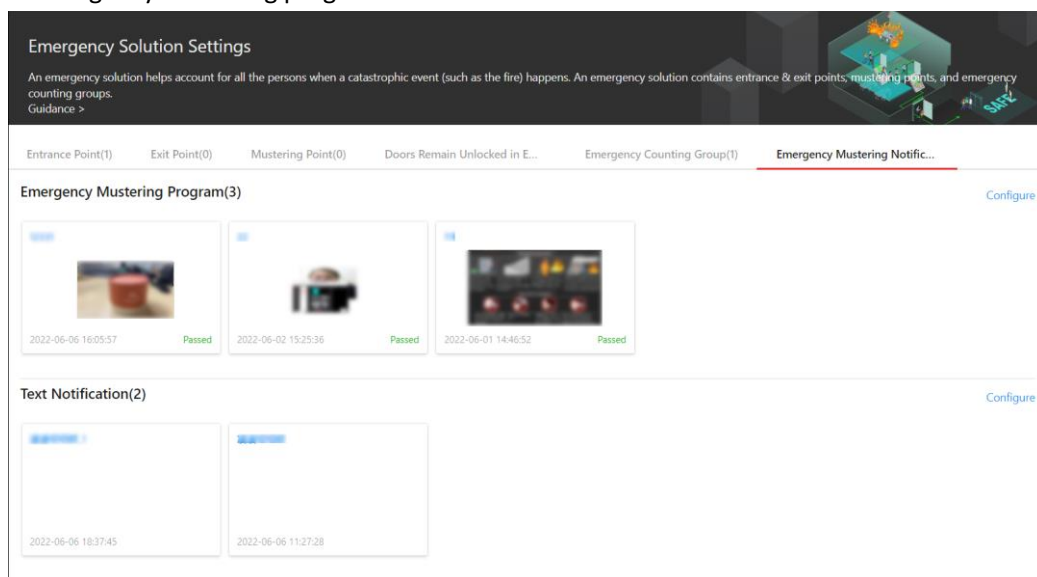
1. Support configuring and releasing emergency mustering programs and emergency text notifications.



2. Support switching between two application modes (Digital Signage and Interactive Flat Panel) for configuring and releasing emergency mustering text notifications.



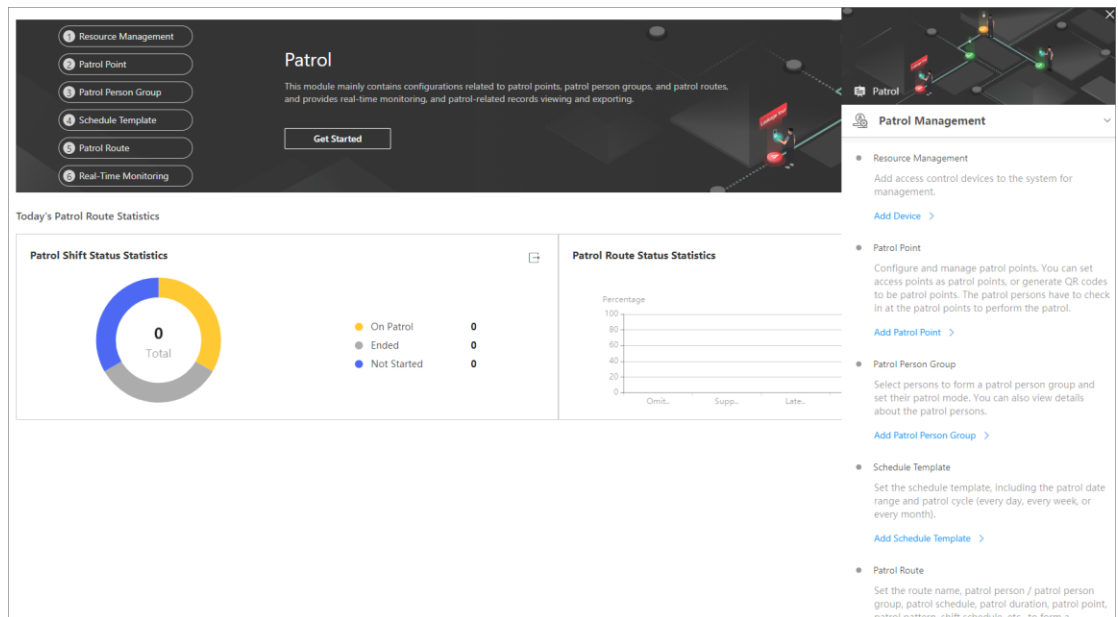
- Support automatically switching the normal transmissions on the screen to the released emergency mustering programs or text notifications throughout the emergency, once the emergency alarm is triggered.
- Support manually turning off emergency or deleting the device from the platform to stop the emergency mustering programs or text notifications.



