

DSS Installation Configuration and Business Use Guide

V1.0

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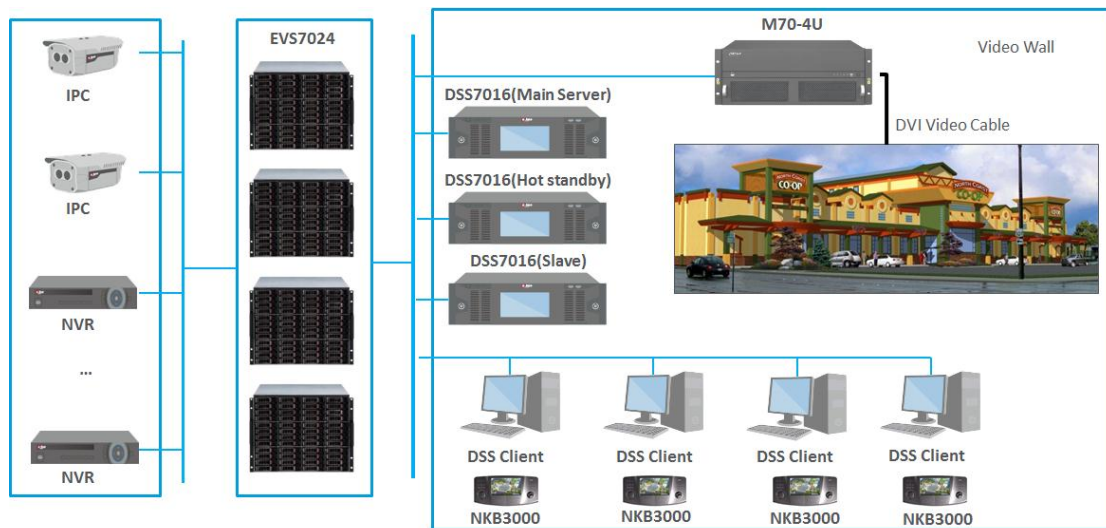
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DSS Deployment

1.1 DSS Overall Frame Intro

1.1.1 System Frame



- DSS

According to project demand, deploy host, hot spare, slave device, you can select DSS7016 or DSS4004. DSS7016 has better overall performance than DSS4004 ,and it supports local storage, may plug in 16 disk slots, one as system disk , other 15 may be storage disks , and it can expand into multiple DSS7016 to support larger demand on storage.

- Storage

You can select EVS as front storage, not as central storage, and this scheme is more suitable for DSS4004.

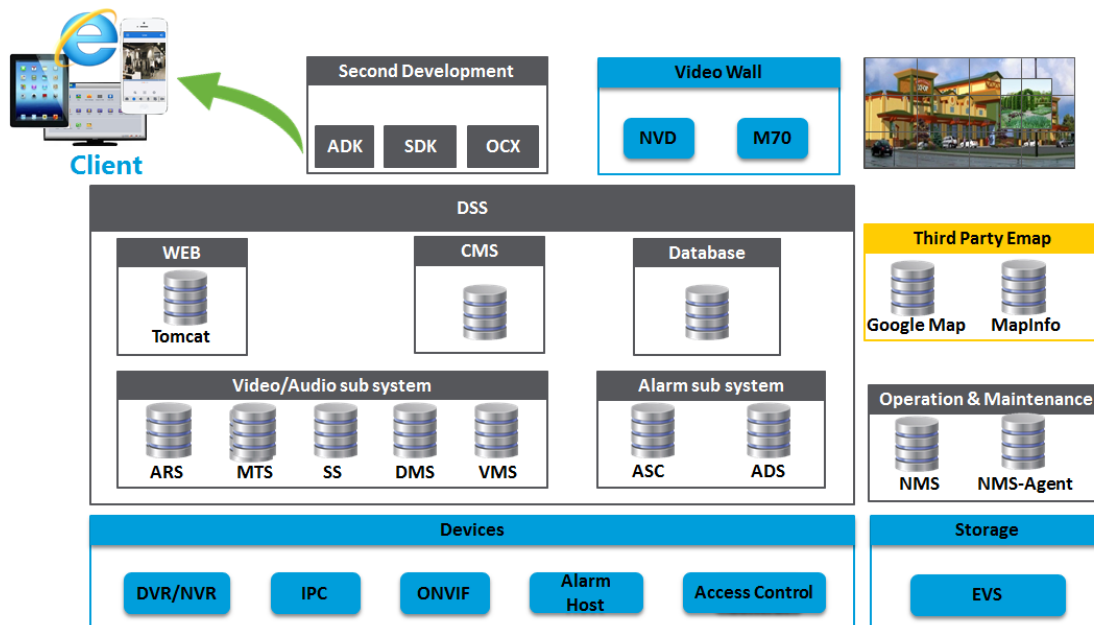
Central storage scheme need to deploy more DSS to support forwarding storage, DSS quantity and storage bandwidth are related, mainly depending on storage and band width size, and in order to reduce platform investment, we recommend EVS front storage.

If you select DSS7016 as central storage, no using EVS.

- TV Wall

Select M70 to control video wall.

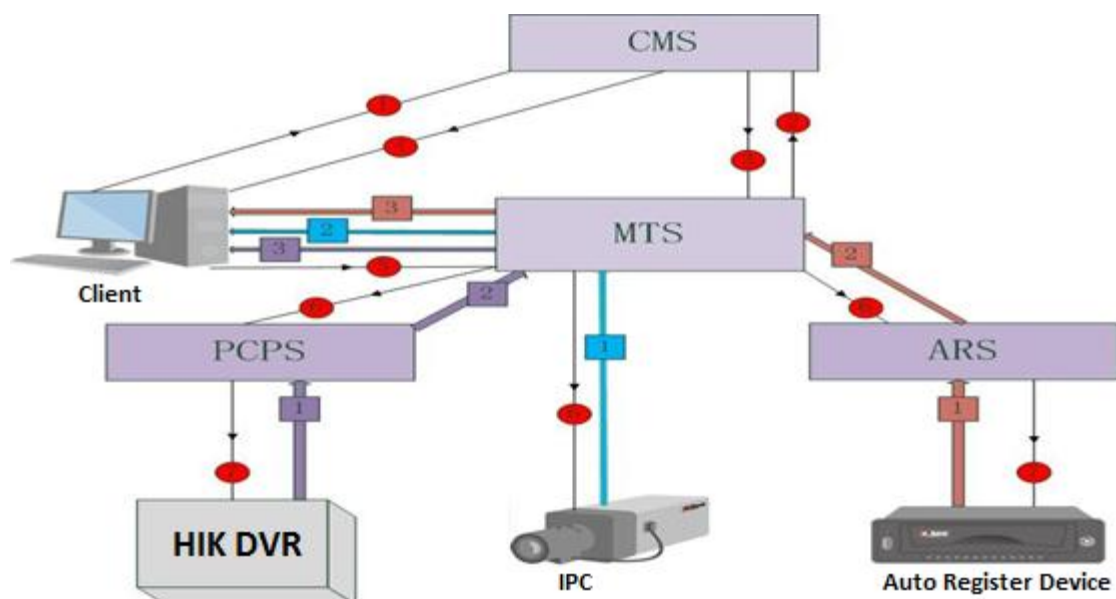
1.1.2 DSS Structure



Server Name	Function	Port
CMS	Manage other server registration and signal deployment	9000
DMS	Responsible to login front encoder, receive alarm, forward alarm, send alarm and send calibration command	9200
MTS	Responsible to get A/V stream from front device and forward to SS, client and decoding device.	9100
SS	Responsible for record storage and record search and playback	9320
VMS	Responsible to login decoding device and send video wall task to decoding device	
MGW	Responsible to send MTS address to decoding device	
ARS	Responsible to auto register device listening, login and get and	9500

	forward stream to MTS	
PCPS	Responsible for Hikvision, onvif device login and to get and forward stream to MTS	
ASC	Responsible to resolve alarm scheme into ADS and some APP	9700
ADS	Response to send alarm info to different objects according to different schemes	9600
ADP	Responsible for cascading of alarm business	9800
VQDS	Perform video quality diagnosis, currently diagnosis options on 7016 are : video loss, high brightness, low brightness, contrast, definition, color shift	9900
PES	Responsible to manage MCD	9400
MCD	Responsible for alarm host, access control and environment device input and alarm receiving and forwarding	

1.1.3 Live Video Flow



1.1.3.1 Live Preview Signal Flow

1. Client send request to CMS ;
2. CMS send command to MTS ;
3. MTS receive command, and send its address back to CMS ;
4. CMS receive MTS return and send MTS address to client ;
5. Client get video from MTS according to address ;
6. If MTS does not request this channel of video, it will send signal data to device ;

If device is Hikvision, then MTS get video from PCPS ;

If it is auto registration of device, MTS get video from ARS ;

1.1.3.2 Live Preview Data Flow

- Auto Registration

DVR——ARS——MTS——client ;

- Hikvision device

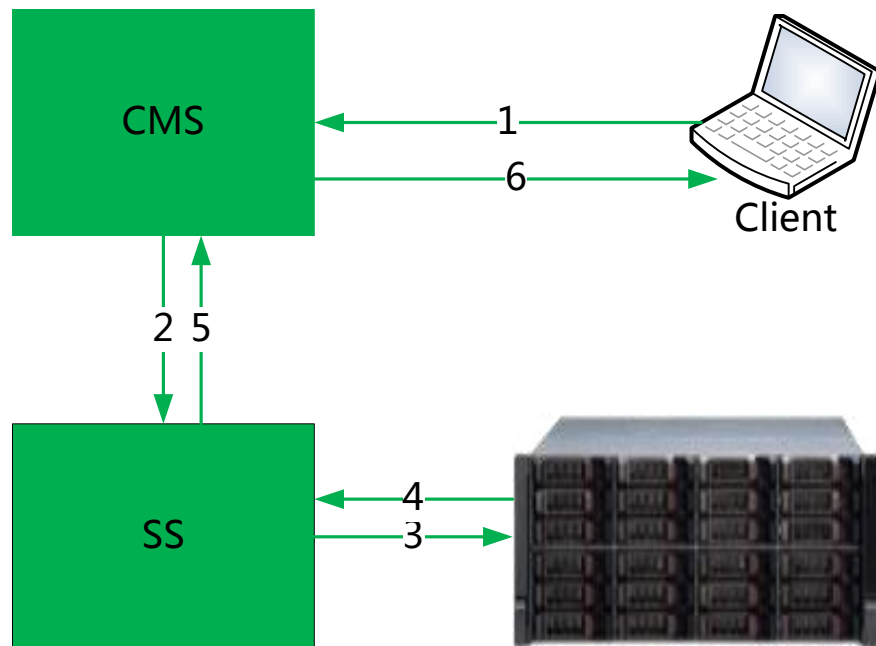
HKDVR——PCPS——MTS——client ;

- Directly login device

DHDVR——MTS——client ;

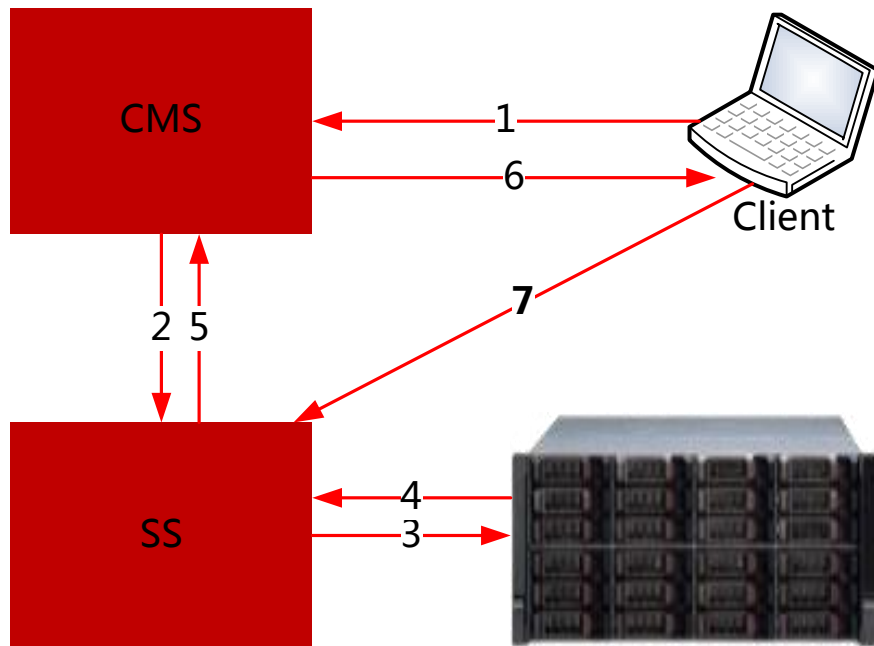
1.1.4 Device Record Search and Playback Signal Stream

1.1.4.1 Search



1. Client send request to search record to CMS ;
2. CMS send signal of search device record to SS ;
3. SS call SDK to search front device record ;
4. Front device return record info to SS ;
5. SS return record info to CMS ;
6. CMS return record info to client ;

1.1.4.2 Playback



1. Client double click a time point to playback——client send playback request signal to CMS ;
2. CMS send playback signal to SS ;
3. SS send record date request to front device ;
4. Front device return record data to SS ;
5. SS send its own RTSP address to CMS ;
6. CMS send SS address to client ;
7. Client requires corresponding SS request record data ;

1.1.4.3 Data

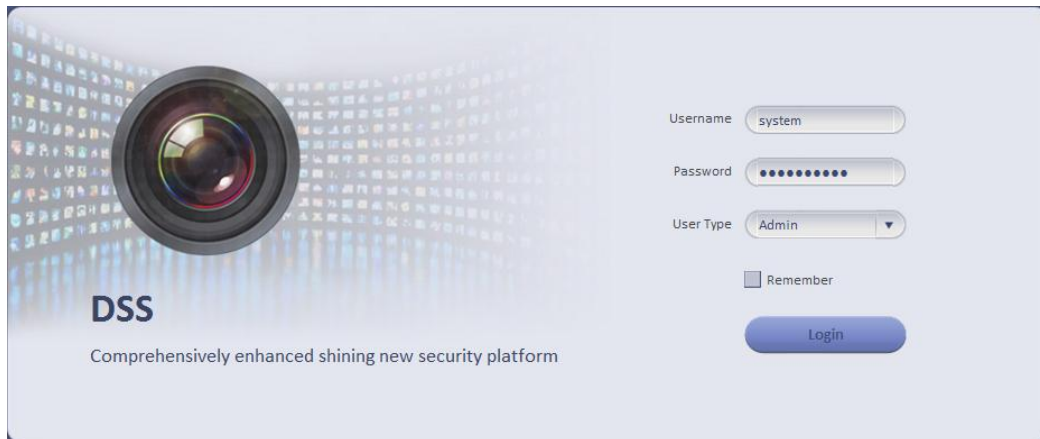
Front device——SS server——client

1.2 Upgrade

If during upgrading, you need to clear config, the correct flow is :

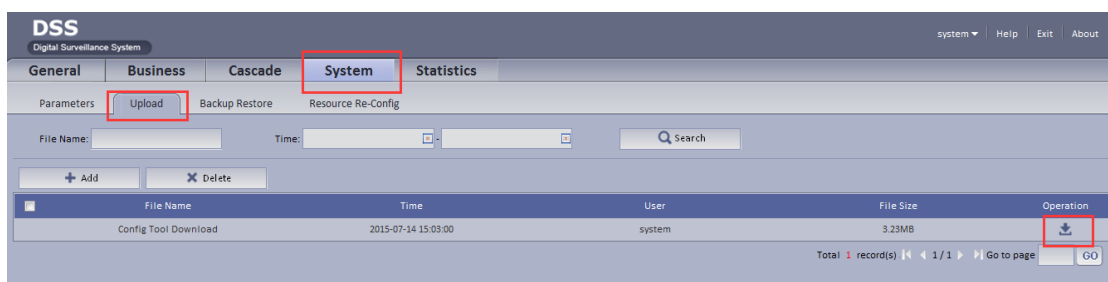
Config Backup->Upgrade program->Config clear->Restore system default

Step 1: Login manager web.







The image shows the login page of the DSS (Digital Surveillance System) web interface. On the left, there is a large camera lens graphic and the text "DSS" followed by "Comprehensively enhanced shining new security platform". On the right, there are input fields for "Username" (containing "system"), "Password" (masked with dots), and "User Type" (a dropdown menu set to "Admin"). Below these is a "Remember" checkbox and a "Login" button.

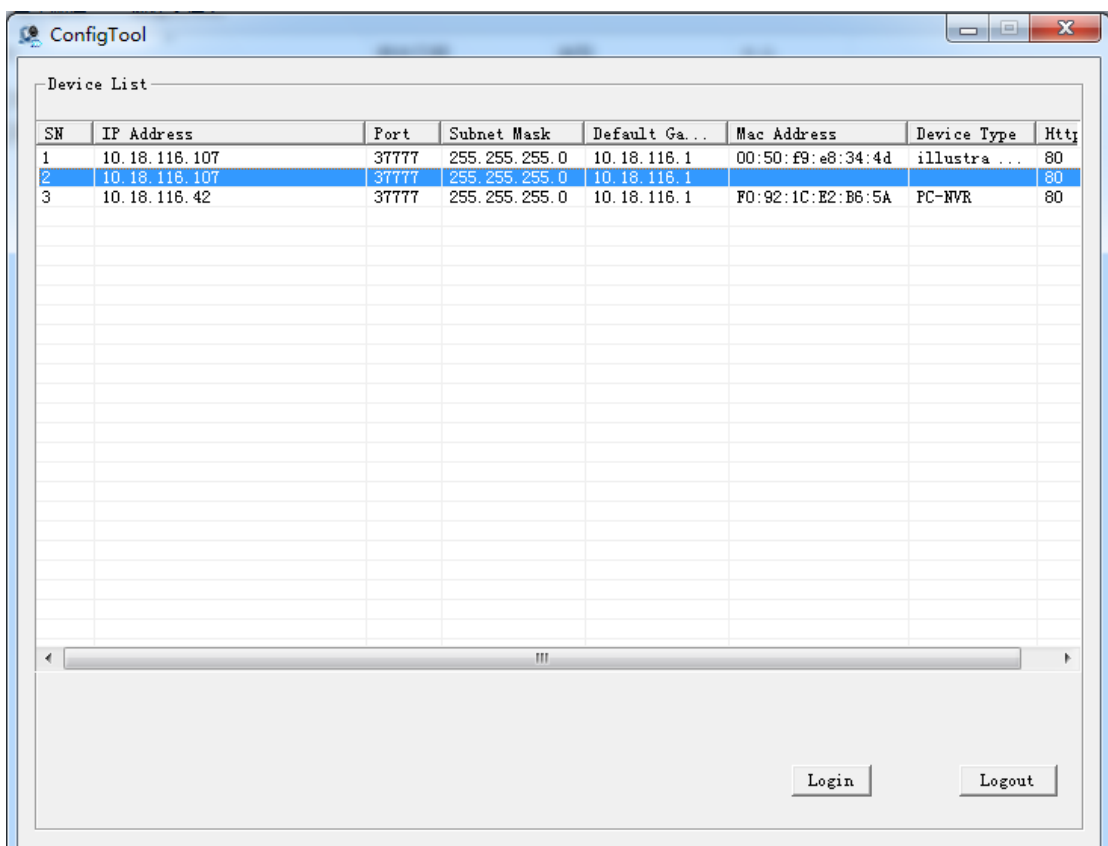
Step 2: Select System->Upload, and click  button to download the Config tool.



The image shows the "System" tab in the DSS web interface. The "Upload" sub-tab is selected. Below the sub-tabs, there are fields for "File Name" and "Time", and a "Search" button. A table lists the upload history. The first entry is "Config Tool Download" with a "Download" button in the "Operation" column.

File Name	Time	User	File Size	Operation
Config Tool Download	2015-07-14 15:03:00	system	3.23MB	

Step 3: Choose  DSSConfig.zip at downloaded folder and unzip. Click to open DSSConfig folder and unzip the file  UpgradeTool.zip, then select  ConfigTool.exe file to open.



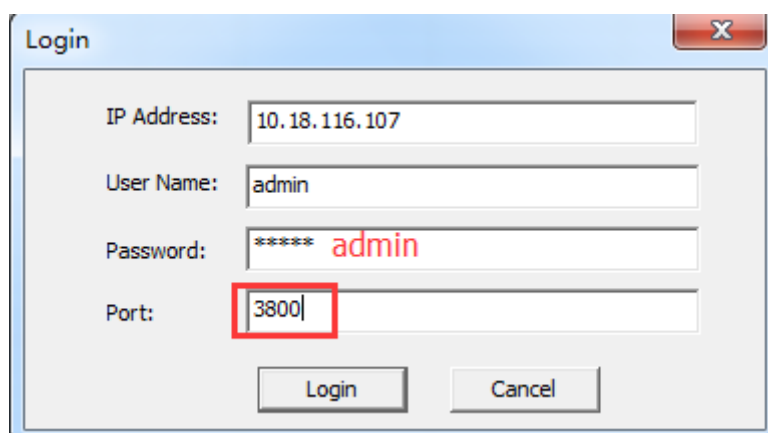
The image shows the "ConfigTool" application window. It has a "Device List" table with columns: SN, IP Address, Port, Subnet Mask, Default Ga..., Mac Address, Device Type, and Http. The first three rows are highlighted in blue.

SN	IP Address	Port	Subnet Mask	Default Ga...	Mac Address	Device Type	Http
1	10.18.116.107	37777	255.255.255.0	10.18.116.1	00:50:f9:e8:34:4d	illustra ...	80
2	10.18.116.107	37777	255.255.255.0	10.18.116.1	00:50:f9:e8:34:4d	illustra ...	80
3	10.18.116.42	37777	255.255.255.0	10.18.116.1	F0:92:1C:E2:B6:5A	PC-NVR	80

At the bottom right, there are "Login" and "Logout" buttons.

Step 4: Click Login and pop up Login interface, input IP address, Username, Password and Port of DSS7016 or DSS4004, then Login.

Note: User name and Password are "admin" in Default, the port is 3800.



Step 4: Download and copy the upgrading file to PC. Click "open" button to select the upgrading file, and click "Upgrade" button.

About 5 minute later, system will prompt Upgrade Finished and Reboot, click OK to finish the upgrade.

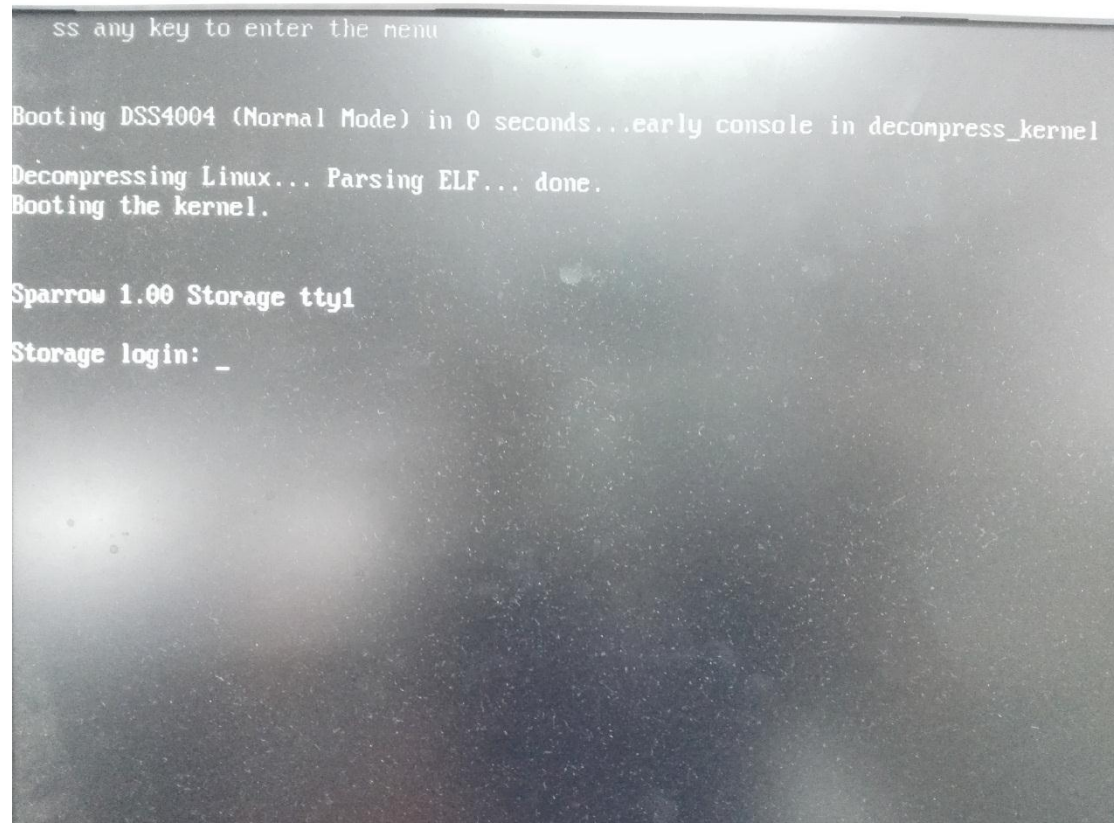
Note: Make sure the upgrading file which is copied to PC is complete, if not or select the file from u DISK directly, system will prompt file error.

1.3 Network Deployment

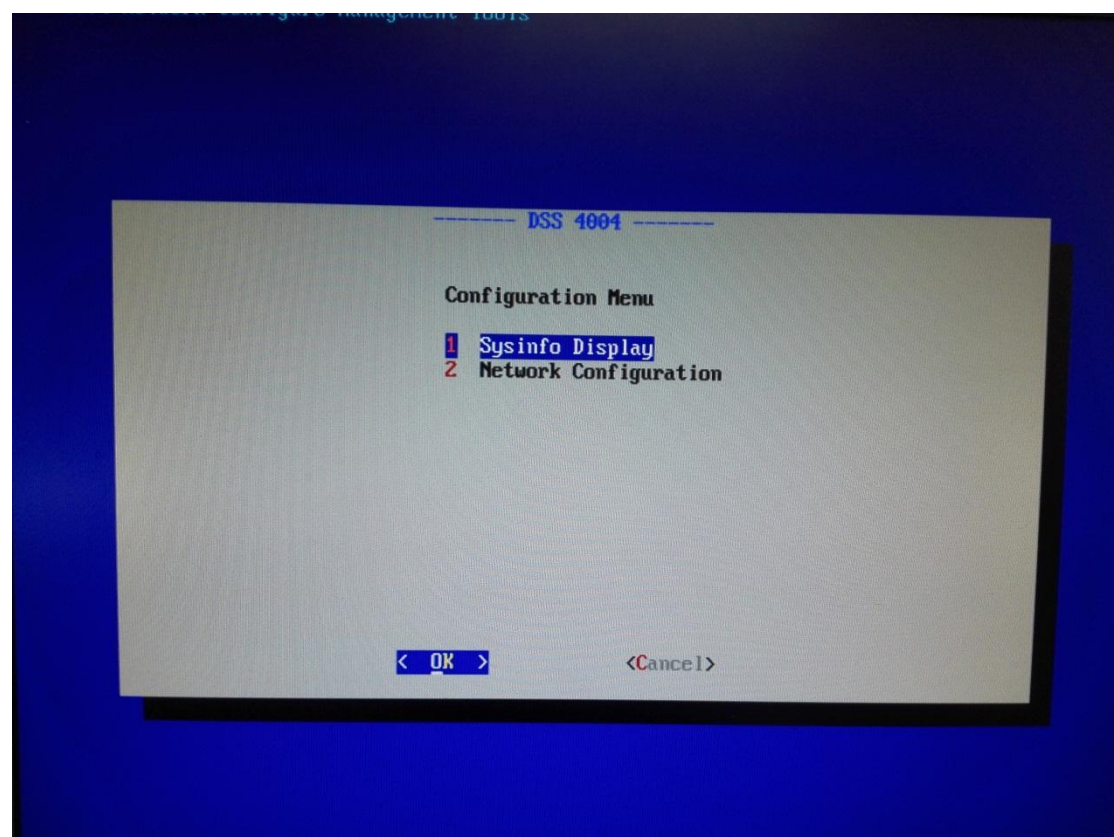
1.3.1 IP Config

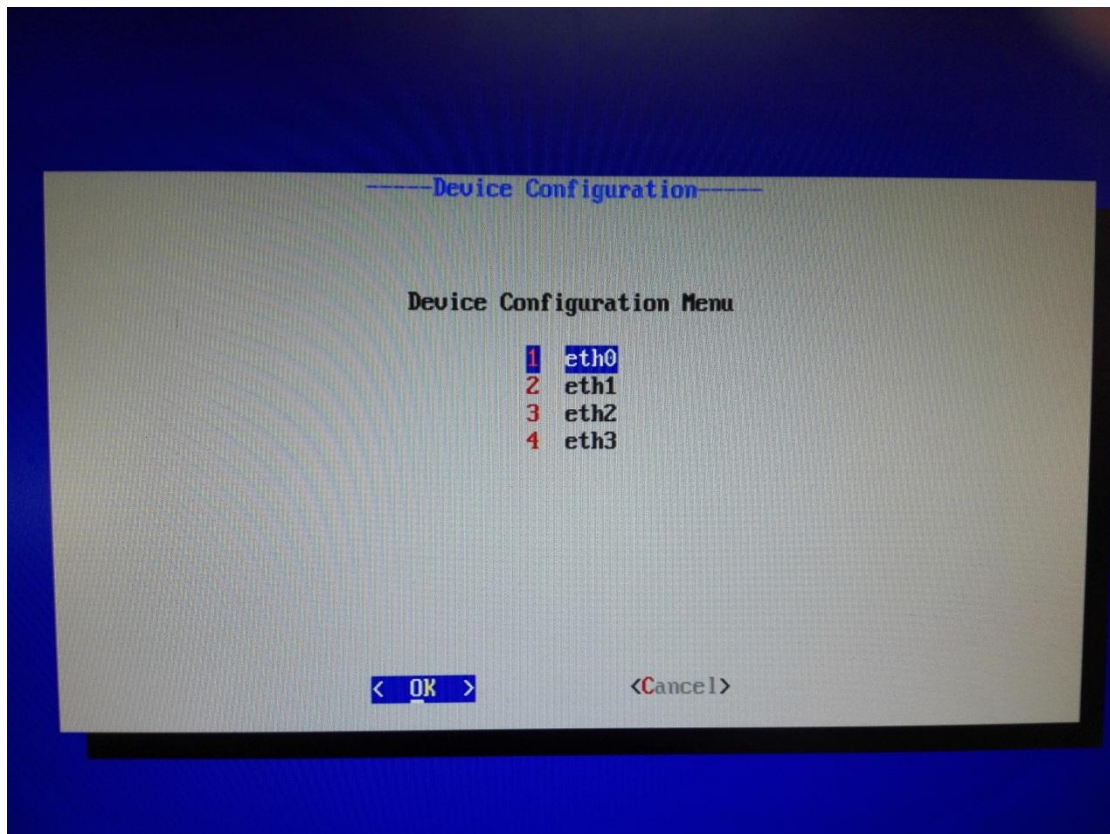
1.3.1.1 DSS4004

Step 1 : Connect monitor to DSS4004 , and login, username : root , initial password is dahua2006

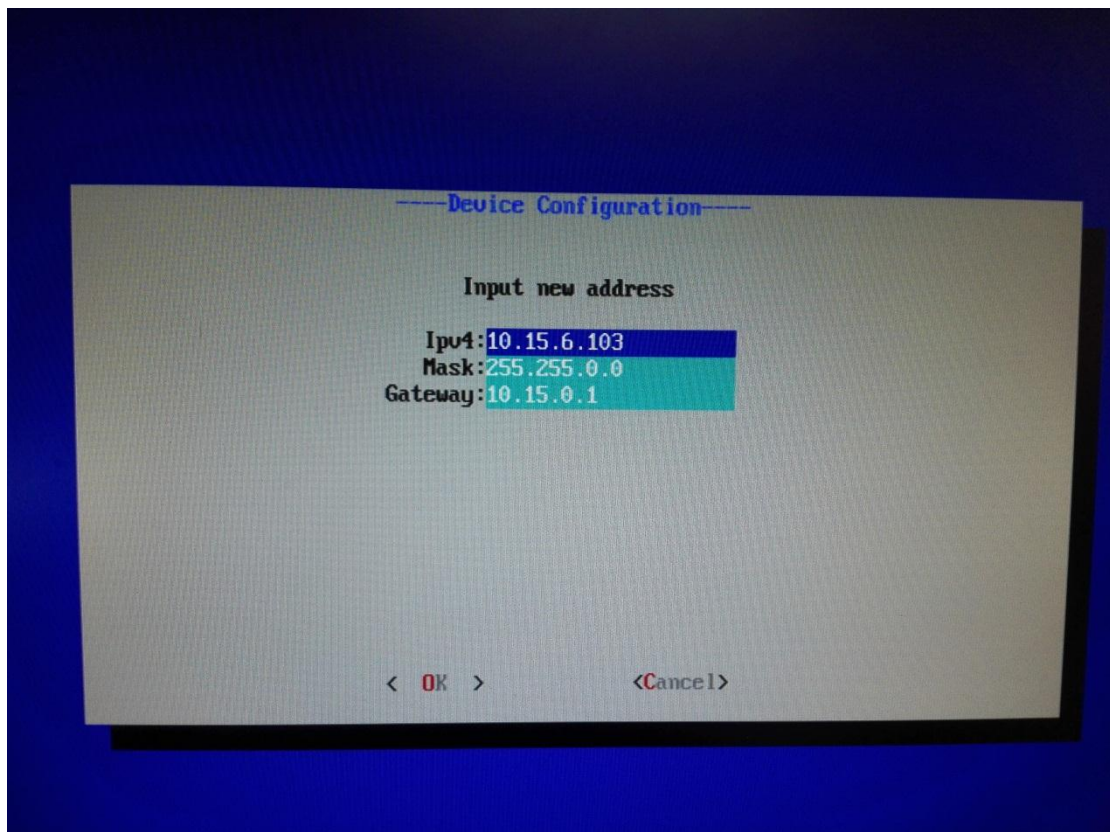


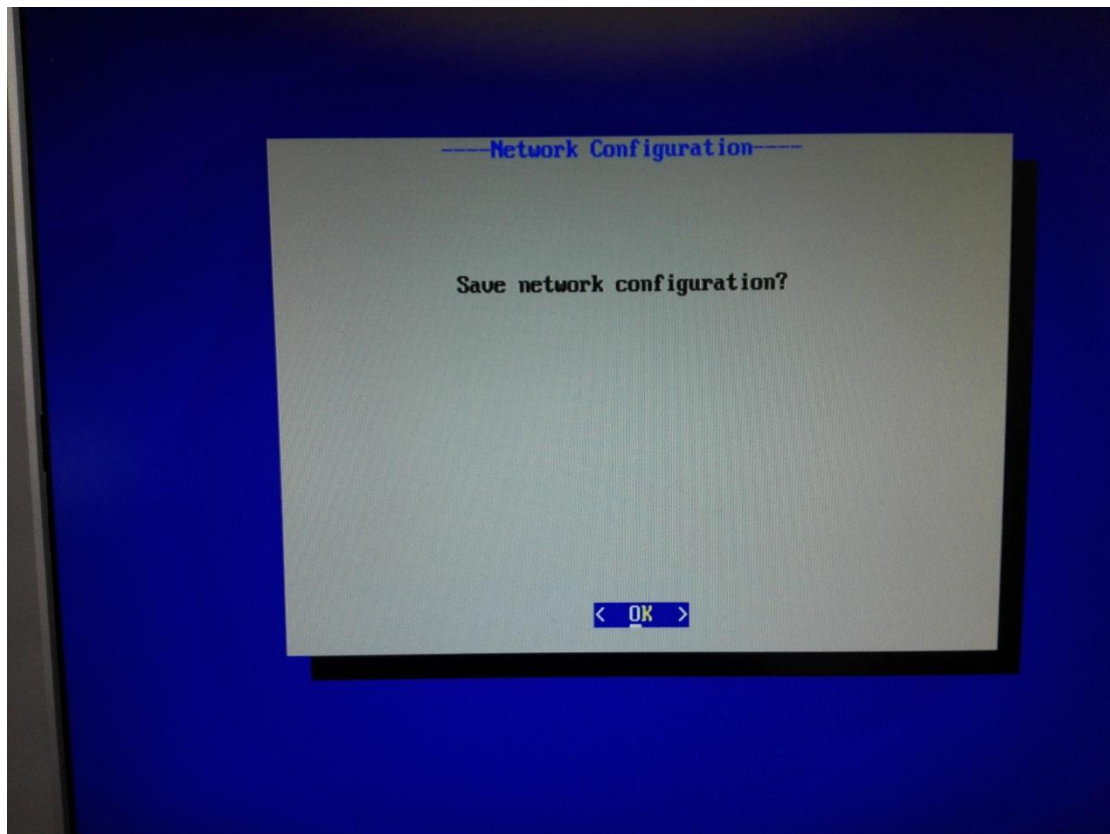
Step 2 : Select Network Configuration and Ethernet card to config.





