PMS

User's Manual

V1.2.1

ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.

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Cybersecurity Statement

- You are responsible for the risks resulting from connecting your product to the internet, including but not limited to, cyber-attacks, hacking attacks, computer viruses and malware, etc. Please protect your data and personal information by taking necessary actions, such as changing the default password and using a strong combination, changing your password periodically, keeping your firmware up-to-date, etc. Dahua is not responsible for any dysfunction, information leakage or other problems caused by failure to take necessary precautions to secure your devices. We will provide product maintenance services.
- To the extent not prohibited by applicable laws, Dahua and its employees, licensees, and affiliates are not liable for personal injury, or any incidental, special, indirect, or consequential damages whatsoever, including, without limitation, damages for loss of profits, corruption or loss of data, failure to transmit or receive any data, business interruption, or any other commercial damages or losses arising out of or related to the use or inability to use its products or services, however caused, regardless of the theory of liability (contract, tort or otherwise), even if it has been advised of the possibility of such damages. Some jurisdictions do not allow the exclusion or limitation of liability for personal injury, or of incidental or consequential damages, so this limitation may not apply to you.
- In no event shall liability for all damages (other than as may be required by applicable laws in cases involving personal injury) exceed the amount paid for products or services.

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Cybersecurity Recommendations

Mandatory actions to be taken towards cybersecurity

1. Change Passwords and Use Strong Passwords:

The number one reason systems get “hacked” is due to having weak or default passwords. Dahua recommends changing default passwords immediately and choosing a strong password whenever possible. A strong password should be made up of at least 8 characters and a combination of special characters, numbers, and upper and lower case letters.

2. Update Firmware

As is standard procedure in the tech-industry, we recommend keeping NVR, DVR, and IP camera firmware up-to-date to ensure the system is current with the latest security patches and fixes. Check the firmware release of your running devices. If the firmware release date is over 18 months old, please contact a Dahua authorized local distributor or Dahua technical support for available update releases.

“Nice to have” recommendations to improve your network security

1. Change Passwords Regularly

Regularly change the credentials to your devices to help ensure that only authorized users are able to access the system.

2. Change Default HTTP and TCP Ports:

● Change default HTTP and TCP ports for Dahua systems. These are the two ports used to communicate and to view video feeds remotely.

● These ports can be changed to any set of numbers between 1025-65535. Avoiding the default ports reduces the risk of outsiders being able to guess which ports you are using.

3. Enable HTTPS/SSL:

Set up an SSL Certificate to enable HTTPS. This will encrypt all communication between your devices and recorder.

4. Enable IP Filter:

Enabling your IP filter will prevent everyone, except those with specified IP addresses, from accessing the system.

5. Change ONVIF Password:

On older IP Camera firmware, the ONVIF password does not change when you change the system's credentials. You will need to either update the camera's firmware to the latest revision or manually change the ONVIF password.

6. Forward Only Ports You Need:

● Only forward the HTTP and TCP ports that you need to use. Do not forward a huge range of numbers to the device. Do not DMZ the device's IP address.

● You do not need to forward any ports for individual cameras if they are all connected to a recorder on site; just the NVR is needed.

7. Disable Auto-Login on SmartPSS:

Those using SmartPSS to view their system and on a computer that is used by multiple people should disable auto-login. This adds a layer of security to prevent users without the appropriate credentials from accessing the system.

8. Use a Different Username and Password for SmartPSS:

In the event that your social media, bank, email, etc. account is compromised, you would not want someone collecting those passwords and trying them out on your video surveillance system. Using a different username and password for your security system will make it more difficult for someone to guess their way into your system.

9. Limit Features of Guest Accounts:

If your system is set up for multiple users, ensure that each user only has rights to features and functions they need to use to perform their job.

10. UPnP:

● UPnP will automatically try to forward ports in your router or modem. Normally this would be a good thing. However, if your system automatically forwards the ports and you leave the credentials defaulted, you may end up with unwanted visitors.
● If you manually forwarded the HTTP and TCP ports in your router/modem, this feature should be turned off regardless. Disabling UPnP is recommended when the function is not used in real applications.

11. SNMP:
Disable SNMP if you are not using it. If you are using SNMP, you should do so only temporarily, for tracing and testing purposes only.

12. Multicast:
Multicast is used to share video streams between two recorders. Currently there are no known issues involving Multicast, but if you are not using this feature, deactivation can enhance your network security.

13. Check the Log:
If you suspect that someone has gained unauthorized access to your system, you can check the system log. The system log will show you which IP addresses were used to login to your system and what was accessed.

14. Physically Lock Down the Device:
Ideally, you want to prevent any unauthorized physical access to your system. The best way to achieve this is to install the recorder in a lockbox, locking server rack, or in a room that is behind a lock and key.

15. Connect IP Cameras to the PoE Ports on the Back of an NVR:
Cameras connected to the PoE ports on the back of an NVR are isolated from the outside world and cannot be accessed directly.

16. Isolate NVR and IP Camera Network
The network your NVR and IP camera resides on should not be the same network as your public computer network. This will prevent any visitors or unwanted guests from getting access to the same network the security system needs in order to function properly.

For latest information about Dahua the cybersecurity statement and recommendations, please visit www.dahuasecurity.com.

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1 Overview

Product Introduction

PMS platform has a core of intelligent entrance/exit management system, meantime integrating video monitoring, entry/exit control and etc. It can:

- ANPR camera, barrier, LED, VTO device and other hardware product management.
- Management of multiple parking lots.
- Vehicle and owner management.
- Live preview and playback of multiple device, multiple channel.
- Remote open barrier
- VTO one-click connect platform, and can call and talk.
- Search record of vehicle pass.
- Force vehicles to leave the parking.
- View diagram and chart of vehicle enter and exit.
- PMS platform supports to download, and install client.

Requirement of Config

Minimum config is in Chart 1-1

.

Parameter	Note
Processor	Core i3 4160
Memory	4GB
HDD	500G
OS	Microsoft Windows 7/ Win 8.1/Win10 (64 bit)
Explorer	IE9 and higher, Chrome, Firefox
Resolution	Recommend 1280×1024 resolution Hardware support DirectX9.0c and higher

Chart 1-1

Support refreshing, restarting or stopping services or modify service ports.

After the server is installed, the config tool is installed by default. If you want to reinstall it, please download the config tool installation package on the server WEB interface.

Log into the PMS installation server, and double-click . For system display, see Figure 2-25

Figure 2-25 System config

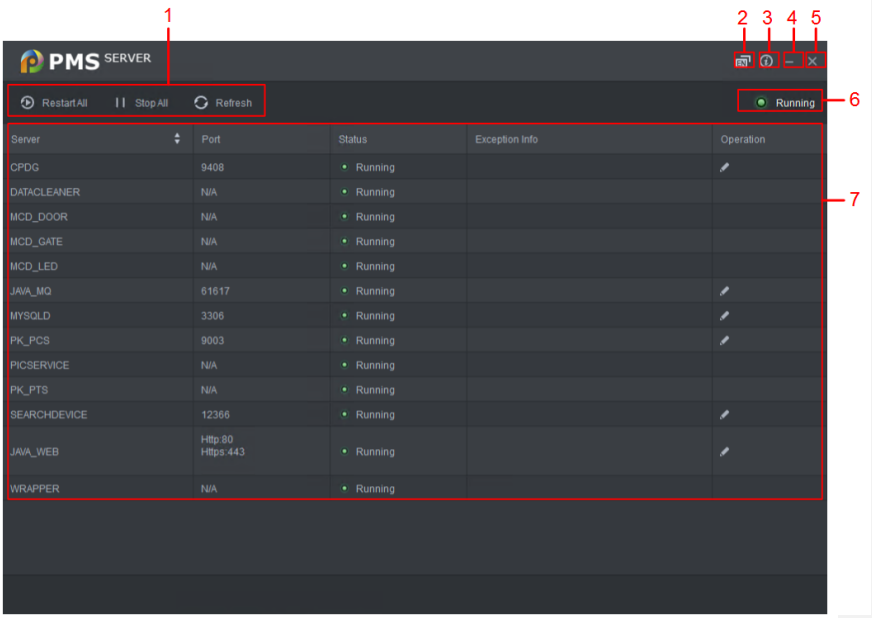


Chart 1-1 Module introduction

No.	Function	Note
1	Service Management	Support the following three operations: ● Click Restart All to restart all services. ● Click Stop All to stop all services. ● Click Refresh to refresh services.
2	Language Management	The system supports Chinese and English. Click the icon to switch languages. After language switch, restart the config tool to take effect.
3	About	Click the icon to see the software version and release date.

No.	Function	Note
4	Minimize	Click the icon to minimize the config tool interface.
5	Close	Close the config tool.
6	Overall Service Status Display	Display the overall service status, including • : Starting. • : Exception. • : Stopping. • : Normal running. • : Stopped.
7	Service Display	Display all services and service status. Click to modify the service port number, and then the system will automatically restart the service.

Login System

Step 1. In IE enter PMS IP address, and press Enter key. Format of the IP address is http://172.10.2.76, such as "http://172.10.2.76". See Figure 2-1.

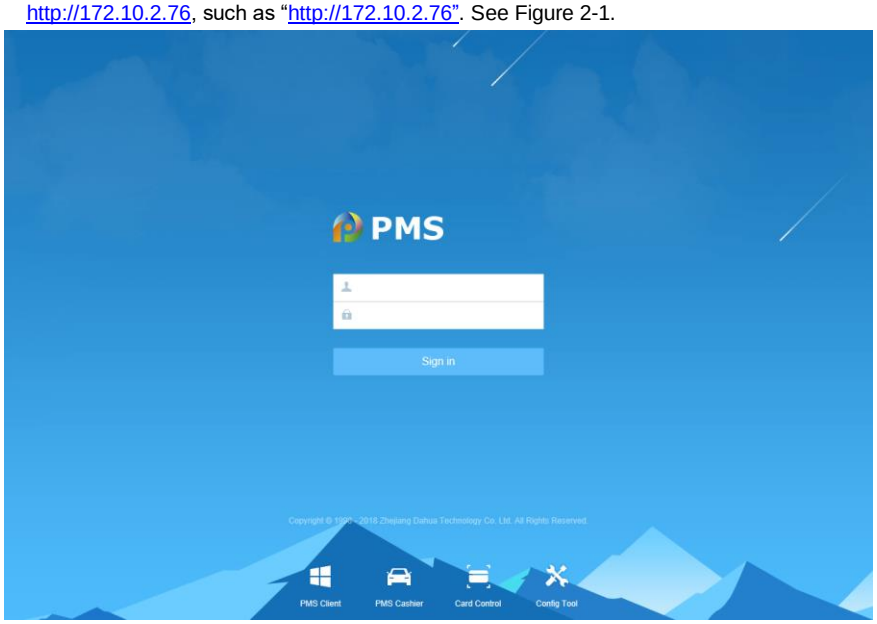


Figure 2-1

- Click to download client.
- Click to download card control.
- Click to download payment client.
- Click to download a config tool.

Step 2. Enter username and password, click Login.

Note:

- Default username is system. Default password is 123456. When you login for the first time, system pops up a box to ask you to change password.
- When you enter wrong password for 5 consecutive times, the account will be locked for 10 min.
- Find back password function requires collection of some user basin information.

Homepage

See Figure 2-2.

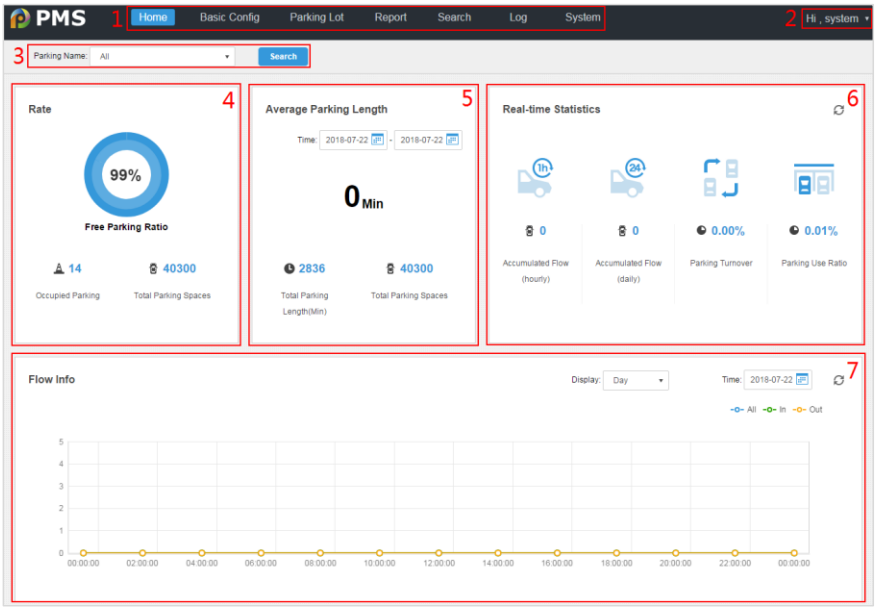


Figure 2-2

No.	Parameter	Note
1	Menu	Show function menu.
2	Username	Show login username, click ▼ on the right, you can modify username, password, logout and etc.
3	Parking Search	Click ▼, select parking name, and click Search to show current parking lot, average parking duration and etc.
4	Rate	Show free parking rate, occupied parking rate and total parking.
5	Average Parking Length	Show average parking length, total parking and parking number in selected period of current parking area. Click 📅, you can change period of statistics of average parking length.
6	Real-time Statistics	Show accumulated vehicle flow per hour/per day, parking turnover rate and parking usage rate in the parking. Click ↻, to refresh real time statistical info.
7	Flow Info	Show curve of flow change in the parking lot. Place mouse on the curve, you can shoe time info and vehicle flow OUT, IN and ALL values at this point. ● Click ▼ next to Display, to switch time span shown in flow curve.

No.	Parameter	Note
		• Click next to Time, to change period of vehicle flow. • Click All, In or Out，to make the icon become colorful and its corresponding will be shown in vehicle flow curve. Click this icon again, it become grey and its corresponding curve will not be shown in icon.

Chart 2-1

Sign Up

After you install the system, for users who has not signed up in the system, you can enjoy a free trial up to 89 days with max of two channels of device.

Step 1. Login in homepage, you can see remaining free days in this trial in a pop-up box, see Figure 2-3.

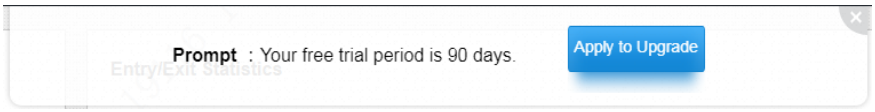


Figure 2-3

Step 2. Click Apply to Upgrade, see Figure 2-4.

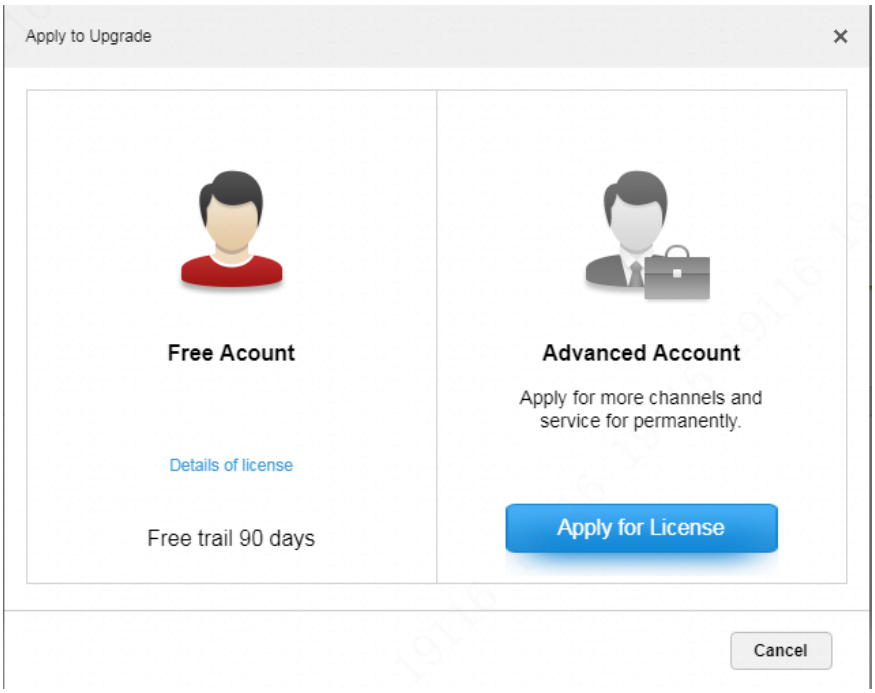


Figure 2-4

Parameter	Note
Free Account	General user is free user, with two channels, up to a 90-day

Parameter	Note
	period.
Advanced Account	Application required, after being authorized, a free user become an advanced user, without limit on usage period can enjoy more channels.

Chart 2-2

Step 3. Click Apply for License, system pops up Apply for License box, see Figure 2-5. You can set “Common Parking System” or “Advanced Parking System”.

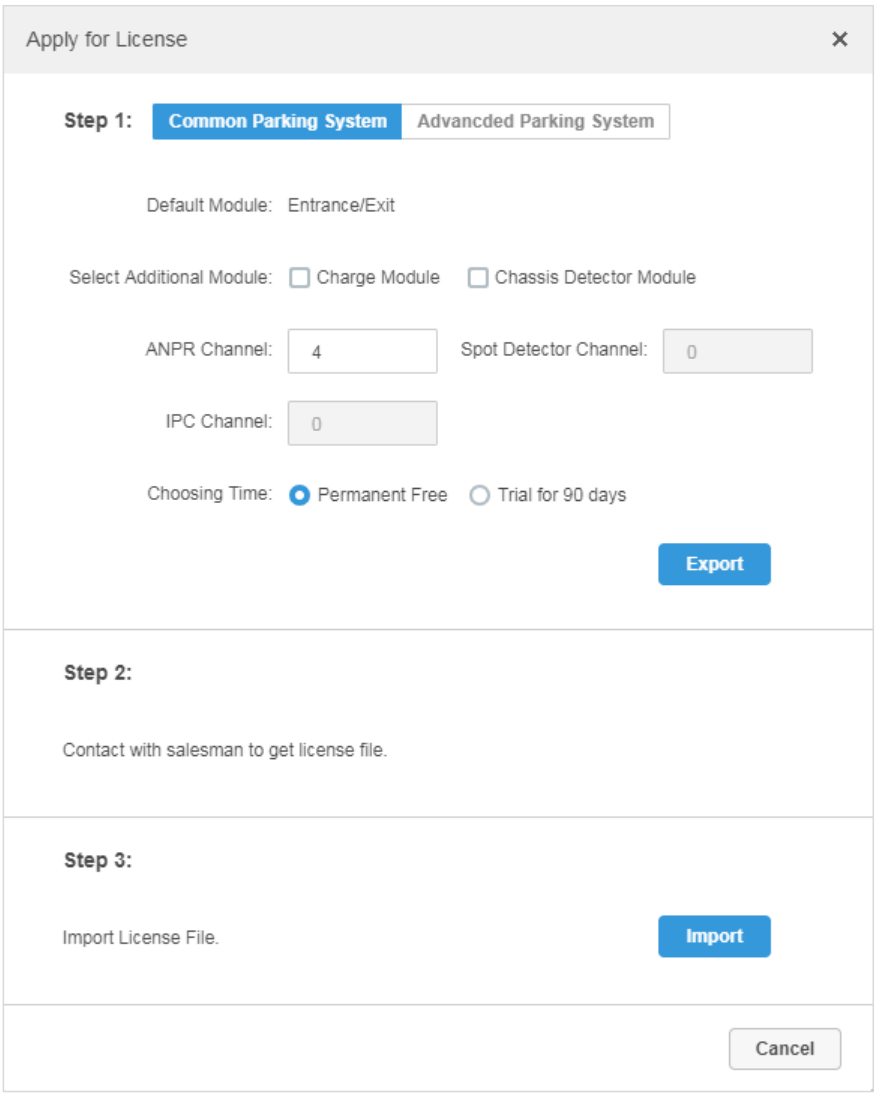


Figure 2-5

Step 4. Click “Apply for License”, system pops up box, see Figure 2-6.

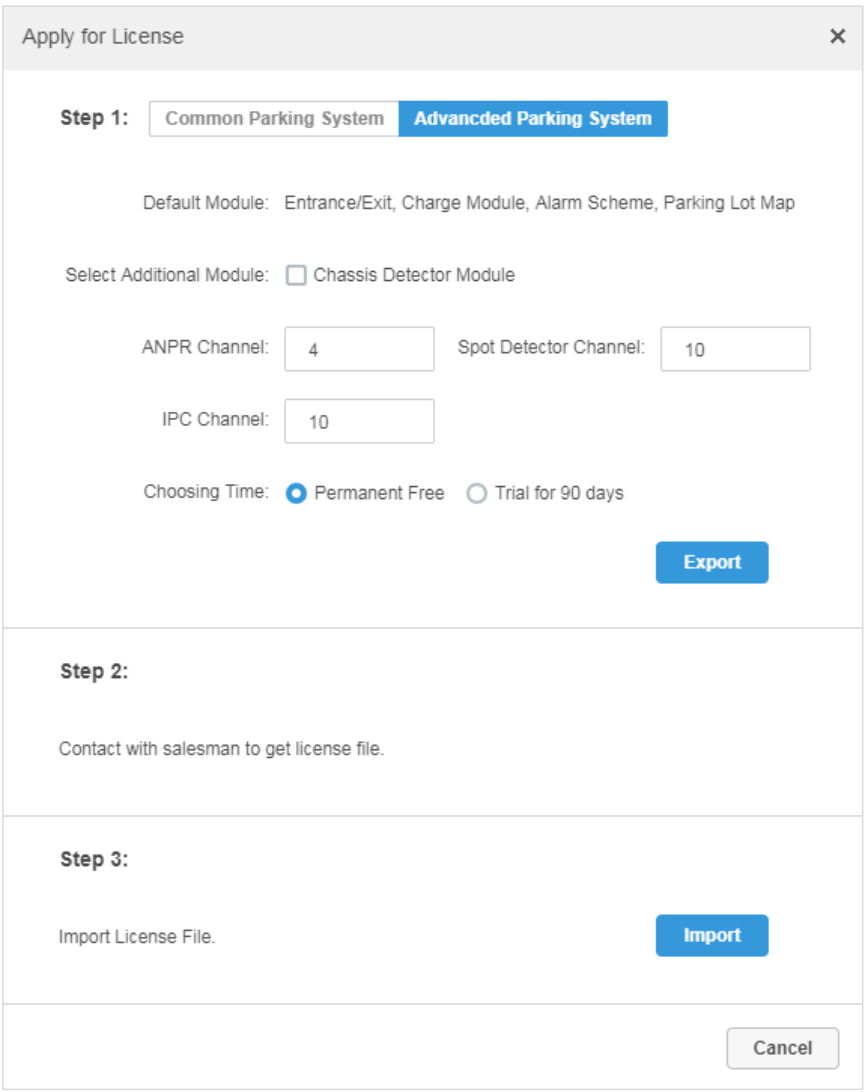


Figure 2-6

Step	Parameter	Note
1	Export	Click Export, auto generate LicenseInfo.zip file info needed by the system.
2	Get License file	● Common parking system: only input ANPR channel. ● Advanced parking system: input ANPR, IPC, Spot Detector channels.
3	Import	Click “Import”, to import reg.dat file into the system. Complete sign up.

Chart 2-3

Quick Config

Flow of quick configuration is in Figure 2-7.

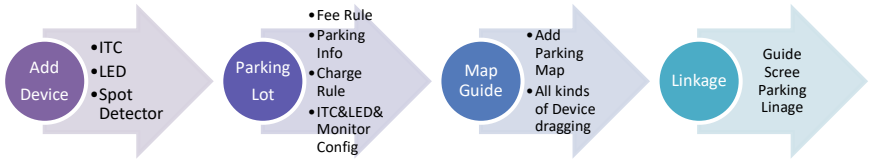


Figure 2-7

3.1.1 Device Management

Select Basic Config>Device, you can see all online devices, see Figure 2-8.

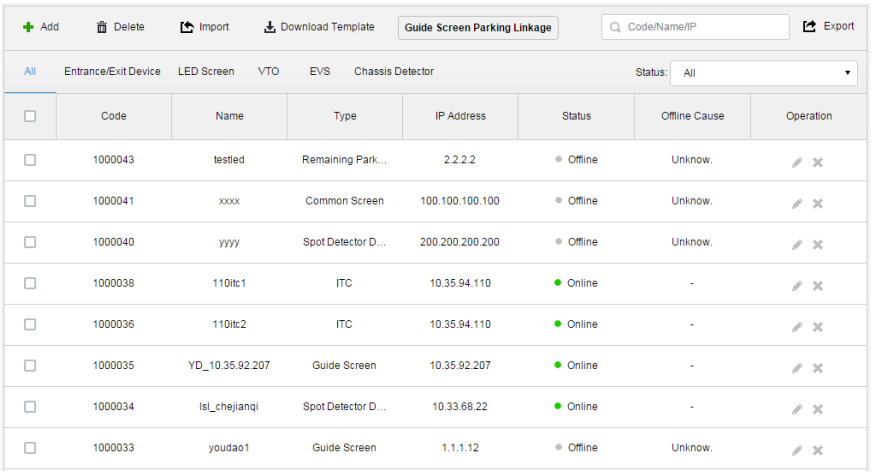


Figure 2-8

When online status shows in grey, the device is offline. When online status is green, the device is online. Click device type name to show info of each device type.

- Click Add, to add device, see Ch 2.4.2.1.
- Click next to device, to change device info.
- Click next to device to delete the device. Select in front of one or more devices, and click Delete to delete these devices.
- Click Import to import device info into the system, click Export to export device info.
- Click Download Template to download imported device template.
- Click Guide Screen Parking Linkage to link guide screen to the guided parking, see Ch 2.4.2.2.

3.1.1.1 Add Device

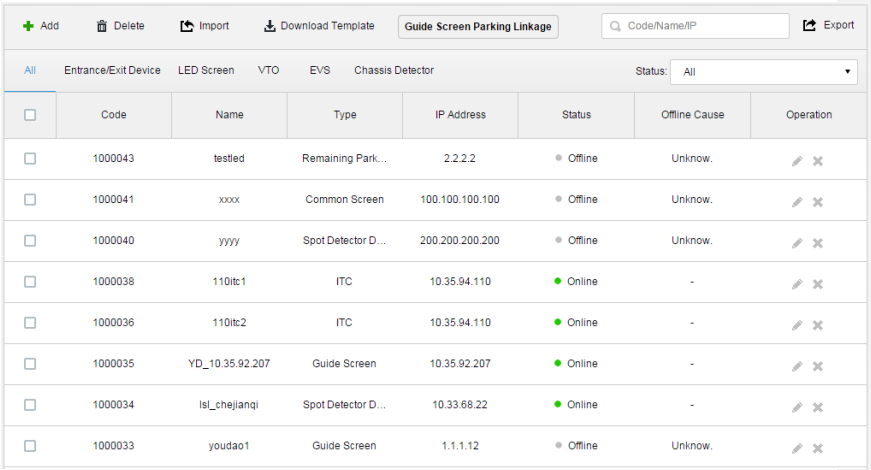
Add different types of devices to the platform to import device data for judgment and statistics.

Step 1 Select Basic Config > Device Management.

The system displays all online devices. See Figure 3-8. When **Status** is

displayed in grey, the device is offline. When the **Status** is displayed in green, the device is online. Click **Type** to show info of each device type.

Figure 1-2 Device management



Operations other than adding a device:

- Click next to the device to change the device info.
- Click next to the device to delete the device. Select in front of one or more device codes, and click Delete to delete one or more devices.
- Click Import to import device info into the system. Click Export to export device info.
- Click Download Template to download the imported device template.

Step 1. Select **Device Type**, you can select among ANPR, LED, VTO, EVS, all-in-one or chassis detector, and ultrasonic parking space controller.

The following introduces each type.

Add ANPR

Step 1. Select device type to be ANPR.

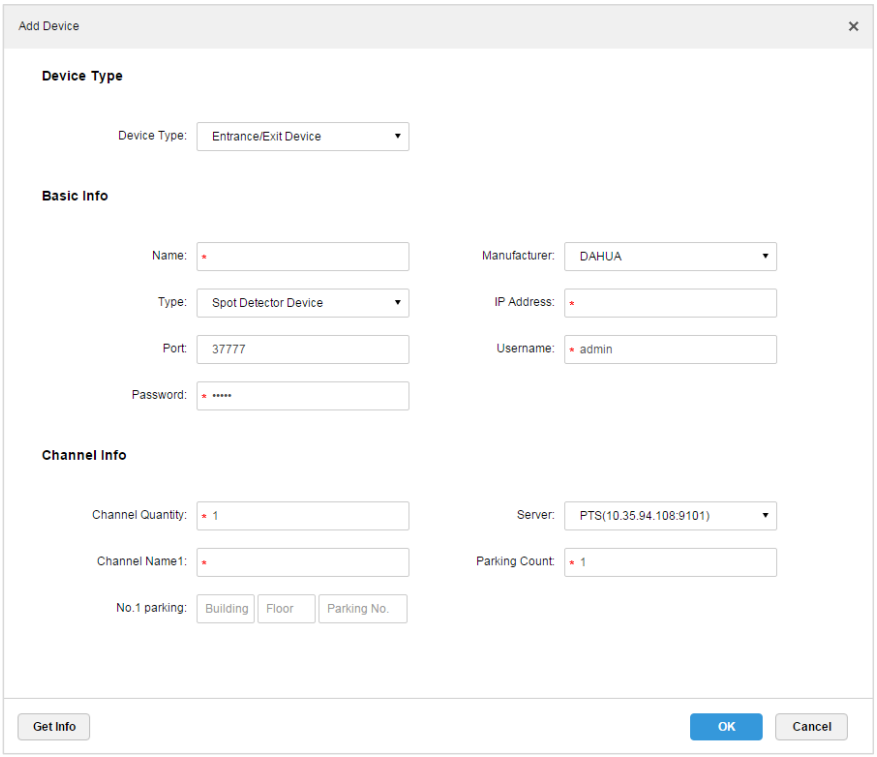


Figure 2-10

Step 2. According to actual condition, set each parameter info.

Note:

Parameter with * is mandatory.

Parameter	Note
Device Name	Set device name.
Manufacturer	Select manufacturer.
Type	According to different device type, select corresponding device type.
IP Address/Port	Set device IP address/port.
Port	Enter device port.
Username/Password	Enter login device web username/password.
Password	Enter device password.
Channel Quantity	Set device channel quantity.
Server	Select server type. ANPR device is “PTS” server.
Channel Name1	Enter port value.
Parking Count	Set parking count in this channel.
No.n parking	Set physical no. of building and floor where each parking locate.

Parameter	Note
Bind ITC	Note: When device type is “IVS-T”，you may set this parameter. Click “please select”，system pops up “Bind ITC”page. Select ITC device name.

Chart 2-4

Step 3. Click **Get Info** to test device connection. Acquire the parking info of the vehicle detector.

Step 4. Click OK.