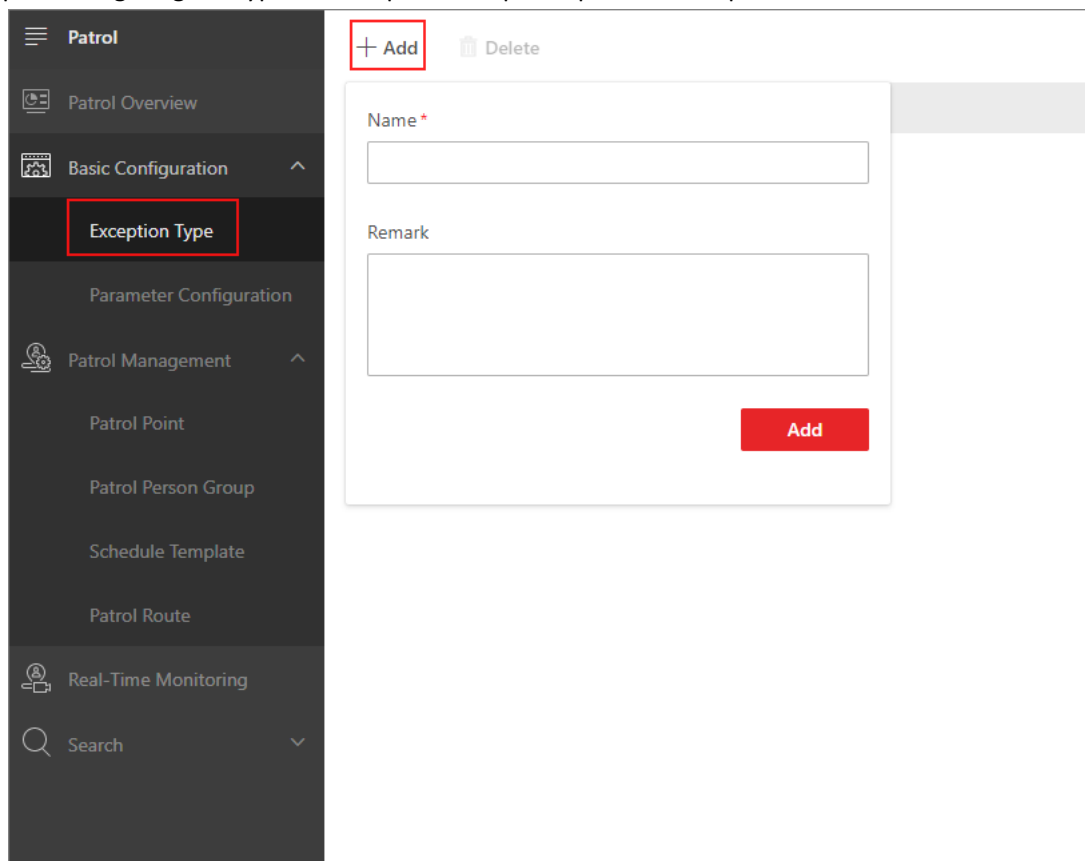
## Patrol Management

On the Web Client, added the Patrol module. On the Control Client, added Patrol Monitoring and Patrol Search. On the Mobile Client, added patrol-related features (checking in by scanning QR codes, reporting exceptions, receiving patrol-related notifications, etc.). The detailed supported features are as follows.

- Added a wizard for the Patrol module, which is hidden on the right and will appear on mouse hover, providing guidance for users on how to set up and manage patrol tasks.



2. Support configuring the types of exceptions for patrol persons to report via Mobile Client.



3. Support configuring the storage location for storing attachments uploaded during patrols.

### Parameter Configuration

#### Local Storage Configuration

*i* The storage location of the attachment in exception reporting.

\*Storage Location HDD (1)

**vsm\_local\_pool**

800.0 GB Free of 984.0 GB

#### Notification Time

Enable Notification ☒

*i* When enabled, patrol persons will receive notifications of the relevant patrol information via the Mobile Client before patrol starts.

\*Advance Notification By  min

#### Detection Frequency

\*Detection Interval  Second

*i* The frequency of the server detecting the patrol route status at regular intervals.

Save

- Support configuring the time of advance notification for reminding patrol persons before patrols start. Support setting a time between 20 and 60 minutes.

### Parameter Configuration

#### Local Storage Configuration

ⓘ The storage location of the attachment in exception reporting.

\*Storage Location HDD (1)

**vsm\_local\_pool**
800.0 GB Free of 984.0 GB

#### Notification Time

Enable Notification ☒

ⓘ When enabled, patrol persons will receive notifications of the relevant patrol information via the Mobile Client before patrol starts.

\*Advance Notification By  min

#### Detection Frequency

\*Detection Interval  Second

ⓘ The frequency of the server detecting the patrol route status at regular intervals.

**Save**

5. Support configuring up to 1,024 patrol points.

### Add Patrol Point

Patrol Point Type ☒ Access Point ⓘ ☐ QR Code ⓘ

Select Patrol Point

Patrol Point Name	Resource Na...	Linked Camera(s)	Operation
<input type="text" value="Door 01"/>	Door 01	<input type="button" value="+ Link"/>	<input type="button" value="Delete"/>

6. Support setting the following types of devices as patrol points: face recognition terminal, access control terminal, and door station.
7. Support linking up to 4 cameras to each patrol point, which can be general network cameras or cameras of access control devices.

← Add Patrol Point

Patrol Point Type ☒ Access Point ⓘ  
☐ QR Code ⓘ

Select Patrol Point + Add 🗑 Delete All

Patrol Point Name	Resource Na...	Linked Camera(s)	Operation
<input type="text" value="Door 01"/>	Door 01	<div><div>+ Link</div><div>Camera 01 ✕</div><div>Camera 01 ✕</div><div>Camera 01 ✕</div><div>Camera 01...✕</div></div>	<div>🗑</div>


8. Support configuring up to 300 patrol person groups.

Add Patrol Person Group ✕

\*Patrol Person Group Name

\*Patrol Mode  
☒ Any Person in the Group ⓘ  
☐ All Persons in the Group ⓘ

Select Person ⓘ



No resource selected.