Step 3 : Modify I P info, and save.



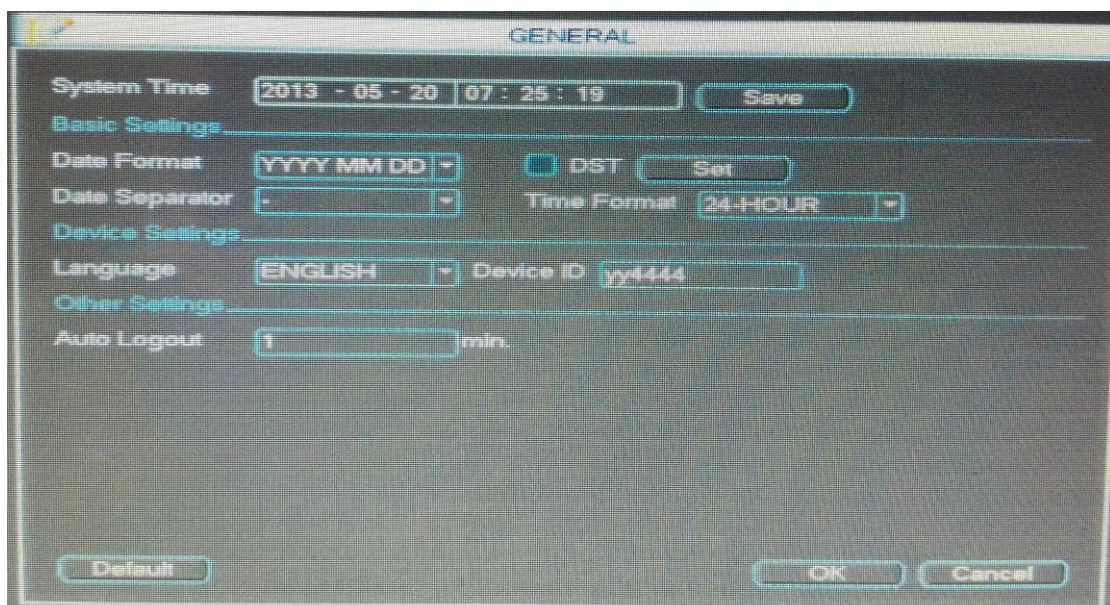


Note: After login, you can re-enter network config interface via "setup" command.

1.3.1.2 DSS7016

Step 1 : After system boot up, system pop up "startup guide" box.

Step 2: Click "next" , pop up "general setup" box to set.

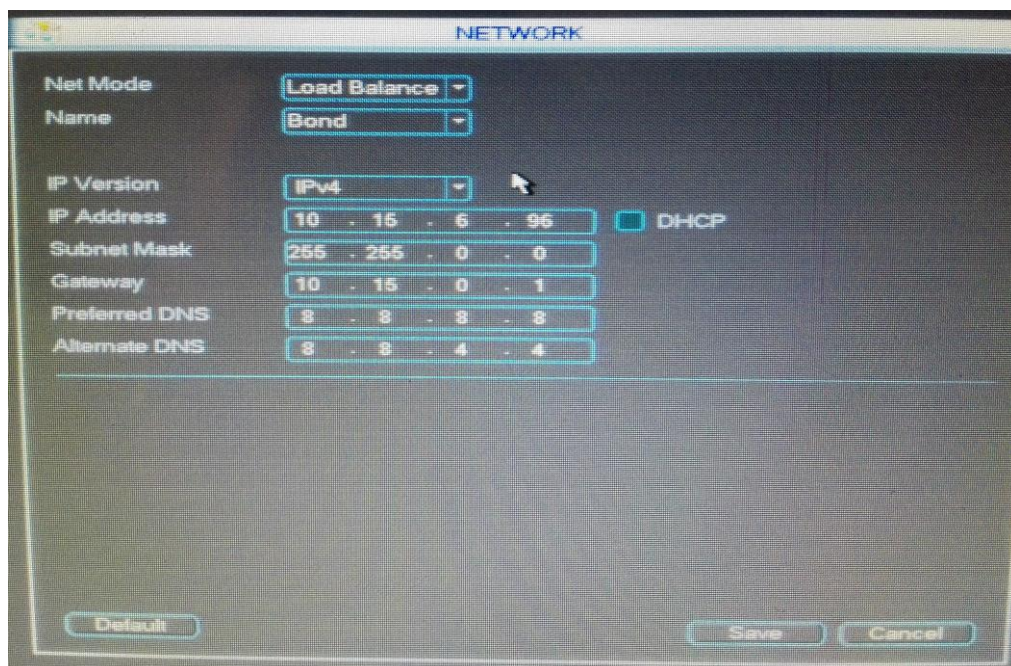


Step 3: Config IP address

After basic setup is complete, click next , pop up "network config" box to set.

- Load balance :

4 network ports bound to form one virtual network port, only need to configure one IP , in actual work, 4 network ports will switch data (according to front device and client MAC address and DSS7016 4 network ports MAC address calculate to ensure that a certain front-end or client uses a certain network port to switch.)

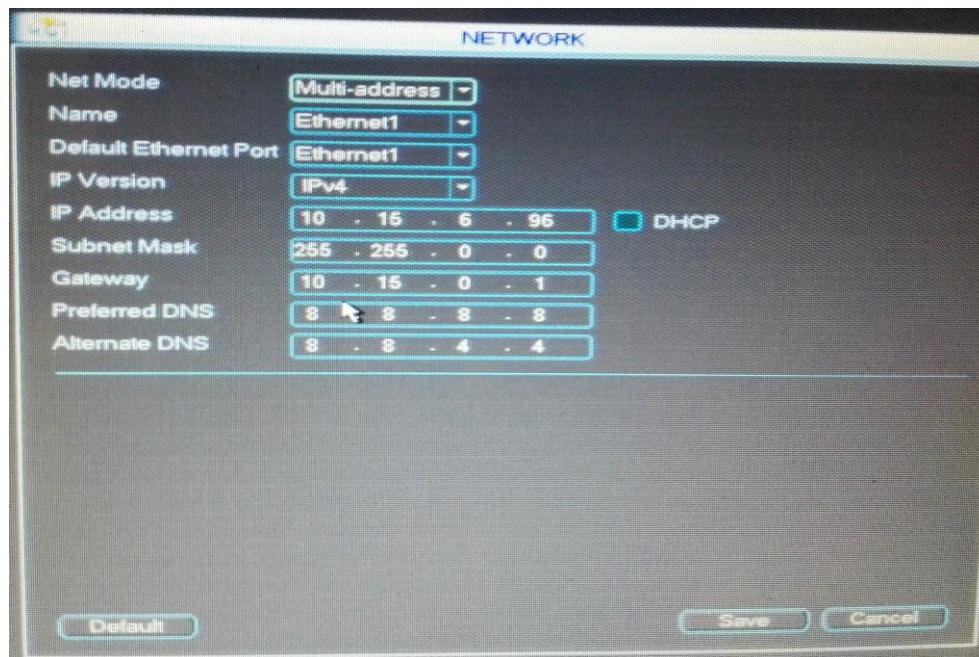


The screenshot shows a "NETWORK" configuration window. The "Net Mode" is set to "Load Balance" and the "Name" is "Bond". The "IP Version" is "IPv4". The "IP Address" is "10 . 15 . 6 . 96", "Subnet Mask" is "255 . 255 . 0 . 0", "Gateway" is "10 . 15 . 0 . 1", "Preferred DNS" is "8 . 8 . 8 . 8", and "Alternate DNS" is "8 . 8 . 4 . 4". The "DHCP" checkbox is unchecked. At the bottom are "Default", "Save", and "Cancel" buttons.

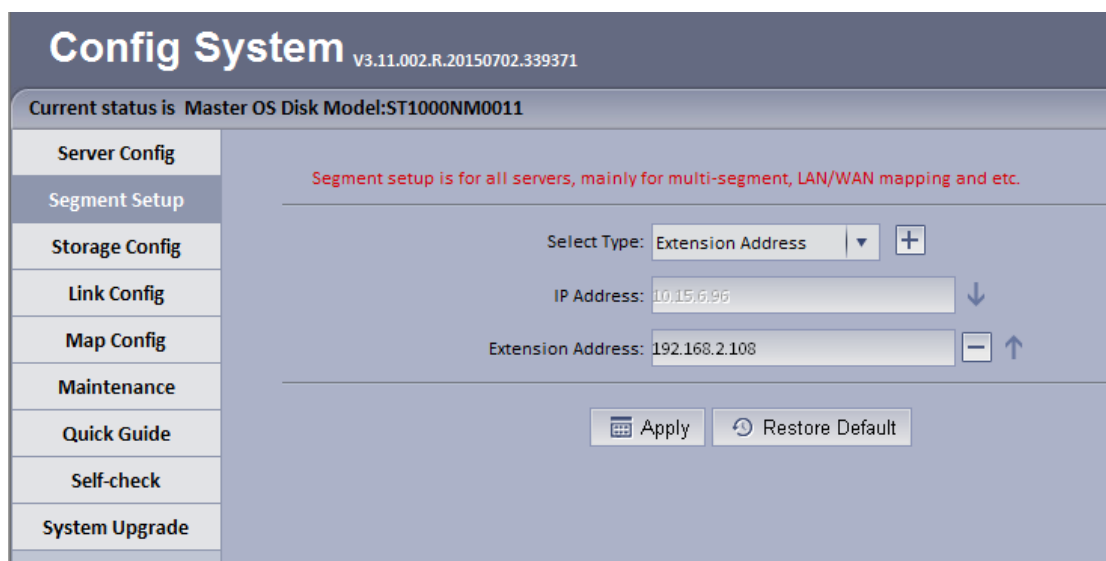
Field	Value
Net Mode	Load Balance
Name	Bond
IP Version	IPv4
IP Address	10 . 15 . 6 . 96
Subnet Mask	255 . 255 . 0 . 0
Gateway	10 . 15 . 0 . 1
Preferred DNS	8 . 8 . 8 . 8
Alternate DNS	8 . 8 . 4 . 4
DHCP	<input type="checkbox"/>

- Multi-address mode

multi-address mode is 4 network ports which can independently work , no matter whether other network connect to Ethernet cable or not , 4 Ethernet port IP must config as different segments ; If one network port is LAN, and one network port is WAN, you need to set default network to connect to WAN card ;



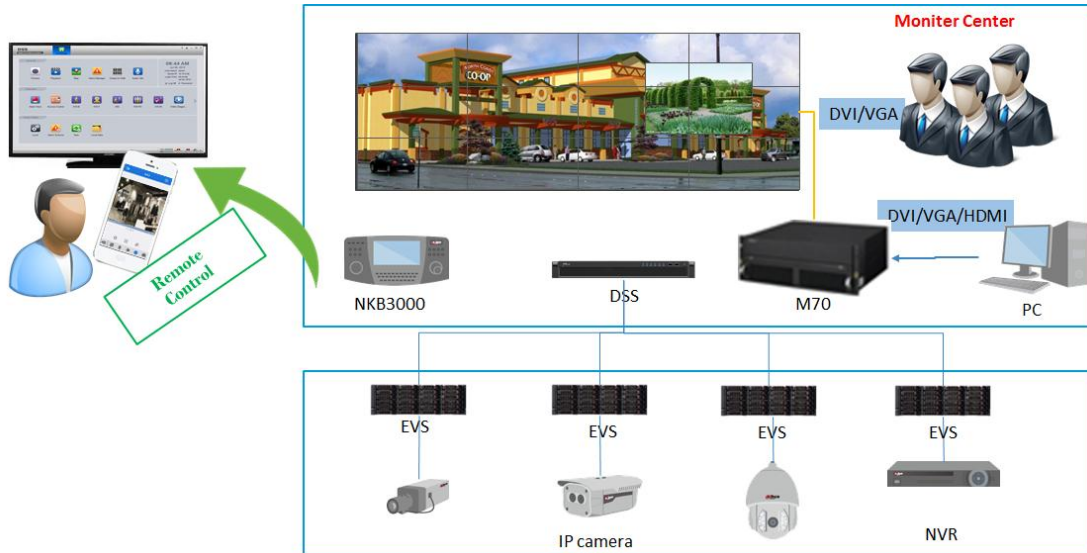
After local LCD configured multi-address, login config tool , <http://ip/config> , click Segment Setup , and select " Extension Address" , click "+" , input LCD panel configured IP, click Apply ;



1.3.2 Standalone Mode

For small surveillance system, you can use directly DSS7016 or DSS4004 matrix monitoring platform to achieve.

Note: to guarantee system stability, we recommend you to deploy one more DSS , for dual hot spare.



- DSS

According to project need, deploy host, hot spare, extension, you can select either DSS7016 or DSS4004.

- Storage

Select EVS as front storage, or you can directly use DSS7016 as central storage.

- TV Wall

Use M70 to control video wall.

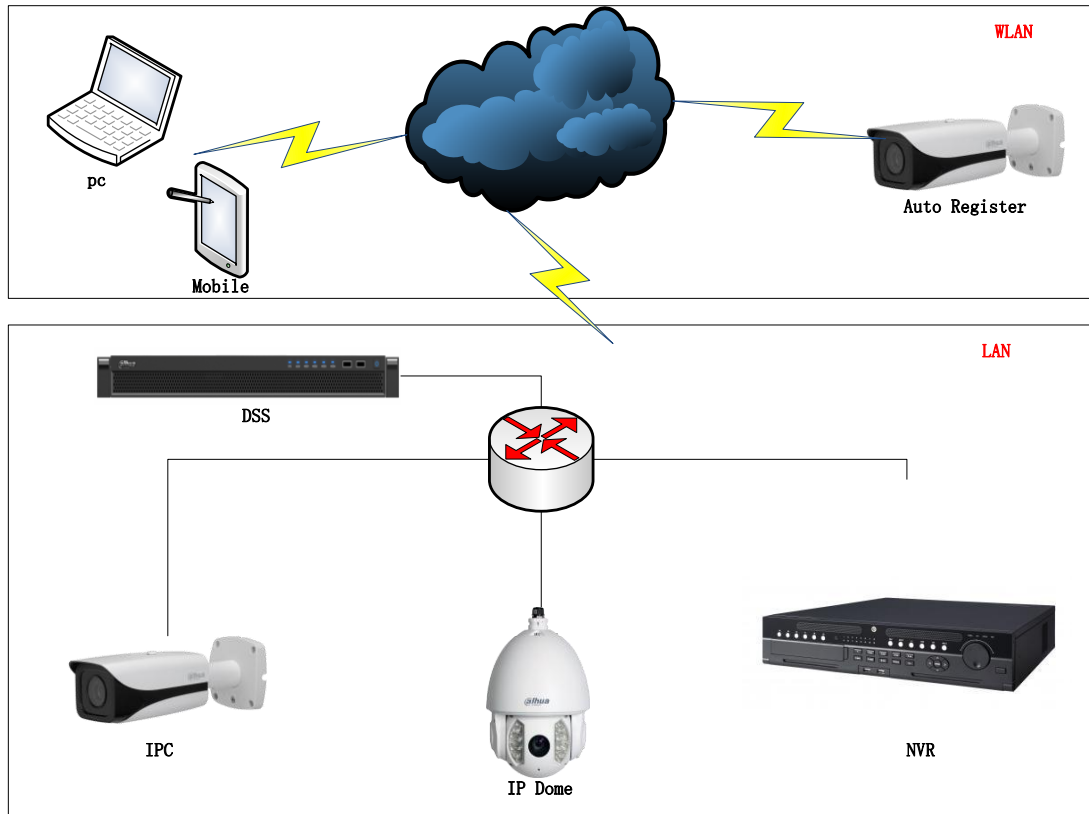
DSS7016 and DSS4004 performance as follow :

	DSS7016	DSS4004
Local Storage	1-System HDD 2-16- Storage HDD	Not support
Transfer capability	700Mbps	300Mbps
Devices	500	200
Channels	2000	500
Accounts	Support 10000 accounts management and 1000 online users	Support 2000 accounts management and 100 online users

Note : If adopts DSS7016 as storage, you need to format HDD.

1. Login system config interface, format is : <http://IP/config> ;
2. Storage config->select disk to format->click format button ;

1.3.3 WAN Mapping



- 1、 Map DSS' s IP for DMZ , map out all ports of this DSS' s IP, and this is the easiest method ;
- 2、 In LAN is there are multiple device or PC need WAN mapping, to make WAN mapping , you may make port mapping to open WAN for port to be used by DSS , in general LAN DSS each server port maps to WAN as the same port, if 7016 server needed port is already occupied by other server in WAN, such as admin used login port is 80 , but WAN port 80 is occupied, than you can map LAN port 80 to WAN port 82 or 90. However, when WAN admin login, need to input : <http://X.X.X.X:82> ; If CMS 9000 port is also occupied in WAN IP port, then you can map LAN 9000 to other port , such as : 9001 , so when WAN user logins CMS, need to input port no. : 9001 ;
- 3、 WAN mapping need to open port :Tomcat—80 ;CMS—9000 ;DMS—9200 ;MTS—9100 ;SS—9320 ;ARS—9500 ;ADS—9600 ;ASC—9700 ;ADP—9800 ;MGW—9090 ;config tool—9092 ;CRT tool—22 ;

WAN mapping has two methods , now we use NETGEAR wireless router as example, and please note different model may have different configuration interface.

1.3.3.1 DMZ Host Method

- First login router management interface.
- Client WAN Setup in menu on the left.
- In WAN Setup interface “Default DMZ Server” check this option , and fill in IP address of DMZ computer you want to set as host. The IP address shall be static which you can manually set.

The screenshot displays the Netgear SmartWizard router manager interface for the WAN Setup of an N150 Wireless Router (model WGR614). The interface is in English. On the left, a sidebar lists various configuration options under 'Maintenance' and 'Advanced'. The main area is titled 'WAN Setup' and contains several settings: 'Disable Port Scan and DoS Protection' (unchecked), 'Default DMZ Server' (checked with IP address 172.16.5.25), 'Respond to Ping on Internet Port' (unchecked), 'MTU Size (in bytes)' (1500), and 'NAT Filtering' (Secured). There are 'Apply' and 'Cancel' buttons at the bottom. On the right, a 'WAN Setup Help' panel provides detailed instructions for setting up a DMZ server, including steps like clicking the 'Default DMZ Server' check box, typing the IP address, and clicking 'Apply'.

Note : the advantage of DMZ method is the easy setup, you can use when you are not sure to open which port. Set computer as DMZ host, its all ports will open to internet, and this will lead to risk. After set DMZ host, all ports mapping indicate toward DMZ host. Invalid when indicate toward other computer' s port mapping.

1.3.3.2 Port Mapping Method

- First login router management interface.
- Click “Port Forwarding&Port Triggering” in menu on the left.
- Click button “Add Custom Service” to map port, make ADS server as example , port to map is 9500 , server IP address is the LAN IP address to be mapped to WAN (this IP address need to be manually

set static), perform the same operation to other server mapping.

NETGEAR
SMARTWIZARD

router manager
N150 Wireless Router model WGR614

Select Language:
English
Apply

E-mail
Maintenance
Router Status
Attached Devices
Backup Settings
Set Password
Router Upgrade
Advanced
Wireless Settings
Wireless Repeating Function
Port Forwarding / Port Triggering
WAN Setup
LAN Setup
QoS Setup
Dynamic DNS
Static Routes
Remote Management
UPnP
Traffic Meter
Web Support
Knowledge Base
Documentation

Port Forwarding / Port Triggering

Please select the service type.
☒ Port Forwarding
☐ Port Triggering

Service Name: AIM
Server IP Address: 192.168.1. Add

#	Service Name	Start Port	End Port	Server IP Address
---	--------------	------------	----------	-------------------

Edit Service Delete Service

Add Custom Service

Port Forwarding / Port Triggering Help

Port triggering is an advanced feature that you can use for gaming and other Internet applications. Port forwarding can typically be used to enable similar functionality, but it is static and has some limitations.

Port triggering opens an incoming port temporarily and does not require the server on the Internet to track your IP address if it is changed by DHCP, for example.

Port triggering monitors outbound traffic. When the router detects traffic on the specified outbound port, it remembers the IP address of the computer that sent the data and triggers the incoming port. Incoming traffic on the triggered port is then forwarded to the triggering computer.

Using the Port Forwarding / Port Triggering screen, you can make local computers or servers available to the Internet for different services (for example, FTP or HTTP), to play Internet games (like Quake III), or to use Internet applications (like CU-SeeMe).

Port forwarding is designed for FTP, Web server, or other server-based services. Once port forwarding is set up, requests from the Internet are forwarded to the proper server.

Port triggering allows requests from the Internet only after a designated port is triggered. Port triggering applies to chat and Internet games.

Port Forwarding

For the services, applications, or games that already exist in the drop-down list, you need to specify only the computer's IP address. Otherwise, you should specify the port number and computer's IP address for each service, game, or application by clicking the Add Custom Service button.

NETGEAR
SMARTWIZARD

router manager
N150 Wireless Router model WGR614

Select Language:
English
Apply

E-mail
Maintenance
Router Status
Attached Devices
Backup Settings
Set Password
Router Upgrade
Advanced
Wireless Settings
Wireless Repeating Function
Port Forwarding / Port Triggering
WAN Setup
LAN Setup
QoS Setup
Dynamic DNS
Static Routes
Remote Management
UPnP
Traffic Meter
Web Support
Knowledge Base
Documentation

Ports - Custom Services

Service Name: ADS
Service Type: TCP/UDP
Starting Port: 9500 (1-65535)
Ending Port: 9500 (1-65535)
Server IP Address: 172.6.5.25

Apply Cancel

Ports - Custom Services Help

To set up an application, game, or service:

1. Type the service name in the Service Name field.
2. Type the beginning port number in the Starting Port field.
3. If the application uses only a single port, type the same port number in the Ending Port field.
4. If the application uses a range of ports, type the ending port number of the range in the Ending Port field.
5. Type the IP address of the computer in the Server IP Address field.
6. Click Apply.

To edit a service entry:

1. Modify the information in the Service Name, Starting Port, Ending Port, and Server IP Address fields.
2. Click Apply.

Note: the advantage of port mapping is relatively safe since it shall be added one by one manually, only some ports are open to public.

Note :

1. external port no: it is to map LAN port to which port of WAN, such as to map LAN port 80 to

WAN port 81 , or LAN cms port 9000 to WAN port 9002. (In general, WAN and LAN shall match each other, but sometimes WAN port 9000 is occupied by other server, then need different mapping)

2. internal port no: fill in port of LAN that you want to map to WAN ;
3. IP address: fill in LAN address you want to map to WAN ;

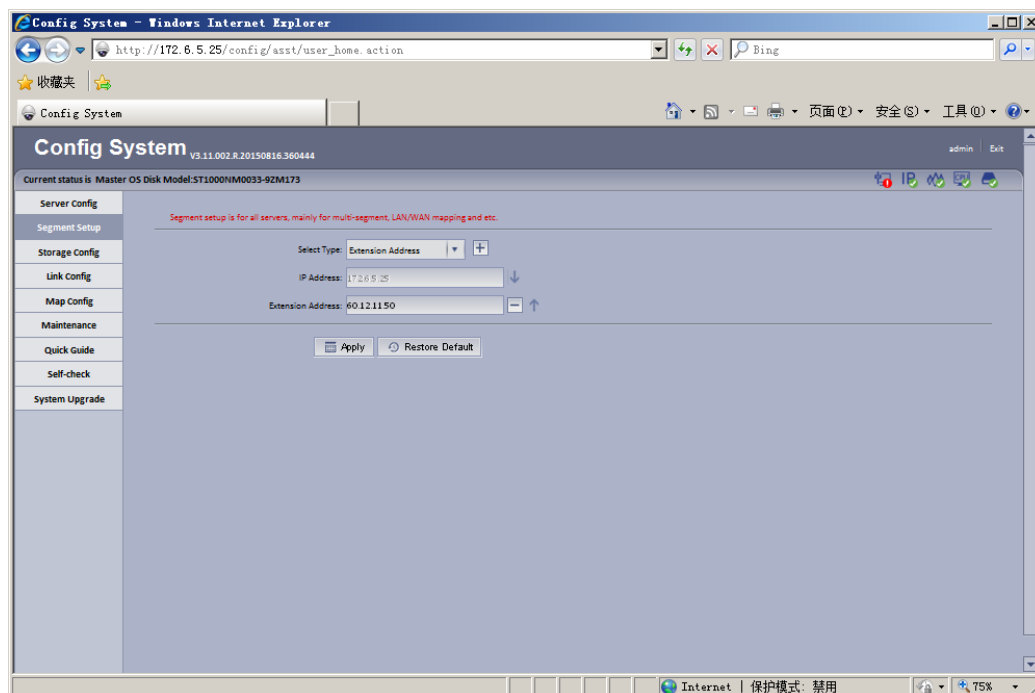
1.3.3.3 DSS Config After WAN Mapping

After router has configured WAN mapping, you need to go to WEB and config :

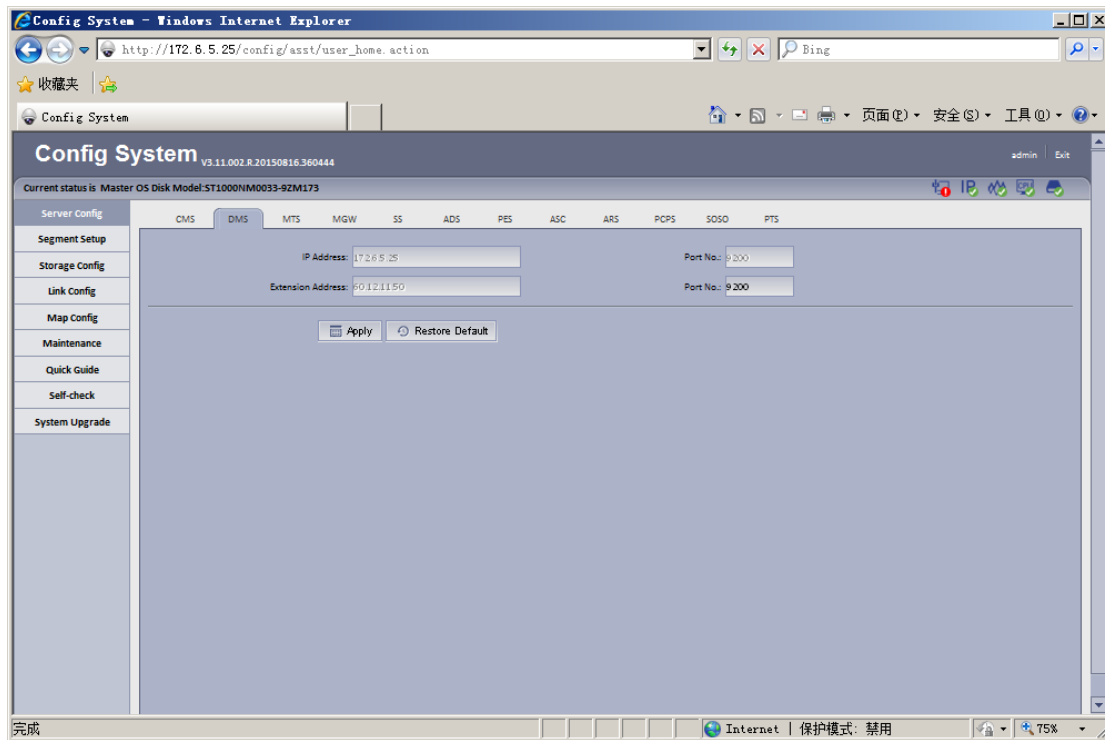
- **First login WEB config interface**

http://172.6.5.25/config/user_toLoginPage.action

1. Click Segment Setup option on the left ,click “+ ” button , in Extension Address fill in mapping WAN IP address.



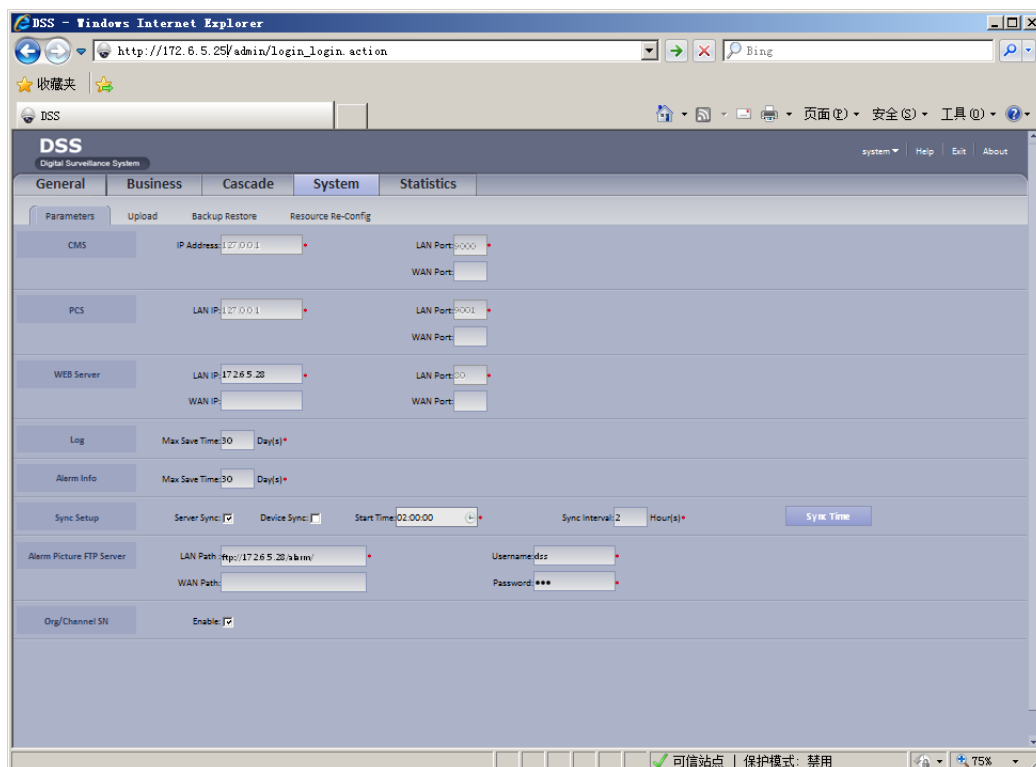
2. Click Server Config on the left , select DMS option , Extension Address by default fill in I P address from previous step, default port is 9 2 0 0 , if port is not modified, maintain default is fine, other server M T S , MGW, SS, ADS, PES, ASC, ARS, PCPS, PTS with the same operation.



- **Login WEB manager**

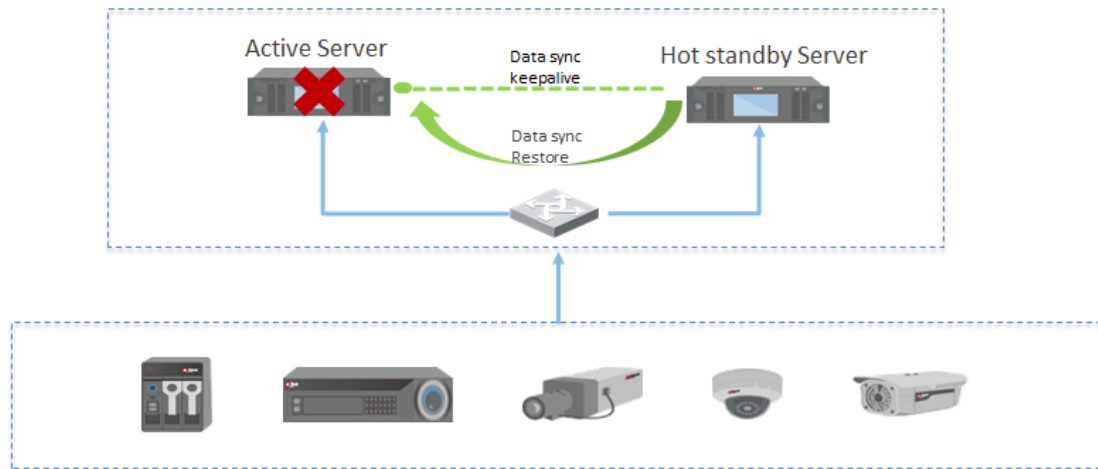
http://172.6.5.25/admin/login_login.action

Select System option->Parameters, fill in CMS option WAN Port 9000 (by default) , PCS option WAN Port 9001(default) , WEB Server option WAN Port 80(by default) , Alarm Picture FTP Server option WAN Path ftp://60.12.11.50/alarm/



1.3.4 Dual Hot Spare

1.3.4.1 Framework



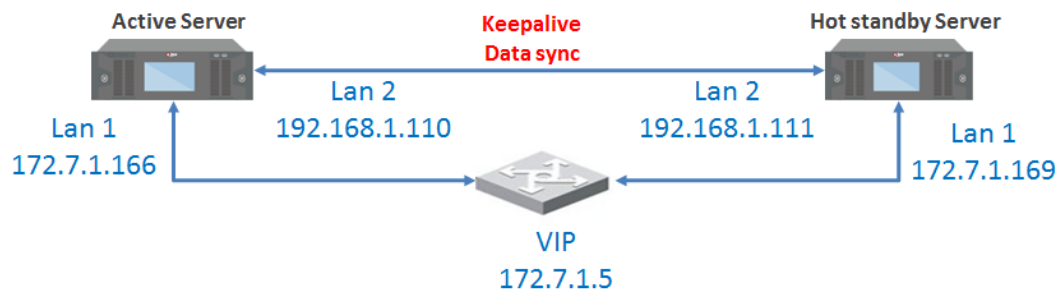
Hot standby mode can improve the stability of system, when the active server fail or disconnect, the hot standby server change to active mode automatically and the system keep on work normally .

Note:

Instruction before you deploy the hot standby system.

- The two DSS7016 of hot standby system as the center management server generally, but not as the storage.
- The hot standby system need to be configured a VIP(Virtual IP) , which is not be used in business network. You need only login by VIP after configuration.
- The NTP timing must be done between the two DSS7016 before deploying the hot standby system, to ensure clock synchronization.
- If you want to link the SMS and Email when the alarm happen, you must to finish relevant option in both DSS7016 before deploying the hot standby system.

1.3.4.2 Network Connection



- Connect the lan 2 between two DSS7016 by cable, and must be configured with the same network segment, to keep alive and data sync.
- Connect the lan 1 of both DSS7016 to switch, to manage the other devices.
- VIP(Virtual IP) must be not used in business network. this can be ensured by PING utility.

1.3.4.3 Config

Step 1:

For example , 172.7.1.166 and 172.7.1.169 are the IP address of active server and hot standby server , login in the web manage of active server and hot standby server respectively , then configure VIP as the web server IP and submit.

