

User Manual



■ V1.00.000

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11443 XXX 3018-02-30

Welcome

Thank you for using our Digital Surveillance System (DSS) Express!

This user's manual is designed to be a reference tool for operation of your system.

Here you can find detailed operation information about DSS.



Important Safeguards and Warnings

Please read the following safeguards and warnings carefully before using the product in order to avoid damages and losses.

Note:

- Do not expose the device to lampblack, steam or dust. Otherwise it may cause fire or electric shock.
- Do not install the device at position exposed to sunlight or in high temperature. Temperature rise in device may cause fire.
- Do not expose the device to humid environment. Otherwise it may cause fire.
- The device must be installed on solid and flat surface in order to guarantee safety under load and earthquake. Otherwise, it may cause device to fall off or turnover.
- Do not place the device on carpet or quilt.
- Do not block air vent of the device or ventilation around the device. Otherwise, temperature in device will rise and may cause fire.
- Do not place any object on the device.
- Do not disassemble the device without professional instruction.

Warning:

- Please use battery properly to avoid fire, explosion and other dangers.
- Please replace used battery with battery of the same type.
- Do not use power line other than the one specified. Please use it properly. Otherwise, it may cause fire or electric shock.

Special Announcement

- This manual is for reference only.
- 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 for more information.

1 Overview

• Product Positioning

DSS Express is an important surveillance platform product in DSS family (Dahua Security Software), design for medium-small project. DSS Express integrates video, access control, intercom, alarm controller, entrance & exit, facial recognition and etc., combining with front-end device function. DSS Express supports simple, reliable, open and more features which bring user with HD, smart, safe experience. Meantime, DSS Express adopts standard C/S structure, and there are free and premium versions available.

Highlights

- > Standard C/S structure, client integrates config and management function
- > Global logic config page, different users will see different config content
- > Hardware decoding, output more HD videos
- > Find device, quickly add device, quickly manage device
- > Password error-lock user, find back password via security questions, anti-attack
- > https certificate input
- Auto and manual back up data
- Provide platform secondary development SDK docking

2 Before Installation

2.1 Set Server IP Address

- Step 1. Connect server and switch via Ethernet cable.
- Step 2. Click "Start", and select Network, see Figure 2-1.

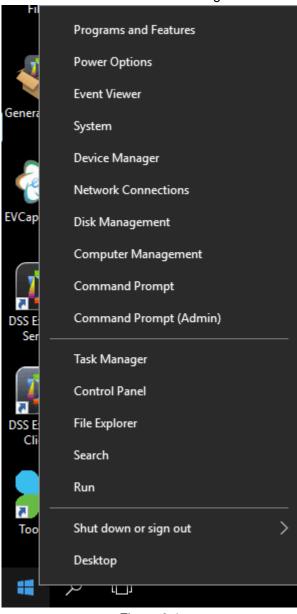


Figure 2-1

Step 3. In-pop up page, select "Change adapter settings", see Figure 2-2.

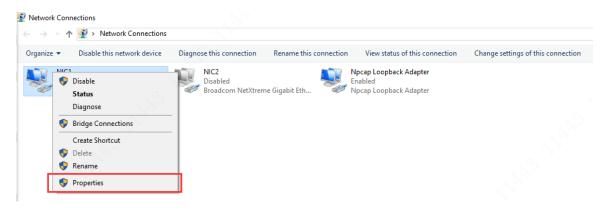


Figure 2-2

Step 4. In Figure 2-3, select corresponding network card to set IP V4 address.

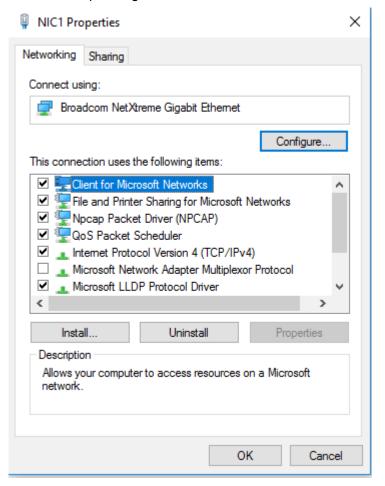


Figure 2-3

2.2 Set Server System Time

Step 1. Click system time at the lower right corner in windows, see Figure 2-4.

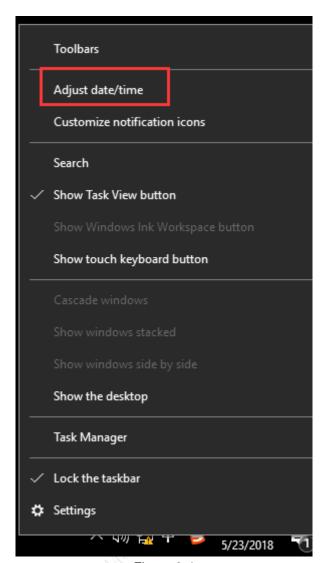


Figure 2-4

Step 2. Set time zone and DST, see in Figure 2-5 .