Remarks

**Save**

9. Support forming patrol person groups with one or multiple persons.
10. Support setting the patrol mode of a patrol person group to "Any Person in the Group" or "All Persons in the Group". Any Person in the Group - Any person in the group can check in at the patrol point to perform the patrol. All Persons in the Group - All persons in the group need to check in at the patrol point to perform the patrol.

Add Patrol Person Group

\* Patrol Person Group Name

\* Patrol Mode

☒ Any Person in the Group ⓘ

☐ All Persons in the Group ⓘ

Select Person

No resource selected.

Remarks

Save

11. Support configuring schedule templates and setting the related parameters, including the template name, time range, and the repeat cycle for patrol scheduling. Support setting the repeat cycle to "Every Day", "Every Week" (on selected days of a week), or "Every Month" (on selected dates of a month).

+ -

Search

Add Schedule Template

Basic Information

\* Name

Schedule

Time Range

2022-07-07 - 2022-07-07

\* Repeat Cycle

☒ Every Day

☐ Every Week

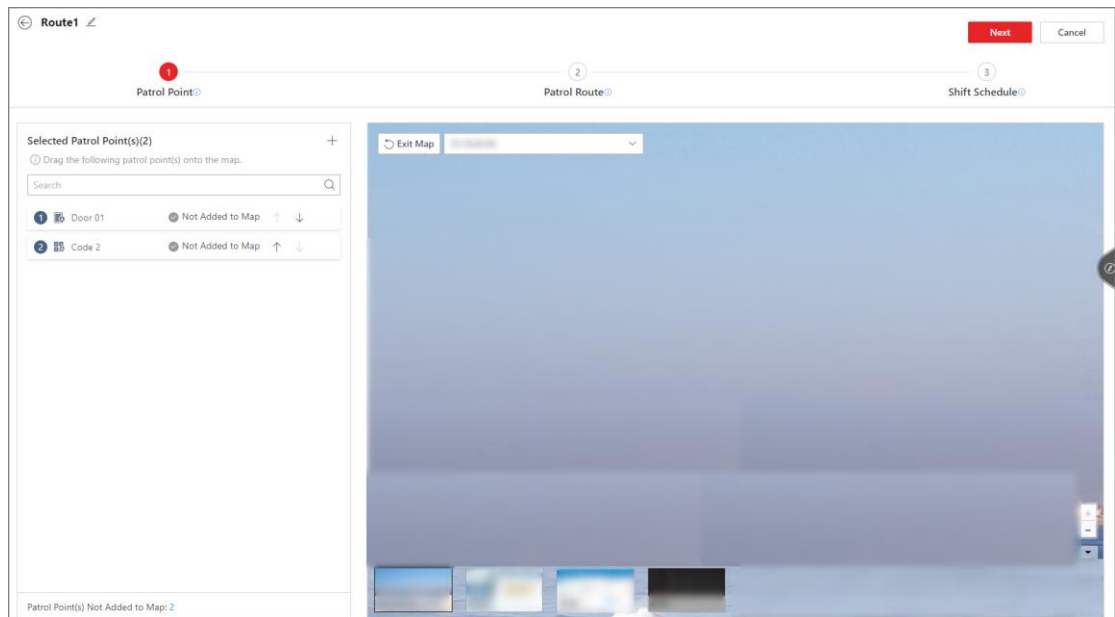
☐ Every Month

Add

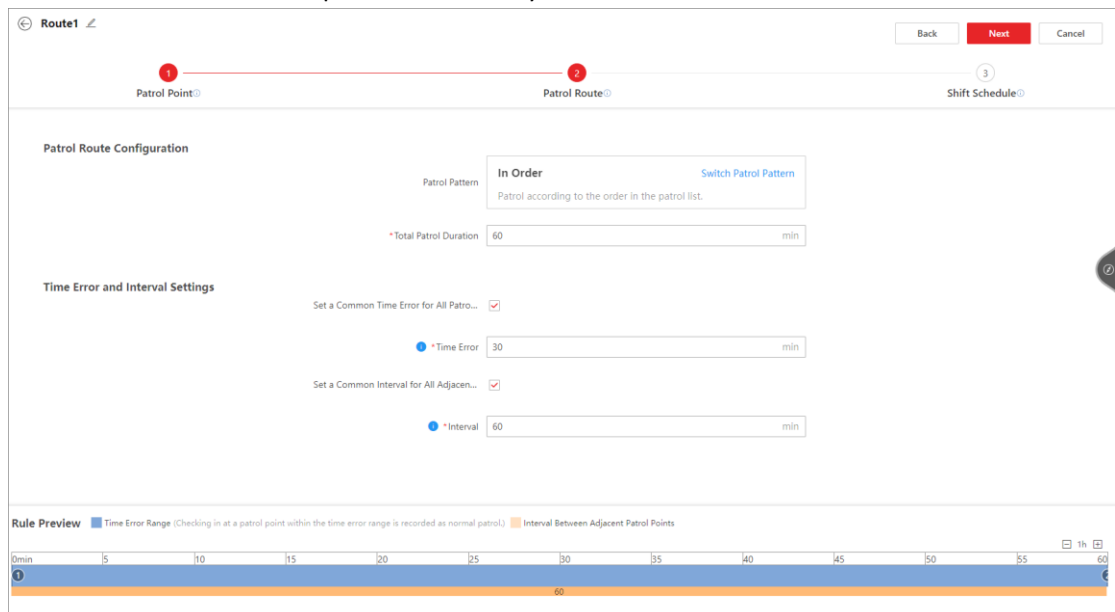
Cancel

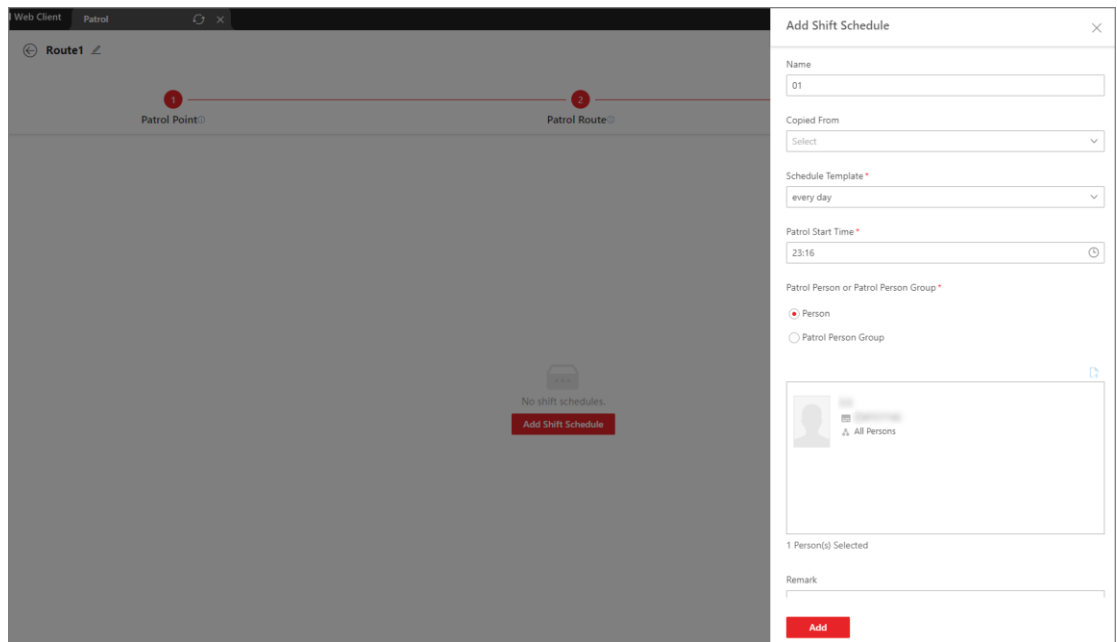
12. Support configuring patrol routes based on e-maps.



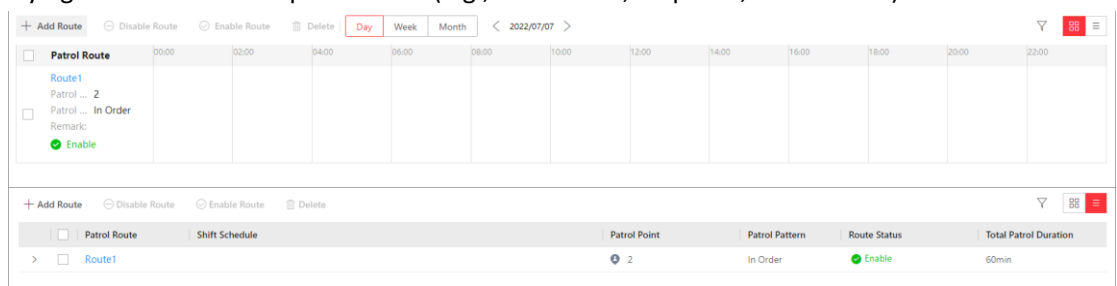


13. Support configuring patrol tasks by setting the following parameters: route name, patrol person or person group, schedule template, patrol duration, patrol points, patrol pattern (e.g., in order, no order, first point first, last point last, first point first and last point last), shift schedules, whether to start the patrol immediately, and the time for advance notification.

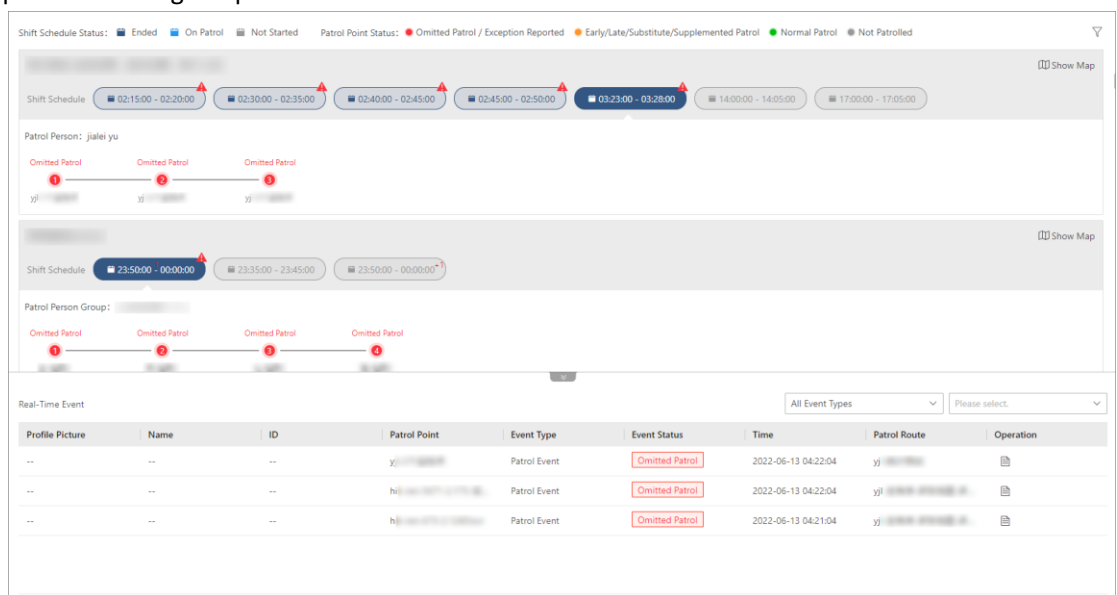




14. Support displaying patrol route information in a visualized way (in calendars or lists). Support displaying the status of each patrol route (e.g., not started, on patrol, not enabled).