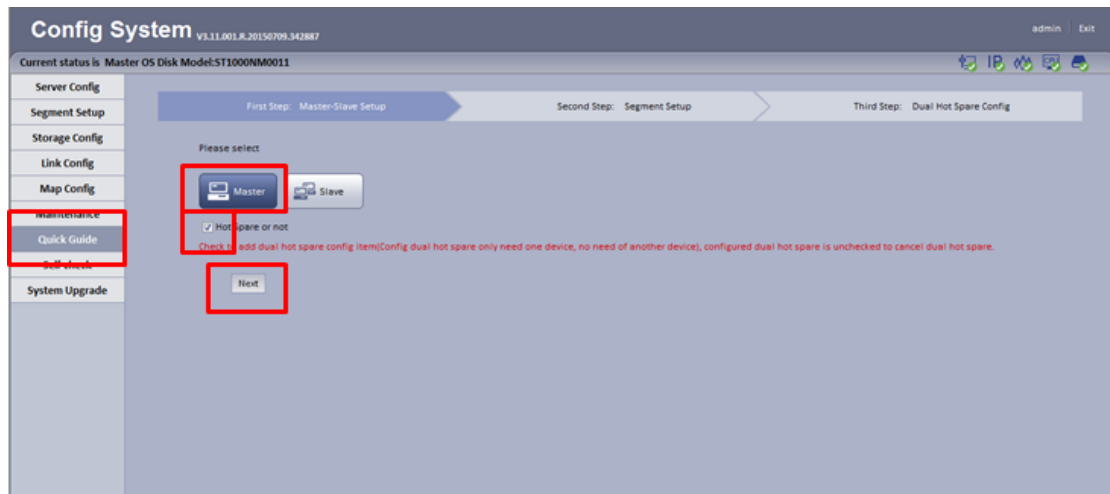
General	Business	Cascade	System	Statistics
Parameters Upload Backup Restore Resource Re-Config				
CMS	IP Address: 172.7.1.1	LAN Port: 8000	WAN Port:	
PCS	LAN IP: 172.7.1.1	LAN Port: 8001	WAN Port:	
WEB Server	LAN IP: 172.7.1.15	LAN Port: 80	WAN Port:	
Log	Max Save Time: 30 Day(s)			
Alarm Info	Max Save Time: 30 Day(s)			
				Submit Cancel

Step 2:

Choose the 172.7.1.166 as the standard server

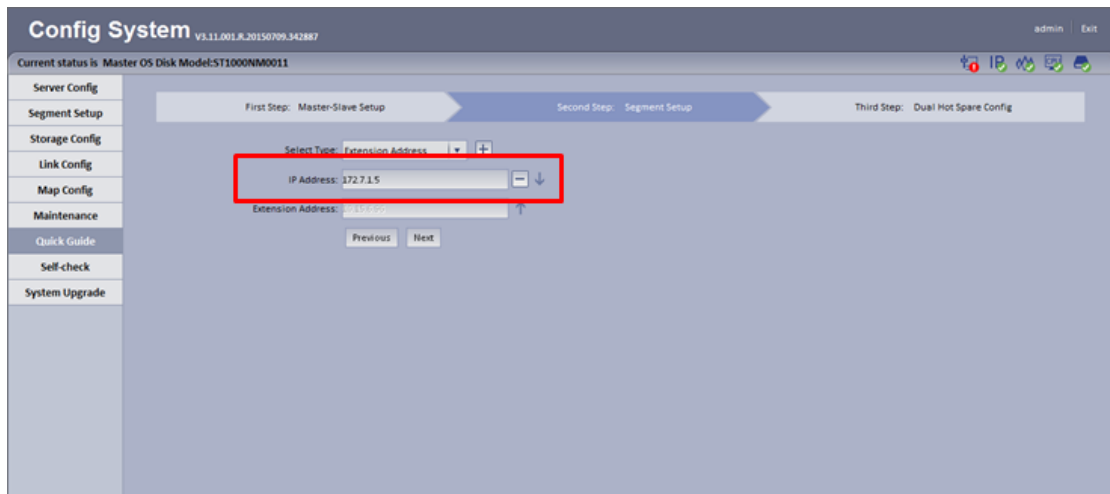
Enter and login the Configure System via [http:// 172.7.1.166/config](http://172.7.1.166/config)

Enter Quick Guide, select Master and check "Hot spare or not" option.



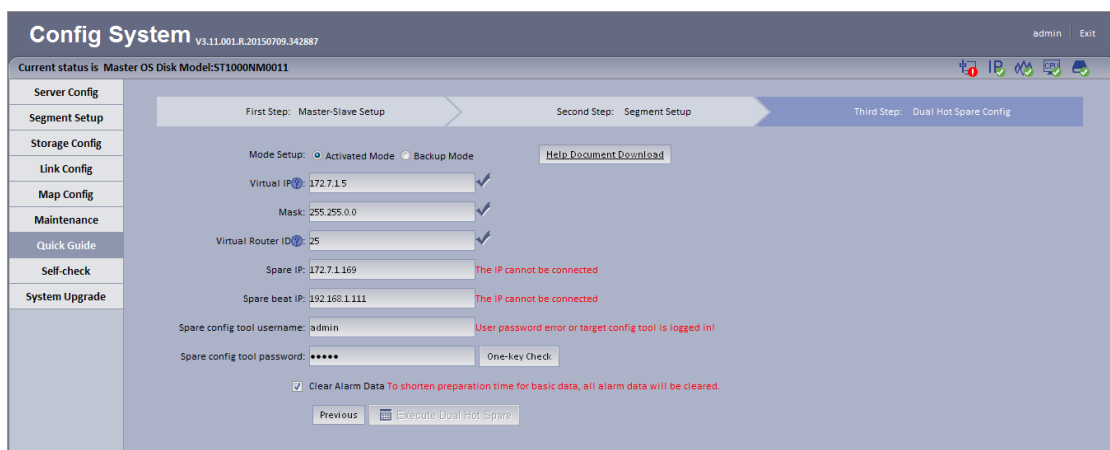
Step 3 :

Set the VIP as the extension address, and adjust it to first line.



Step 4 :

Choose the mode for the standard server, then fill in parameters. Check up the parameters by clicking "One-key Check" button, then "Execute Dual Hot Spare", system will synchronize the data between active server and hot standby server. Then finish configuration of this hot standby system after rebooting.



Note:

- Make sure that Mask is consistent with business network.
- Virtual router ID is the identification number which distinguish the hot standby system.
- Another DSS7016 can not login during configuration, or the calibration can not be passed through.

1.3.4.4 Tear Down

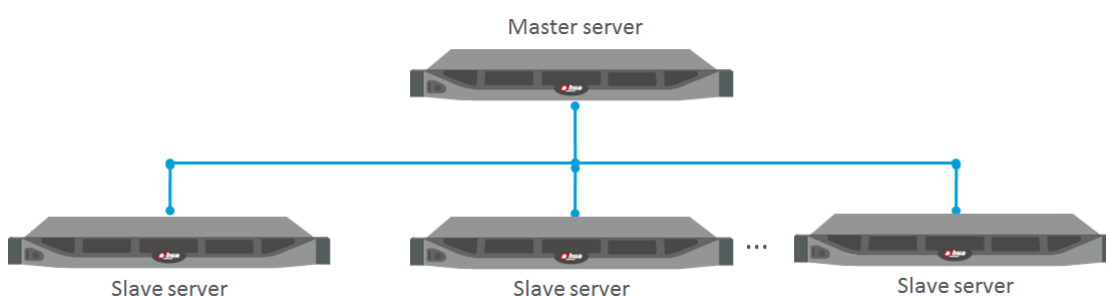
If you want to teardown the hot standby system, you must login configure system and uncheck the “Hot Spare or not” option in both active server and hot standby server.



1.3.5 Distribution Server Config

Via pile, may fulfill requirement of larger surveillance system. Mainly control DSS to complete main role, and manage extension mode DSS , support distribution ; extend mode DSS then complete forwarding, storage (DSS7016) and device management function, max support 20 unit of pile.

1.3.5.1 Framework



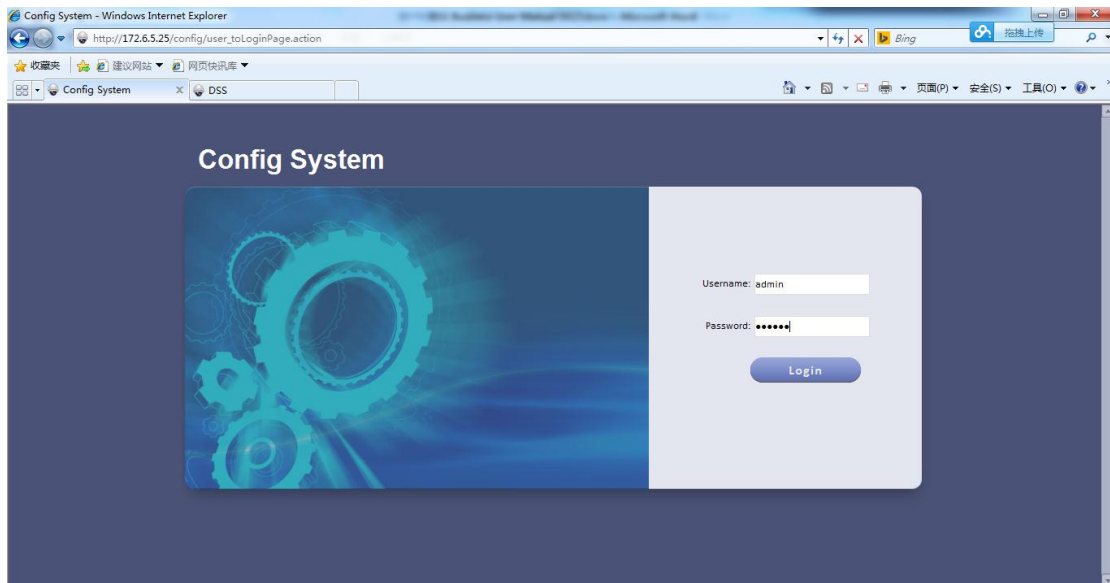
Distribution system, there are two types of the type of server, master server and slave server, but only one main service, the other is slave server; the role of the primary server is the master, make data management, equipment management and disposal of other work slave server, Therefore, the system only the master server starts the database (mysql service), tomcat and CMS and other services, and role of slave server is a device access + forwarding + storage, just start the appropriate service functions, such as DMS, MTS, SS, ARS, PCPS, etc. the only interface of the entire system to the user is IP address of the master server;

Using the System Config tool to config the slave server with master server IP, the services in slave server will register to CMS services of primary server automatically, when the master server CMS service receives information , it will assigned server ID to register server, which distinguish the different type of service and the same type of service which from different registration server , and the registration information and service type are written in the database, meanwhile notify Tomcat service to read the data from the database. At this time, master server will show up the distribution server info;

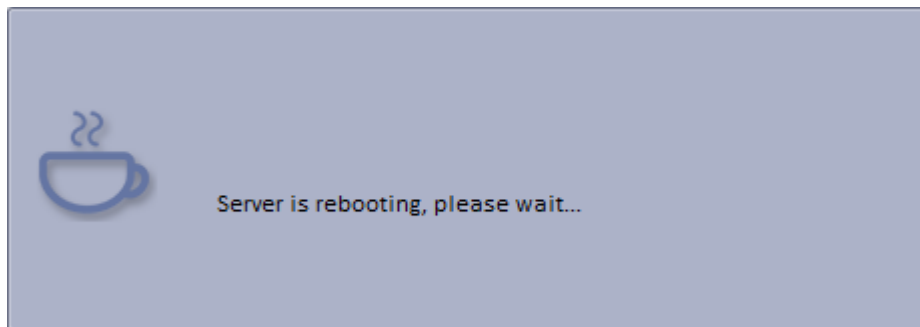
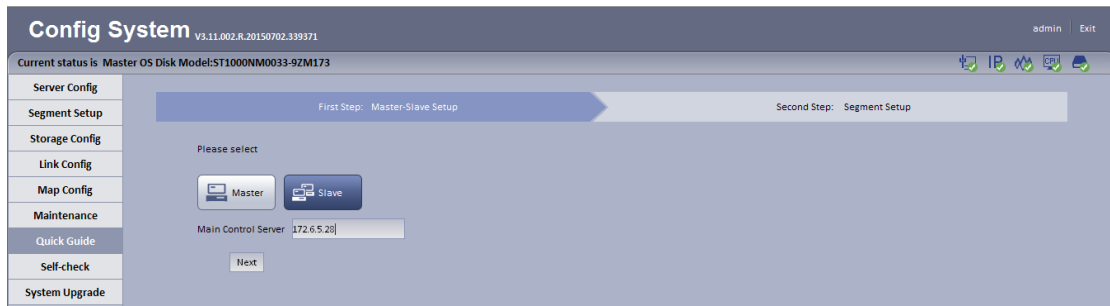
1.3.5.2 Config

Two units of DSS address are 172.6.5.25 and 172.6.5.28 , hope to set 172.6.5.28 as master server, and set 172.6.5.25 as slave server.

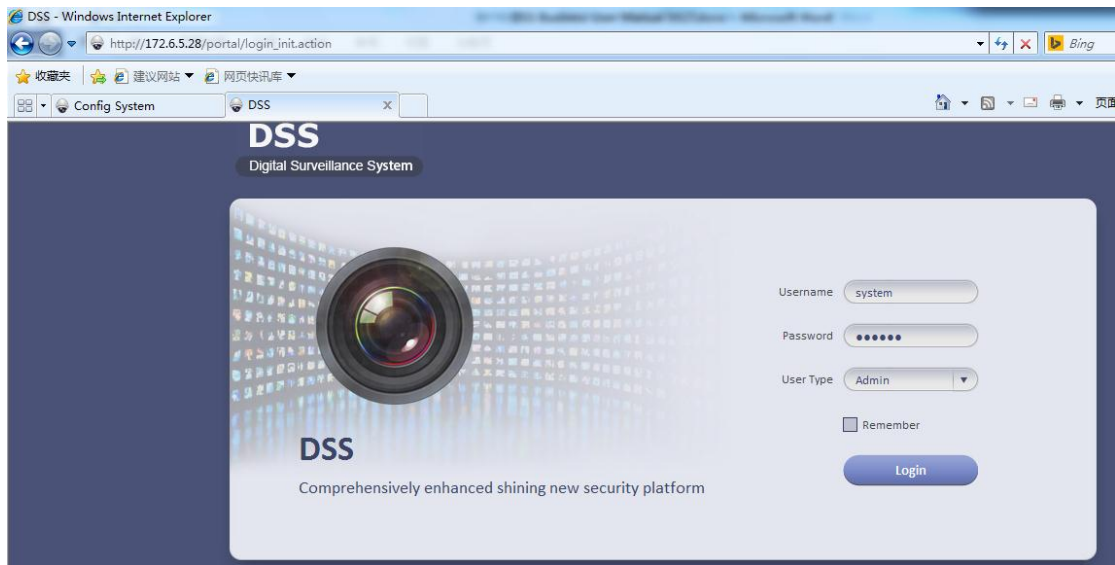
Step 1: Via visiting the IP address to be set to sub server, enter Config interface, such as <http://ip/config>




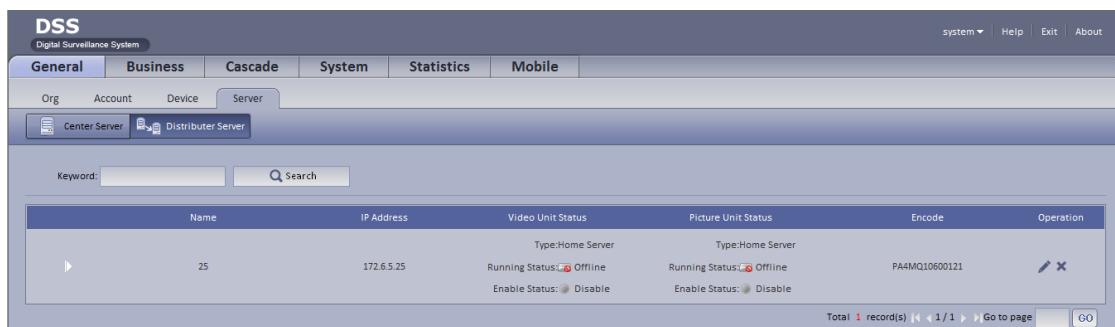
Step 2: Enter quick guide, select "slave" . Fill in main control IP address. Click Next, to enter next, configure related info and save. Reboot server.



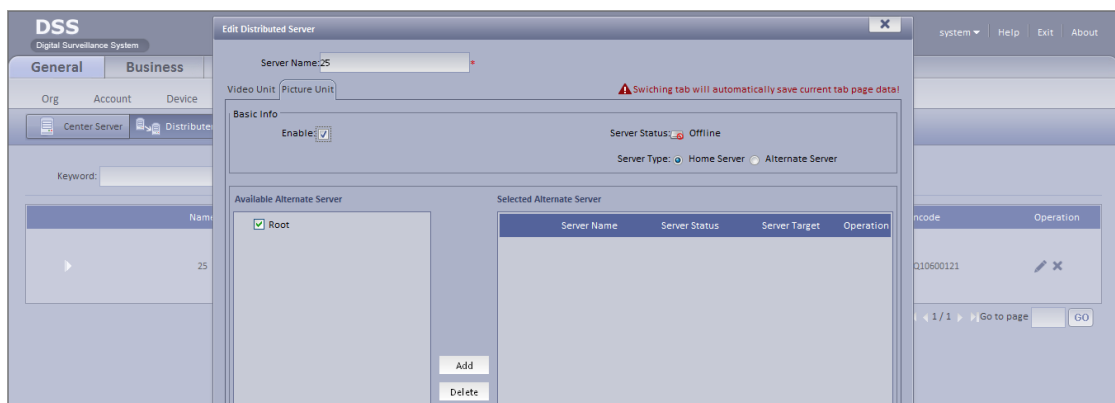
Step 3: Login main server 172.6.5.28

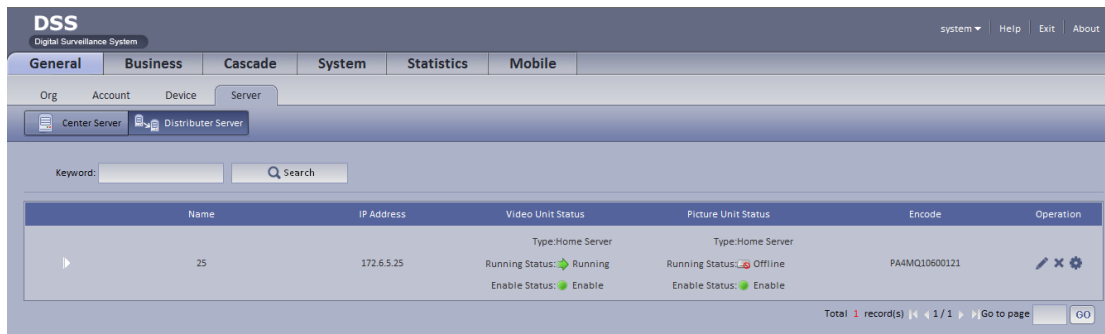


Step 4 : Enter General->Server->Distributer Server, click  icon , enter “Edit Distributed Server” interface.



Step 5 : Select Video Unit and Picture Unit, check Enable , select Home Server , and save, enable distribution server ;





1.3.6 N+M Backup

1.3.6.1 Principle

N + M backup is a backup mechanism for distribution server, where N is the number of units home servers, M refers to several alternate server, the home server means the server has ownership relations with equipment (selecting server when add device), alternate server refers to the backup machine of home server;

After the designated home server add alternate server, if the home server is down and can not be started within 60 seconds, CMS will the equipment and business on home server assigned to the backup server machine, while the video is stored on disk of backup services;

During the alternate server work, the existence records of the home server can be queried but can not be played, but if the original home service has been restored from the exception, although the device does not move back , the original home records can also be played back;

When the home server is restored to normal, the device can be moved back to the original home server, then the home video services and alternate server can query and playback;

- 1) N+M backup in general is for distribution device ;
- 2) About config N+M backup device number , in general $1 \leq N \leq 20, 1 \leq M \leq 5$. N+1 is used in more applications ;
- 3) N+M backup can be manually switched.

1.3.6.2 Config Method

Match 1.3.6 distribution server config, only when at Step 5 select Alternate Server, and check available alternative server.

Business Function Operation

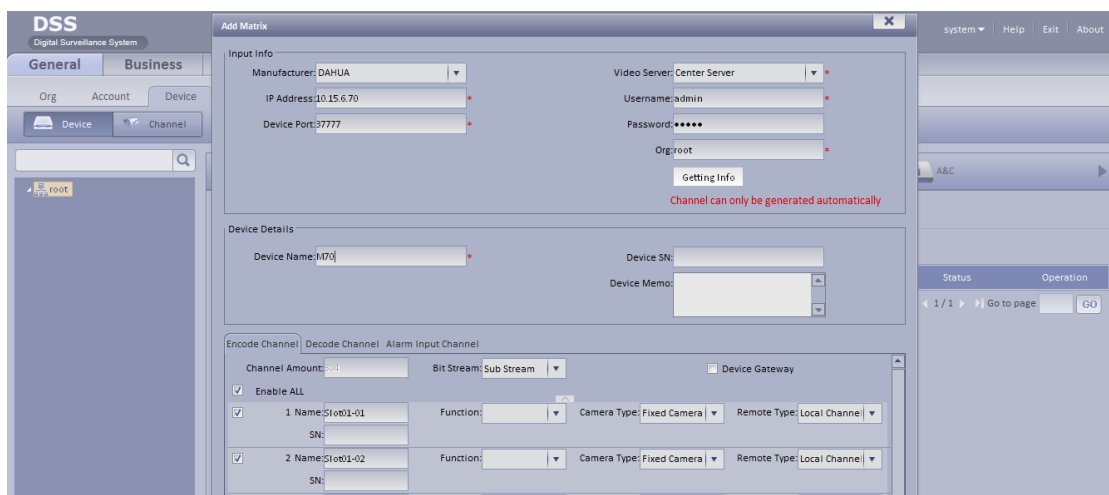
2.1 TV Wall

2.1.1 Add Video Wall Device

Step 1: Login manager, select General->Device->Matrix



Step 2: Fill in M70 IP address account and password, click "Getting Info" to auto get device info.

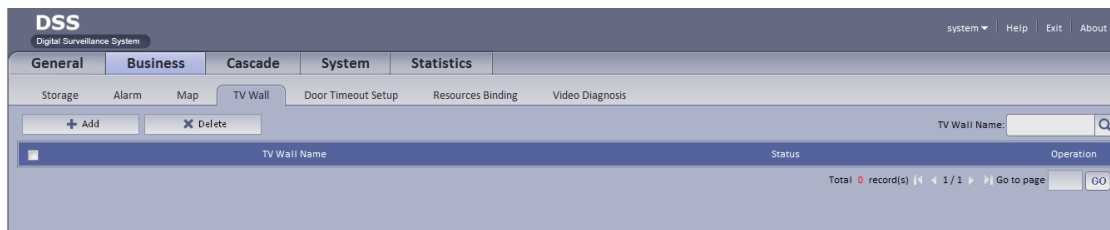


Note :M70 device channel info can only be get by clicking "Getting info" button, cannot manually input, so when adding M70 device, please ensure the device and 7016 are well connected and device are

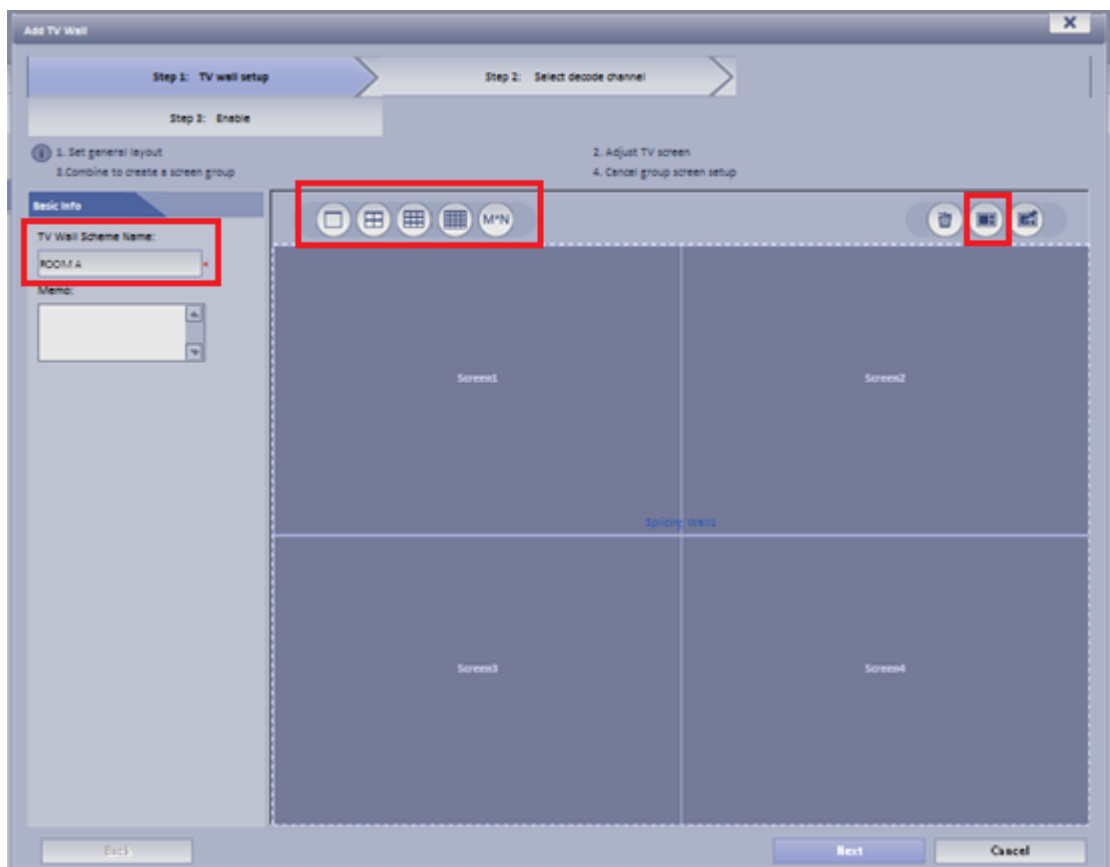
available.

2.1.2 TV Wall Config

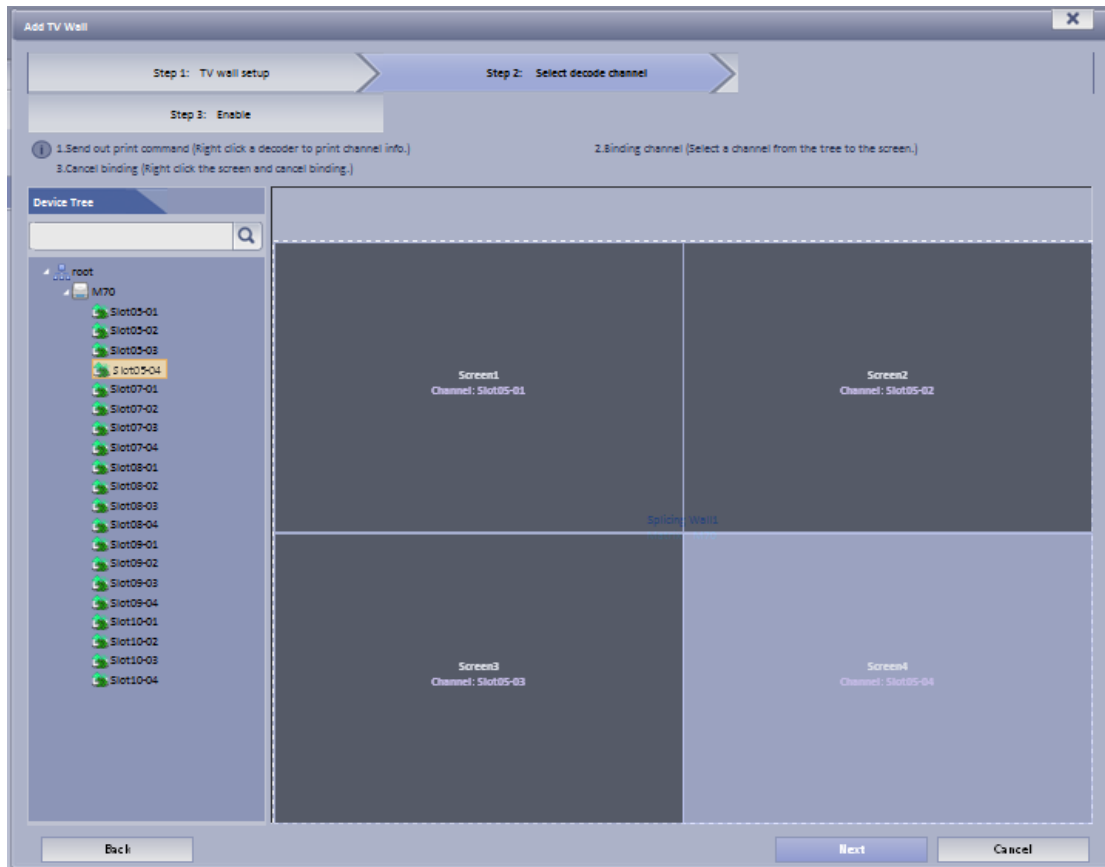
Step 1: Business->TV Wall->Add



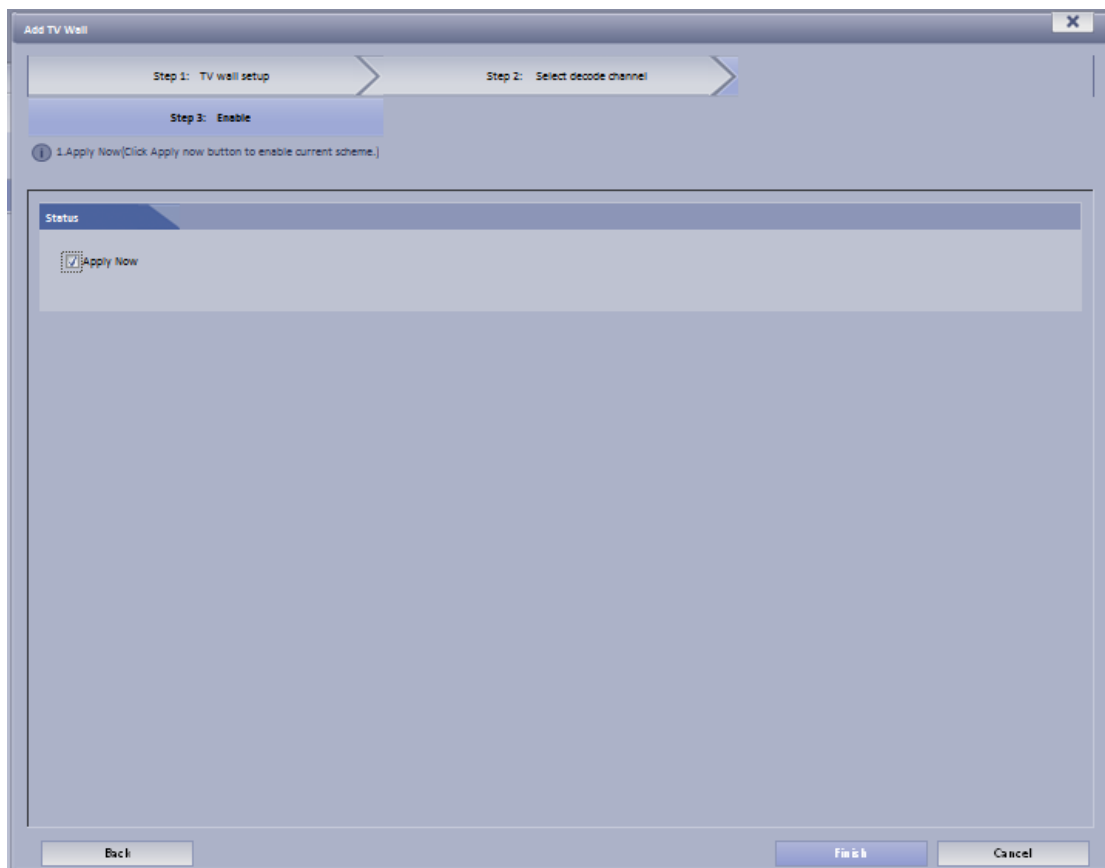
Step 2: Input TV Wall Scheme Name, select screen layout, if to configure **cubeless** video wall, select screen to combine and click combine button at the upper-right.



Step 3 : Bind decode channel with screen



Step 4 : Enable "Apply Now" , and Finish.

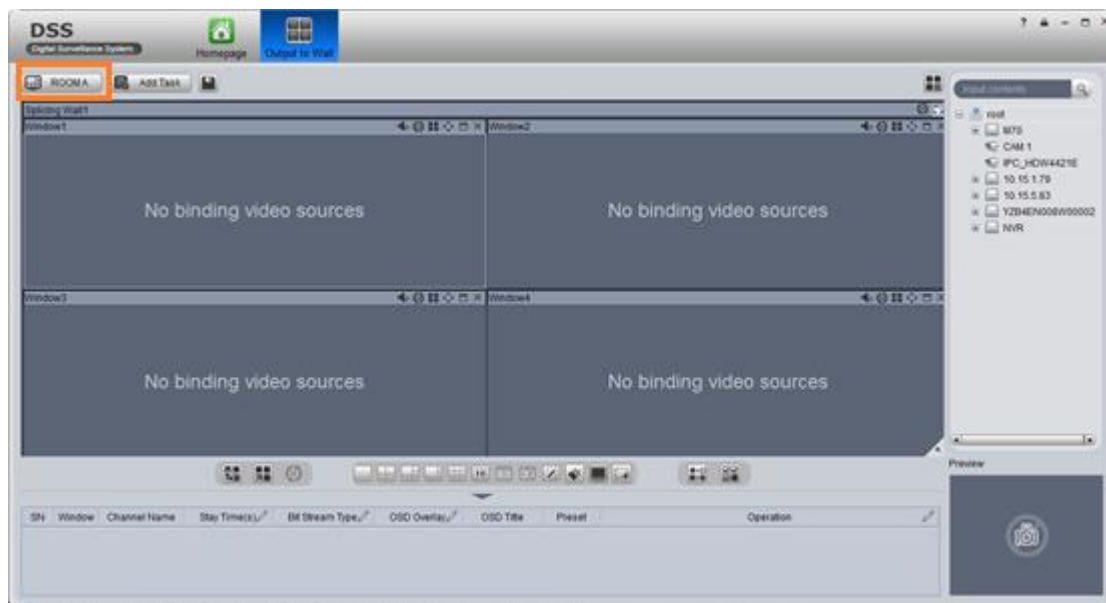


2.1.3 Video on Wall Operation

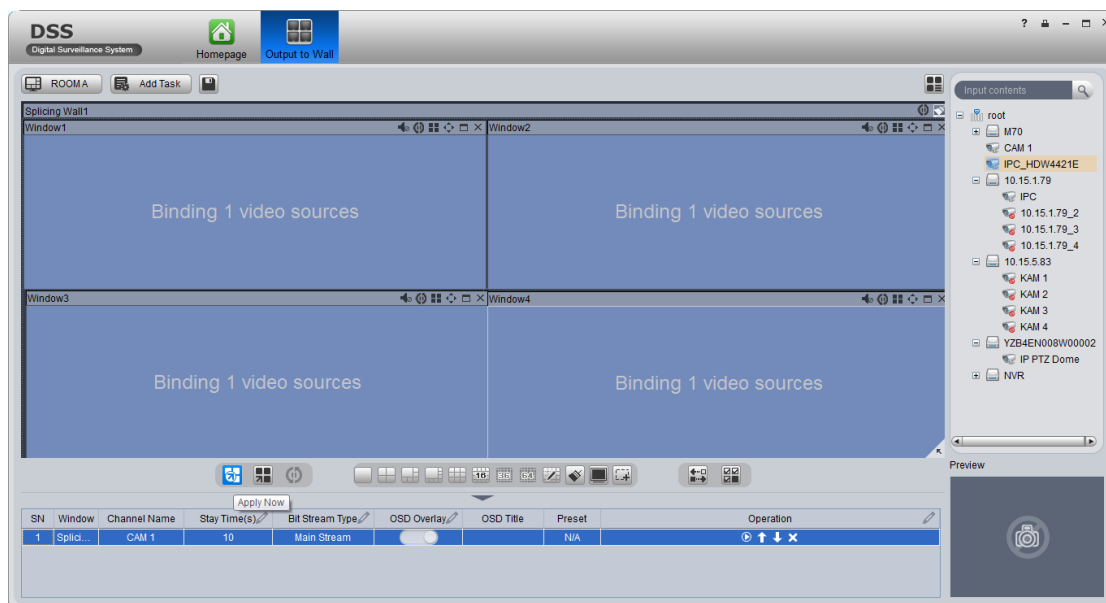
Login client, open Output to Wall.

2.1.3.1 Output to Wall




Step 1: Select TV Wall dropdown list, select corresponding TV wall .







Step 2: Drag device in right list to window of TV wall.