Add LED

Step 1. Device type is LED screen. See Figure 2-9.

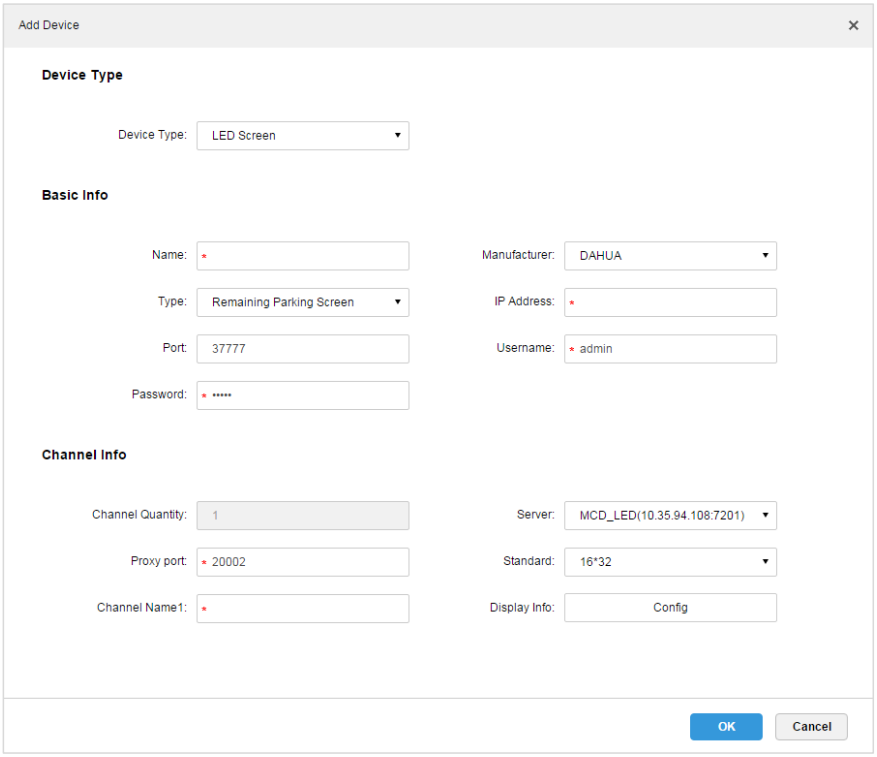


Figure 2-9

Step 2. Set each parameter, see the following chart.

Note:

Parameter with * is mandatory.

Parameter	Note
Device Name	Set device name.
Manufacturer	Select manufacturer.
Type	According to different device type, select corresponding device type.
IP Address/Port	Set device IP address/port.

Parameter	Note
Port	Enter device port.
Device Name	Set device name.
Password	Enter device password.
Channel Quantity	Set device channel quantity.
Server	Select server type. LED screen server is “MCD_LED”.
Proxy Port	Enter port value.
Standard	Set LED screen size.
Channel Name	Enter port value.
Display Info	Click “Config”，set content on LED screen, for setup see text below.
Display Row	Note: When device type is “payment screen”, you can set this parameter. Set row of display.

Chart 2-5

Step 3. Set LED screen info. See the figure below.

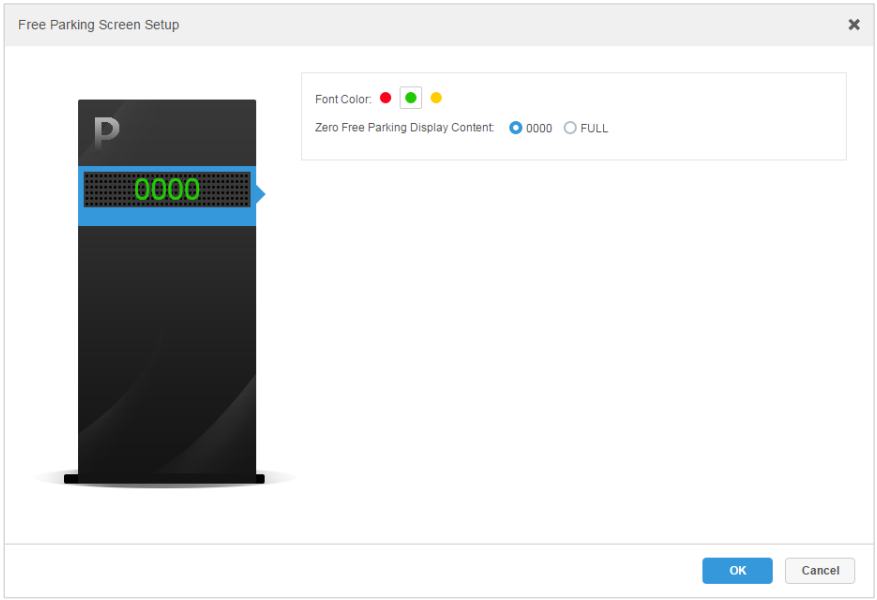


Figure 2-12

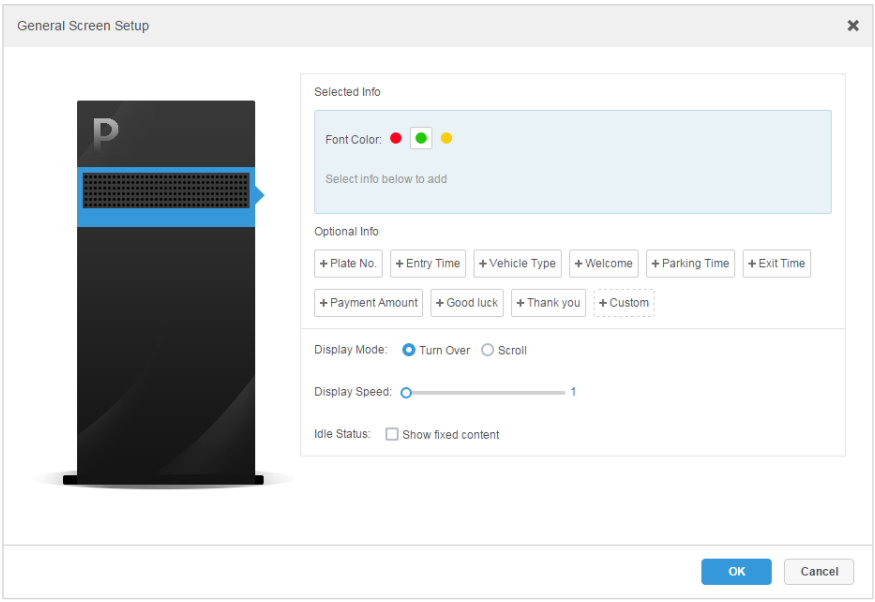


Figure 2-13

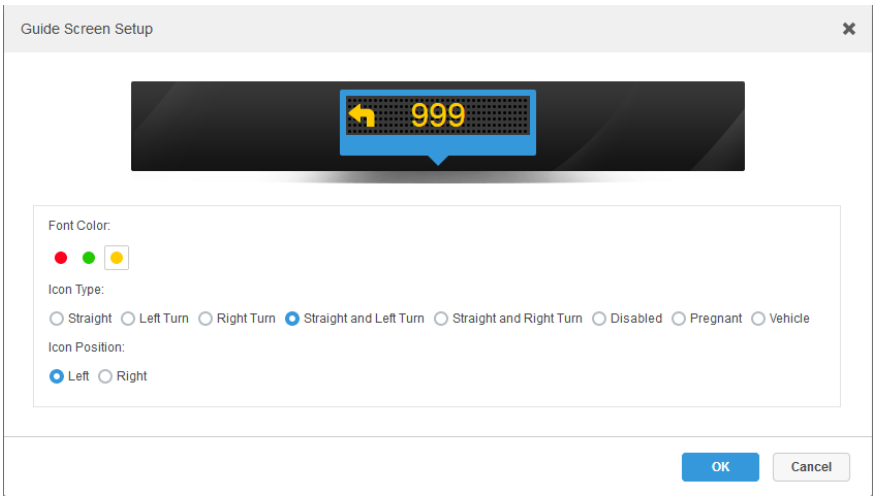


Figure 2-10

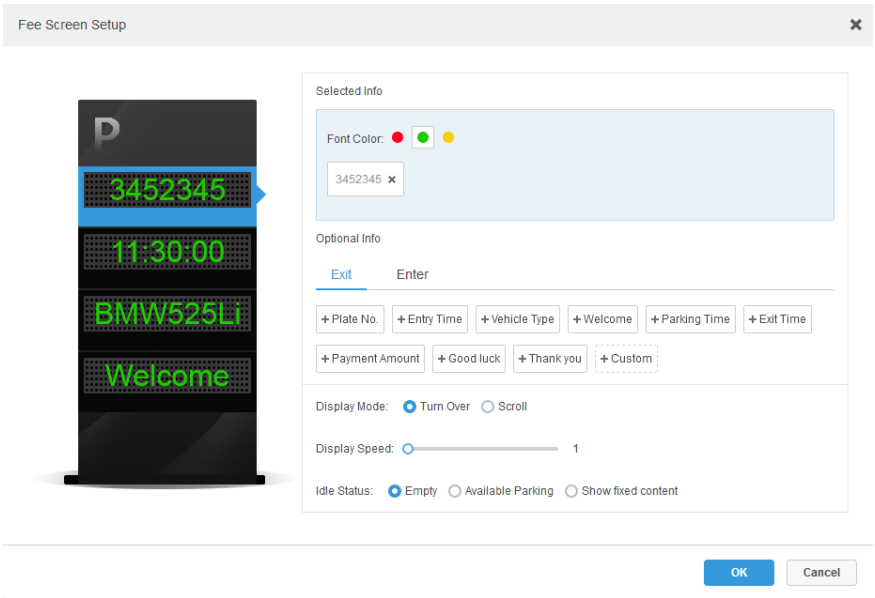


Figure 2-15

Parameter	Note
Font Color	Set LED screen font color. Available: red, green or yellow.
Zero Free Parking Display Content	When there is no free parking is this parking lot, LED screen shows content, you can select either “0000” or “NULL”.
Optional Info	Set LED screen displayed content. Click corresponding content, to add it into LED screen.
Display Mode	Set display mode in the screen, you can flip page or scroll.
Display Speed	Set movement speed. Range is 1～100， as the higher the value, the faster the speed will be.
Idle Status	Select “Show fixed content”, pops up input box. You can input content to be shown during idle time.
Direction of Arrow	Set direction of arrow in the screen. Available: straight, left, right, straight-left, straight-right.
Position of Arrow	Set position of arrow in screen. Available: left or right.

Chart 2-6

Step 4. Click OK, exit screen setup, and return to add device page.

Step 5. Complete screen info setup, click OK.

Add VTO

Step 1. Select device type to be VTO. See Figure 2-11.

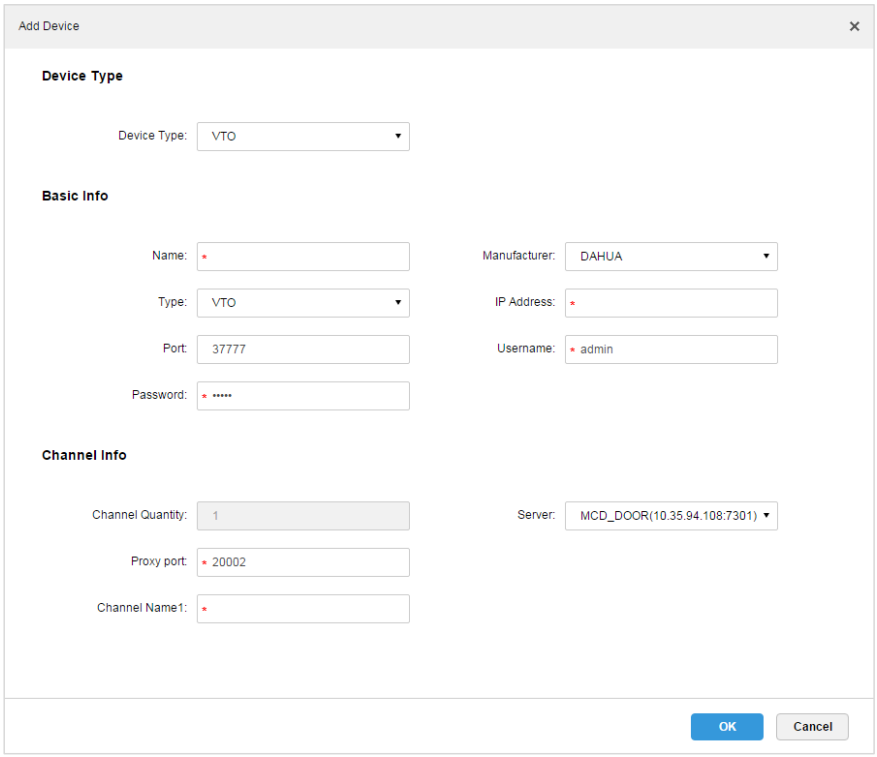


Figure 2-11

Step 2. Set each parameter. See the chart below.

Note:

Parameter with * is mandatory.

Parameter	Note
Device Name	Set device name.
Manufacturer	Select manufacturer.
Type	Select VTO which is the default type.
IP Address	Set device IP address/port.
Port	Enter device port.
Username	Enter device username.
Password	Enter device password.
Channel Quantity	Set device channel quantity.
Server	Select server type. VTO server is “MCD_DOOR”.
Proxy Port	Enter port value.
Standard	Set LED screen size.
Channel Name n	Enter port value.

Chart 2-7

Step 3. Click OK.

Add EVS

Step 1. Device type is EVS. See Figure 2-7.

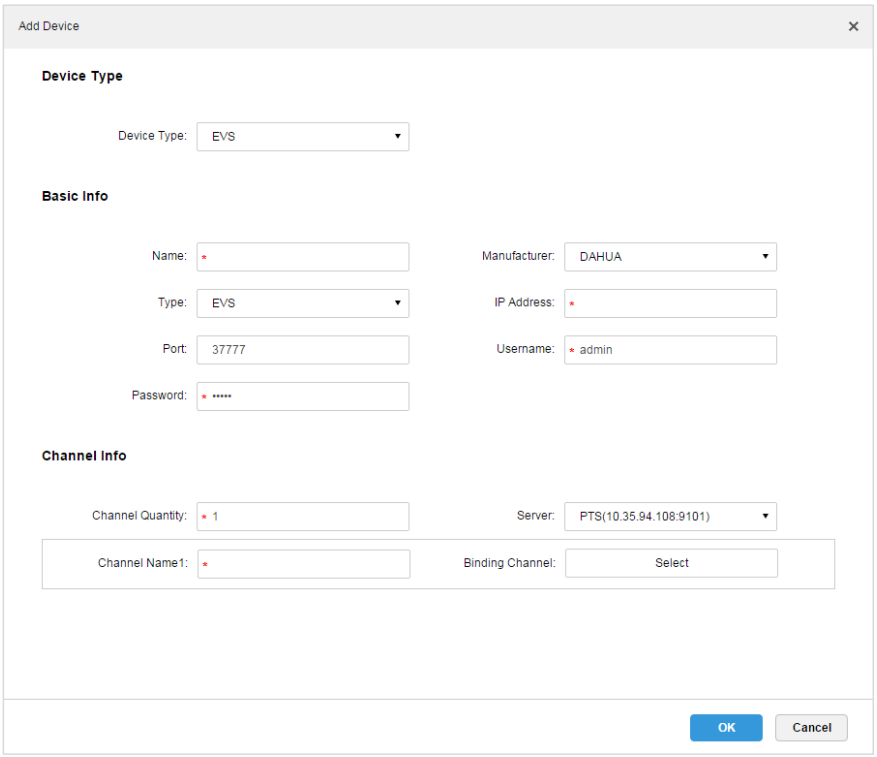


Figure 2-112

Step 2. Set each parameter, see the following chart.

Note:

Parameters with * is mandatory.

Parameter	Note
Device Name	Set device name.
Manufacturer	Select manufacturer.
Type	Select EVS which is the default type.
IP Address	Set device IP address.
Port	Enter device port.
Username	Enter device username.
Password	Enter device password.
Channel Quantity	Set device channel quantity.
Server	Select server type. EVS server is “PTS”.

Parameter	Note
Channel Name	Enter port value.
Binding Channel	Click “Select”, see a pop-up page and please select channel name.

Chart 2-8

Step 3. Click OK.

Add All-in-one

Step 1. Device type is All-in-one.

See Figure 2-13.

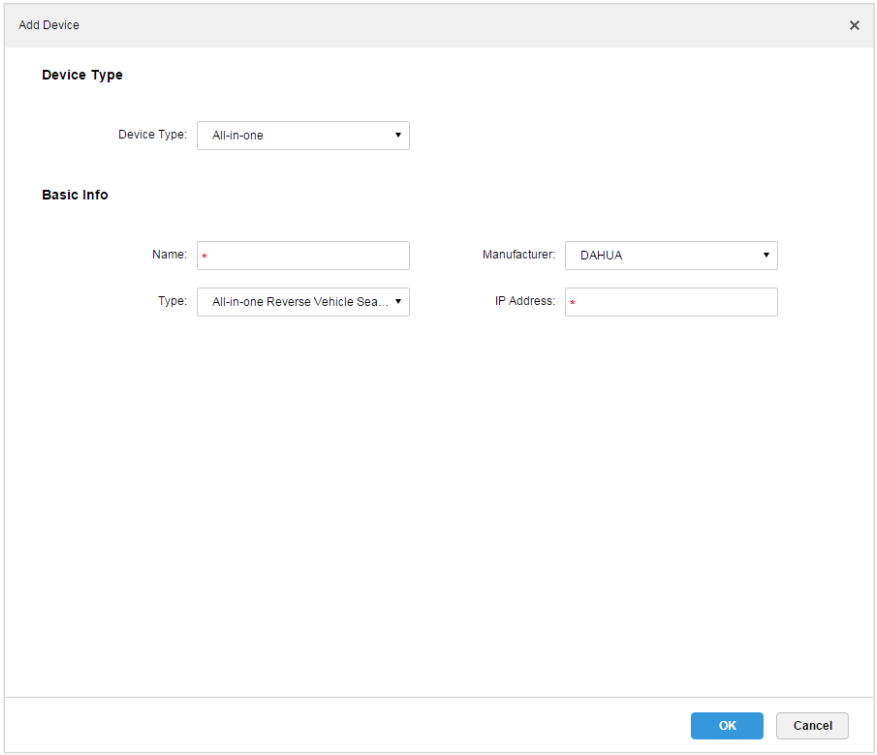


Figure 2-13

Step 2. Set each parameter, see the following chart.

Note:

Parameters with * is mandatory.

Parameter	Note
Device Name	Set device name.
Manufacturer	Select manufacturer.
Type	Select all-in-one. Default is vehicle positioning device.
IP Address	Set device IP address.

Chart 2-9

Step 3. Click OK.

Add Chassis Detector

Step 1. Device type is chassis detector.

See Figure 2-14.

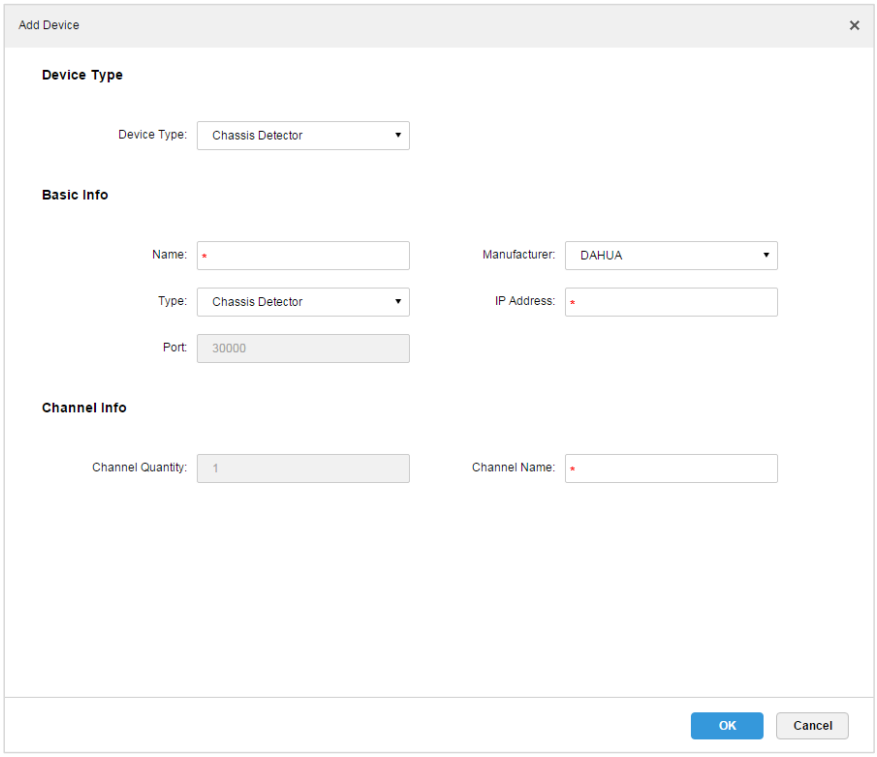


Figure 2-14

Step 2. Set each parameter, see the following chart.

Note:

Parameters with * is mandatory.

Parameter	Note
Device Name	Set device name.
Manufacturer	Select manufacturer.
Type	Select chassis detector which is the default type.
IP Address	Set device IP address.
Port	Enter device port. Default is 30000.
Channel Quantity	Channel quantity cannot be changed. Default is 1.
Channel Name	Enter port value.

Chart 2-10

Step 3. Click OK.

3.1.1.2 Guide Screen Parking Linkage

Device guide screen guides to parking.

Step 1. Click Guide Screen Parking Linkage. See Figure 2-15.

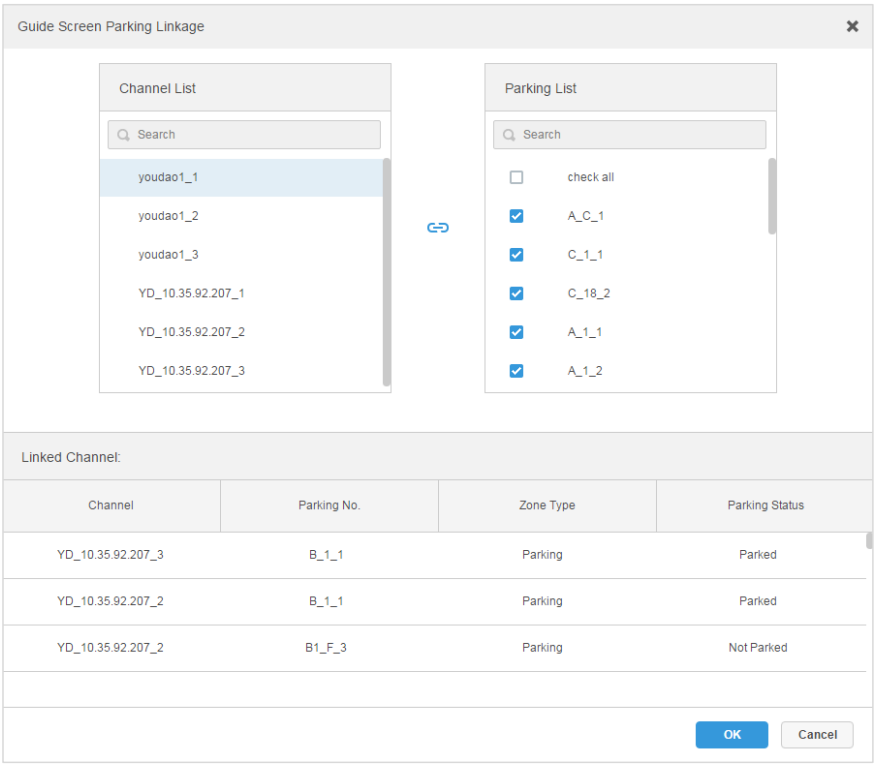


Figure 2-15

Step 2. Channel List, select guide screen channel.

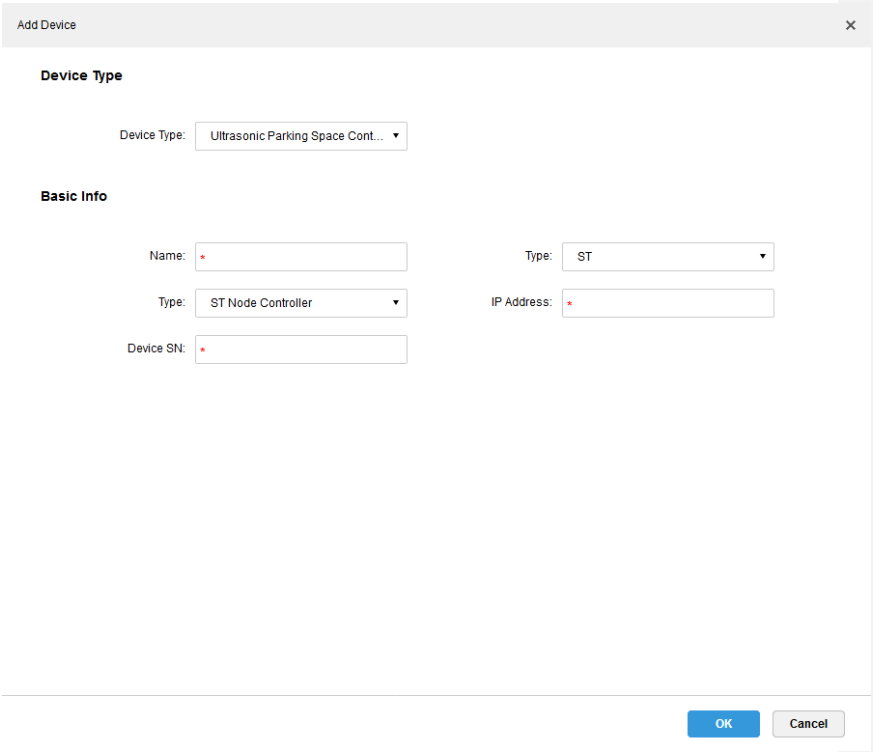
Step 3. In Parking List, select one or more parkings.

Step 4. Click OK.

Add Ultrasonic Parking Space Controller

Step 1 Device Type is **Ultrasonic Parking Space Controller**.
For system display, see Figure 3-20.

Figure 1-3 Add Ultrasonic Parking Space Controller



Step 2 Configure each parameter according to the actual situation. For each parameter, see 0.

说明

Parameter with * is mandatory.

Chart 1-2 Add Ultrasonic Parking Space Controller - Parameters

Parameter	Note
Device name	Set the device name.
Device type	Only support “ST”.
Device type	Only support “ST Node Controller”.
IP address	Enter the device IP address.
Device SN	The serial number of the added ultrasonic parking space controller.

Step 3 Click **OK** to complete config.

3.1.2 **Parking Setup**

3.1.2.1 Add Parking

A user can add new parking lot. New parking lot includes config steps of parking info, entrance/exit device config and surveillance device. Steps are below.

Step 1. Select Parking Lot>Parking Lot. See Figure 2-.

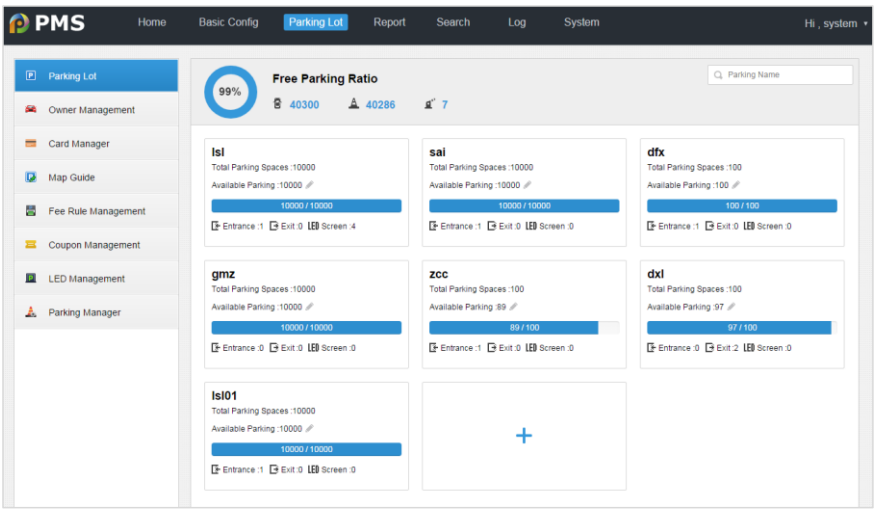


Figure 2-21

Step 2. Click +.

See Figure 2-22

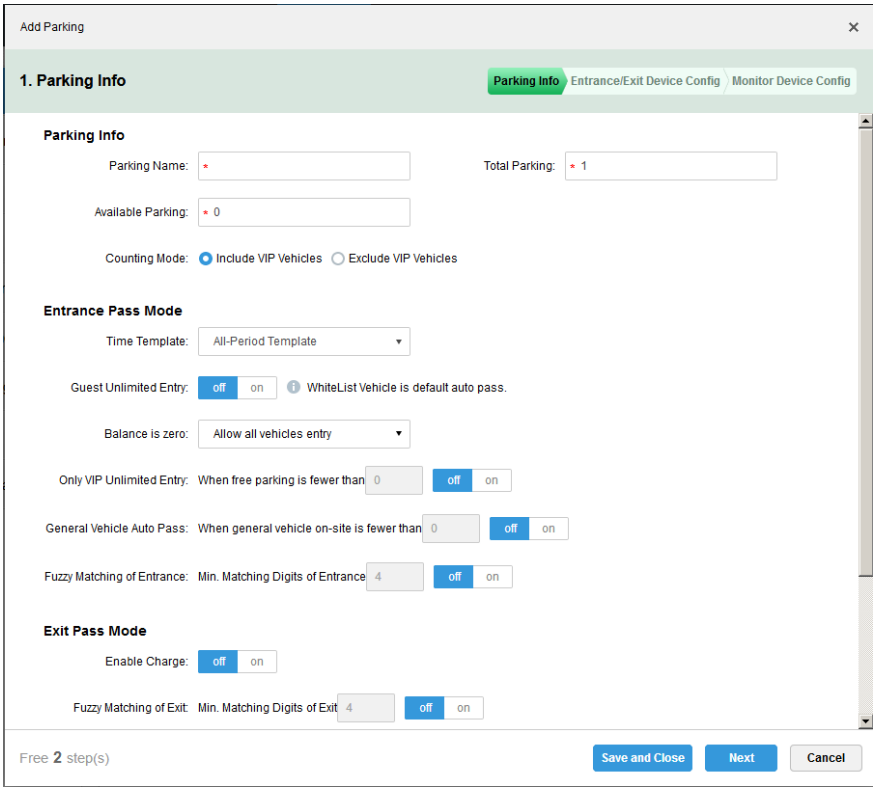


Figure 2-16

Step 3. Set each parameter, see chart below.

Parameter	Note
Parking Name	Set parking name.
Total Parking	Set total parking in the parking lot.
Available Parking	Set current free parking number.
Counting Mode	Select to include/exclude VIP vehicle.

Chart 2-11

Step 4. Click ▼ next to Time Template, select time template; and you also can click ✚ in dropdown list to add time template.

