Figure 23-4

Step 3.   Click ![icon] on the left, and select device channel. Below select report type, statistical time, click Search, see Figure 23-5.
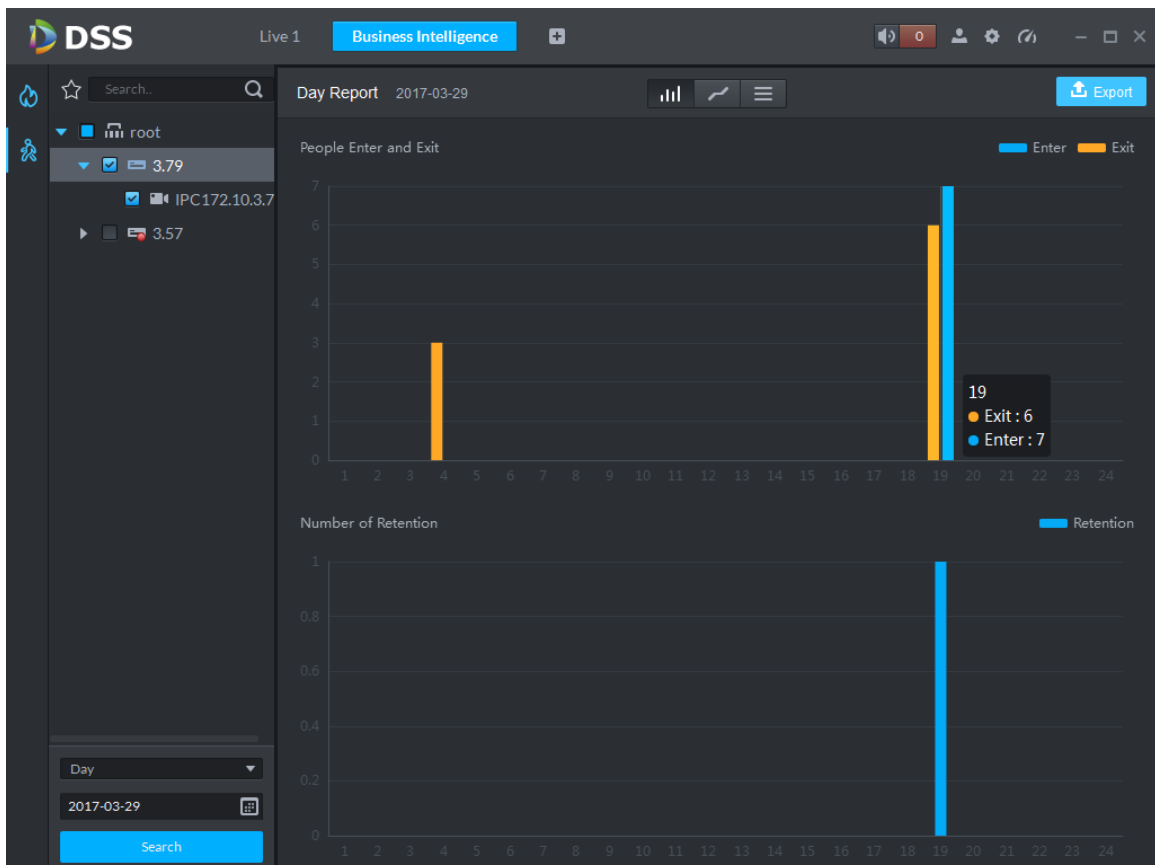
Figure 23-5

You can view line chart or list.

23.4 **View People Count in Preview**

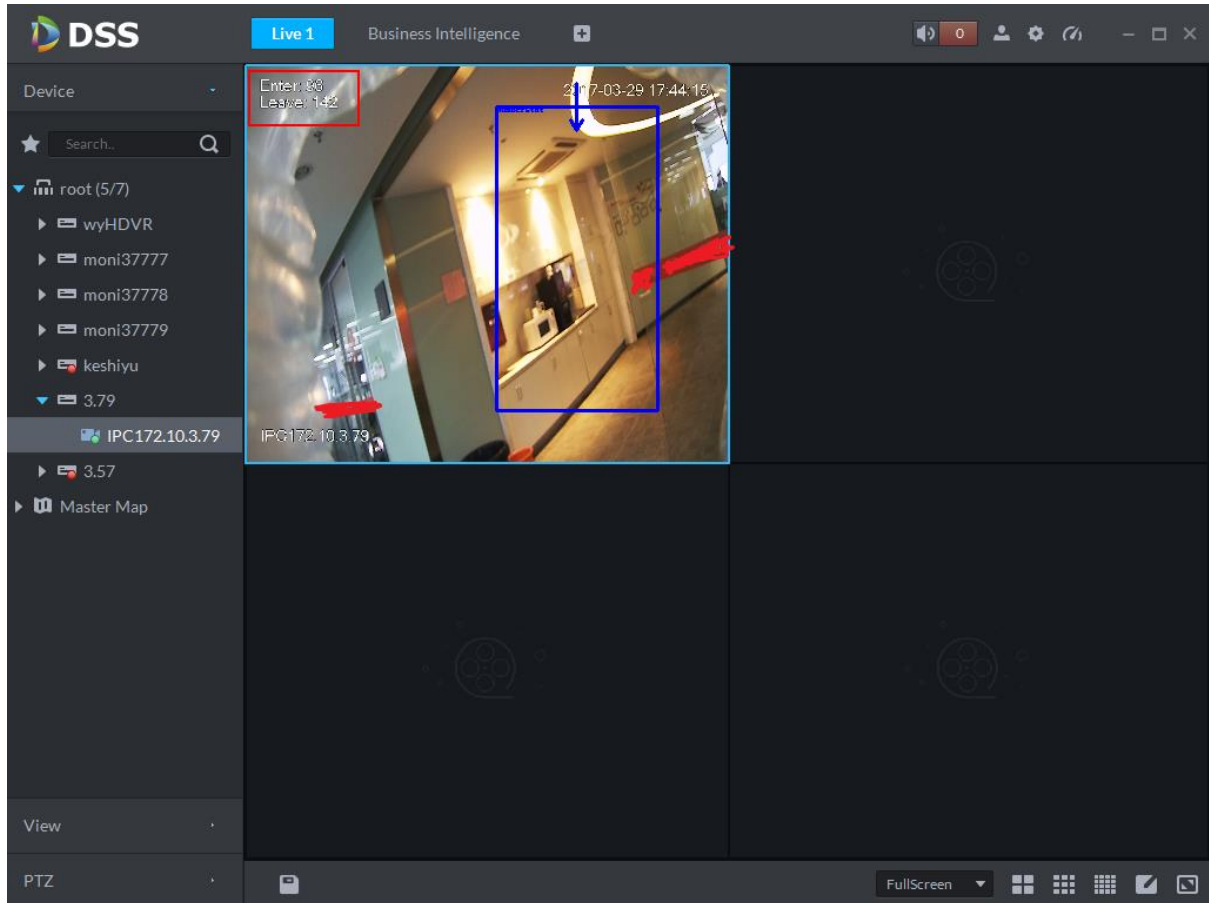In Preview interface, you can view Smart IPC video, and people count is shown at the upper-left corner, see Figure 23-6.

Figure 23-6

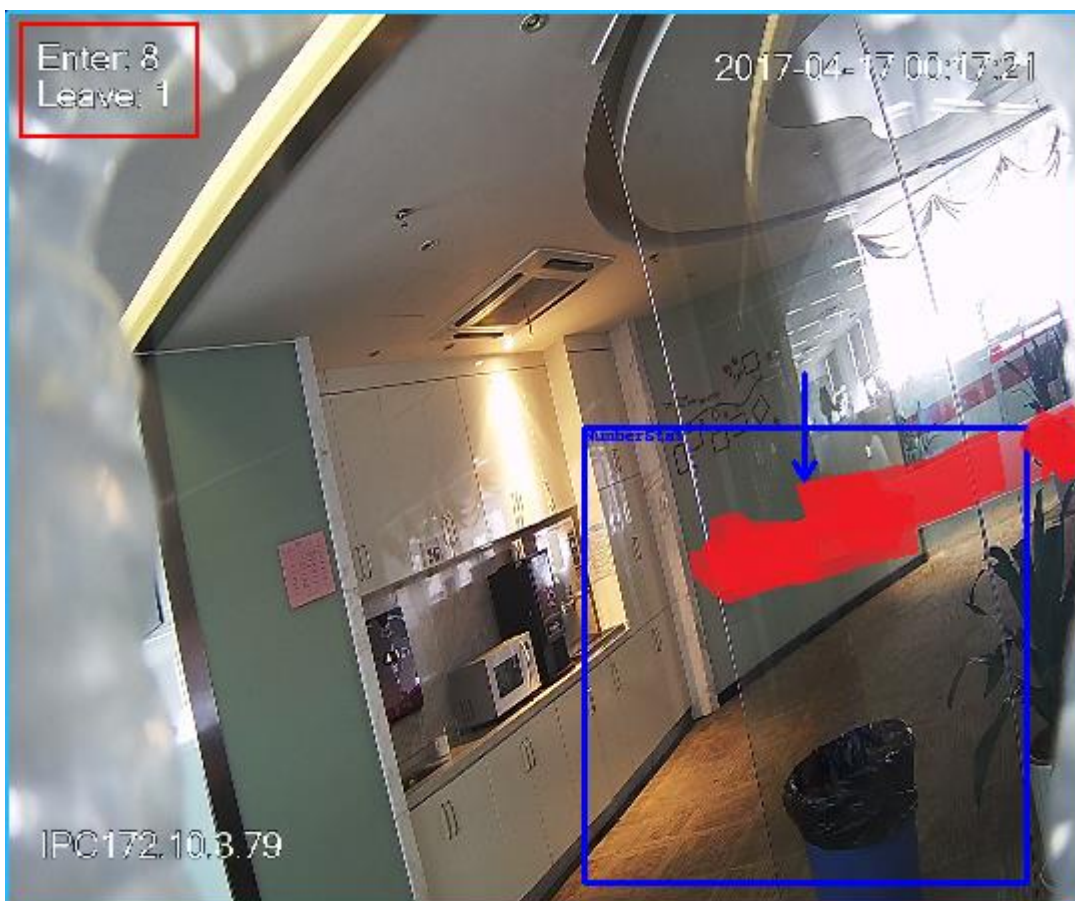Entry/exit count is shown at the upper-left corner, see Figure 23-7.

Figure 23-7

23.5 **Heat Map**

Step 1. Click [flame icon] tab.

Step 2. Select channel to show heat map, and select time, click Search. See Figure 23-8.
Note:

The device sends heat map data to platform on a real-time basis. Starting when device is added to platform, you can search heat map data uploaded. Unit of search is week (interval between start time and end time cannot exceed 1 week).
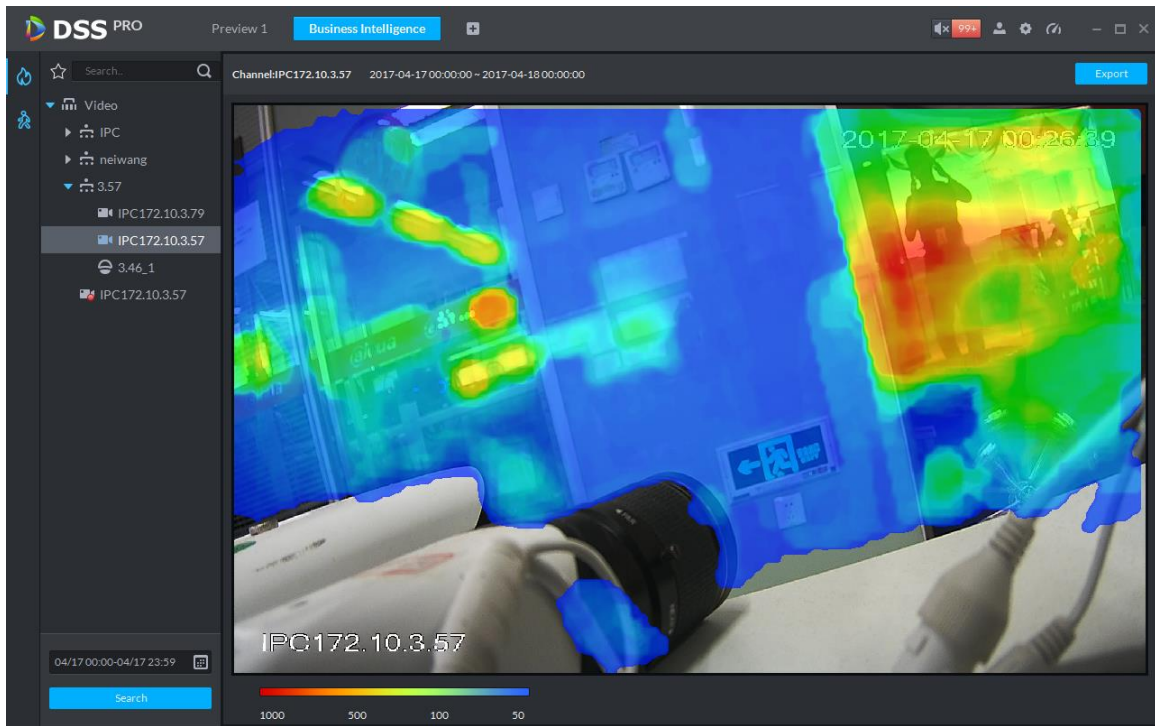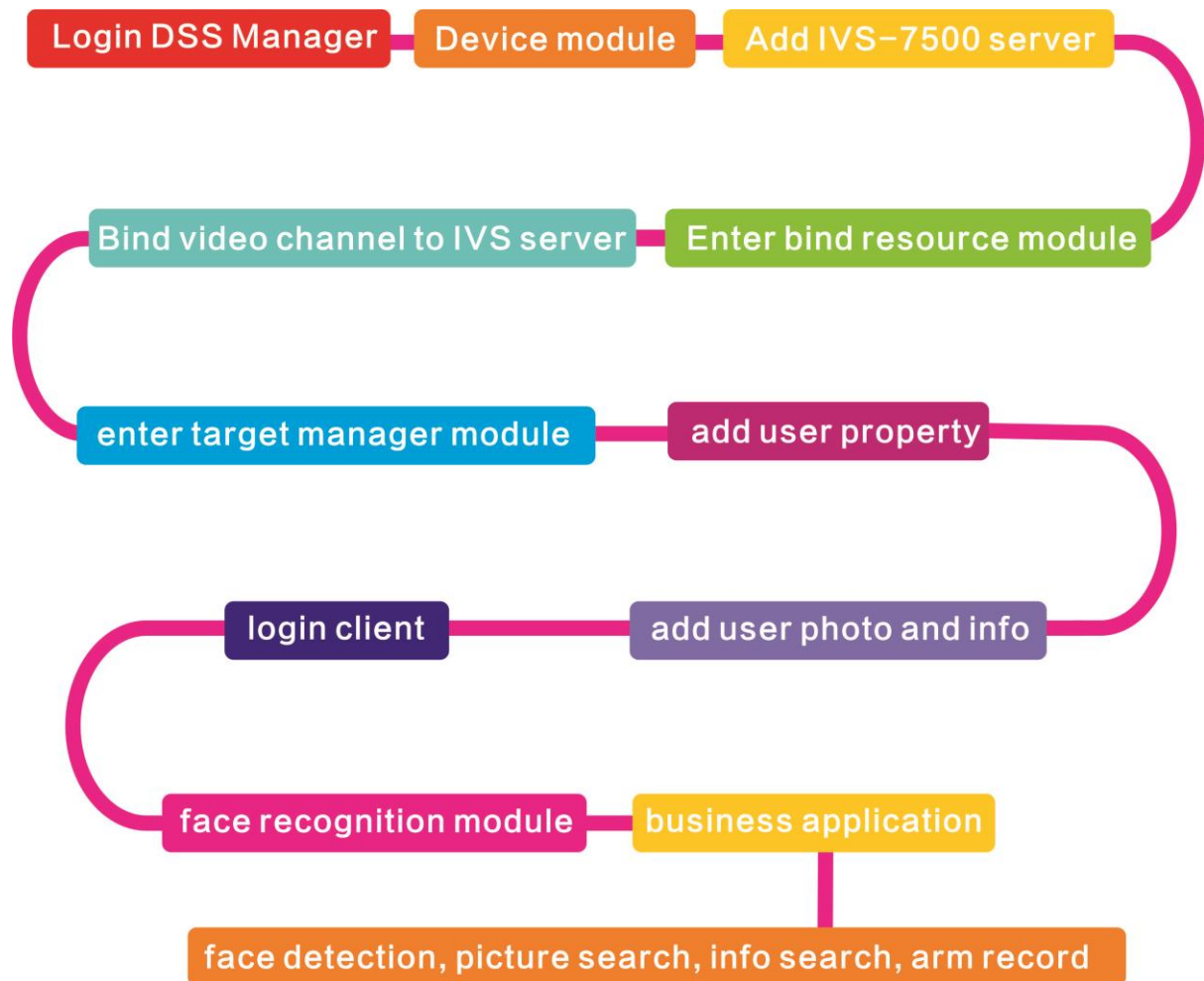
Figure 23-8

Click [Export] at the upper-right corner, you can export heat map in bmp format.

24 Face Recognition

24.1 Business Flow

24.2 Add IVS Server

DSS Professional V7.01 only supports IVS-7500 model of server for input.

Step 1. Log in DSS Manager, enter device management module, in Figure 24-1, click ➕ Add to add IVS server.

Figure 24-1

Step 2.   In the figure, add device and select type to be "Intelligent Device".

Figure 24-2

Step 3. In the figure, enter IVS-7500 IP address, port, username and password. Select device organization and server, click **Add** button to enter device info input interface.

Figure 24-3

Step 4.   In Figure 24-4, enter device name, select role for the device, click OK.
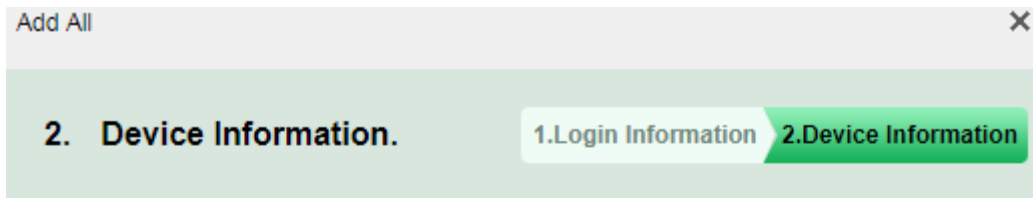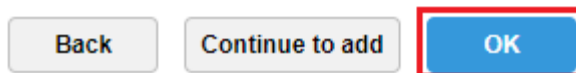
Figure 24-4

Step 5. IVS device is in Figure 24-5.

Figure 24-5

24.3 **Bind Video Channel**

Step 1. Log in DSS Manager, click ➕ to open new tab, in the figure select "Bind Resource" to

enter bind resource module.
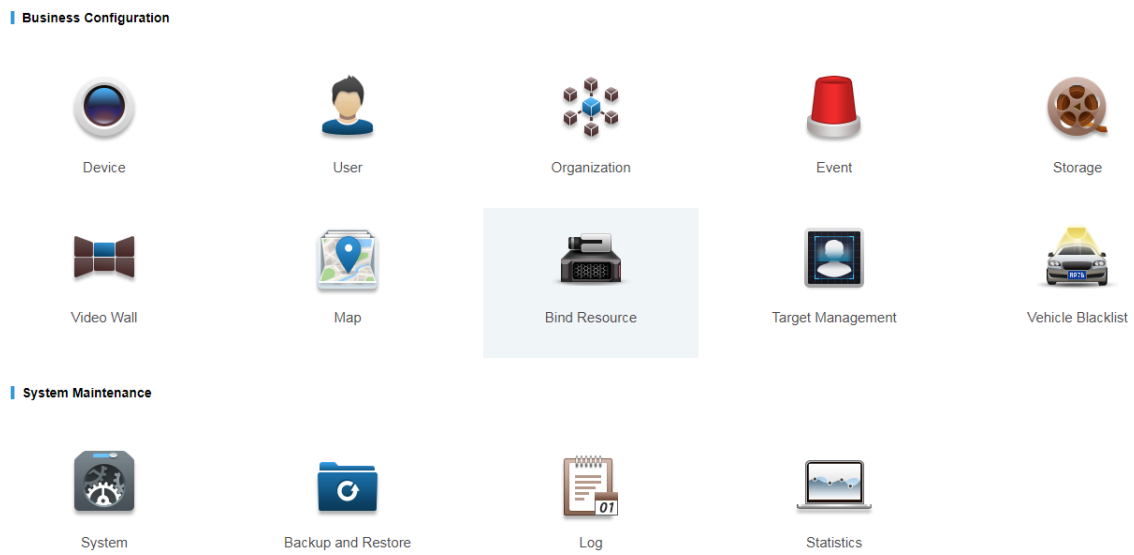
Figure 24-6

Step 2. Enter setting interface, click ⚙ Setting in this interface to set binding. See Figure 24-7.
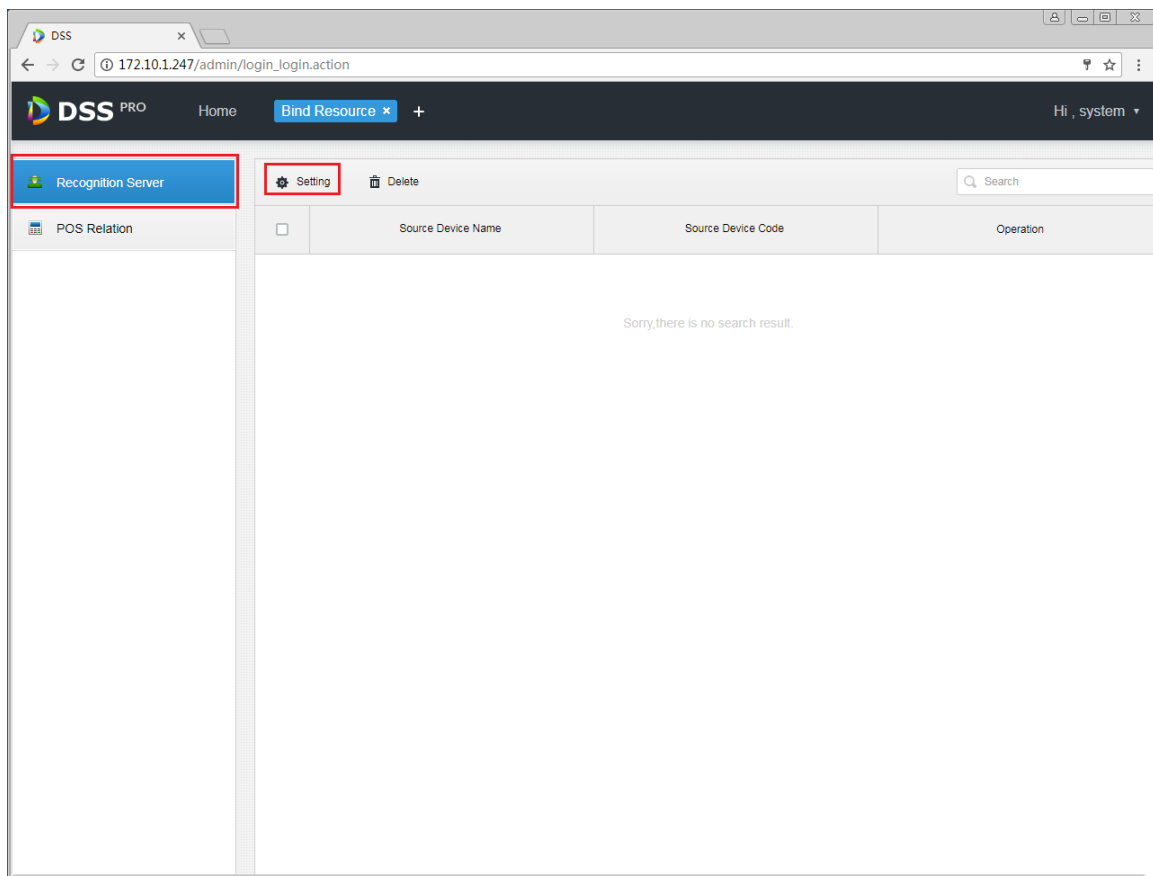
Figure 24-7

Step 3. In the figure, select IVS-7500 server and video channel to bind, click OK.
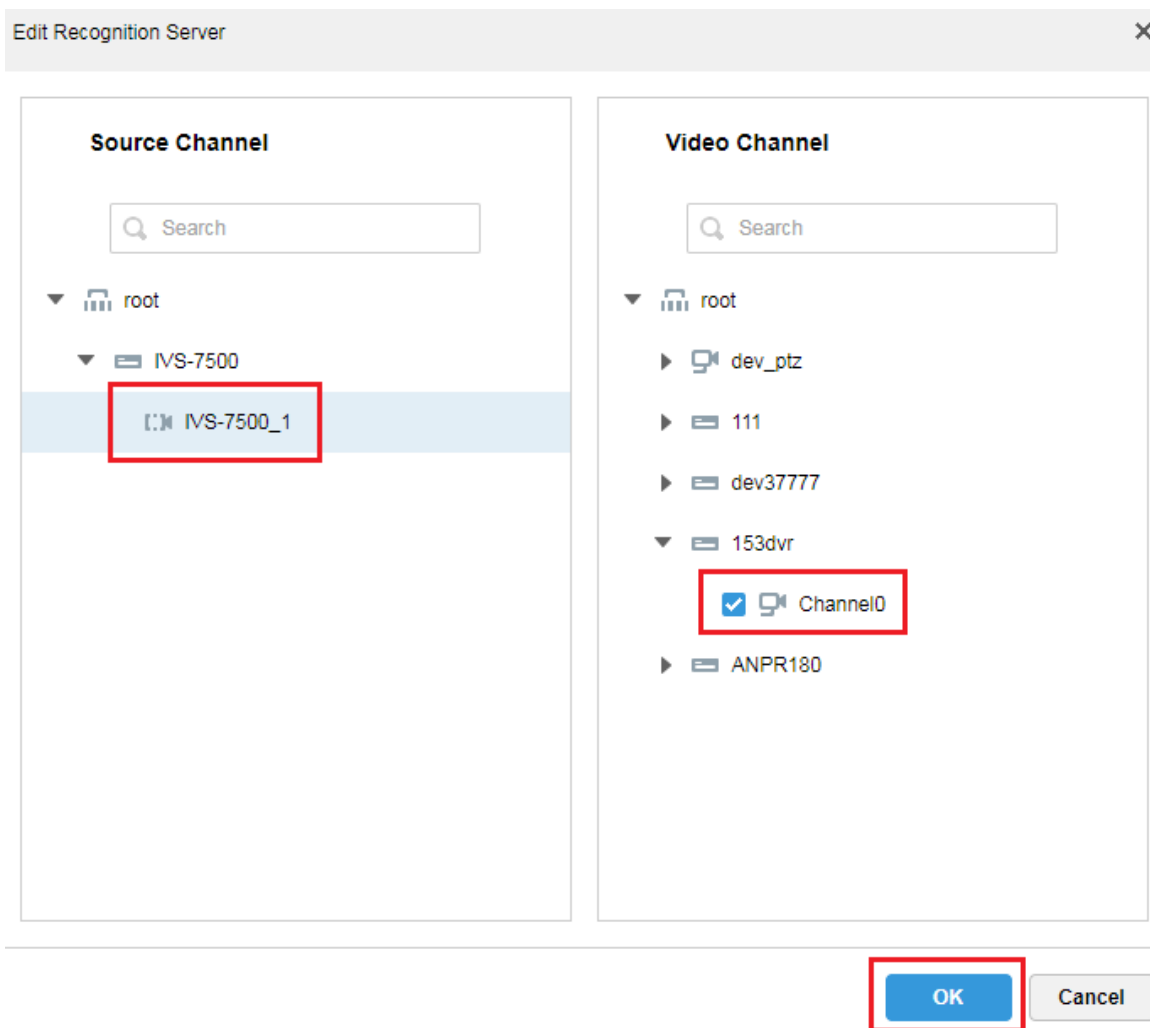
Figure 24-8

24.4 **User Resource Management**

There are two ways to create user info. If user picture and info exist, you can import user info as administrator. If user picture does not exist, you can add info of user snapshot by camera into user database.

24.4.1 **User Type Management**

Step 1. Login DSS Manager, click to open new tab, see the figure and select "Target Management" to enter user resource management module.