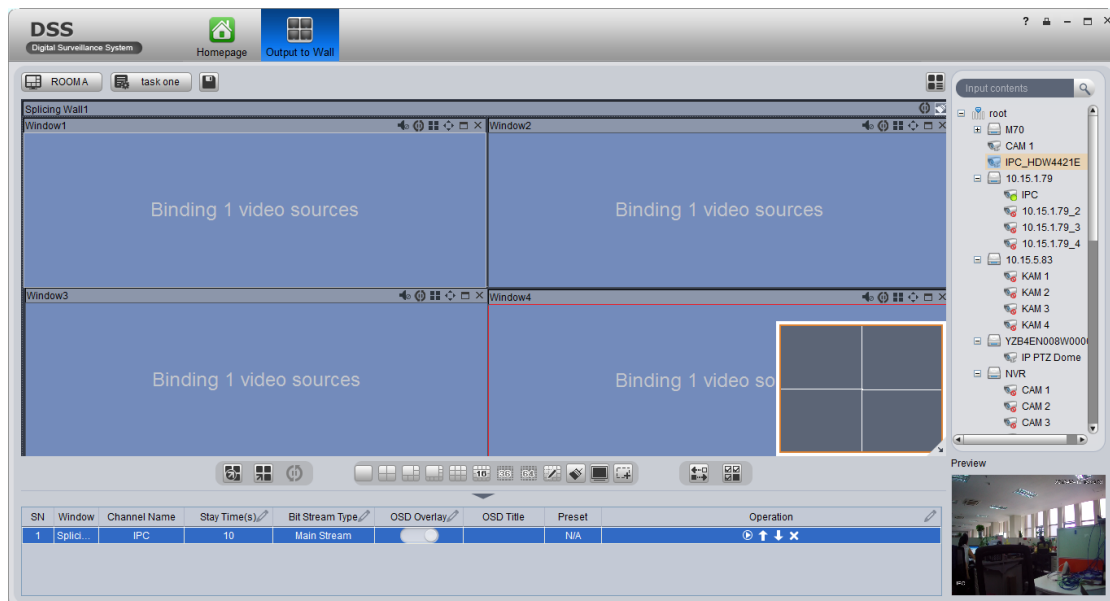


Intro of functional buttons

1.  Apply Now: When select, drag video channel to window, video will be output to wall, you do not need to click output video wall button.
2.  TV Wall: Output video wall button, display current bound video source on wall.
3.  Clear Screen: Clear screen operation.

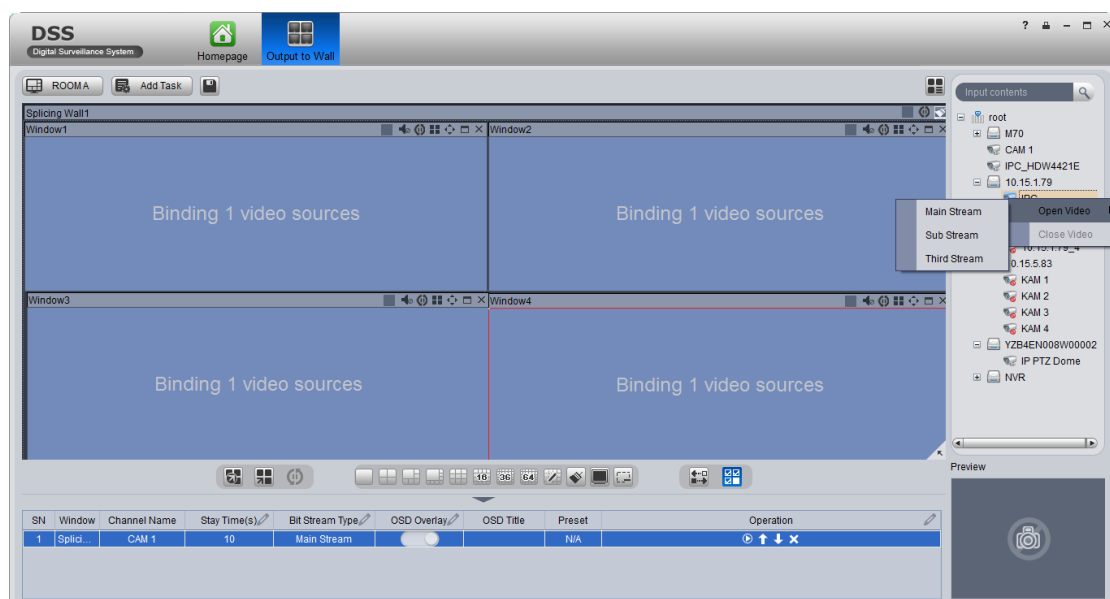
4.  custom window: user can custom split mode by self.
5.  screen on/off: Remote control to enable and disable display screen of TV wall.
6.  one-key setup : Batch set stream type and stay time.
7.  Multiple Selection Operation: Simultaneously select multiple windows.

On client, click the arrow at the lower-right corner to pop up eagle eye thumbnail, zoom in to quickly find location of eagle eye.

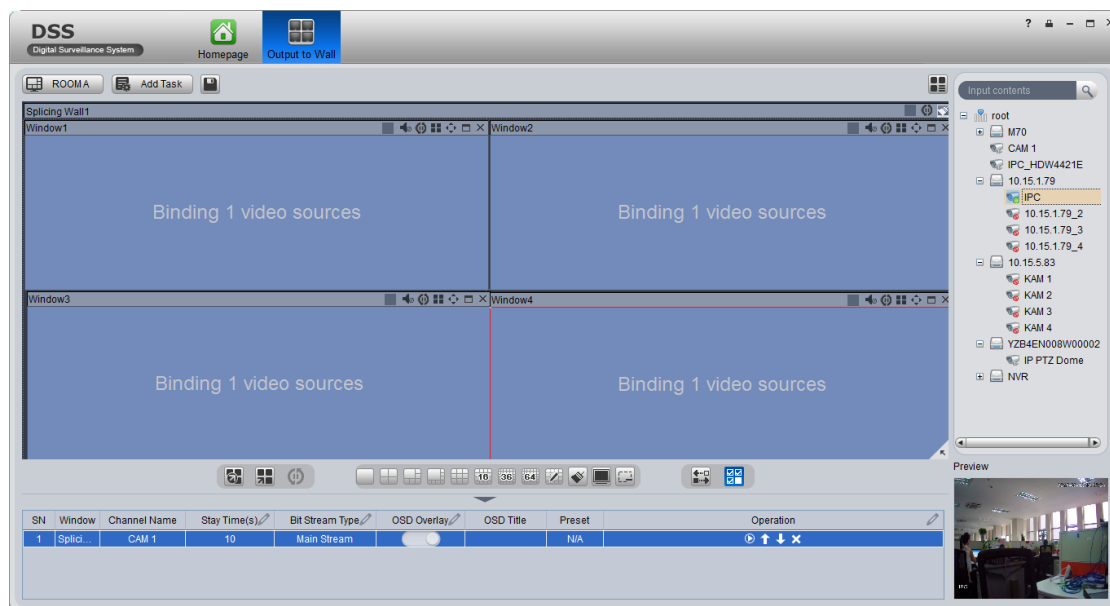


2.1.3.2 Vide in Small Window

Step 1 : Device tree select a channel, right click , open video, select bit stream type.

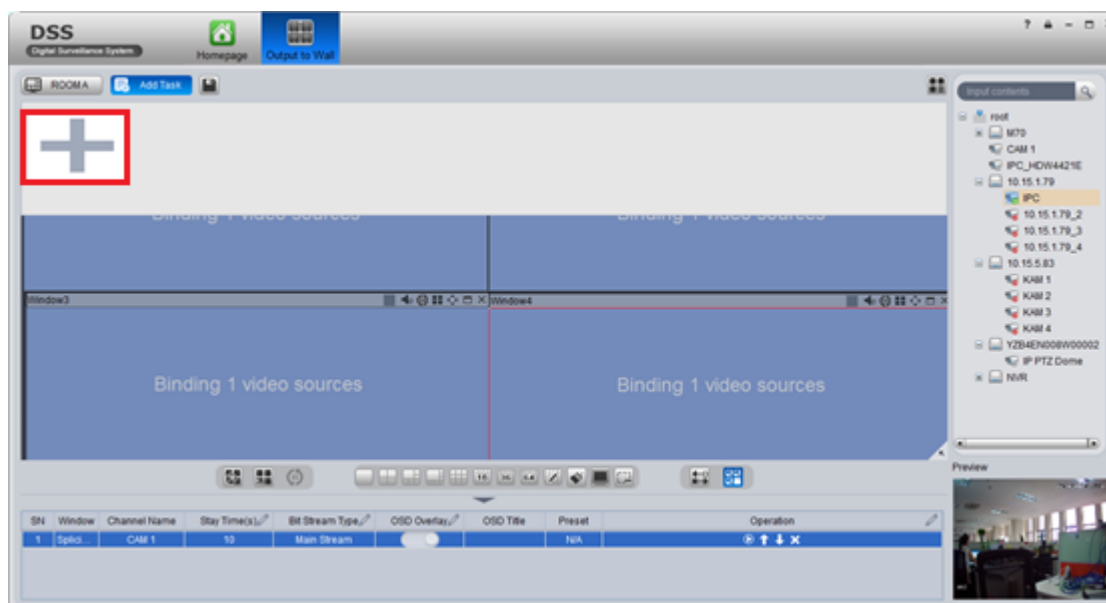


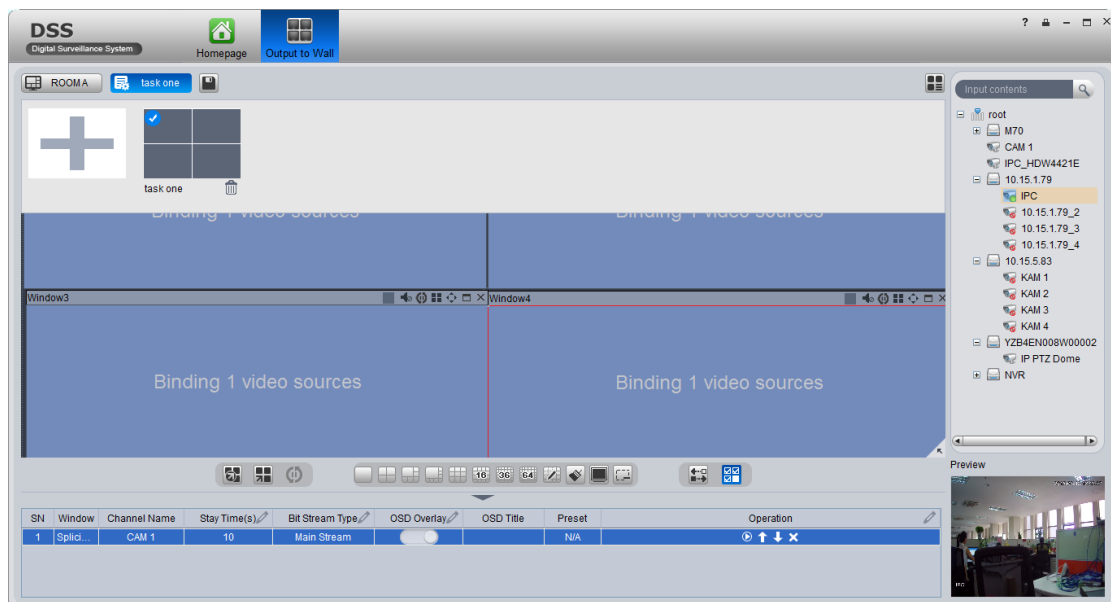
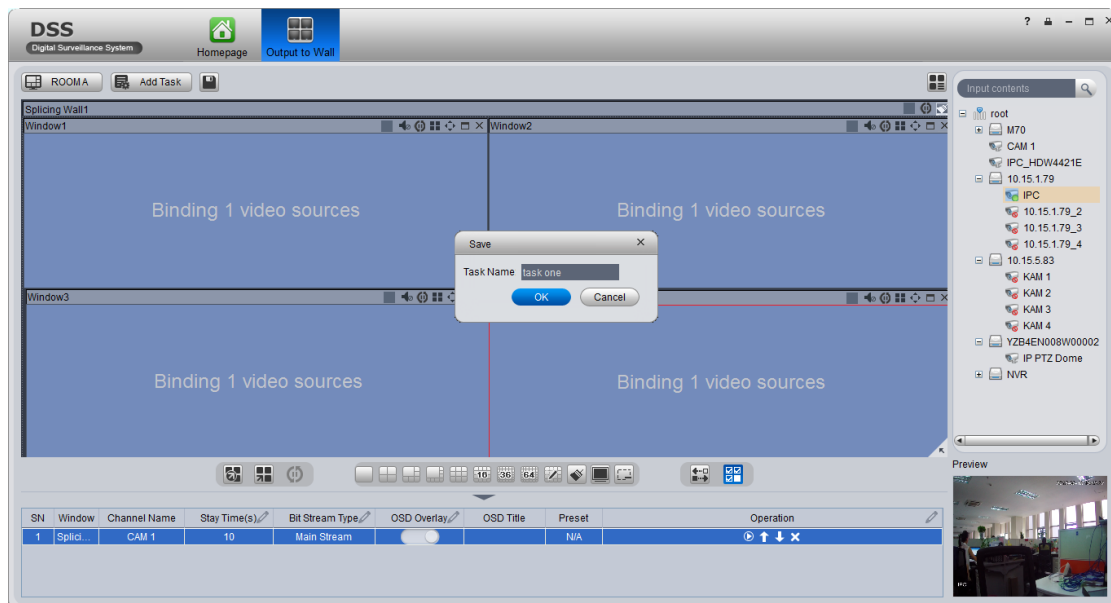
Step 2 : Display in small window.



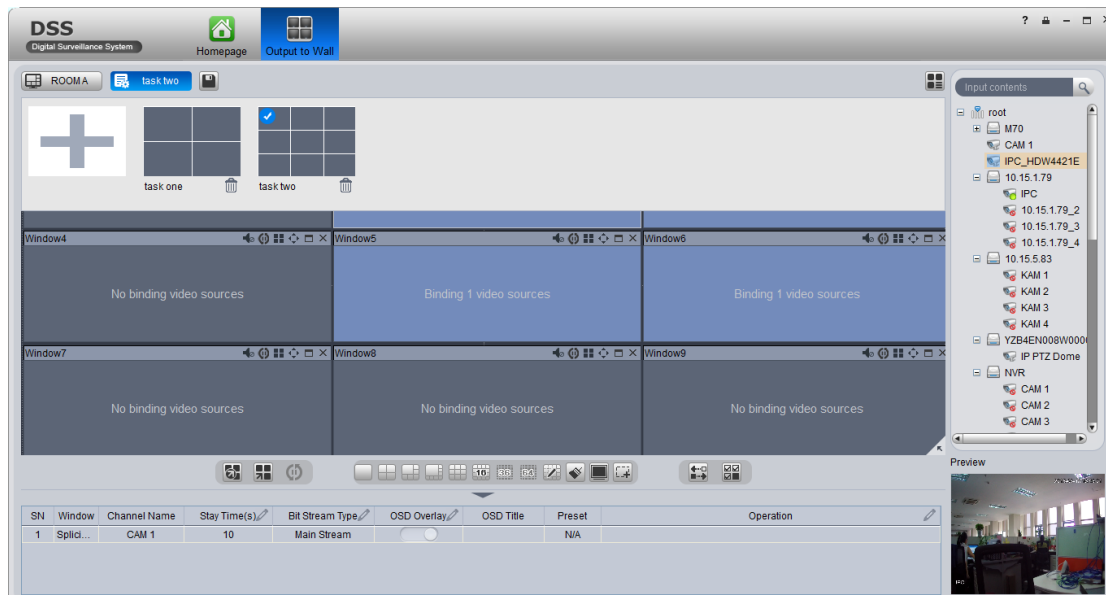
2.1.3.3 Video Wall Task

Step 1 : After binding video channel and screen in client, click Add Task, click + , input tack name, click OK to save.



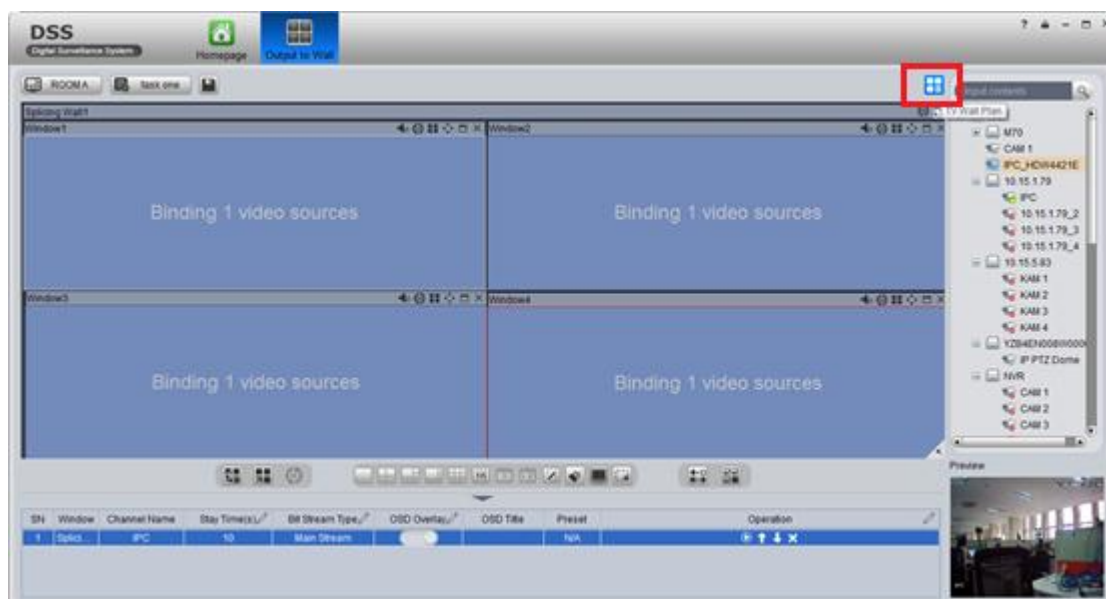


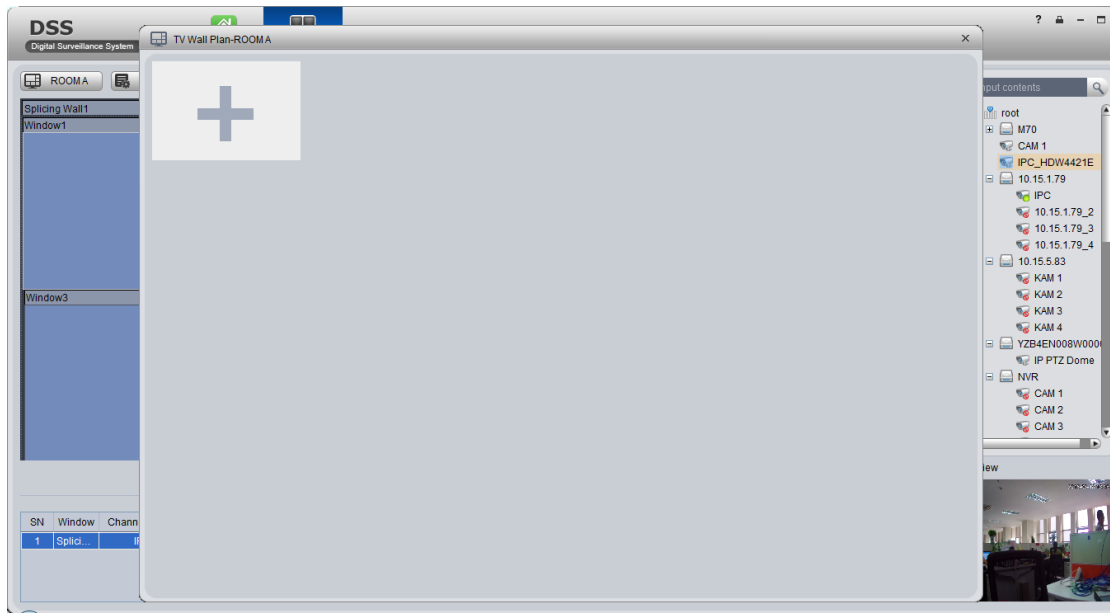
Follow the same steps, you can add more video wall tasks. And you can switch among multiple tasks to achieve manual output of different tasks.



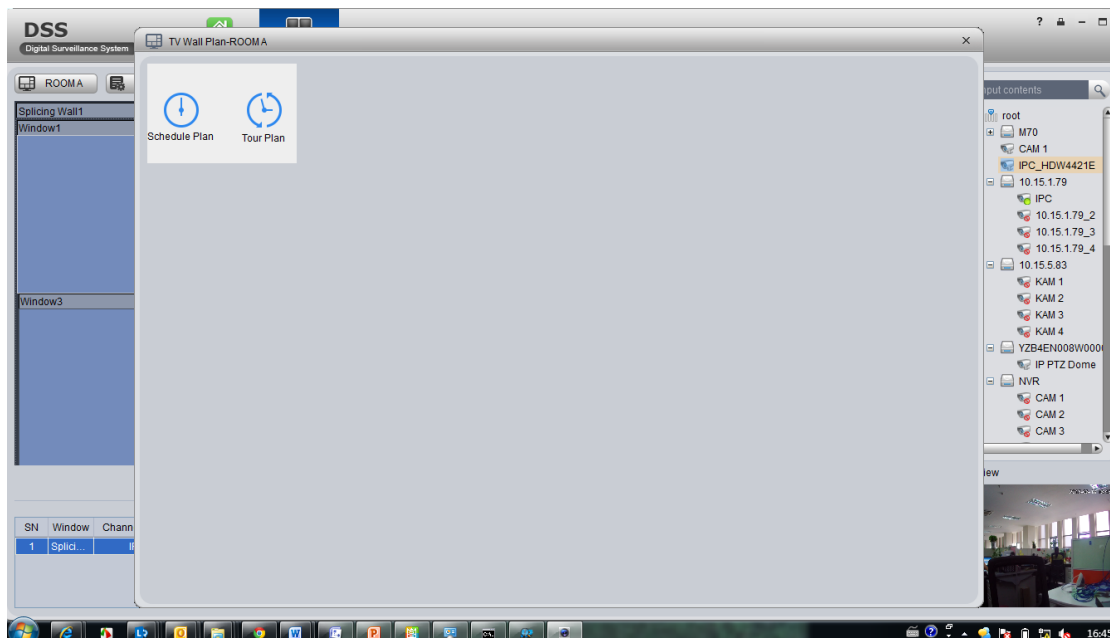
2.1.3.4 Video Wall Plan

Step 1 : Enter TV Wall Plan , select+.



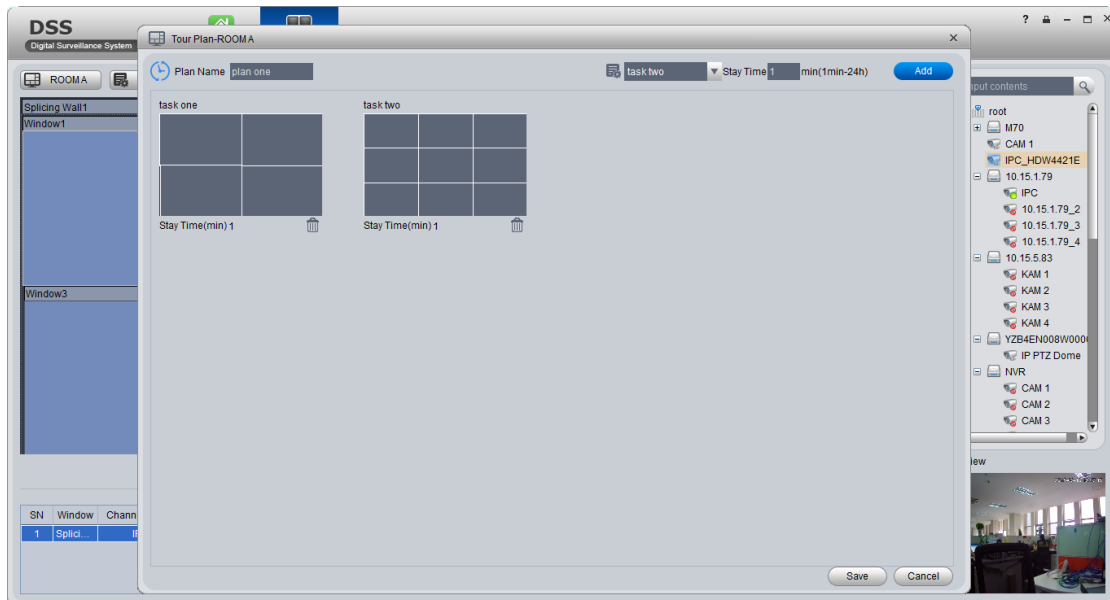


Step 2 : Select plan type : Schedule Plan or Tour Plan

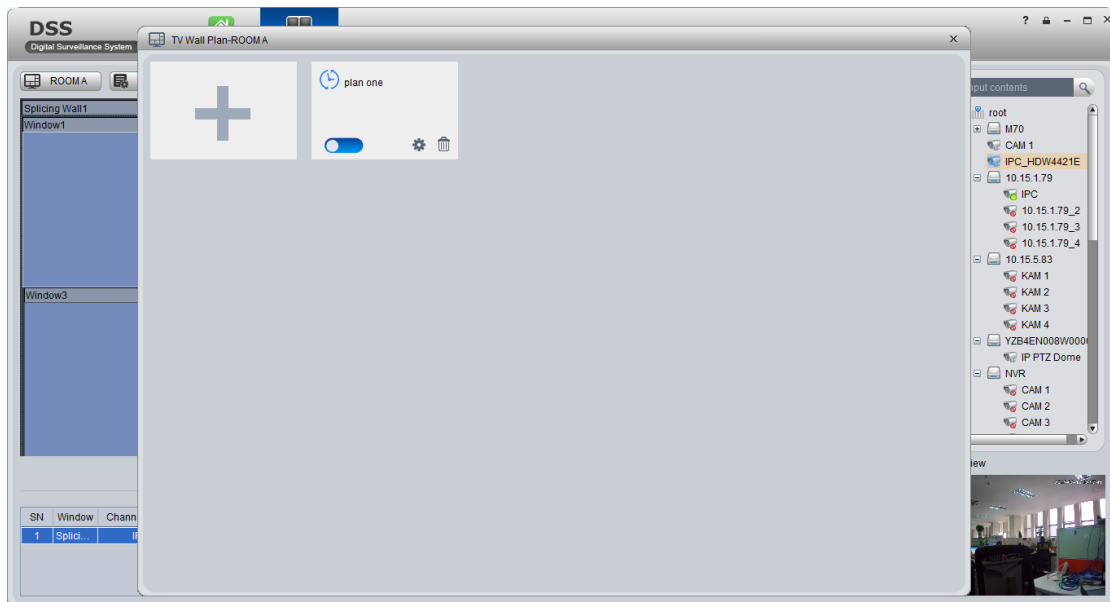


Step 3 : Fill in Plan Name , Select task , Set the stay time , and Add.

According to need you can add multiple tasks to tour and save.



Step 4 : In TV Wall Plan interface, display configured task, open enable, as to enable video wall task.

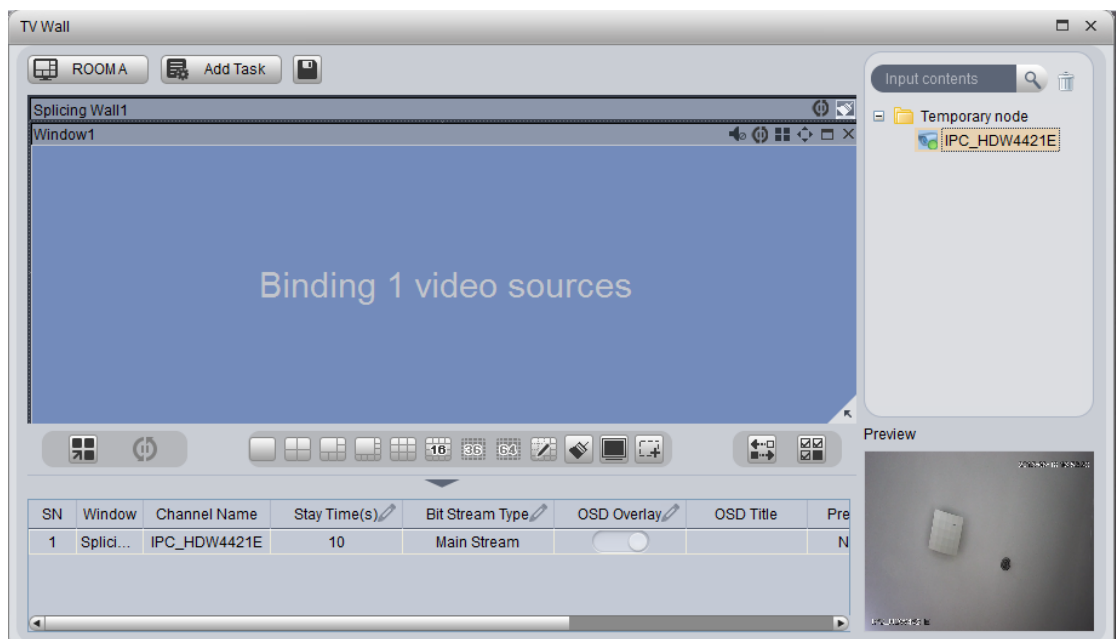
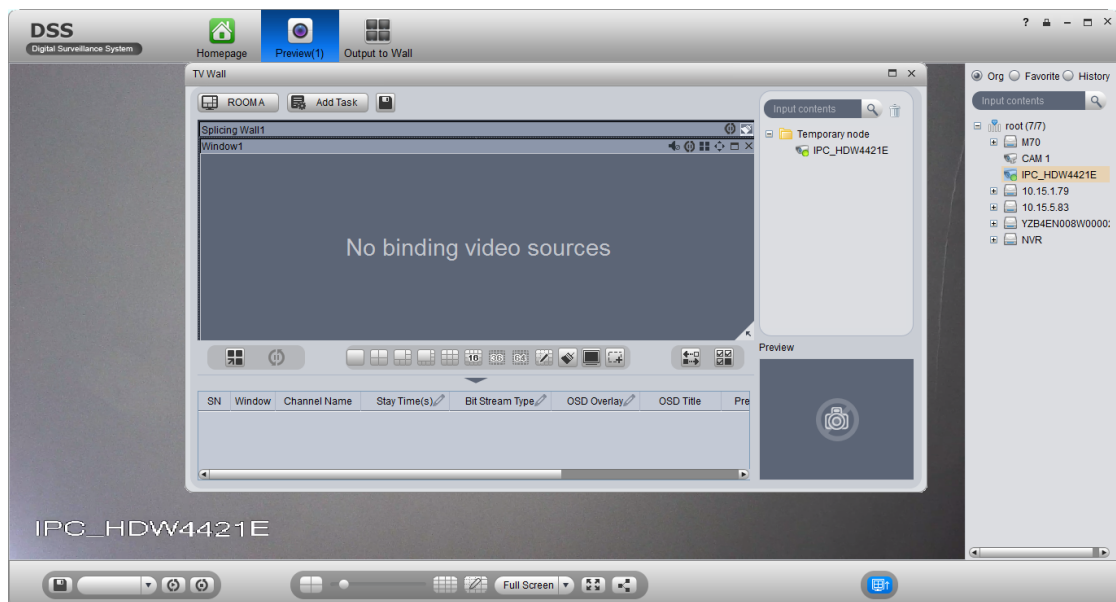


2.1.4 Real-time Output to Wall

Step 1 : In live preview window, select  ;



Step 2 : In pop-up window, drag resource to corresponding window to output.



2.1.5 Alarm Output to Wall

When alarm occurs, link alarm to wall, see Ch 2.3.6.

2.1.6 Playback on Wall

Client pushes record data to decoder, and only can push to physical screen, cannot push to cubeless video wall.



2.1.7 E-map on Wall

Step 1: Click pane button, select area to output to wall, display device list within the area.

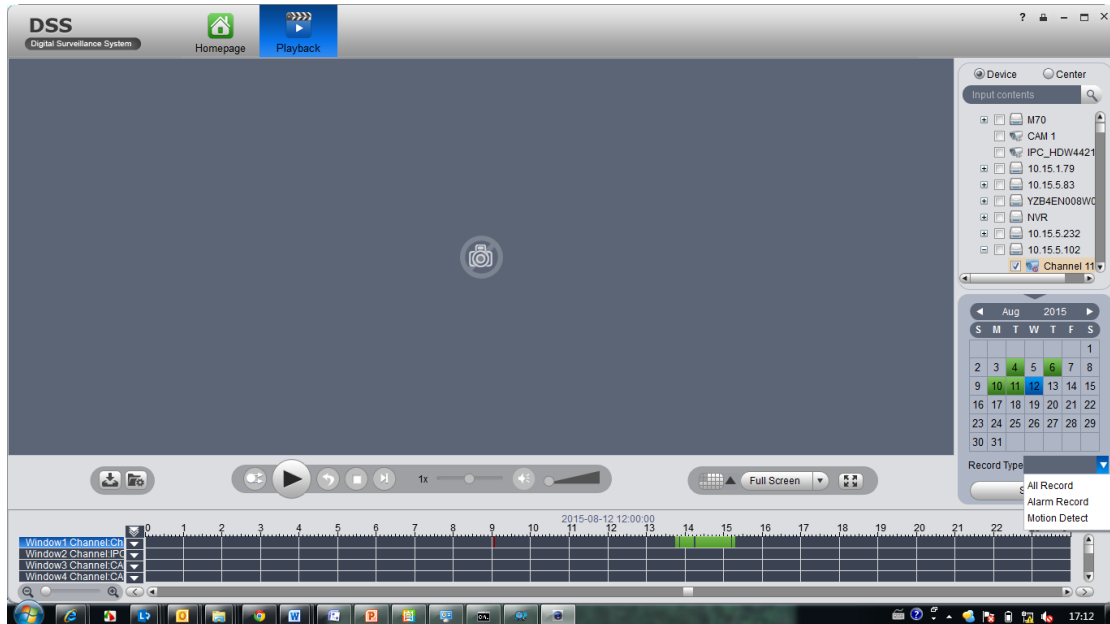
Step 2: Select TV Wall , drag channel corresponding screen to output to video wall.



2.2 Record Operation

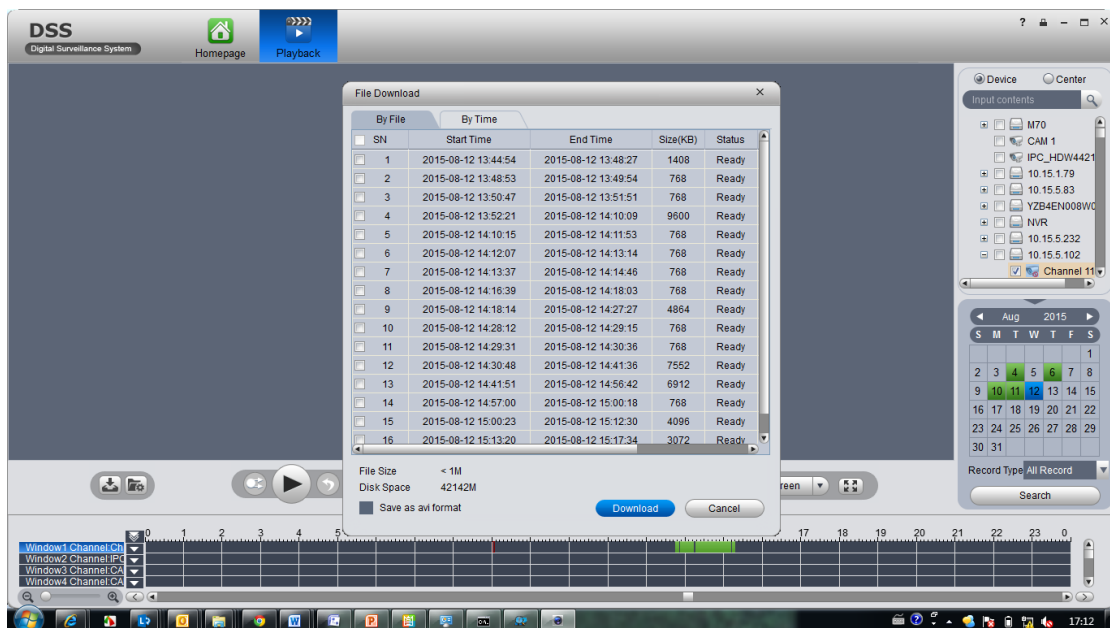
2.2.1 Search Record by Record Type

Support alarm record, motion detection and all record classification search.