1. Click ✚.

   See Figure 2-17.

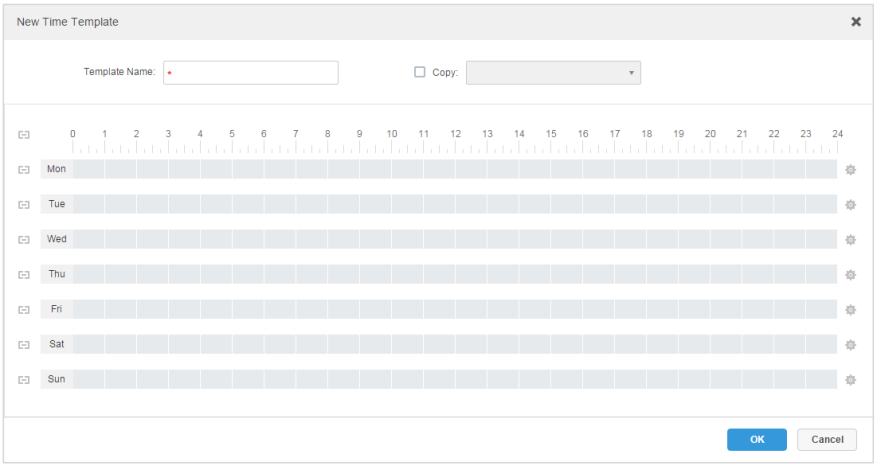


Figure 2-17

2. In Time Template Name, enter name.
3. Move mouse to above the time axis, when the cursor changes to , you can draw time template. When you finish drawing, the position will be green.
   Note:
   - Place cursor on the drawn area, the cursor changes to , click drawn area to delete this area.
   - Click in front of time axis, you can select one or more days within one week. Click in the front row, and you can adjust week time.
4. (Optional) After you select Copy, click ▼ to select time template. You can add time plan of this template to new template.

5. Click OK.

Step 5. Set each parameter, see the following chart.

Parameter	Note
Auto Release	Select whether to enable auto release.
Free parking is zero	Set when free parking is zero, enter vehicle entry rule. Allow all vehicle entry, allow trusted vehicle entry, allow forbidden vehicle entry or allow VIP vehicle entry.
Only allow VIP vehicle auto release	Set when free parking is below certain value, whether allow auto release of VIP vehicle.
General Vehicle Auto Release	Set when general parking is below certain value, whether allow auto release of general vehicle.
Entrance Fuzzy Match	Enable the function when the vehicle is in the white list. If the matching digits of entrance reach or exceed the set value, allow the vehicle to enter the parking lot.
Enable Payment	Select whether to enable medical payment.
Exit Fuzzy Match	Enable the function when the vehicle is in the white list. If the matching digits of exit reach or exceed the set value, allow the vehicle to exit the parking lot.
Timeout Alarm	Whether to enable timeout alarm, and set timeout time.
Free Parking Correction	After long-time operation, there may be data errors. Enable the Remaining Parking Correction function to regularly reset the remaining parking data.

Chart 2-12

Step 6. Click Next. See Figure 2-18.

Note:

Click Save and Close, you save current setup and close this page.

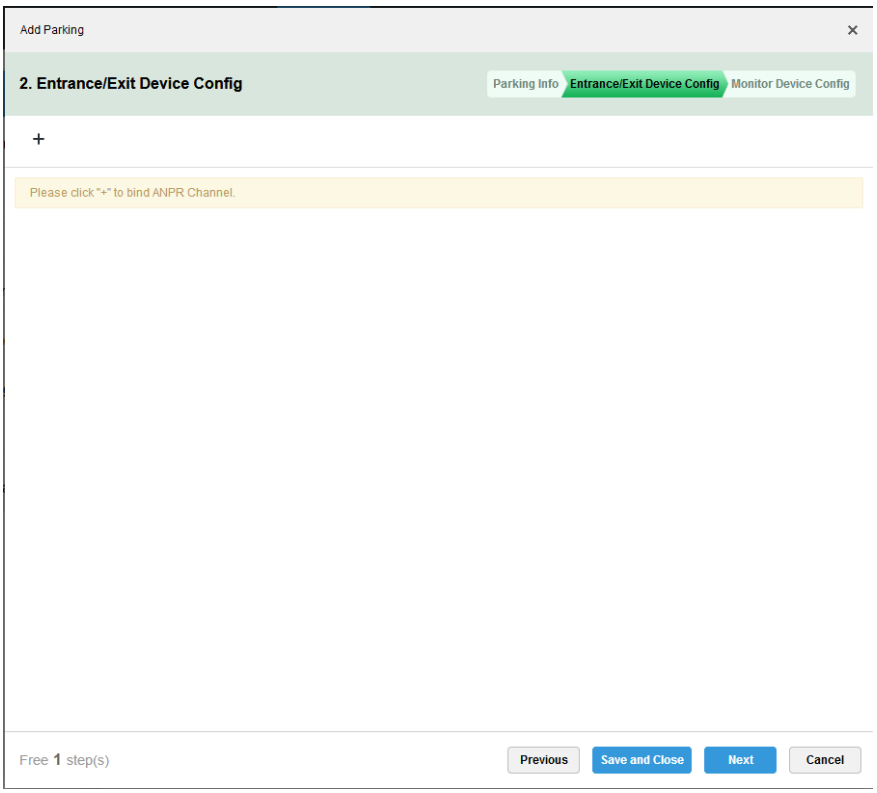


Figure 2-18

Entrance/Exit Config

Step 1. Click +. See Figure 2-19.

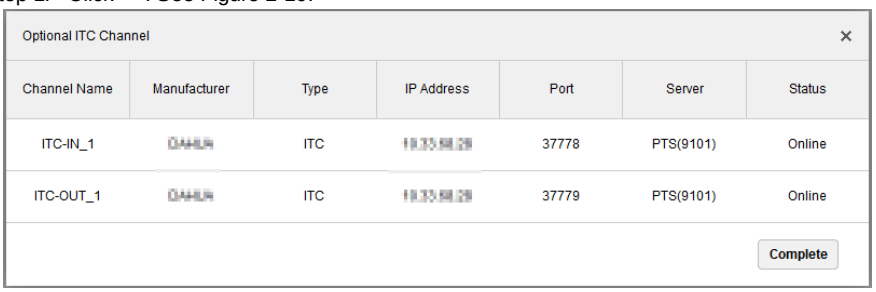


Figure 2-19

Step 2. After you select ANPR channel, channel name is shown in blue. Click Complete, add ANPR channel to setup of entrance/exit device config page.

Step 3. According to actual need, set entrance/exit device direction, you can select enter, exit or in-parking. See Figure 2-20.

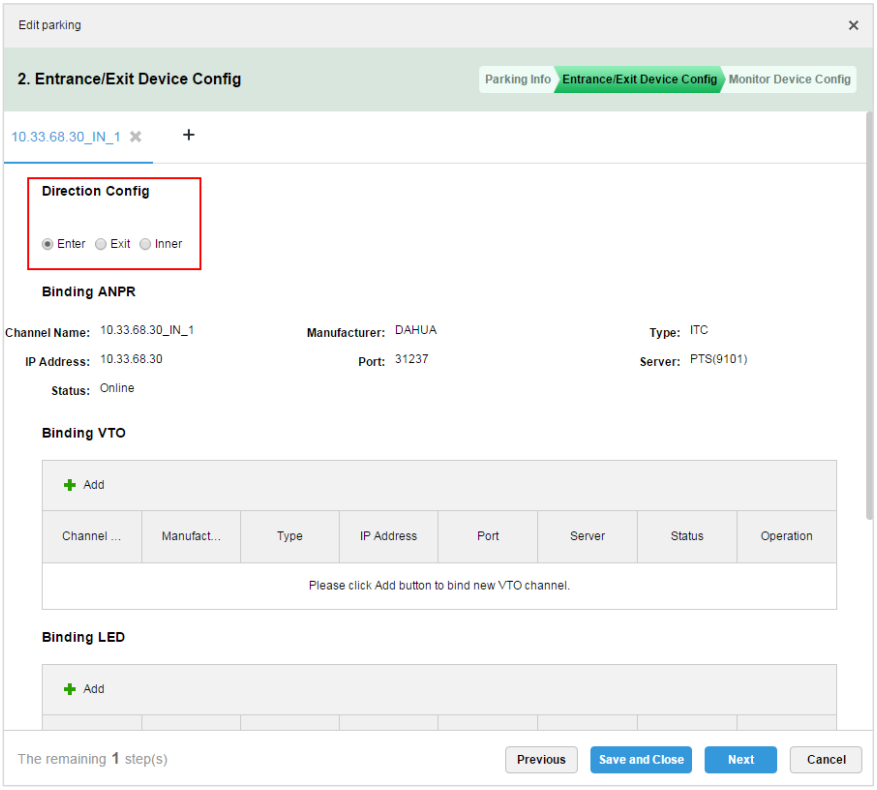


Figure 2-20

Step 4. (Optional) Select LED device, chassis detector and other entrance/exit device need to be bound. Method to add is similar to adding ANPR device.

Step 5. Click Next.

See Figure 2-21.

Note:

Click Save and Close, to save current setup and close page.

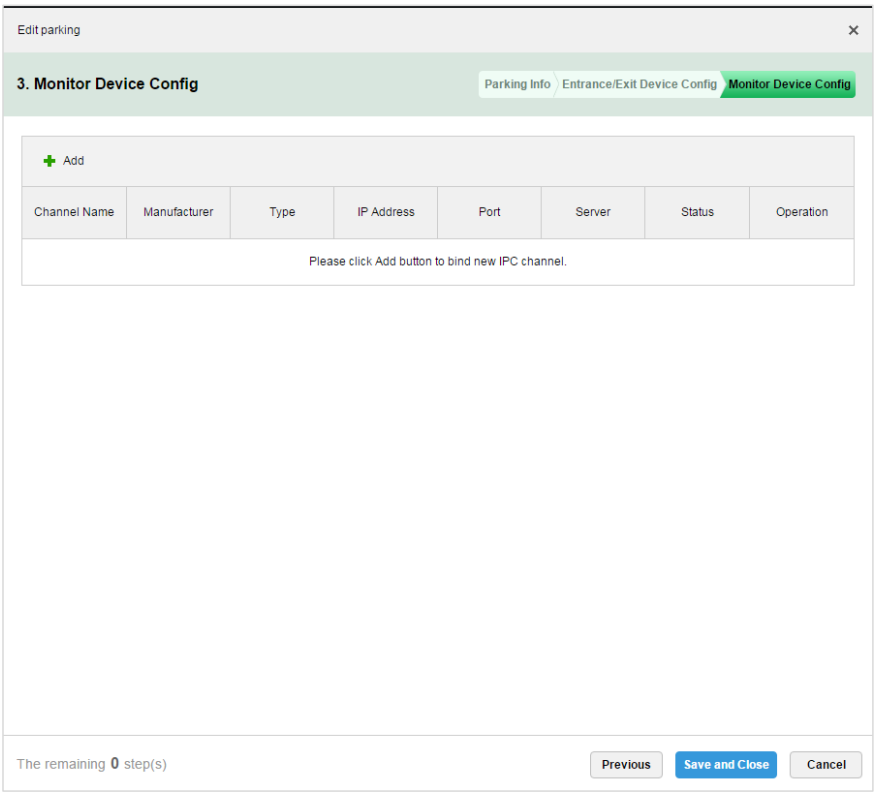


Figure 2-21

Monitor Device Config

Step 1. Click ✚. See Figure 2-22.

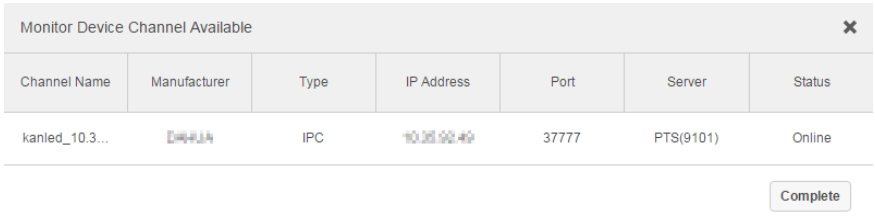


Figure 2-22

Step 2. After you select surveillance device channel, channel name is blue. Click Complete, add surveillance device channel to config page in Figure 2-23.

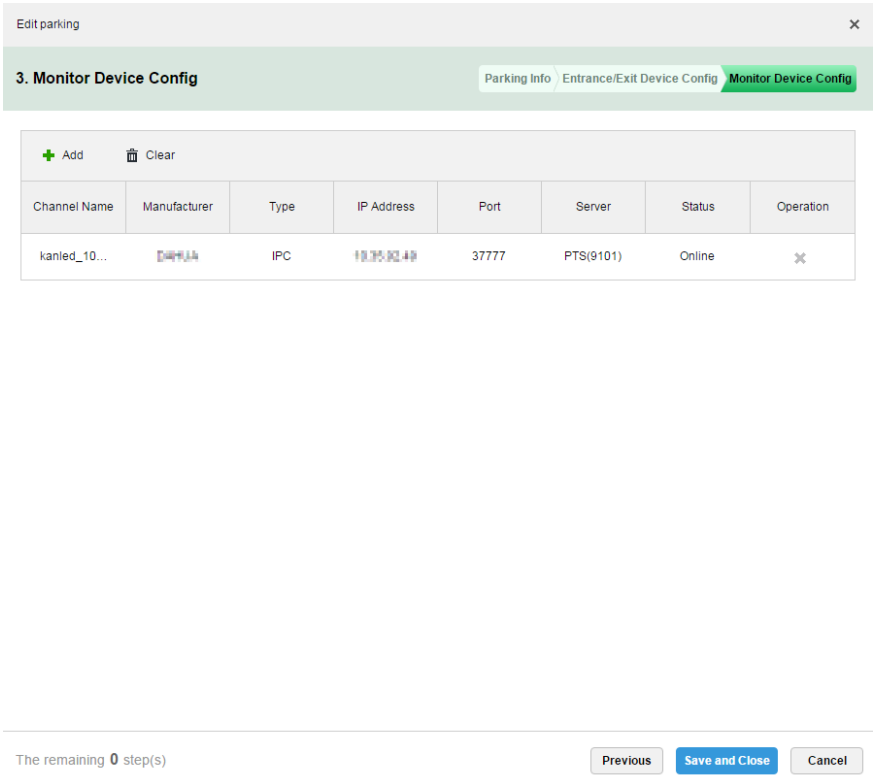


Figure 2-23

Step 3. Click Save and Close.

3.1.2.2 Fee rule Management

After you complete setup of parking lot, you shall set fee rule inside parking.

Step 1. Select Parking Lot>Fee Rule Management. See Figure 2-24.

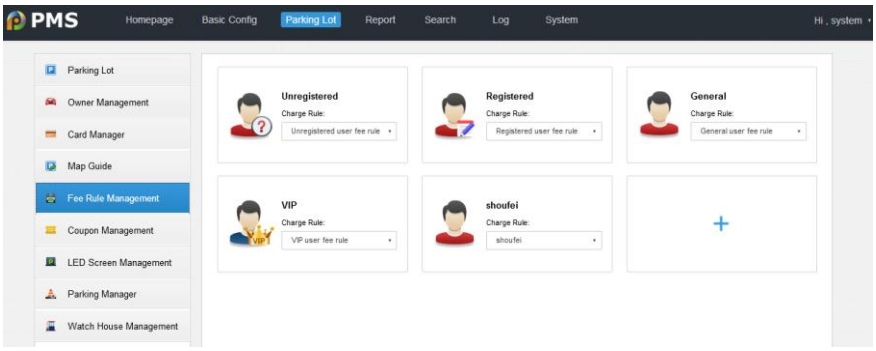


Figure 2-24

Step 2. Click + to create user group. See Figure .

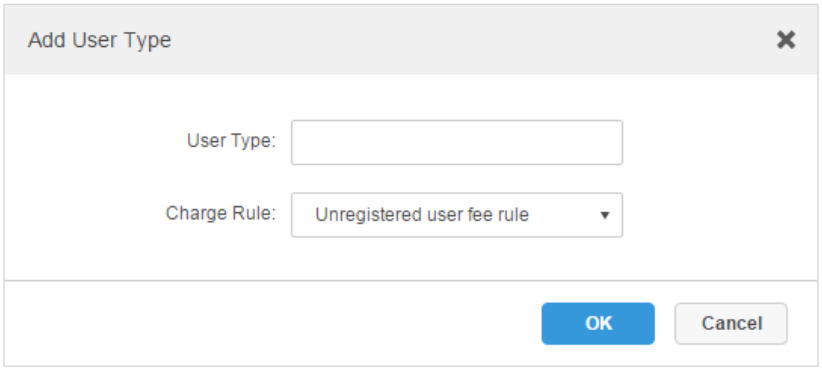


Figure 2-31

Step 3. Set user type.

Step 4. Set fee rule.

You can select to add fee rule, change old fee rule or delete fee rule. See Figure 2-25.

Note:

Click ▼ of set user group, and you can add, change or delete fee rule.

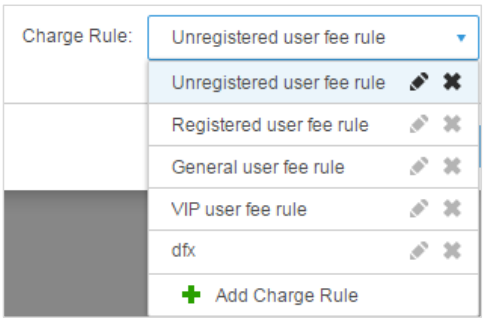


Figure 2-25

- Click ✚, to add fee rule. Steps are below:

1. Click ✚. See **Error! Reference source not found.**.**Error! Reference source not found.**.
2. Set each parameter, see the chart below.

Parameter	Note
Rule Name	Set the name for the charge rule.
Rule Type	Select the type for the charge rule. You can select Booth Charge or Center Charge. ● Booth Charge: The vehicle is only allowed to leave the parking lot after paying the parking fee at the booth. ● Center Charge: The vehicle is allowed to leave the parking lot after paying the parking fee via the booth or the online platform.
Max Charge	Set the maximum parking fee daily.

Parameter	Note	
Free Minutes	Set the free parking minutes. After set, the system starts charging after the end of free minutes.	
Charge by Hour	Charge by the parking hours, and set the parking fees paid for a different length of time. For example, if the fee for "1 Hour" is "10 $", the fee for "2 Hours" should be set as the sum of the fees for the first hour and the second hour. If the fee for the second hour is 5 $, the fee for "2 Hours" should be set as "15 $", and the like.	The two charge modes are mutually exclusive, so one charge rule can only configure one charge mode.
Charge by Time Period	Set different charging standards for different time periods. Support the charge by time or by number of times. The system calculates the charge amount according to different time periods and different charging standards. ● Charge by Time Select **By Time Period**, and set the parking fee per hour. If the parking time spans two time periods, calculate the fee for two time periods. ● Charge by Number of Times Select **By Number of Times**, charge once during this time period according to the set value.	
Enter Time Exit Time Calculate Test Charge Amount	Test the charging standard, set the **Enter Time** and **Exit Time** of the vehicle, and click **Calculate Test**. The system displays the total amount of parking fees during the set parking time.	

~~Parameter~~	~~Note~~
~~Rule Name~~	~~Set fee rule.~~
~~Rule Type~~	~~Select rule type, you can select Booth center or Center charge.~~ ● ~~Booth Charge：Only when the vehicle pay at the booth, it is allowed to leave this parking.~~ ● ~~Center Charge：Only when the vehicle pay via booth or platform online, it is allowed to leave this parking.~~
~~Max Charge~~	~~Set max of charge daily.~~
~~Free Minute~~	~~Set free parking length.~~
~~Charge by Hour~~	~~Set length of each parking, and amount to be paid.~~
~~Enter Time~~	~~Set entry time of vehicle.~~
~~Exit Time~~	~~Set vehicle exit time.~~
~~Calculate Test~~	~~Click this button to calculate amount of parking charge during this period.~~
~~Charge Amount~~	~~Shot amount of charge.~~

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Chart 2-13

3. Click OK.
   - Click to change fee rule. Please refer to steps of Add Fee Rule.
   - Click to delete fee rule.

Step 5. Click OK.

3.1.3 **Map Config**

In the parking lot, device must be bound to position same as in actual condition (except vehicle detector and card finding all-in-one device). Devices not added will not be displayed in map config.

Note:

A guide screen shall be bound to input or output ITC channel.

Add Map

Step 1. Select Parking Lot>Map Guide, see Figure 2-26.

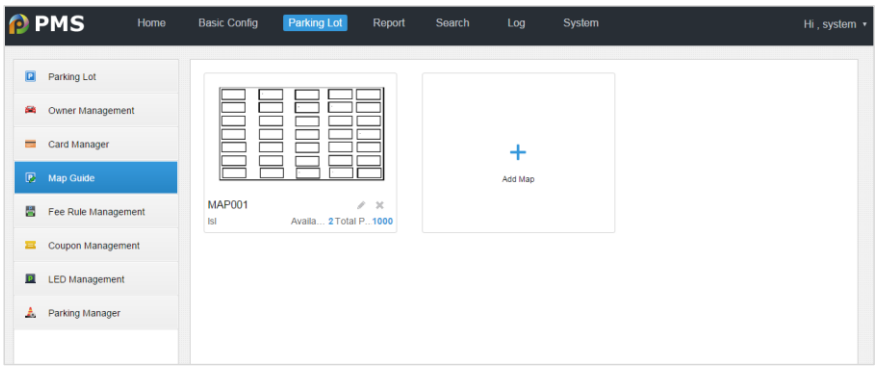

Figure 2-26

Step 2. Click +. See Figure 2-27.

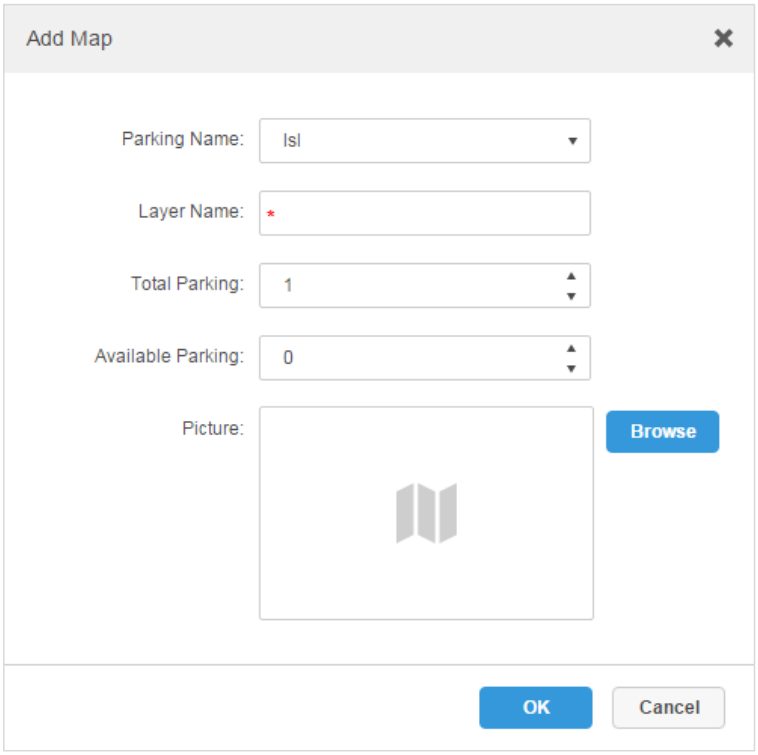

Figure 2-27

Step 3. Click ▼ next to parking name, and select name of this parking.

Step 4. Set layer name, total parking, free parking, and garage number.

Note:

- Parameter with * is mandatory.
- Parameter with ▲ or ▲ to increase or decrease total parking or free parking.

Step 5. Click **Browse** to import the map according to the interface prompt.

Step 6. Click **OK** to complete config.

Add Device Channel

~~Step 1. In Map Guide page, click map to zoom in and enter add device channel page.~~

Figure 2-28 Step 1. In the **Map Guide** page, click map to zoom in and enter Add Device Channel page. See Figure 3-36. See Chart 3-15 for the description of buttons above the map.

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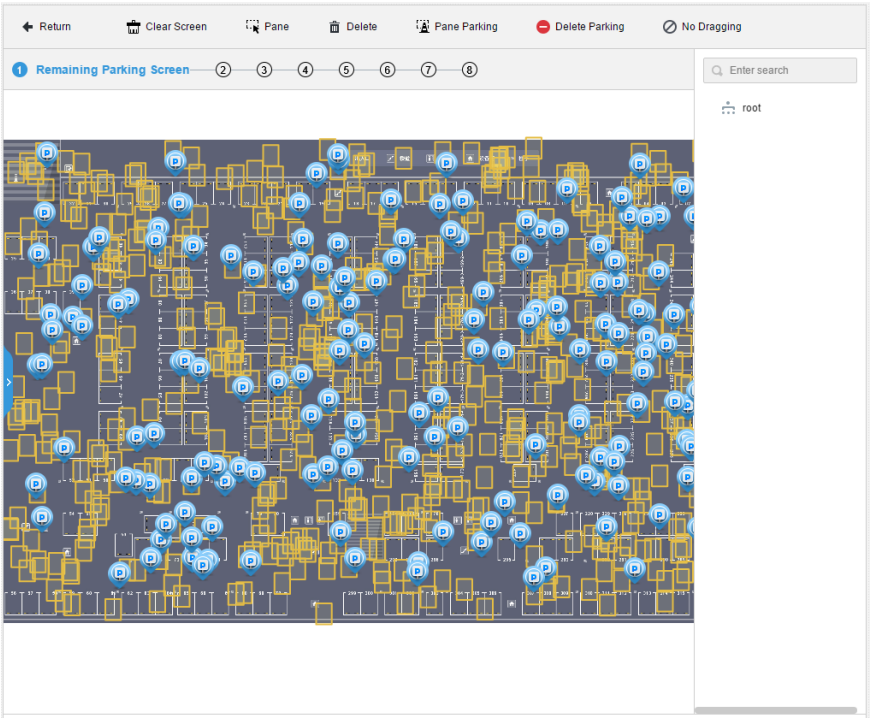


Figure 2-28

Parameter	Note
Return	Click it, and return to homepage.
Clear Screen	Click it, clear all device channels on screen.
Pane	Click it, select multiple device channels on map.
Delete	In map, pane select device channel and click this button to delete the device channel.
Delete Parking	In map, select parking, and click this button to delete selected parking.

Chart 2-14

Step 2. In map you can add device channel, in sequence: 1) free parking screen, 2)entrance/exit camera, 3)monitor channel, 4)parking, 5)vehicle detector, 6)guide screen, 7)all-in-one device config, 8)vehicle finder line. The following will introduce each of these.

Note:

When channel name is shown in red, it means this channel has not been added to map.

- Free parking screen, entrance/exit camera, monitor channel, parking, vehicle detector, guide screen, and all-in-one device: at root node, click channel of free parking screen, and drag it to appropriate position on map. After you complete setup of current channel, click Next to auto go to next channel config.
- Parking: in device list on the right, click parking name and then click position of this parking on map. Map shows a yellow box. Hold this yellow box, you can adjust positon. Drag the blue dot on this box to adjust its position and size of the box. After you complete setup of this channel, click Next to auto go to next channel config.

- Vehicle Finder Line: After you all all-in-one device, you can add vehicle finder line on map. Click Draw button above map, and draw a line starting at all-in-one device. Click parking position on this line to add point of vehicle finder.
  - ◆ Select vehicle finder line: click select vehicle finder line, and pane select line on map.
  - ◆ Delete vehicle finder: click delete vehicle finder line, and delete selected line.

Step 3. Click OK.

Basic Config

Basic config includes device manager, organization manager, alarm scheme, user manager, server manager, system config and etc.

3.1.4 Device

Refer to Ch 2.4.2.

3.1.5 Organization

A user can adjust organization structure of device channel.

Step 1. Select Basic Config>Organization, see Figure 2-29.

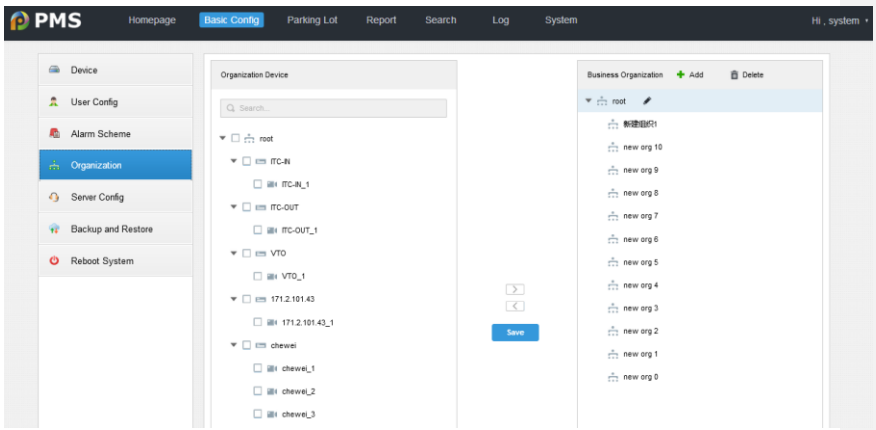


Figure 2-29

A user can add, delete and modify alarm scheme. To add scheme:

Step 1. Click Add on the right. You can add and delete logic organization.

Step 2. Under root organization on the left, click > to add channel on the right.

Click < to add channel under logic organization back to root organization.

Step 3. Click Save.

3.1.6 Alarm

Select Basic Config>Alarm Scheme. Click Add, system pops up add alarm scheme box. You can edit added alarm scheme, enable or disable scheme. See Figure 2-30.

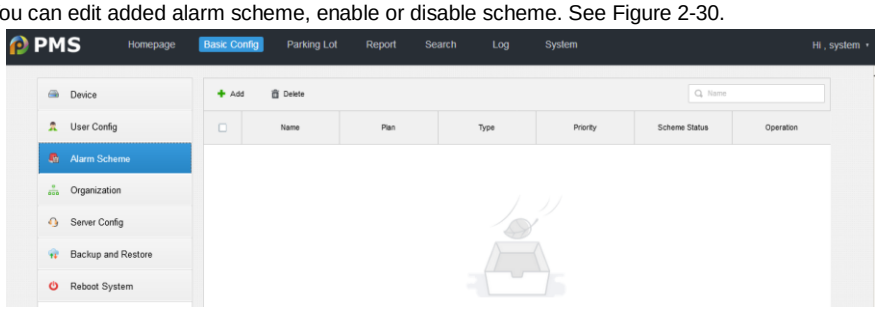


Figure 2-30

A user can add, delete and modify alarm scheme. To add alarm scheme:

Step 1. Click . See Figure .