15. Support reminding patrol persons before patrols start by both pushing advance notifications and popping up prompt windows on the Mobile Client.
16. Support monitoring the patrol route status in real time.



17. Support monitoring the status of shift schedules in real time.

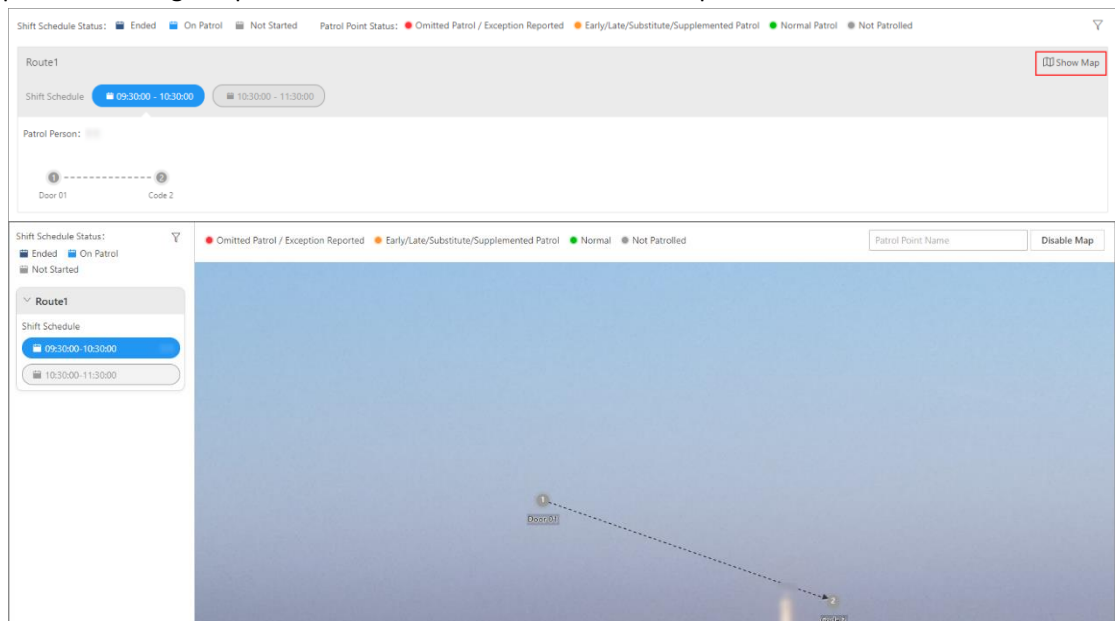


18. Support monitoring the status of patrol points in real time.



19. Support viewing detailed information of the actual/planned patrol person of a patrol point in real time.

20. Support monitoring the patrol status in real time via lists or e-maps.

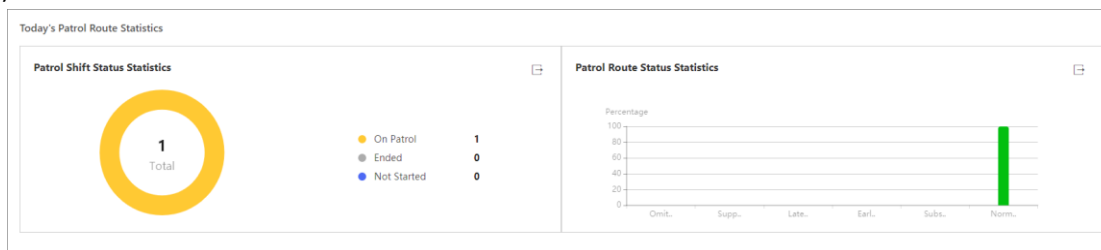


21. Support viewing the live view of cameras linked to a patrol point and enabling video recording (supported on Web Client, Control Client, and Mobile Client).

22. Support manually starting or postponing a shift.



23. Support displaying the patrol shifts scheduled for the current day with information such as the patrol route, patrol start time, and related patrol person / patrol person group.
24. Support displaying the statistics of patrol route status of the current day, i.e., the percentages of patrol routes with different status (e.g., normal patrol, omitted patrol, substitute patrol, etc.).



25. Support reporting exceptions occurred during patrols via Mobile Client; the reported content includes exception description, patrol point information, and related pictures and videos.
26. Support the following patrol events: normal patrol, early patrol, late patrol, supplemented patrol, and omitted patrol.

The form titled "Event Type" includes the following elements:

- Event Type:** A dropdown menu currently set to "Patrol Event".
- Patrol Status:** A dropdown menu currently set to "Normal Patrol", with a "X" icon and a "+ 5" button.
- Search:** A text input field with a magnifying glass icon.
- Filters:** A list of checkboxes under a collapsed "All" header:
  - ☒ All
  - ☒ Normal Patrol
  - ☒ Omitted Patrol
  - ☒ Supplemented Patrol
  - ☒ Early Patrol
  - ☒ Late Patrol

27. Support triggering linkage actions for exceptions occurred during patrols, such as triggering alarms, recording videos, and automatically sending emails.
28. Support triggering pop-up windows of alarms, which contain the following information: event type, event description, shift schedule, patrol point, planned patrol person, scheduled patrol period, actual patrol time, and live view of the linked camera(s) (support enabling video recording).
29. Support displaying alarm information during real-time patrol monitoring (via map or list).
30. Support checking and exporting patrol status statistics of patrol routes, patrol points, and patrol persons. Support filtering the statistics by specifying a time range.