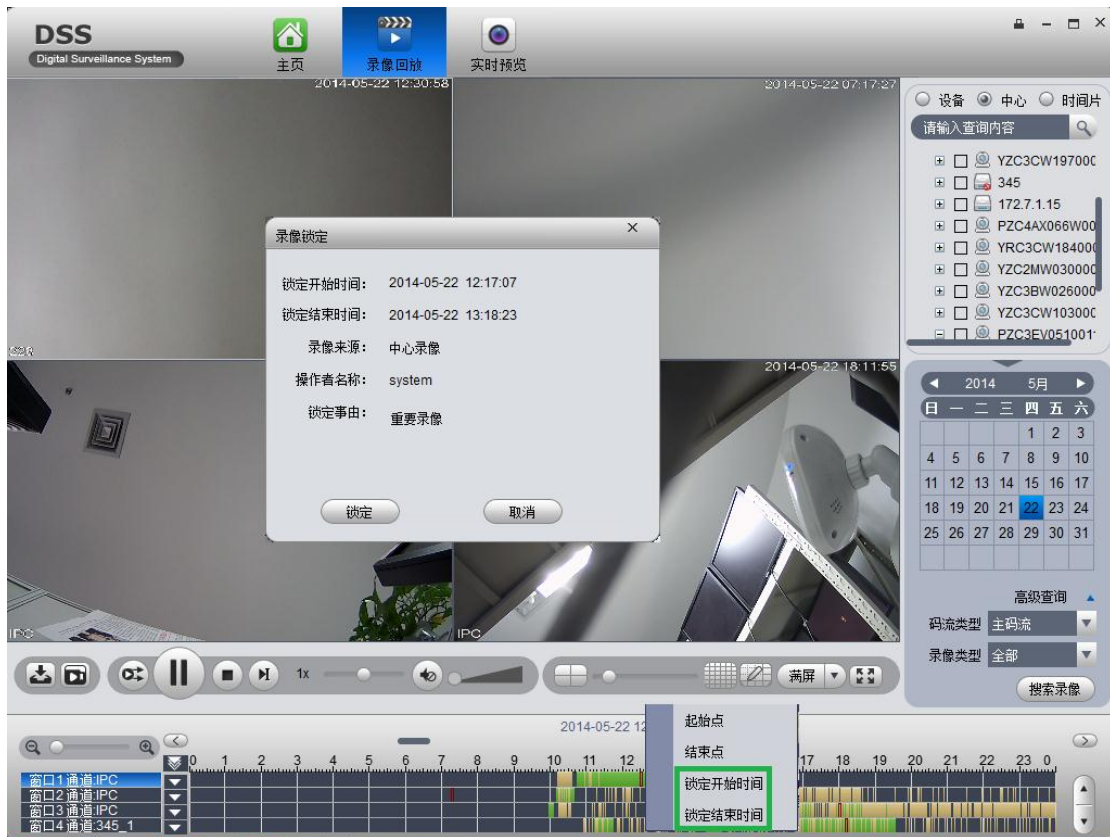
2.2.2 Download Record

After record search is complete, click record download button, pop up File Download box, you can select file and download by time.

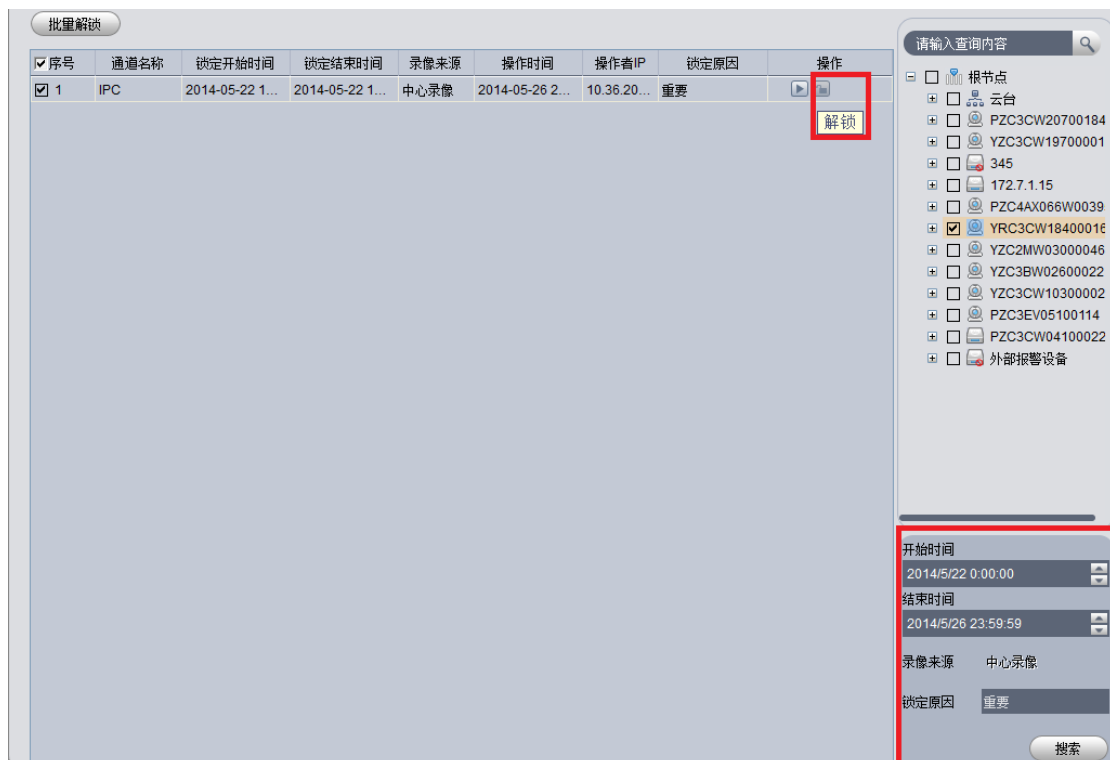


2.2.3 Lock Record

Step 1: Record bar right click will pop up menu and you can select lock start and end time, select end time will pop up box as shown below, you can input reason of lock and click Lock.

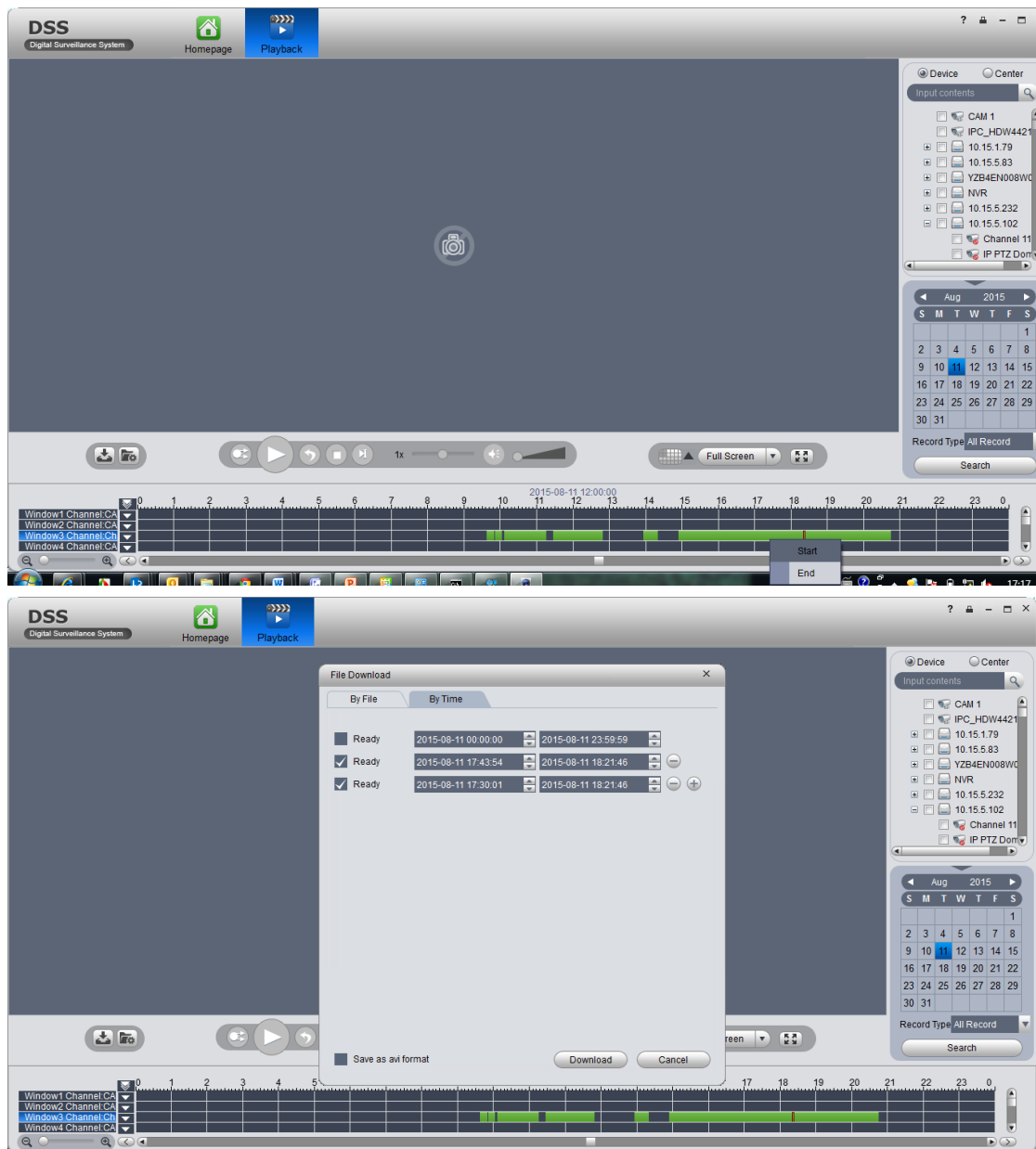


Step 2: In record lock unit, search and unlock.



2.2.4 Download Record by Time

On time axis, select one start point, right click, select start ,and select one end point, right click, select End , the following interface pops up.



2.3 Central Alarm Management

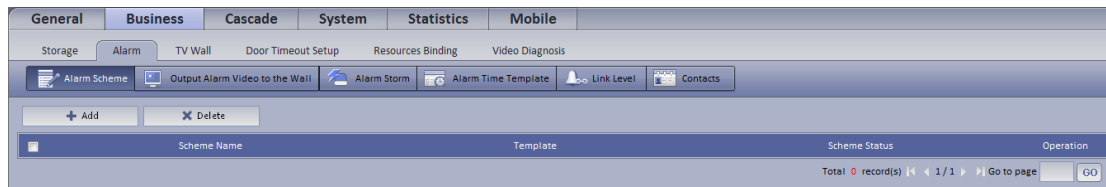
For admin, who managed all of the system, may link to email, SMS, center video wall, and center storage.

2.3.1 Setup Flow

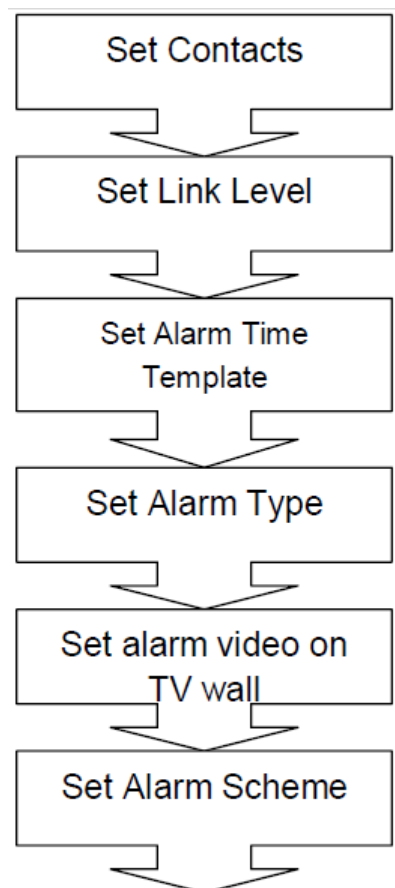
DSS Manager supports alarm, including Alarm Scheme, Output Alarm Video to the Wall, Alarm Type, Alarm Time Template, Link Level and Contacts.

- Alarm Scheme: set alarm scheme template.
- Output Alarm Video to the Wall: Make alarm video display on wall.

- Alarm Storm: Set system alarm interval as batch.
- Alarm Time Template: Set alarm time template.
- Link Level: Set alarm link level.
- Contacts: Set user who to receive alarm notice.

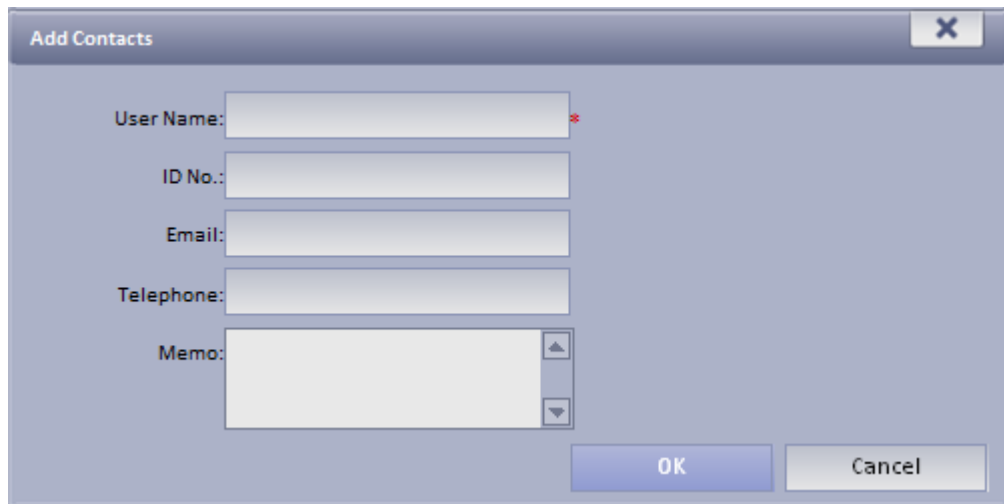


Configuration progress as follow:



2.3.2 Contacts

When you add user into contacts and if the setup of Link Level includes email or sms, then system will send email or sms to the new contact.



Add Contacts

User Name:

ID No.:

Email:

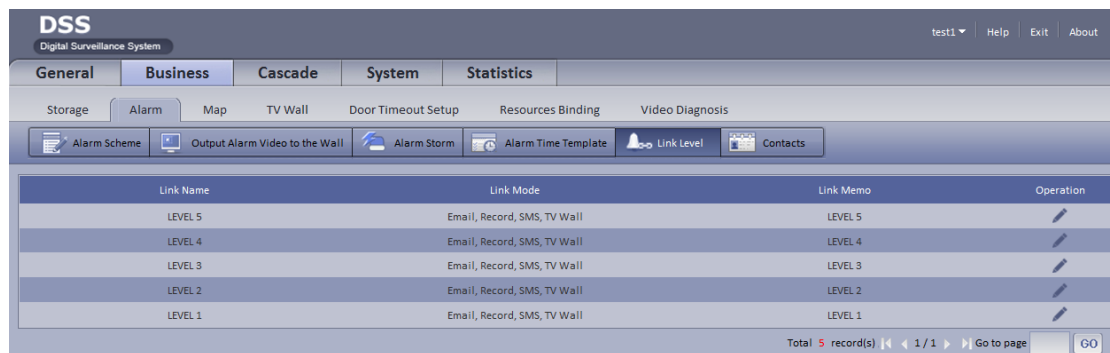
Telephone:

Memo:

OK Cancel

2.3.3 Set Link Level

Set Link Level Name and select Link Mode. including Email, Record, SMS, TV Wall.



DSS
Digital Surveillance System

test1 Help Exit About

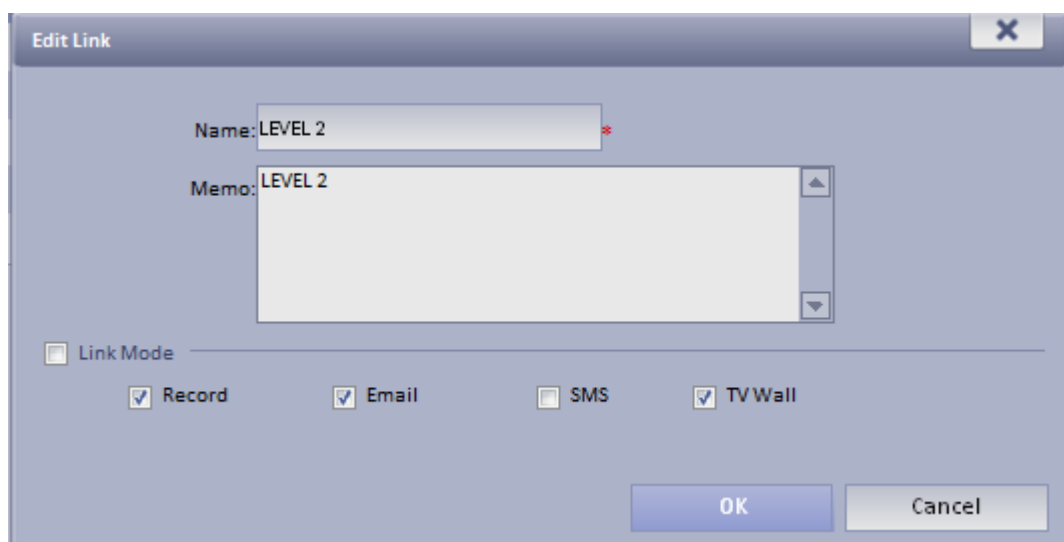
General Business Cascade System Statistics

Storage Alarm Map TV Wall Door Timeout Setup Resources Binding Video Diagnosis

Alarm Scheme Output Alarm Video to the Wall Alarm Storm Alarm Time Template Link Level Contacts

Link Name	Link Mode	Link Memo	Operation
LEVEL 5	Email, Record, SMS, TV Wall	LEVEL 5	
LEVEL 4	Email, Record, SMS, TV Wall	LEVEL 4	
LEVEL 3	Email, Record, SMS, TV Wall	LEVEL 3	
LEVEL 2	Email, Record, SMS, TV Wall	LEVEL 2	
LEVEL 1	Email, Record, SMS, TV Wall	LEVEL 1	

Total 5 record(s) 1 / 1 Go to page GO



Edit Link

Name: LEVEL 2

Memo: LEVEL 2

Link Mode

☒ Record ☒ Email ☐ SMS ☒ TV Wall

OK Cancel

2.3.4 Set Alarm Time Template

Input Template Name, select cycle period or Single Period. Set Period and link level.

General

Business

Cascade

System

Statistics

Mobile

Storage

Alarm

TV Wall

Door Timeout Setup

Resources Binding

Video Diagnosis

Alarm Scheme

Output Alarm Video to the Wall

Alarm Storm

Alarm Time Template

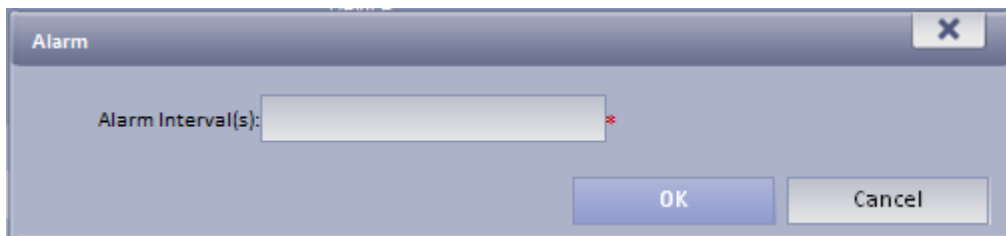
Link Level

Contacts

Alarm Interval Setup

Cancel Alarm Interval Setup

Type Name	Alarm Source Type	Alarm Interval	Operation
Overload	Device	10	
Exit Alarm	Device	10	
Exit Departure Zone	Device	10	
Disk Full	Device	10	
Illegally exit unloading area	Device	10	
Driver Out	Device	10	
Exit Driving Zone	Device	10	
Illegally exit restricted area	Device	10	
Outage Alarm	Device	10	
Illegally exit speed limit area	Device	10	
Brake	Device	10	
ACC Power On	Device	10	
Enter Departure Zone	Device	10	



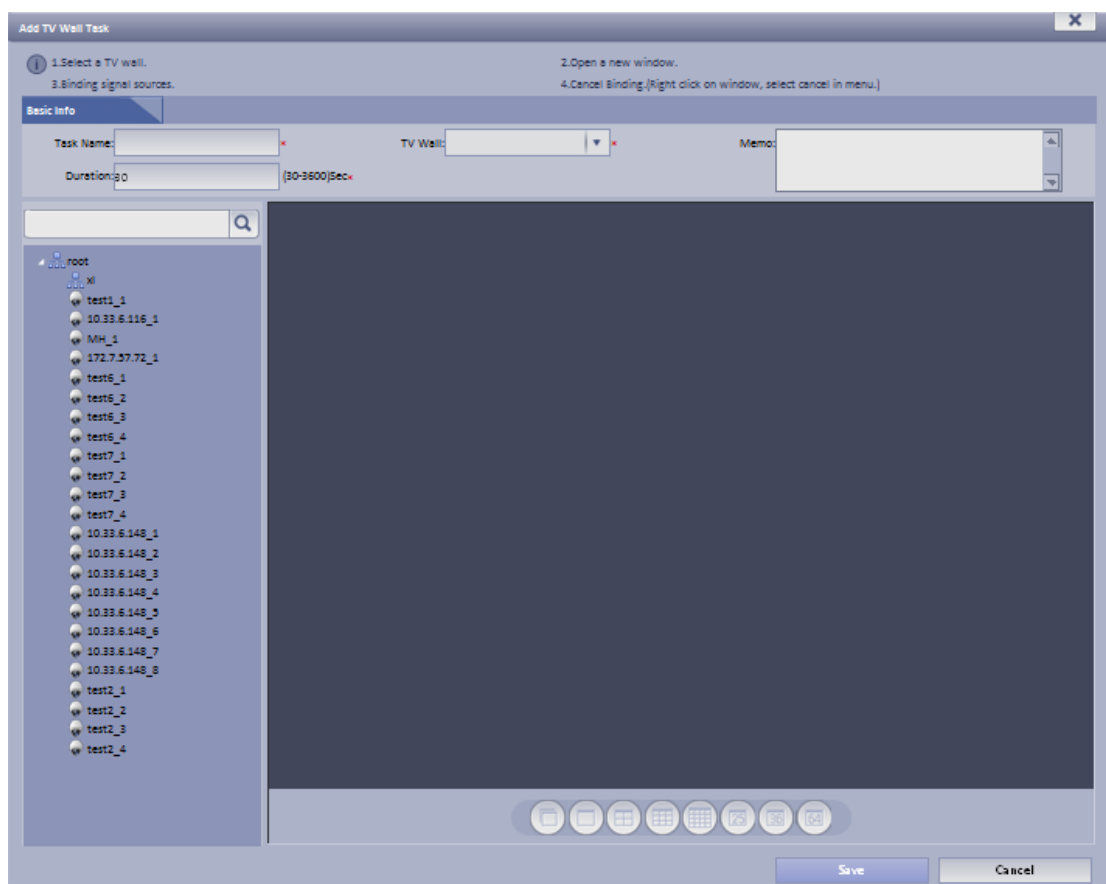
Note: Set alarm interval to 10s by default, if alarm interval is too frequent, alarm info will not be able to be solved efficiently, which is equivalent to device' s anti-dither function.

2.3.6 Output Alarm Video to the Wall

Step 1. Add TV Wall task .

Step 2. Input Task Name and select TV Wall, set duration.

Step 3. Drag channel on the left to TV wall window, and save.



Note: You shall configure TV wall before outputting alarm video to the TV wall.

2.3.7 Set Alarm Scheme

Step 1 : Add Alarm Scheme.

The screenshot shows the 'Add Alarm Scheme' dialog box with the '1 Alarm Time' tab selected. The dialog has a progress bar at the top with three steps: '1 Alarm Time', '2 Alarm Source and Operation', and '3 Alarm Preview'. Below the progress bar, there are fields for 'Scheme Name' (with a red asterisk indicating it is required), 'Template' (a dropdown menu with a '+' icon), and 'Enable' (a checked checkbox). There is also a 'Memo' text area. Below these fields is a 'Template Details' section with a table header: 'Time', 'Corresponding Link Level', and 'Corresponding Link Item'. The table is currently empty. At the bottom right, there are 'Next' and 'Cancel' buttons.

Step 2: Add alarm Source and corresponding link operation.

The screenshot shows the 'Add Alarm Scheme' dialog box with the '2 Alarm Source and Operation' tab selected. The dialog has a progress bar at the top with three steps: '1 Alarm Time', '2 Alarm Source and Operation', and '3 Alarm Preview'. Below the progress bar, there are '+ New' and 'Delete' buttons. Below these buttons is a table with the following headers: 'SN', 'Alarm Source', 'Alarm Type', 'Link', and 'Operation'. The table is currently empty. Below the table is a section titled 'Add Alarm Source and Link Operation 1'. This section is divided into two main areas: 'Alarm Source' and 'Corresponding Link Operation'. The 'Alarm Source' area has tabs for 'Device', 'Video Channel', 'Alarm Input Channel', 'Intelligent Channel', 'A&C Channel', and 'System'. The 'Video Channel' tab is selected, showing a list of video channels (CAM 7 to CAM 16, IPC8281, and IPC-A18) and a search bar. The 'Corresponding Link Operation' area has tabs for 'Record', 'Email', 'SMS', and 'TV Wall'. The 'Record' tab is selected, showing a list of video channels (CAM 7 to CAM 16, IPC8281, and IPC-A18) and a search bar. To the right of the 'Record' tab, there is a 'Pre-record' section with a warning icon and text: 'Pre-record: You must have record ready on DVR/IPC/NVR.' Below this, there are input fields for 'Pre-record' (with a unit 's') and 'Record' (with a unit 's'), and a 'Sub Stream' checkbox. At the bottom right, there are 'Save' and 'Cancel' buttons.

In Alarm Source area, select alarm source (Device, Video channel, Alarm input Channel, Intelligent Channel, A&C Channel, System).

In Corresponding Link Operation area, select link operation(Record, Email, SMS, TV Wall).

Note: If you need pre-record, then there needs to be record on the device.

Step 3: alarm preview

Add Alarm Scheme

1 Alarm Time 2 Alarm Source and Operation 3 Alarm Preview

Scheme Name: test Template: test

Memo:

Template Details

Time	Corresponding Link Level	Corresponding Link Item
Alarm time begin at the 2015-06-19 on each Mon,Tue,Wed,Thu,Fri,Sat,Sun 00:00:00 to 23:59:59 Never Stop	LEVEL 5	Record,Email,SMS,TV Wall

Alarm Source and Operation

SN	Alarm Source	Alarm Type	Link
1	IPC8281	Motion Detect	Record

Link Info

Record Email SMS TV Wall

IPC8281

Back Finish

2.3.8 Alarm Record Search

Login DSS client , enter playback interface, select center storage record.



Note : Center alarm link to center alarm record, for rights owned by all client users, including search, playback and download.

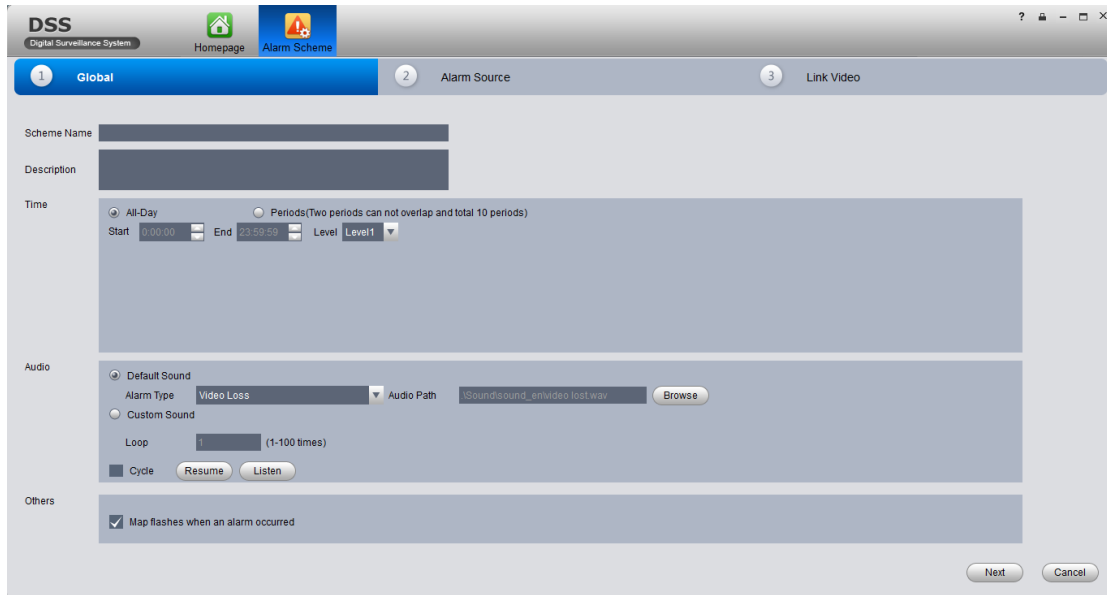
2.4 Client Alarm Management

For operator, config alarm plan for resources within right range.


2.4.1 Alarm scheme

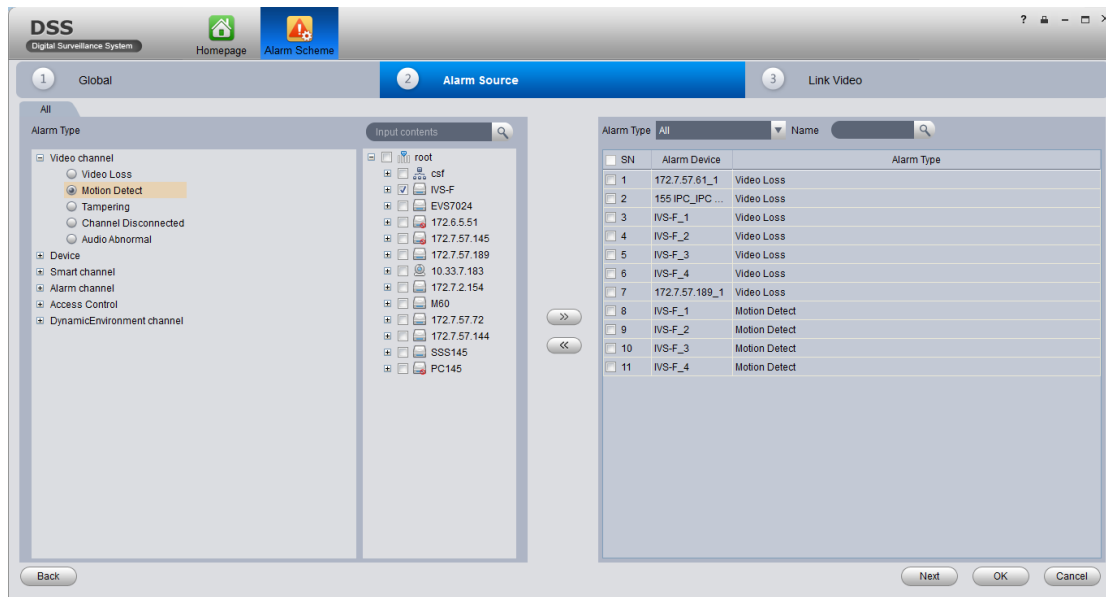
Step 1: Enter Alarm Scheme interface.

Step 2: Input Scheme Name, Description, Time, Audio and Others.




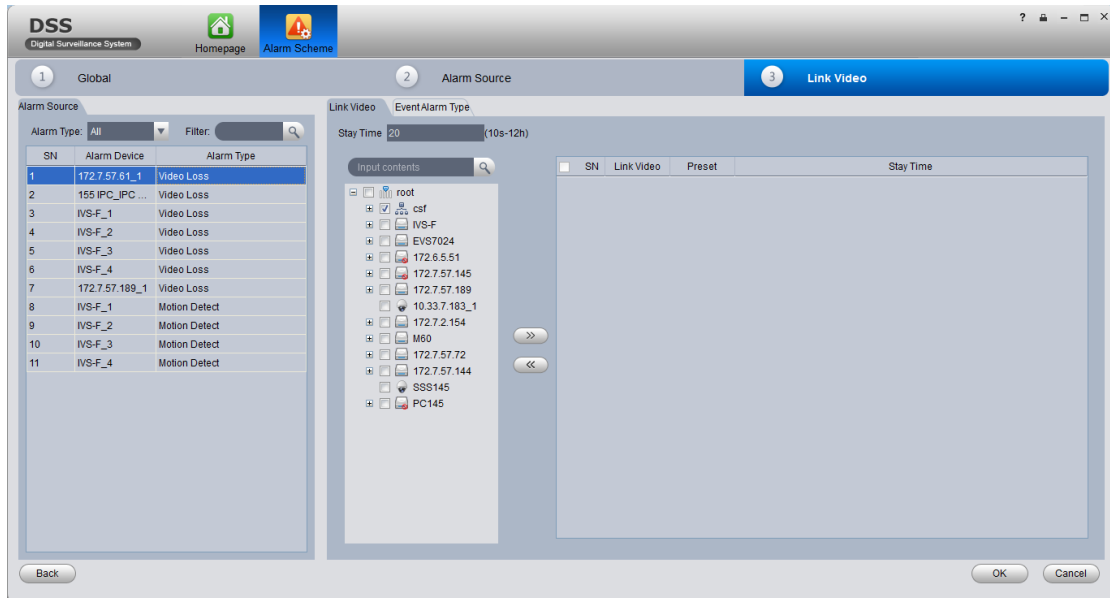
Step 3: Set Alarm Source.

Select Alarm Type to be armed and channel on the left. Click on . System will add alarm source to list on the right.

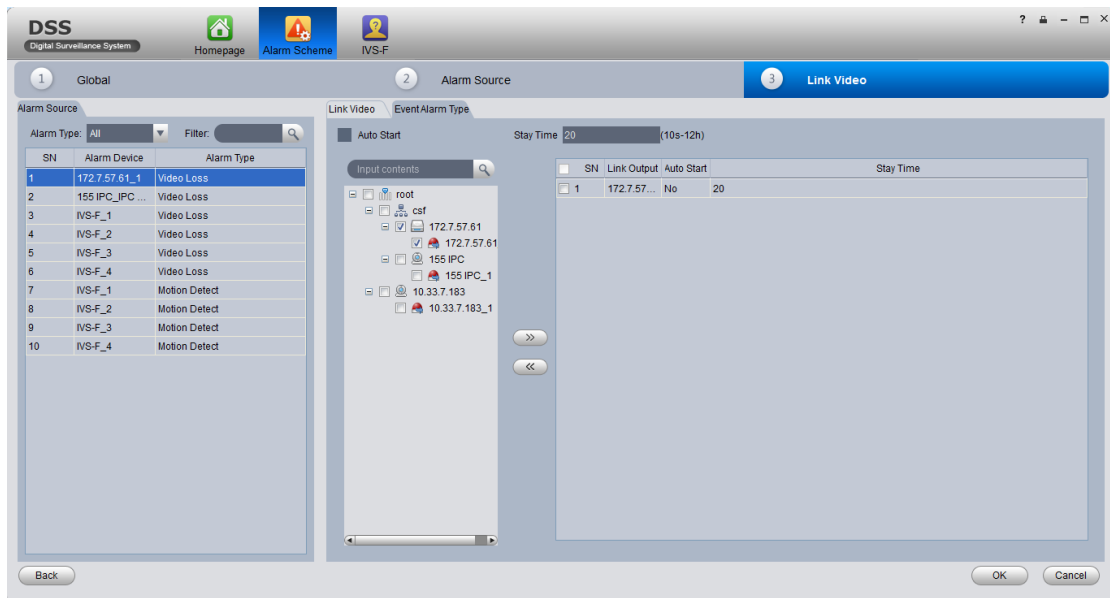


Step 4: Set Link Video

Select alarm source on the left. Select video channel under Link Video tab. Click on  to add selected link video to area on the right.