Figure 24-9

Step 2. Before you add user info, please create user type. In the figure, click ⚙ User Property Setup button to enter setup interface.
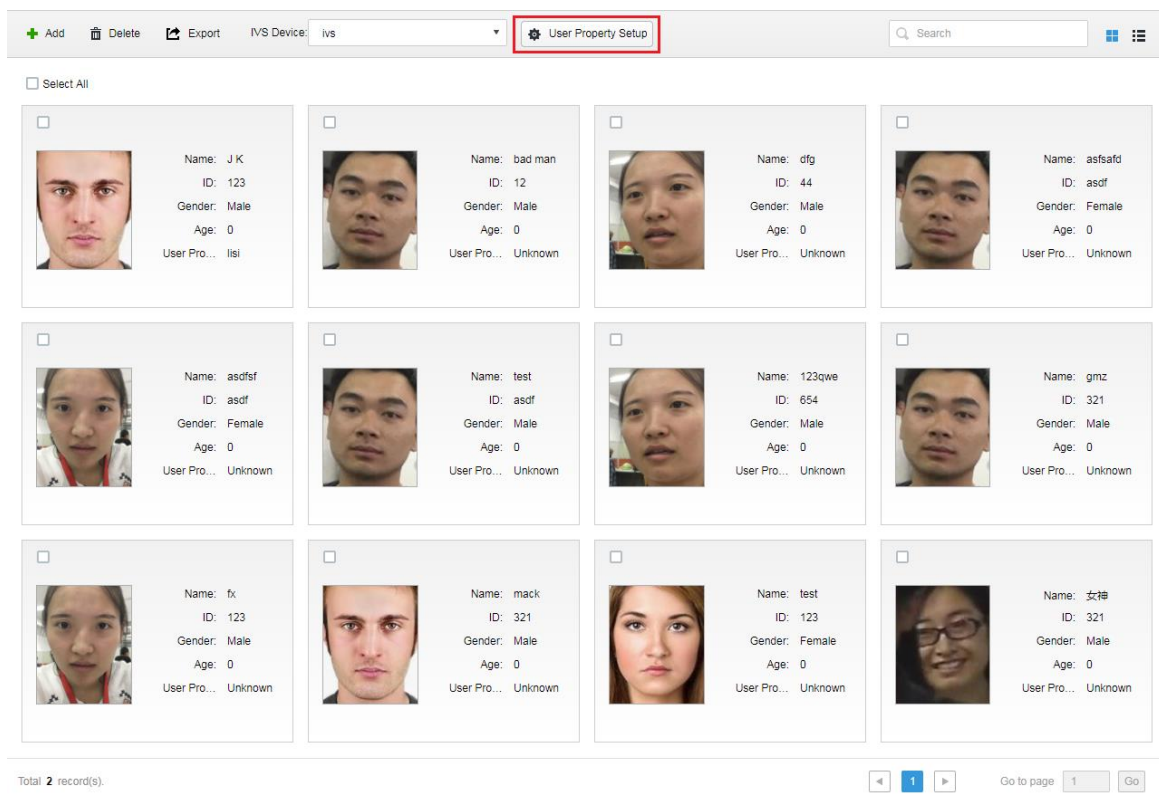
Figure 24-10

Step 3. In the figure click ➕ Add to enter add interface.
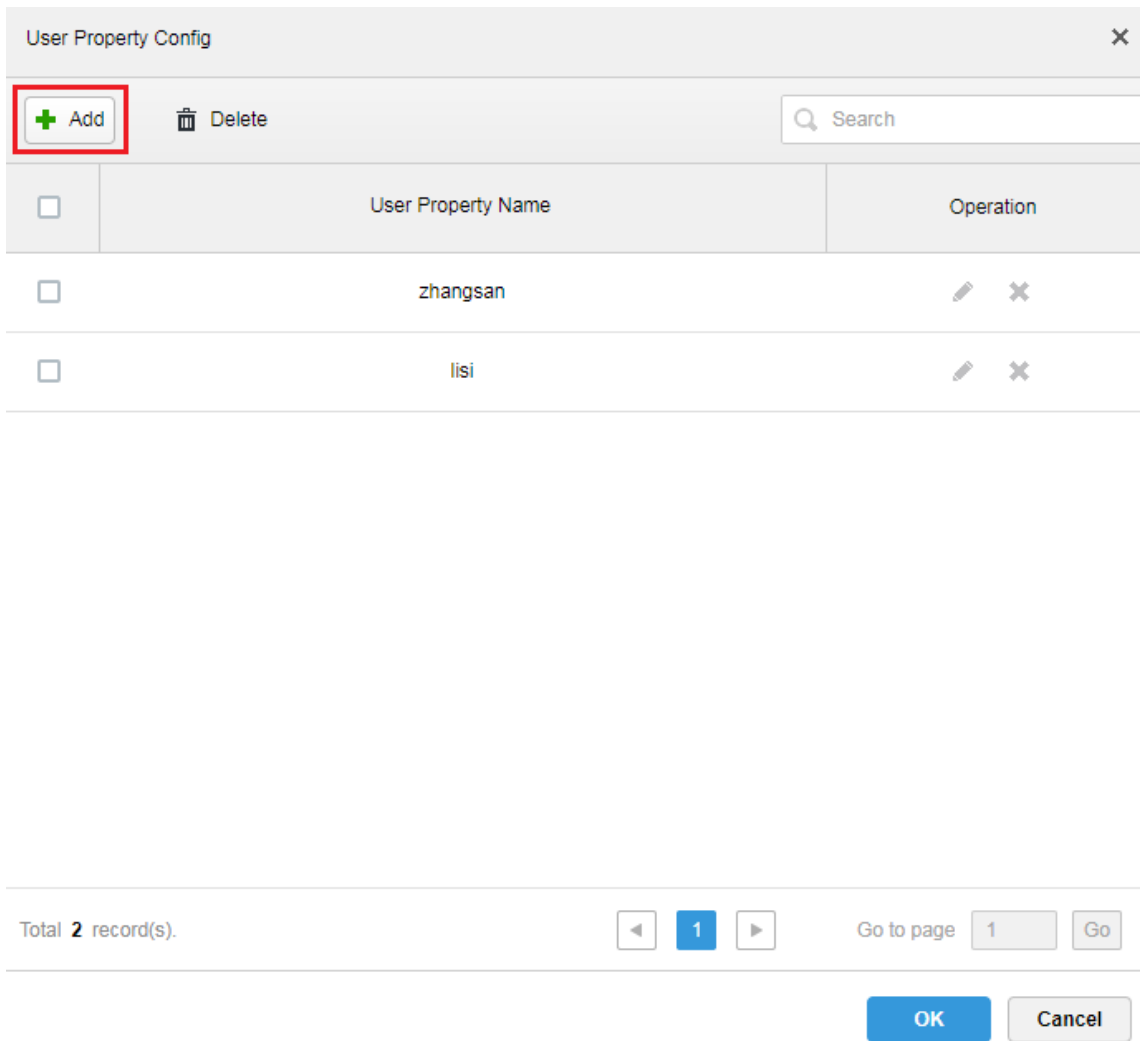
Figure 24-11

Step 4. In add interface, enter user property name, click OK.

Step 5. Click ✎ button to enter edit interface for existing user, click ✖ button to delete this type.
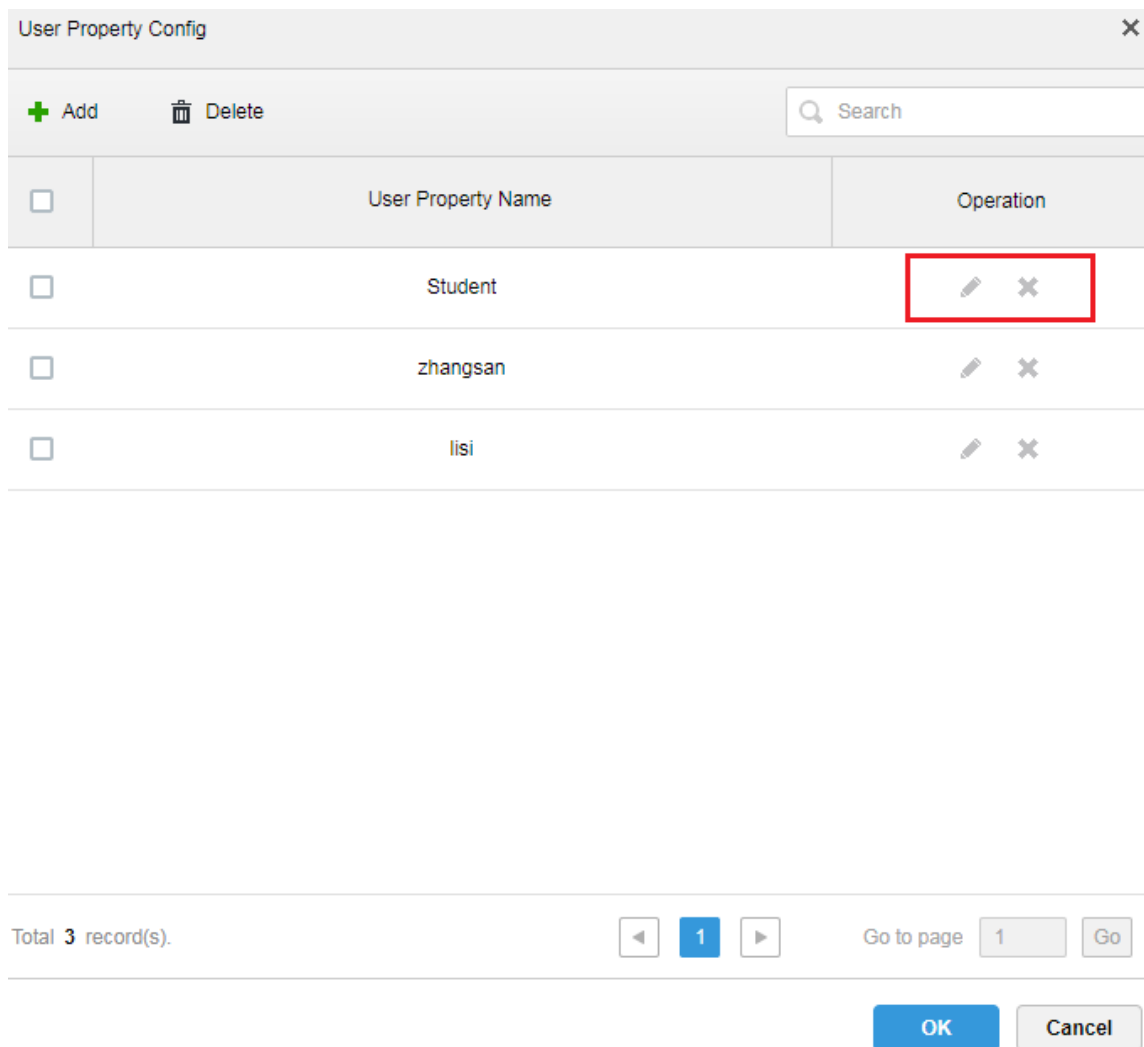
Figure 24-12

24.4.2 **Add User-Manager**

Step 1. Log in DSS Manager, click ➕ to open new tab, and in the figure select "Target Management", to enter user resource management module.
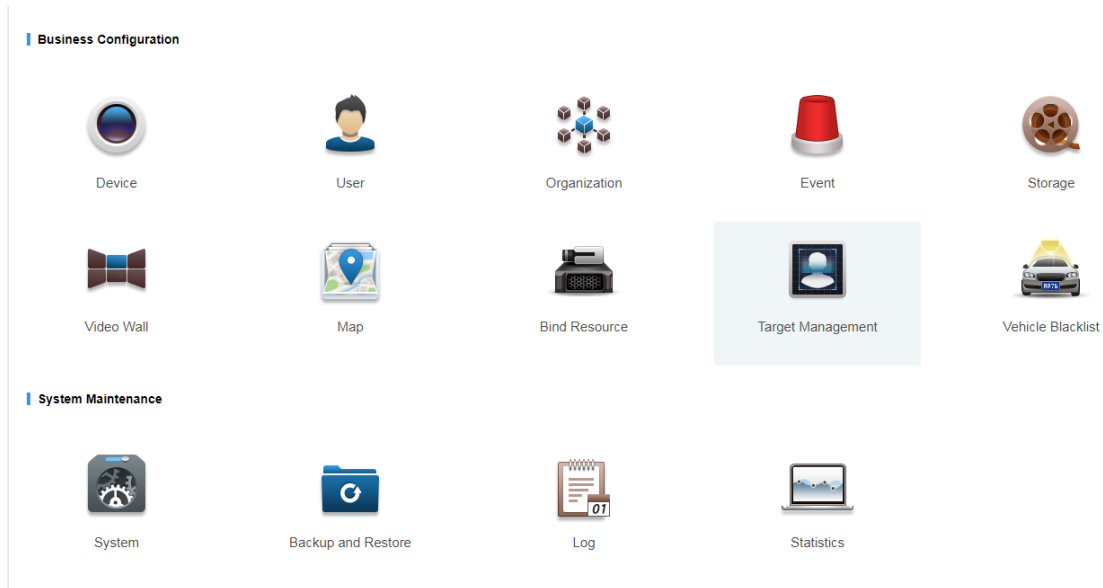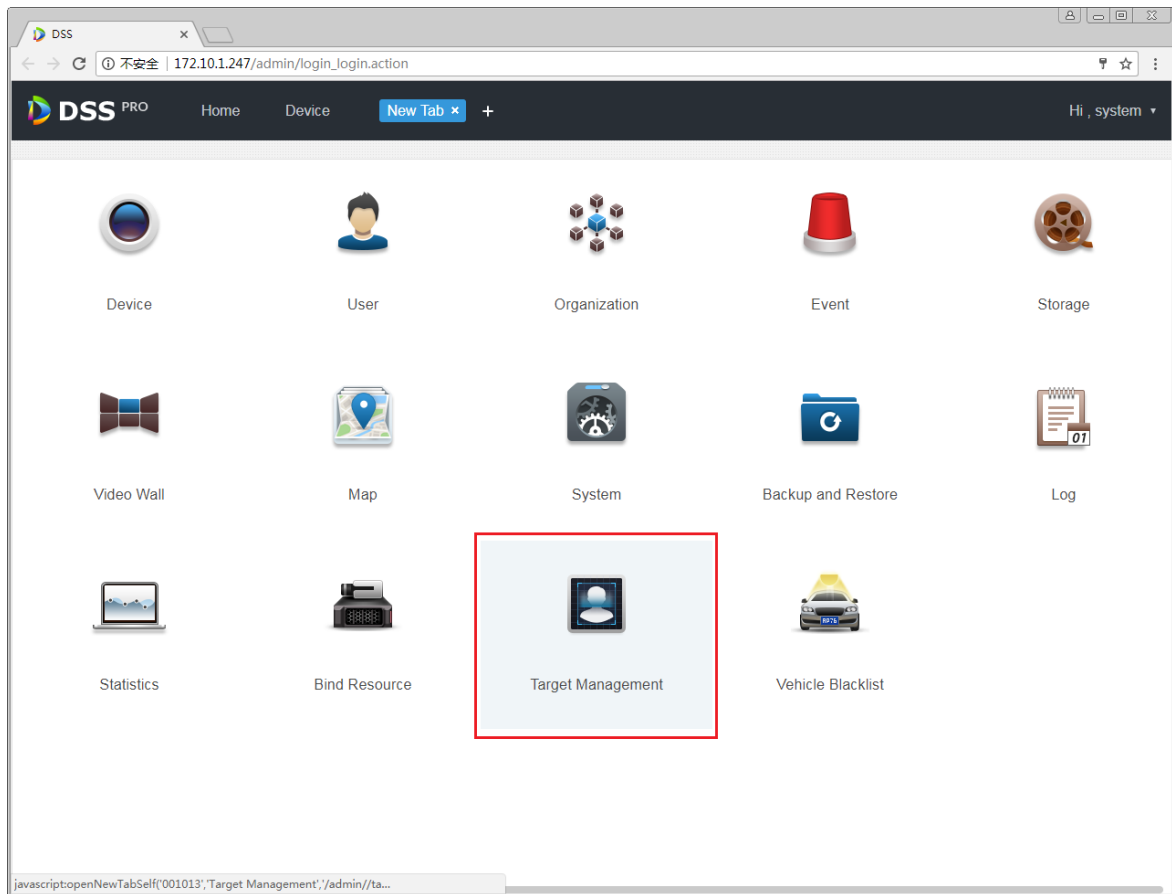
Figure 24-13

Step 2.   Enter target management interface, see figure below, click ![Add] button to enter add user interface. See Figure 24-14.
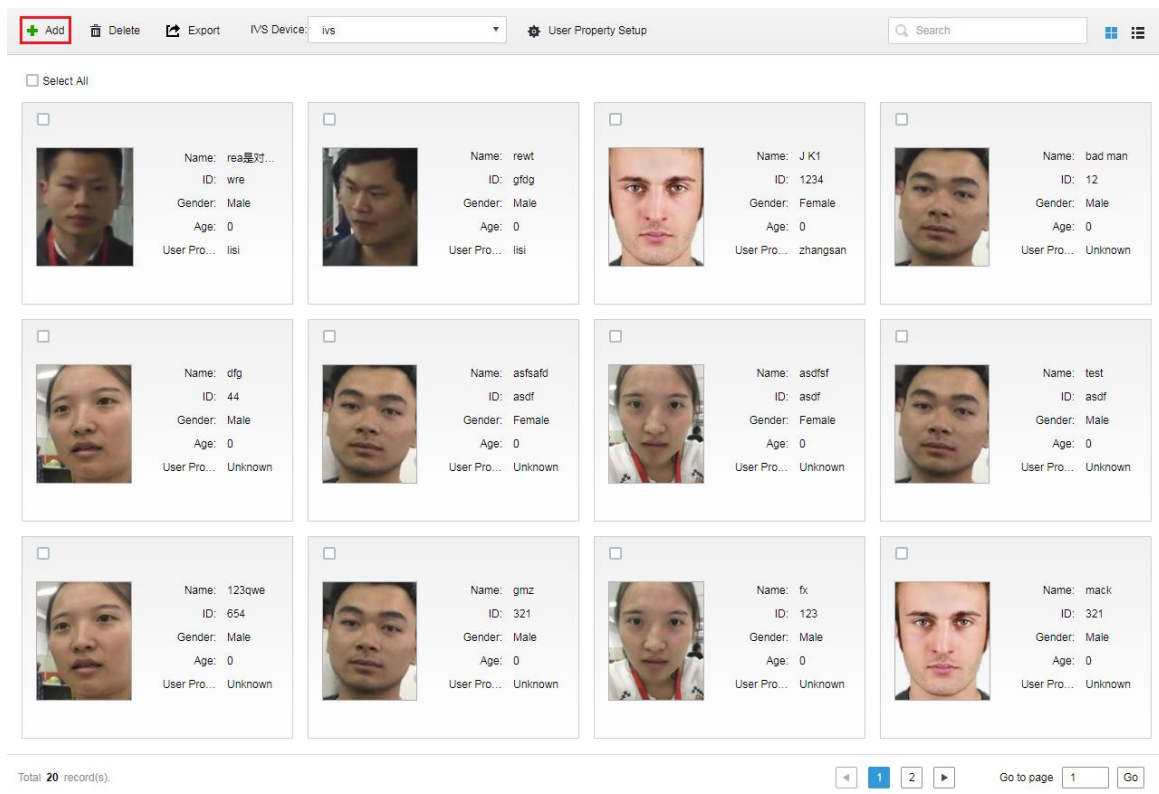
Figure 24-14

Step 3. Enter add user interface, see figure below, click Upload Image button to upload user image, and fill in user name, ID, select gender and DOB. Click OK.

Edit User Info

Basic Info

Figure 24-15

Note:
Requirement of user image:
- Front image.
- Width ≤1000px, height≤1000px.
- Image format in jpg.

24.4.3 **Add User Info-Client**

Step 1. Log in DSS Client, click face recognition module, see Figure 24-16.
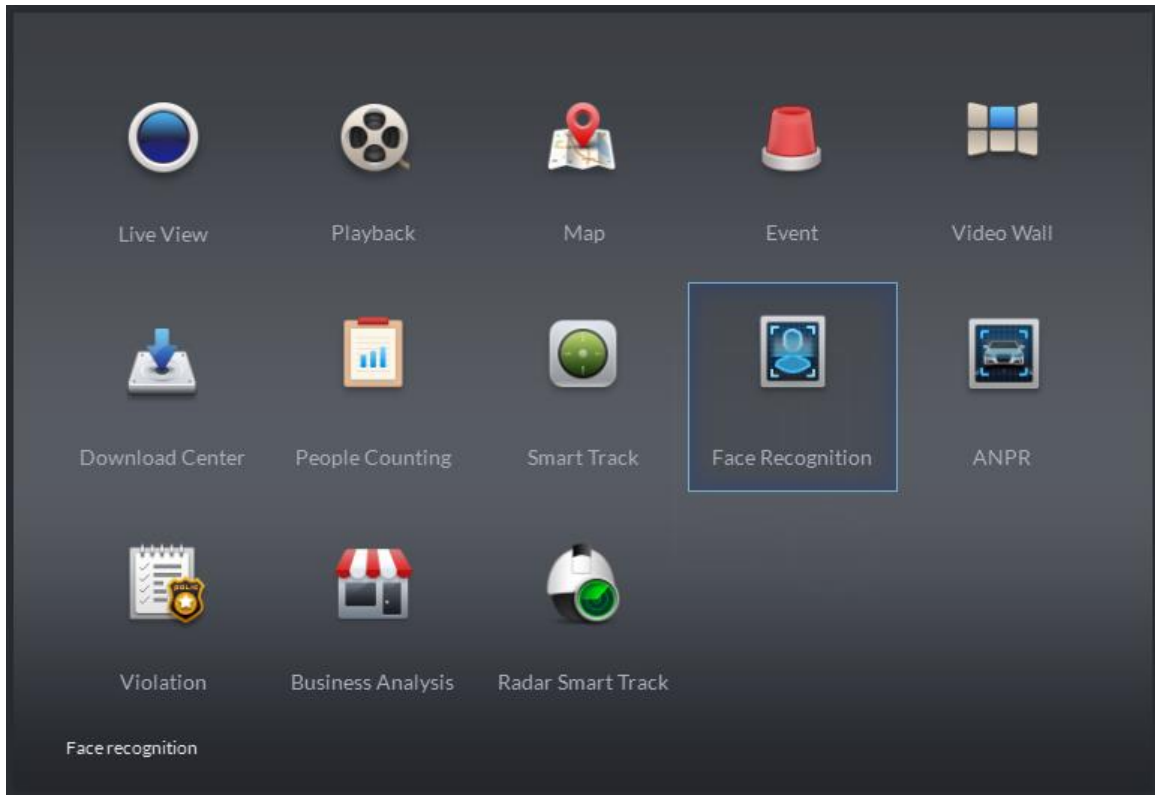
Figure 24-16

Step 2.   Open corresponding IVS channel video, and detected user image will be shown below. See Figure 24-17, user with a red box exists in user database.

Figure 24-17

Step 3.   Double click image in scroll bar, enter corresponding info, click Register button to add user into user database.

Figure 24-18

24.5 **Client Application**

24.5.1 **Face Recognition**

Step 1. Log in DSS Client and open new tab, click "Face Recognition" module to enter ANPR application, see Figure 24-19.

Figure 24-19

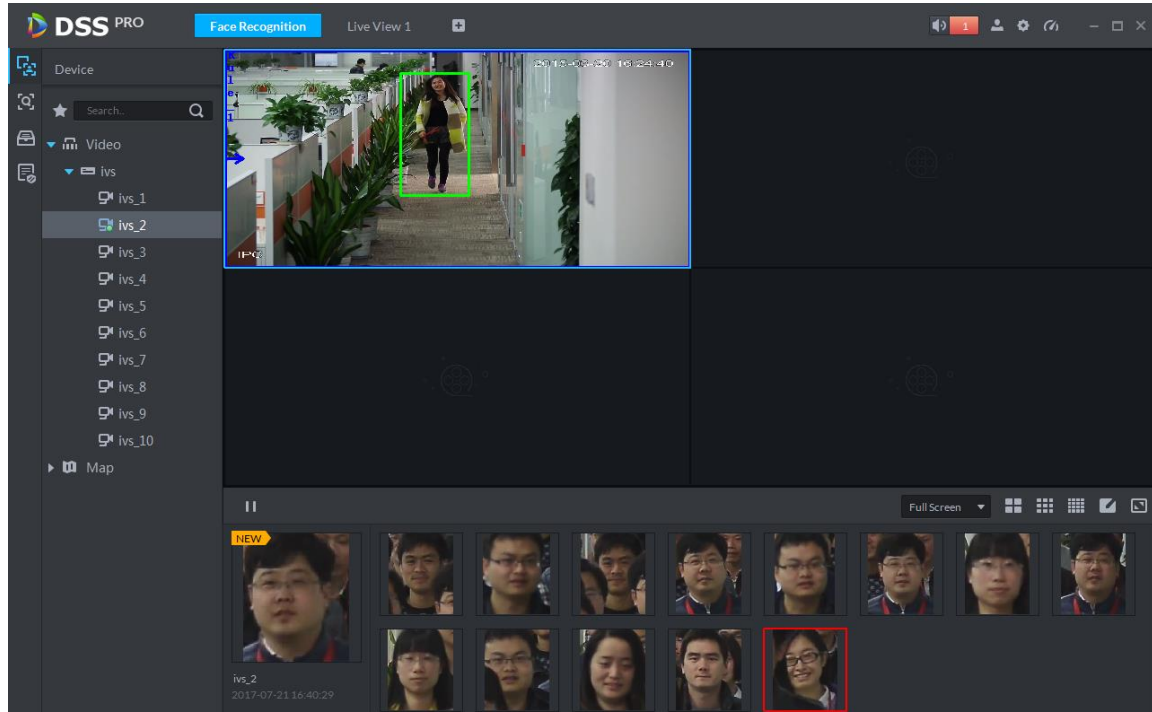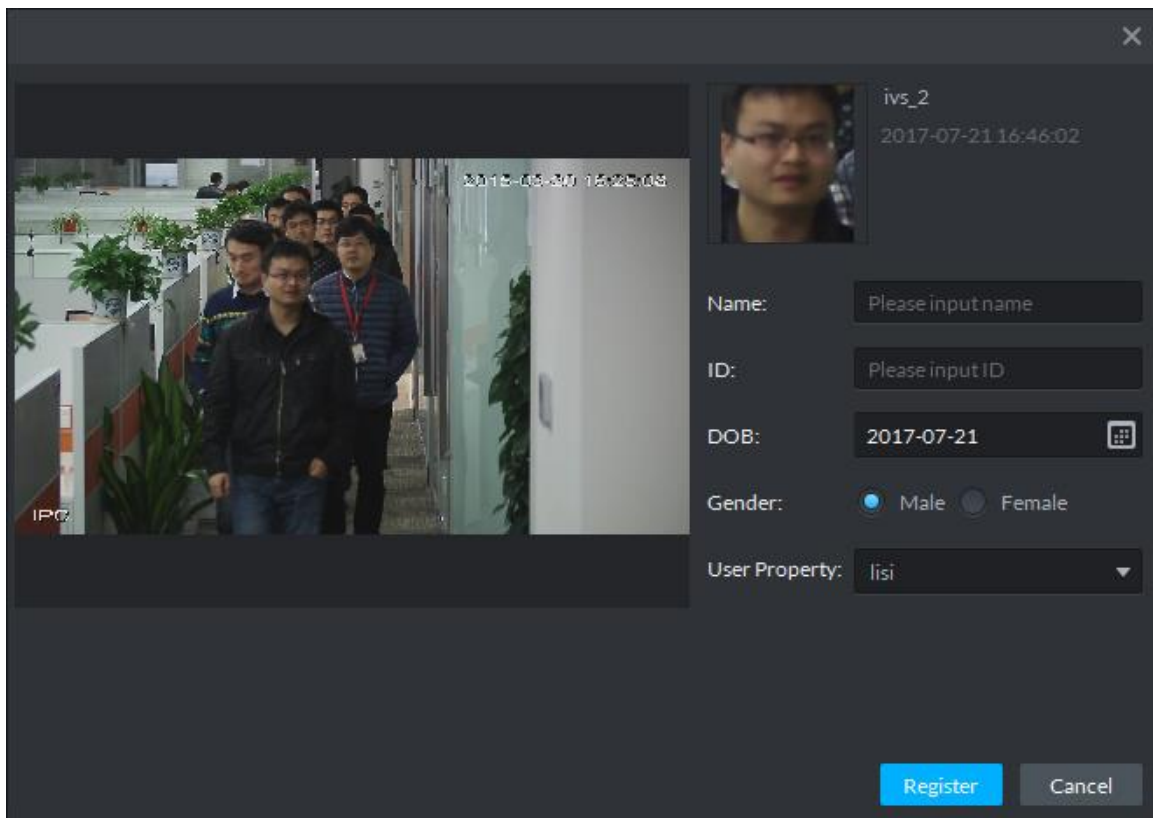Step 2. Enter face recognition module, select [icon] to enter face recognition application, double click to open or drag IVS channel to video window. In scroll bar, it will show face image detected, see Figure 24-20. A red box means successful pairing with user database.
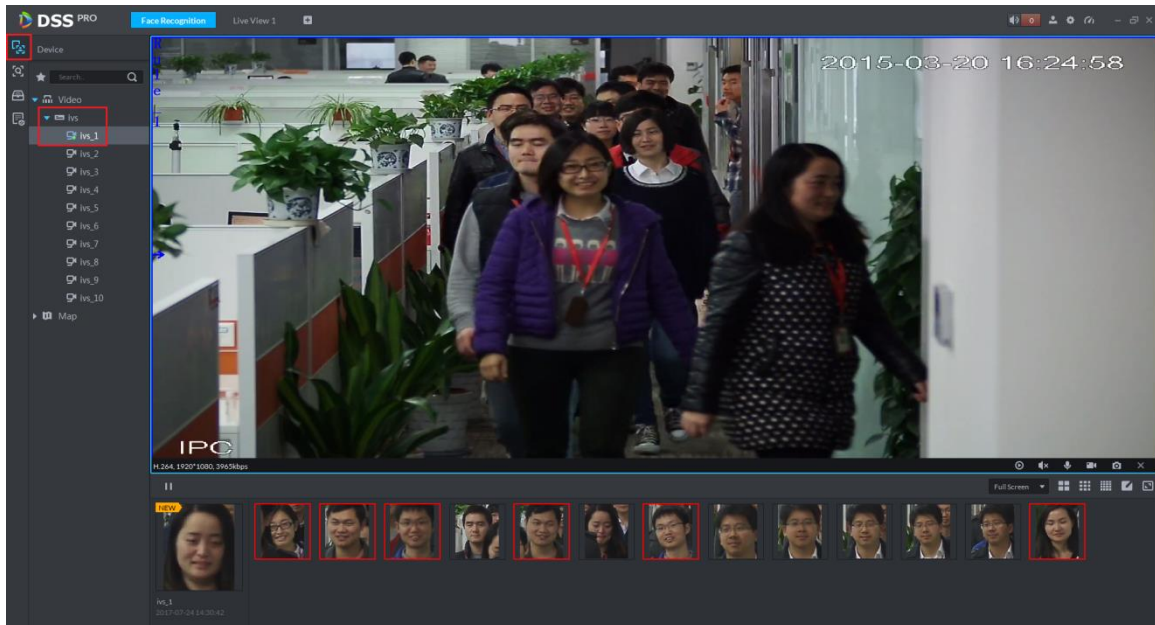
Figure 24-20

Step 3. In scroll bar, click [icon] button to pause picture refresh, click [icon] button to restore refresh.