3



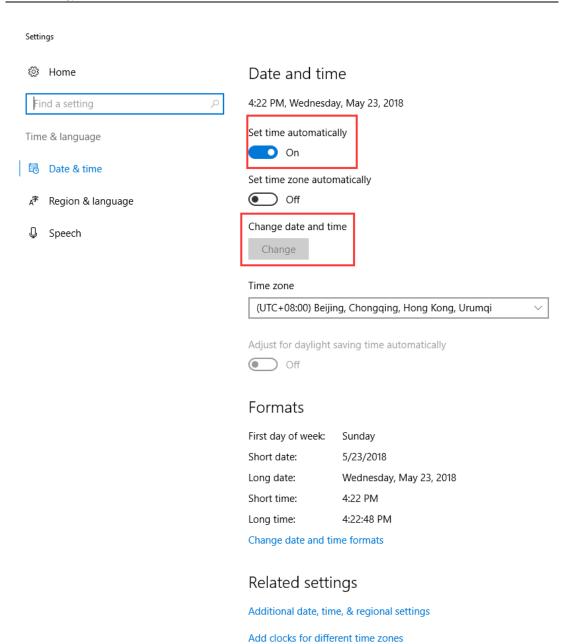


Figure 2-5

3 Install &Run DSS Express

3.1 Server Config Requirement

Server config requirement is in Chart 3-1.

DSS Server Hardware Requirement		
Recommend	CPU: Intel® Xeon® CPU E3-1220 v5 @3.00GHz	
	Memory: 8GB	
	Ethernet card: 1Gps	
	DSS path capacity: 500G and higher	
Low-end	CPU: I3-2120	
	Memory: 8GB	
	Ethernet card: 1Gps	
	DSS path capacity: 200G and higher	

Chart 3-1

3.2 Installation & Run

Step 1. Double click to install and enter installation mode, see Figure 3-1.



Figure 3-1

Step 2. Please check I have read and agree the DSS agreement, see Figure 3-2. Click "Next" button to enter next step.

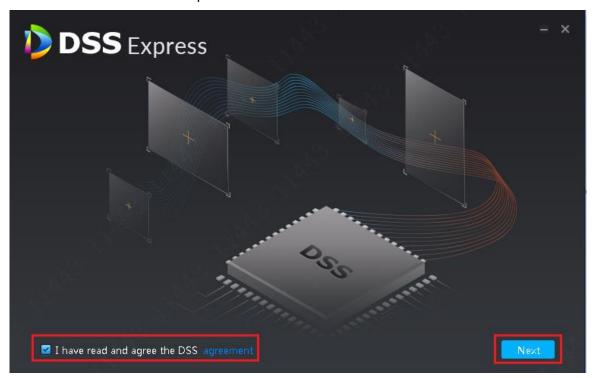


Figure 3-2

Step 3. Based on network setup, determine if you will change Https port, default port is 443, see Figure 3-3, If you do not change it or have completed change, click "Next" button to enter next step.



Figure 3-3

Step 4. Server default installation path is C:\DSS Express\Server, the system will auto detects free space in this path, see Figure 3-4. If want to change path, click "Browse" button to select other installation path, and then click "Install" button to install.



Figure 3-4

Note:

• If "Install "button is grey, please check if installation directory is correct, or if free space in this directory is enough for the system.

Step 5. Progress is in Figure 3-5. The whole process needs about 5-10 minutes, please wait.



Figure 3-5

Step 6. Installation is complete, click "Run "button to open server, see Figure 3-6.

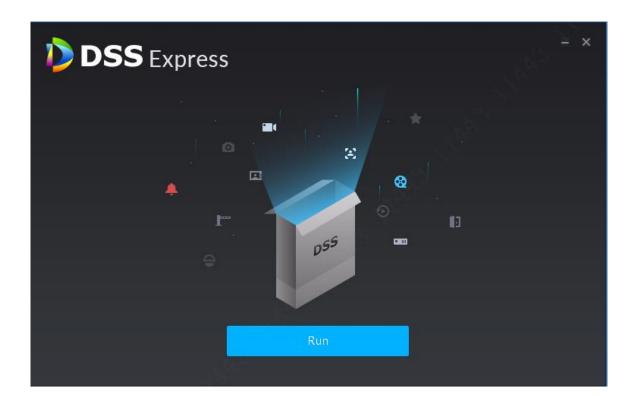


Figure 3-6

3.3 Change Initial Password

Step 1. After installation is complete, you must download and log in DSS Express Client to change system initial password. Client PC config requires:

DSS Client PC Hardware Requirement		
Recommend	CPU:i5-6500	
	Main Frequency:3.20GHz	
	Memory:8GB	
	Graphics Card:Intel® HD Graphics 530	
	Ethernet Card:1Gbps	
	DSS Client Directory Space:100GB	
Low-end	CPU:i3-2120	
	Main Frequency:3.20GHz	
	Memory:4GB	
	Graphics Card:Intel® HD Sandbridge Desktop Gra	
	Ethernet Card:1Gbps	
	DSS Client Directory Space:50GB	

Chart 3-2

Step 2. To download client, in Internet Explorer, enter DSS Express server and IP address to enter Manager, and then click Client corresponding button to download, see Figure 3-7.