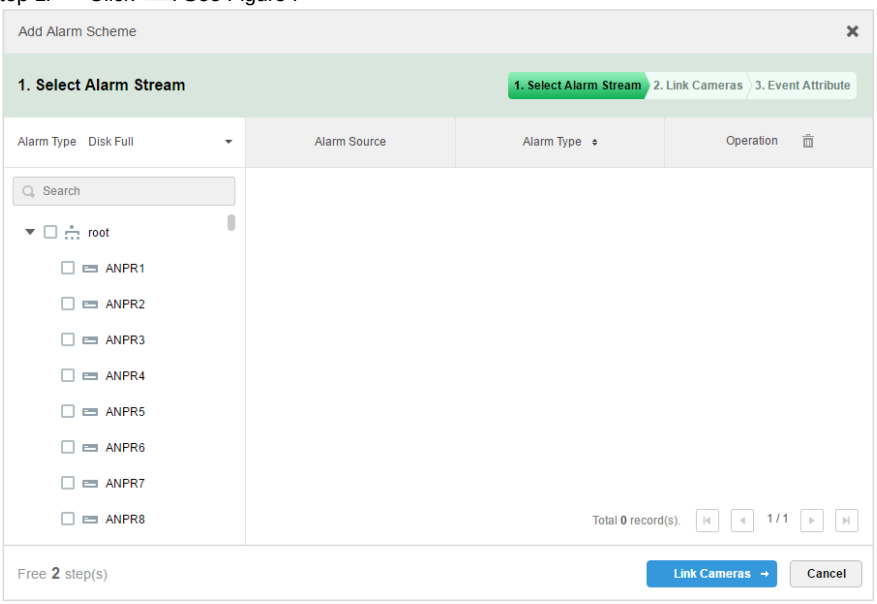


Figure 2-40

Step 2. Select alarm type, and check channel. See Figure .

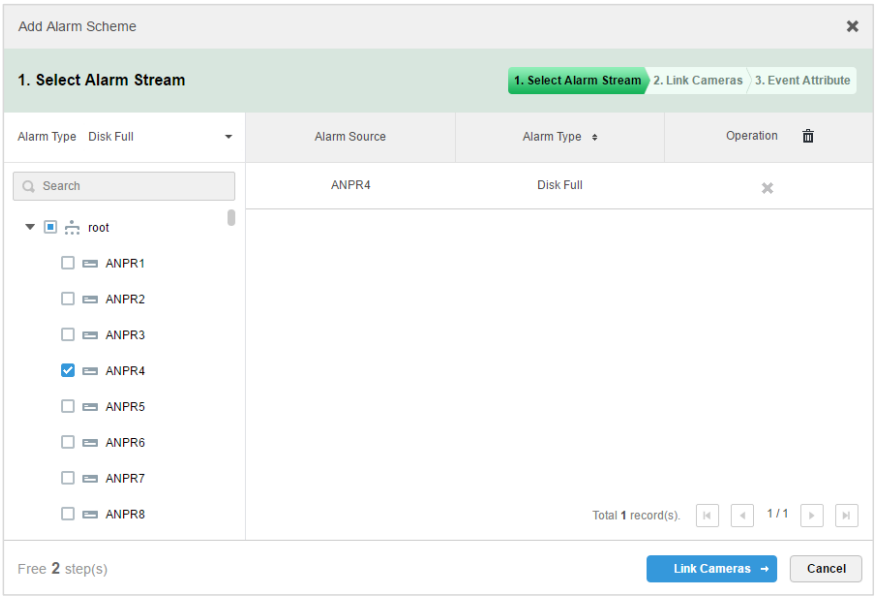


Figure 2-41

Step 3. Click Link Camera →, see Figure .

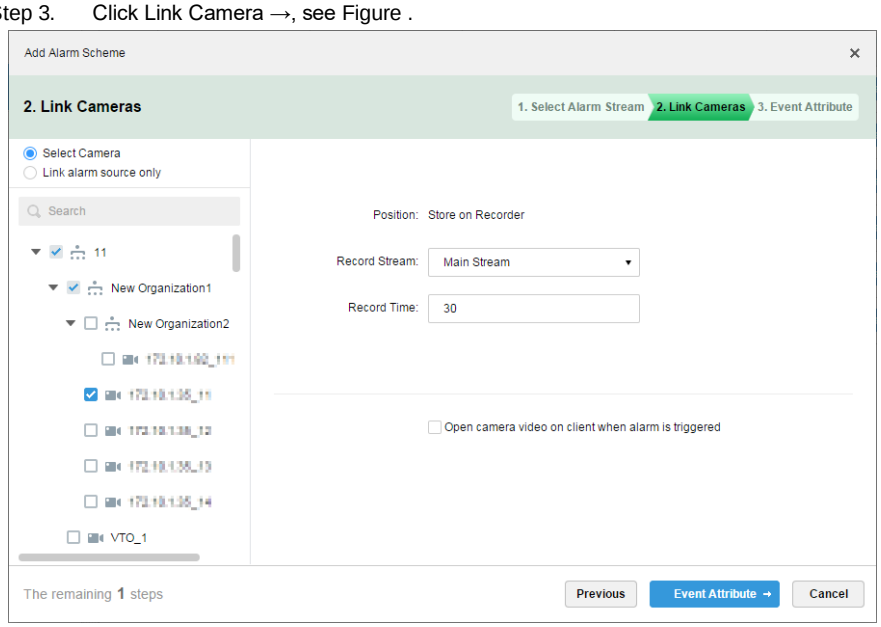


Figure 2-42

Step 4. Check link camera, set stream, record time and etc. and select whether to turn ON camera when alarm is triggered.

Step 5. Click Event Attribute →. See Figure .

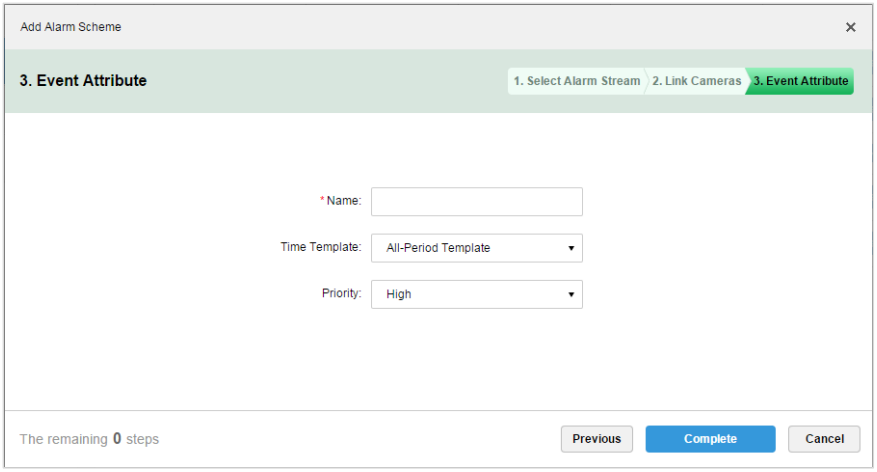


Figure 2-43

Step 6. Enter scheme name, select time template, priority.

Step 7. Click Complete.

In alarm scheme page, you can disable or enable added shceme.

- After you select ☐, click Delete to delete selected alarm scheme. Select ☐of the first row to select all alarm schemes.
- ON means scheme is ON. Click it, and it becomes OFF which means scheme is OFF.
- Click to change alarm scheme. Please refer to steps of adding alarm scheme.
- Click to delete alarm scheme.

3.1.7 **User**

Select Basic Config>User Config. See Figure .

- When user status is green, this user is enabled. When user status is grey, this user is frozen.
- When online status is green, this user is online. When online status is grey, this user is offline.

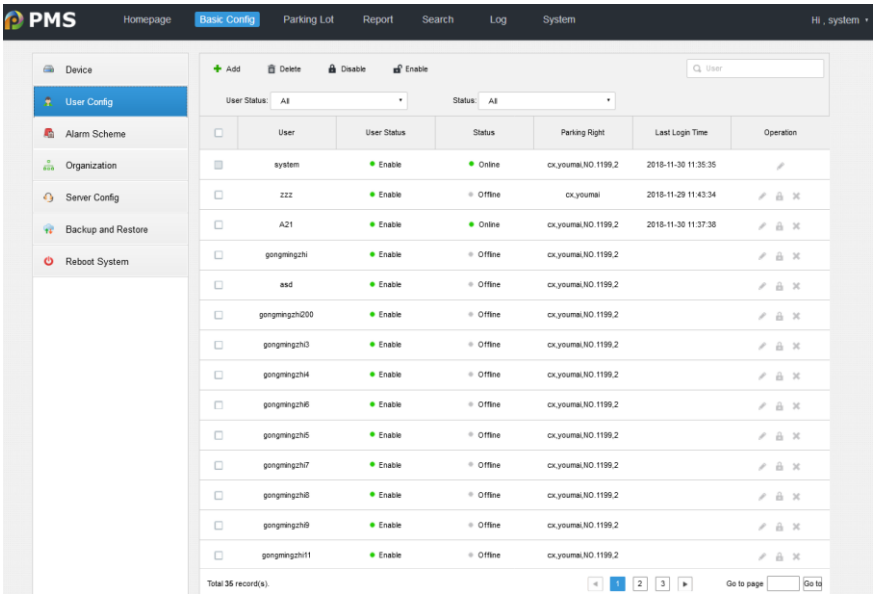


Figure 2-44

Here you can add, delete, freeze and enable user. To add user:

Step 1. Click . See Figure 2-31.

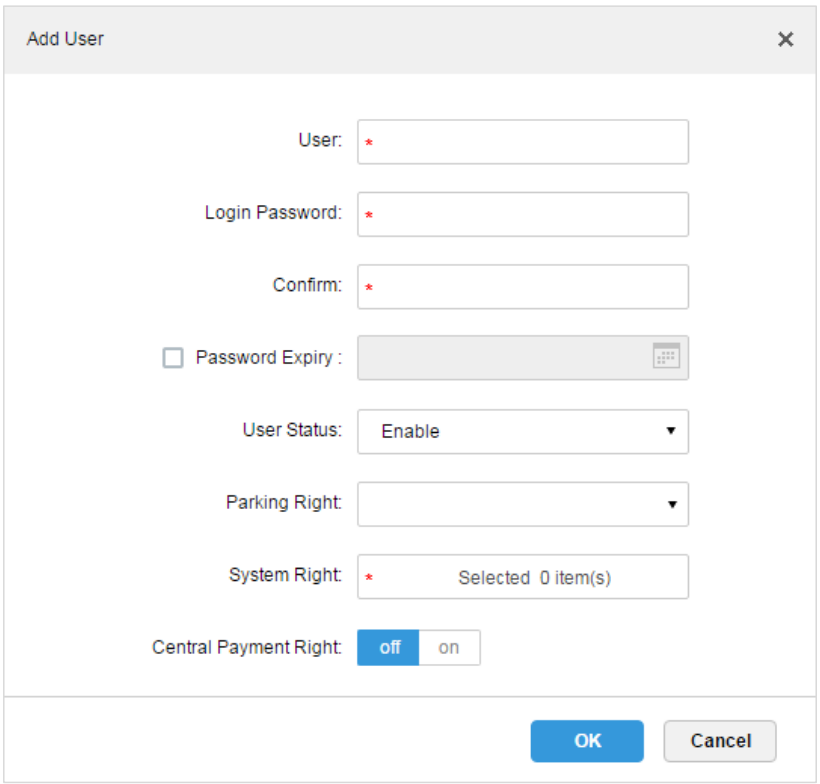


Figure 2-31

Step 2. According to your need, set each parameter. See the following chart.

Note:

Parameter with * is mandatory.

Parameter	Note
Username	Enter username.
Login Password	Enter login password. Password shall meet the following requirements. ● Password shall be 8～16 characters. ● DO NOT contain space. ● Password must include letter and number.
Confirm	Enter password again, to confirm it.
Password Expiry	Set user expiry. Check “Password Expiry”, to enable this function. Click , select date, as to set user validity to this date.
User Status	Select user status, and enable or freeze user.
Parking Right	Click , to select parking of this user.
System Right	Select user right in this system. Click , to expand right tree, and select detailed user right.
Central Payment Right	Select whether to enable central payment right or not.

Chart 2-15

Step 3. Click OK.

In User page, you can delete, freeze and modify user.

- After you select , click Delete to delete selected user. In the first row, select to select all users.
- means the user is enabled. Click this icon, icon changes to which means the use is frozen.
- Click , to edit user info. Steps refer to add user.
- Click to delete user.

3.1.8 **Server**

Select Basic Config>Server Config.

In Server interface, you can view each server name, online status and etc. See Figure 2-32.

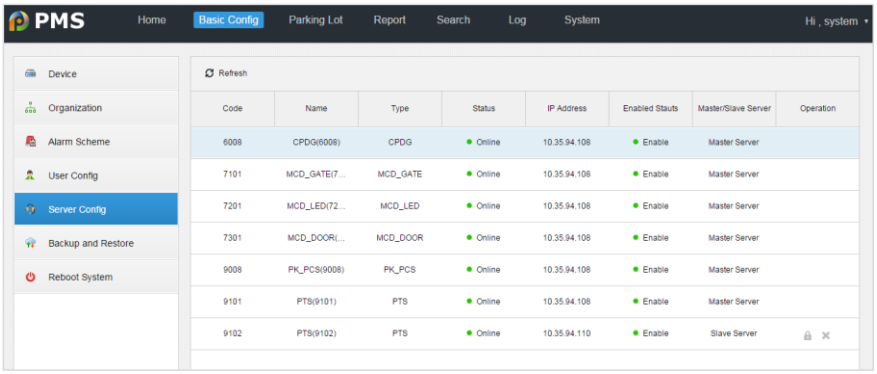


Figure 2-32

When online type is green, it means this server is online. When online type is gray, it means this server is offline.

Server type includes master server and slave server. When status is green, the server is enabled. When status is grey, the server is frozen. Server type includes master server and slave server.

- Master server: cannot be frozen or deleted.
- Slave server: can be frozen or deleted.

3.1.9 **Backup and Restore**

Select Basic Config>Backup and Restore. It supports locally back up and restore, server auto backup and restore.

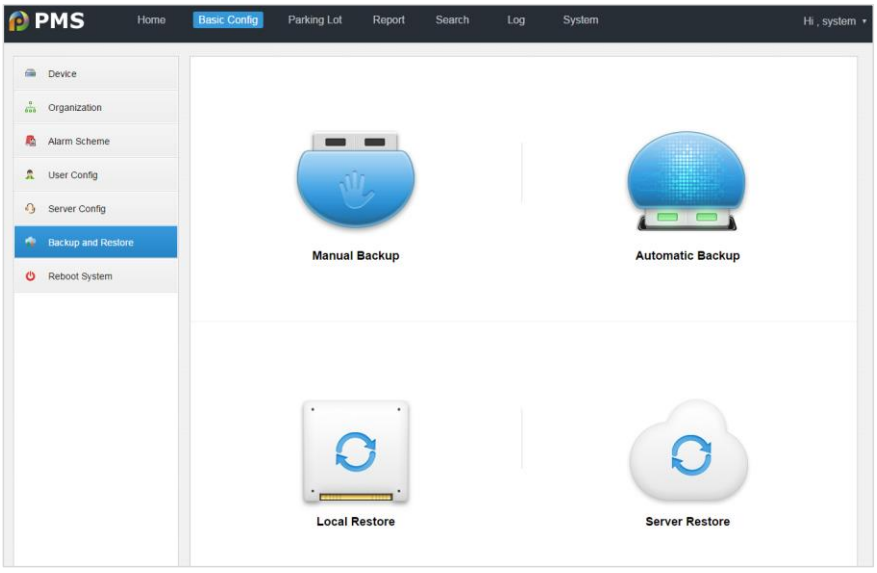


Figure 2-33

- Manual backup: require input pf login password and encrypt password.
- Automatic backup: set whether to enable this function accordingly.

- Local restore: select local file, to restore.
- Server restore: system auto search backup file of this server to restore.

3.1.10 Reboot System

Select Basic Config>Reboot System.
See Figure 2-34.

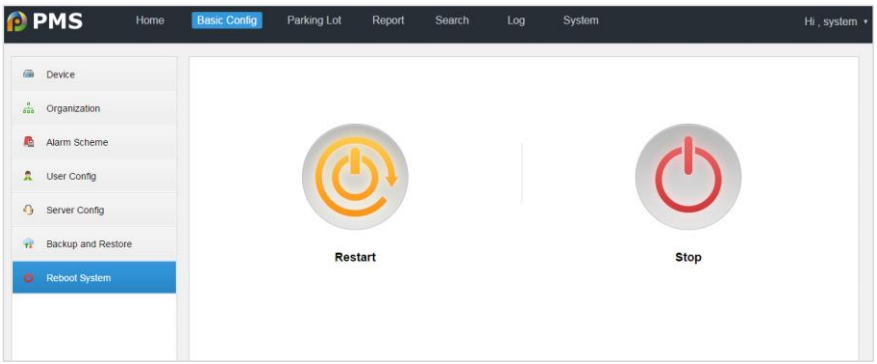


Figure 2-48

Click to reboot PMS8000 server.

Click to stop PMS8000 server.

Parking Lot

Parking lot setup includes parking config, card manager, car&people, map guide, fee rule and etc.

3.1.11 Parking Lot

You can add or modify parking.

- Click to add new parking zone. Refer to Ch 2.4.3.1.
- Click to edit parking info. See steps to add parking area.
- Click to delete parking.

3.1.12 Owner Management

You can add, modify and delete corresponding relationship between vehicle and person. You also can import the info into system. One person can be related to more plates. Select Parking>Owner Management, see Figure 2-35.

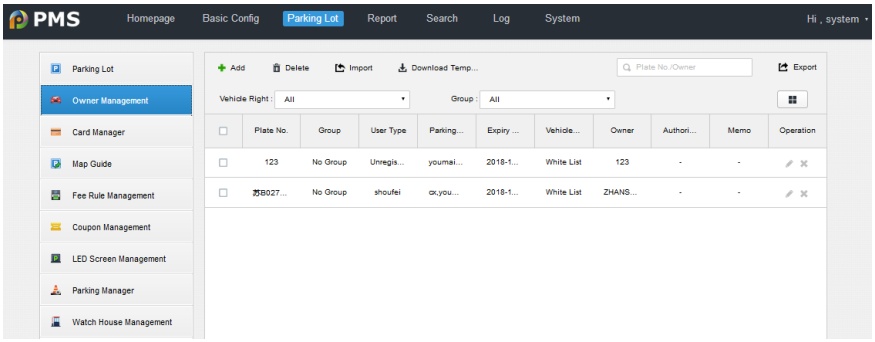


Figure 2-35

To add owner:

Step 1. Click ✚. See Figure 2-36.

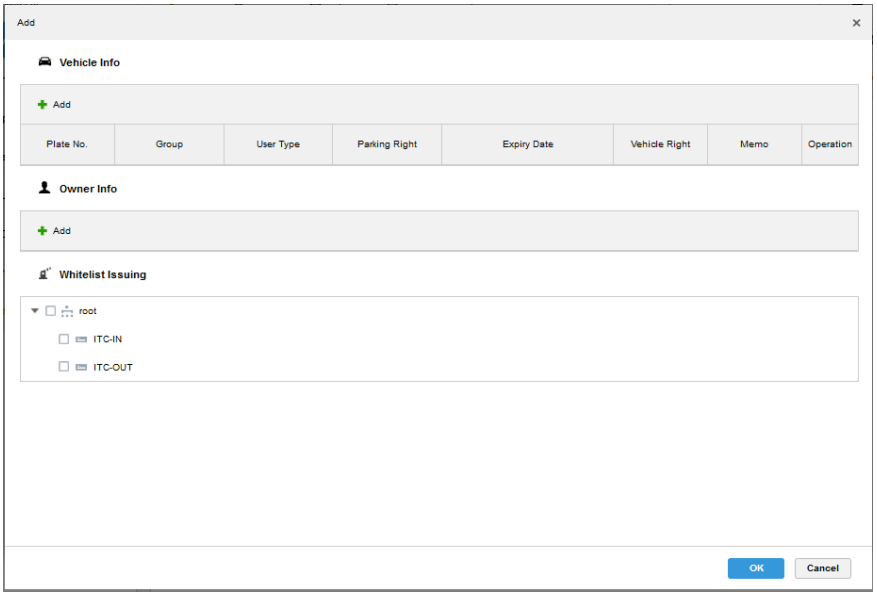
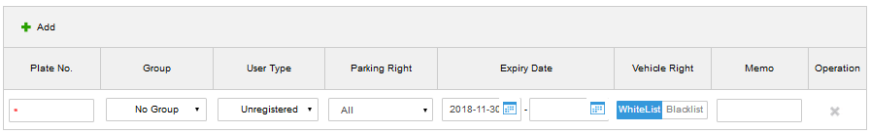


Figure 2-36

Step 2. Click ✚ below vehicle information.

See Figure .

Figure 2-51



Step 3. According to actual need, set each parameter info, see the following chart.

Note:

Parameter with * is mandatory. Click to delete vehicle info.

Parameter	Note
Plate No.	Enter plate no.
Group	Click ▼, select group of this plate.
User Type	Click ▼, select user type of this plate.
Parking Right	Select the parking lot associated with the vehicle.
Expiry Date	Click , in pop-up page, select expiry date of this plate.
Vehicle Right	Select vehicle right, you can select white list or black list.
Memo	Enter memo if need.

Chart 2-16

Step 4. Click of user info below, to add owner info of this plate.

See Figure 2-37.

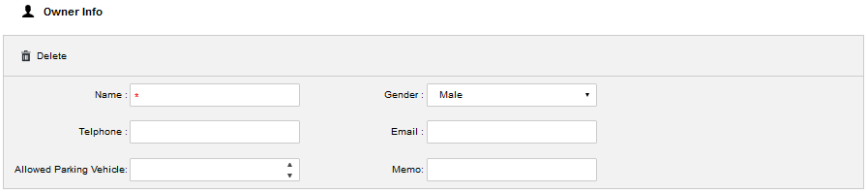


Figure 2-37

Step 5. Set parameter, see the following chart.

Note:

Parameter with * is mandatory, and click Delete to delete owner info.

Parameter	Note
Name	According to actual need, enter parameter.
Gender	
Telephone	
Email	
Park Vehicle	Adjust park vehicle. Click ▲ or ▼, to increase or decrease park vehicle.
Memo	Enter memo if need.

Chart 2-17

Step 6. Select ANPR right.

Step 7. Click OK.

You can modify, delete owner info. You also can fill in owner info in template, to import/export info into/from system.

- After you select ☐, click Delete to delete selected user. Select ☐ in the first row, as to select all owners.
- Click Download Template to download owner template.
- Click Import to fill in owner template into the system.
- Click Plate No./Owner to enter plate or owner info. Click Export to export info.
- Click to edit user info. See step 1-7.

- Click ✖ to delete user.

3.1.13 Card Manager

A user can add card of vehicle recognition and authorize card. Select Parking Lot>Card Manager. See Figure .

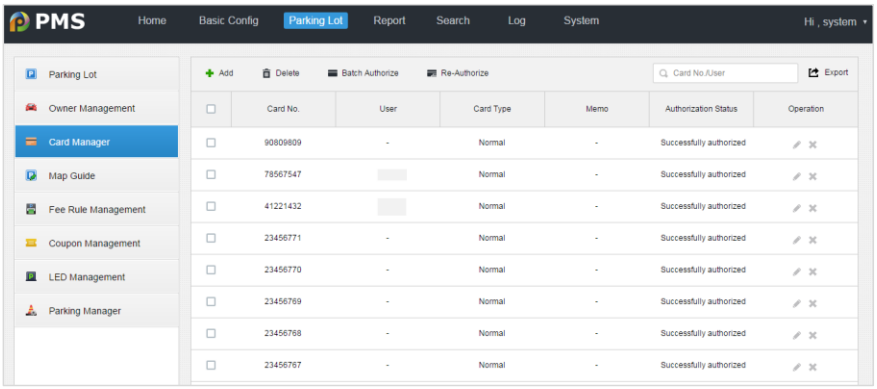


Figure 2-53

3.1.13.1 Add Card

To add card:

Step 1. Click ✚, see Figure 2-38.

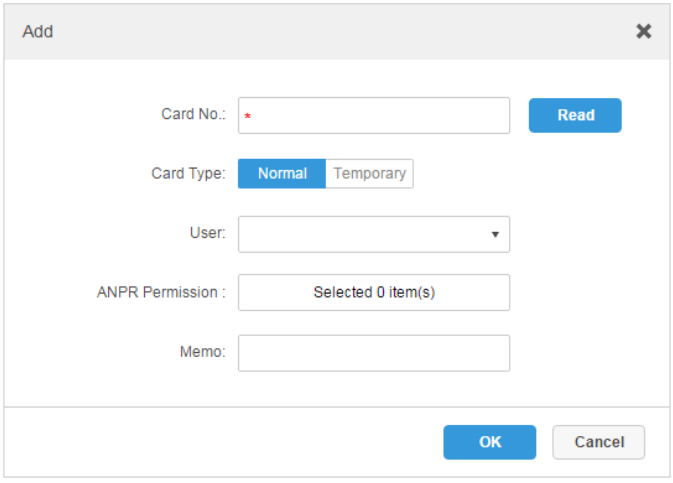


Figure 2-38

Step 2. Set parameter, see the following chart.

Note:

Parameter with * is mandatory.

Parameter	Note
Card No.	Enter card no. Click “Read” to recognize card info.
Card Type	Set card type, you can select general card or temporary card.
User	Click ▼, select card owner info.
ANPR Permission	Click box to select ANPR device.
Memo	Enter memo if need.

Chart 2-17

Step 3. Click OK.

3.1.13.2 Authorize Card

After you add card info, you shall authorize this card.

Step 1. Click Batch Authorize. See Figure 2-39.

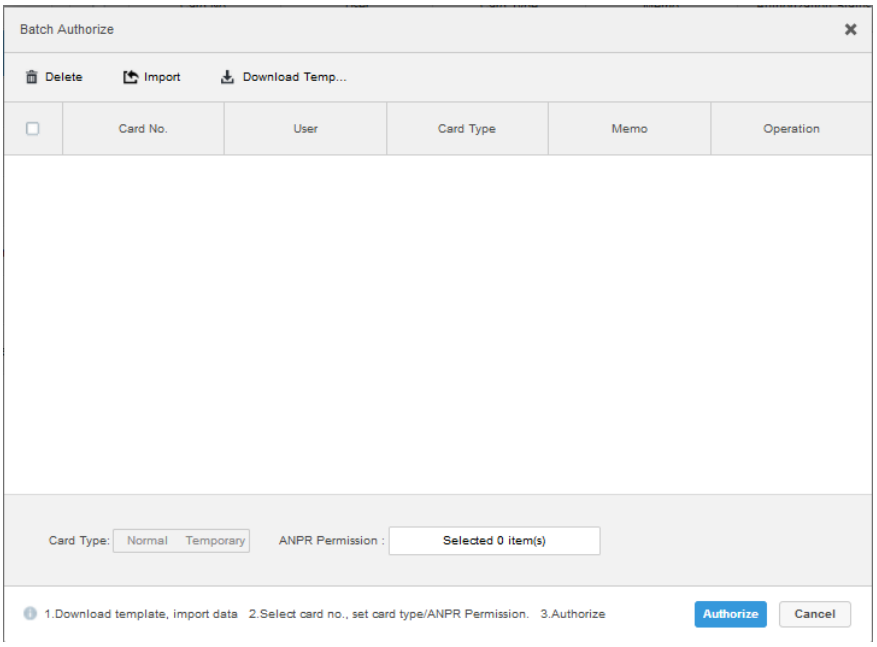


Figure 2-39

Step 2. Click Download Template to download authorize template.

Step 3. Click Import, fill in template import to system.

Step 4. Select one card or more cards, set card type. You can select normal card or temporary card.

- Normal card: can enter the parking lot for multiple times.
- Temporary card: enter once.

Step 5. Click ANPR Permission box, select ANPR device.

Step 6. Click Authorize.

You can modify and delete owner info. You also can fill in owner template, import and export info into/from system.

- Select ☐, click Delete, to delete selected card. Select ☐ in the first row, you can select all cards.
- Select one or more cards, click Re-Authorize to re-authorize card.
- In Card No./User, enter card no. or user info, click Export to export info.
- Click ✎ to change card info. Refer to steps to add card.
- Click ✖ to delete card.

3.1.14 Map Guide

See Ch 2.4.4.

3.1.15 Fee Rule Management

See Ch 2.4.3.2.

3.1.16 Coupon Management

A user can add coupon type and amount of corresponding coupon.

Select Parking Lot>Coupon Management. See Figure .

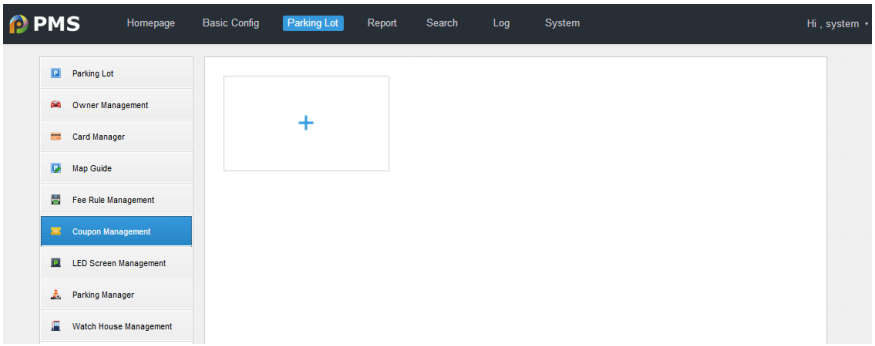


Figure 2-56

To add coupon.

Step 1. Click +. See Figure

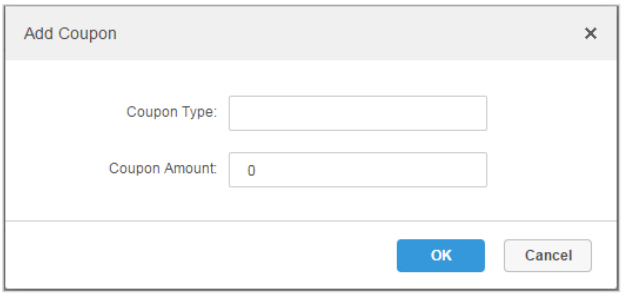


Figure 2-57

Step 2. Enter coupon type.

Step 3. Enter coupon amount.

Step 4. Click OK.

3.1.17 LED Management

Bind the parking space group to the LED screen to ensure that the LED screen can obtain and display the parking space data.

3.1.17.1 Remaining Parking LED Screen

It is used to set LED screen which shows free parking in the parking lot.

Step 1. Select Parking Lot>LED Management. See Figure 2-40.

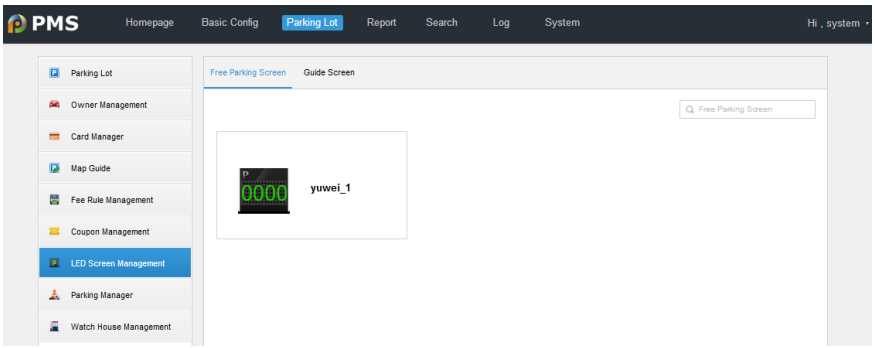


Figure 2-40

Step 2. Click LED screen.