Figure 24-21

Step 4. Place mouse on image with red box, you can see similarity, see Figure 24-22.

Figure 24-22

Step 5. Double click red box to see detail of snapshot, see Figure 24-23.

Figure 24-23

Step 6. Double click image without red box, fill in user info, see Figure 24-24. Click "Register" button to add the user into user database.
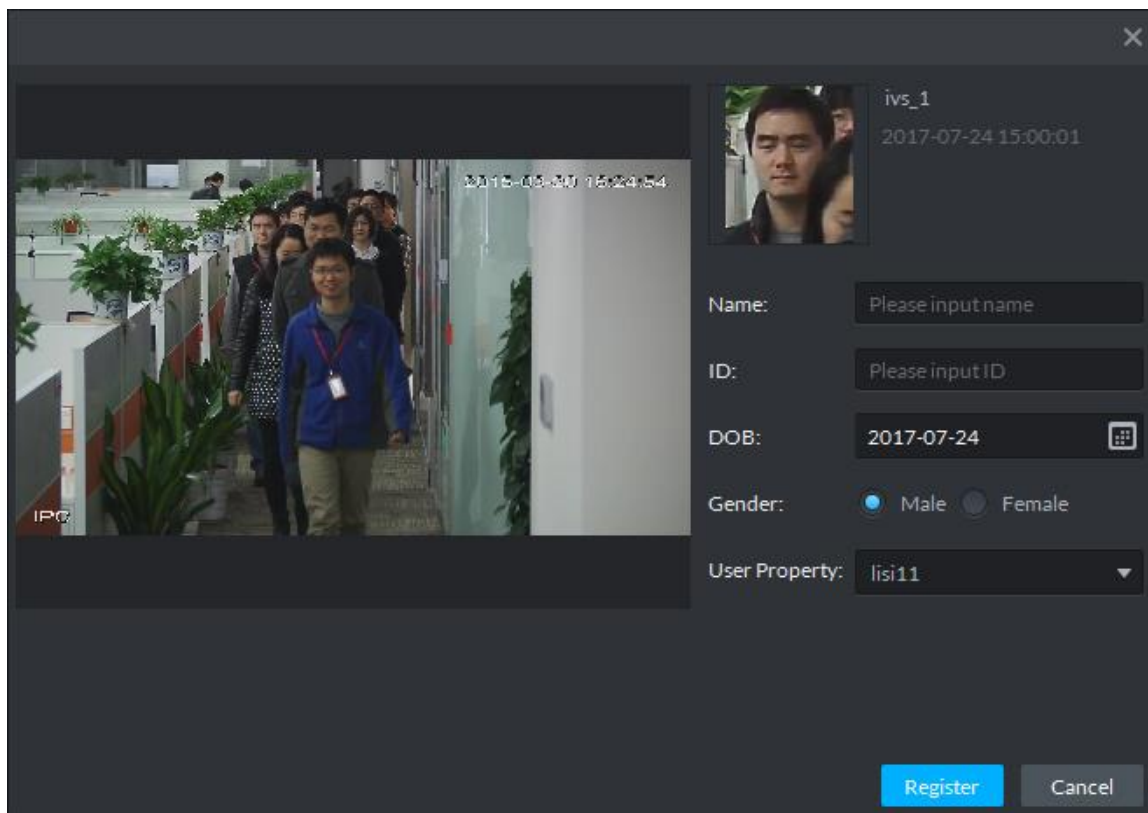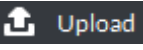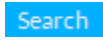
Figure 24-24

24.5.2 **Snapshot Search**

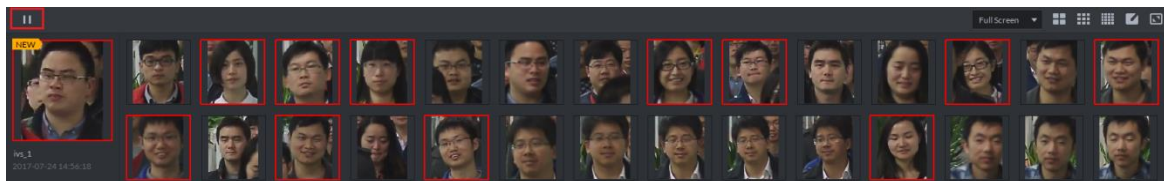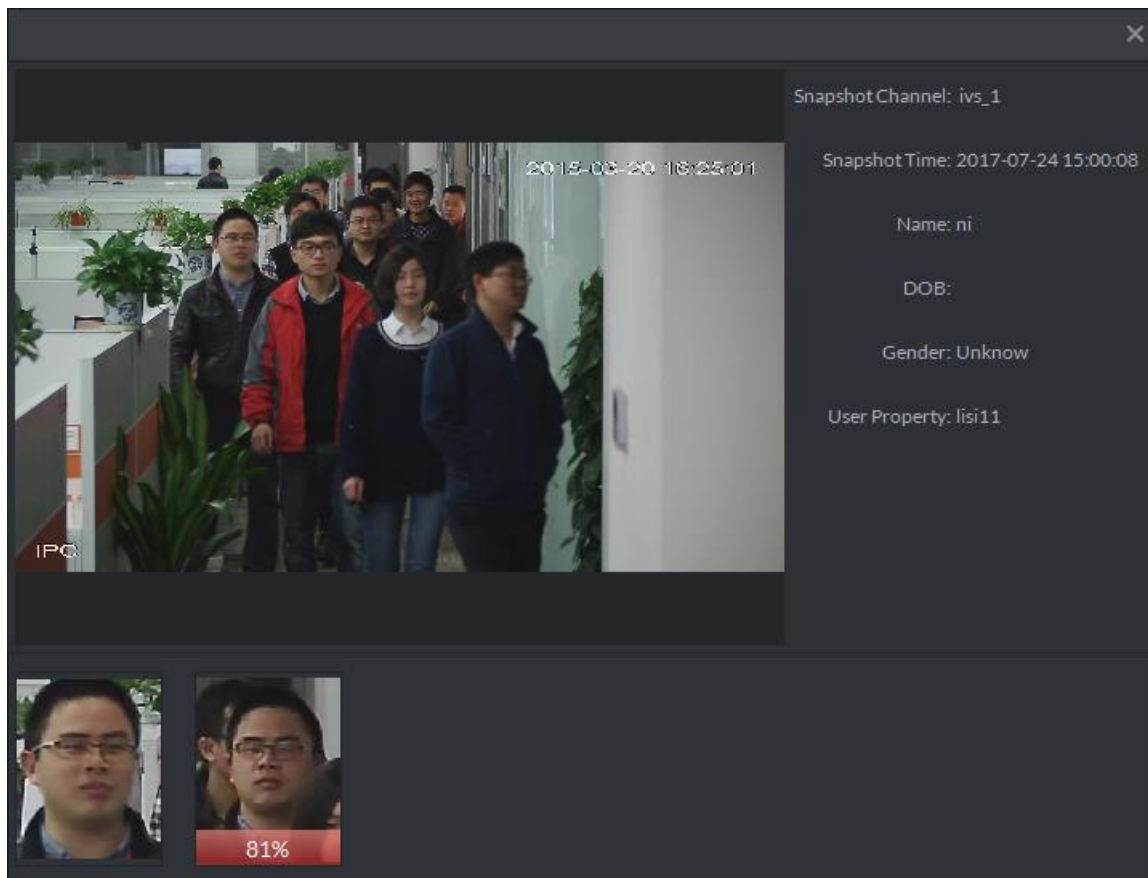Step 1. Enter face recognition module, select icon to enter snapshot search app. First select IVS device and channel (multiple choices), and then click button to upload user snapshot you want to search. In read face snapshot, select face you want to search, drag your selected similarity and select period for search, click .
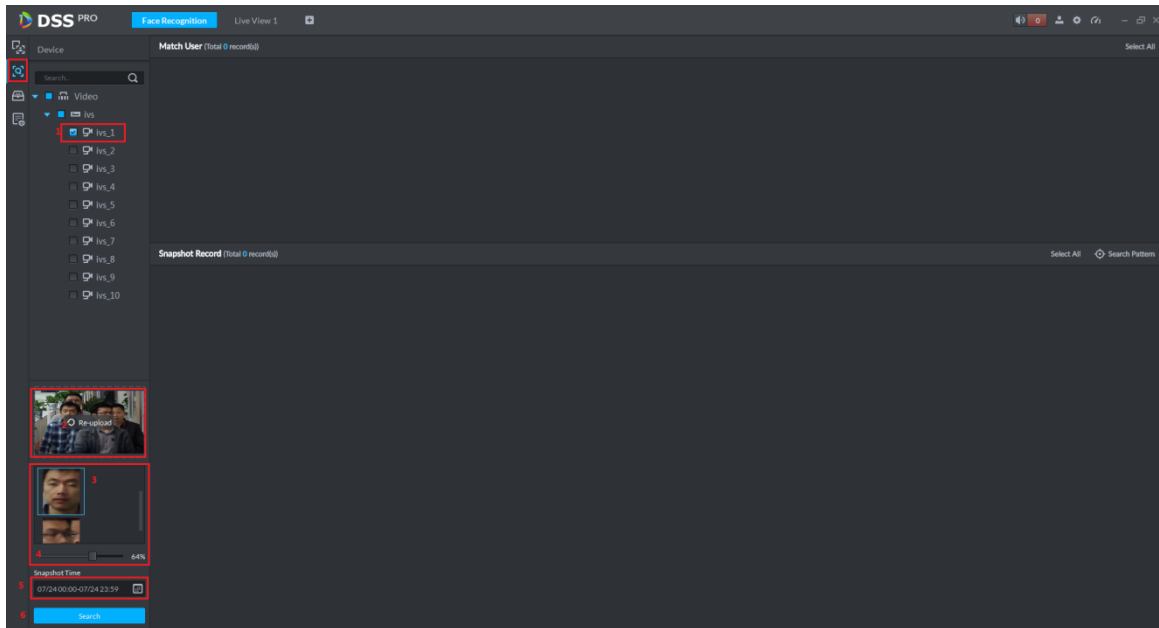
Figure 24-25

Step 2. See Figure 24-26, in Match User it shows matched record from user database. In Snapshot Record, you can see all matched records detected in the IVS channel.
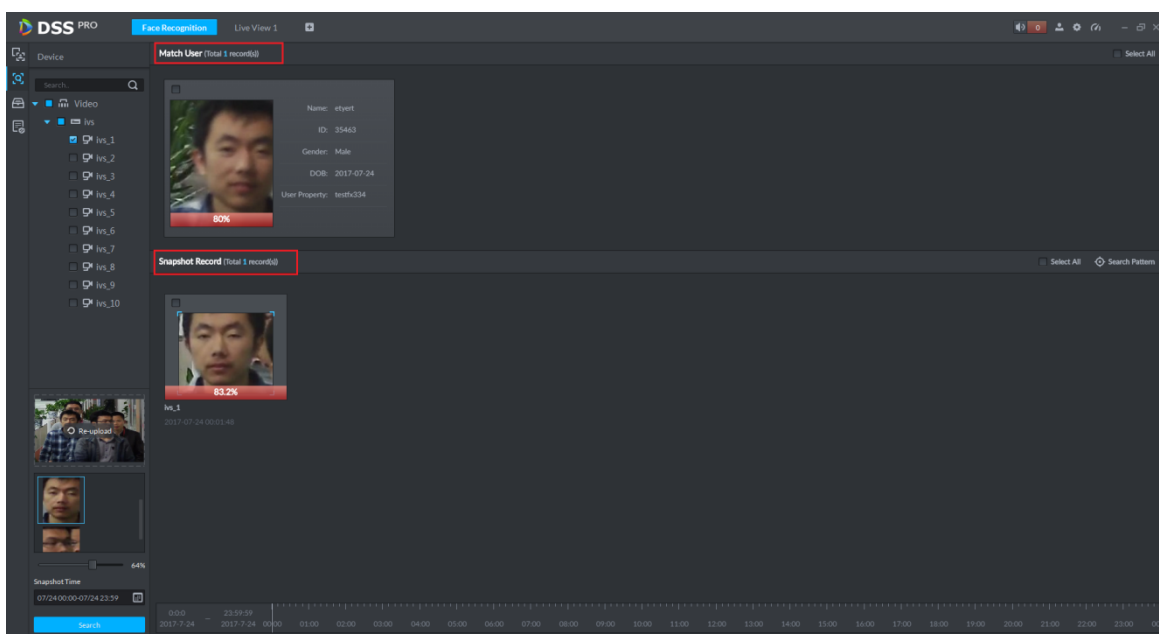
Figure 24-26

Step 3. In Snapshot Record, select picture, click [⊙ Search Pattern] button to view user pattern.

Figure 24-27

Step 4. See user pattern，See Figure 24-28
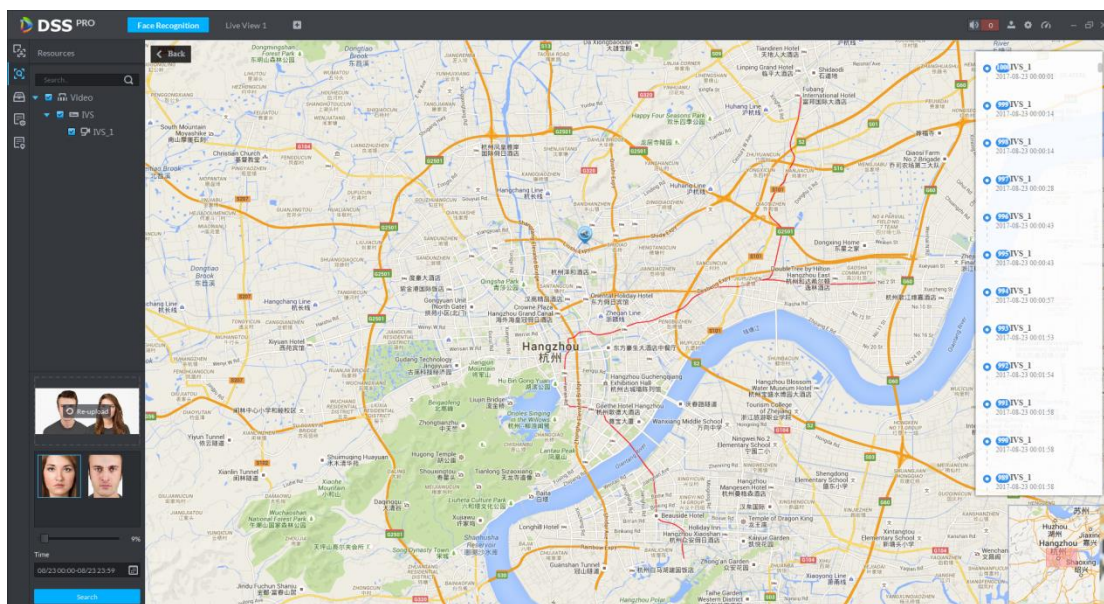
Figure 24-28

24.5.3 **Info Search**

Step 1. Enter face recognition module, select [⊟] mark to enter snapshot search app, see Figure 24-29 and select IVS device and channel (select one only), and select search period, user type, name, ID, gender and etc. Click [Search] button to search.
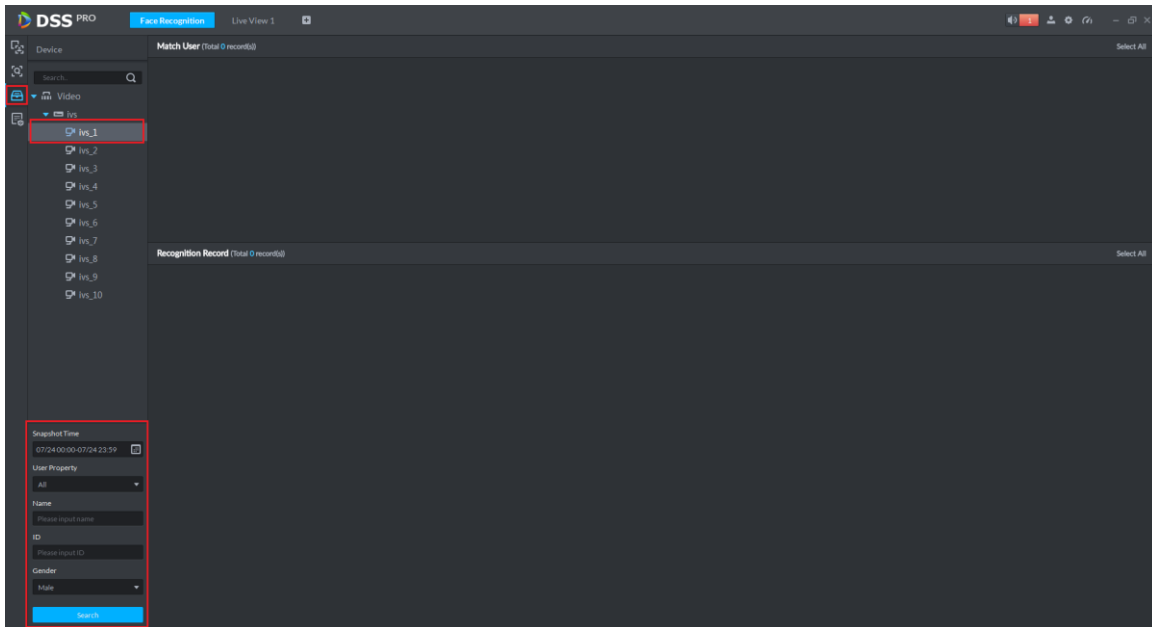
Figure 24-29

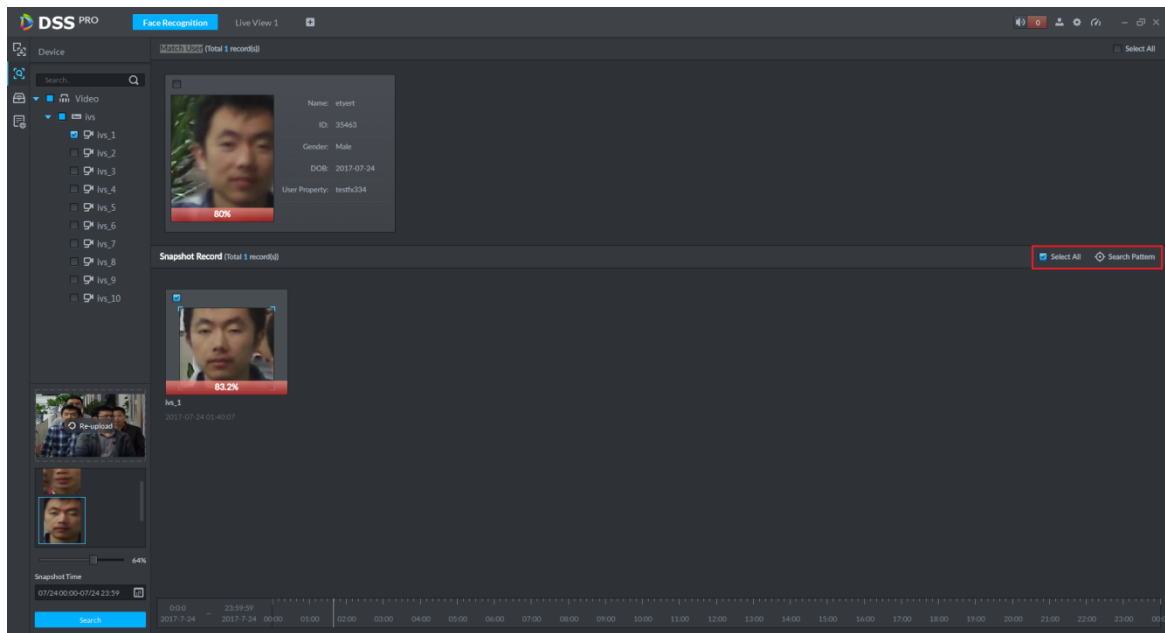Step 2. Search result is in Figure 24-30. Match User shows match result by user type, name, ID, gender and etc. Recognition Record shows result of comparison between IVS channel snapshot record and user database.
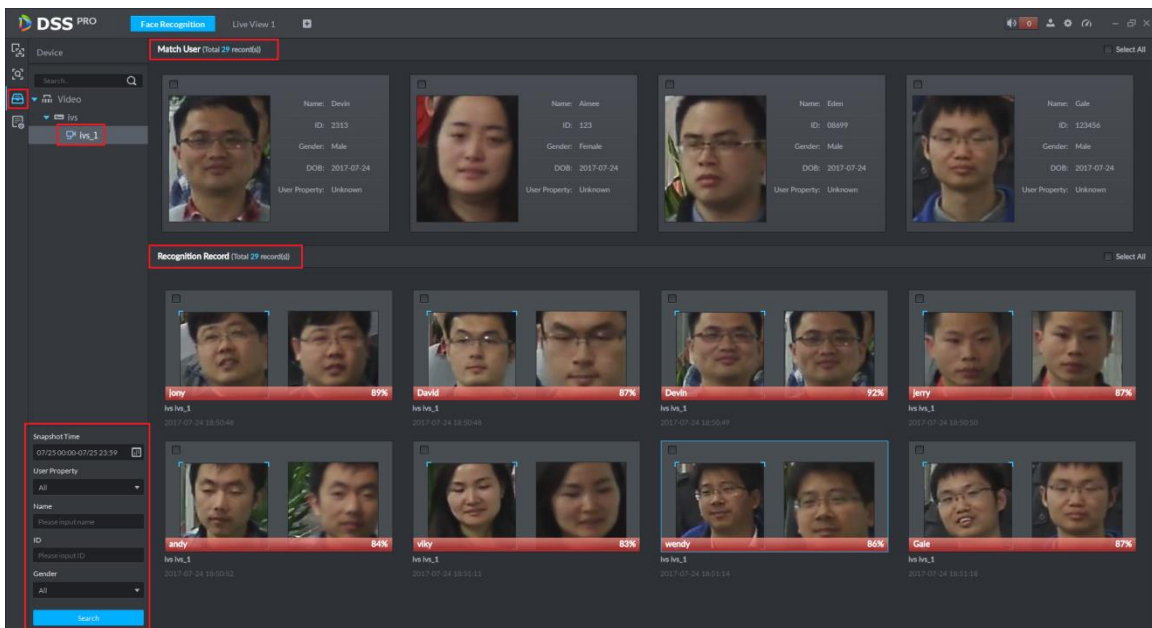
Figure 24-30

Step 3. Double click any one result in Recognition Record and you can see details of this recognition, as well as detailed scene of user, see Figure 24-31.

Figure 24-31

24.5.4 **Arm Record**

Arm record shows all detection records of existing user in user database by an IVS channel.

Step 1.   Enter face recognition module, see Figure 24-32. Select [icon] icon to enter picture search

app, select period to search, click [Search] button.

Figure 24-32

Step 2.   See Figure 24-33, click [Statistics] button to search total record quantity.
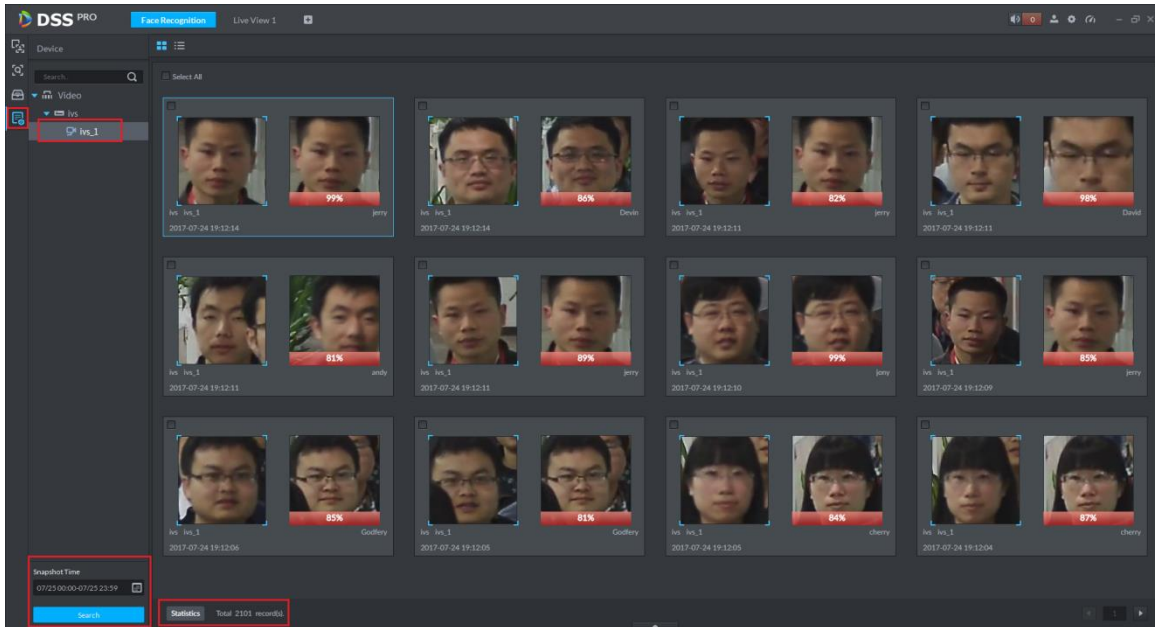
Figure 24-33

Step 3. Double click any one record to view details, see Figure 24-34, click Previous One or

Next One button to view previous or next record.
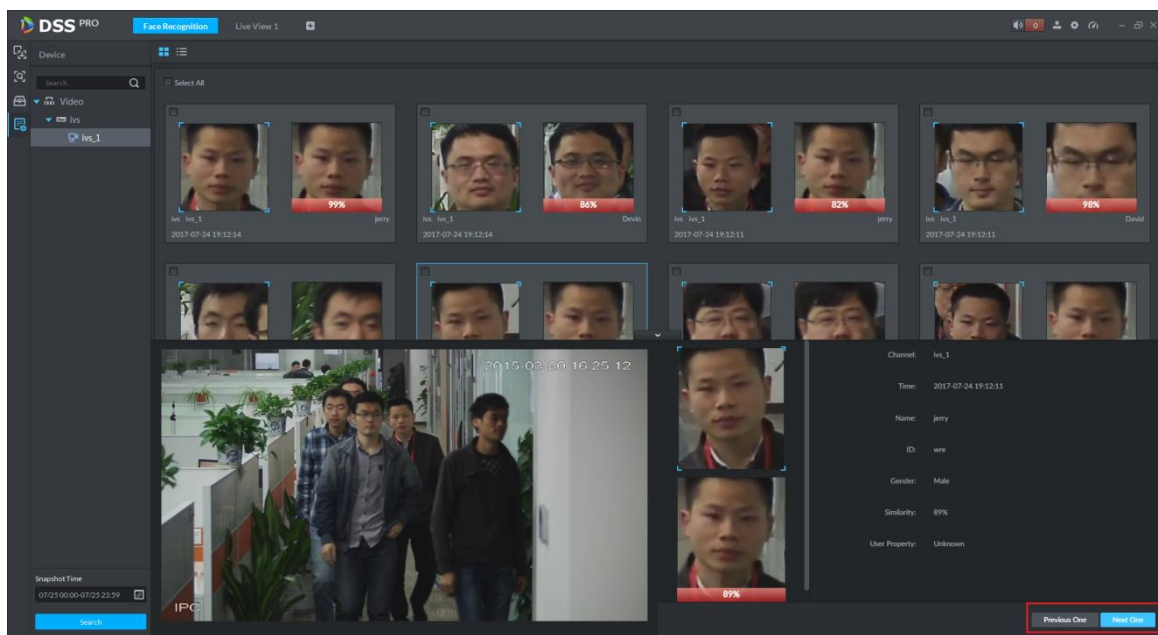
Figure 24-34

25 Smart Track

DSS Client supports smart track which links fisheye speed dome to general speed dome to better control each monitoring point.

Note:

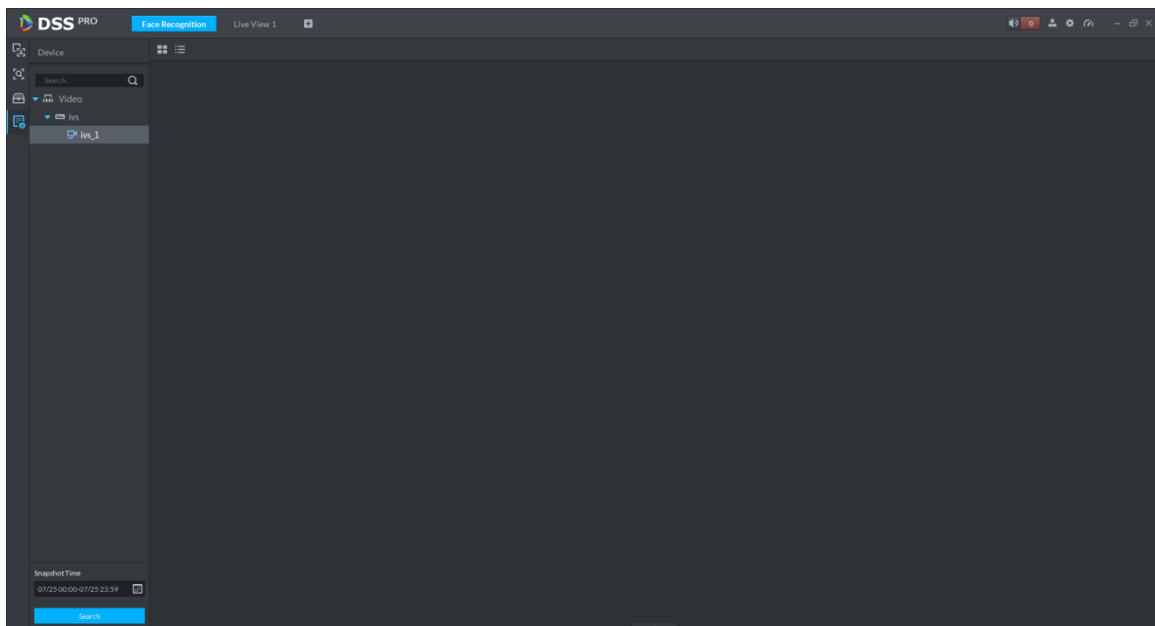Before operating smart track, you must go to Device manager to add fisheye device (after device is added, click ✏, and select fisheye and general speed dome. See Ch 7.2.