Patrol Route		Patrol Point	Patrol Person	2022/01/01 00:00:00 - 2022/01/01 00:00:00		Export	
Patrol Route	Number of Ended ...	Normal Patrol / N...	Early Patrol / Early ...	Late Patrol / Late P...	Omitted Patrol / O...	Supplemented Pat...	Substitute Patrol / ...
1	1	0/0.0%	0/0.0%	0/0.0%	1/100.0%	0/0.0%	0/0.0%
rf	2	0/0.0%	0/0.0%	0/0.0%	2/100.0%	0/0.0%	0/0.0%
cu	2	0/0.0%	0/0.0%	0/0.0%	2/100.0%	0/0.0%	0/0.0%
cu	3	0/0.0%	0/0.0%	0/0.0%	2/66.7%	0/0.0%	1/33.3%
	3	0/0.0%	0/0.0%	0/0.0%	3/100.0%	0/0.0%	0/0.0%

31. Support searching for patrol events and exporting the event records.

## Event Record Search

### Time

Last 30 Days



### Patrol Point



Code 2



Door 01



### Patrol Route



Route1



### Event Type

All



### Search By

☒ Person

☐ ID

### Search In

☒ Select Person

☐ Fuzzy Matching

+ Add    Delete



Person Name

ID

Person Group

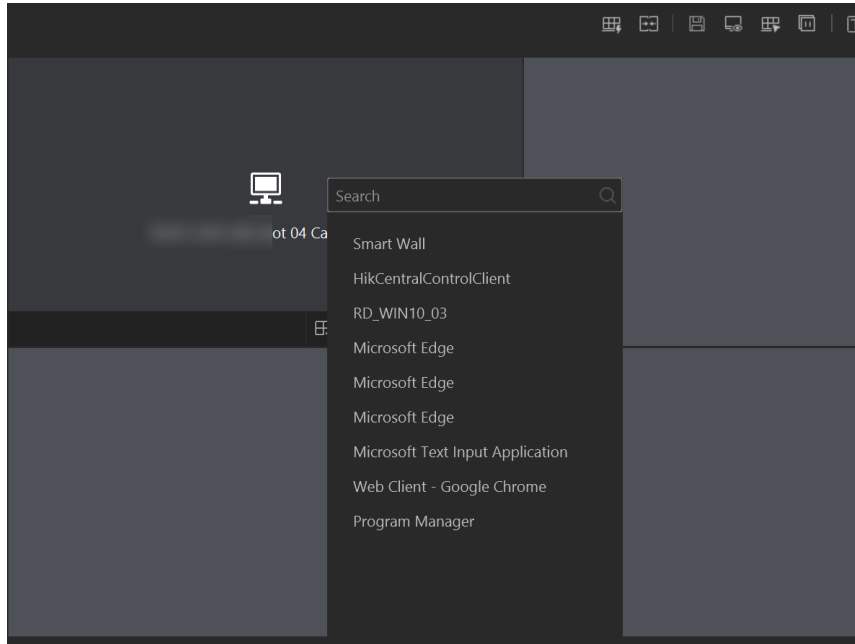
Search

- 32. Support checking in at patrol points by scanning QR codes via Mobile Client.
- 33. Support viewing patrol routes for the current day, including the shifts, patrol points, events related to patrol points, alarms from linked patrol points, resources linked to patrol points, and patrol statuses via Mobile Client.
- 34. Support alarm events including the exception reporting, early patrol, late patrol, substitute

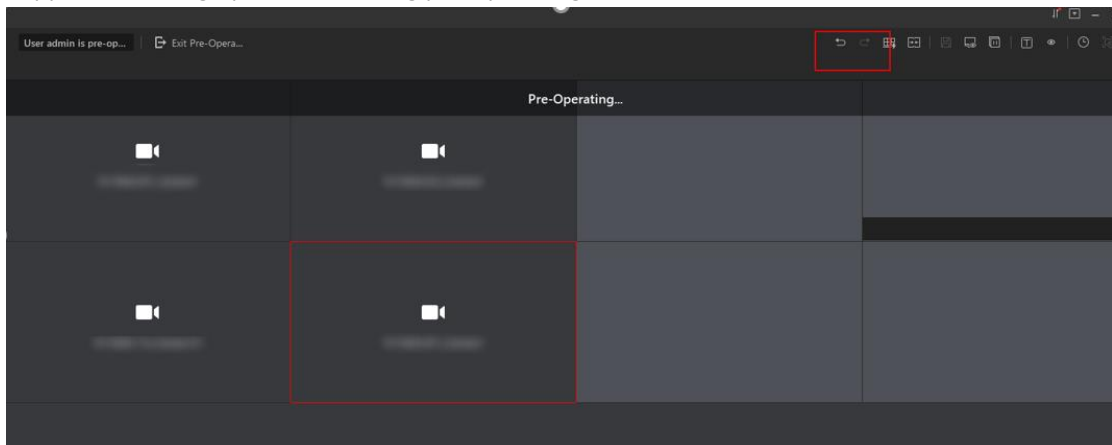
patrol, omitted patrol, supplemented patrol, and normal patrol on the Mobile Client.