Enter LED setup page.

Step 3. Select free parking control mode.

Note:

Click Return to exit setup.

- ANPR device.
  1. Click **Entrance/Exit Device**.

     The system displays the config interface of Entrance/Exit Device for controlling the remaining parking. See Figure 2-41.

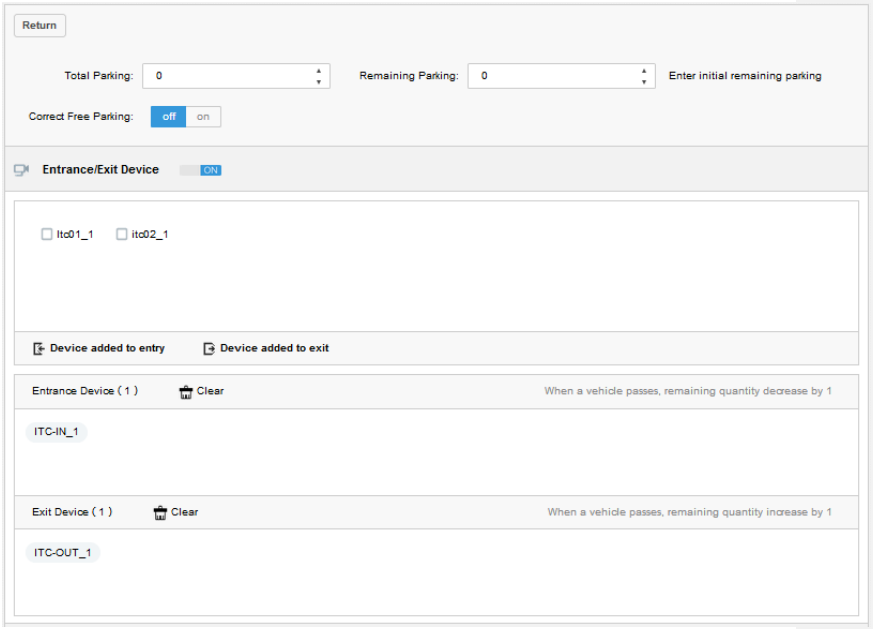


Figure 2-41

2. Click next to **Entrance/Exit Device**.

   The icon changes to , which enables Entrance/Exit Device to control the remaining parking.

3. Set the number of parking spaces.
   - ◇ **Total Parking**: Set as the total number of parking spaces monitored by Remaining Parking Screen.
   - ◇ **Remaining Parking**: Set as the number of the remaining parking spaces monitored by Remaining Parking Screen at the config.
   - ◇ **Correct Free Parking**: There might be errors in the remaining parking data of Remaining Parking Screen after long-time operation. Turn on **Correct Free Parking** to set the remaining parking, and restore the remaining parking at the set correction time.
4. Select **Entrance Device** and **Exit Device** according to the actual situation.
5. Click **Save** on the bottom right of the interface to complete config.

- Parking detector

1. Click **Parking Detector**.
   The system displays the config interface of Parking Detector for controlling the remaining parking. See Figure 2-42.

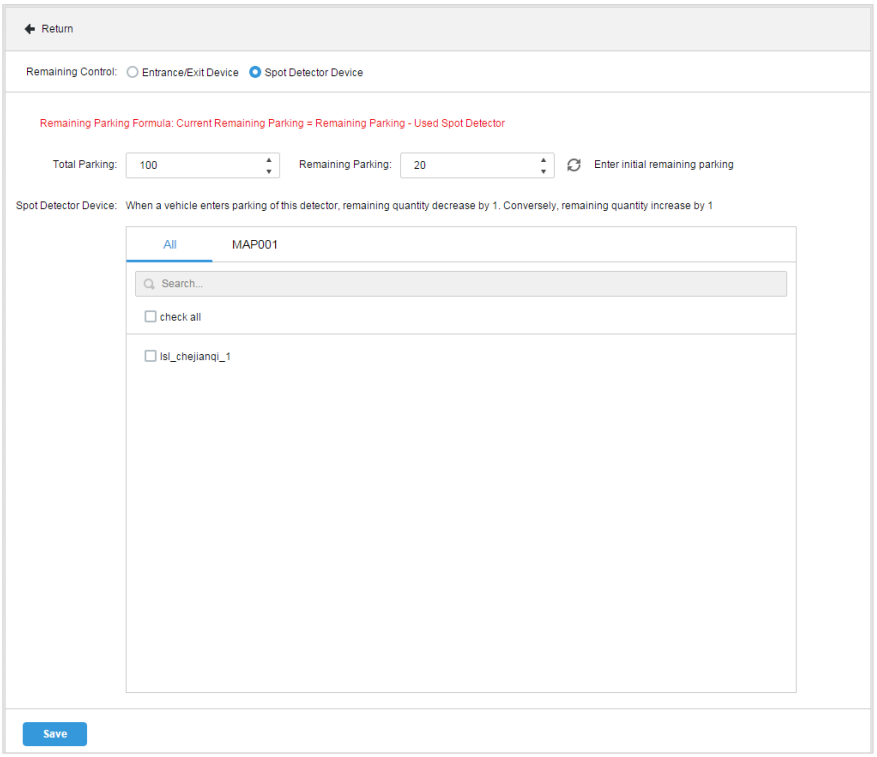


Figure 2-42

2. Click OFF next to **Parking Detector**.

   The icon changes to ON, which enables Parking Detector to control the remaining parking.

3. Set the number of parking spaces.
   - ◇ **Total Parking**: Set as the total number of parking spaces monitored by Remaining Parking Screen.
   - ◇ **Remaining Parking**: Set as the number of the remaining parking spaces monitored by Remaining Parking Screen at the config.

   说明

   Click to refresh the initial remaining parking.

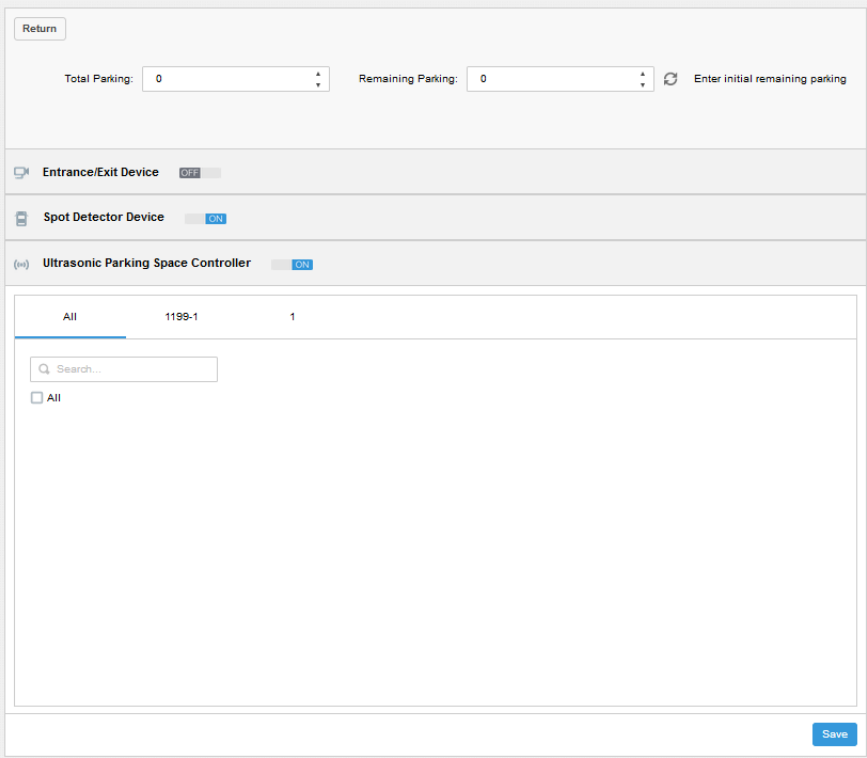
4. Select the area and parking space.
5. Click **Save** on the bottom right of the interface to complete config.

- Ultrasonic Parking Space Controller

1. Click **Ultrasonic Parking Space Controller**.

   The system displays the config interface of Ultrasonic Parking Space Controller for controlling the remaining parking. See Figure 3-60.

Chart 1-4 Remaining parking control mode - Ultrasonic Parking Space Detector



2. Click OFF next to **Ultrasonic Parking Space Detector**.

   The icon changes to ON, which enables Ultrasonic Parking Space Detector to control the remaining parking.

3. Set the number of parking spaces.
   - ◇ **Total Parking**: Set as the total number of parking spaces monitored by Remaining Parking Screen.
   - ◇ **Remaining Parking**: Set as the number of the remaining parking spaces monitored by Remaining Parking Screen at the config.

   说明

   Click to refresh the initial remaining parking.

4. Select the area and parking space.
5. Click **Save** on the bottom right of the interface to complete config.

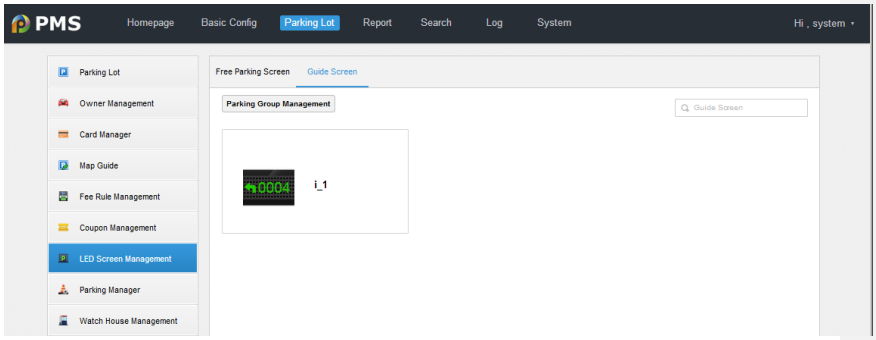
3.1.17.2 Guide Screen

Parking spaces guided by Guide Screen.

Step 1 Select **Parking Lot** > **LED Screen Management** > **Guide Screen**.

The system displays the **Guide Screen** interface. See 0.

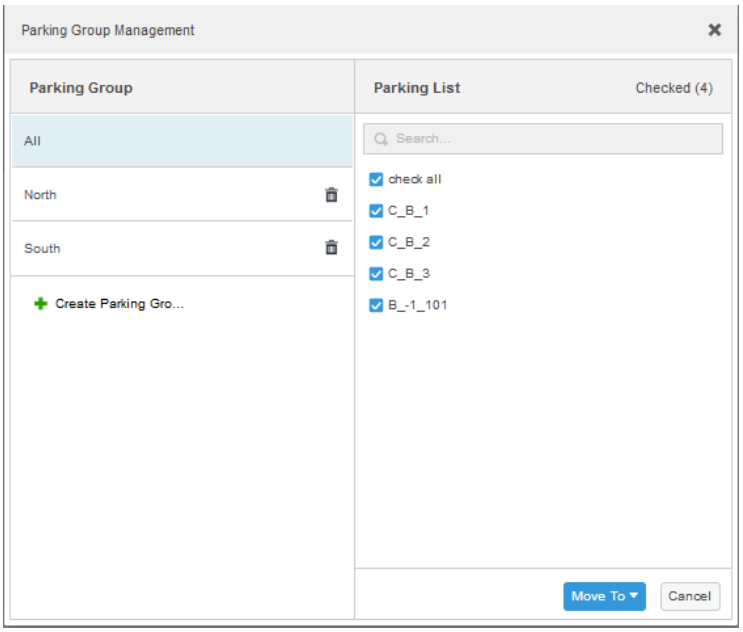
Chart 1-5 Guide Screen



Step 2 Manage the parking spaces in groups.

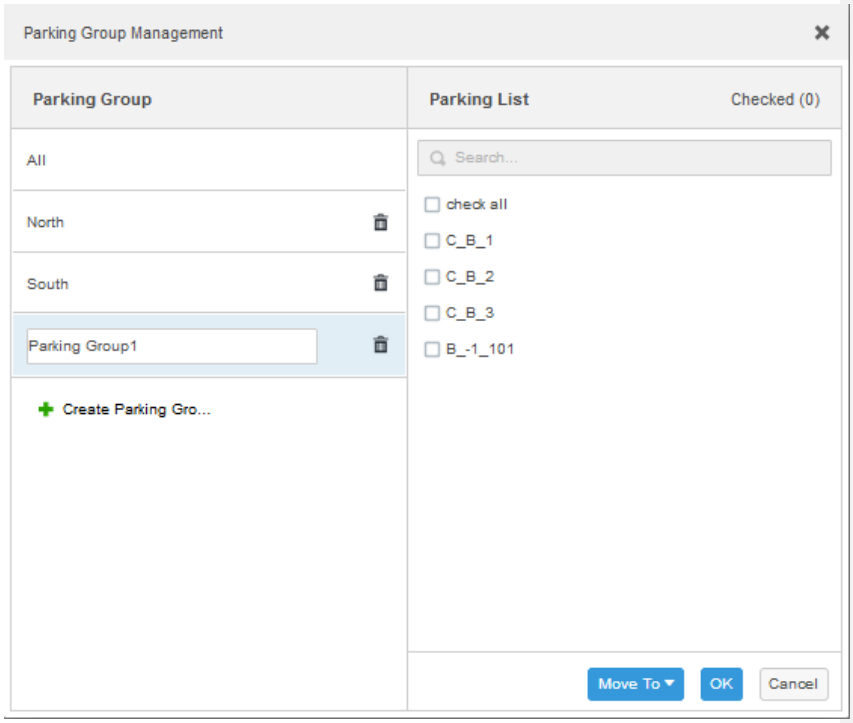
1. Click **Parking Group Management**.
   The system displays the **Parking Group Management** interface. See Figure 3-62.

   Chart 1-6 Parking Group Management.



2. Click **Create Parking Gro…**
   The system displays the newly created parking group. See Figure 3-63.

Figure 1-7 New Parking Group



3. Move mouse to the new parking group, and click to modify **Group Name**.
4. Check one or more parking spaces in **Parking List**.

   说明

   Check one or more parking spaces, click **Move To**, then check a parking group in the pop-up box, to quickly change the parking spaces in the parking group to the checked parking groups.
5. Click **OK** to complete config.

Step 3 Bind Parking Group to Guide Screen.

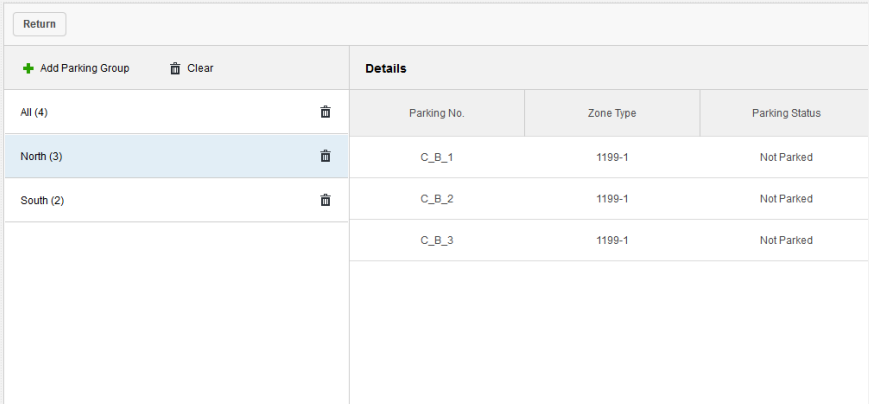
6. Click **Guide Screen**.

   The system displays the Guide Screen Config Interface. See Figure 3-64.

   说明

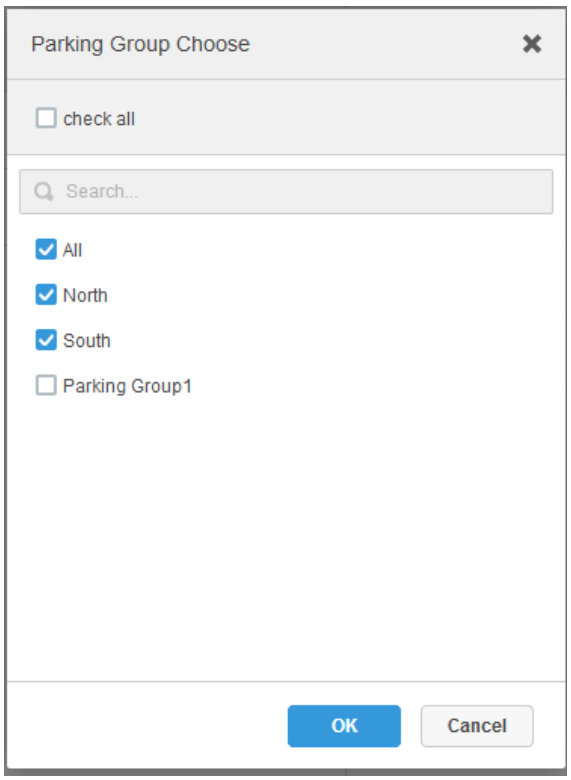
   Click **Return** to exit config.

Figure 1-8 Guide Screen Config Interface



7. Click **Add Parking Group**.
   The system displays the **Parking Group Choose** interface. See Figure 3-65.

   Figure 1-9 Bind Parking Group



8. Check the parking groups to be bound. Click **OK** to complete config.

3.1.18 Parking Manager

Manage the relations between parking spaces and vehicles, namely bind or unbind parking spaces and vehicles.

When you add map in this parking lot, you can set group of vehicle. Select Parking Lot>Parking Manager. See Figure 2-43.

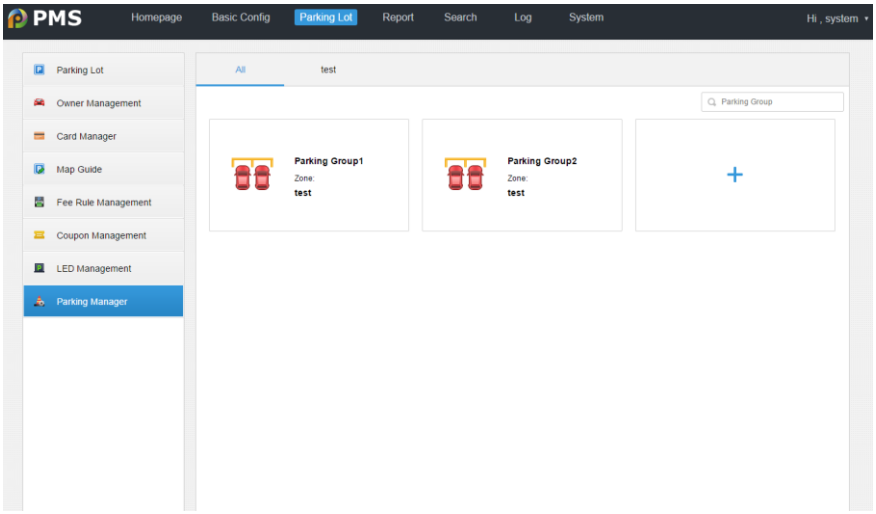


Figure 2-43

- All parking log names are shown below the menu. You can switch parking lot below this menu and view parking group of each parking lot.
- Click ▼ to show all parking list.
- In Parking Group enter parking group name, to quickly locate parking group.

3.1.18.1 Add Parking Group

Step 1. Click +.

See Figure 2-44.

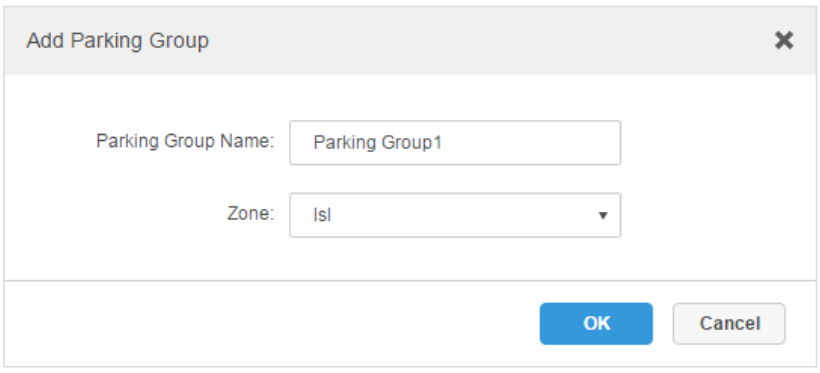


Figure 2-44

Step 2. Set parking group name.

Step 3. Click ▼ to select parking area of this group.

Step 4. Click OK.

System auto pops up bind parking group page, please see Ch 2.6.8.2.

3.1.18.2 Bind Parking Group

Step 1. Click ✎ at the upper right corner of parking group icon. See Figure 2-45.

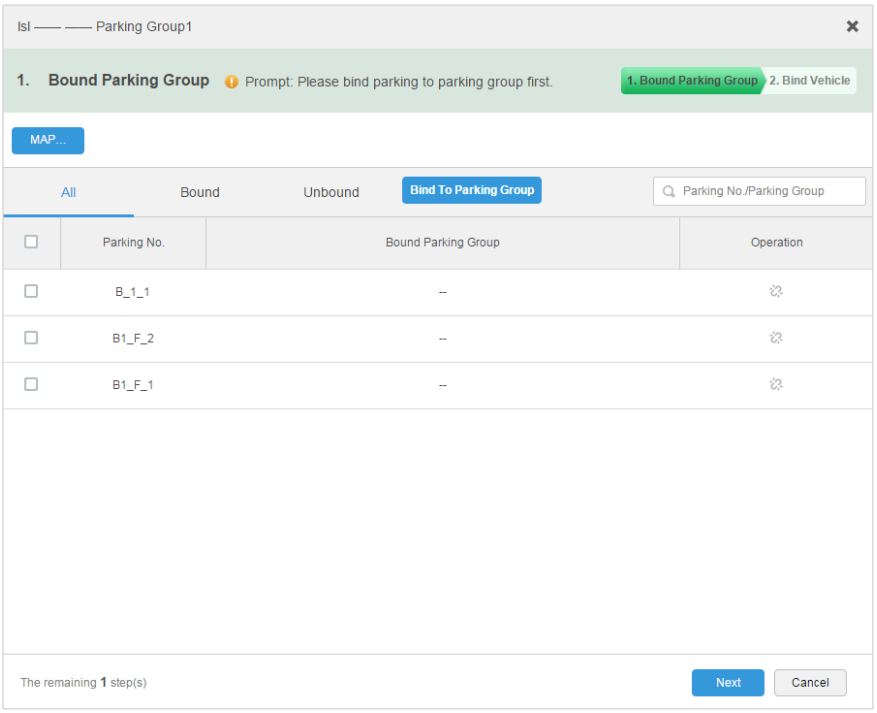


Figure 2-45

Step 2. Select parking and click Bind To Parking Group.

Note:

- Click 🔗 to unbind relationship.
- In Parking No./Parking Group, enter parking or group name to quickly position parking or parking group.
- Click Bound or Unbound above parking name, to quickly view bound and unbound parking.

Step 3. Click Next. See Figure 2-46.

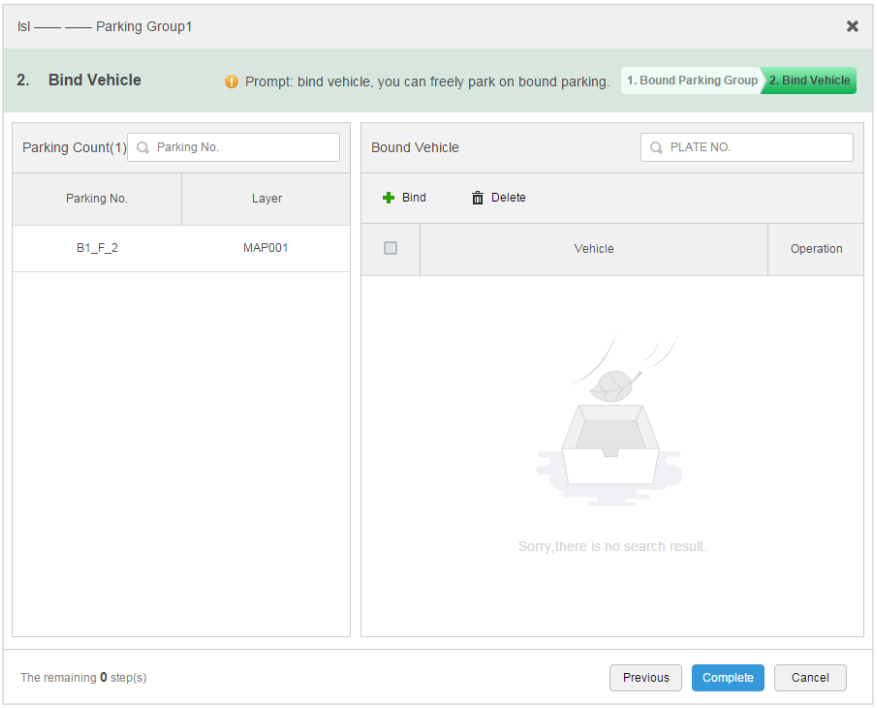


Figure 2-46

Step 4. Click . See Figure 2-47.

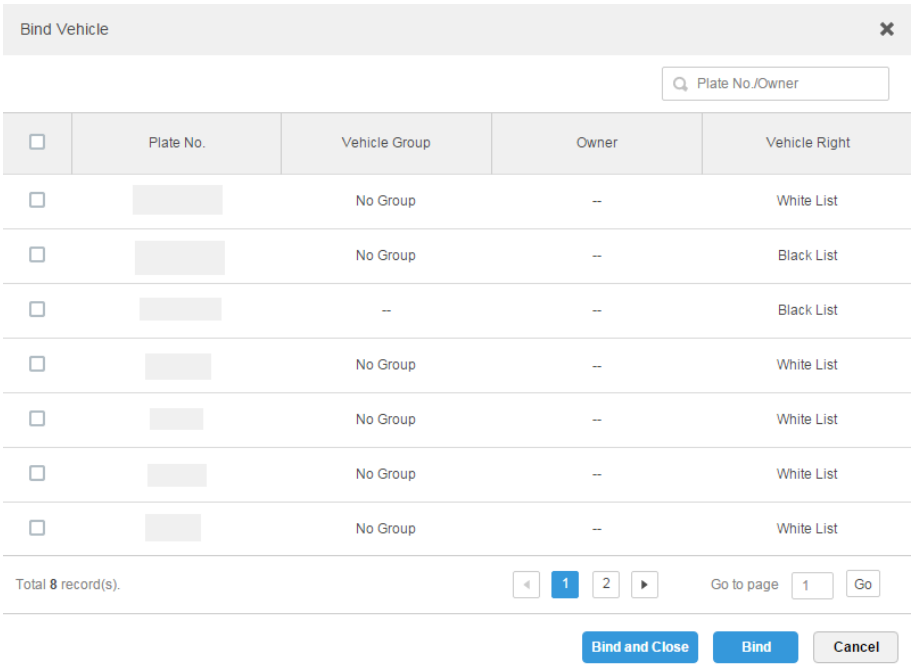


Figure 2-47

Step 5. Select vehicle, and click Bind or Bind and Close.

Note:

Select vehicle and click Delete next to this vehicle to delete it.

Step 6. Click Complete.

3.1.19 **Booth Management**

Set Watch House for the parking lot.

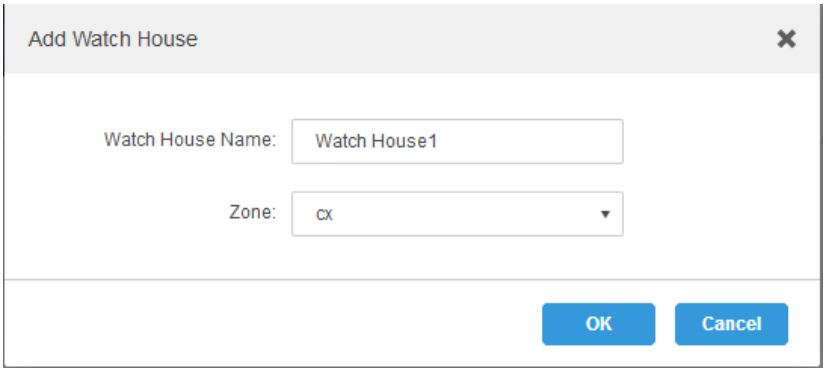
Step 1 Click +.

Pop up **Add Watch House** dialog box.

Step 2 Enter Watch House Name, select the parking lot where the watch house is located, and click **OK**. See Figure 3-71.

Add Watch House is completed.

Chart 1-10 Add Watch House



Report Statistics

The system supports statistics of fee details, coupon details and shift.

3.1.20 Charge Details

Select Report>Charge Detail. See Figure 2-48.

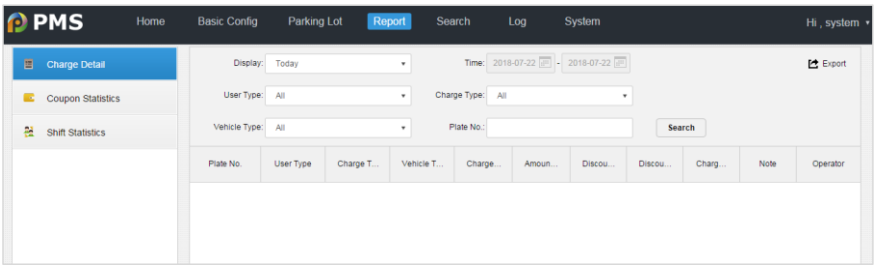


Figure 2-48

- It supports to search fee details of a certain period (day/week/month/year/custom).
- It supports search by period, user type, fee type, vehicle type, plate no.
- Charge details include: plate no., user type, fee type, vehicle type, amount charged, amount paid, coupon amount, coupon type and etc.
- Result will be exported in Excel file.

3.1.21 Coupon Statistics

Select Report>Coupon Statistics, see Figure 2-49.

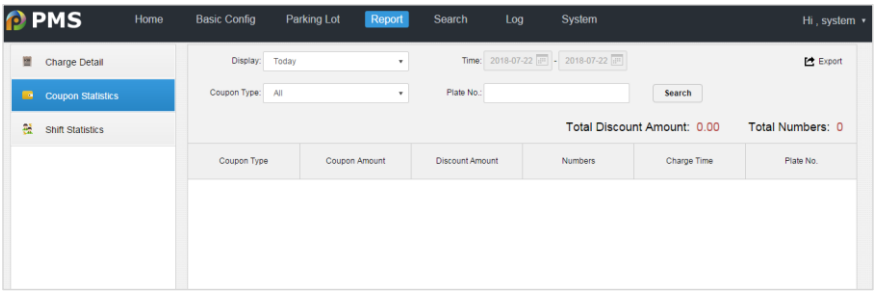


Figure 2-49

- It supports to search coupon of a certain period (day/week/month/year/custom).
- It supports search by period, coupon type, plate no.
- Coupon statistics includes: coupon type, coupon amount, discount amount, time and etc.
- Result will be exported in Excel file.

3.1.22 Shift Statistics

Select Report>Shift Statistics, see Figure 2-50.