25.1 Flow
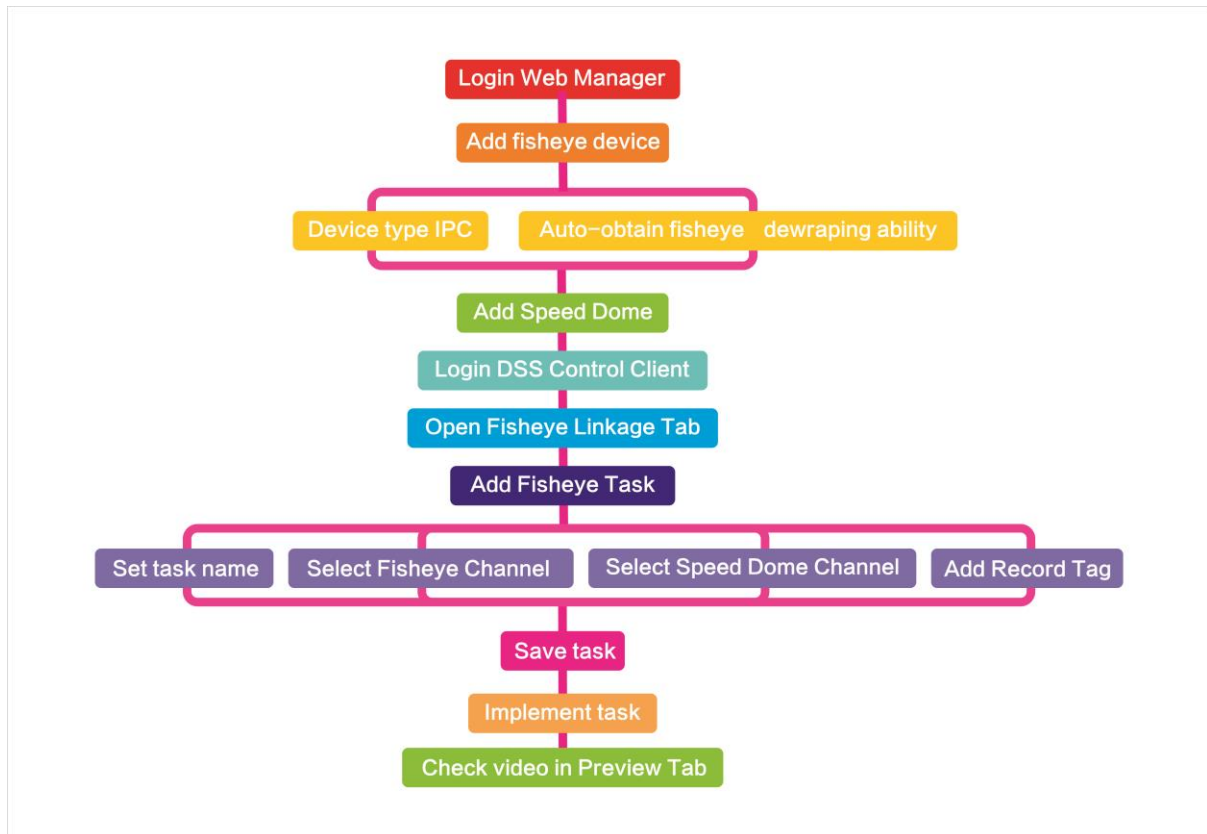
Figure 25-1

25.2 Add Monitor Task

Step 1. Click ⊞ next to Preview, select smart track.

Step 2. Click ➕. See Figure 25-2.
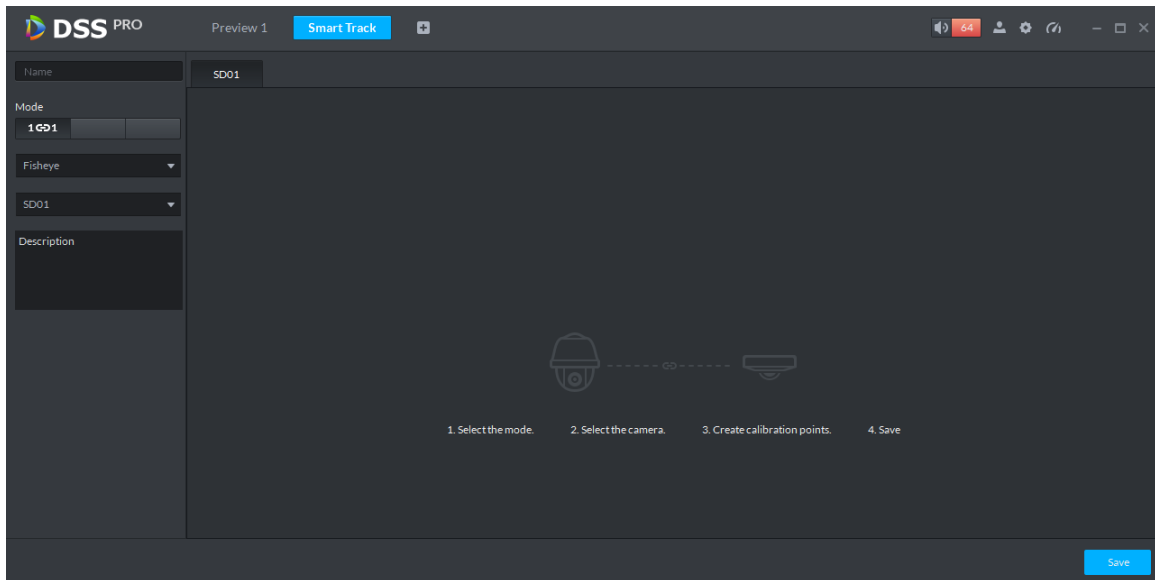
Figure 25-2

Step 3.   Set monitor point name, select fisheye name and speed dome name, see Figure 25-3.
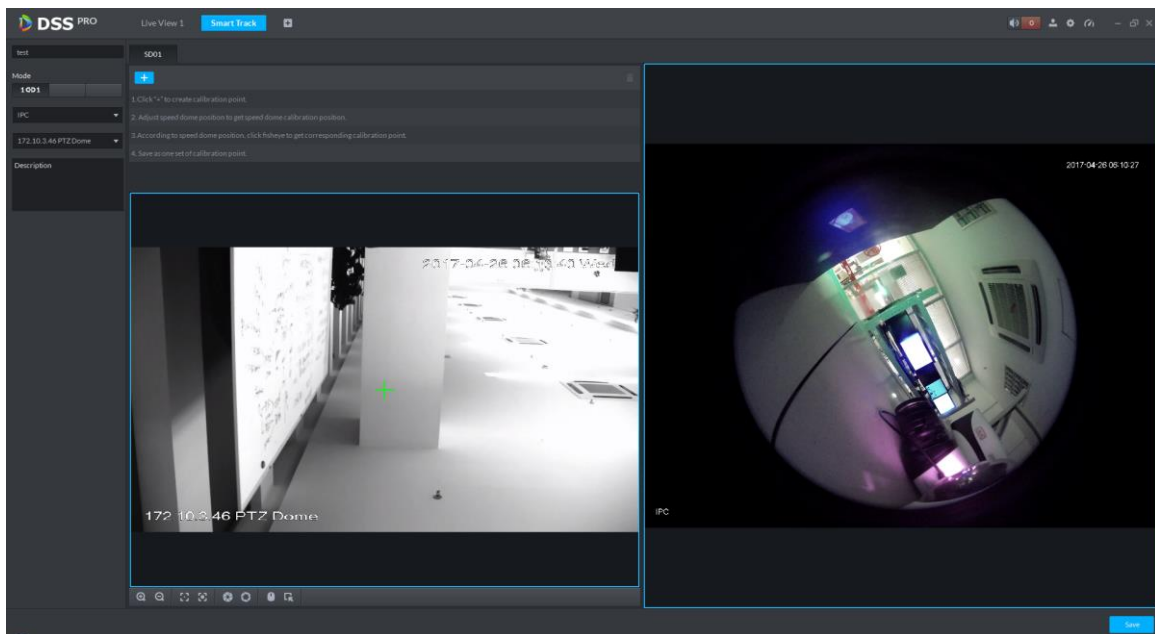
Figure 25-3

Step 4.   Click [+], on the right move [+] to select one point. On general speed dome on the left, click [ ] to rotate speed dome to find this point. Adjust PTZ to move to center position (green cross in window), see Figure 25-4.
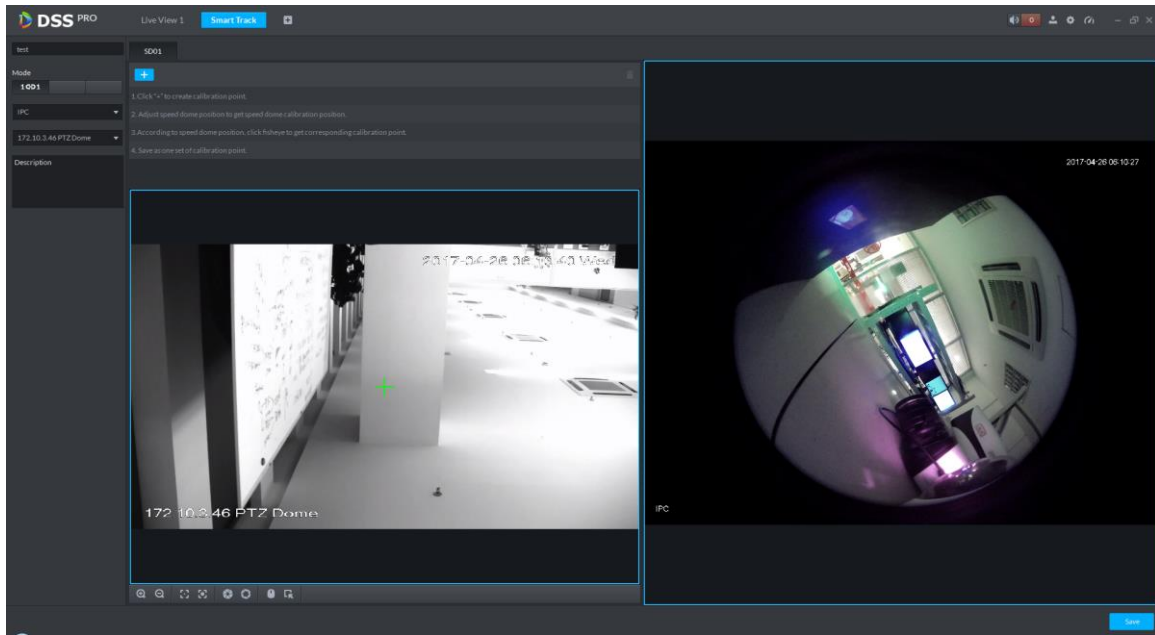
Figure 25-4

Note:

- Select 3-8 mark points on fisheye speed dome.

- When you find mark point on the left side of general speed dome, click to zoom out PTZ.

- Click to 3D position, and when you click a certain point on the left side of speed dome, it will auto move to the center.

Step 5. Click to marked point.

Step 6. Follow Step 4. -5 to add at least three mark which shall not be on a same straight line. See
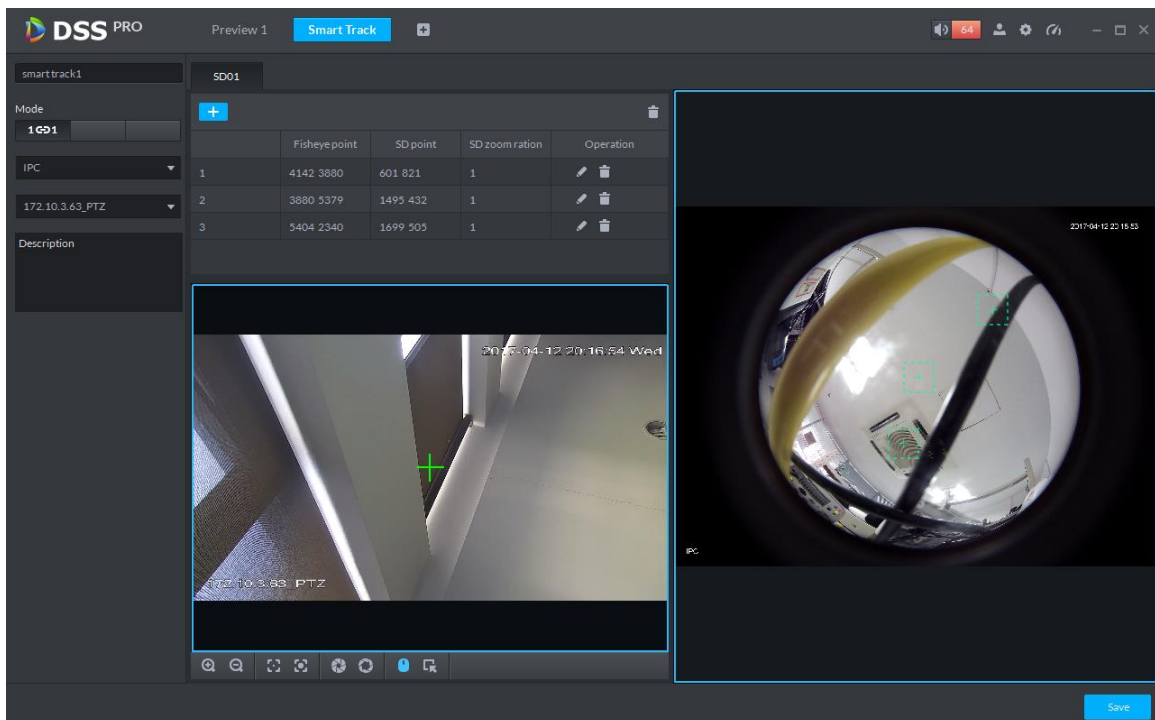
Figure 25-5

Step 7. Click Save, see Figure 25-6.
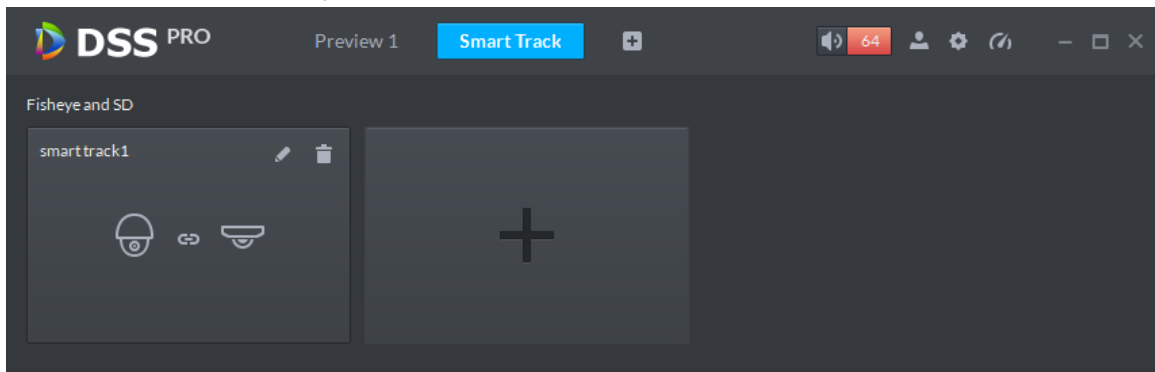
Figure 25-6

25.3 **Execution of Fisheye Monitor Task**

Step 1. Double click complete monitor task box, enter Preview interface, see Figure 25-7.
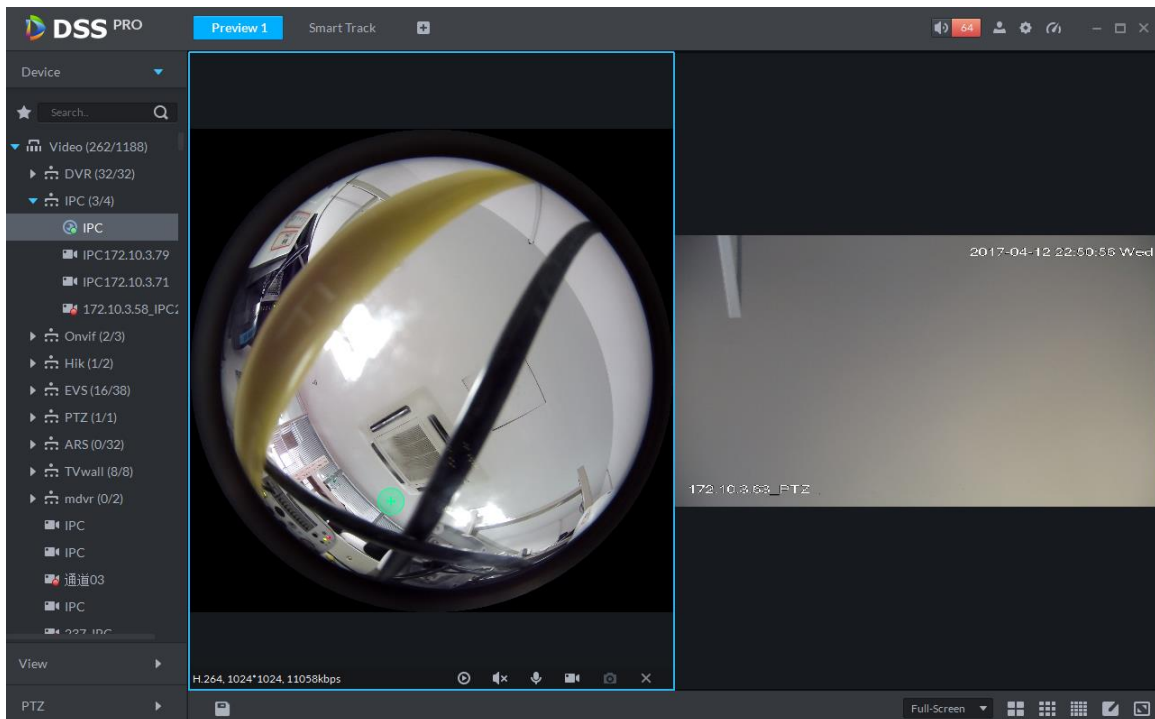
Figure 25-7

Step 2. Click any point on the left of fisheye, general speed dome on the right will auto link to corresponding position.

Step 3. Click , pop up Save the View box, see Figure 25-8.
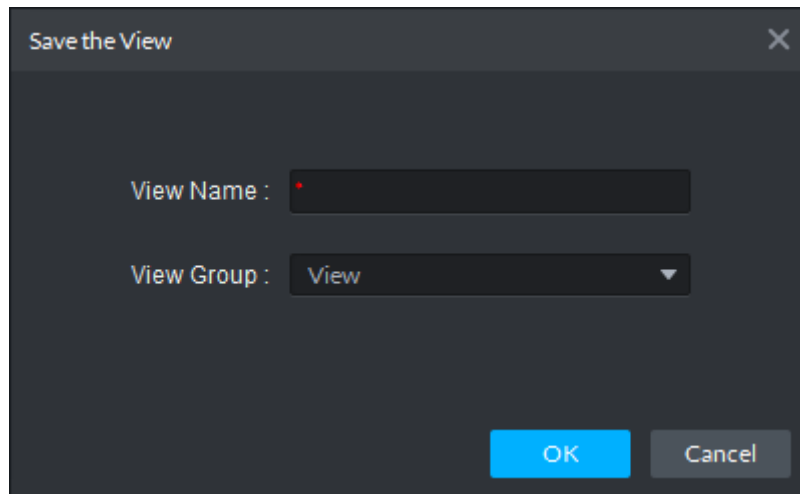
Figure 25-8

Step 4.　Enter view name, select group, and click OK.

26 Radar Smart Track

26.1 Business Flow
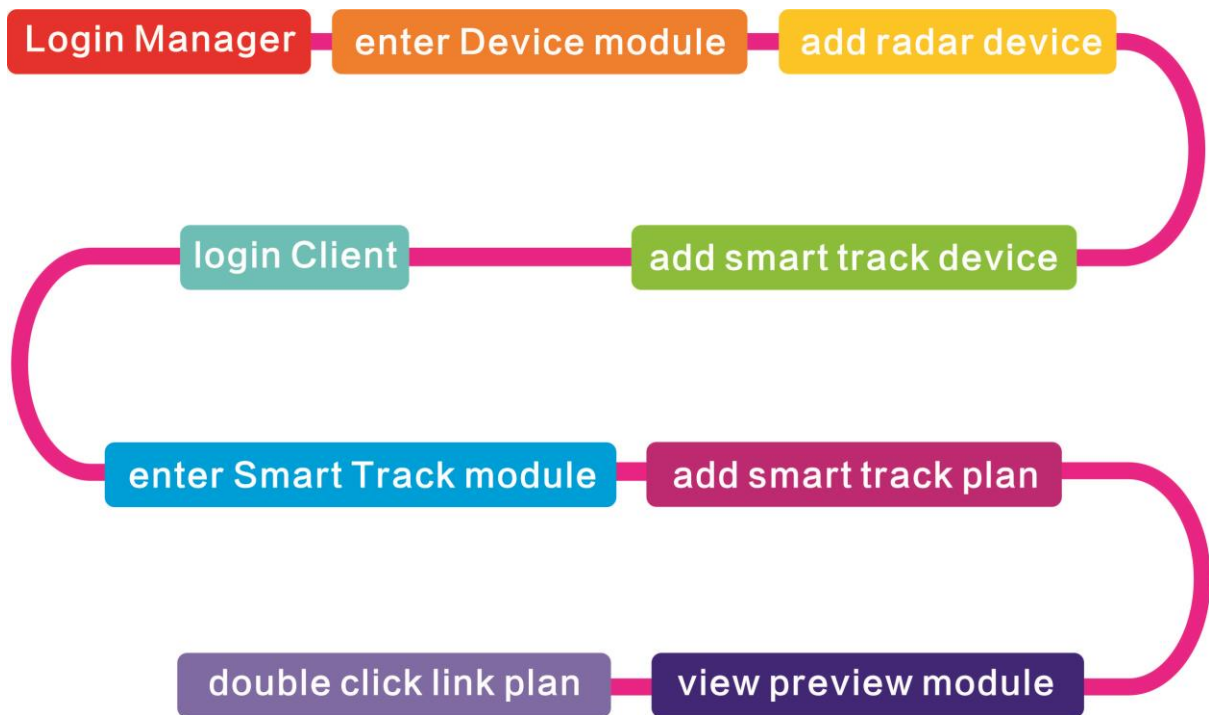
26.2 Add Radar

Step 1. Login Manager, enter Device module, in Figure 26-1 click ➕ Add to enter Add

interface.
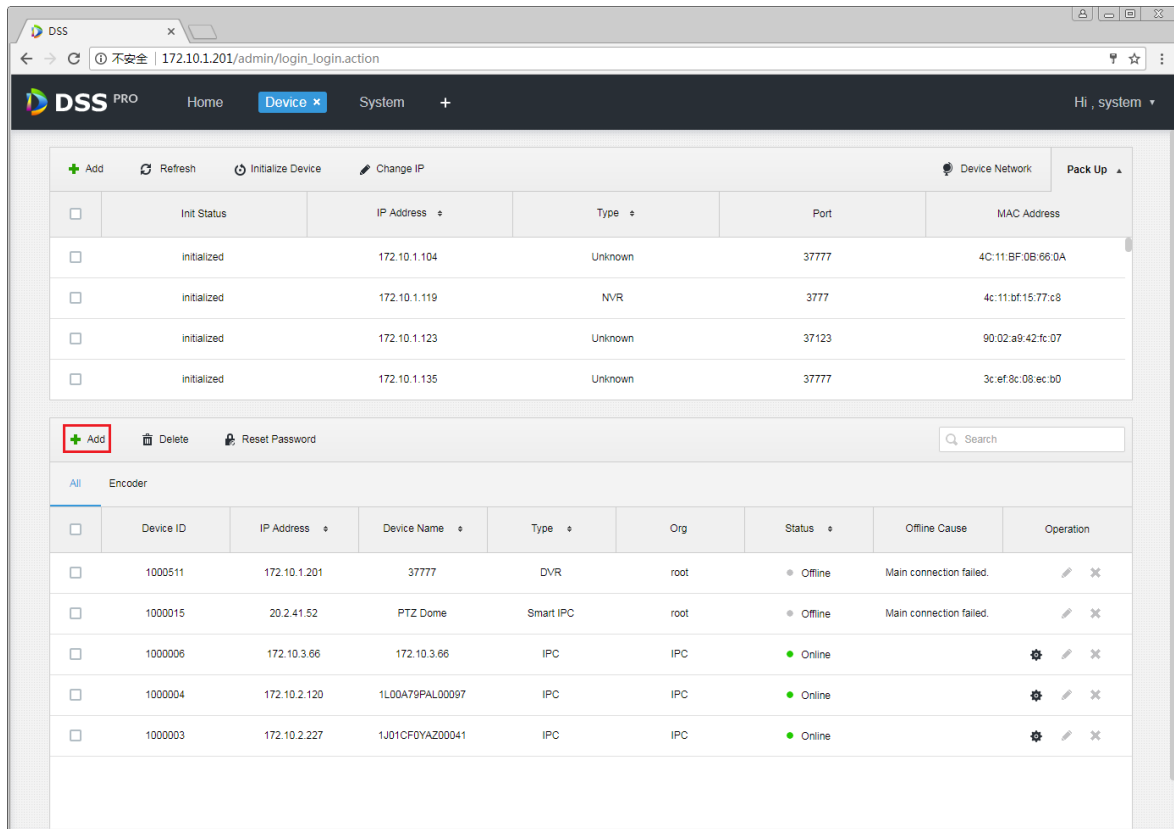
Figure 26-1

Step 2. In Figure 26-2, device category shall be "Radar Device" and enter device IP, port, username and password. Select device organization and server, click [Add] to go to next step.

Figure 26-2

Step 3.   In Figure 26-3, fill in radar device name, select device model (currently support B100 and B300), fill in device SN, select device role and click OK.

Figure 26-3

Step 4.　Radar device is shown in Figure 26-4. Click ✎ to edit this radar device.

Figure 26-4

Step 5. Click ✏ to edit this radar device, see Figure 26-5.

Figure 26-5

26.3 Add Smart Track

Step 1. Login Manager, enter device module, in Figure 26-6 click ➕ Add to enter Add interface.
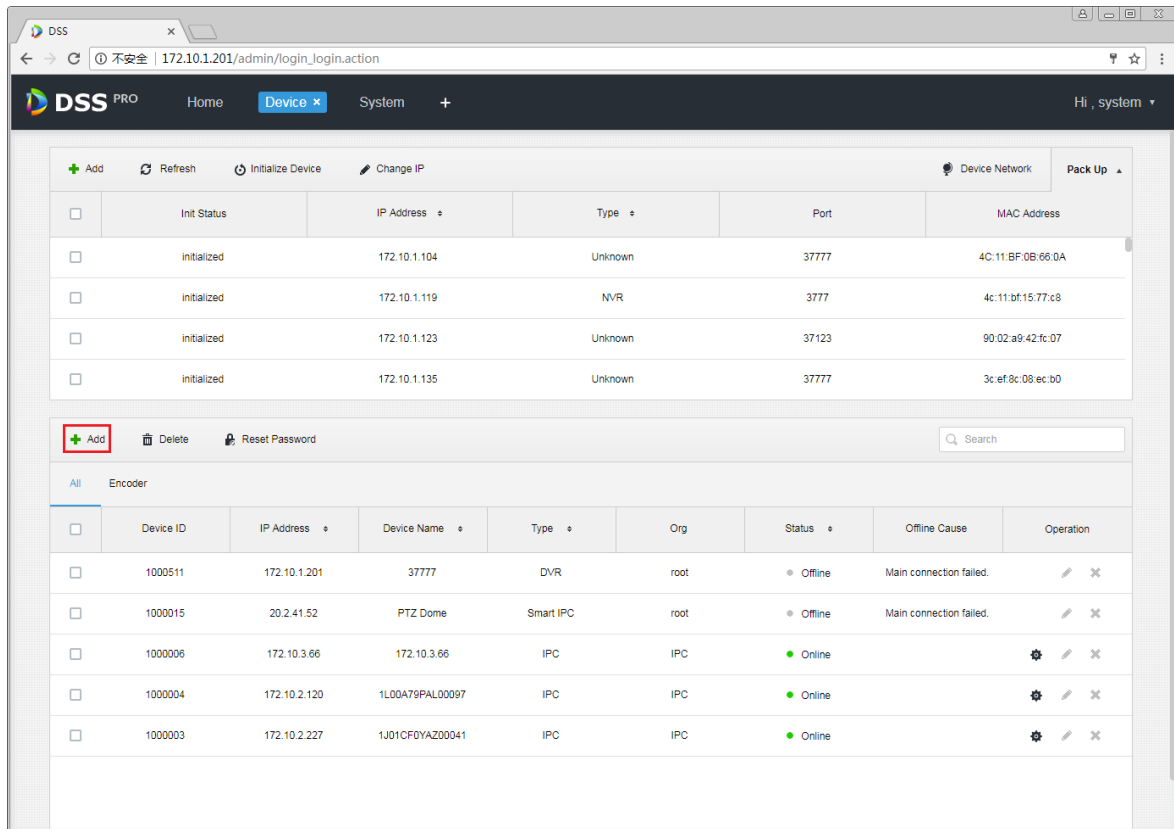
Figure 26-6

Step 2. In Figure 26-7, for device category select "Encoder", enter smart track dome IP, port, username and password. Select device organization and server, click Add to go to next step.