## Smart Wall

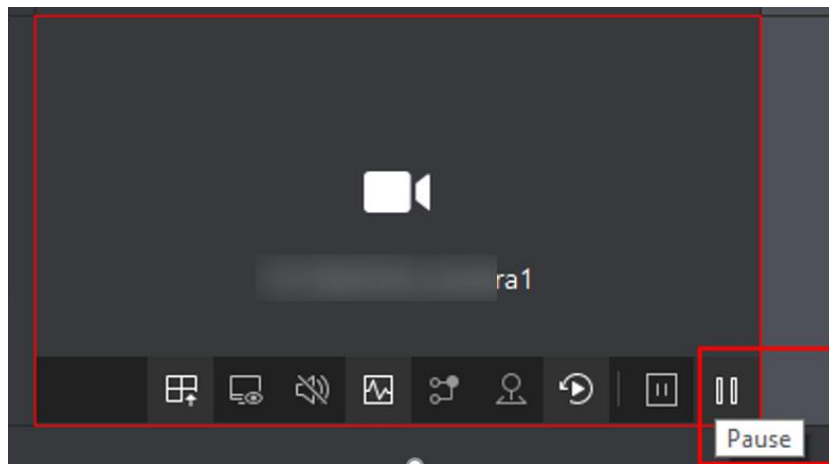
1. Support displaying the content of programs (PowerPoint, Google Chrome, Internet Explorer, Microsoft Edge, Microsoft Word, Microsoft Excel, and video players) on the smart wall.



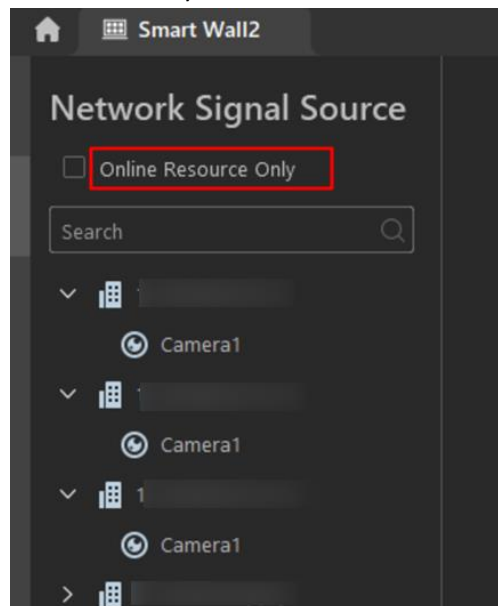
2. Support displaying the map and the content of Control Panel, Maintenance, Parking Lot, Intelligent Monitoring, Monitoring, and Alarm Center on the smart wall.
3. Support controlling the permission of adding, editing, and deleting public views.
4. Support prompting the user to refresh the status of smart wall on the Control Client manually when they want to operate the smart wall while auto-switch is being performed or the view is being switched according to the schedule.
5. Support canceling operations during pre-operating.



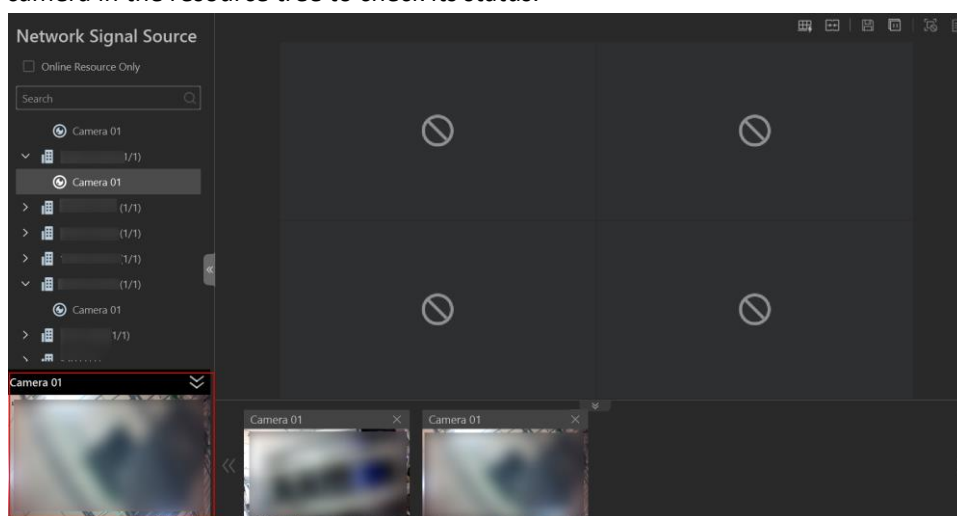
6. Support pausing the live video on the live view window and displaying the last frame.