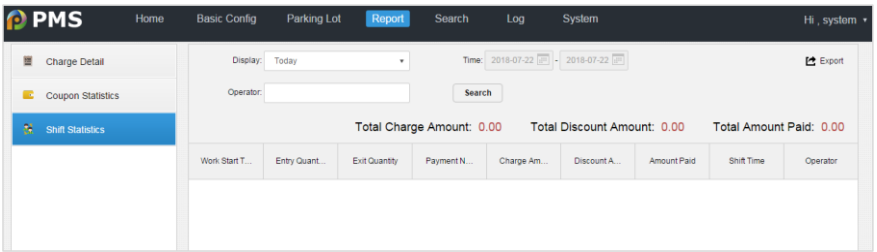


Figure 2-50

- It supports to search shift of a certain period (day/week/month/year/custom).
- It supports search by period and operator.
- Shift statistics include: sign in time, incoming vehicle, outgoing vehicle, fee times, amount charged, discount amount, amount paid and etc.
- Result will be exported in Excel file.

Info Search

Info search includes vehicle entrance/exit, existing vehicle, pass records, vehicle chassis record and etc.

3.1.23 Vehicle Enter/Exit

Vehicle enter/exit can search vehicle by entrance channel, exit channel, plate no., start time and etc. After being filtered, you can export Excel file.

Select Search>Vehicle Enter/Exit, see Figure 2-51.

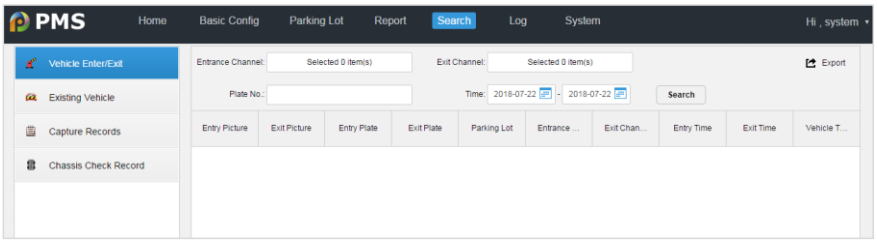
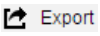


Figure 2-51

- Click to select time.
- Click Search to search vehicle enter/exit result.
- Click  to export result of search.

3.1.24 Existing Vehicle

In existing vehicle record, you can filter by vehicle plate, entry time. You also can export record in Excel. For some abnormal vehicle, you can see whether it exists or is forced to exit parking.
Select Search>Existing Vehicle. See Figure 2-.

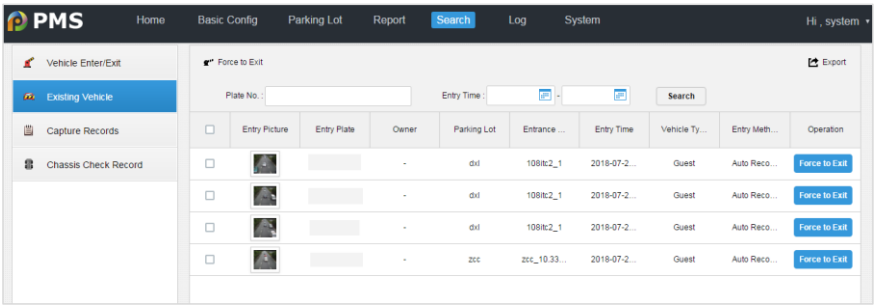
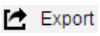


Figure 2-70

- Click to select time.
- Click Search to search existing vehicle info.
- Click  to export result of search.
- Click to force the vehicle to exit this parking.

3.1.25 Capture Records

Capture Records searches vehicle info passing a specific ANPR within certain period. You can filter record by ANPR channel, direction, plate, time and you can export in Excel.
Select Search>Capture Records.
See Figure 2-52.

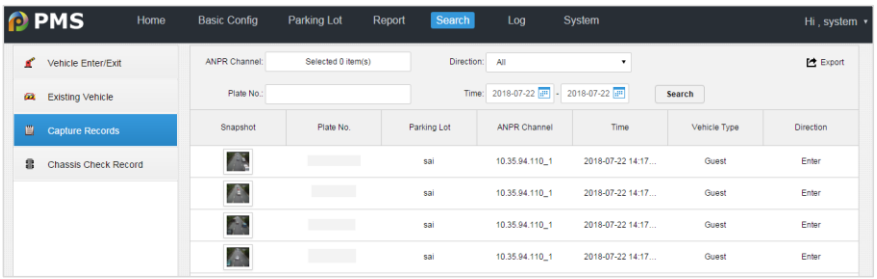


Figure 2-52

- Click ANPR channel, select ANPR device in this parking.
- Click ▼, select direction of vehicle, and select all, entry or exit.
- In plate no. field, you can enter plate no.
- Click to select time.
- Click Search to search capture vehicle info.
- Click Export to export result of search.

3.1.26 Chassis Check Record

Chassis check record mainly scans vehicle chassis looking for hidden dangerous goods. It supports check of vehicle chassis channel, driving direction, plate no., and time. Result will be exported in Excel file.

Select Search>Chassis Check Record.

See Figure 2-53.

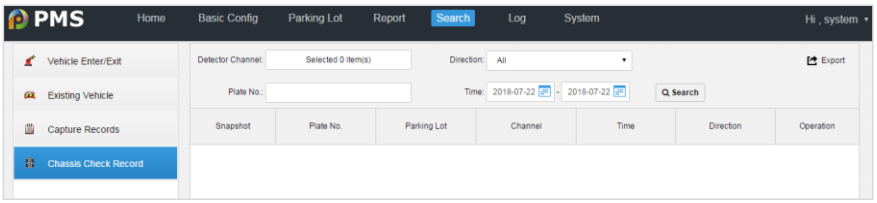


Figure 2-53

- Click chassis detection channel, select chassis detection channel device.
- Click ▼, select direction of vehicle, and select all, entry or exit.
- In plate no. field, you can enter plate no.
- Click to select time.
- Click Search to search result of chassis check detection.
- Click Export to export result of search.
- Click Picture, to download picture collected.

Log Manager

Log Manager includes device status log, alarm log, management log, system log, parking alarm log and etc.

3.1.27 Device Log

Device Log mainly record online/offline status of different devices. Select Log>Device Log, see Figure 2-54.

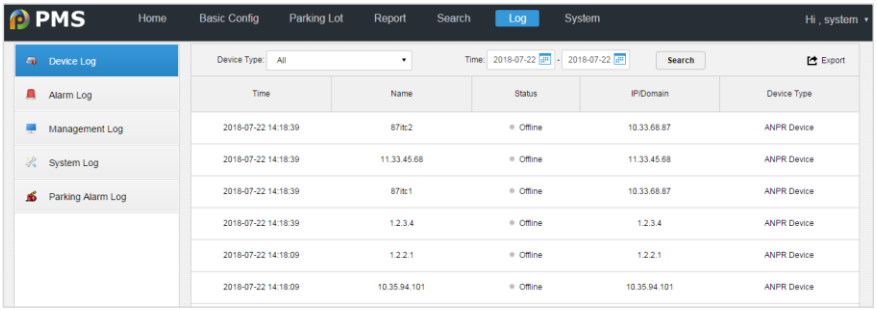


Figure 2-54

- Click ▼, select device type.
- Click to select time.
- Click Search to search device status.
- Click Export to export result of search.

3.1.28 Alarm Log

Alarm Log mainly record alarm history. Select Log>Alarm Log, see Figure 2-55.

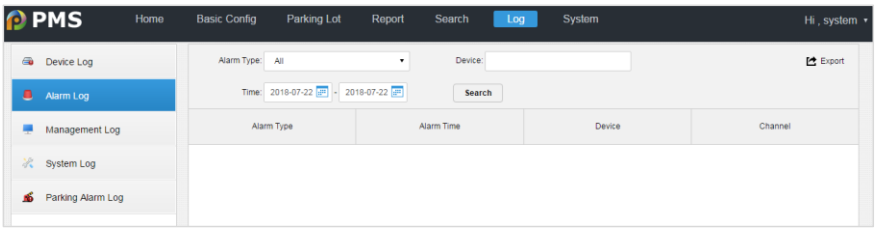


Figure 2-55

3.1.29 Management Log

Management Log mainly record operation by each user. Select Log>Management Log, see Figure 2-56.

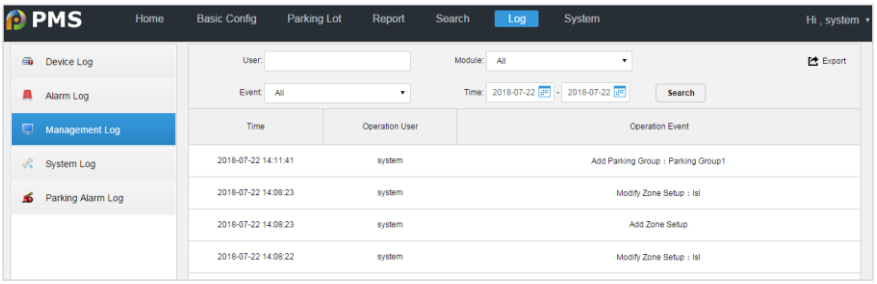


Figure 2-56

- Click ▼ next to module, select functional module.
- Click ▼ next to time, select time type.
- Click to select time.
- Click Search to search device status.
- Click Export to export result of search.

3.1.30 System Log

System log mainly record system server event. Select Log>System Log, see Figure 2-57.

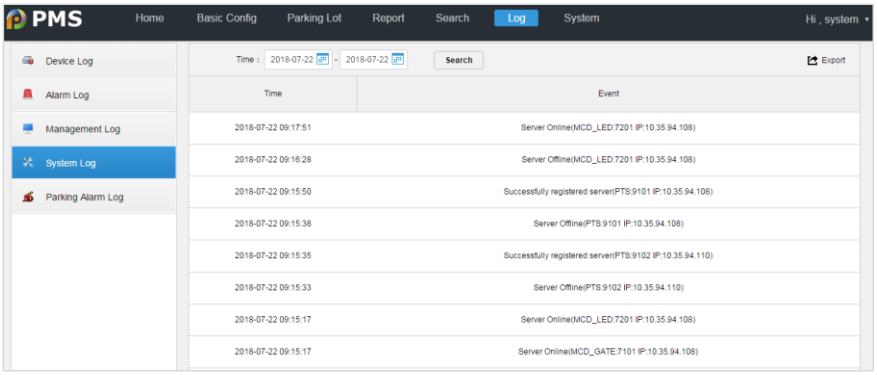


Figure 2-57

- Click to select time.
- Click Search to search device status.
- Click Export to export result of search.

3.1.31 Parking Alarm Log

Parking alarm log records timeout alarm record in different parking. Select Log>Parking Alarm Log, see Figure 2-58.

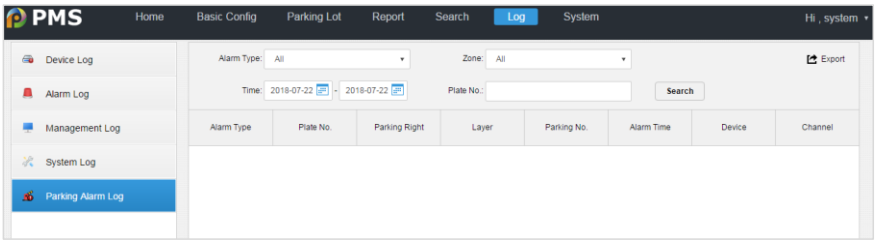


Figure 2-58

- Click ▼ next to alarm type, select alarm type for search.
- Click ▼ next to time, select parking.
- Click to select time.
- Click Search to search alarm log.
- Click Export to export result of search.

System Config

3.1.32 System Parameter

It is used to view software version and server time and set time sync interval. Select System Config>System Parameter. See Figure 2-59.

Figure 2-59

Select Sync Setup, enter sync interval, unit is min.

3.1.33 Message Storage Time

Set log, statistical report, parking info and snapshot storage time on server. Select System Config>Message Storage. See Figure 2-60.

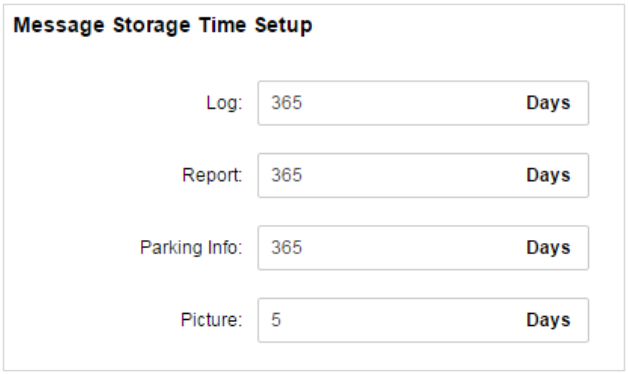


Figure 2-60

In time field, enter storage time value, unit is days.

3.1.34 HTTPS Config

Enable system HTTPS protocol, to ensure system security. Select System Config>HTTPS, see Figure 2-.

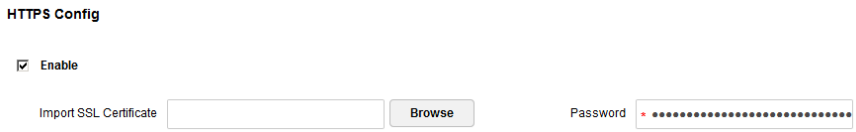


Figure 2-80

Select Enable, click Browse, and select SSL certificate, enter password.

3.1.35 Map Parameter

Set refresh time of free parking on map. Select System Config>Map Parameter, see Figure 2-61.

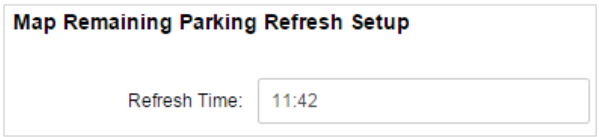


Figure 2-61

In refresh time field, enter time. Time is 24-hour standard.

3.1.36 Guide Screen Threshold

Set threshold value of guide screen. When free parking is lower then this threshold value, forbid entry of vehicle. Select System>Remaining Parking Setup. See Figure 2-62.

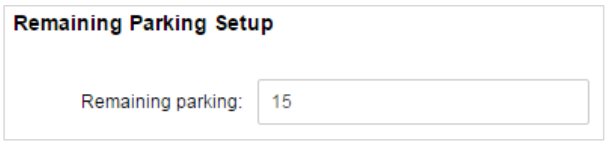


Figure 2-62

In remaining parking field, enter value.

3.1.37 Record Time

Set system record playback time. Select System>Record Time. See Figure 2-63.

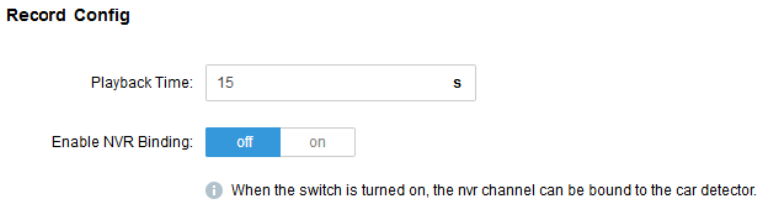


Figure 2-63

Enter playback time in record playback time. Unit is sec.

3.1.38 Vehicle Info Statistics

Set source of vehicle info statistics. Select System>Vehicle Info Statistics, see Figure 2-64.

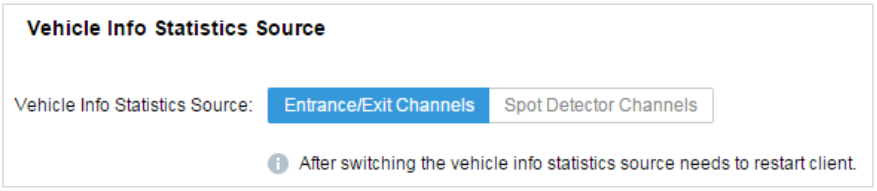


Figure 2-64

You can select ANPR channel or vehicle detector as source of info.

Note:

After you switch source of vehicle info statistics, you shall reboot the client.

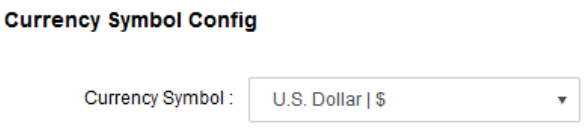
3.1.39 Currency Symbol Config

Configure the system to display the Currency Symbol.

Step 3 Select **System Config** > **Currency Config**.

The system displays the Currency Symbol Config interface. See Figure 3-91.

Figure 1-11 Currency Symbol Config



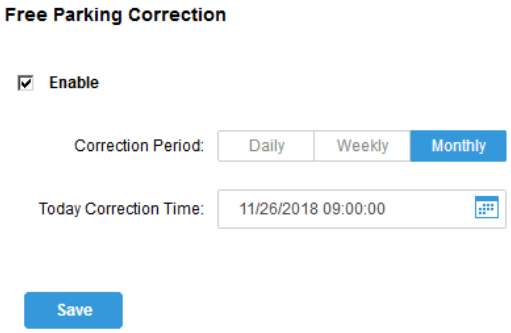
Step 4 Click ▼ to select a currency symbol.
If the currency symbol is not in the drop-down list, click ✚ to add the currency symbol.

3.1.40 Free Parking Correction

Set the correction period and time. At the set time of each period, the system automatically gives the remaining parking data.

Step 5 Select **System Config** > **Free Parking Correction**.
The system displays the Free Parking Correction config interface. See Figure 3-92.

Figure 1-12 Free Parking Correction Config



Step 6 Select **Correction Period** and set **Today Correction Time**.
Step 7 Click **Save** to complete config.

Install and Uninstall Client

4.1.1 Install Client

PMS client can be downloaded from system manager web, see Figure 3-1.

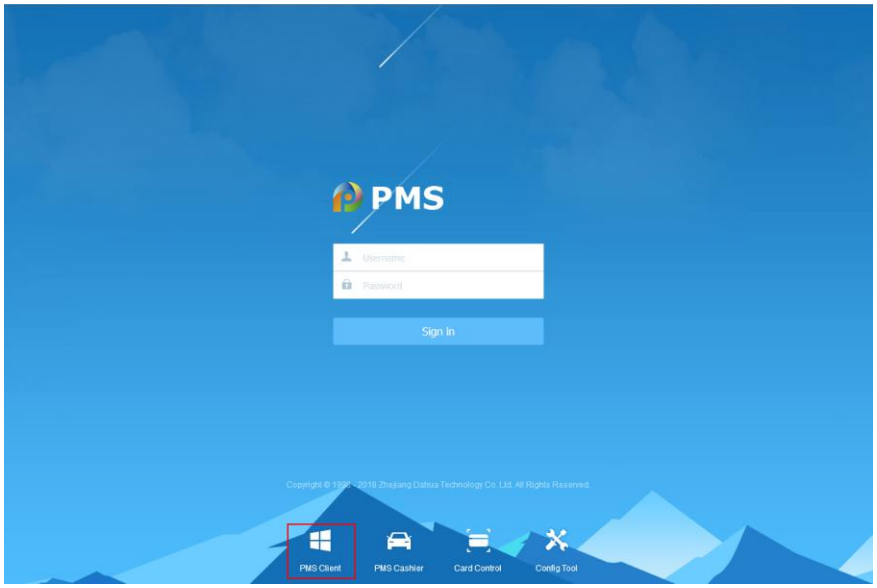


Figure 3-1

Step 1. Click

to download C/S client.

Step 2. Click Save, and save PMS client to PC.

Step 3. Double click “General_PMS_Professional_Control_Client_Eng_V1.01.000.exe”. The system shows quick installation interface, see Figure 3-2.

In the steps, the name of client installation package is only for reference. There might be differences between names of different versions of installation packages.

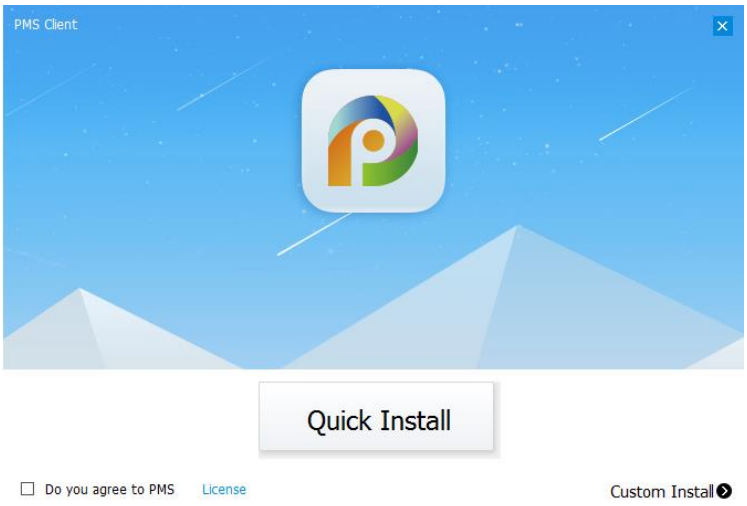


Figure 3-2

Step 4. Click Quick Install, or click Custom Install, select path to install.

See Figure 3-3.

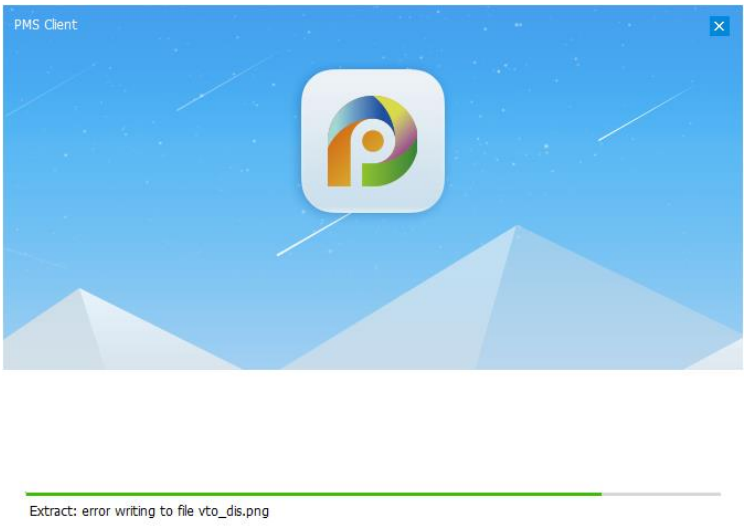


Figure 3-3

See Figure 3-4.

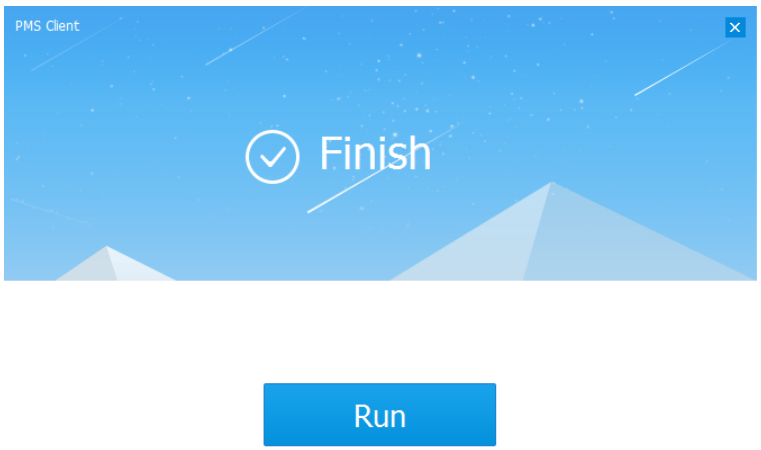


Figure 3-4

4.1.2 **Uninstall Client**

In Windows start menu, click All Programs, find PMS Client folder, click Uninstall PMS Client. See Figure 3-5.

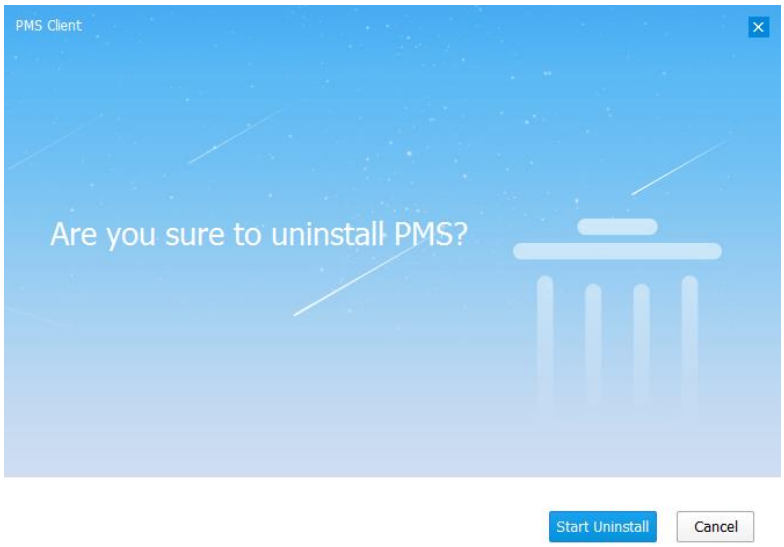


Figure 3-5

Click Start Uninstall, to uninstall PMS client.

Function

4.1.3 **Login Client**

See Figure 3-6.

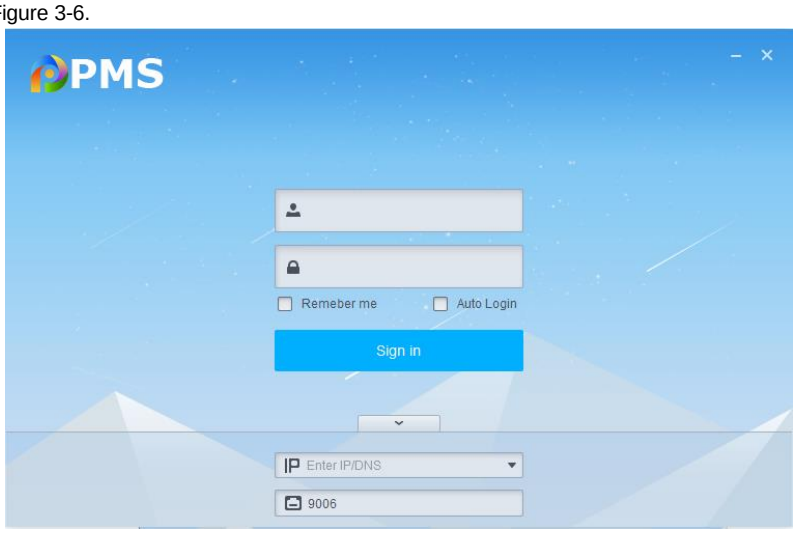


Figure 3-6

Step 1. Enter username and password.

The user info manager adds and manages the username and password on the server side.

Step 2. Click button, enter server IP and port.

Server IP is PMS manager web IP address, port is 9006 by default.

Step 3. Click Login. See Figure 3-7.

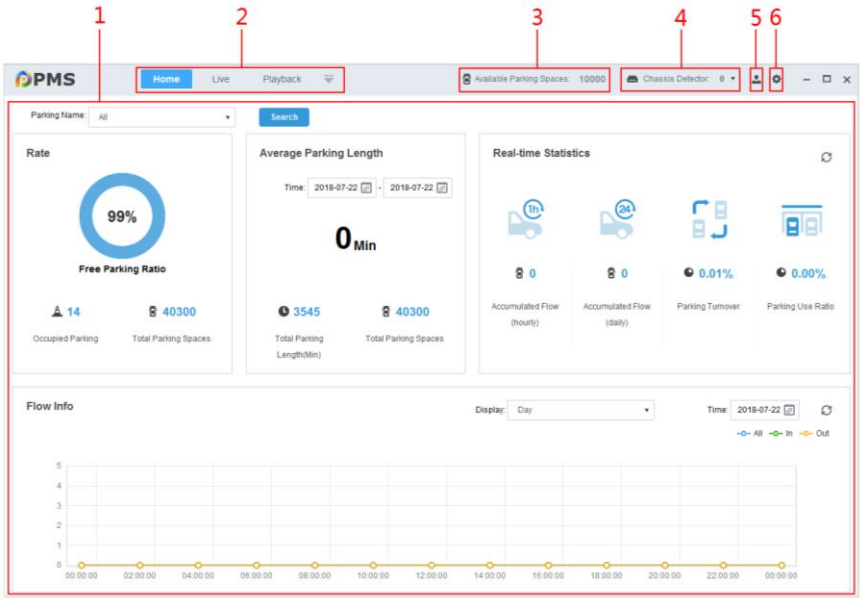


Figure 3-7

No.	Note
1	Client homepage. See Ch 2.2.
2	Client function bar. Live record, playback, download device snapshot video, view event, set map, view vehicle message and chassis scan info.
3	View free parking info.
4	Set chassis device. Click next to chassis detector，pop up chassis detector setup page. In this page, select chassis detector, click Apply, and click OK.
5	Click , to logout user and get help document.
6	Click , to set parking lot info and client basic info. ● Select “entrance/exit”，and in pop-up page select parking where the booth located. Click Apply or OK, confirm user switch. You shall log in again. ● Select“Basic Config”，set client language and file storage path.

Chart 3-1

4.1.4 **Live Preview**

Select Live tab.

Double click device channel at left, or you can drag channel into video window, see Figure 3-8.

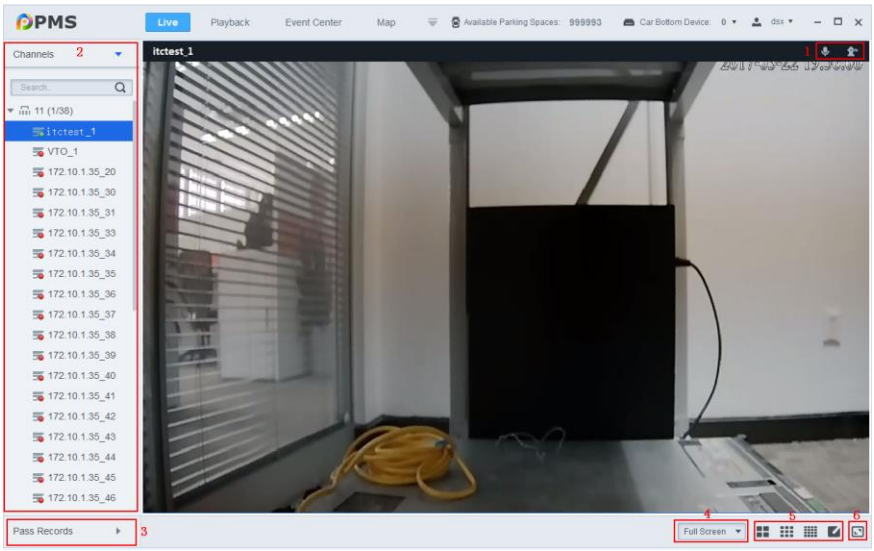


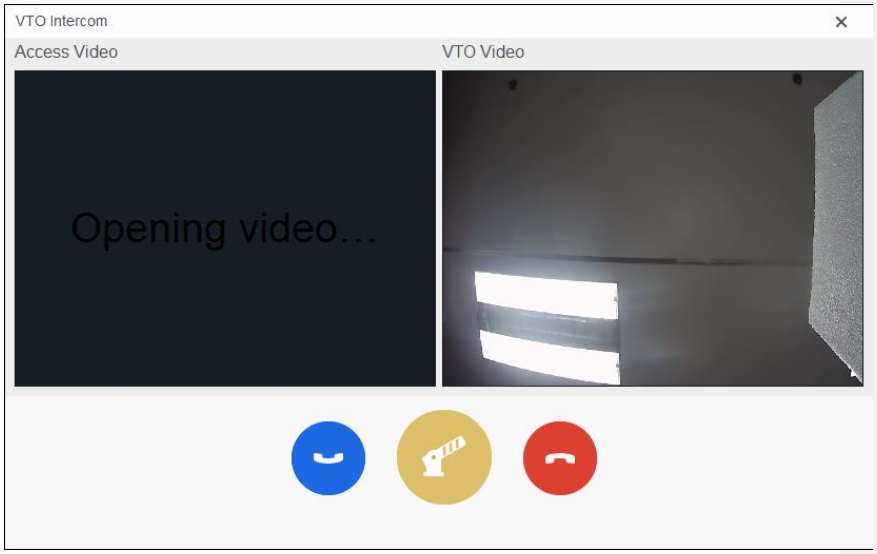
Figure 3-8

No.	Note
1	: VTO remote talk, this function is for video channel bound to VTO device only. : Remotely open barrier, when the barrier is bound, you can click it to open barrier.
2	Device tree channel list: means video channel with abnormal status. means status is normal but not play video channel. means playing video channel.
3	Pass records: entry/exit record. You can compare vehicle picture and plate, as well as pass video.
4	Aspect ratio: Select aspect ratio of video window.
5	Window split: Used to set window split. You can directly select 4, 9, 16 modes, as well as click to customize split.
6	Full screen: Switch window to full screen, if you want to exit, you can click ESC.