Figure 26-7

Step 3.　In Figure 26-8 fill in smart track dome name. When network is unobstructed, the platform will auto get device type and channel info. See the figure, select device role, click OK.

Figure 26-8

Step 4. Smart track device is in Figure 26-9.

Figure 26-9

26.4 Smart Track Plan Setup

Step 1.   Login Client, open New tab to enter radar smart track module, see Figure 26-10.
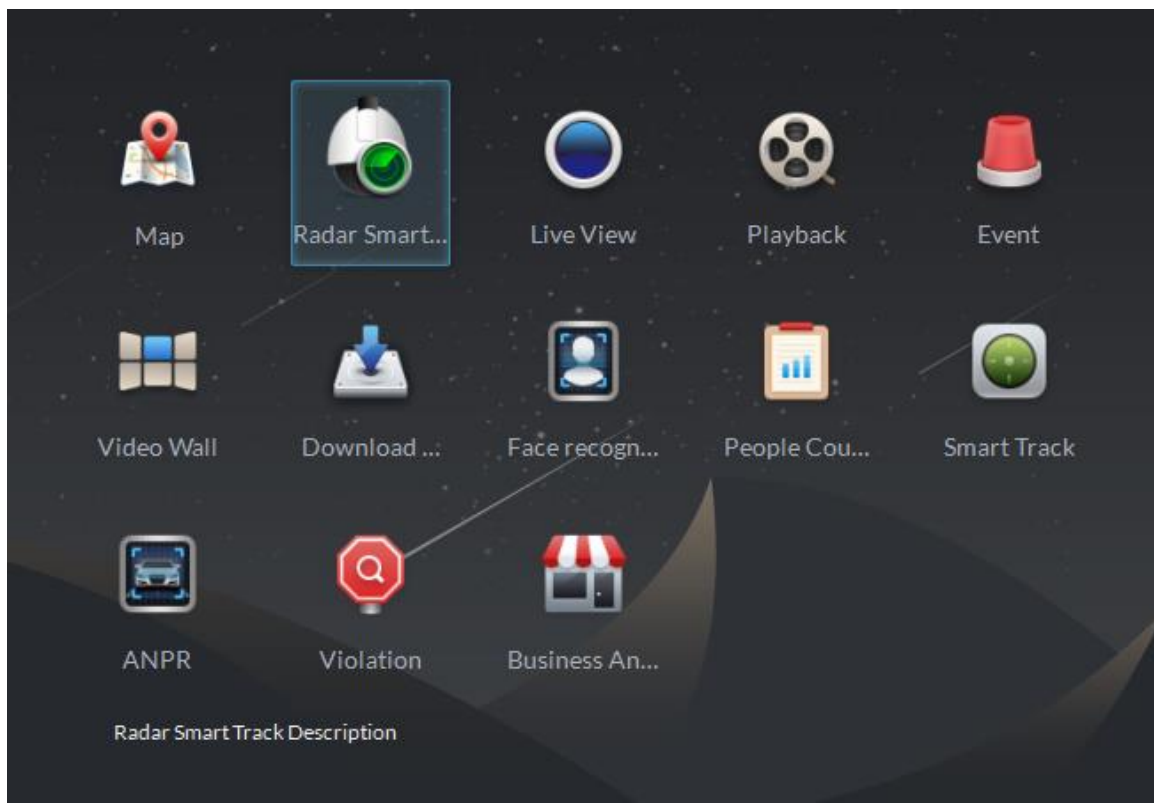
Figure 26-10

Step 2.   Enter radar smart track module, see Figure 26-11 for initial status, click to add link plan.
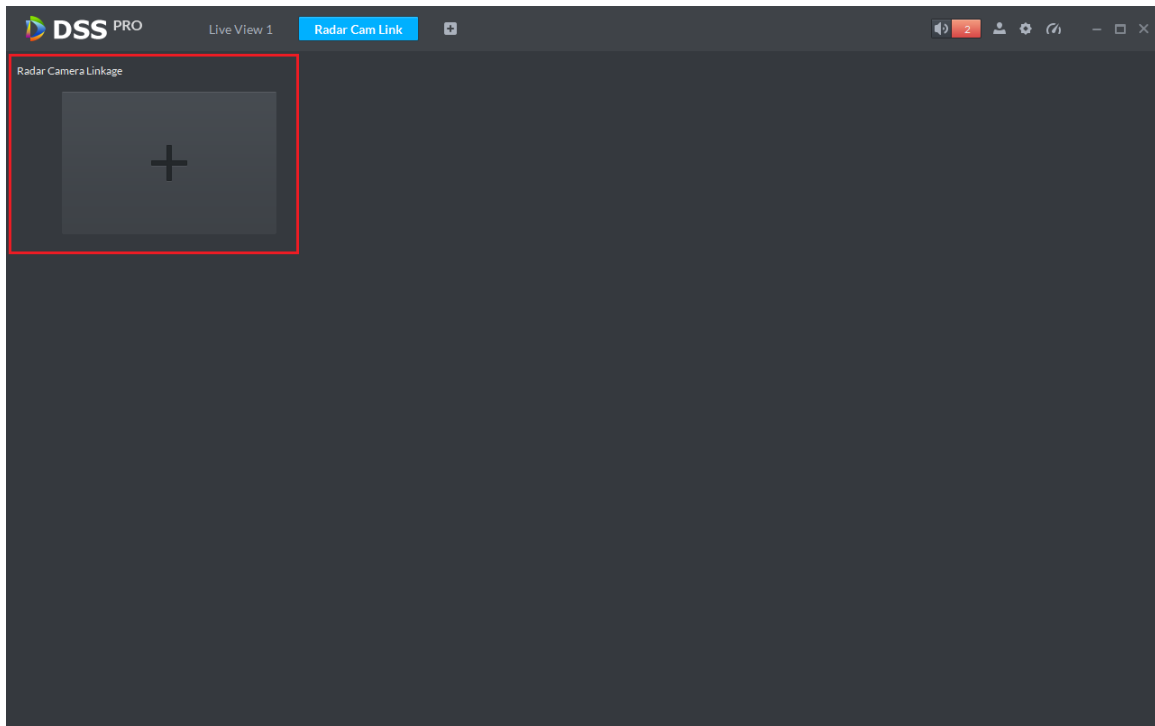
Figure 26-11

Step 3. Enter add interface, see Figure 26-12 prompt "No map data, please set the map on the left first." Because radar channel shall be dragged onto ma and if the system has not added map, you shall login Manager and add map.
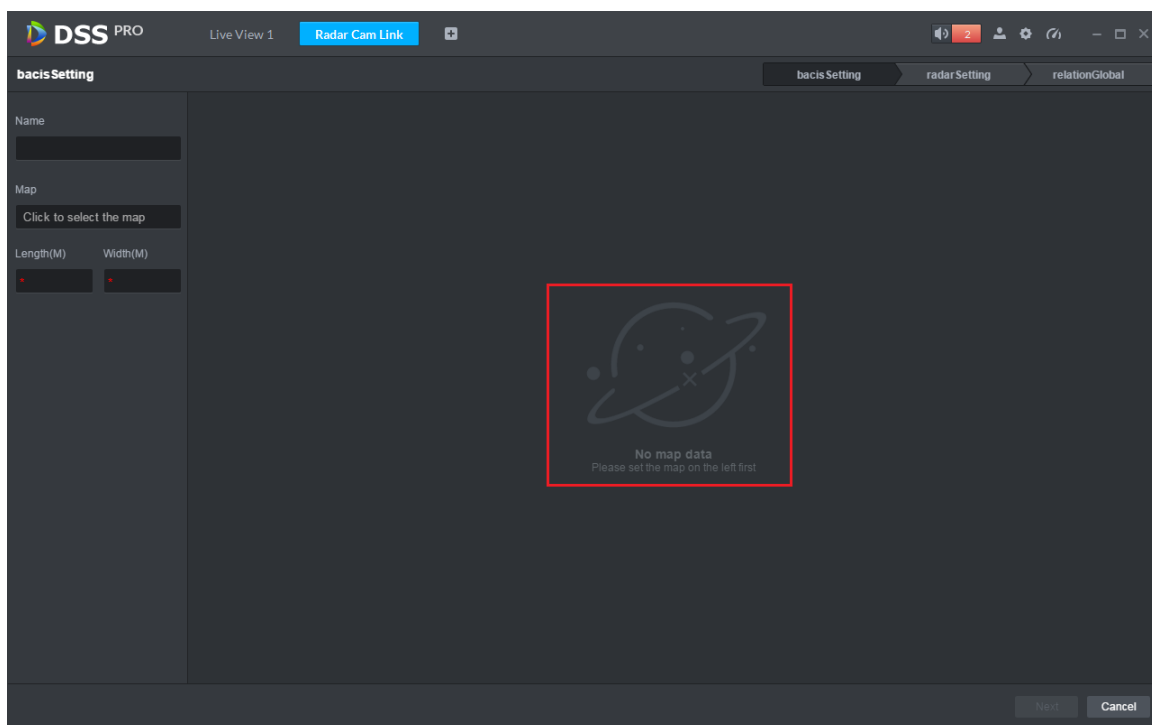
Figure 26-12

Step 4. Basic config. Set plan name, select map. Enter actual length and width of map's corresponding area. See Figure 26-13 and Figure 26-14. Click Next to enter radar config.
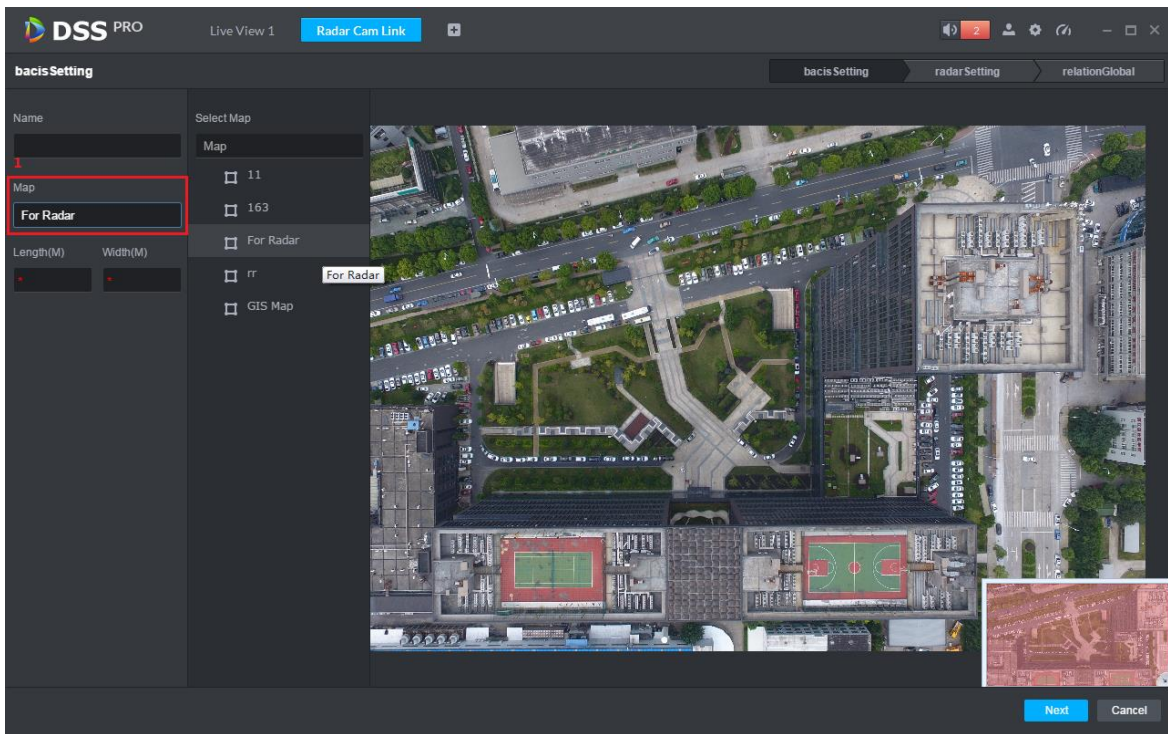
Figure 26-13
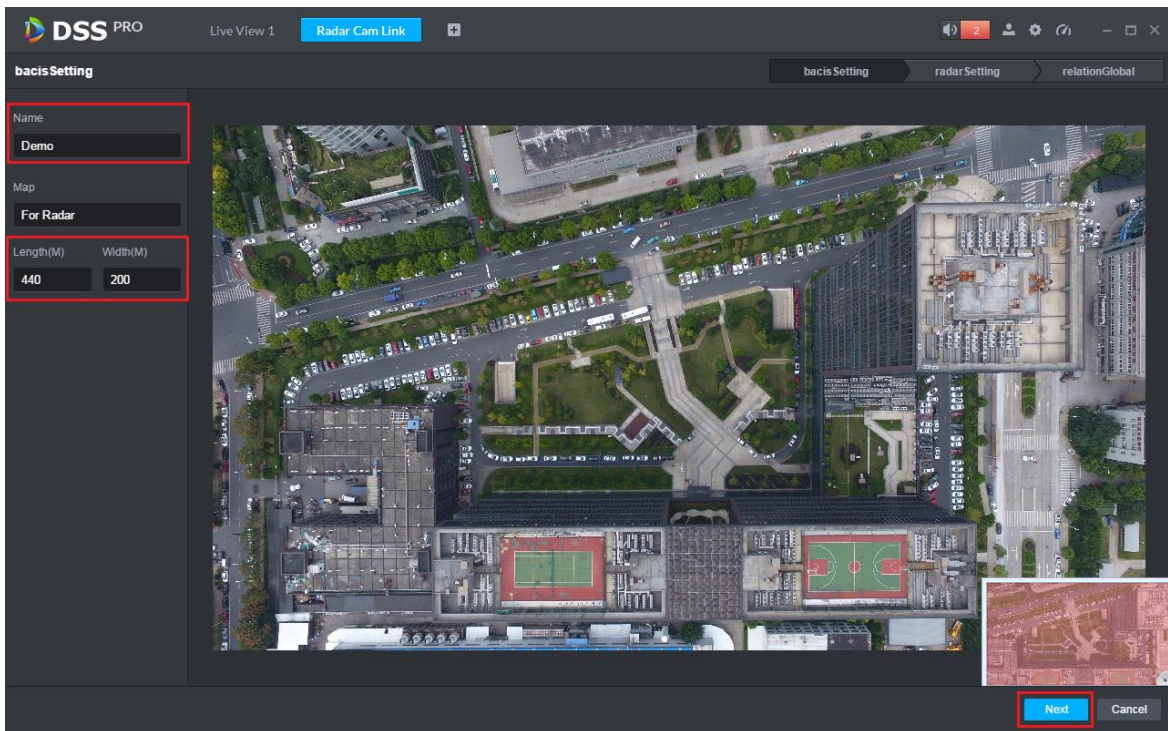
Figure 26-14

Step 5. Enter radar setup, see Figure 26-15, select corresponding radar channel and drag it to actual installation position on map.
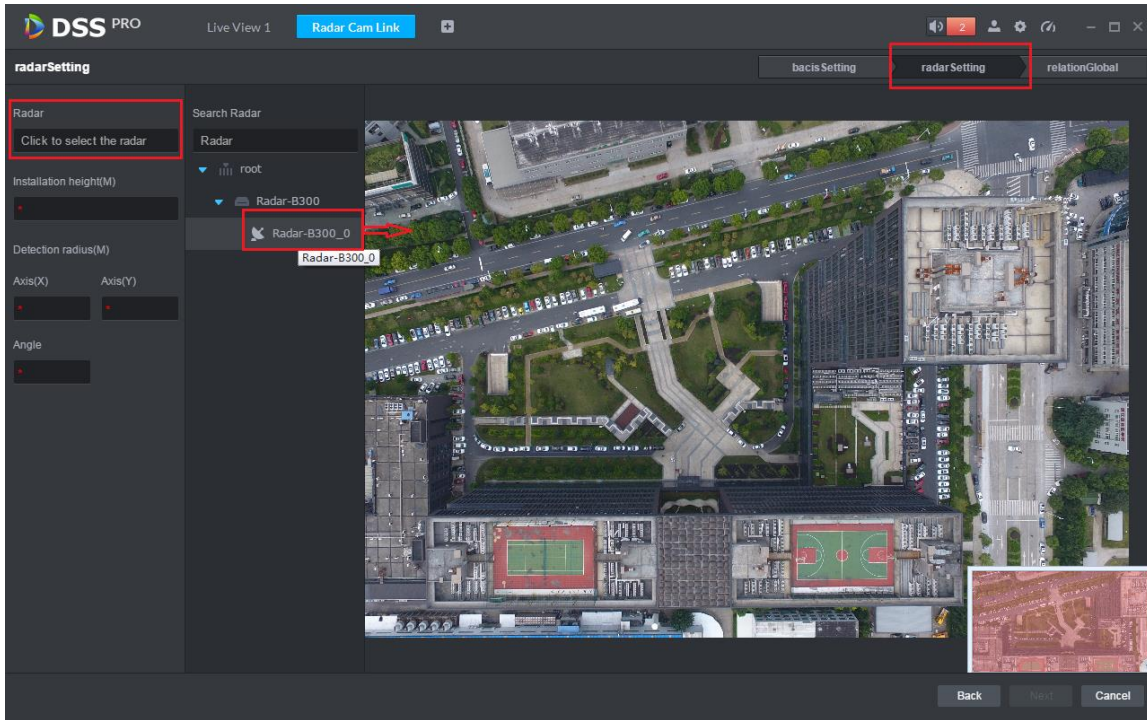
Figure 26-15

Step 6.   In Figure 26-16 you can set radar device installation height. Manually rotate blue shadow area to adjust radar device monitoring area as well as you can manually adjust angle value. Click Next to enter smart track dome config.
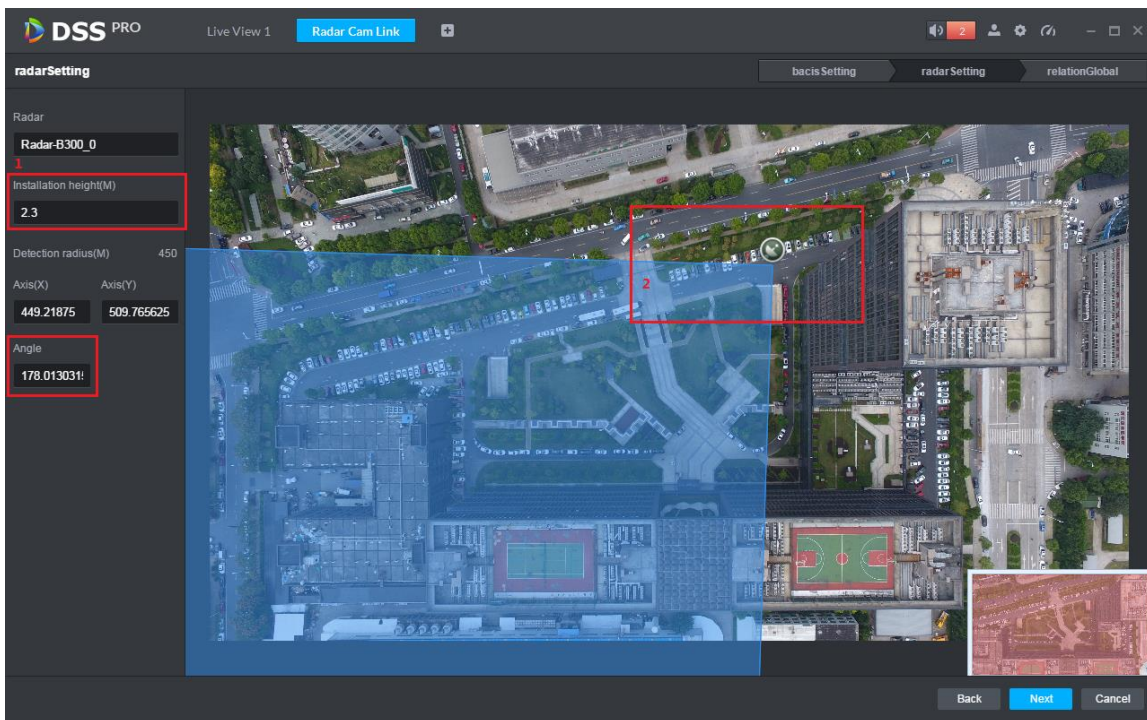
Figure 26-16

Step 7.   Config dome. In Figure 26-17, click speed dome and select input box. In open device list, double click channel you want to link.
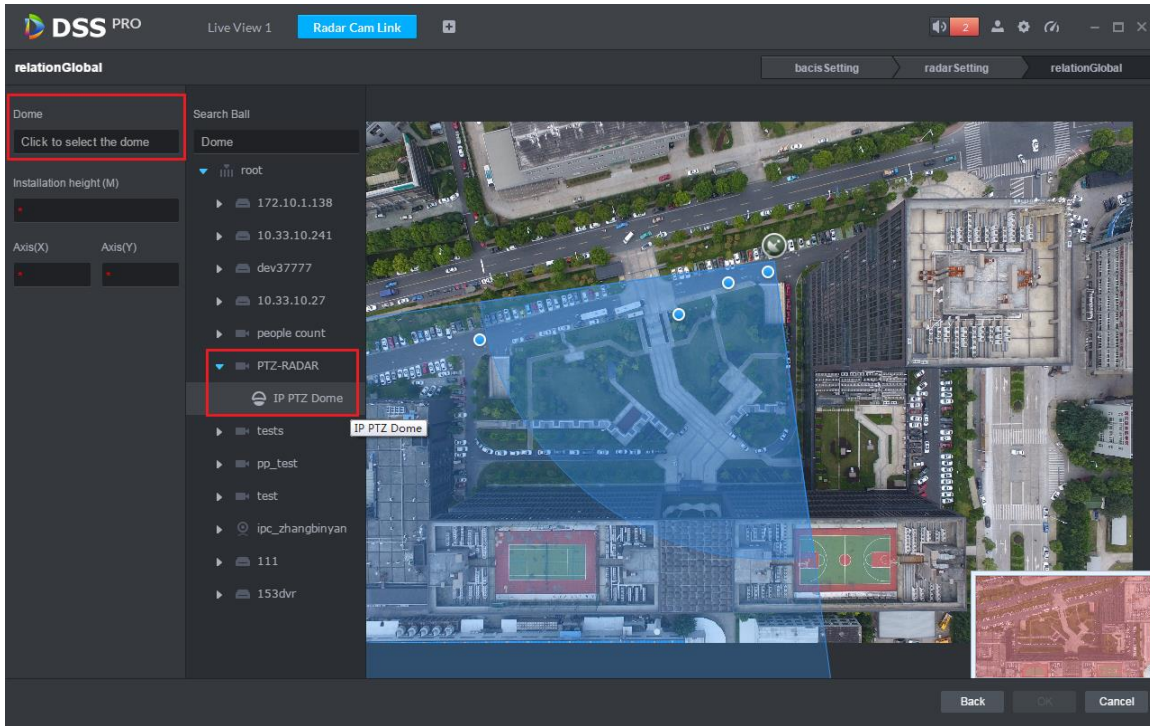
Figure 26-17

Step 8. In Figure 26-18, set speed dome installation height, XY axis data are auto gotten.
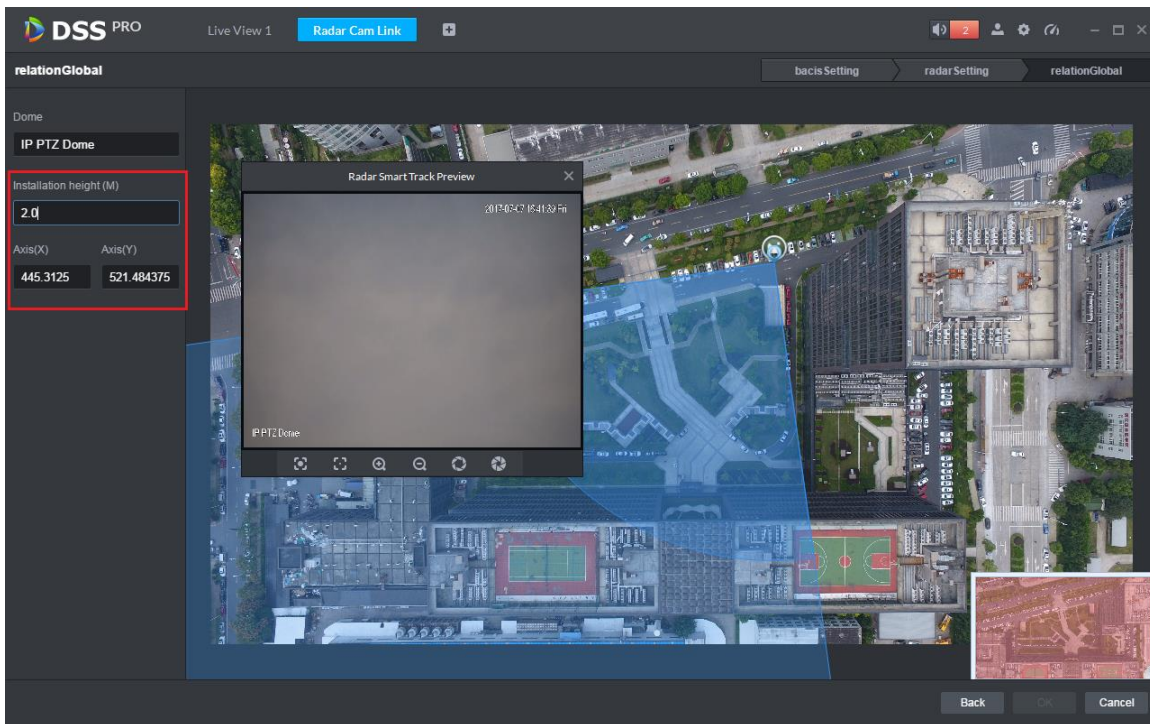
Figure 26-18

Step 9. Set calibration point. You shall link radar to monitoring position of the dome via one calibration point. See Figure 19-9. How to set: in radar monitoring area, select one blue point (detected moving object), then the blue point turns to yellow; rotate dome toward this moving object, click OK to save.
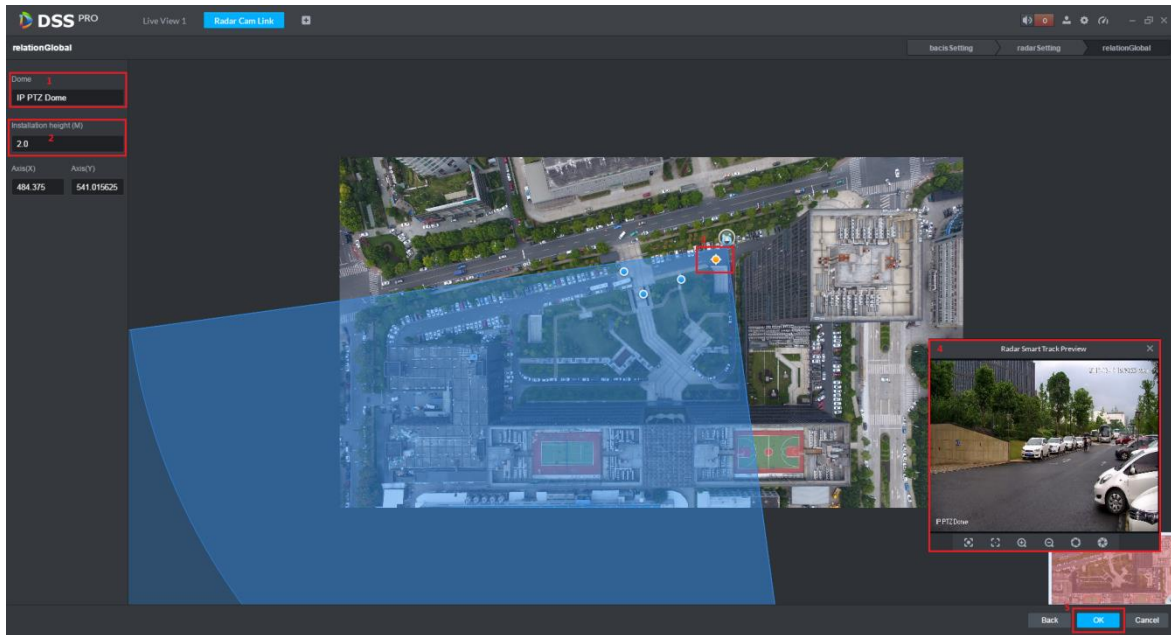
Figure 26-19

Step 10. Radar link plan view and modification. In Figure 26-20, click [pencil icon] to edit this plan. Click

[trash icon] to delete this plan.
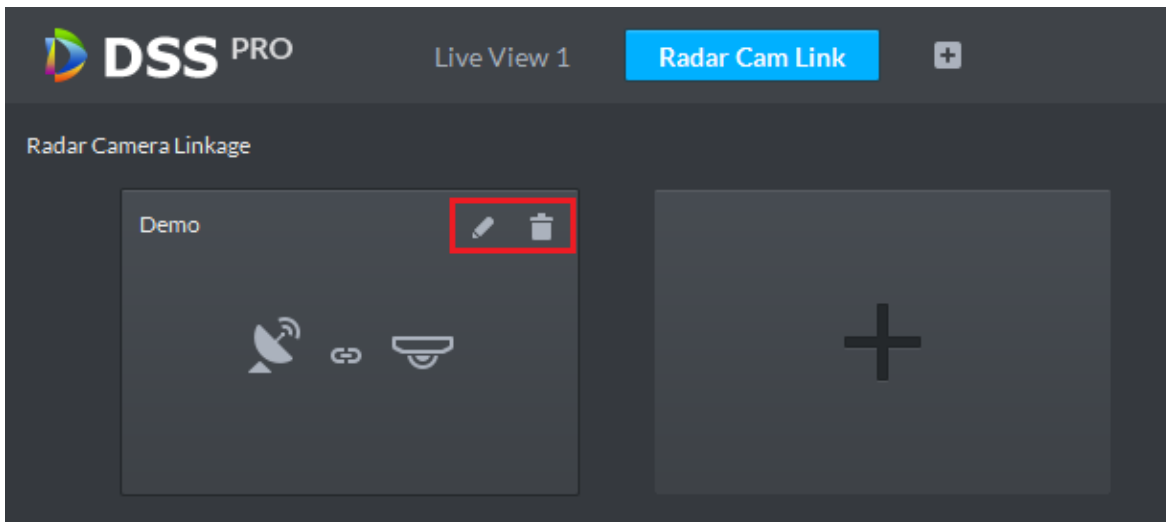
Figure 26-20

26.5 **Application Display**

Step 1. In smart track module, see Figure 26-21, double click plan list to open set link plan.
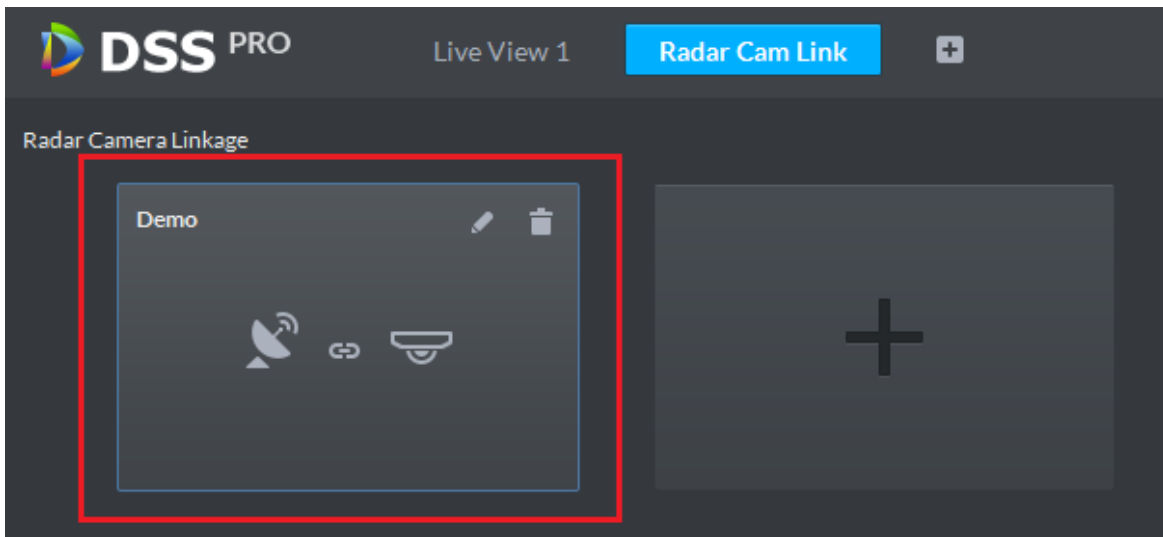
Figure 26-21

Step 2. Open plan to it auto goes to live view module, see Figure 26-22, when moving object appears in monitoring range of radar, dome will auto track this object. You can freely drag the dome.