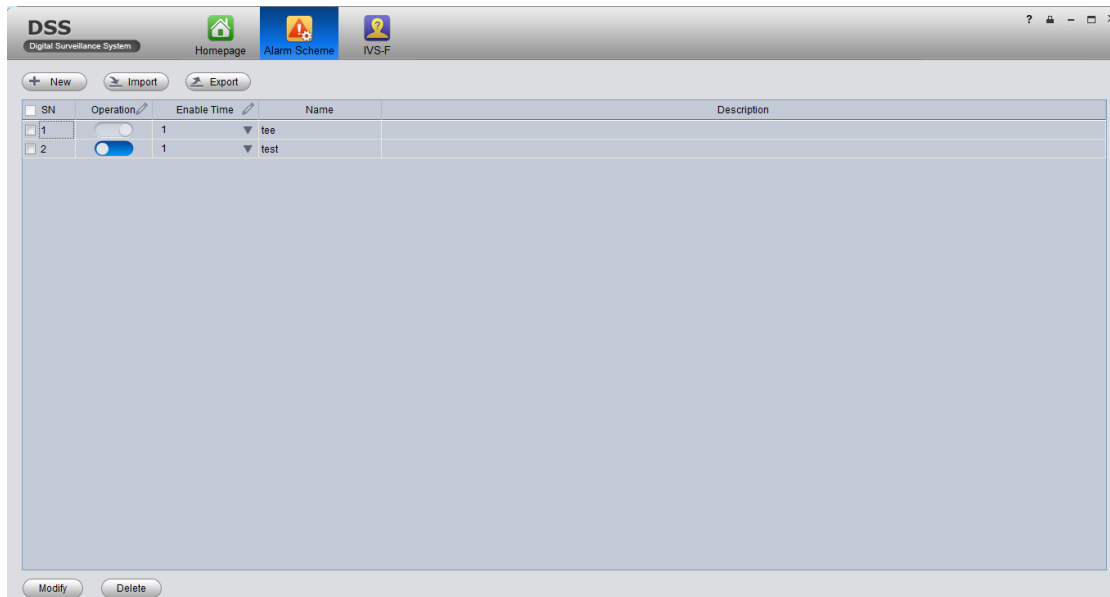


If you want link alarm out, Select alarm output device under Event Alarm Type tab.



Step 5: Enable alarm scheme

After you add alarm scheme, click on operation bar, and close status turn to open. Click on open can enable alarm scheme and click on Enable Time to select time template to enable.



Note: time template is set by manager in manage web.

2.4.2 Alarm Manager

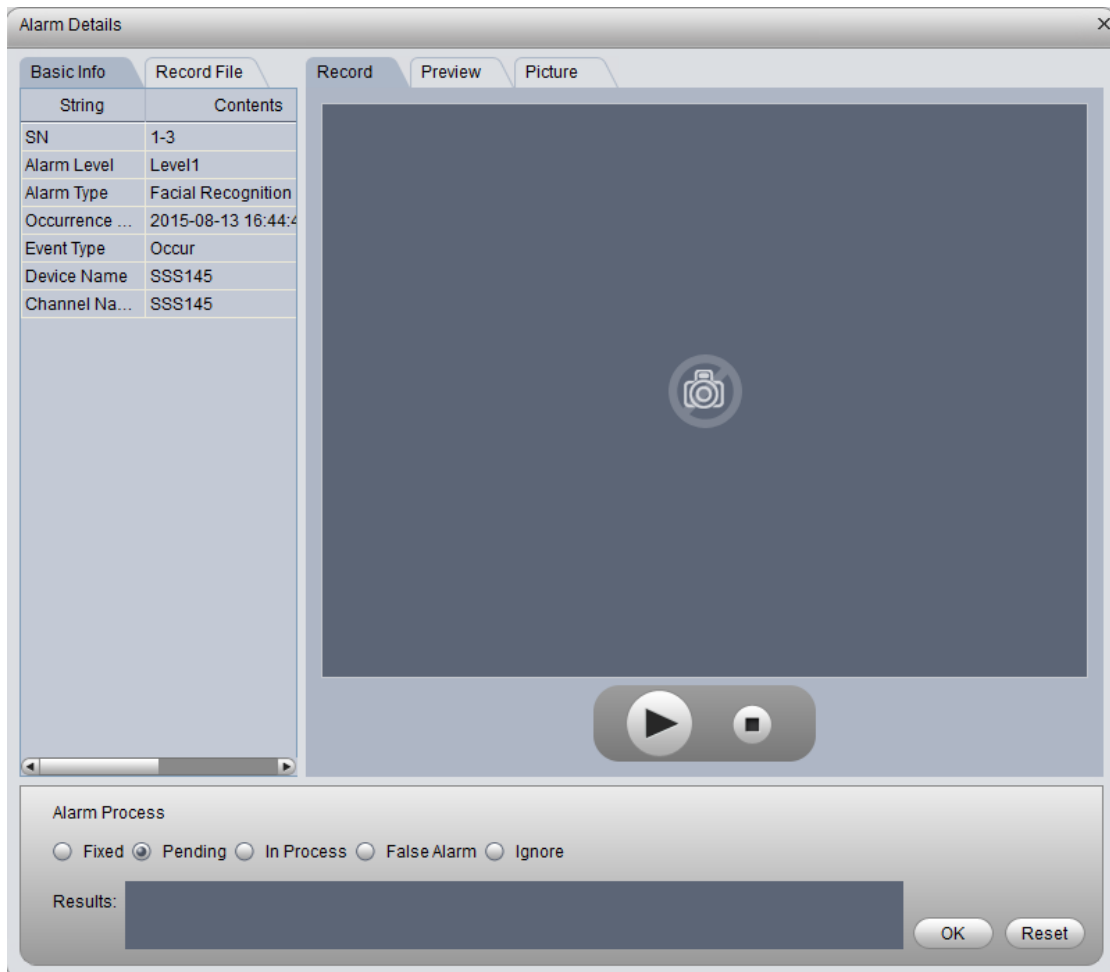
If alarm scheme is configured, when alarm occurs, Alarm Manager displays corresponding alarm.

- Real-time Alarm

System displays all alarms by level.

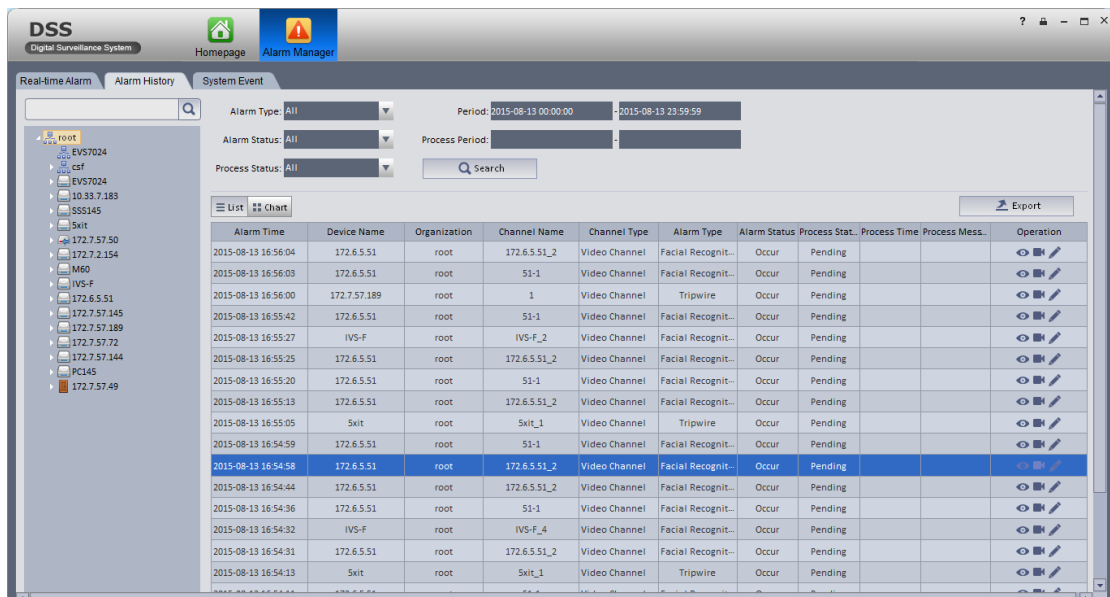


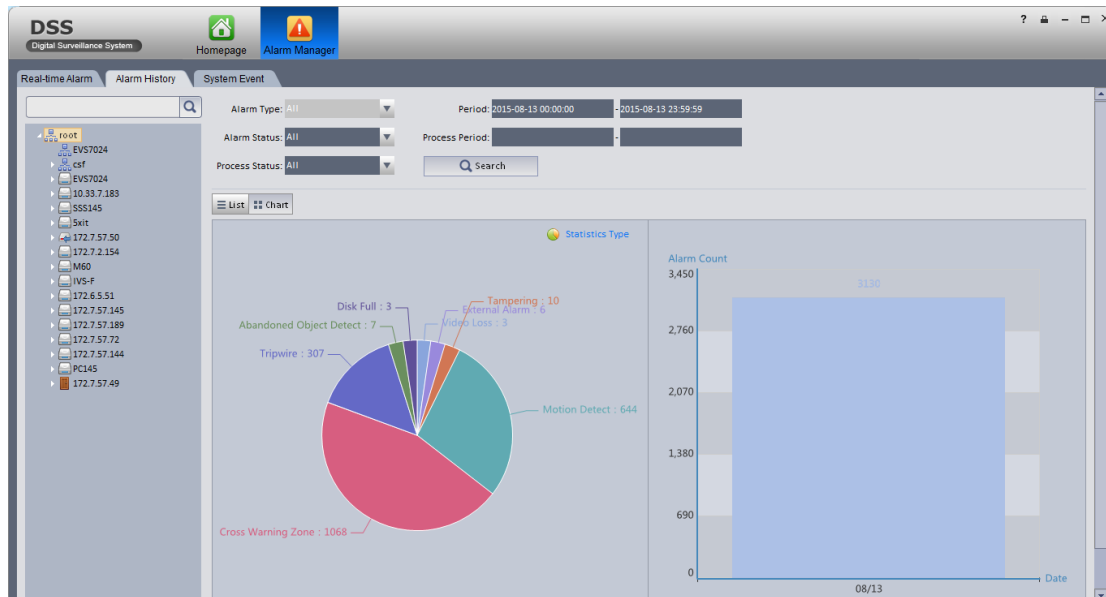
Double click the alarm info, show alarm details and mark the alarm with pending, fixed, in progress, false alarm, ignore and results.



- Alarm History

Select corresponding channel in list on the right, and select Alarm Type, Period, Alarm Status, Progress Period, Progress Status. Click on "Search" to search alarm records meeting above criteria. It will list alarm info by list mode or chart mode.





- System Event

Show the System level alarm info.

The screenshot displays the DSS Alarm Manager interface with the 'System Event' tab selected. The table below shows the structure of the system level alarm information.

SN	Time	Alarm Type	Host Code	Alarm Information
----	------	------------	-----------	-------------------

2.5 E-Map

2.5.1 Google Map

Step 1 : Login system config interface, such as <http://IP/config>

Step 2: Map Config, select Google ,set default longitude and latitude(position to default area)->Apply.

Config System

V3.11.002.R.20150724.350119

Current status is Master OS Disk Model:

Server Config

Segment Setup

Storage Config

Link Config

Map Config

Maintenance

Quick Guide

Self-check

System Upgrade

Map Selection:
☐ Super Map
☐ Raster Map
☒ Google
☐ Google Offline Map

Longitude and Latitude Setup

Longitude: 120.178299258353

Latitude: 30.1892863586331

Map Zoon Setup

Map Initial Zoom Level: 14

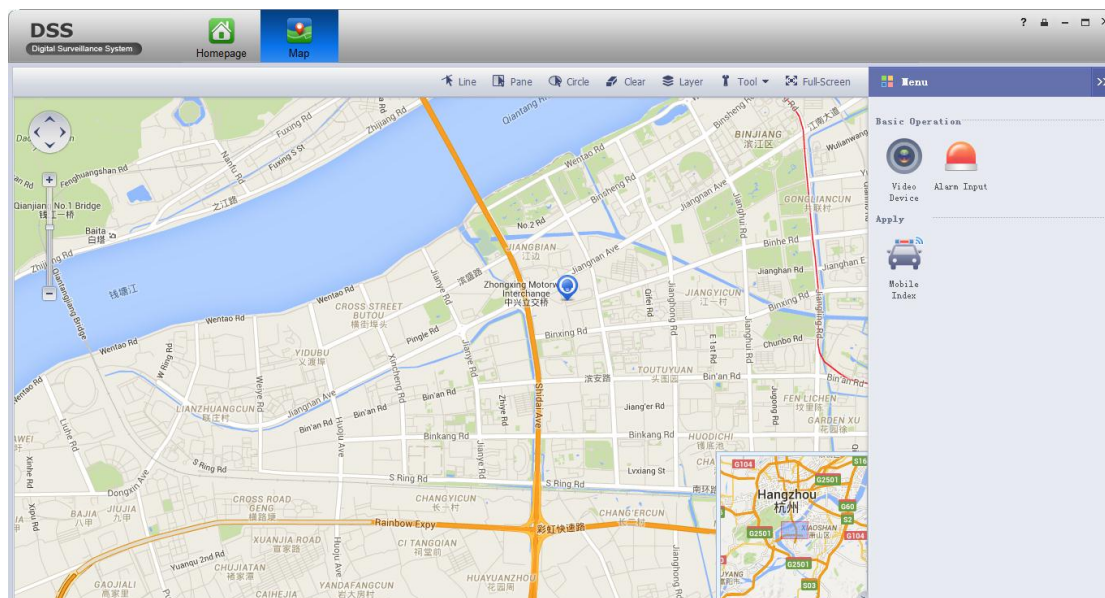
Map Spot Display Level: 14

Min Map Display Level: 3

Max Map Display Level: 21

Apply

Step 3: Display on client



Note : client google map language pack selection depends on IE browser language option.

2.5.2 Google Offline Map

Step 1 : Login system config interface, such as <http://IP/config>

Step 2: Map Config, select Google offline Map , set map engine path and map WAN IP ->Apply.

Config System V3.11.002.R.20150724.350119

Current status is Master OS Disk Model:

Server Config	<p>Map Selection: <input type="radio"/> Super Map <input type="radio"/> Raster Map <input type="radio"/> Google <input checked="" type="radio"/> Google Offline Map</p> <hr/> <p>Map Engine Path: <input type="text" value="http://10.33.7.138:8090/isever/service"/></p> <p>Map Engine WAN IP: <input type="text" value="10.33.7.138"/></p> <hr/> <p>Longitude and Latitude Setup</p> <p>Longitude: <input type="text" value="120.178299258353"/></p> <p>Latitude: <input type="text" value="30.1892863506331"/></p> <hr/> <p>Map Zoon Setup</p> <p>Map Initial Zoom Level: <input type="text" value="14"/></p> <p>Map Spot Display Level: <input type="text" value="14"/></p> <p>Min Map Display Level: <input type="text" value="3"/></p> <p>Max Map Display Level: <input type="text" value="21"/></p> <hr/> <p> Apply</p>
Segment Setup	
Storage Config	
Link Config	
Map Config	
Maintenance	
Quick Guide	
Self-check	
System Upgrade	

Note :

Map engine path : map located path ;

Map engine WAN IP : Map server and program are not on the same device, you need to configure map server IP address.

2.5.3 Raster Map

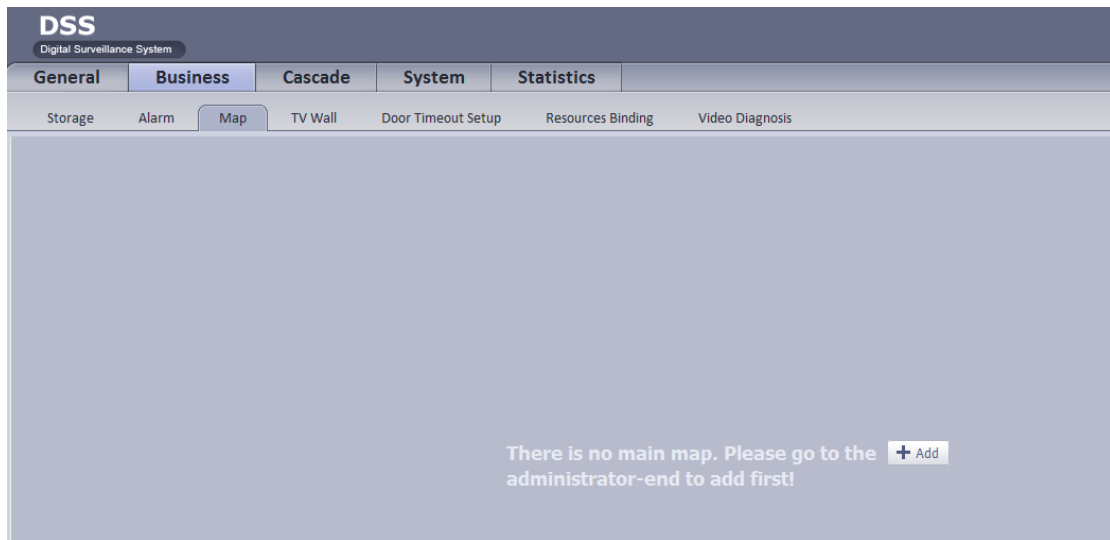
Step 1 : E-map type select: select raster maps click Apply, and effect after reboot ;

Config System V3.11.002.R.20150724.350119

Current status is Master OS Disk Model:

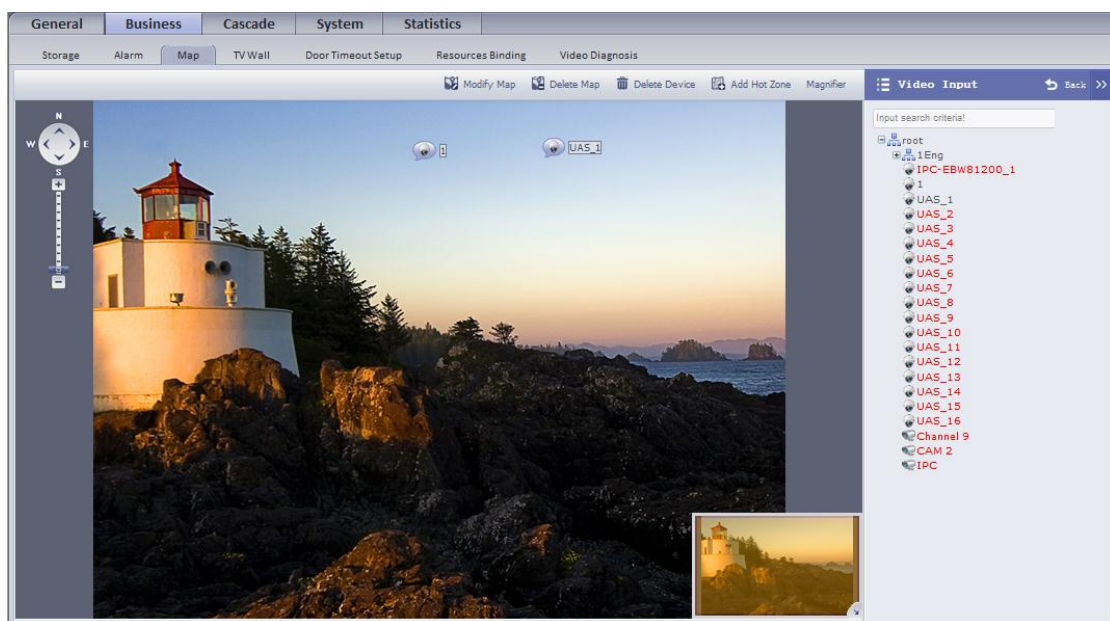
Server Config	<p>Map Selection: <input type="radio"/> Super Map <input checked="" type="radio"/> Raster Map <input type="radio"/> Google <input type="radio"/> Google Offline Map</p> <hr/> <p> Apply</p> <div style="border: 1px solid gray; padding: 10px; margin-top: 20px;"> <p>Warning</p> <p> By switching map, all map information will be cleared and server will reboot, continue?</p> <p><input type="button" value="OK"/> <input type="button" value="Cancel"/></p> </div>
Segment Setup	
Storage Config	
Link Config	
Map Config	
Maintenance	
Quick Guide	
Self-check	
System Upgrade	

Step 2 : Log in manager, enter Business->Map

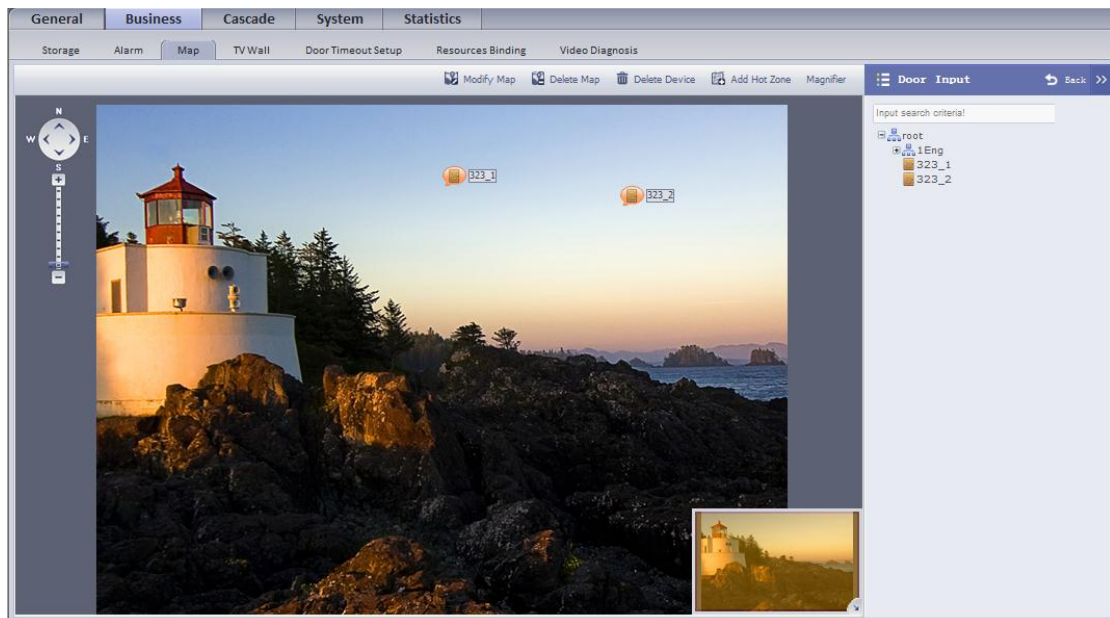


Step 3: Add map picture.

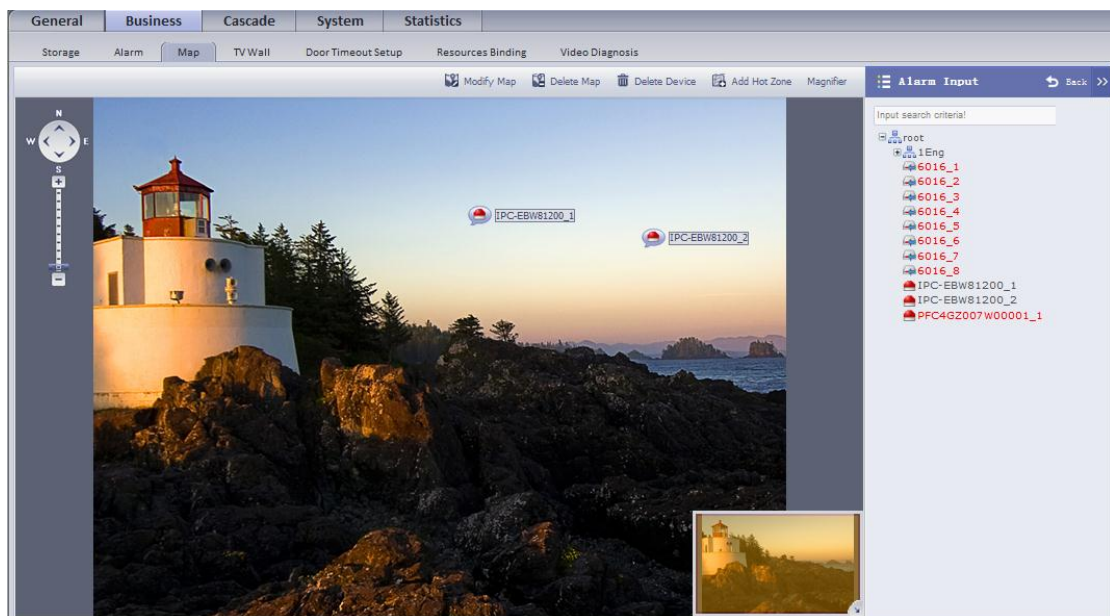
Step 4: Add video channel.



Step 5 : Add access control channel

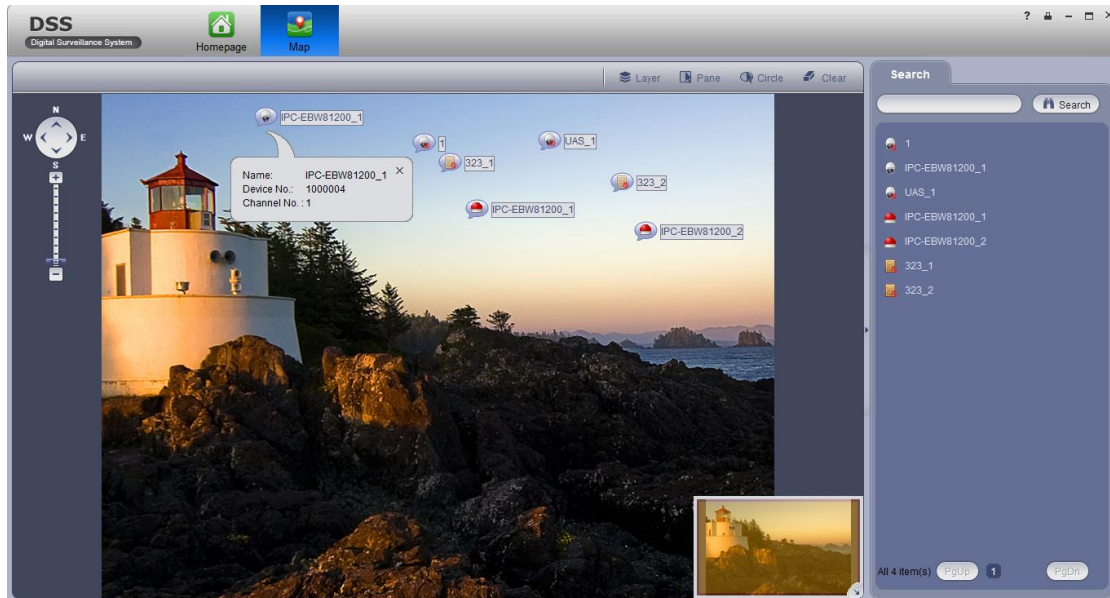


Step 6 : Add alarm channel

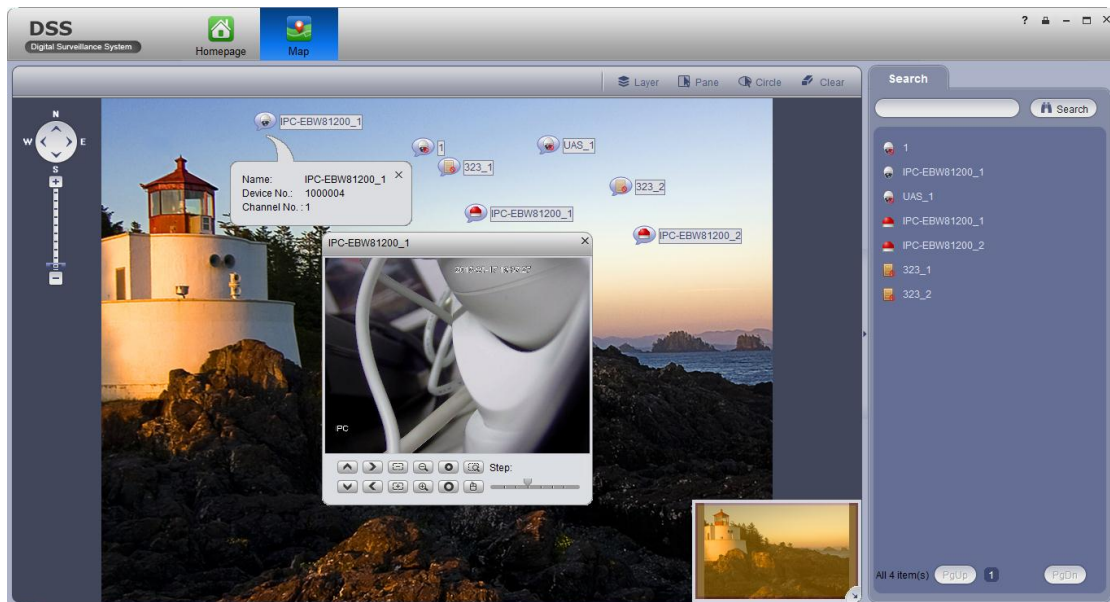


Step 6 : Client display

Show device online and offline statuses and channel info.



View channel video, and support PTZ operation. Channel with record storage, may playback record.



2.5.4 Super Map

Step 1 : Select Super Map—configure map engine path—config map shortest path analysis—configure map engine WAN IP—application.

Config System v3.11.002.R.20150724.350119

Current status is Master OS Disk Model:

Server Config	Map Selection: <input checked="" type="radio"/> Super Map <input type="radio"/> Raster Map <input type="radio"/> Google <input type="radio"/> Google Offline Map
Segment Setup	Map Engine Path: <input type="text" value="http://10.33.7.138:8090/iserwer/service"/>
Storage Config	Map Shortest Path Analysis Server: <input type="text" value="http://10.33.7.138:8090/iserwer/service"/>
Link Config	Map Engine WAN IP: <input type="text" value="10.33.7.138"/>
Map Config	Longitude and Latitude Setup
Maintenance	Longitude: <input type="text" value="120.178299258353"/>
Quick Guide	Latitude: <input type="text" value="30.1892863586331"/>
Self-check	Map Zoon Setup
System Upgrade	Map Initial Zoom Level: <input type="text" value="14"/>
	Map Spot Display Level: <input type="text" value="14"/>
	Min Map Display Level: <input type="text" value="3"/>
	Max Map Display Level: <input type="text" value="21"/>

Note :

Map engine path : map located path ;

Map shortest path analysis : server path used to analyze the shortest distance between two points on map

Map engine WAN IP : map server and program are not on the same device, need to config map server and IP address

2.6 Video Quality Diagnosis

2.6.1 Video Diagnosis Setting

Step 1 : Diagnosis item config

Video quality diagnosis mainly include video loss ,high brightness ,low brightness ,contrast ,definition , color shift. These values' normal, warning and abnormal ranges may be set in diagnosis option.

DSS Digital Surveillance System system Help Exit About

General Business ITS Cascade System Statistics

Storage Alarm Map TV Wall Door Timeout Setup Resources Binding Video Diagnosis

Scheme Config Task Config **Diagnosis Item Config**

	Name	Diagnosis Item	Operation
<input type="checkbox"/>	test	Video Loss, H.Brightness, L.Brightness, Contrast, Definition, Color Shift	<input type="button" value="edit"/> <input type="button" value="delete"/>

Total 1 record(s) 1 / 1 Go to page

Edit Diagnosis Item Config

Base Config

Name: test *

Memo: test

☒ Apply All Diagnosis Items

☐ Normal
 ☐ Warning
 ☐ Abnormal

☒ Video Loss

☒ H.Brightness 0 100

☒ L.Brightness 0 100

☒ Contrast 0 100

☒ Definition 0 100

☒ Color Shift 0 100

OK Cancel

Step 2 : Task config

DSS Digital Surveillance System

General Business ITS

Storage Alarm Map TV

Scheme Config Task Config

+ Add X Delete

Task Name

33
22
11

Edit Task Config

Basic Info

Task Name: 33 Stay Time: 5 (5-15)Sec

Diagnosis Config: test

Memo: 33

Channel Info:

Alternate Channel

- root
 - EV57024
 - csf
 - 1
 - IVS-F_2
 - IVS-F_3
 - IVS-F_4
 - EV57024_1
 - EV57024_2
 - EV57024_3
 - EV57024_4

Add Delete

Selected Channel

Channel Name	Device Name
1	IVS-F
172.7.57.61_1	172.7.57.61

Total 2 record(s) 1 / 1

Memo

Memo	Operation
33	

ord(s) 1 / 1 Go to page GO

Step 3 : Scheme config

DSS Digital Surveillance System

General Business ITS

Storage Alarm Map TV

Scheme Config Task Config

+ Add X Delete

Scheme Name

22

Edit Scheme Config

General

Scheme Name: 22 Enable

Memo:

Scheme Info

Alternate Task

33
22
11

Add Delete

Selected Task

Task Name	Start Time
11	10:56:00
33	10:56:30
22	10:57:00

Task Conflict Overwrite Task Detail

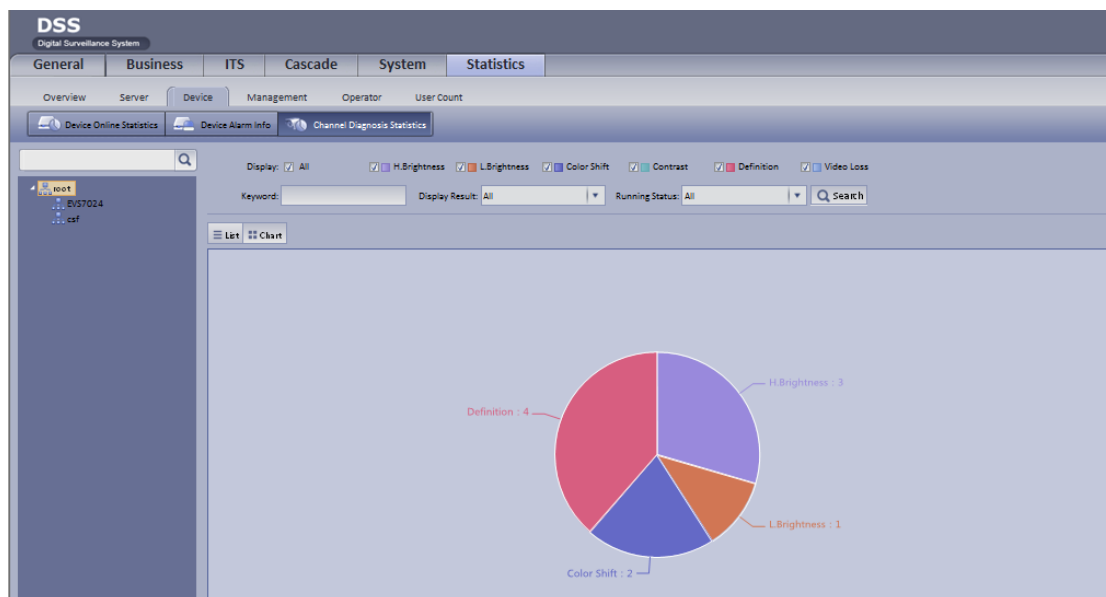
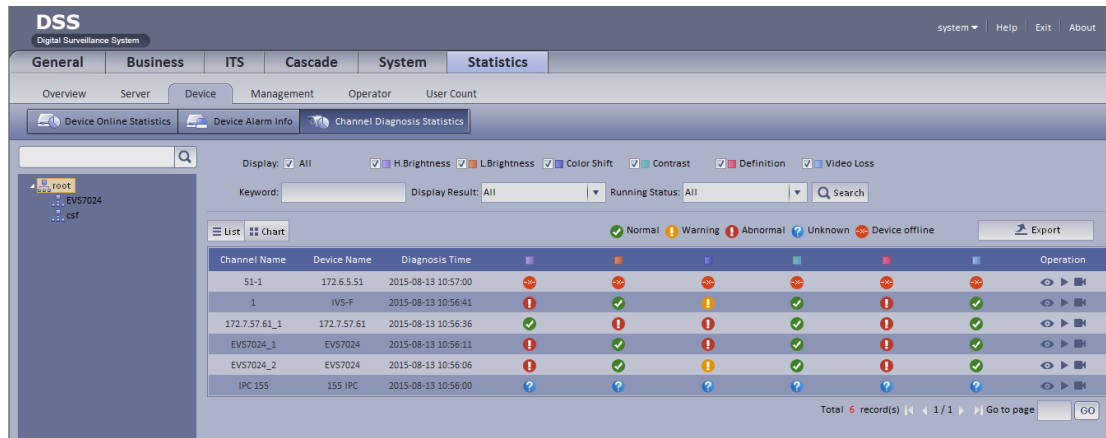
tus

tus	Operation
re	

ord(s) 1 / 1 Go to page GO

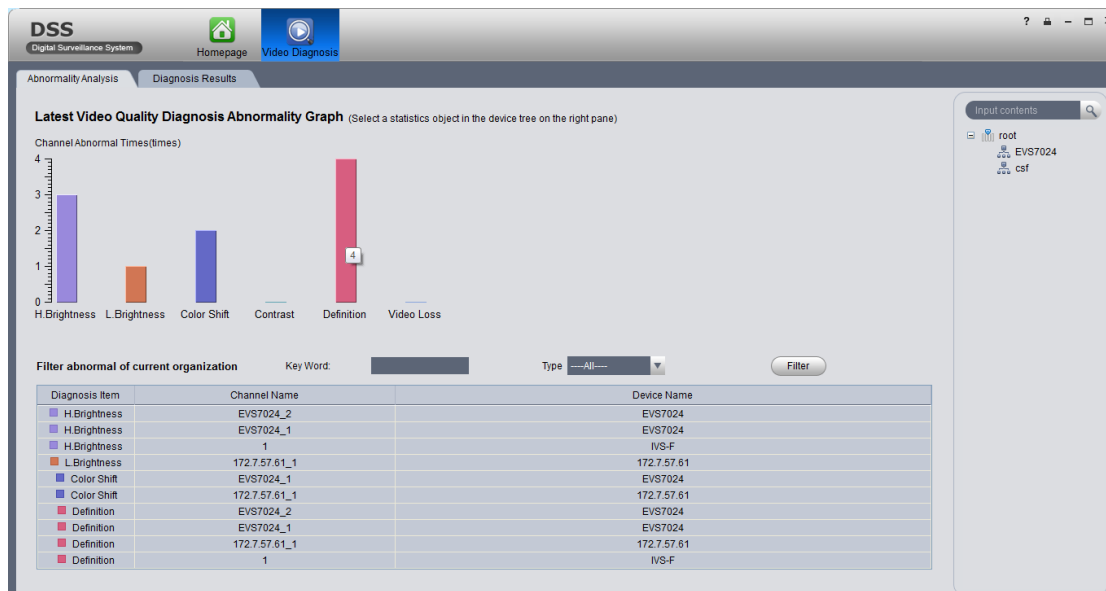
2.6.2 Manager Channel Diagnosis Statistics

In maintenance statistics→device statistics→channel diagnosis statistics module , you can see result of diagnosis. It has list and graph formats.