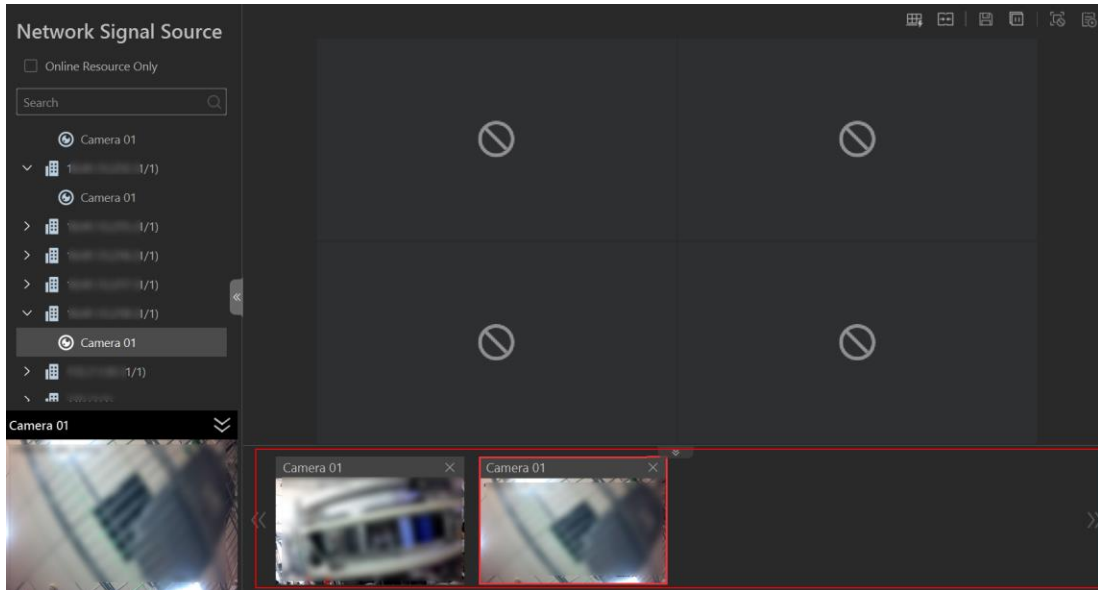
7. Support displaying online resources only in the resource tree.



8. Before displaying on the smart wall, support viewing the live view of the camera via clicking the camera in the resource tree to check its status.



9. Support dragging the resource to the pre-monitor area to view its live video, and dragging it from the pre-monitor area to a display window to display the live video on the smart wall directly.



## OpenAPI

1. Added an API for applying the validity period of license plate number to devices.
2. Added an API for adding, deleting, viewing, and editing the information about vehicles in the blacklist.
3. Added an API for standard playback via RTSP, live view and playback via HLS, and live view and playback via RTMP.
4. Added an API for getting the people's dwell time and people counting statistics.
5. Added an API for getting the parking fee and the parking duration according to the license plate number.
6. Added an API for returning the confirmation information after the parking fee is paid. The vehicle can exit the parking lot after that.
7. Added an API for getting the vehicle list in the Mobile Monitoring module.
8. Added an API for getting the detailed vehicle information according to the vehicle No.
9. Added an API for directly starting two-way audio with the mobile devices.
10. Added an API for getting the real-time GPS information, and searching for historical GPS information.
11. Added an API for reporting mobile device alarms to the platform, including ADAS event alarm, driving behavior event alarm, emergency alarm, etc.

## Improvements

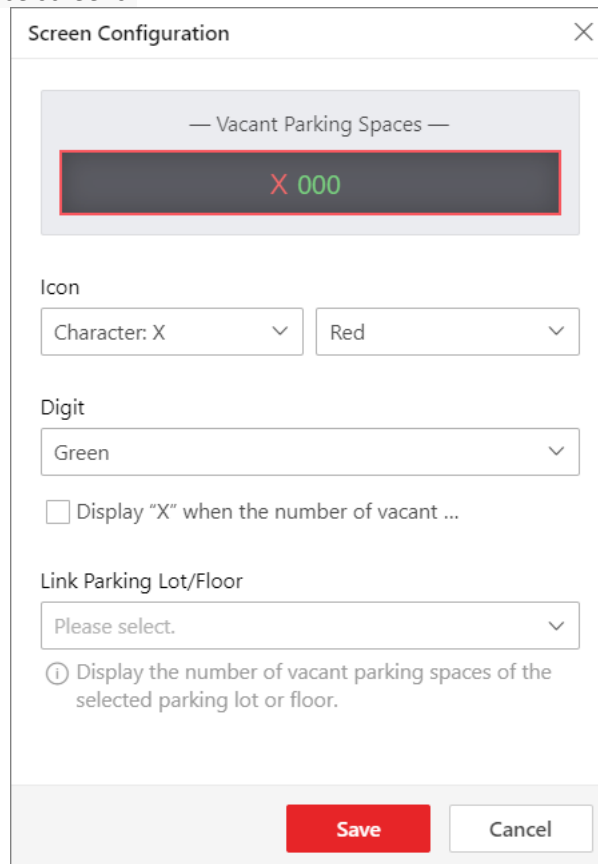
### General

1. Improved the function of PTZ control.
2. Improved the function of data interchange.



## Vehicle and Parking Management

Improved parking lot configurations on the Web Client: add up to 100 entrances and exits, batch configure up to 100 parking spaces for once, and apply multiple icons and digit colors to the indoor guidance screens.



The screenshot shows a 'Screen Configuration' dialog box with a close button (X) in the top right corner. Inside the dialog, there is a preview area at the top showing a dark grey rectangle with the text '— Vacant Parking Spaces —' above it. The rectangle itself contains a red 'X' followed by the green digits '000'. Below the preview, there are configuration options: 'Icon' with a dropdown menu showing 'Character: X' and a color dropdown showing 'Red'; 'Digit' with a dropdown menu showing 'Green'; a checkbox labeled 'Display "X" when the number of vacant ...' which is currently unchecked; and 'Link Parking Lot/Floor' with a dropdown menu showing 'Please select.'. At the bottom of the dialog, there are two buttons: a red 'Save' button and a white 'Cancel' button.

## Time and Attendance

Improved the Nepal calendar.

## IP Speaker

Improved the solution of playing audio files.

## Small Wall

1. Improved the performance of performing auto-switch in one window on the smart wall.
2. Improved the display of the number of cameras in the resource tree.