Figure 26-22

27 Backup and Restore

DSS Manager supports to back up config info and save backup to local PC, meantime it supports to restore backup file.

Note:

Only "system" user can back up and restore which means only when a user login via "system" account, he/she can back up and restore config.

27.1 System Backup

27.1.1 Intro to Function

To ensure user data security, DSS Professional system provides backup function of data. It includes manual backup and auto backup.

27.1.2 Manual Backup

Step 1.   Login DSS Manager.

Step 2.   Click ➕ next to Home, select Backup and Restore, see Figure 27-1.
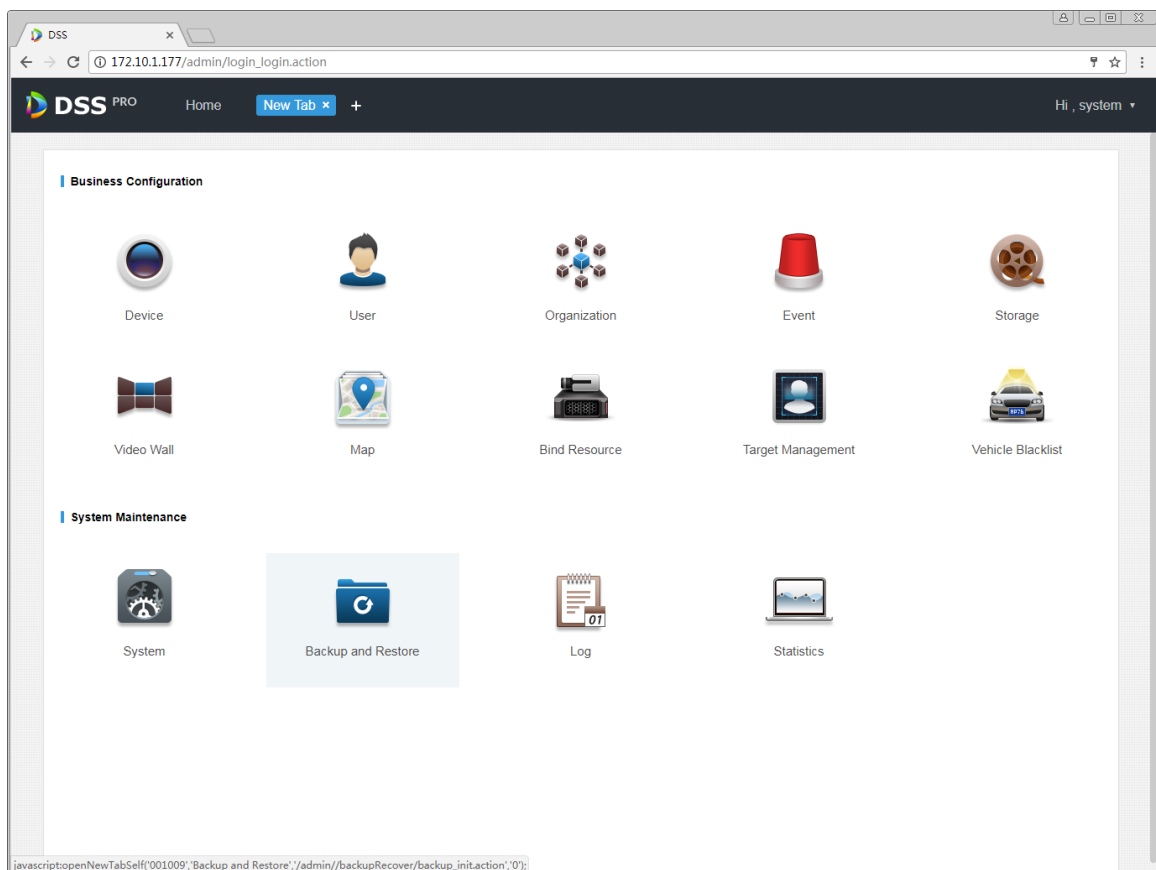
Figure 27-1

Step 3.   Select 🗐 **Backup** tab, enter backup interface, see Figure 27-2.
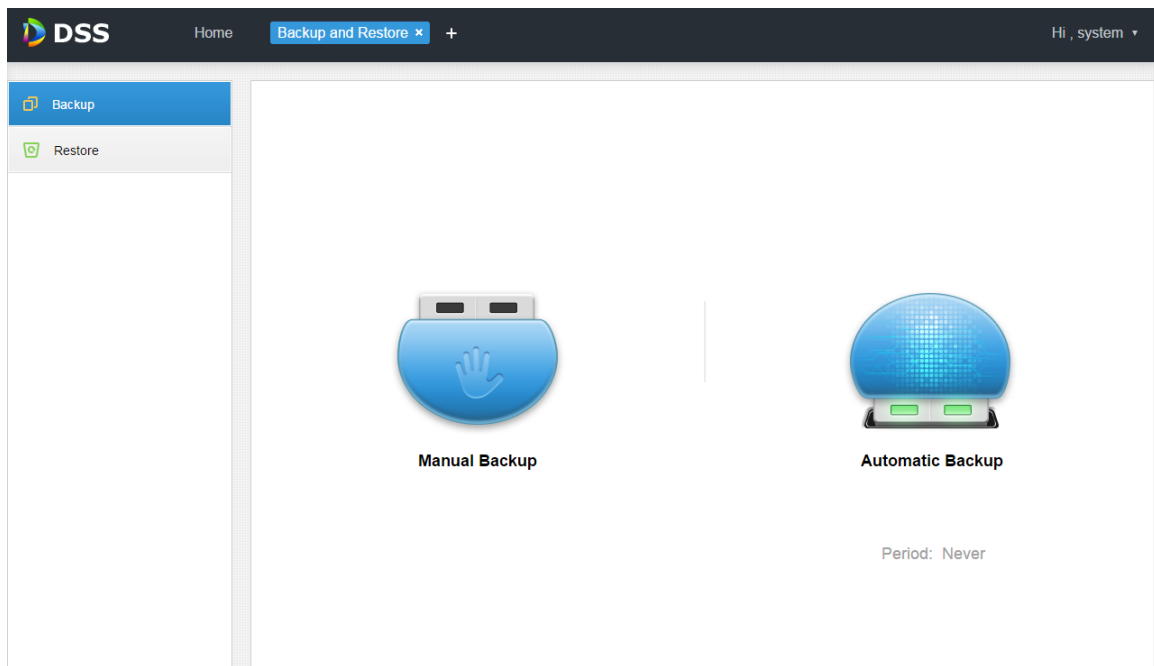
Figure 27-2

Step 4.   Manually back up data by clicking .

Step 5.   Backup result is shown, and you can see backup result at the lower-left corner in explorer (as well as download content of explorer). Click to show it in folder. Default backup path is C:\Users\"actual user name"\Downloads.
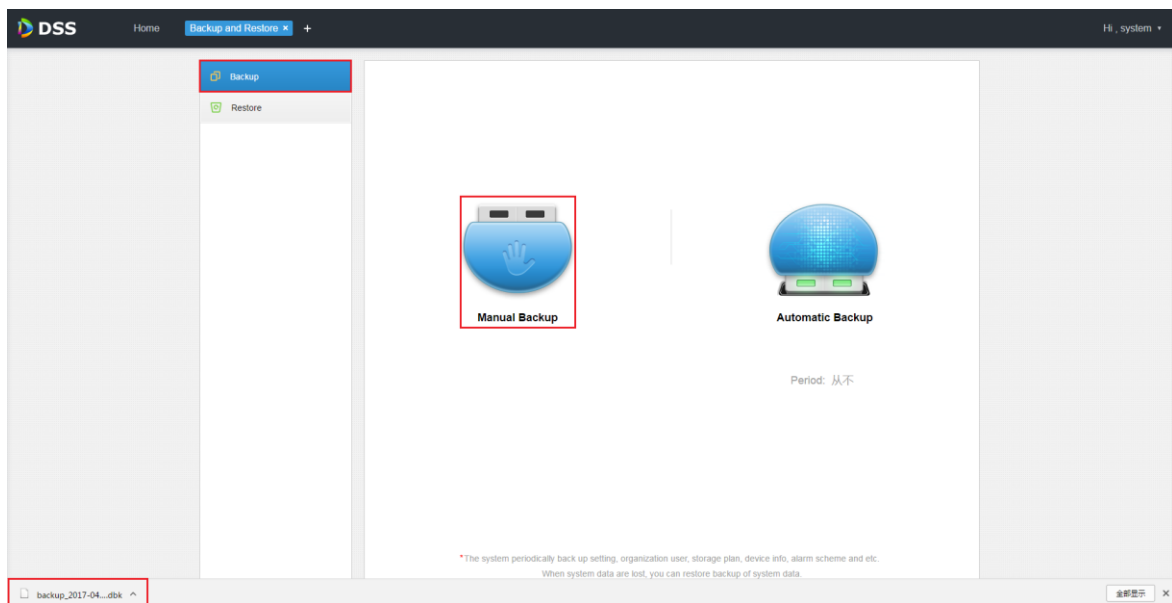
Figure 27-3

Step 6.   See Figure 27-4 pop up box, enter password to encrypt this backup file.
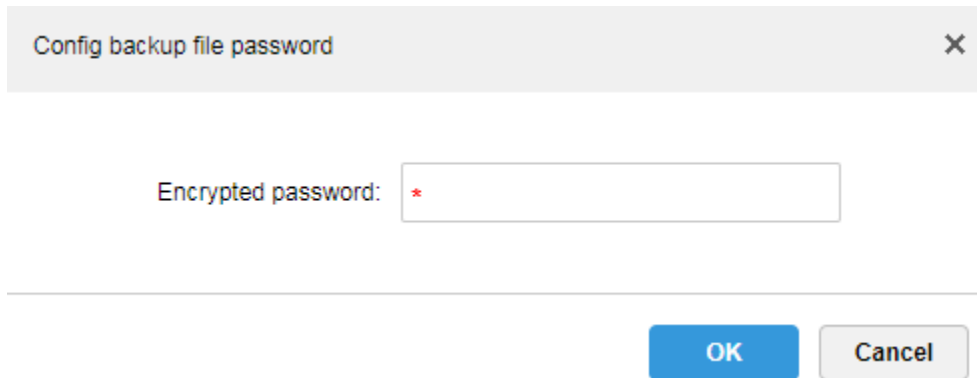
Figure 27-4

Step 7.   In default path, see Figure 27-5.

Figure 27-5

27.1.3 **Auto Backup**

Step 1.   Refer to Ch 18.1.2 Step 1.~3.

Step 2.   Auto back up, click , see Figure 27-6.
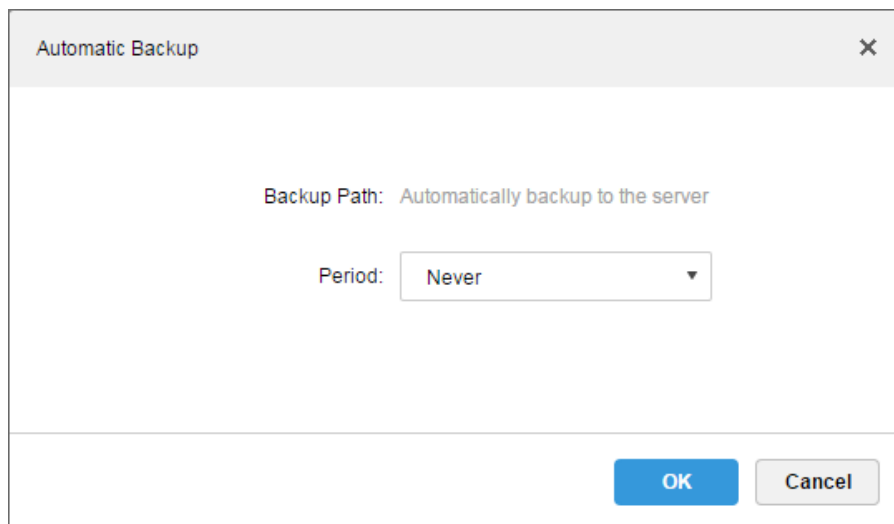
Figure 27-6

Step 3.   Select backup period from dropdown list, you can select: never, by data, by week, by month, see Figure 27-7.
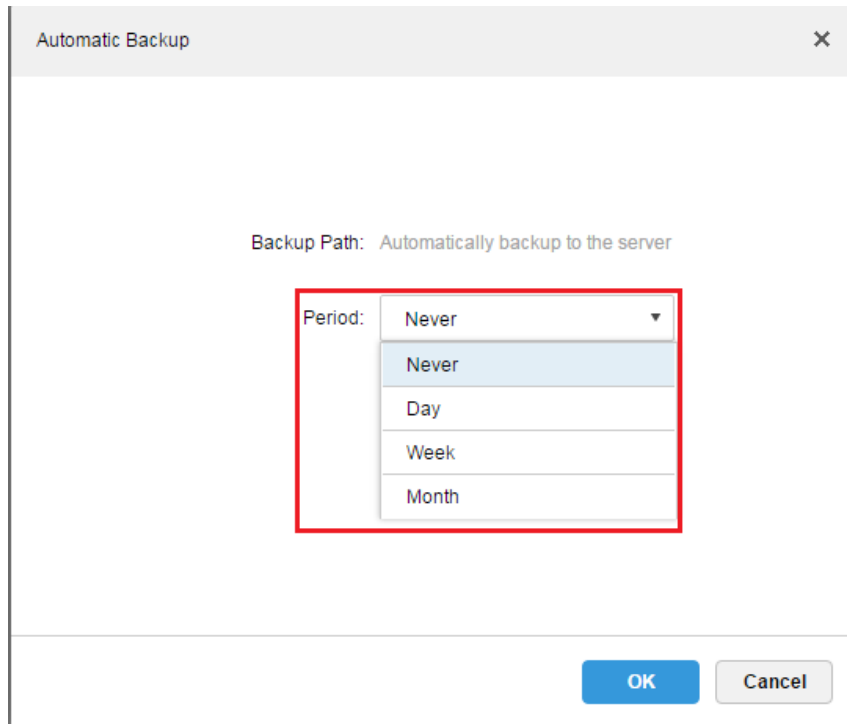
Figure 27-7

Step 4.   Select backup period, and the pages show setup menu, you can set auto backup

execution time. After you set time, click OK to save config. The system auto back up

data by selected period and time to server.
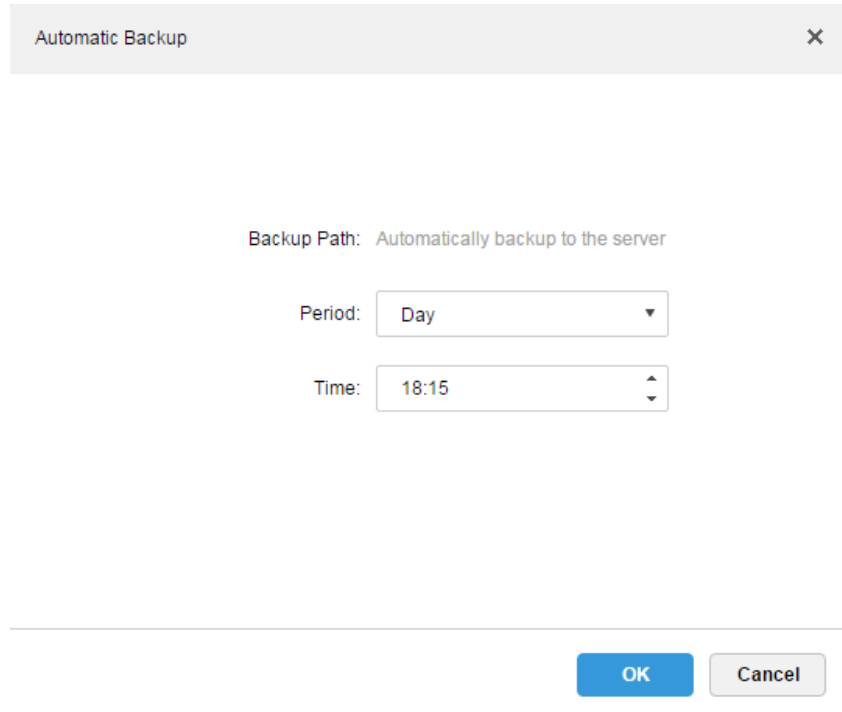
Figure 27-8

Automatic Backup

Period: Day

Time: 18:15

Figure 27-9

Step 5.   On server, view auto backup file. Default backup path is server installation
directory-Servers-bak- db_backup, see Figure 27-10.

172.5.1.207_dss_20170412_1.sql	2017/4/12 18:15	SQL 文件	221 KB
172.5.1.207_dss_20170412_dml_1.sql	2017/4/12 18:15	SQL 文件	42 KB

Figure 27-10

27.2 **System Recovery**

27.2.1 **Intro to Function**

When user database is abnormal, you can use the recovery function to recover data to the latest
backup so DSS system can quickly recovers thus minimize user loss.
Warning:
Before you restore system, you shall stop DSS operations done by other users. This function will
change data info, be careful!

27.2.2 **Restore Local File**

Local file restore is to restore manually backed up file to server.

Step 1.   Select [Restore] tab, enter Restore interface, see Figure 27-11.
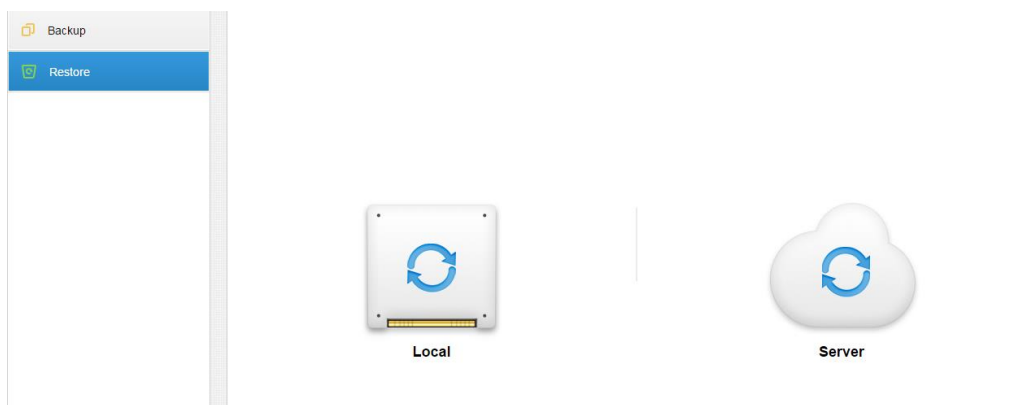
Figure 27-11

Step 2. Click , select local file to restore, click **Choose** and select file. Click **OK** to continue, see Figure 27-12.
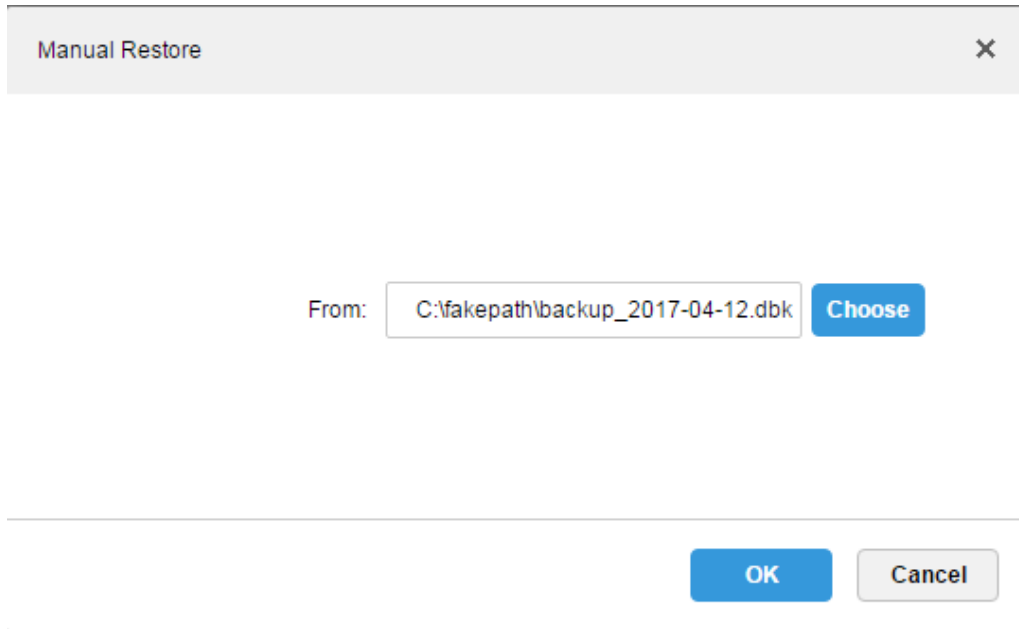
<div align="center">Figure 27-12</div>

Step 3. Enter admin password to restore, see Figure 27-13.
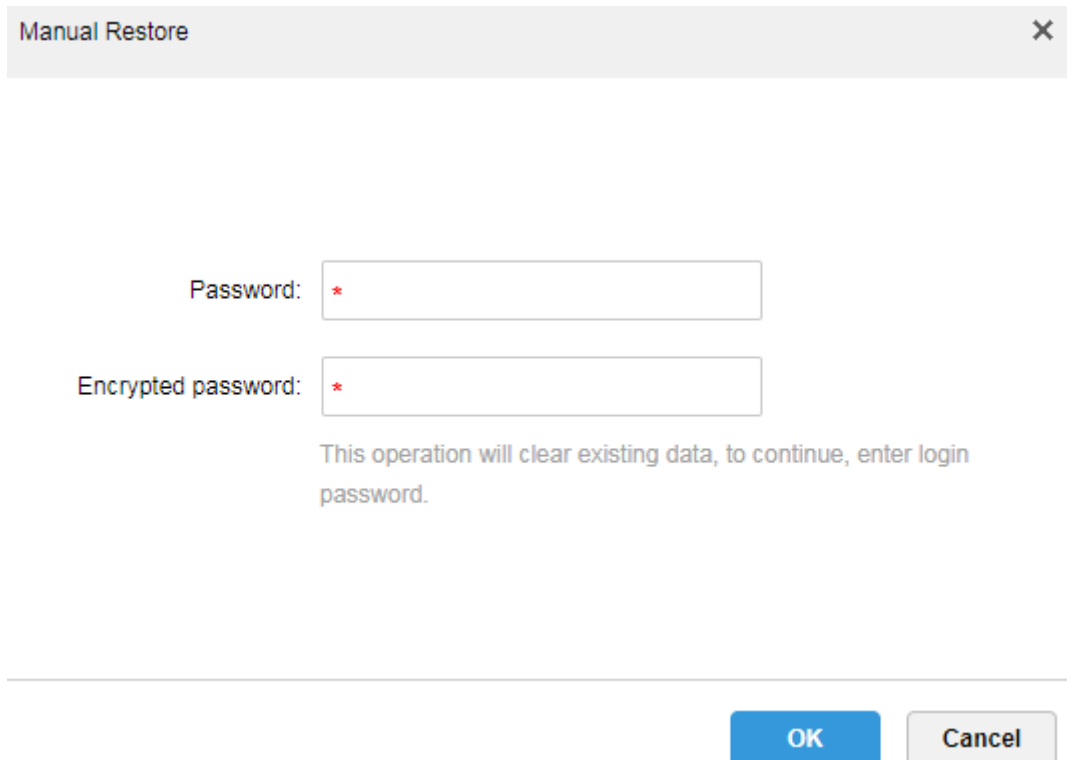
<div align="center">Figure 27-13</div>

Step 4. Now it is restoring data, you can see percentage of progress complete.

Step 5. When it successfully restores, system will reboot.

27.2.3 Restore Server File

Select to restore backup file on server, however, you must have enabled auto backup function of the system already, so the server has backed up file periodically.

Step 1. Select **Restore** tab, see Figure 27-14.
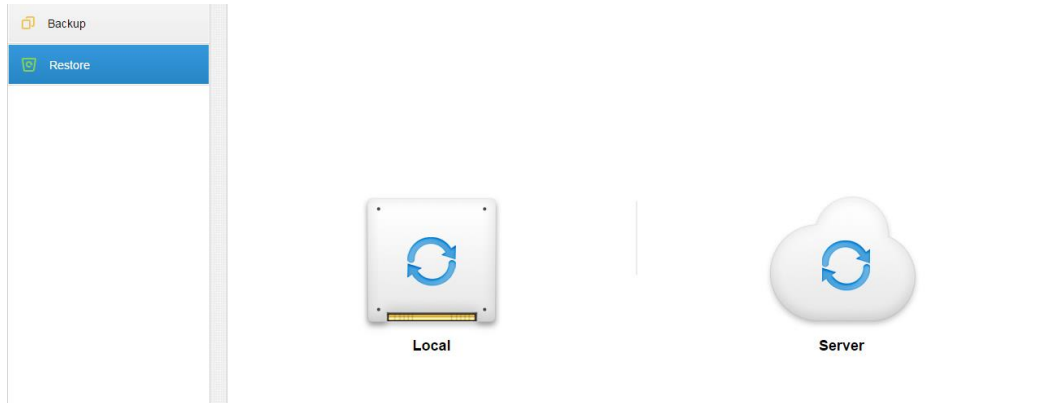
Figure 27-14

Step 2. Click **Server** , in pop-up list, click and select file to restore, see Figure 27-15.
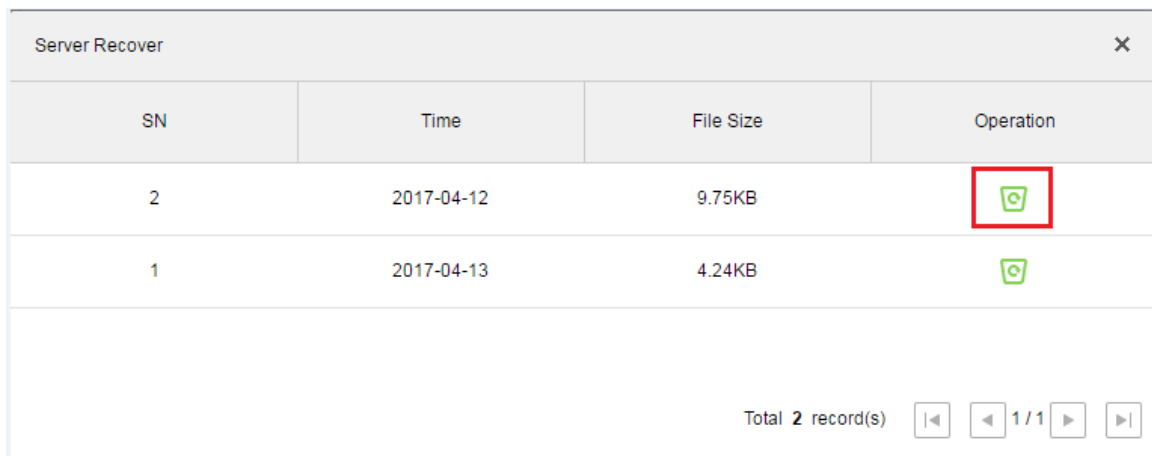
Figure 27-15

Step 3. Enter admin password, click **OK** to execute, see Figure 27-16.
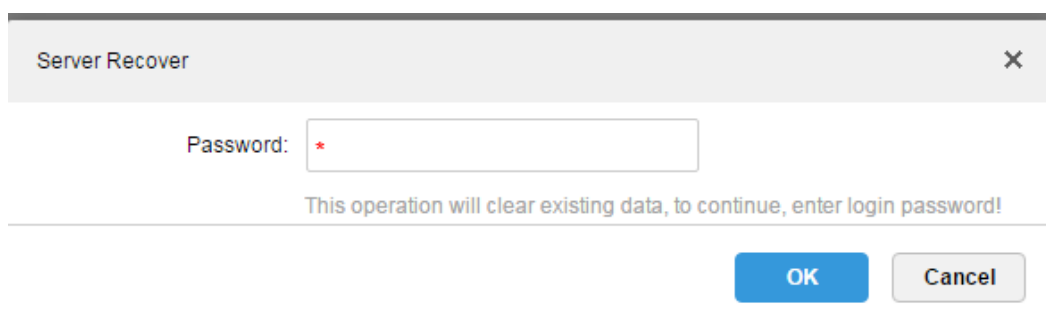
Figure 27-16

Step 4. When it successfully restores, you will see a prompt and system will reboot.