Chart 3-2

If the device initiates a call, the system will display the prompt box. See the following figure. Support viewing videos, answering the call, opening the barrier or hanging up the call. After the barrier is open, enter the record or cancel the entry according to system prompts.

Figure 1-13 Preview



4.1.5 **Playback**

Select Playback tab.

Check video channel in device tree on the left, set search time, stream, click Search. See Figure 3-9.

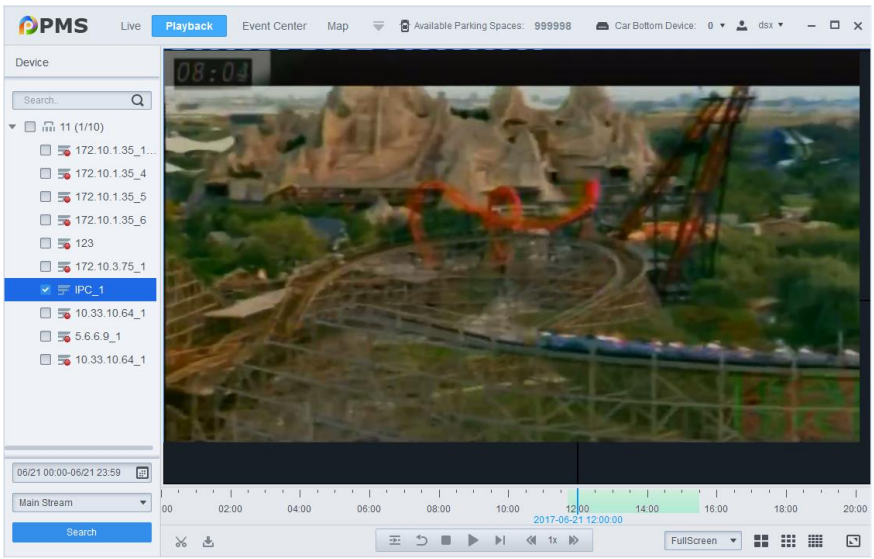


Figure 3-9

Parameter	Note	Parameter	Note
	Cut record		Download record
	Sync play		Playback
	Stop		Next frame
	Play/pause		Play by 2x, 4x, 8x
	Play by 1/2x, 1/4x, 1/8x		

Chart 3-3

4.1.6 **Download Center**

Select Download Center tab, see Figure 3-10. In device tree on the left, select device channel, click . Select time, and click Search to view device records. Select device record, you can download record. Click Stop All to stop all download tasks. Click Delete All to delete all download tasks.

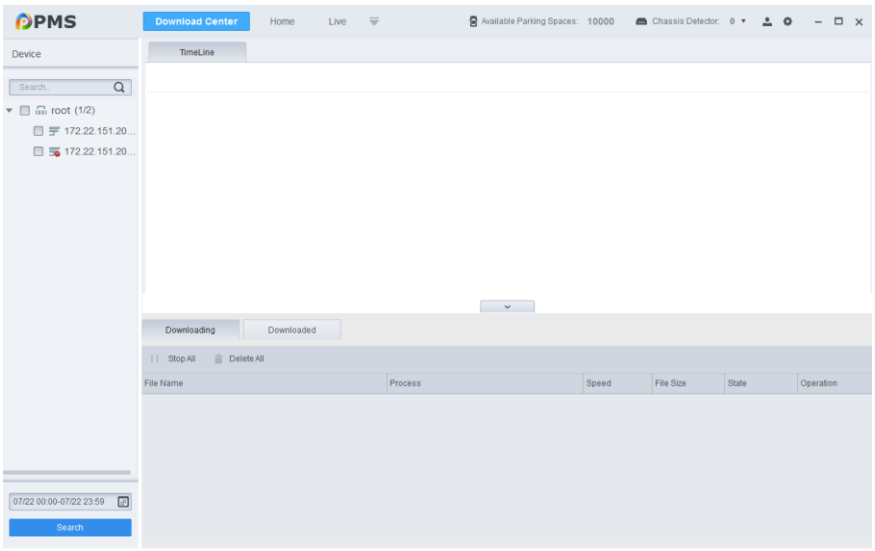


Figure 3-10

4.1.7 **Event Center**

Step 1. Click . Select Event Center tab.
Step 2. Select alarm type, video channel, search date, click Search. See Figure 3-11.

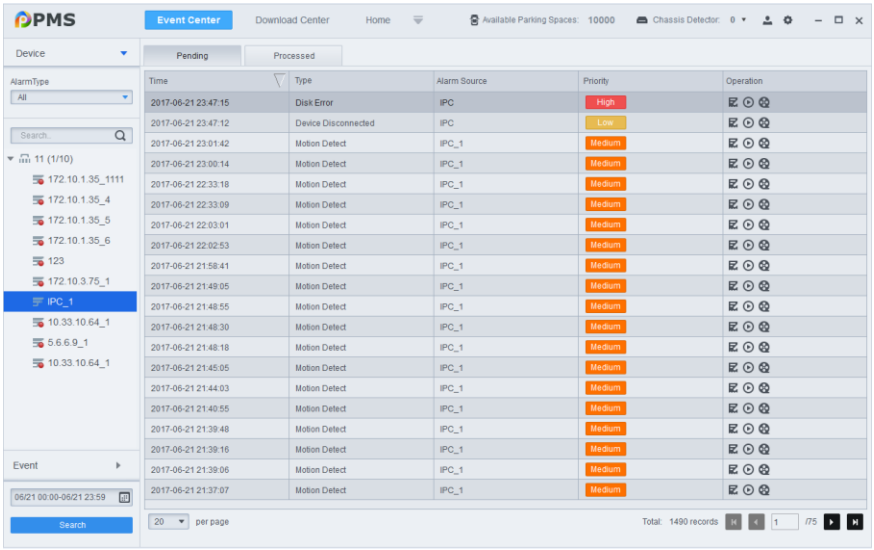


Figure 3-11

Step 3. You can process alarm event, play channel live video and playback video.

- Click to process alarm event.
- Click to play live channel, see Figure 3-12.

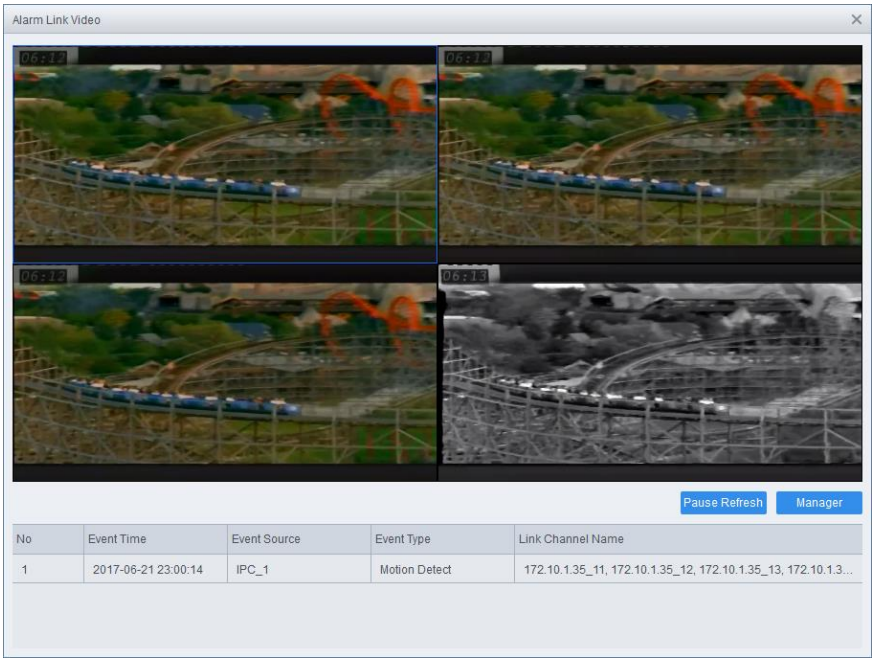


Figure 3-12

- Click to link alarm playback, see Figure 3-13.

  Processed alarm events are shown under Processed tab, you can play live video of channel and link to playback.

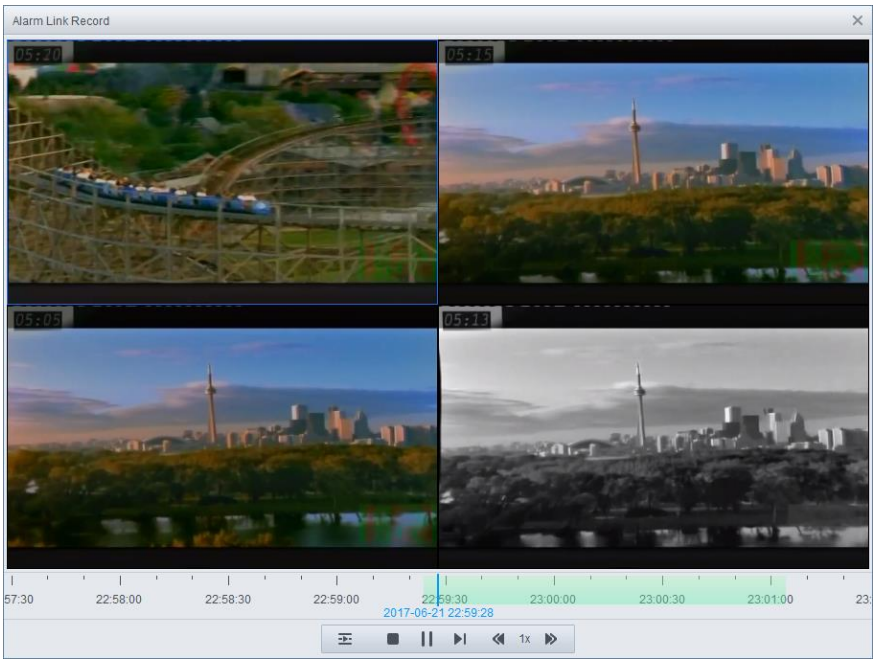


Figure 3-13

Step 4. Click Event in device tree on the left, and in alarm type dropdown list, select timeout alarm and set search time.

Step 5. Click Search.

You can view entry time, parking duration, plate no., owner and etc. and you can process alarm, view snapshot.

4.1.8 **Map**

Step 1. Click . Select Map tab. See Figure 3-14.

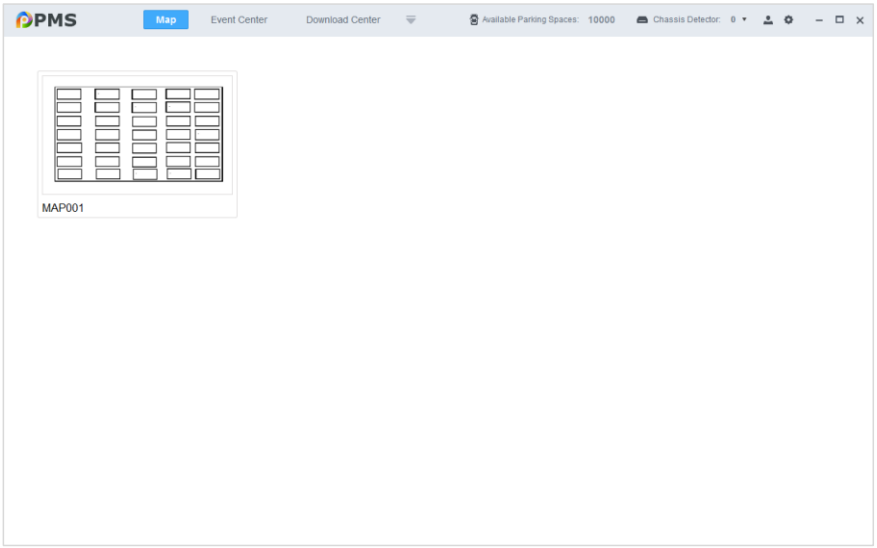


Figure 3-14

Step 2. Click any map, see Figure 3-15.

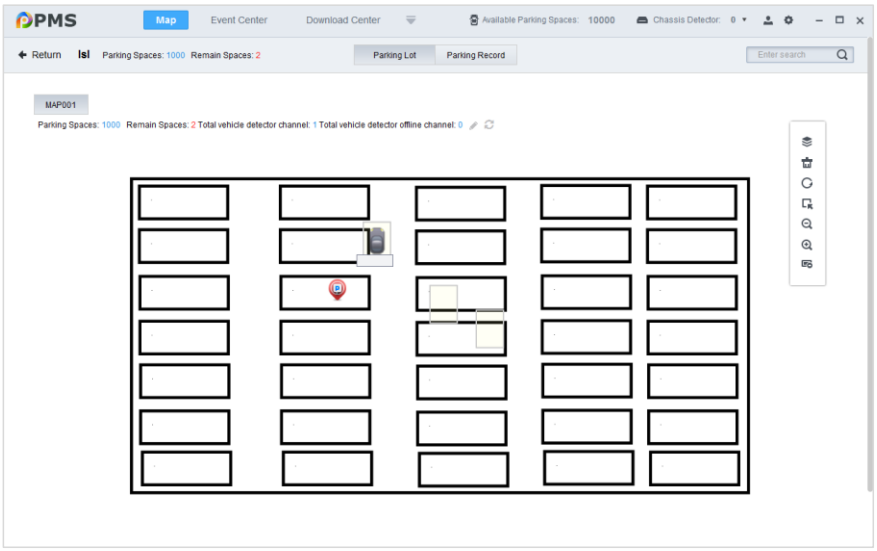


Figure 3-15

Parking interface shows corresponding parking, total parking and remaining parking.

Parameter	Note	Parameter	Note
	Layer		Pane
	Clear map operation		Zoon out

Parameter	Note	Parameter	Note
	Reset		Zoom in
	Pane select		Whether the map displays the plate No. recognized by the parking detector or not.

Chart 3-4

Step 3. Click device channel in map to show channel name and IP.

Step 4. Click to pane select online device, see Figure 3-16.

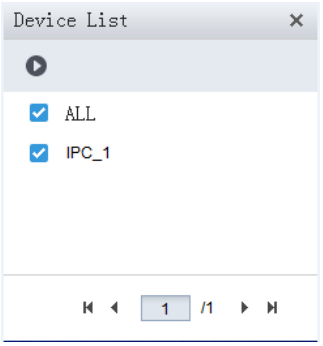


Figure 3-16

Step 5. Click , see Figure 3-17.

Figure 3-17

Step 6. Select Parking Record tab.

Step 7. Set time, plate no., or parking, click Search. See Figure 3-18.

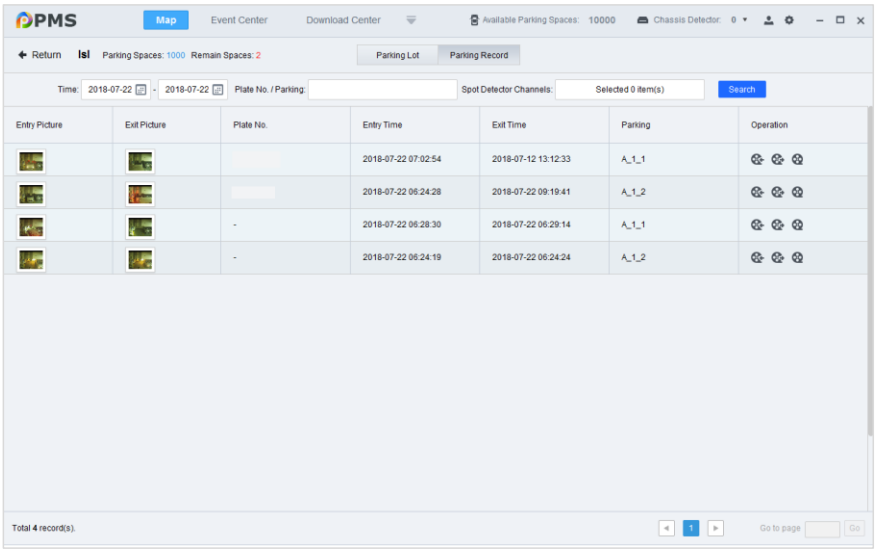


Figure 3-18

Step 8. Click the plate picture to zoom in and display parking time, parking area code, parking space No., plate No., vehicle color and other info.

Step 9. View the video.

- Click to view the video of the vehicle entering the parking space.
- Click to view the video of the vehicle leaving the parking space.
- Click to view all the videos of the vehicle entering and leaving the parking space.

4.1.9 **Search**

4.1.9.1 Existing Vehicle

Existing vehicle records vehicle currently exist in parking lot. You can filter vehicle by plate no., entry time and etc. You also can export via Excel. For those abnormal vehicles, such as a vehicle is no longer in the parking lot, but system shows it in existing vehicle list, you can force it to leave. Click to select **Search** > . See Figure 3-19.

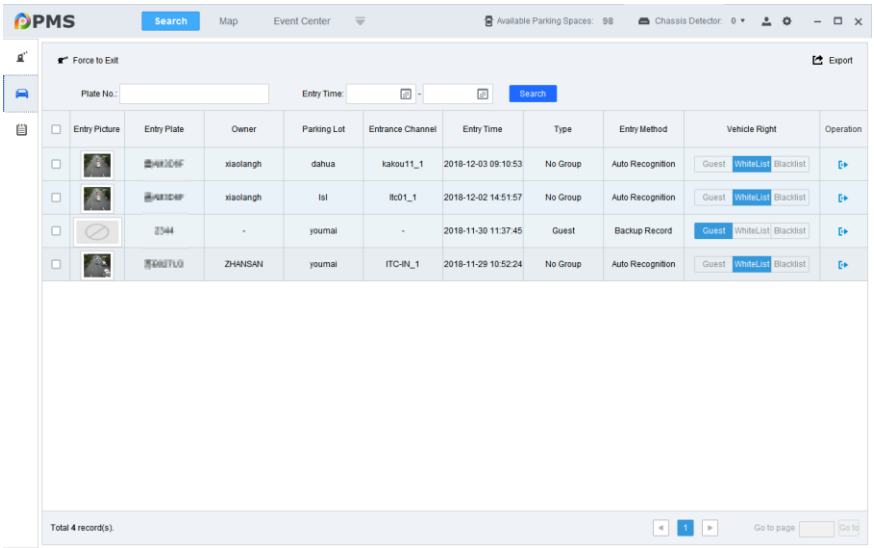


Figure 3-19

- Click vehicle picture to view large picture.
- Click or you can check more vehicles, click Force to Exit to force the vehicle to exit.

4.1.9.2 Pass Records

Pass records mainly records vehicle entry/exit record. You can search record by channel, direction, plate no., and time. You also can export it in Excel file. Click to select **Search** > . See Figure 3-20.

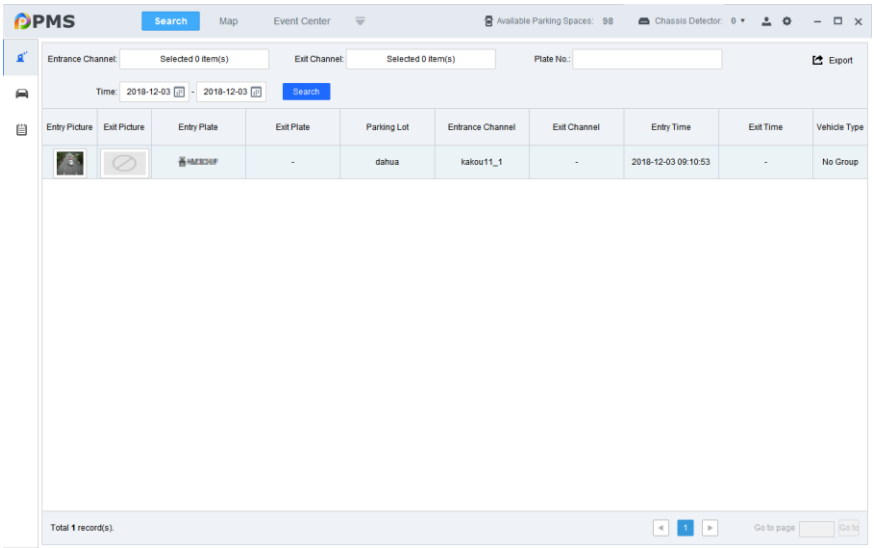


Figure 3-20

- Click vehicle picture to snapshot to view large picture.
- Click to view snapshot linked video.

4.1.9.3 Snapshot Record

Snapshot record mainly searches record of vehicle enters/exits. It can show entry time and type of vehicle owner. You can view snapshot, as well as export record as Excel file. Click to select **Search** > . See Figure 3-21.

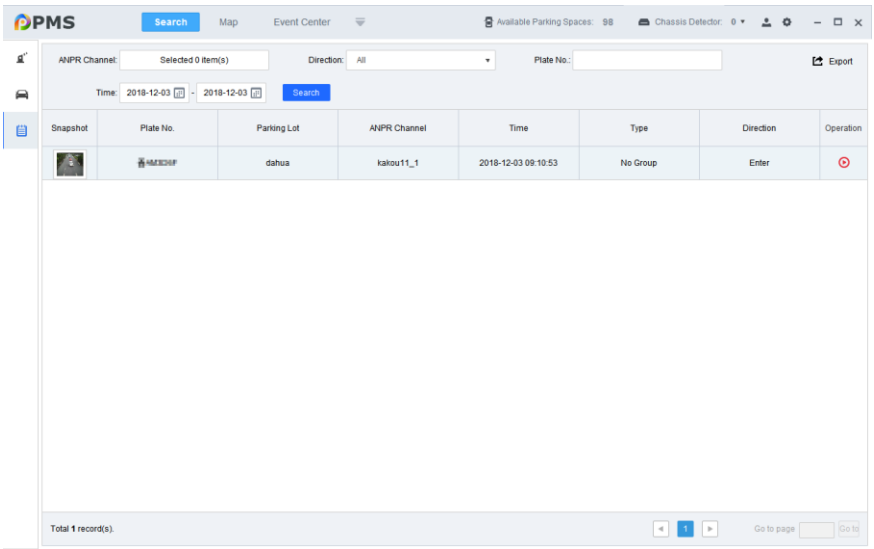


Figure 3-21

4.1.10 Chassis Check

It shows chassis picture, ANPR snapshot and plate info all in the same interface.

Step 1. Click to select **Chassis Check** tab.

Step 2. Click next to “Car Bottom Device” at the upper right corner. See Figure 3-22.

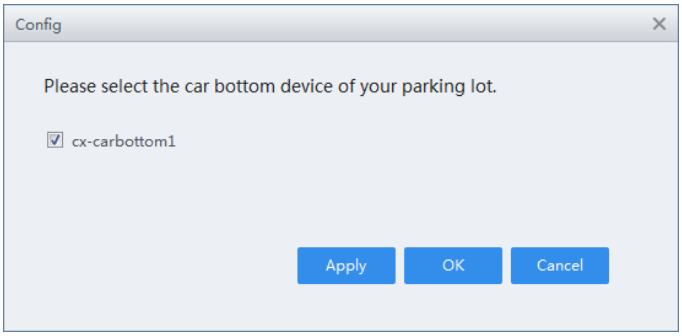


Figure 3-22

Step 3. Select chassis check, click OK.

Step 4. The system starts to look for dangerous goods at vehicle chassis, and shows chassis picture, ANPR snapshot and plate info all in the same interface. See Figure 3-23.

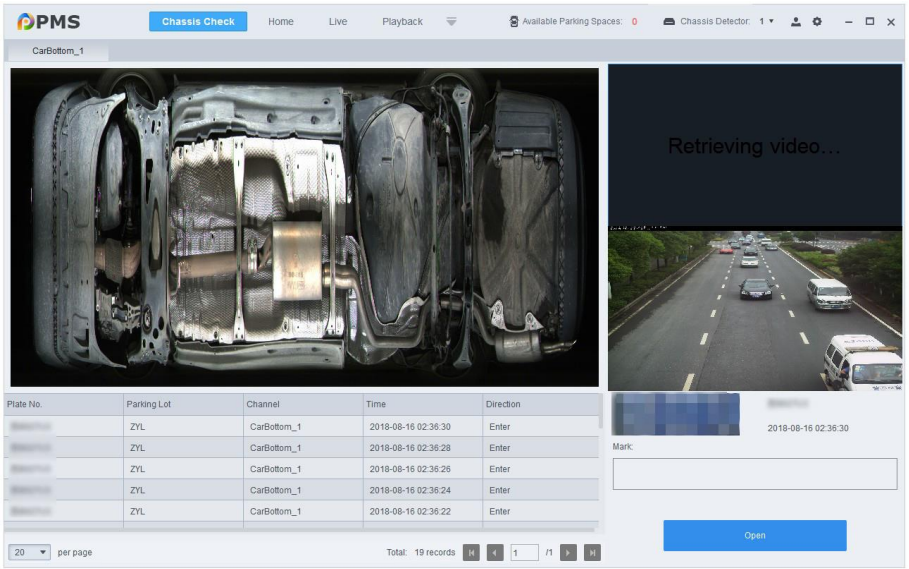


Figure 3-23

Install and Uninstall

5.1.1 Install Client

Cashier client can be downloaded from PMS homepage, see Figure 4-1.

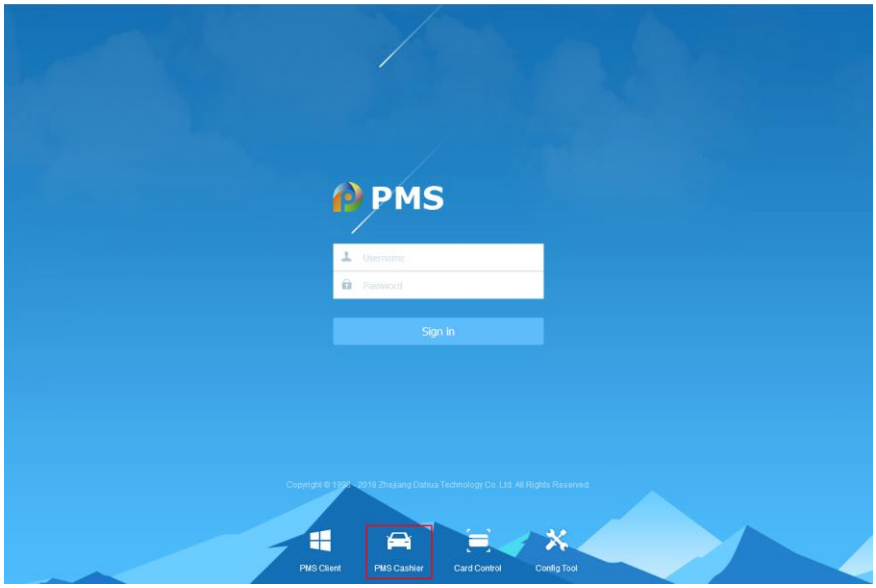


Figure 4-1

Step 1. Click

to download cashier client.

Step 2. Click Save to download and save cashier client to PC.

Step 3. Double click “General_PMS_Professional_Control_Cashier_Eng_V1.01.000.exe”, see Figure 4-2.

In the steps, the name of cashier client installation package is only for reference. There might be differences between names of different versions of installation packages.

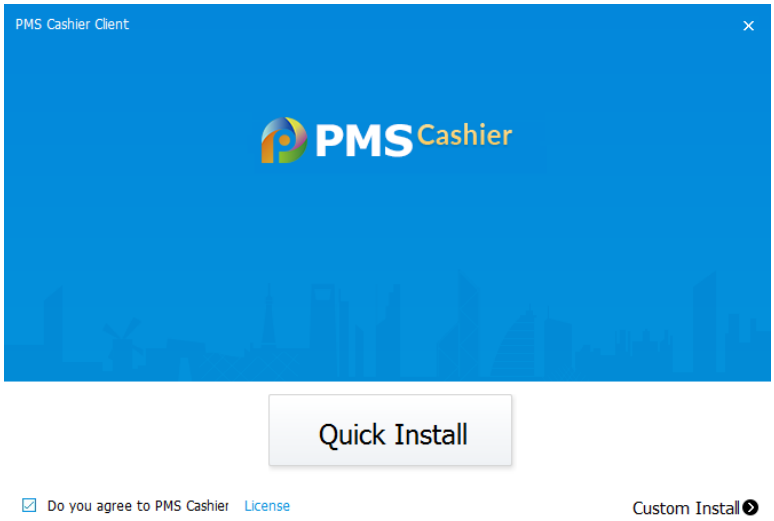


Figure 4-2

Step 4. Click Quick Install, or click Custom Install, select path and install.

See Figure 4-3.

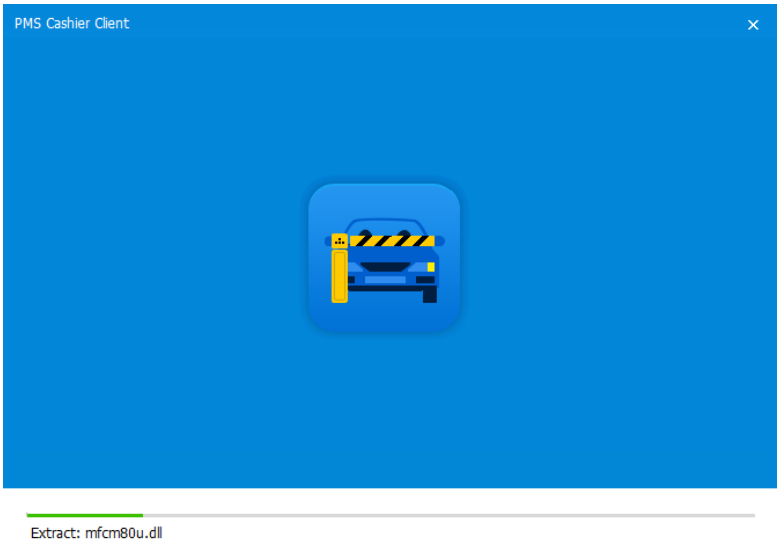


Figure 4-3

Installation is complete, see Figure 4-4.