2.6.3 Client Video Diagnosis

On client you can view video diagnosis abnormal info.



On client view video diagnosis abnormal info result

Display ☒ All ☒ H.Brightness ☒ L.Brightness ☒ Color Shift ☒ Contrast ☒ Definition ☒ Video Loss

Key Word: Display Type: Action Status: Filter

Legend: ✓ Normal ! Warning ! Abnormal ? Unknown - Device Offline

ChnlName	DevName	Time	H.Brightness	L.Brightness	Color Shift	Contrast	Definition	Video Loss	Operation
51-1	172.6.5.51	2015-08-13 10:57:00	!	!	!	!	!	!	
1	IVS-F	2015-08-13 10:56:41	!	!	!	!	!	!	
172.7.57.61_1	172.7.57.61	2015-08-13 10:56:36	!	!	!	!	!	!	
EVST024_1	EVST024	2015-08-13 10:56:11	!	!	!	!	!	!	
EVST024_2	EVST024	2015-08-13 10:56:06	!	!	!	!	!	!	
IPC 155	155 IPC	2015-08-13 10:56:00	?	?	?	?	?	?	

2.7 Access Control Business

2.7.1 Add Access Control Device

Platform manager→basic config→device management→device→access control→add

Access control support DH-BSC1221A/DH-BSC1202B/DH-BSC1202C device input, while DH-BSC1202B is new device.

DSS Digital Surveillance System

General Business Cascade System Statistics

Org Account Device Server

Device Channel

Encoder Decoder Video Wall Alarm Host P/S Matrix ASC

Keyword: Status: Search

+ Add X Delete

Encode	IP Address	Video Server	Device Name	Org
1000011	10.3.3.55	Center Server	323	root

2.7.2 Access Control Link Video Setup

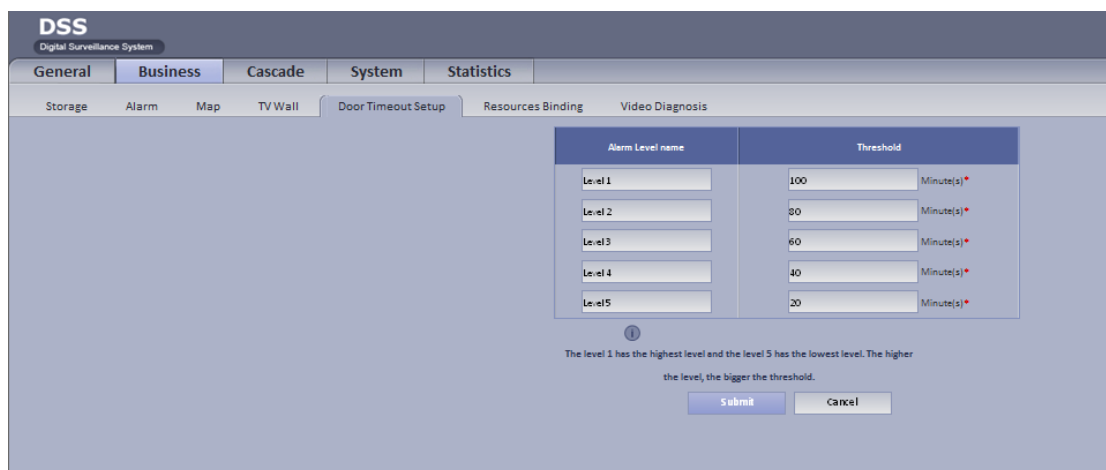
Platform manager→business config→video link→access control→config



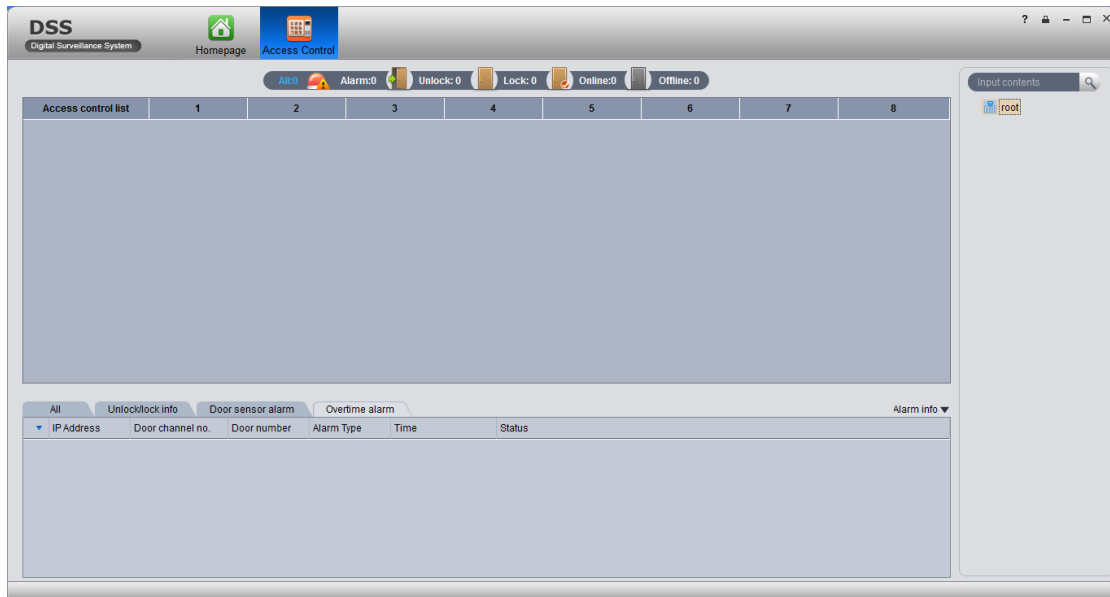
Click non-bold source channel on the left, and check video channel on the right, click OK to config.

2.7.3 Unlock Overtime Alarm

In platform manager→business config→in unlock overtime config unlock overtime , for example config info in the following figure , if unlock time is 6 min , then the client will generate level 5, level 4 and level 3 overtime alarms

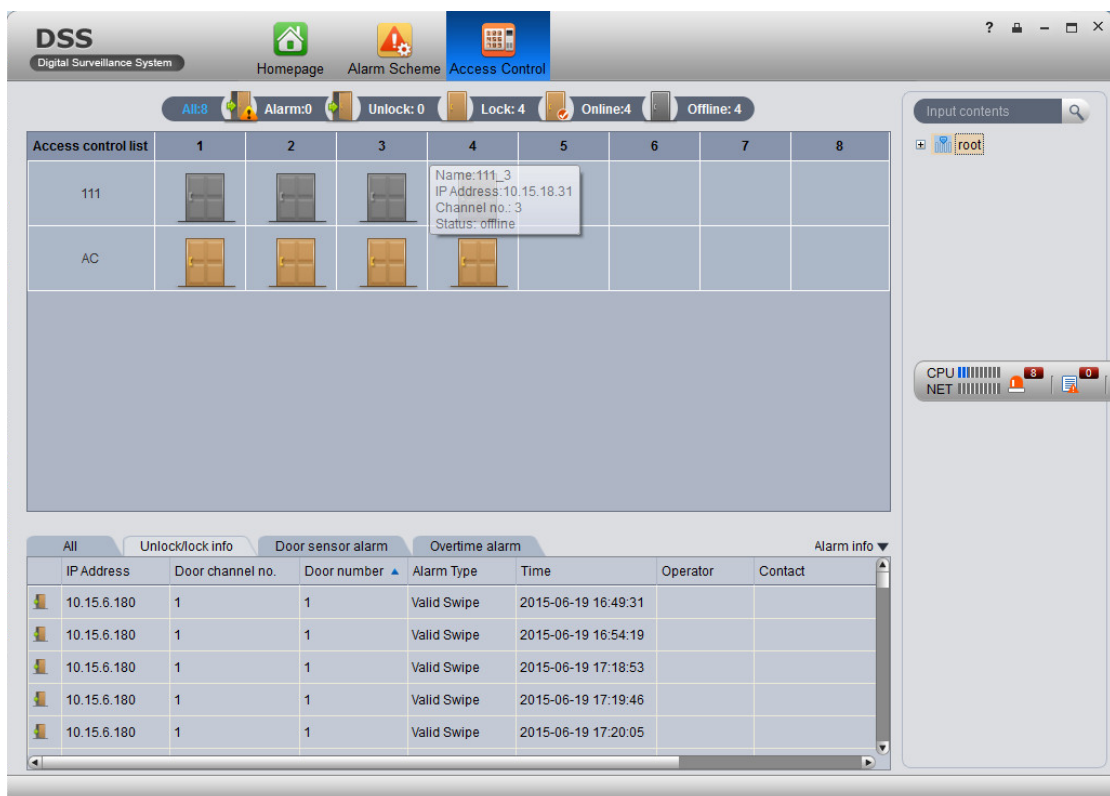


If trigger access control overtime alarm, at bottom of in client access control module, all or overtime alarm bar will show overtime message.



2.7.4 Access Control Alarm Display

In client access control module, there are display of access control alarm info. Click option tab next to all, you can display alarm info by type.



2.7.5 Alarm Link Video

In alarm scheme, add alarm scheme, set scheme name.

DSS Digital Surveillance System

Homepage Alarm Scheme Access Control

1 Global 2 Alarm Source 3 Link Video

Scheme Name: AC

Description:

Time:

All-Day (selected) Periods (Two periods can not overlap and total 10 periods)

Start: 00:00:00 End: 23:59:59 Level: Level1

Audio:

Default Sound (selected) Alarm Type: Video Loss Audio Path: .\Sound\sound_zh\video lost.wav Browse

Custom Sound

Loop: 1 (1-100 times)

Cycle Resume Listen

Others:

☒ Map flashes when an alarm occurred

Next Cancel

In alarm scheme, add alarm scheme, alarm type and alarm source.

DSS Digital Surveillance System

Homepage Alarm Scheme Access Control

1 Global 2 Alarm Source 3 Link Video

Alarm Type: All

Input contents:

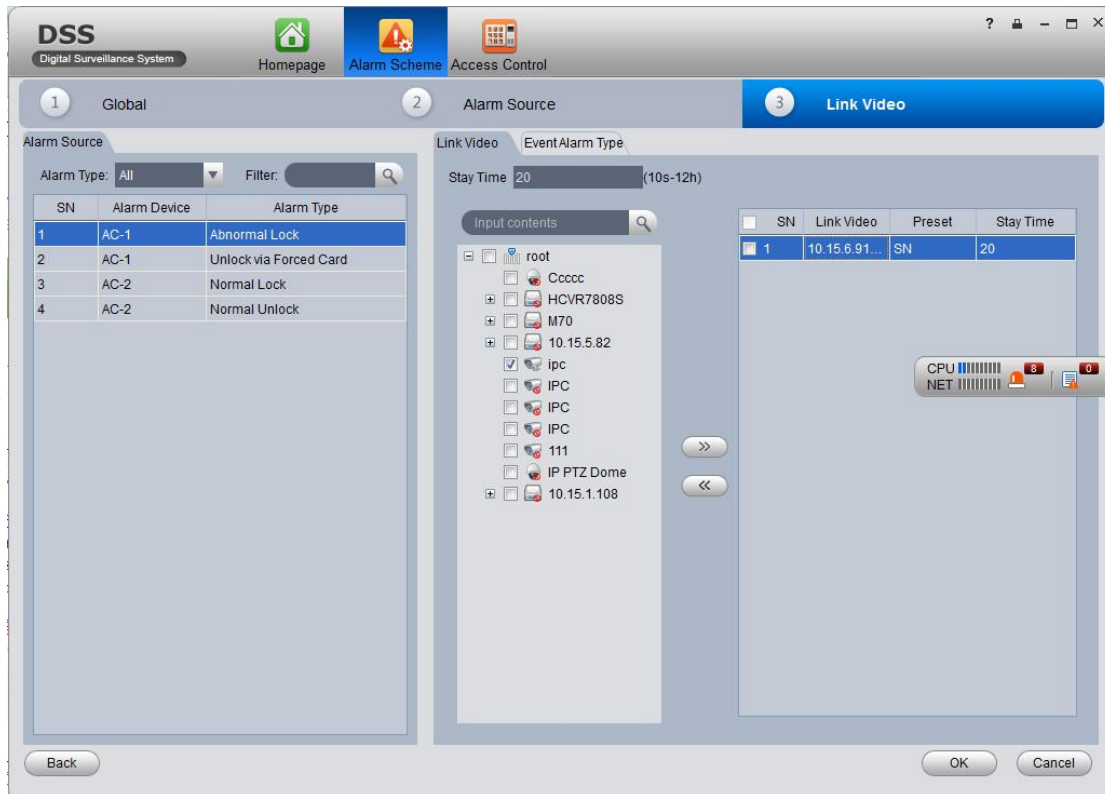
- Video channel
- Device
- Smart channel
- Alarm channel
- Access Control
 - Unlock via Forced Card
 - Unlock via Valid Password
 - Unlock via Invalid Password
 - Unlock via Forced Password
 - Unlock via Valid Fingerprint
 - Unlock via Invalid Fingerprint
 - Unlock via Forced Fingerprint (selected)
 - Valid Swipe
 - Invalid Swipe
 - Door Sensor Alarm
 - Abnormal Unlock
 - Abnormal Lock
 - Normal Lock
 - Normal Unlock
 - Overtime Level 1
 - Overtime Level 2
 - Overtime Level 3
 - Overtime Level 4
 - Overtime Level 5
- DynamicEnvironment channel

Alarm Type: All

SN	Alarm Device	Alarm Type
1	AC_1	Abnormal Lock
2	AC_1	Unlock via Forced Card
3	AC_2	Normal Lock
4	AC_2	Normal Unlock

Back Next OK Cancel

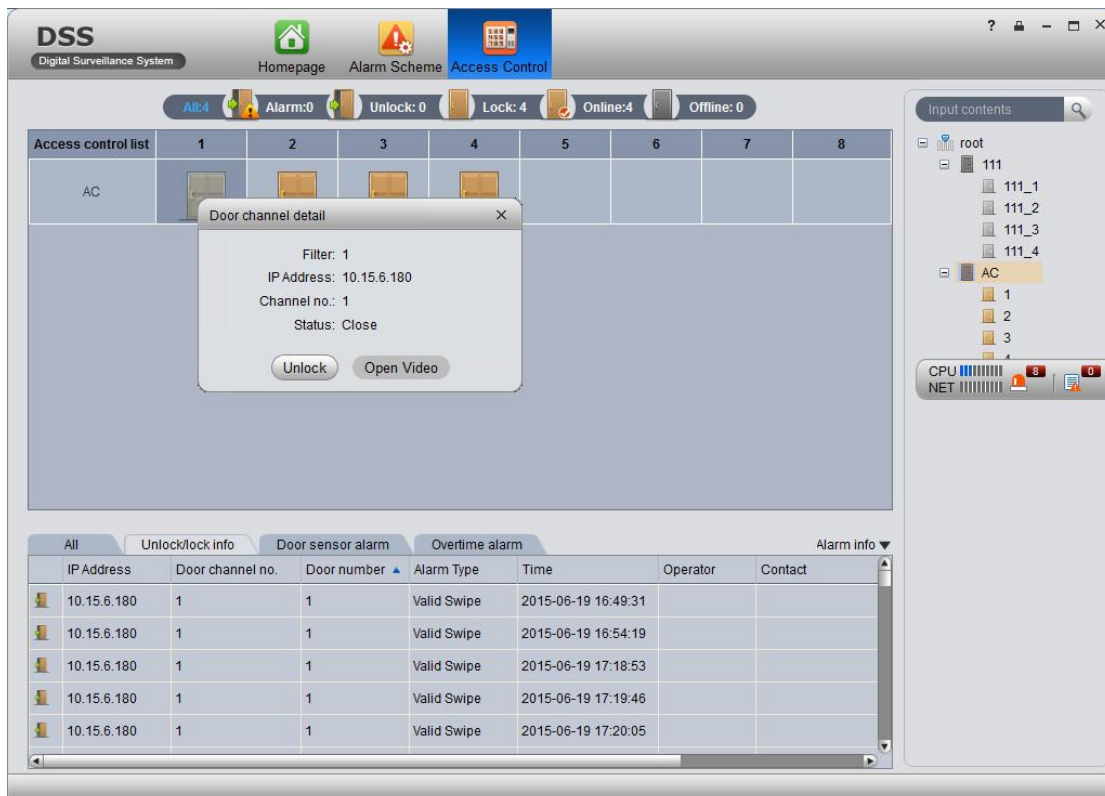
In alarm scheme module, set alarm link video.



Enable access control, client auto pop up linked alarm video.

2.7.6 Access Controller Remote Control

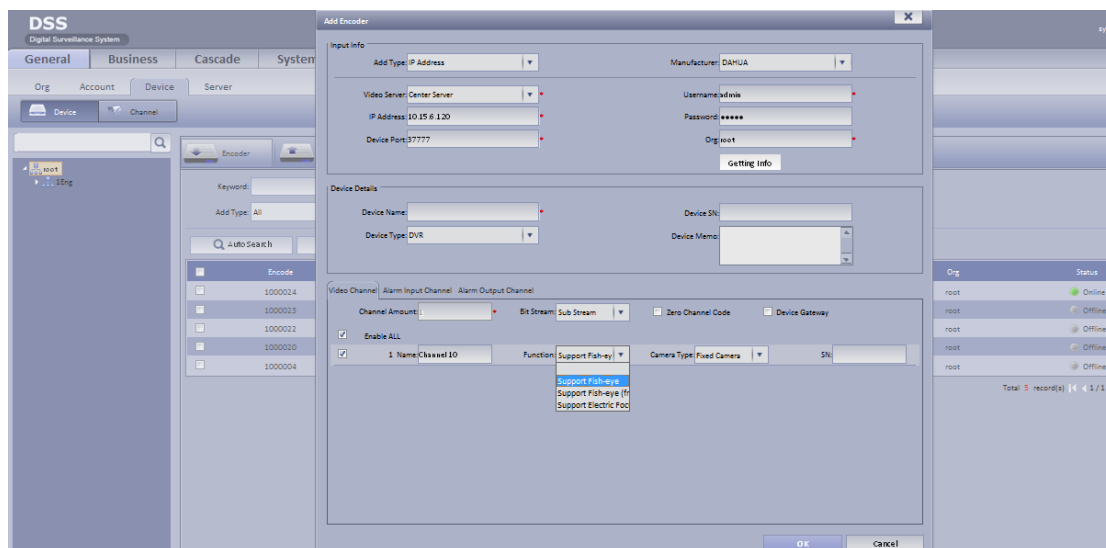
Mo remotely unlock and lock door, and open bound video.



2.8 Fisheye Device Support

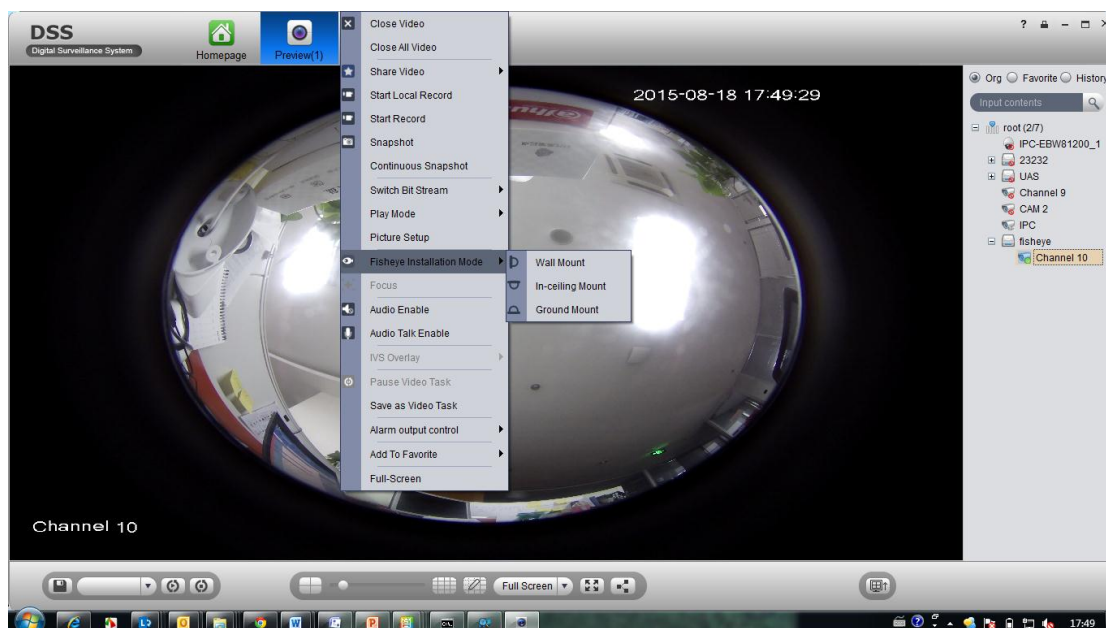
2.8.1 Add Fisheye Device

When add, Function need to select fisheye.



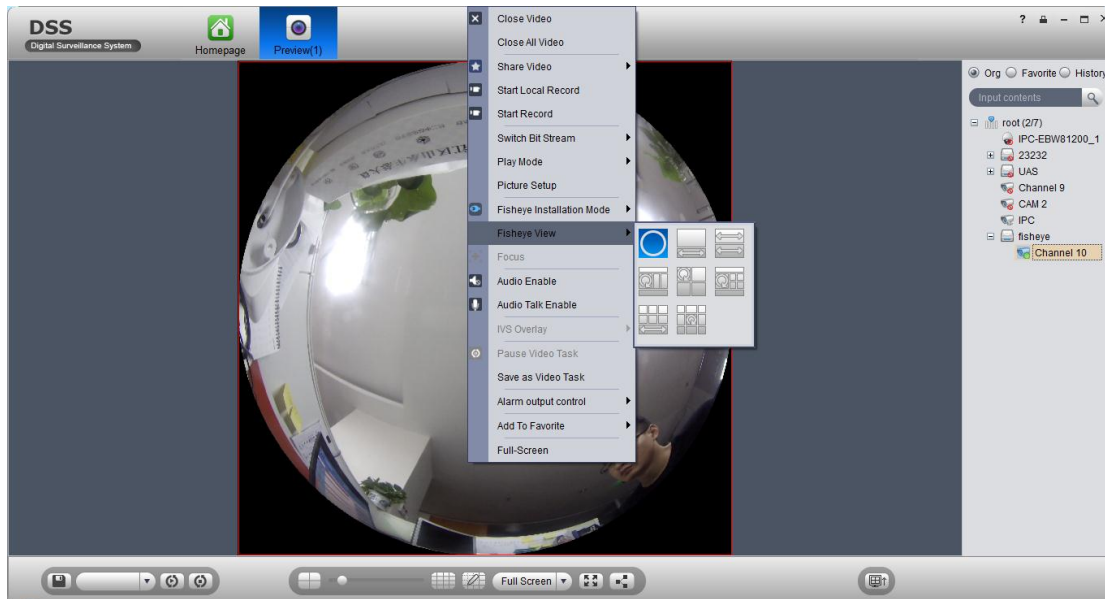
2.8.2 Fisheye Installation Mode Setup

In platform client, select live preview module, select device supporting fisheye function, in video interface right click to set fisheye installation mode.



2.8.3 Fisheye View Mode Setup

And select view mode.



2.8.4 Fisheye Video Correction

In fisheye view PTZ mode, you can click correction function at the lower-right.



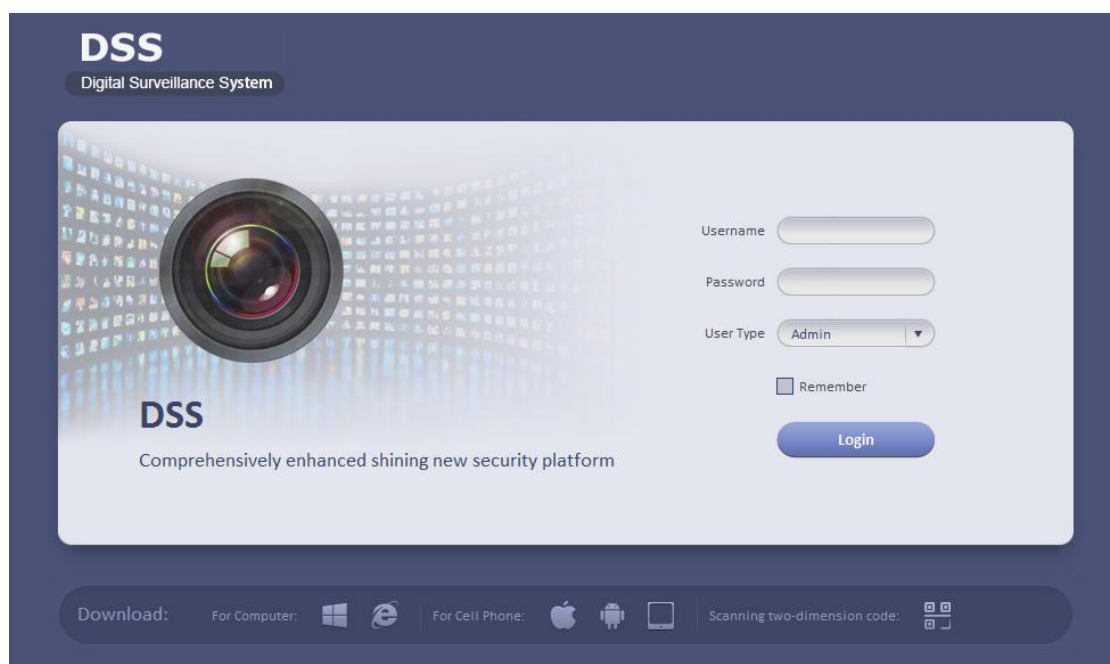
2.9 Intelligent Application

2.9.1 General Intelligent

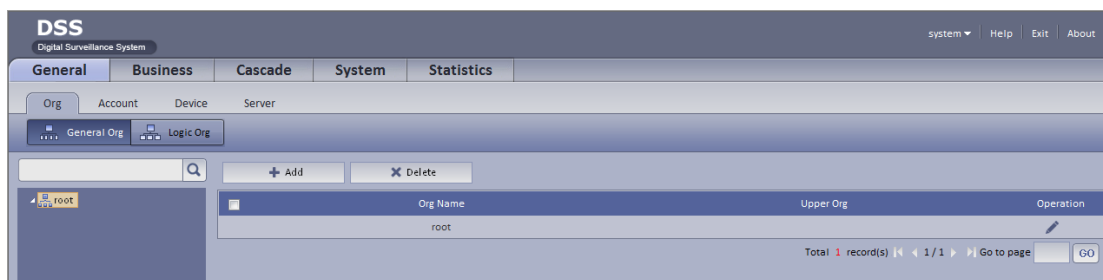
For general intelligent (tripwire, cross warning zone, people count, intelligent tracking), the recommended scheme is the DSS platform direct management over front-end camera with intelligent function.

2.9.1.1 Add Intelligent Device

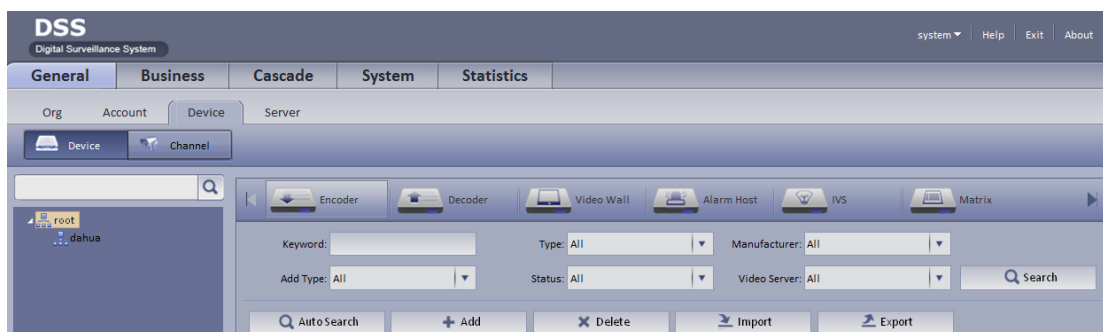
Step 1: Input the IP address of DSS in Internet Explorer and press Enter.



Step 2: Input username and password, select user type, then press Login.



Step 3: Open the manager interface, select General>Device>Device>Encoder.



Step 4: Click , system displays Add Encoder box.

Add Encoder

Input Info

Add Type: IP Address Manufacturer: DAHUA

Video Server: Center Server Username: admin

IP Address: Password: ●●●●

Device Port: 37777 Org: root

Getting Info

Device Details

Device Name: Device SN: Device Memo:

Device Type: DVR

Video Channel Alarm Input Channel Alarm Output Channel

Channel Amount: Bit Stream: Sub Stream ☐ Zero Channel Code ☐ Device Gateway

OK **Cancel**

Step 5: Set the Input Info, input Device Name, and select smart IPC in Device Type. Click Getting Info,

System will automatically get info of video channel, alarm input channel and alarm output channel.

Add Encoder

Input Info

Add Type: IP Address Manufacturer: DAHUA

Video Server: Center Server Username: admin

IP Address: 10.15.6.104 Password: ●●●●●●●●

Device Port: 37777 Org: root

Getting Info

Device Details

Device Name: Smart IPC8281 Device SN:

Device Type: Smart IPC Device Memo:

Video Channel Alarm Input Channel Alarm Output Channel

Channel Amount: 1 Bit Stream: Support Third S Device Gateway

☒ Enable ALL

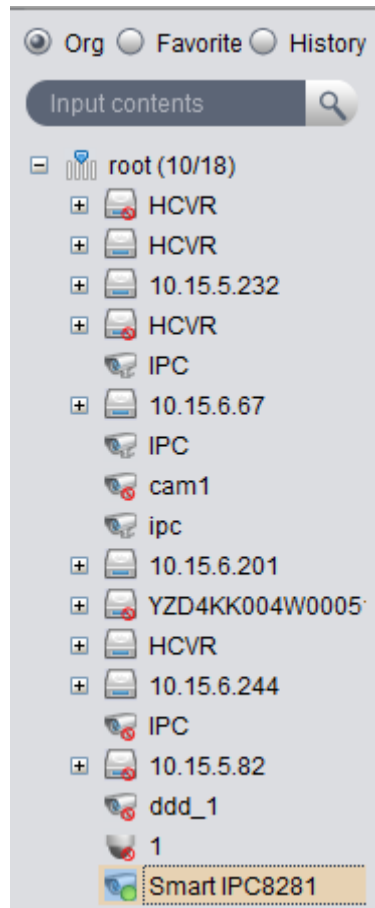
<input checked="" type="checkbox"/>	1 Name: IPC	Function: Support Electri	Camera Type: Fixed Camera
-------------------------------------	-------------	---------------------------	---------------------------

OK Cancel

Click OK as finishing adding encoder.

Step 5: Smart IPC Configuration

- You can right click smart IPC on the client device tree, choose SmartIPC Config to enter the smart IPC config WEB page, where you can set intelligent rules on IPC.



- Or you can go to device WEB page via config button in Manager device list.

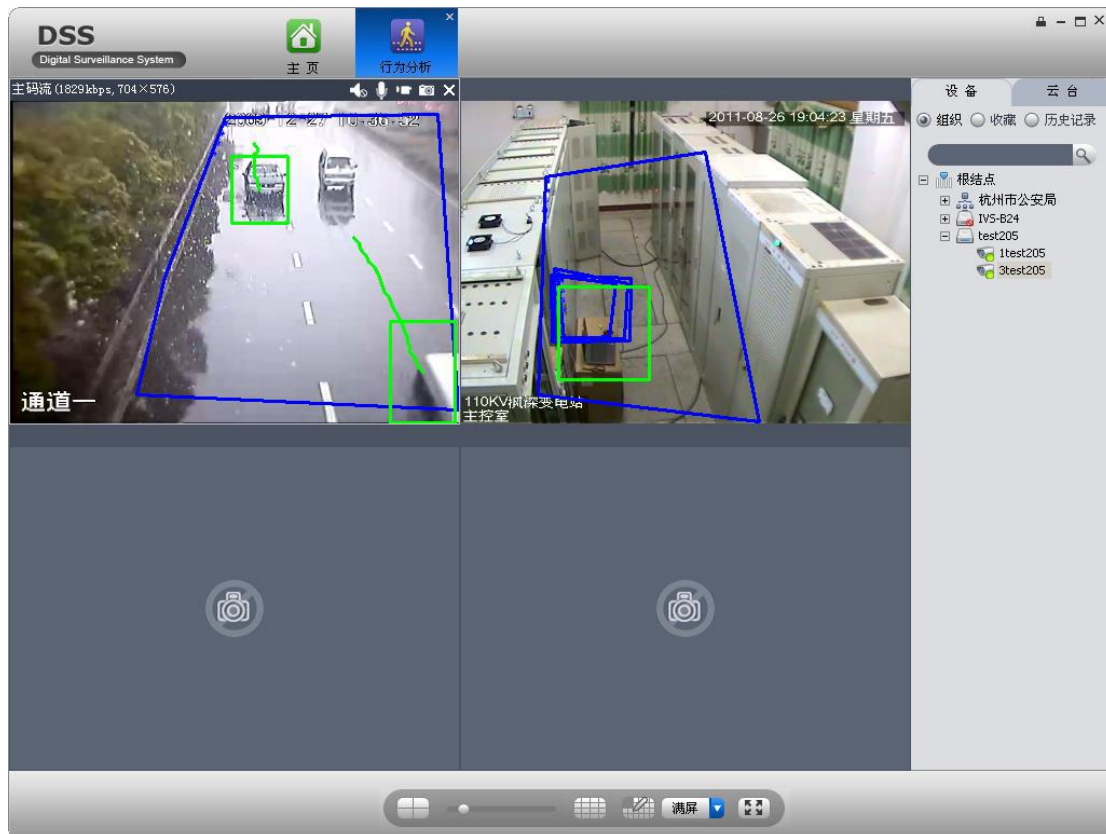
	Encode	IP/Domain	Video Server	Device Name	Type	Org	Status	Operation
	1000009	10.15.6.215	Center Server	NVS	NVS	root	Online	Edit Delete Setup
	1000008	10.15.5.102	Center Server	10.15.5.102	NVR	root	Online	Edit Delete Setup
	1000006	10.15.5.108	Center Server	NVR	NVR	root	Online	Edit Delete Setup

2.9.1.2 Intelligent Alarm Config

Refer to Ch 2.3.