28 Log

28.1 Intro to Function
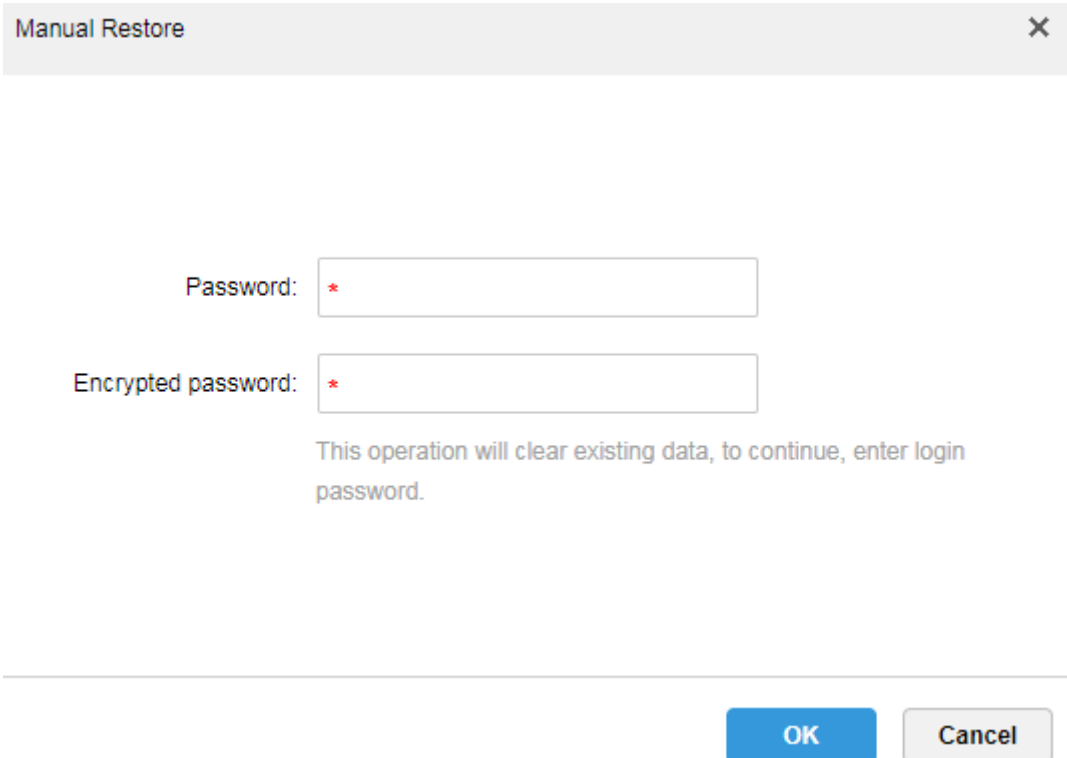
The system supports to search Manager config log, Client config log and system log. You can filter search type of search, select period and keyword. You also can export log (in PDF format). The following takes Manager config log as an example.

28.2 Intro to Operation

Step 1.   Login DSS Manager.

Step 2.   Click ![+] next to Home.

Step 3.   Select log module, see

Figure 28-1

Step 4.   Select log type, event type, search time. See Figure 28-2.

Figure 28-2

Step 5. Result of log search is shown below, and total number of search is shown at the lower-left corner. See Figure 28-3.

Figure 28-3

Step 6. Click ⭧ Export to export log info, see Figure 28-4.

| Log Type: Manager Config Log ▼ | Event Type: Device ▼ | Period: 2017-04-11 📅 - 2017-04-12 📅 | 🔍 Search | ⬆ Export |

Time	Username	Event Type	Event Contents	IP
2017-04-12 18:11:10	system	Device	Add 设备 : 172.10.4.111	172.10.3.13
2017-04-12 18:10:44	system	Device	Add 设备 : 172.10.4.62	172.10.3.13
2017-04-12 18:10:01	system	Device	Add 设备 : 172.10.23.23	172.10.3.13
2017-04-12 18:09:58	system	Device	Add 设备 : 172.10.4.8	172.10.3.13
2017-04-12 18:09:53	system	Device	Add 设备 : 172.10.4.6	172.10.3.13
2017-04-12 18:09:49	system	Device	Add 设备 : 172.10.3.88	172.10.3.13
2017-04-12 18:09:46	system	Device	Add 设备 : 172.10.3.84	172.10.3.13
2017-04-12 18:09:41	system	Device	Add 设备 : 172.10.3.74	172.10.3.13
2017-04-12 18:09:37	system	Device	Add 设备 : 172.10.3.70	172.10.3.13
2017-04-12 18:09:33	system	Device	Add 设备 : 172.10.3.66	172.10.3.13
2017-04-12 18:09:29	system	Device	Add 设备 : 172.10.3.64	172.10.3.13
2017-04-12 18:09:25	system	Device	Add 设备 : 172.10.2.227	172.10.3.13
2017-04-12 18:09:21	system	Device	Add 设备 : 172.10.2.223	172.10.3.13
2017-04-12 18:09:17	system	Device	Add 设备 : 172.10.2.208	172.10.3.13

Total **93** record.   ◀ [1] [2] [3] [4] [5] [6] [7] [▶]   Go to page [1] [Go]

Figure 28-4

Step 7. View export log result, and it shows current log pack at the lower-left corner, you also can view in Explorer download bar, see Figure 28-5.

Figure 28-5

Step 8. Open compression pack, log (PDF) is shown in Figure 28-6.
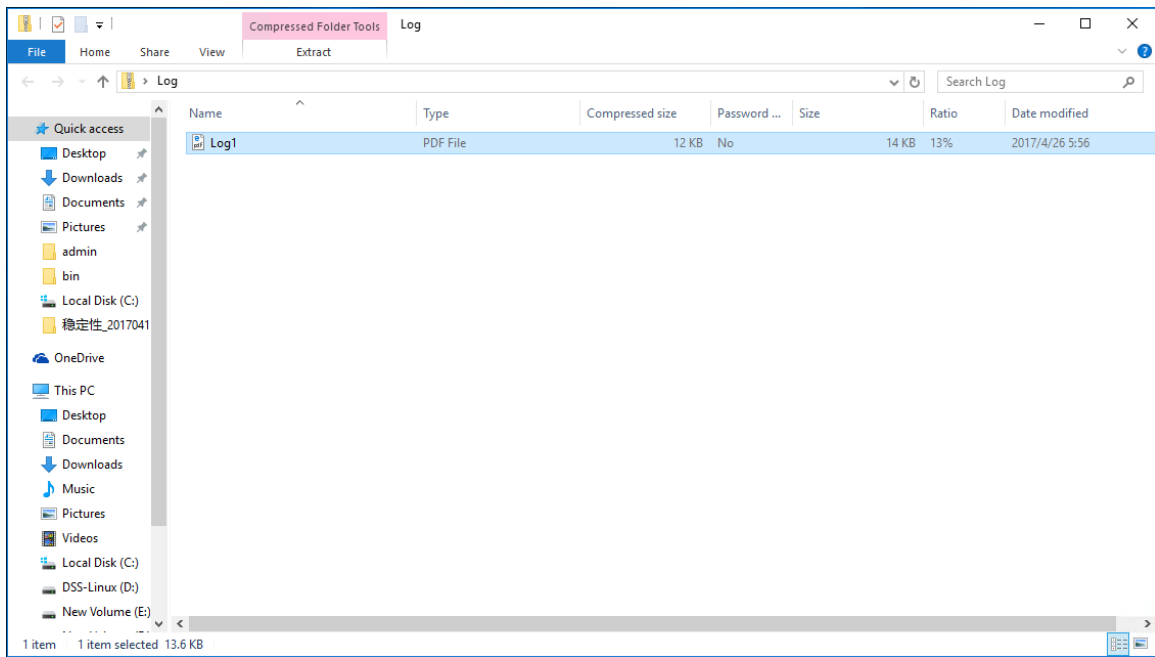
Figure 28-6

Step 9.   View log final result.

29 **Statistics**

DSS Manager supports to search system operation and maintenance statistics function and understand system operation on time.

29.1 **Overview**

Step 1.   Click ![plus icon] next to Home, see Figure 29-1.
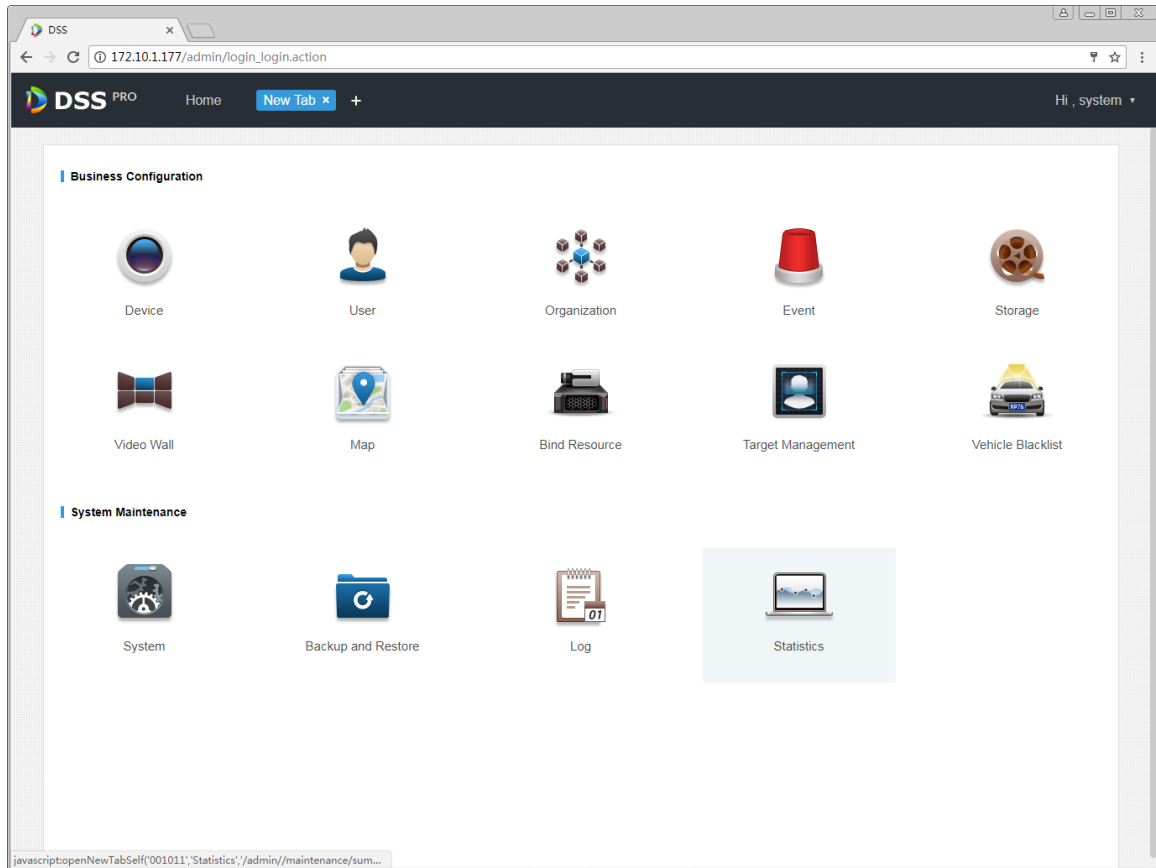
Figure 29-1

Step 2.   Select Statistics, see Figure 29-2.
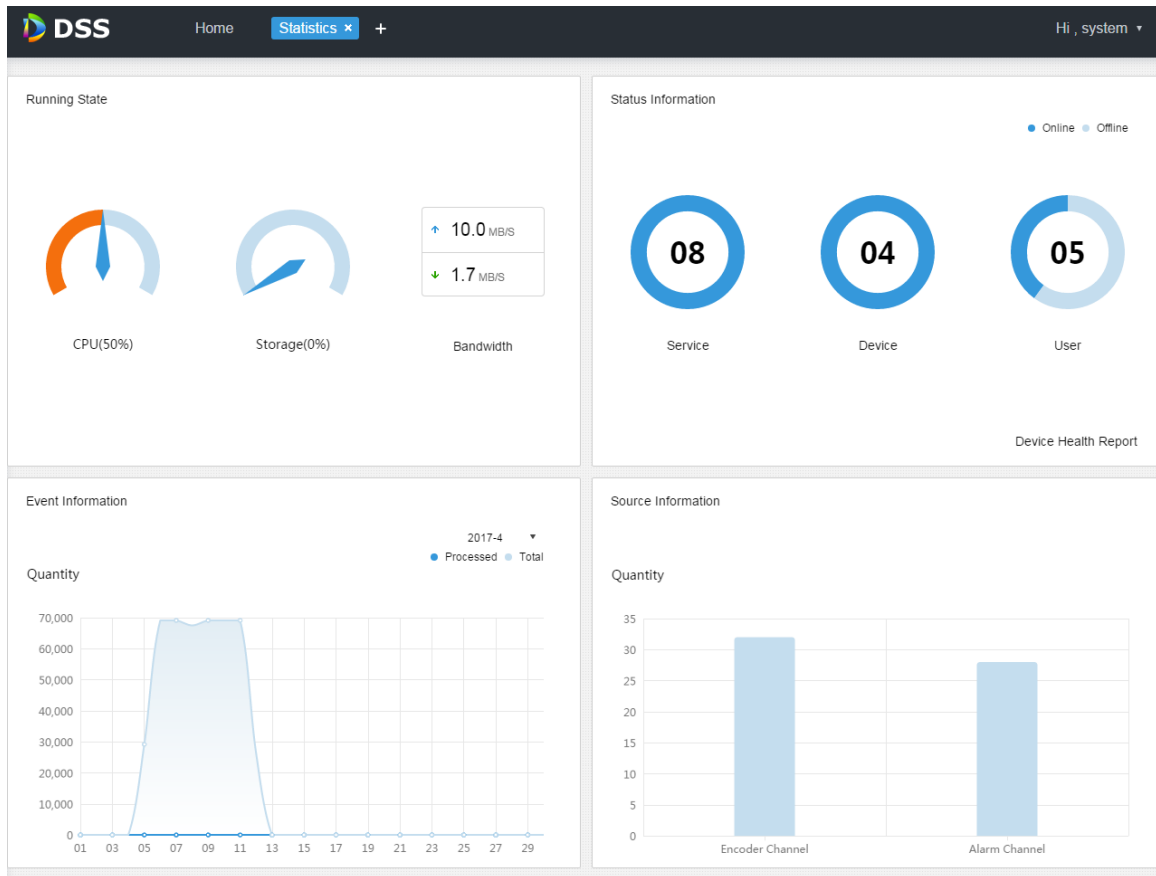
Figure 29-2

29.2 **Running State**

View CPU, storage, bandwidth and etc. Click Running State or icon below to go to detail page, see Figure 29-3.
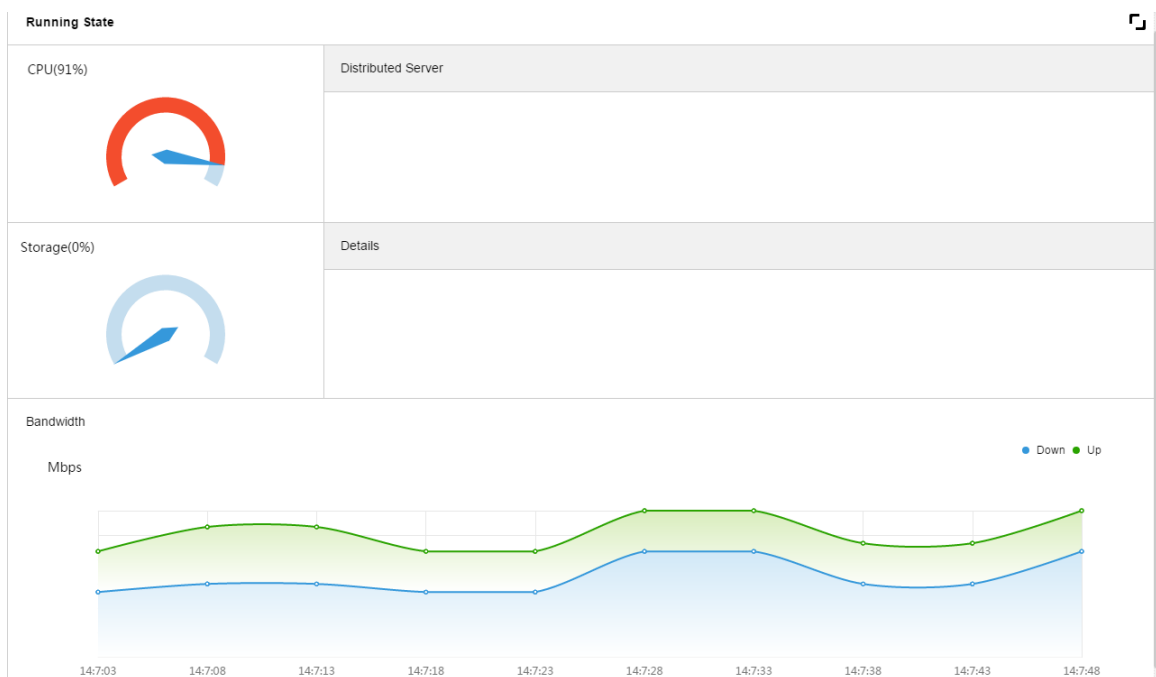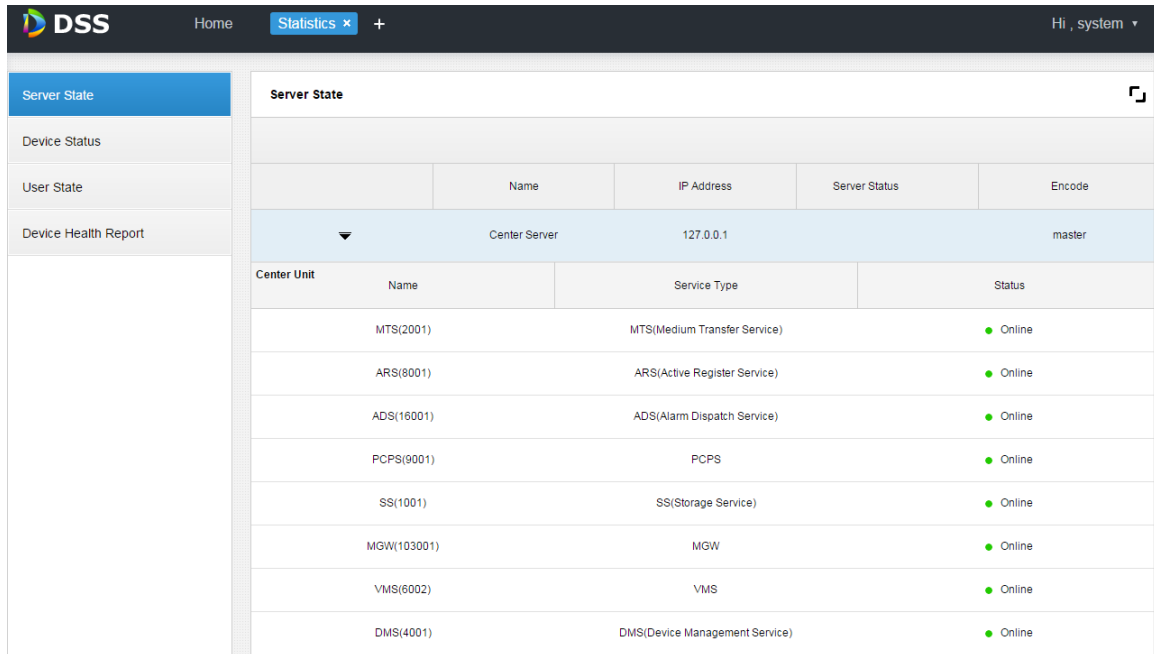
Figure 29-3

29.3 **Status Info**

View server, device, user online/offline status statistics and click Status Info or icon below to go to detail page.

29.3.1 **Server State**

Click ▶ in Server State interface, see Figure 29-4.
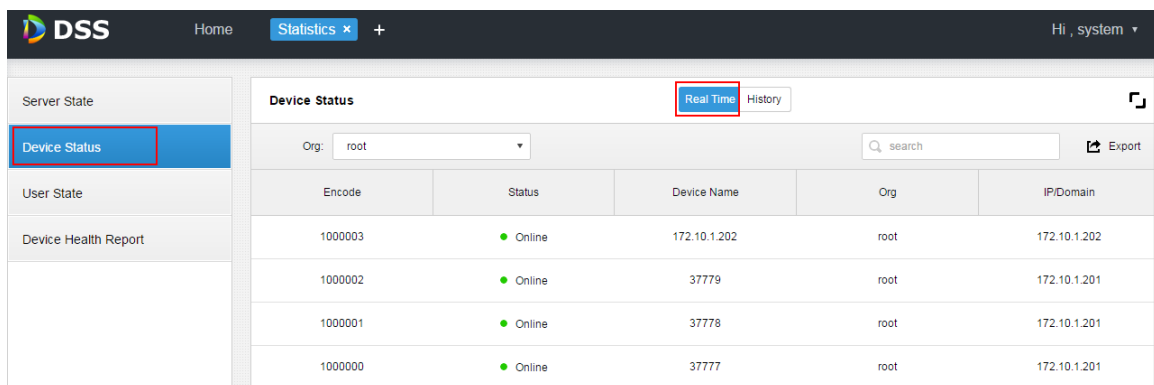
Figure 29-4

29.3.2 **Device Status**

Step 1.   Click Device Status tab, see Figure 29-5.

Figure 29-5

Step 2.   Click Export, to export real-time device status PDF format, see Figure 29-6.
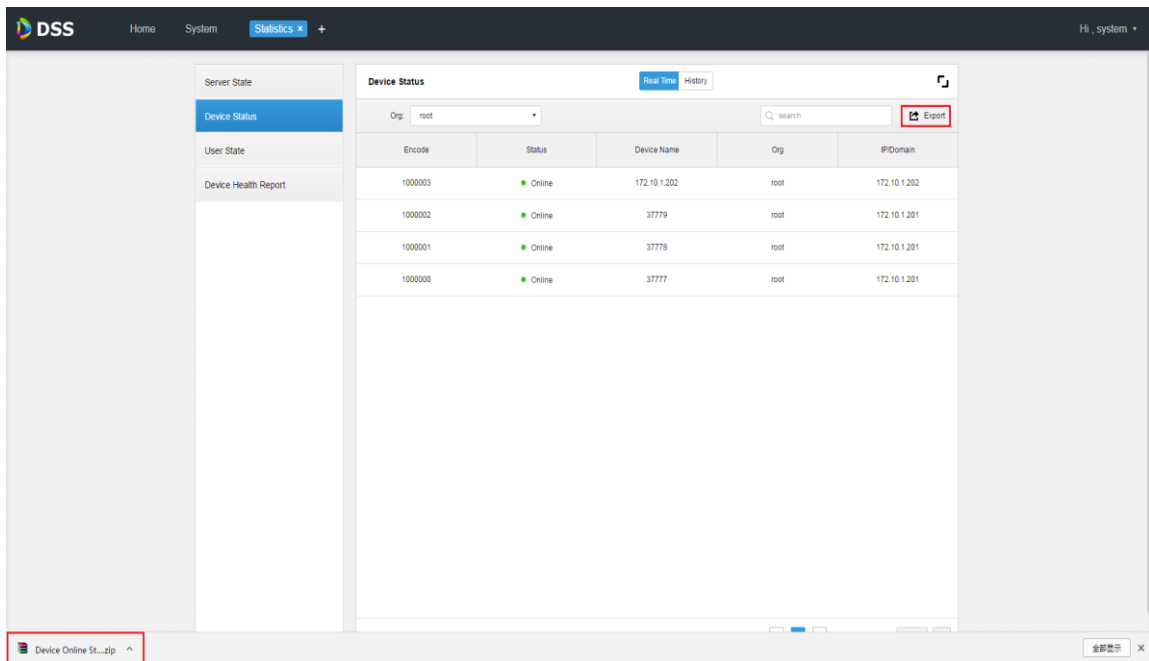
Figure 29-6

Step 3. Open export file, see Figure 29-7.
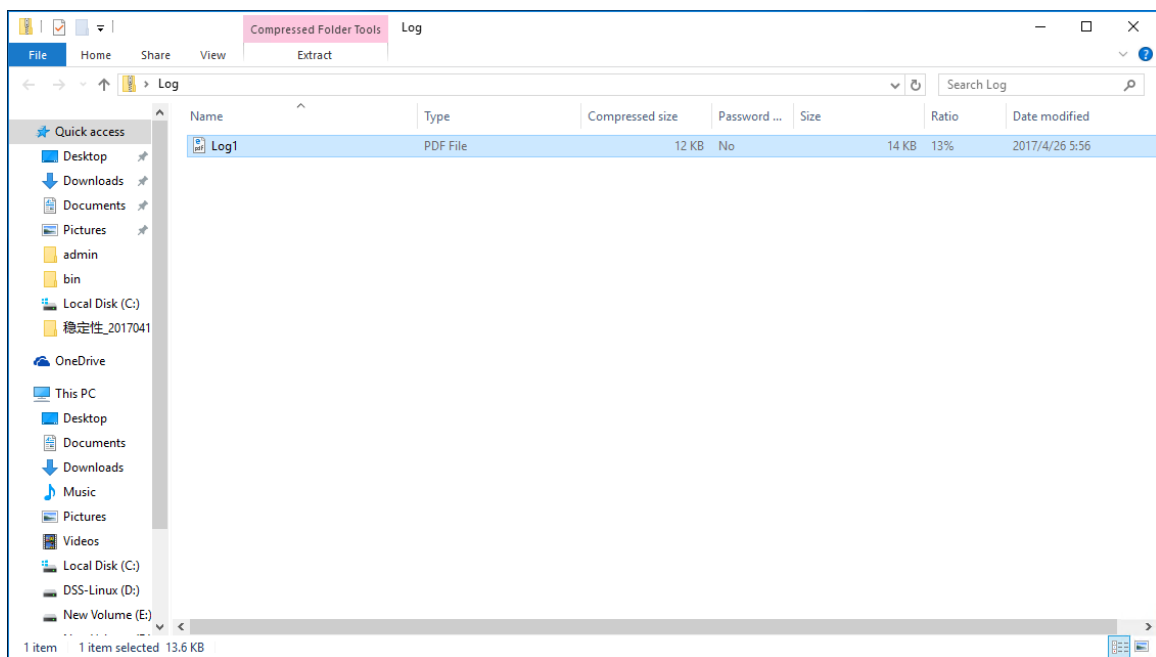
Figure 29-7

Step 4. Click History tab in device status interface to view device historical status, see Figure 29-8.

198

Figure 29-8

Click user state, device health report tab to view corresponding details, which are skipped here.