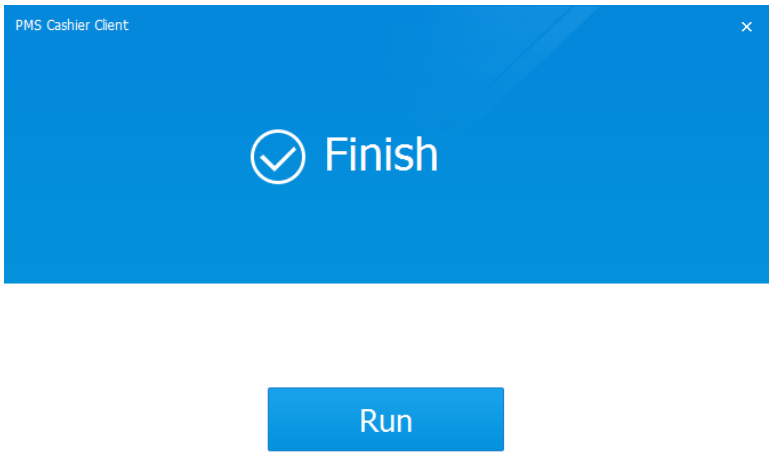


Figure 4-4

5.1.2 **Uninstall Client**

In Windows start bar, click All Programs, find “PMS Cashier” folder, and click “Uninstall PMS Cashier Client”, see Figure 4-5.

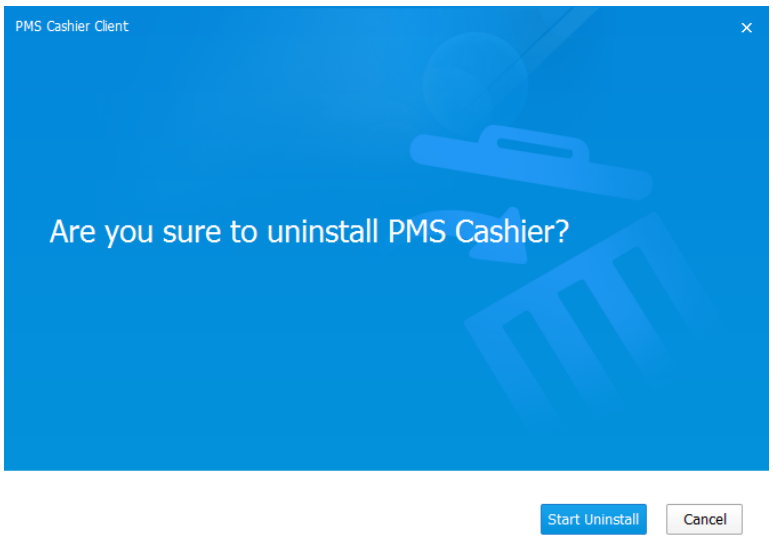


Figure 4-5

Click Start Uninstall to uninstall.

Function

5.1.3 **Client Login**

Step 1. Double-click the shortcut of **Cashier** client.

The system displays the login interface. See Figure 4-6.

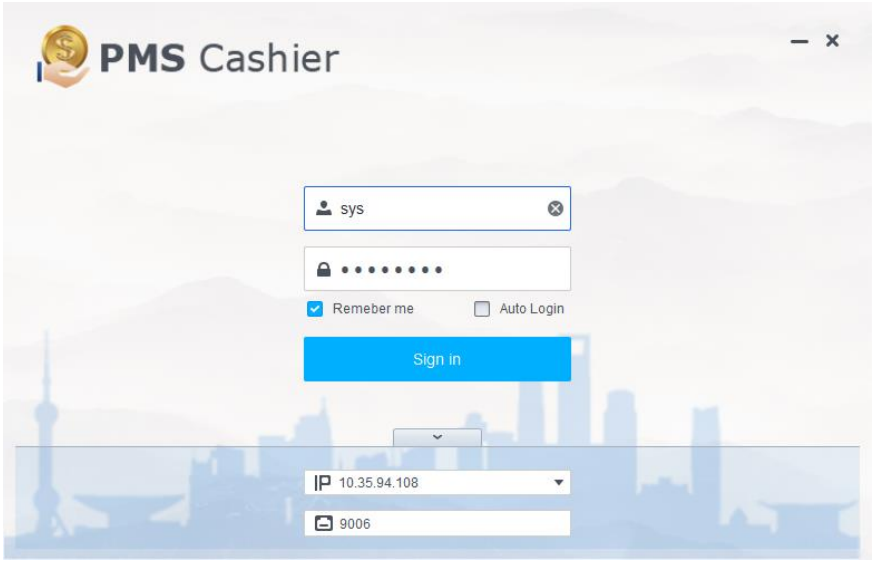


Figure 4-6

Step 2. Enter username and password.

Step 3. Click button below, enter server IP and port. Server IP is PMS platform manager IP address, and default port is 9006. User info manager will add and manage the above info on the server side.

Step 4. Click Sign in.

After a user signs in cashier client for the first time, system pops up config box, or you can click at the upper right corner to set parking, in/out and etc.

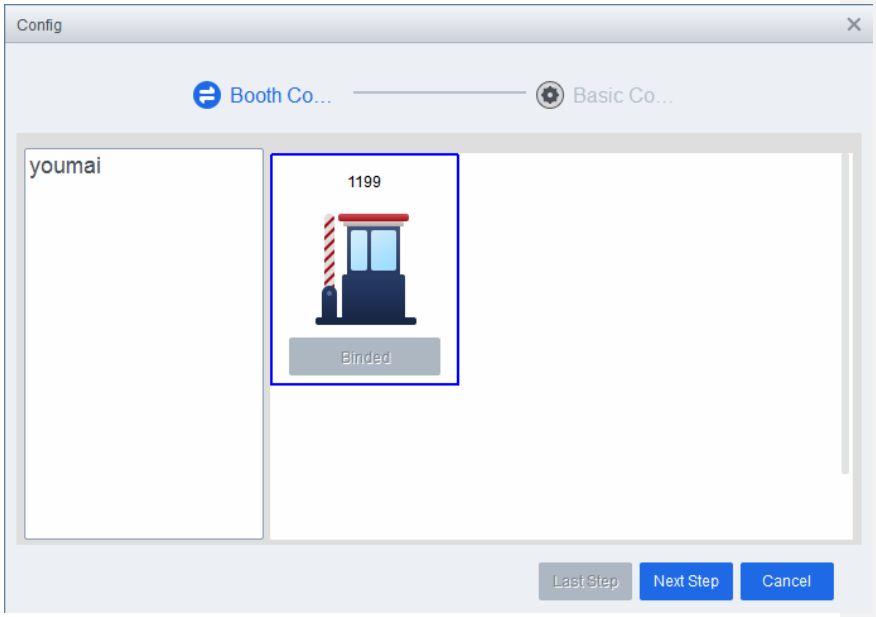
Step 5. Config parameters.

For non-first login, click at the top right corner, and the system pops up **Config** dialog box.

- Parameter Config for Booth Collector

9. Select to bind the booth, and click **Next Step**. See Figure 5-7.

Chart 1-14 Bind the Booth



10. Config basic parameters, click **OK**. See 0. For detailed parameters, see Chart 5-1..

0 Basic Config

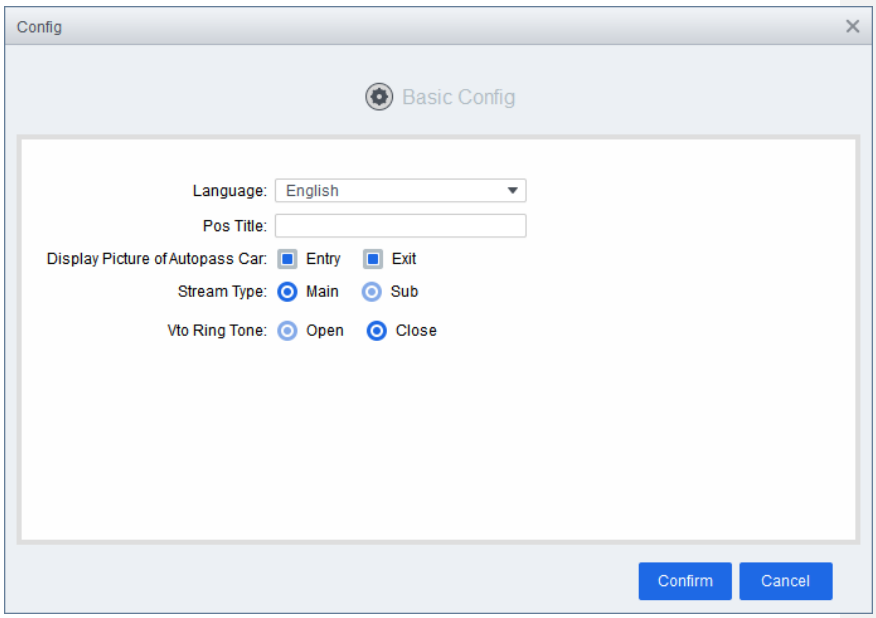


Chart 1-3 Basic Config Parameters

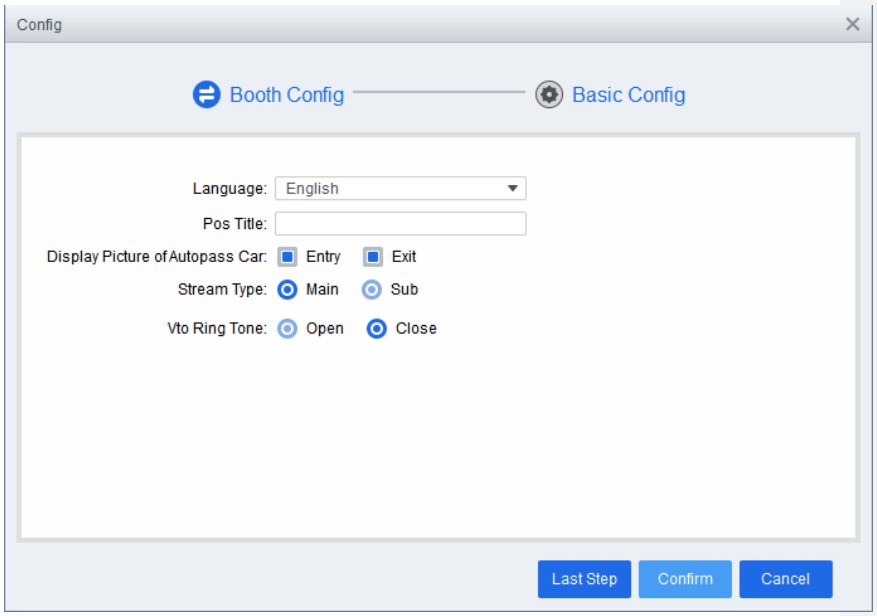
Parameter	Note

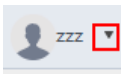
Parameter	Note
Language	Set the display language on the cashier client interface.
Pos Title	Set the printed pos title, generally parking lot name.
Display Picture of Autopass Car	Set whether to auto play the snapshot on the charge interface, and support selecting entrance and exit.
Stream Type	Select to display video stream on the charge interface. Please select Stream Type based on the network environment. If the network is good, it is recommended to select Main. If the network is relatively poor, it is recommended to select Sub.
Vto Ring Tone	Set whether to ring when there is an incoming VTO call.

- Center Collector

  Config basic parameters, click **OK**. See Figure 5-9. See Chart 5-1 for detailed parameters.

Figure 1-16 Config Parameters for Center Collector



Click 

at the top right corner of the interface to view Help Manual.

Charge Management

Center Charge

Search the plate on cashier client according to the system display.

See the following specific steps:

Step 1 Log into cashier client.

Step 2 Enter the plate No. and click **Search**.

Display the parking details and amount of the matched vehicle. See Figure 5-11.

Step 3 Search the corresponding record and confirm the charge amount.

- If it is to be charged, click **Charge** to collect the fee.
- If it is confirmed free of charge, click **Free**.

After clicking Charge or Free, no more charge is required within the set free minutes (set in the charge rule management), and the barrier will automatically open when the vehicle approaches the booth.

Figure 1-17 Charge Interface

5.1.4 Booth Charge

In cashier client, you can manually open barrier, record entry, record exit, correct exit and fuzzy search plus process cashier.

Step 1. Sign in cashier client. See Figure 4-.

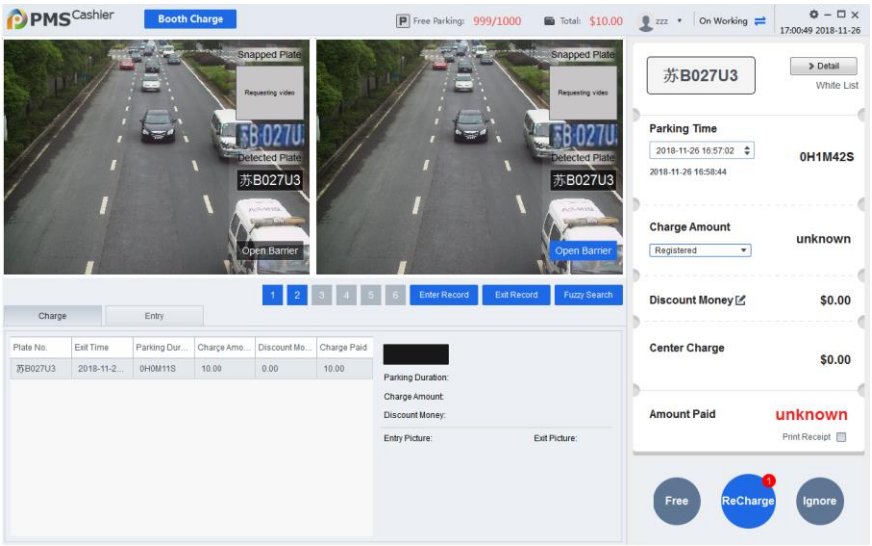


Figure 4-8

Available step:

- Manually open barrier.
  One vehicle enters and barrier is not open automatically, then click Open to open barrier.
- View cashier condition.
  In Charge tab below, there are processed charge condition, including snapshot at entrance/exit, plate no., parking duration and charge.
- Real-time charge.
  - ✧ Before exit parking, user see detailed charge on the right, and user can click Free, Charge or Ignore to collect.
  - ✧ Free is not to collect fee.
  - ✧ Charge is to collect fee according to amount on screen.
  - ✧ Ignore is to ignore this record.

  When the user complete operation, the client will send receipt to server to save this record.
  A user can select among different coupons, and charged amount will change depends on coupon.
- Enter.
  Click Entry tab below, to show vehicle list.
- Entry/exit record.
  Click Entry Record, Exit Record to search entry/exit time by plate no.
- Correct exit.
  Compare snapshot at entrance and exit looking for difference. This correction function can find vehicle of similar plate no., and filter for the same vehicle.
- Fuzzy search.
  If entry record of the vehicle is not found, click Fuzzy Search to fuzzy search.

Step 2. Click at upper right corner, see Figure 4-.

Figure 4-9

Step 3. Click Hand Over, and system auto exit client and shows Sign in interface.

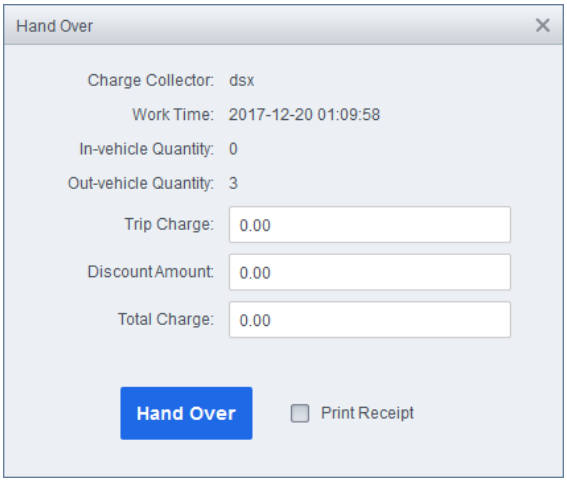
Hand Over

When a collector gets off work or changes shift, the handover should be completed in the system.

Step 4 Click ⇌ at the top right corner.

The system displays the **Hand Over** interface. See Figure 5-13.

Figure 1-18 Hand Over



Step 5 Click **Hand Over**.

The system automatically exits the client and pops up the login interface.

6 FAQ

6.1 Installation

1. What kind of configurations are required to install PMS server？

Answer：

Please install PMS8000 on OS of win 7 64 bit or win10 64 bit.

2. What kind of configurations are required to install PMS server？

Answer：

Parameter	Note
Processor	Core i3 4160
Memory	4GB
HDD	500G
OS	Microsoft Windows 7/ Win 8.1/Win10 (64 bit)
Explorer	IE9 and higher, Chrome, Firefox
Screen Resolution	1280×1024 recommended Hardware support DirectX9.0c and higher

3. Compatible browser?

Answer：

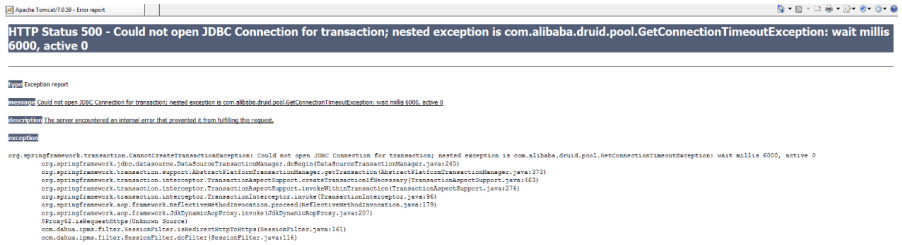
Support IE9 and higher, Google Chrome and Firefox.

4. How long to install?

Answer：

Depends on PC performance, installation requires 5-10 minutes.

5. After installation is complete, I access server IP and see the following note, what shall I do?



Answer：

Check if PMS Server is ON, and if it is ON, and you still cannot access, please uninstall server program and install again. If you still cannot access, please open webpage, reboot PC, turn off McAfee software, and then install again.

6. After re-installation, I still cannot open web page?

Answer：

Reboot PC, close McAfee and other anti-virus software, install again.

7. Under WIN 10 OS, the uninstallation process is stuck, and uninstallation failed.

Answer：

Close the process and uninstall again.

8. May I turn ON firewall when I install PMS8000?

Answer：

Yes, use default setup of firewall is OK.

9. Access web via laptop, and webpage cannot be fully shown, how to set？

Answer：

Webpage has fixed height, and you shall zoom out to support self-adaptive. Support min of 14 inch laptop.

10. The browser is in Chinese, how to set English？

Answer：

Set browser language to English.

11. Installation directory of PMS contains space, which cause server failure.

Answer：

This is due to older version of installation pack, now installation directory does not allow spaces.

12. How to stop backstage program of PMS?

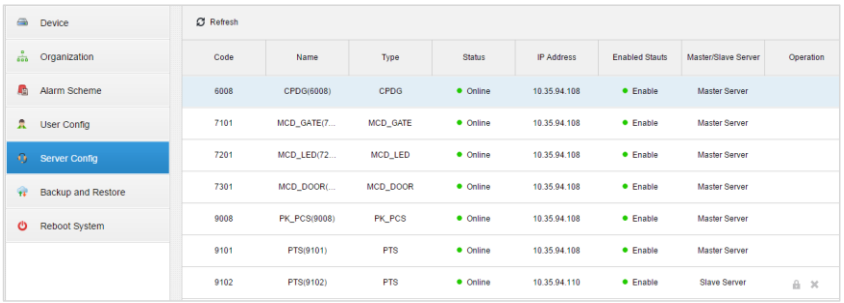
Answer：

Open Windows task manager, and find the program to end it.

13. How to view running status of distributed server?

Answer：

In Basic Config>Server Config>Master/slave Server.



14. A server uninstalls PMS and installs PMS again, is a new License required?

Answer：

In general, a new license is not required. But if you encounter import error, please contact sales person to apply for a new License.

15. PMS data recovered on server are imported to PMS installed on server B, operation has error.

Answer：

First, check versions of these two servers. When their versions are not matched, error will occur. However, if versions are matched, and error still occurs, check device channel of License of server B. For more assistance, please contact technical support.

16. When a vehicle enters parking lot, snapshot is taken as normal, but barrier is not released and I cannot find the vehicle in existing vehicle record.

Answer：

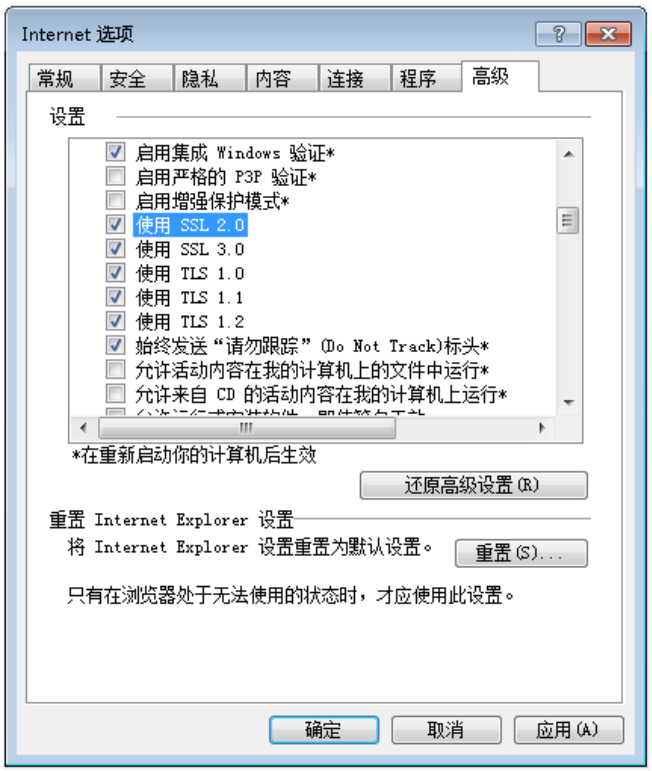
Check vehicle entry rule see if type of this vehicle is included.

17. Q: The PMS administrator platform under HTTPS protocol cannot be accessed via IE. See the following figure.

Figure 1-4 Failure in Login via IE

A: IE browser requires selecting its own Transport Layer Security Protocol (SSL, TLS) to enable HTTPS. If IE does not select the SSL or TLS protocol used to support the platform, the platform cannot be accessed. To enable the protocol, do the following:
Select **Internet options** > **Advanced** on the IE interface, and check **Use SSL 2.0** in the **Security** area. See the following figure.

Chart 1-5 Check Use SSL 2.0



6.2 **Client Application**

1. After I login client, I cannot see ANPR device, how to set？

Answer：

1) Make sure you log in as default system user and this account has no parking right.
2) We recommend you to add user and allocate rights of parking lot and business module, and log in the account.

2. I cannot see live pass record of vehicle on client, how to see it？

Answer：

Switch to pass record on the left in client 【Channels ---> Pass Records】

3. PMS client cannot receive snapshot, but I can snapshot on ITC webpage？

Answer：

Please enter NVR snapshot function, path：Setup—Storage—Schedule—Snapshot, check IVS enable.

4. I cannot see video in playback on client？

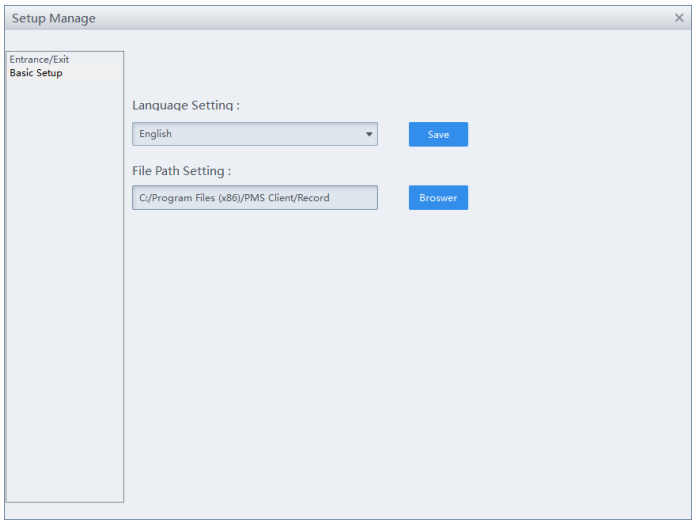
Answer：

1) Make sure NVR program version match the program.
2) NVR upgrade to corresponding version, and then clear config info on web and at local. For first time config, please format the HDD.
3) Check if deice （ITC/NVR）time match platform time. If not, please sync device time.

5. Where can I switch client display language?

Answer：

There is a system config button at the upper right corner, please click it to switch.



6. PMS storage supports platform or local?

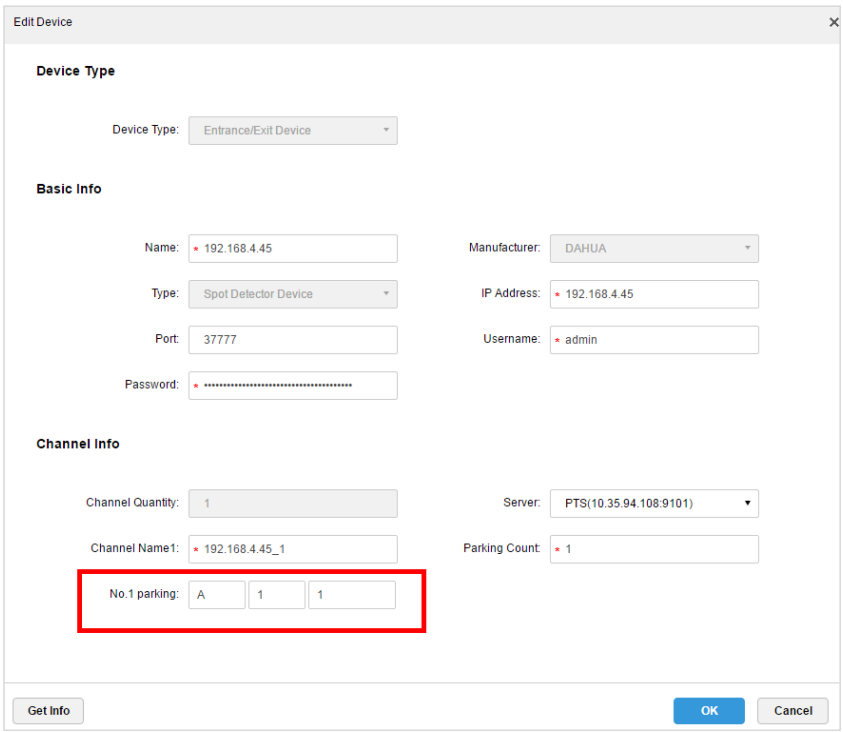
Answer：

It only supports local storage on device. Storage device can be NVR and EVS.

7. The vehicle detector works as normal, but parking status on PMS map is not changed when parking info changes.

Answer：

First check if parking no. in device config and PMS config are identical.



8. Why does the client keep telling me it has failed to release barrier?

Answer：

Now PMS has sent releasing barrier commend to ANPR device, please checked barrier installation.

9. Color of light on parking detector differs from actual color detector.

Answer：

Color of PMS map detector is separately recorded depending on parking status reported by parking detector, not directly repowered by the device. If color differs, please check device configured parking quantity, parking no., see if match setup on platform.

10. Prompt at the lower right corner often shields some functional buttons of this client, can I adjust this client according to screen resolution?

Answer：

The client currently does not support adjustment by resolution. You can move client to avoid

shielding.

11. ANPR entrance quantity and exit quantity are not matched, what is the quantity used by the client? Can I see entrance (exit) info on the client?

Answer：

The client requires matched entrance and exit quantity, so it uses the min quantity matched. If you want to view live video of all entrances and exists, you can install general client.

12. PMS e-map has uploaded picture successfully, why can I see display on webpage?

Answer：

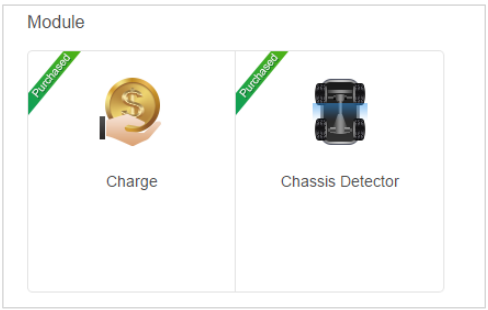
Please check address of platform you enter in explorer and access via localhost please. If yes, use IP address to access.

6.3 Other Problems

1. What is the relationship between chassis and license?

Answer：

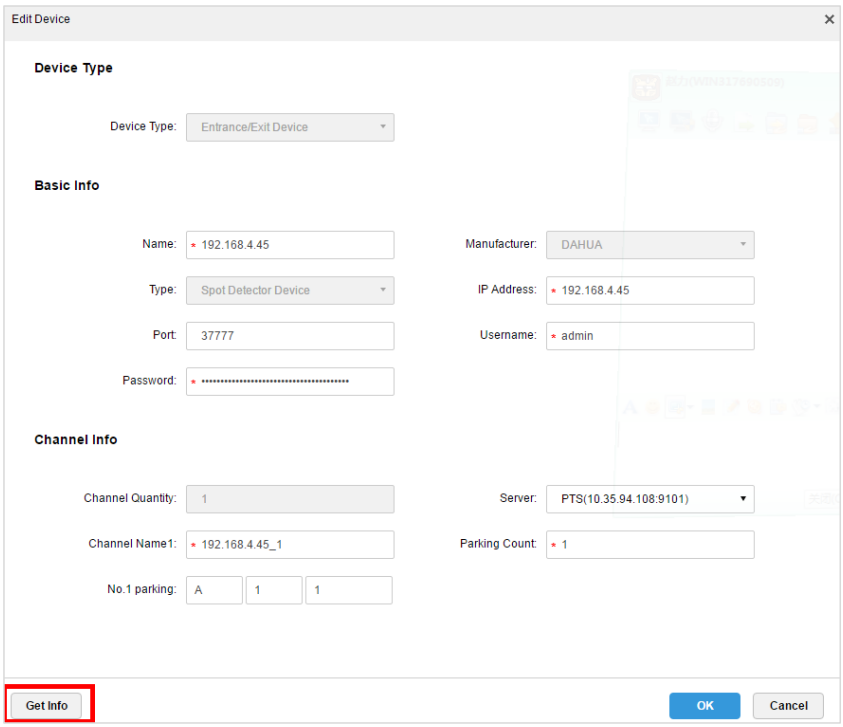
One chassis module needs one license.



2. How PMS auto gets parking info from parking detector?

Answer：

It must trigger report of parking info, then it sync modified area and num, so PMS can get.



For more problems, please contact technical support. Thank you!

Note:

- **This manual is for reference only. Slight difference may be found in the user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **All trademarks and registered trademarks are the properties of their respective owners.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website or contact your local service engineer for more information.**

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