2.9.1.3 Intelligent Application

- Behavior analysis, including tripwire, Intrusion, Object Abandoned and etc.



- People Count

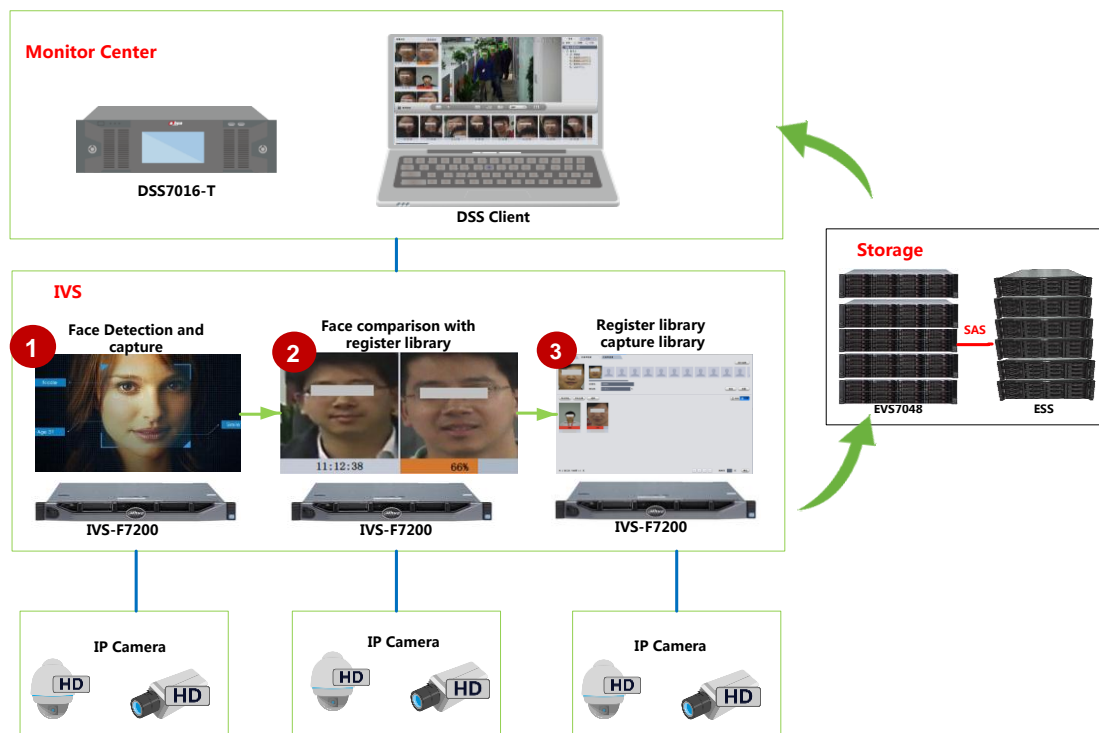


Note : display people count in the upper-left.

2.9.2 Face Recognition

For face recognition, we recommend to use IVS-F7200 , IVS-F7200 can achieve face detection, face comparison and database.

2.9.2.1 System Framework



IVS-F7200 related face recognition records are stored on EVS. Client query the alarm record from EVS.

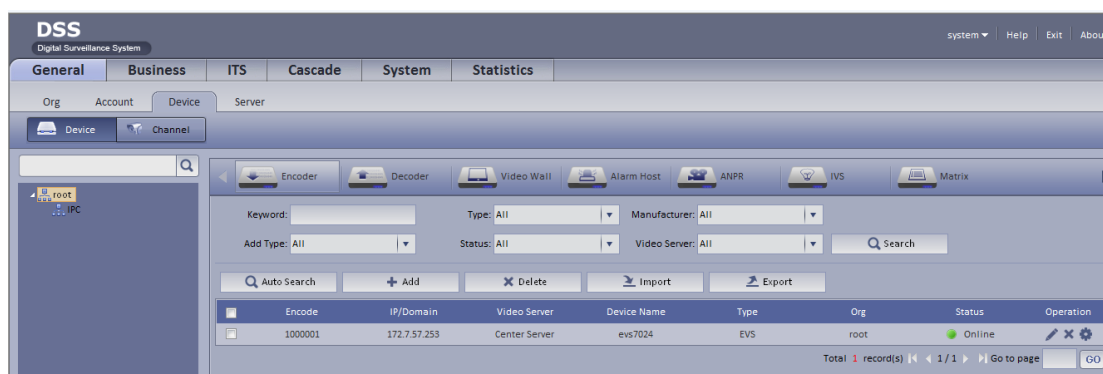
2.9.2.2 IVS-F7200 Config

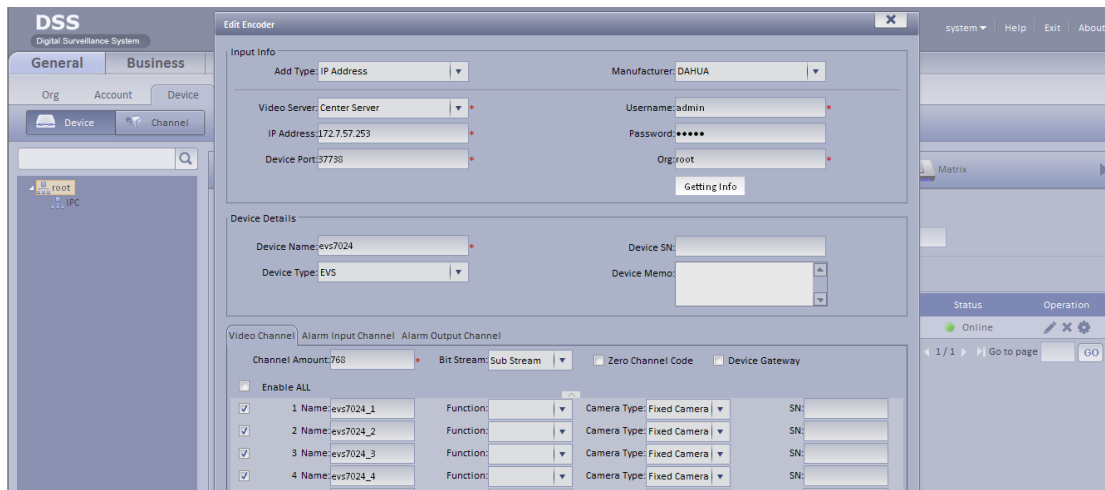
Refer to IVS-F7200 manual.

2.9.2.3 Storage Config

In system framework, EVS deploys as front storage, so need to manually configure.

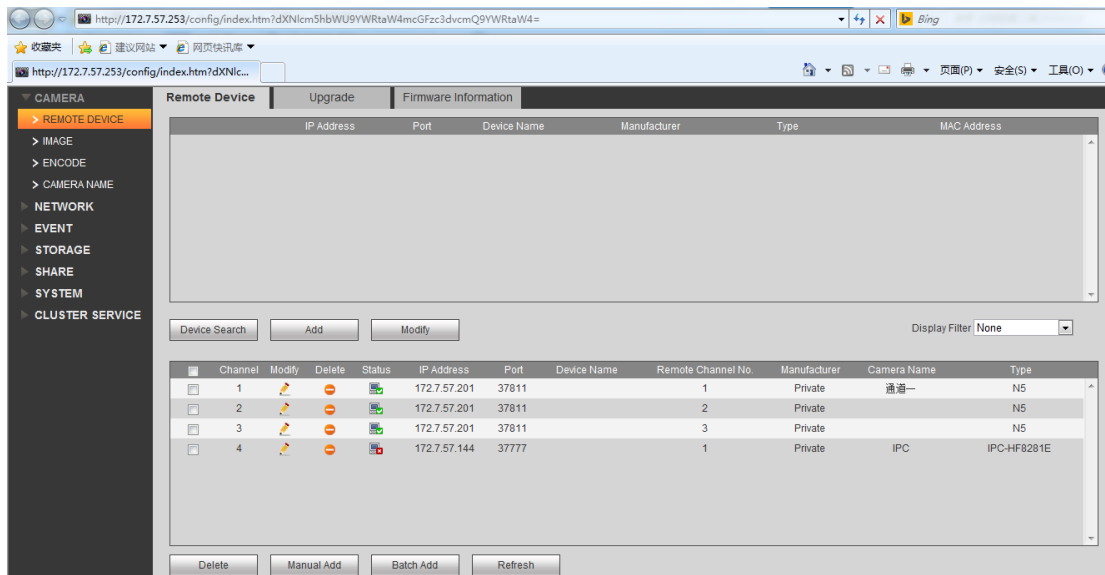
Step 1 : Add EVS





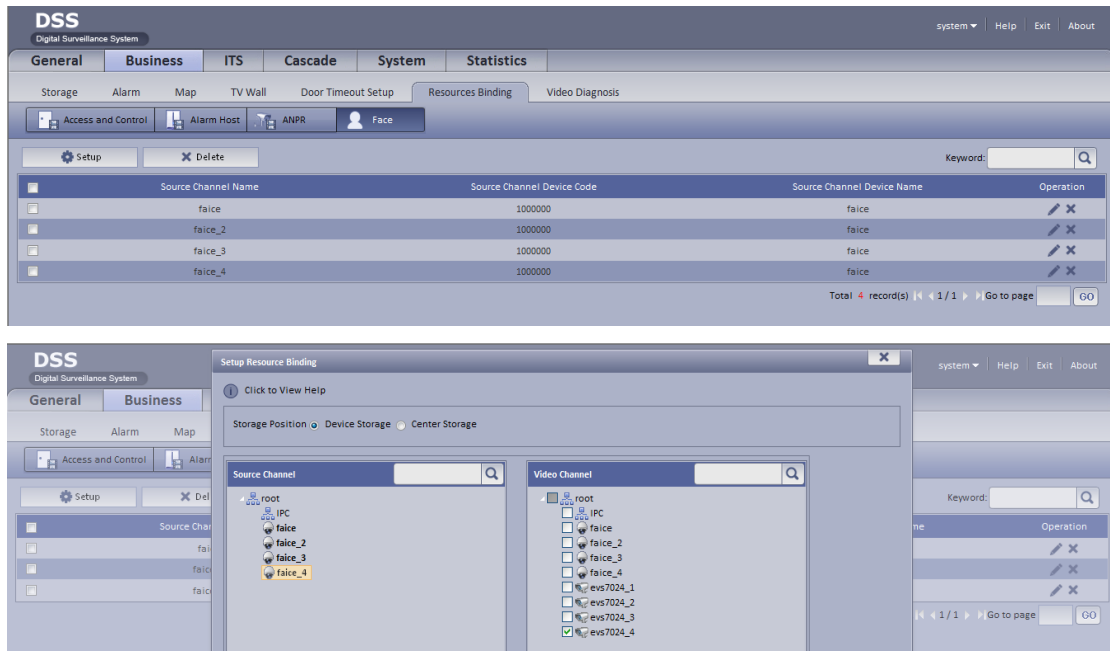
Step 2: Configure EVS remote channel.

Login EVS web, Configure remote device. Make the IVS alarm records storage in EVS.



Step 3 : Binding EVS channel and IVS channel

EVS is as front-end storage in framework, so platform does not know where IVS record is, need to manually bind (future support auto method)



2.9.2.4 Client Business

1. Enter IVS-F interface and select IVSF Monitor Tab, it will show real time video and show the face picture on the bottom of interface.



2. Double click the picture, it will pop-up register add interface, which can add the picture to register library. When this person appear next time , system will produce an alarm info in alarmsearch tab.

Register add

Detail Info

Name: 144 *

Sex: Man

Birth(Y/M): 1970/1/1

Device: faice

City:

ID Type: Identity Card

ID Num: 142 *

Face Lib: Black List

Reg Level: 1

☐ Continue Add

Save Cancel



3. In Register Search Tab, you can search all the face picture which store in register library, also you can import one designated face picture to search if this face is stored in library or not.

DSS
Digital Surveillance System

Homepage IVS-F

IVSMonitor RegisterSearch HistorySearch AlarmSearch

For select

Import Image

Name: Device: faice Sex: Unlimited Register Level: Unlimited

Similarity: 70.0 (Default)

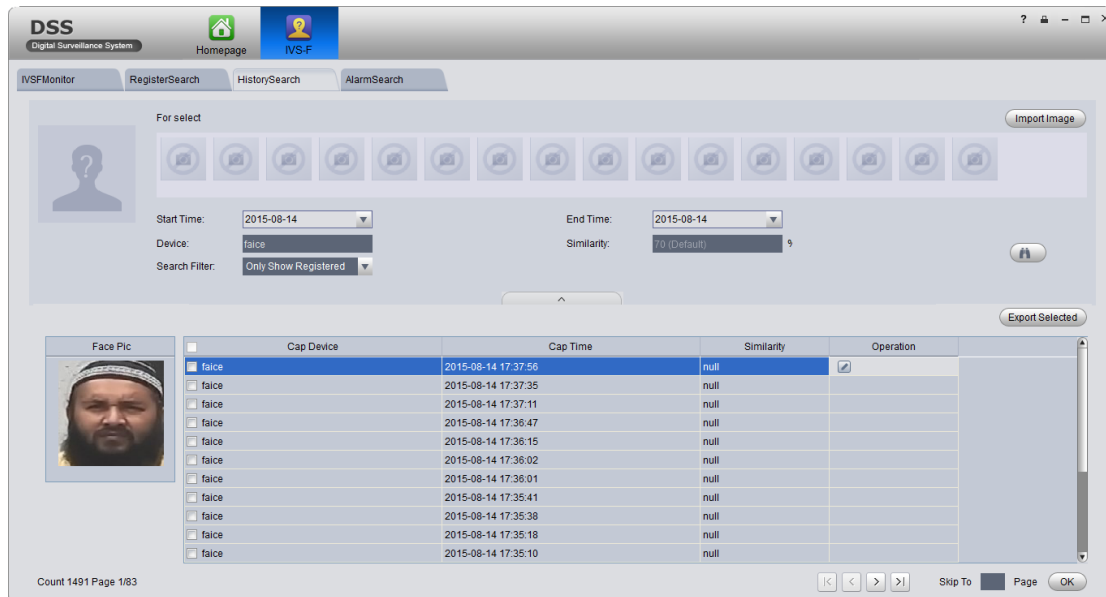
Add Delete Template Download Batch Import Export Selected

Name	Similarity	Sex	Birth	Device	City	ID Type	ID Num	Operation
abcde	null	Woman	2015-08-12	faice	Unknown	ID	20150812092038825	
fghik	null	Woman	2015-08-12	faice	Unknown	ID	20150812092039514	
poluy	null	Woman	2015-08-12	faice	Unknown	ID	20150812092039937	
qwerr	null	Woman	2015-08-12	faice	Unknown	ID	20150812092040483	
abcde	null	Woman	2015-08-12	faice	Unknown	ID	20150812094124982	
fghik	null	Woman	2015-08-12	faice	Unknown	ID	20150812094125481	
ghjkl	null	Woman	2015-08-12	faice	Unknown	ID	20150812094125931	
poluy	null	Woman	2015-08-12	faice	Unknown	ID	20150812094126433	
qwerr	null	Woman	2015-08-12	faice	Unknown	ID	20150812094126978	
wdfgh	null	Woman	2015-08-12	faice	Unknown	ID	20150812094127445	
yhgjk	null	Woman	2015-08-12	faice	Unknown	ID	20150812094127915	

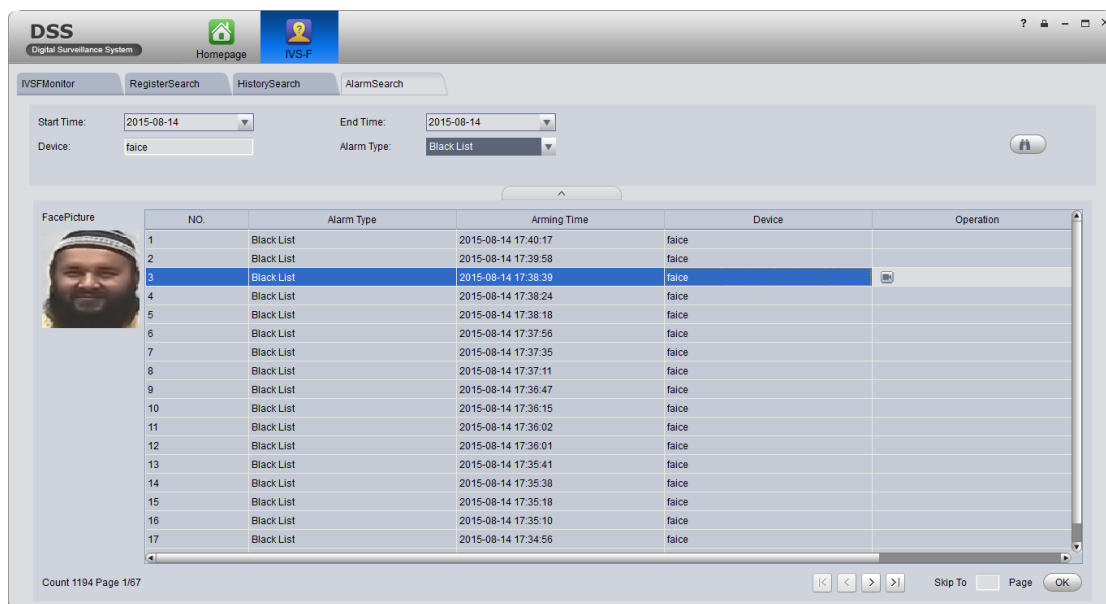
Count 56 Page 1/4

Ship To Page OK

4. In historysearch tab, you can search all picture which appeared in video. Through import image, you can search designated person if appear in designated location and period.



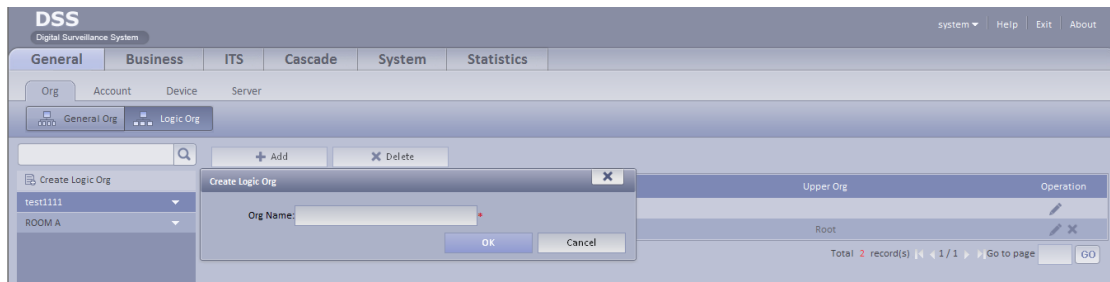
- In alarmsearch tab, it show all the alarm info list, which is produced when matching degree between the capture face and register picture exceed the appointed percentage. you also can play the relative record.



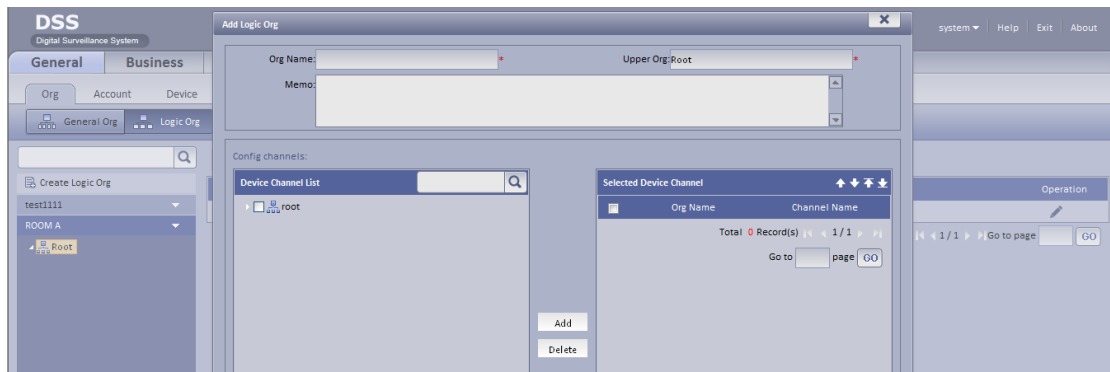
2.10 Logic Organization Structure

Logic organizational structure is different from general device structure, according to his need, user can manage channels of different devices under the same directory for easy management. This function can apply to lower control right, but not limited to device conditions.

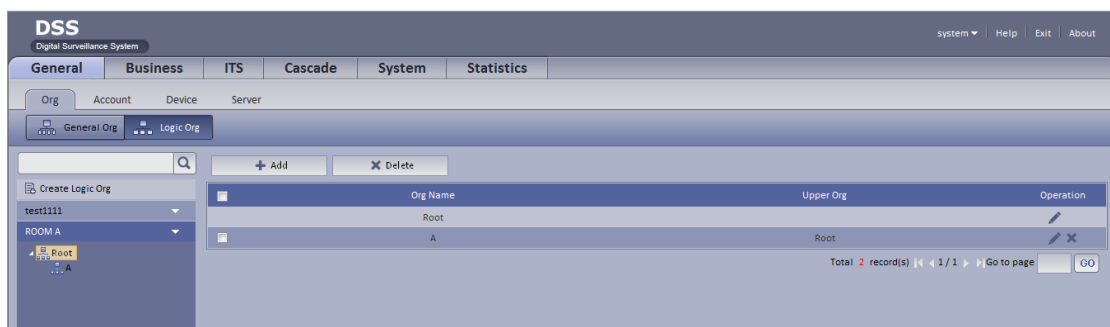
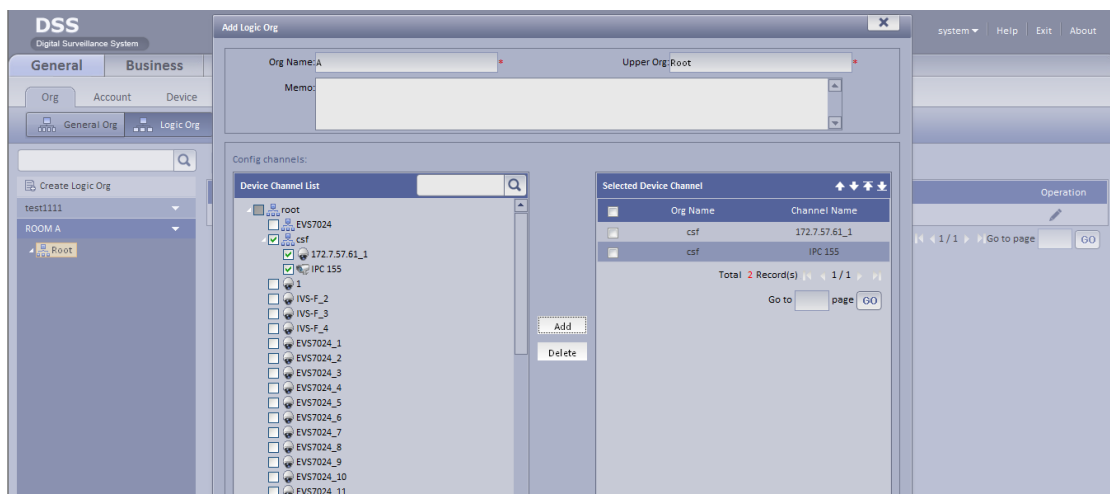
Step 1 : Enter General->Org->Logic Org.



Step 2 : Click Create Logic Org on the left, in pop-up interface enter Org Name, and save. Complete logic organization directory creation.

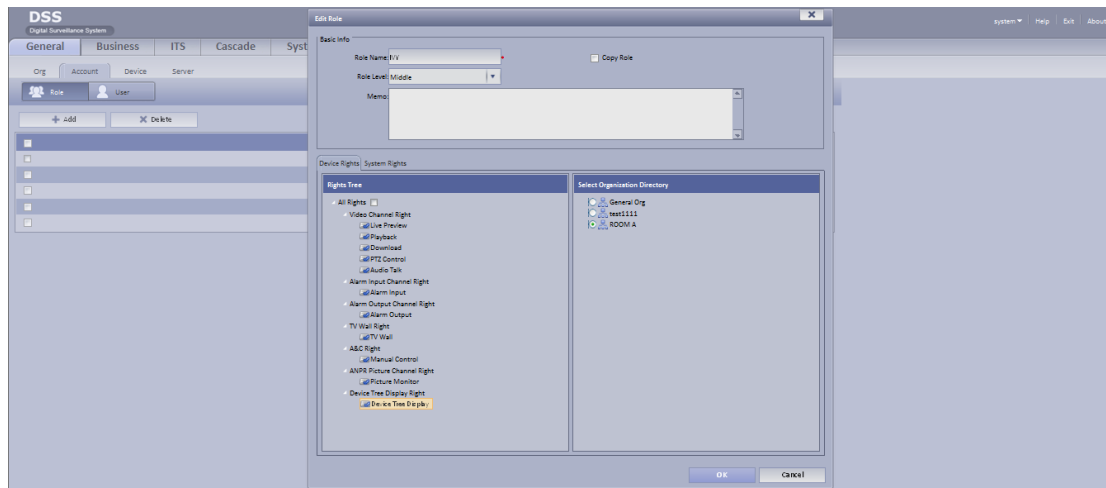


Step 3 : Select organization directory organization, click +Add button , and input related info, select channel to add into current logic organization structure, add content.

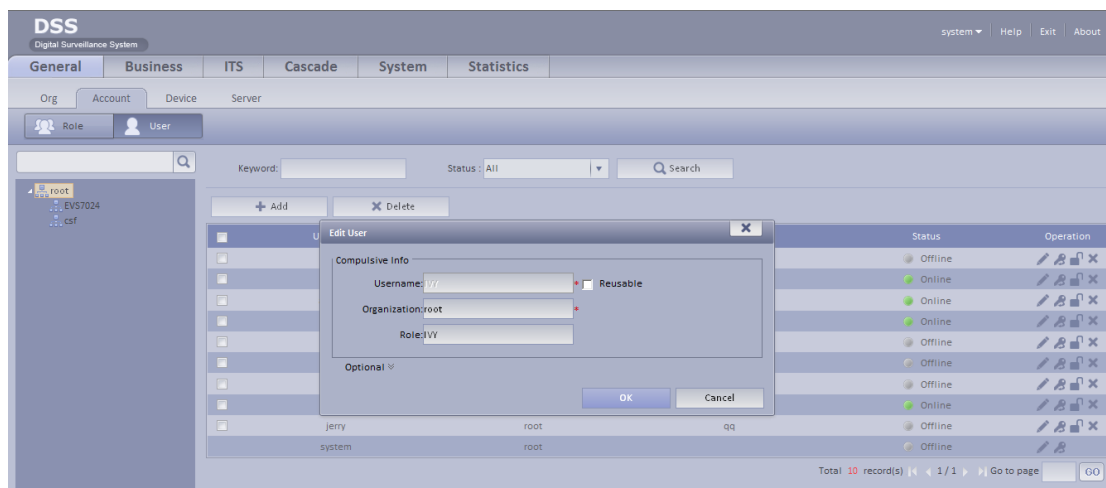


Step 4 : In General->Account->Role, add role , in Edit Role interface Device Rights tab, select Device Tree Display Right column , on the right, Select Organization Directory to display the logic organizational

directory just created, check corresponding directory and save.



Step 5 : Create user, role is belong to the just created role.



Step 6 : After login client using the corresponding account, in resource list only display logic organizational directory with allocated rights.

2.11 DSS Device Sync Time

Working Principle:

DSS server' s DMS server send sync time command to front-end device via network SDK, after front device sync time, will return DMS server to info channel and sync device time to certain time.

Check object to sync time(server, device) , set sync start time and period, click sync time button.

DSS
Digital Surveillance System

General **Business** **Cascade** **System** **Statistics**

Parameters Upload Backup Restore Resource Re-Config

CMS IP Address: 127.0.0.1 LAN Port: 3000 WAN Port:

PCS LAN IP: 127.0.0.1 LAN Port: 3001 WAN Port:

WEB Server LAN IP: 10.15.6.96 LAN Port: 30 WAN IP: WAN Port:

Log Max Save Time: 30 Day(s)

Alarm Info Max Save Time: 30 Day(s)

Sync Setup Server Sync: ☒ Device Sync: ☐ Start Time: 02:00:00 Sync Interval: 2 Hour(s) **Sync Time**

Note : Sync time principle is 7016 via Netsdk to sync device time, so the device does not need to enable NTP server.

2.12 User and Related Rights

2.12.1 Role Management

Step 1: Add role

Click add button

DSS
Digital Surveillance System

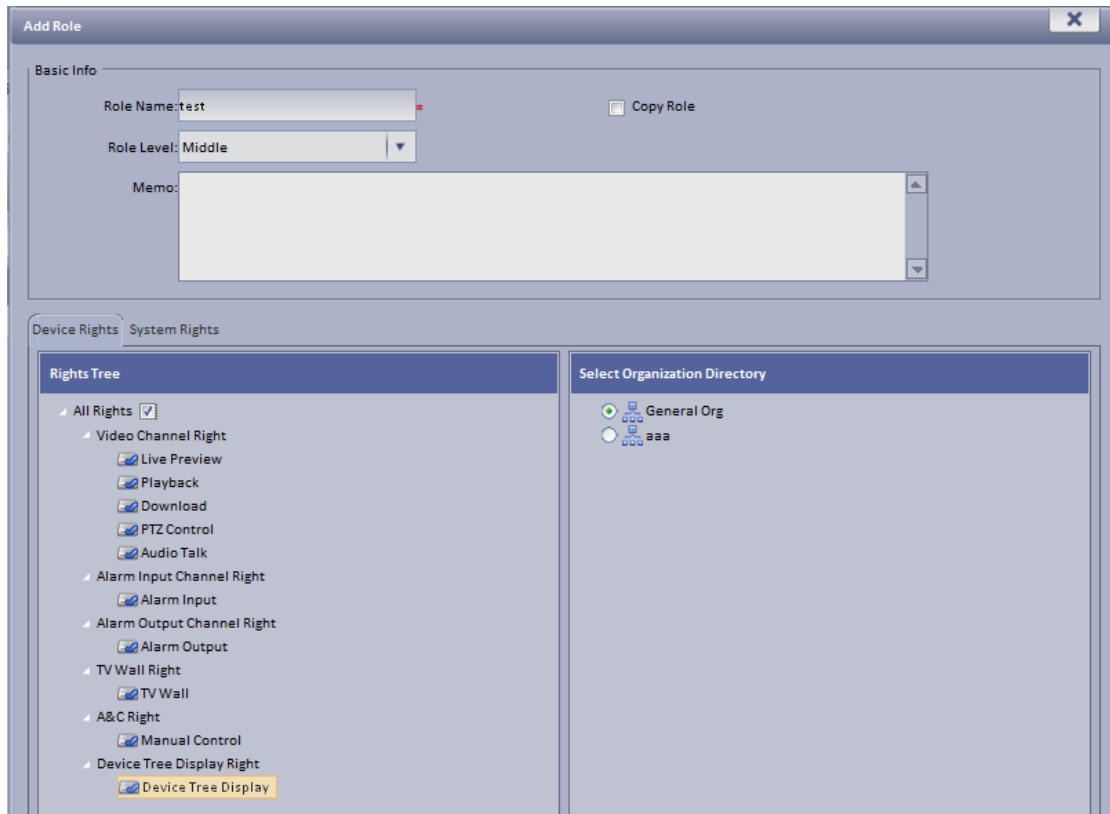
General **Business** **Cascade** **System** **Statistics**

Org Account Device Server

Role **User**

+ Add **X Delete**

Step 2: Check channel to grand corresponding control right.

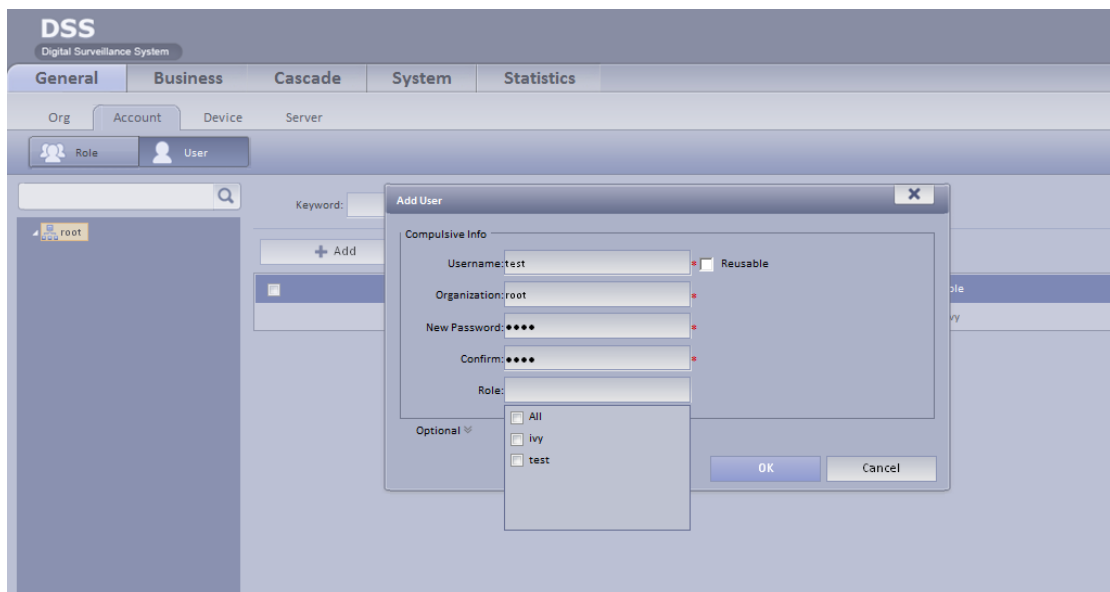


Note : device tree display can only be in one organizational structure at the same time.

2.12.2 User Management

Step 1: Add user

Click add button.



Note : select corresponding right role for user.

2.13 Storage Plan

Login Manager—business config—record management ;

Step 1: Configure time template.

The screenshot shows the 'DSS Digital Surveillance System' interface. The 'Business' tab is selected, and the 'Time Template' sub-tab is active. Below the sub-tabs, there are '+ Add' and 'X Delete' buttons. A table lists existing time templates:

Time Template	Operation
1	[Edit] [Delete]
Weekend Template	[Edit] [Delete]
Business Day Template	[Edit] [Delete]
All-Period Template	[Edit] [Delete]

At the bottom right of the table, it says 'Total 4 record(s)' and '1/1' pages.

The 'Add Time Template' dialog box is open. It has a 'Basic Info' section with 'Template Name: weekend' and a 'Copy' button. The 'Template Details' section has two radio buttons: 'Single Period' (selected) and 'Cycle Period'. Under 'Single Period', there are fields for 'Start Time: 16:00:00' and 'End Time: The same c 19:00:00', with a 'Total of 3 hour(s) 0 second(s)' displayed. The 'Cycle Mode' section has a 'Repeat Time' section with checkboxes for 'Check All', 'Mon', 'Tue', 'Wed', 'Thu', 'Fri', 'Sat', and 'Sun' (all checked). Below this are 'Start Date: 2015-08-19 Wednesday' and 'End Date:' (empty) with a 'Never Stop' checkbox checked. The 'Memo' section contains a text area with the text: 'Begin with 2015-08-19, from the 16:00:00 of each Mon, Tue, Wed, Thu, Fri, Sat, Sun to the 19:00:00 of The same day, never stop.' At the bottom right of the dialog are 'OK' and 'Cancel' buttons.

Step 2: Configure storage plan.

Enter storage plan config interface.

The screenshot shows the 'DSS Digital Surveillance System' interface. The 'Business' tab is selected, and the 'Storage' sub-tab is active. Below the sub-tabs, there are '+ Add' and 'X Delete' buttons. A table lists existing storage plans:

Plan Name	Time Template
normal	1

Add storage plan : check channel to store, input plan name, and select time template and bit stream type,

check enable.

Add Normal plan

The Available Video Channels

Record Plan Setup

All

root

- CAM 3
- CAM 4
- CAM 5
- CAM 6
- CAM 7
- CAM 8
- CAM 9
- CAM 10
- CAM 11
- CAM 12
- CAM 13
- CAM 14
- CAM 15
- CAM 16
- CAM 17
- CAM 18
- CAM 19
- CAM 20
- CAM 21
- CAM 22
- CAM 23
- CAM 24
- CAM 25
- CAM 26
- CAM 27
- CAM 28

Plan Name: 1

Template:

Bit Stream: Main Stream

Enable

Memo

Time Template Details