29.4 Event Information

View statistics and processed alarm of alarm event by month, see Figure 29-9.
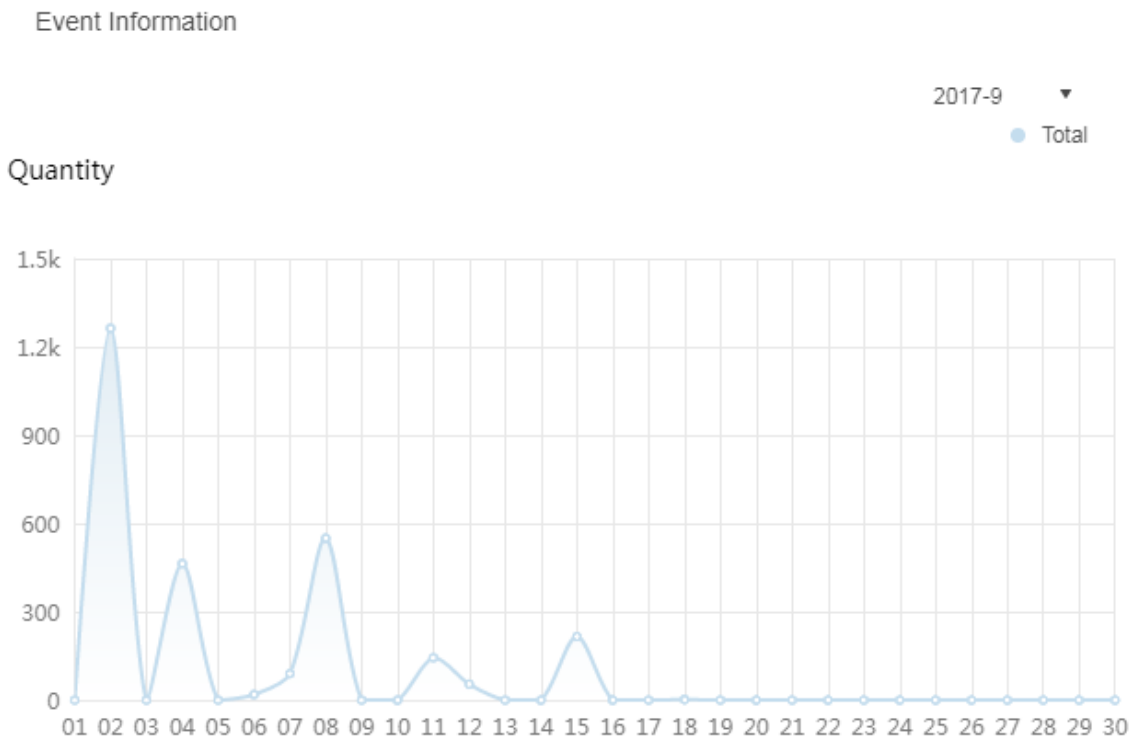
Figure 29-9

29.5 Source Info

View encoding channel and alarm channel statistics, click Source Info or icon below, go to detail page, see Figure 29-10.

Figure 29-10

Click Alarm tab to view alarm channel detail.

30 Sync Time

30.1 Device&Slave Server Sync Time

30.1.1 Function

Device sync time is to sync time on front-end device with platform server. DSS platform supports devices of Dahua, Hikvision and ONVIF protocol. You can view platform server time: DSS platform server installation time.

30.1.2 Principle

Both Dahua and Hikvision devices call related SDK interface to send command to device. Device executes the command and sends feedback to DSS server. Device of ONVIF protocol connects to device which receives sync time command sent from DSS server by calling ONVIF protocol interface. Device executes command and sends feedback to DSS server.

30.1.3 Config

Step 1.   Click ✛ next to Home, see Figure 30-1.
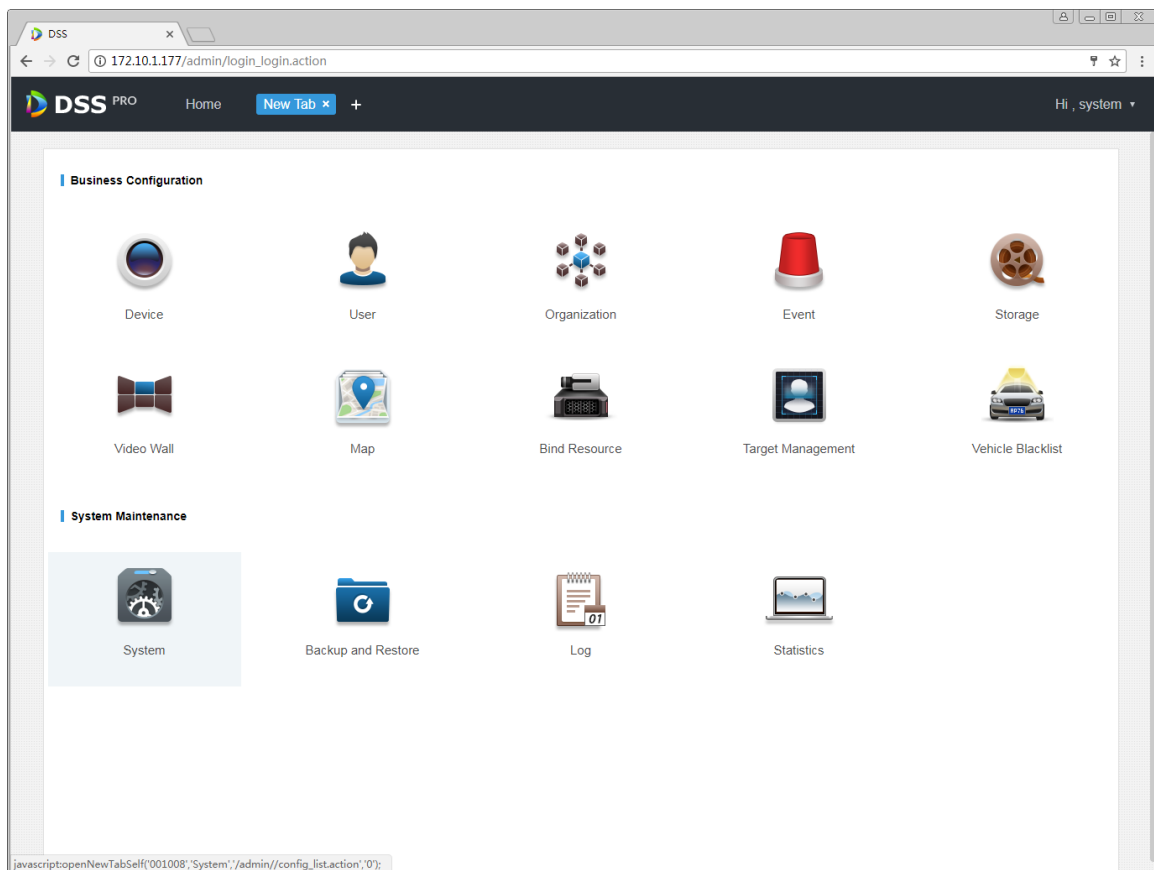
Figure 30-1

Step 2.   Click Interval Setup tab, enable device time calibration, and set parameter, see Figure 30-2.
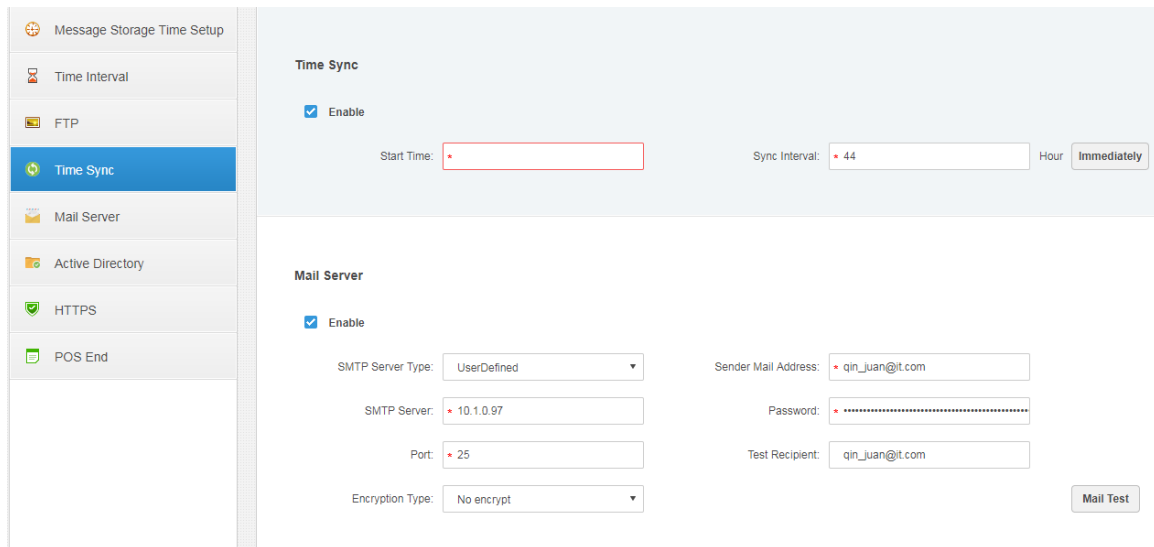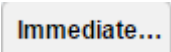
Figure 30-2

Note:

Start time can be selected in dropdown list, and you shall enter interval manually.

Step 3. Click Immediate... to sync time now.

Step 4. Click Save to save.

30.2 **Client Sync Time**

30.2.1 **Function**

Client sync time is to sync DSS Client time with platform server. After sync time is enabled on Manager, sync time on Client is enabled as well, however, you must go to local config on Client to accept this sync separately before sync time on Client.

View client time: PC time where the DSS Client is installed.

30.2.2 **Config**

Step 1. Refer to Ch 18.1.3.

Step 2. Login in DSS Client, click ⚙ at the upper-right corner, open local config.

Step 3. Select General tab, enable net time, see Figure 30-3.
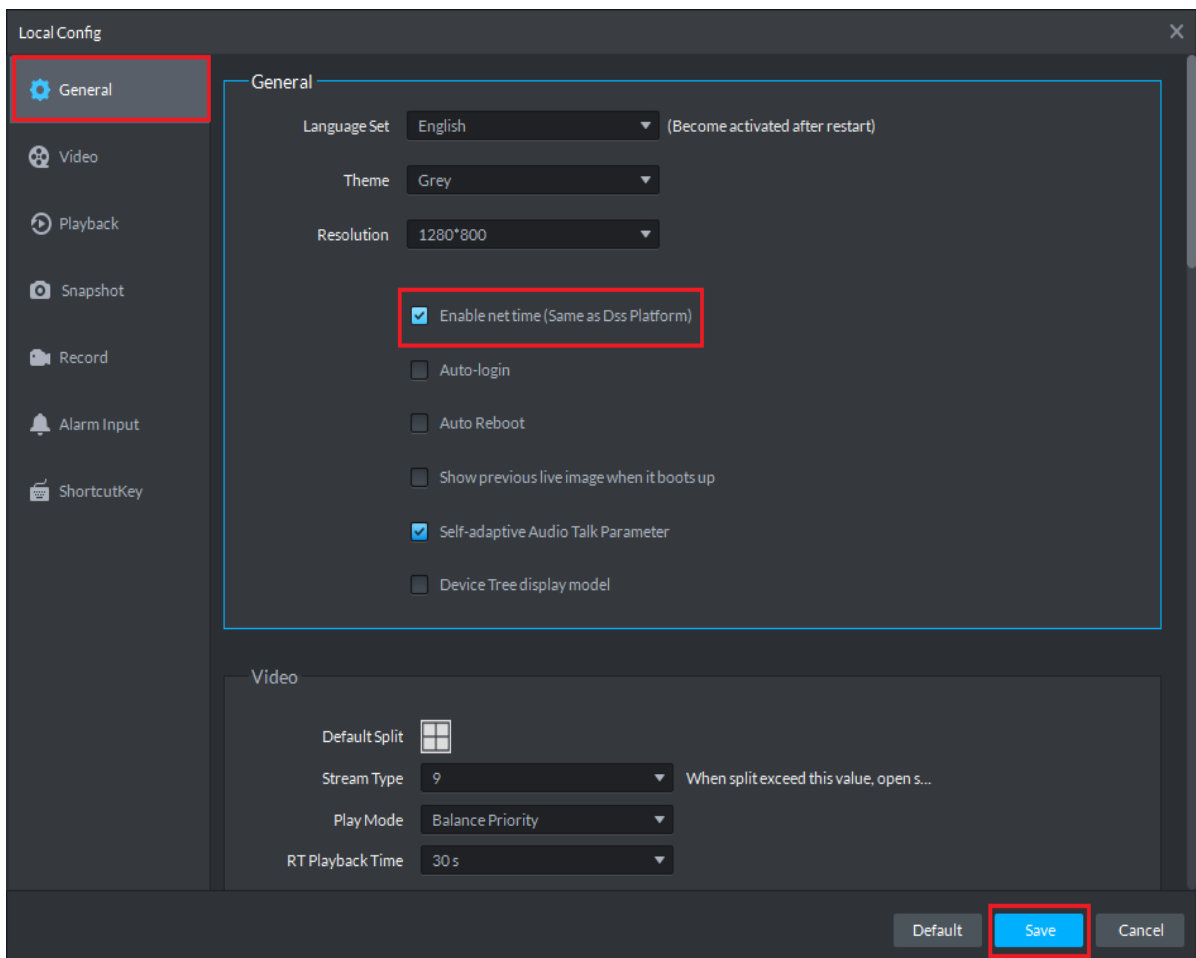
Figure 30-3

Step 4. Click Save.

Step 5. On Manager, click [Immediate...] button, then PC time where Client is installed will sync with DSS server time.

31 FTP

31.1 Usage

Enable FTP function on DSS server, which is mainly used to upload alarm snapshot to DSS platform. You can use DSS system self-carried FTP, or other FTP server you create.

31.2 Config

Step 1.   Click next to Home.

Step 2.   Select System tab, see Figure 31-1.
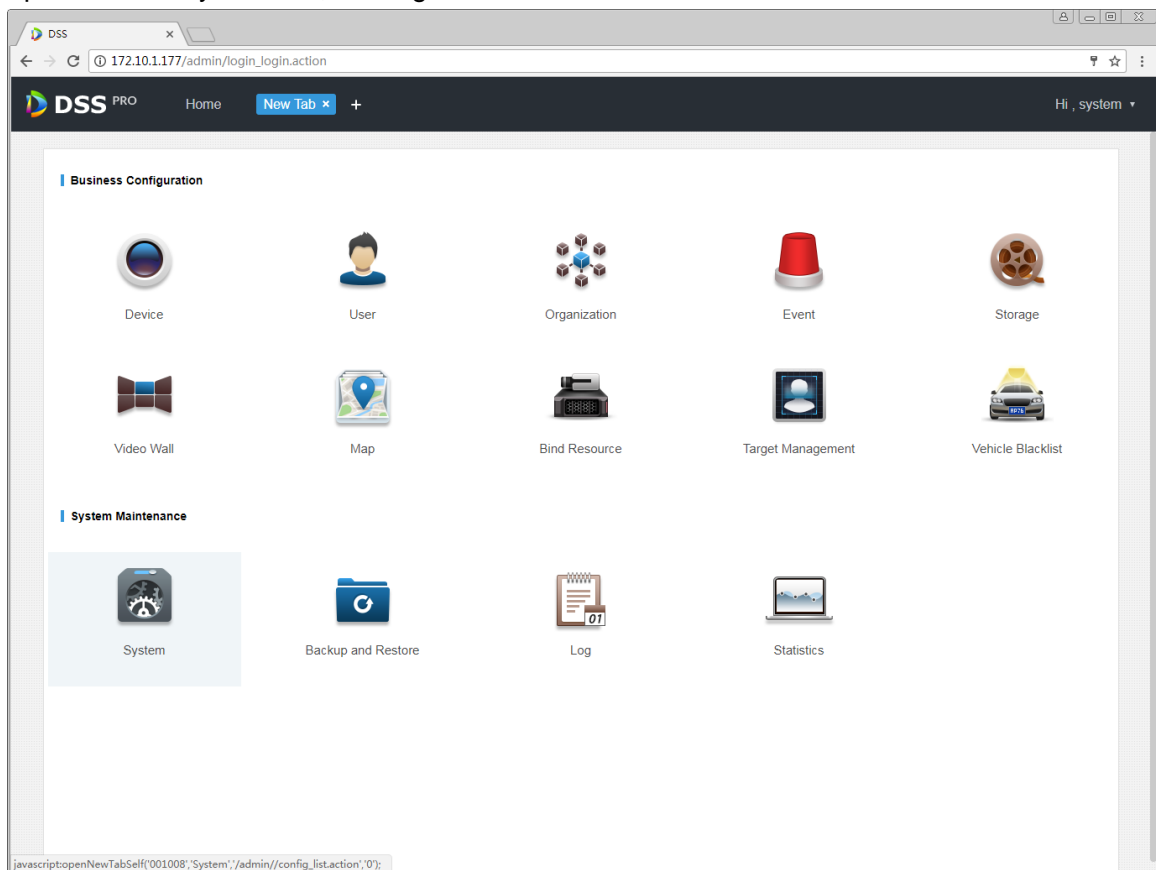
Figure 31-1

Step 3.   Click FTP Setup tab, set FTP address and username, password.
See Figure 31-2.
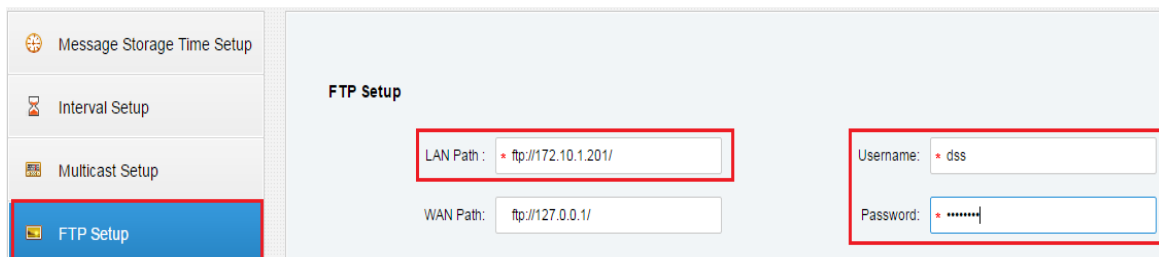
Figure 31-2

Note:

Item with * sign is mandatory, and FTP standard format is: ftp://x.x.x.x/. System self-carried FTP address is IP address of DSS server. Username and password are "dss" by default.

Step 4.   Click to save. See Figure 31-3.
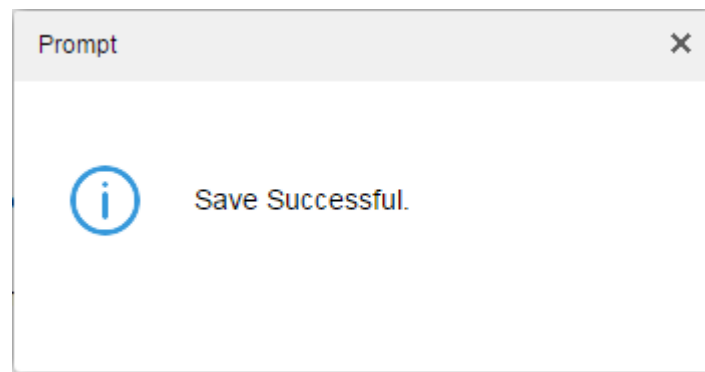
Figure 31-3

31.3 **Usage Display**

Step 1.   On PC desktop, click My Computer.

Step 2.   In address field, enter FTP address you set, such as ftp://172.10.1.201/, press Enter.
See Figure 31-4.
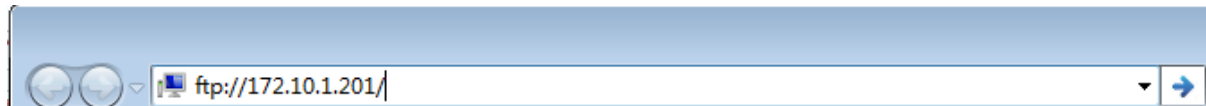
Figure 31-4

Step 3.   After you press Enter, when the FTP is open, enter username and password. (default is dss/dss)

Step 4.   Click Login, enter FTP directory.

32 Version

32.1 Client Version

Click at the upper-right corner of DSS Client, select About, to view version as in Figure 32-1.
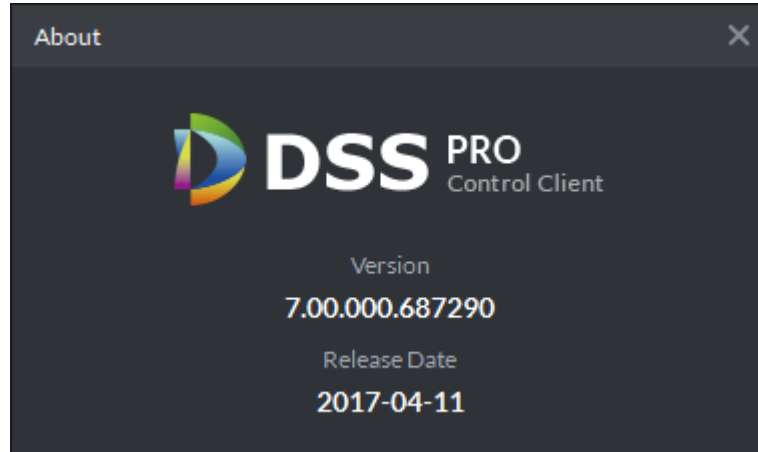
Figure 32-1

33Naming Rule Setup

Click ![gear icon] at the upper-right corner of DSS Client, open Local Config interface.

Click Snapshot and Record tab, you can set naming rule of snapshot and local record, see Figure 33-1.

Naming rule can be select from: channel name_time, channel no._time, time_channel and time_channel name.
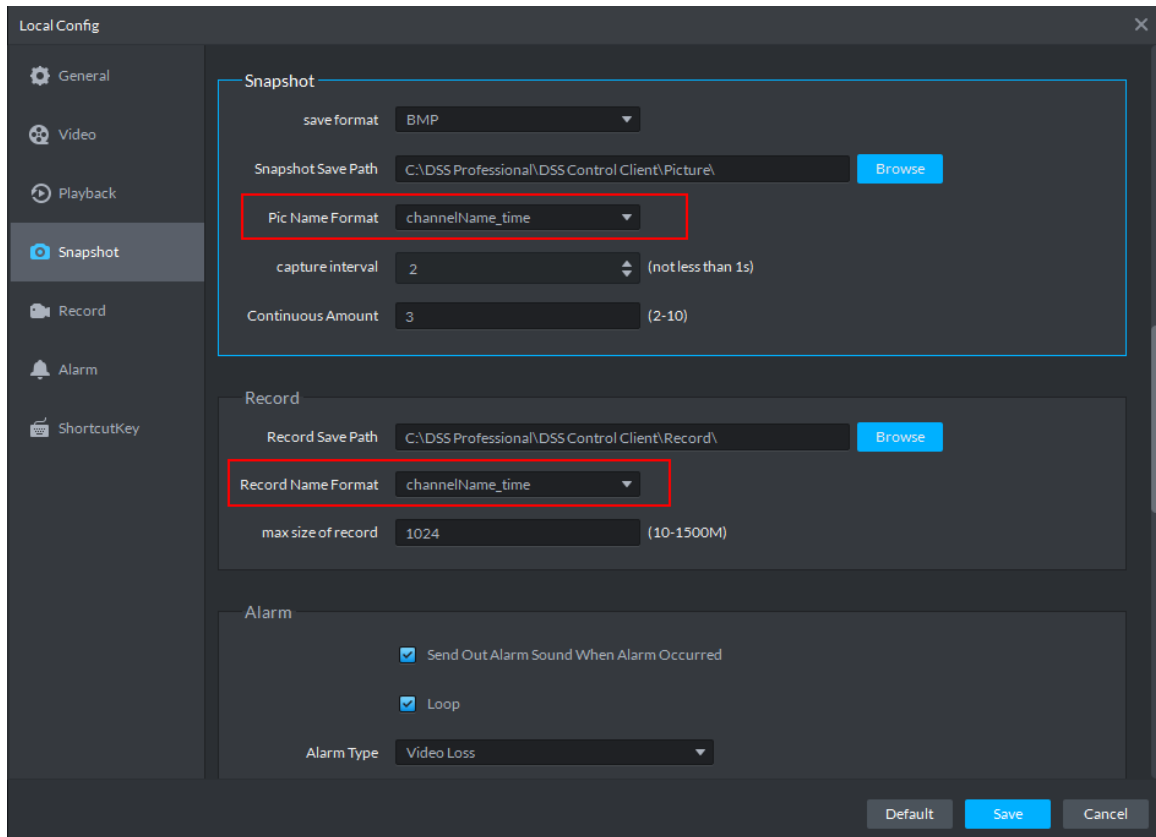
Figure 33-1

34 Path Setup

Click ![gear icon] at the upper-right corner of DSS Client, open Local Config interface.

Click Snapshot and Record tab, you can view storage path of snapshot and local record, see Figure 34-1.
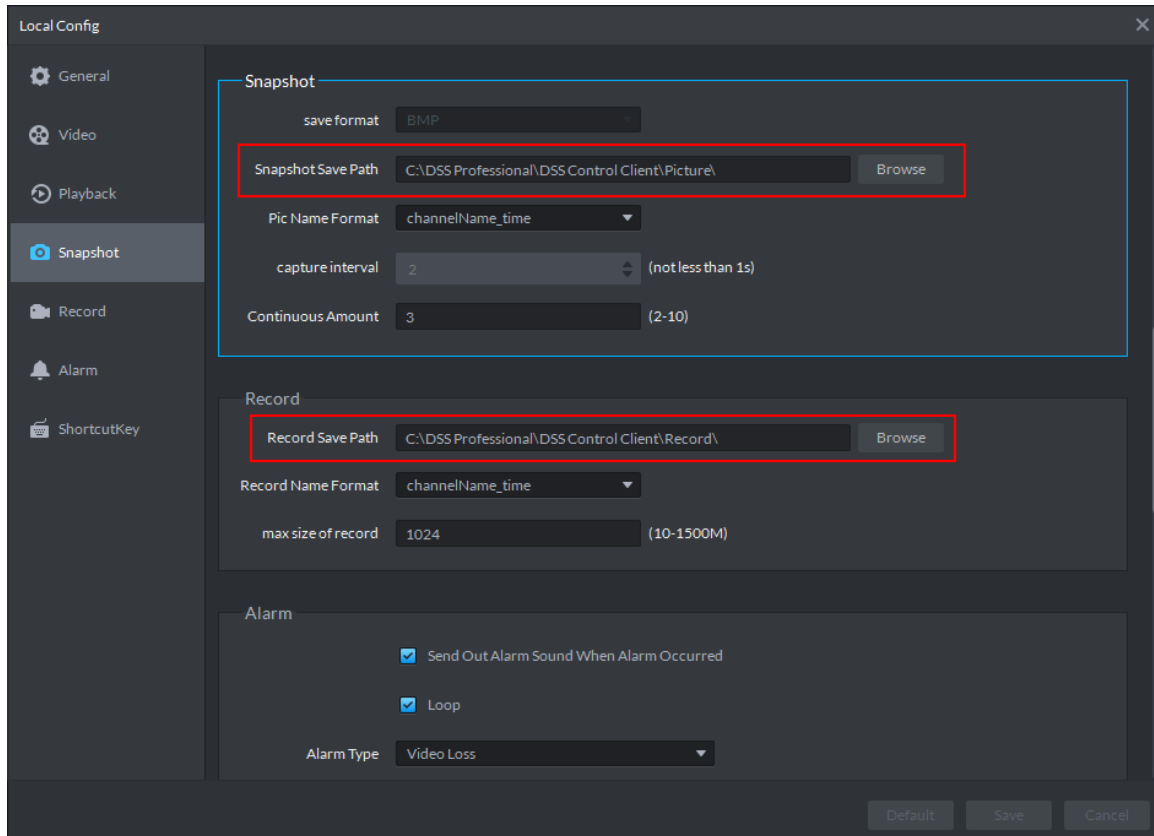
Figure 34-1

35 Help

In homepage of DSS Manager, you can view user's manual, mobile client manual and FAQ.

Add Device

Manually input device connection parameter, to add the device to the platform.

Add Device

Add User

Add user, and authorize the user with system permission.

Add User

Add Event

Add device or system events, and configure the corresponding link actions.

Configure Event

Set Record Plan

Configure the record plan of cameras.

Configure Record Plan

Overview

Status:	Online	Offline
Device:	28	8
User:	3	10
Service:	8	0
HDD	0G/0G	

License

Date:2017-04-20. Details of license

Step 1: Export license request file.

Export trial request file.

Step 2: Contact sales person for license

Step 3: Import License File

Help

User Manual

FAQ

E-Mail:dss_support@dahuatech.com

36 **Shortcut**

Shortcut of PC is in Chart 36-1.

Function	Shortcut	Function	Shortcut
Wnd Move up	Up	Snap Single Wnd	P
Wnd Move down	Down	Snap pic	Ctrl+P
Wnd Move Left	Left	Local Record	Ctrl+R
Wnd Move Right	Right	PreSet1	1
Aperture-	Insert	PreSet2	2
Aperture+	Delete	PreSet3	3
Focus-	Home	PreSet4	4
Focus+	End	PreSet5	5
Wiper	PgUp	PreSet6	6
Light	PgDn	PreSet7	7
Open Single Wnd	L	PreSet8	8
Close Single Wnd	L	PreSet9	9
Open Full Screen	Ctrl+F	PreSet10	10
Close Full Screen	ESC		

Chart 36-1

Appendix 1 Server Module

Abbreviation	Service Name	Function	Port	Protocol
CMS	Center Management Service	Manage each service and provide access interface.	80	TCP
MQ	Message Queue Service	Responsible for message transfer between platforms	61616	TCP
DMS	Device Management Service	Log in front end encoder, receive alarm, forward alarm, send time command.	9200	TCP
MTS	Media Transmission Service	Get audio and video stream from the front-end device, then distribute to the SS, client, decoding device.	9100	TCP
SS	Storage Service	Video storage , video query and video playback	9320	TCP
VMS	Video Matrix Service	Log in the decoding device and send the wall task to the decoding device.	Not a fixed value/no nedd mapping to WAN	TCP
MGW	MediaGateway Service	Send the address of the MTS to the decoding device	9090	TCP
ARS	Auto Register Service	Monitor and login auto-register device, get stream from the device then send to MTS	9500	TCP
PCPS	ProxyList Control Proxy Service	Login Hik and Onvif device, get stream from the device then send to MTS	5060/14509	UDP/TCP
ADS	Alarm Dispatch Service	According to the plan to send alarm information to different objects	9600	TCP

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.**