Figure 3-7
Step 3. double click the client installation file to install, see Figure 3-8.



Figure 3-8

Step 4. Check I have read and agree the agreement, see Figure 3-9. Then click "Next" button to go to next.



Figure 3-9

Step 5. System default installation path is in Figure 3-10. If you want to change installation directory, click "Browse" button to change. After you select a path, click "Install "button to start installation.

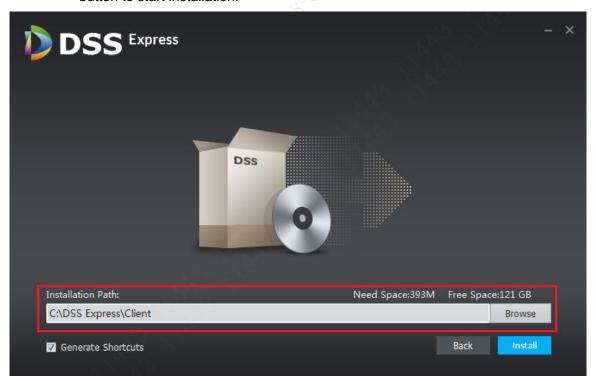


Figure 3-10

Note:

• If "Install "button is grey, please check if installation directory is correct, or if free space in the directory is enough for system.

Step 6. Progress is in Figure 3-11, and this process needs about 1-3 minutes, please wait.

10



Figure 3-11
Step 7. Installation is complete in Figure 3-12, click "Start now "button to run the client.

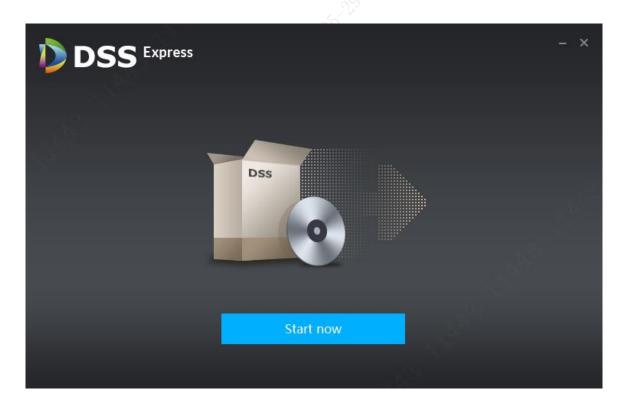


Figure 3-12

Step 8. Client login page is in Figure 3-13. Please click to expand server config page.

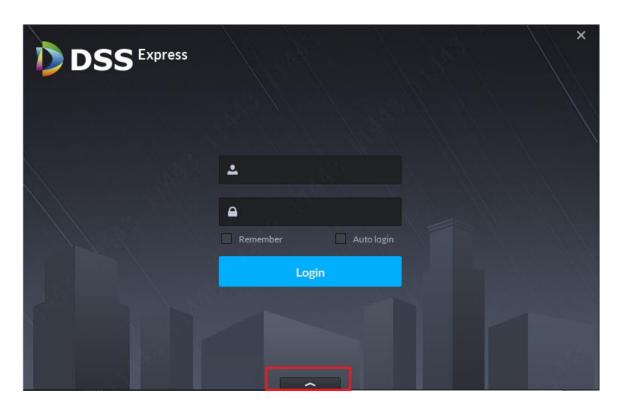


Figure 3-13

Step 9. In this page, fill in DSS Express server IP, port (default is 80), username (default is system), password (initial password is 123456), click "Login "button to log in, see Figure 3-14.

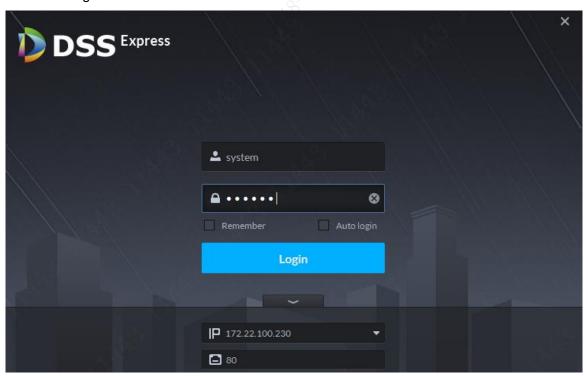


Figure 3-14

Step 10. When initial password is not changed, you log in the client will see Password setup page, see Figure 3-15. Enter new administrator password, and click "Next" button to enter security question setup.

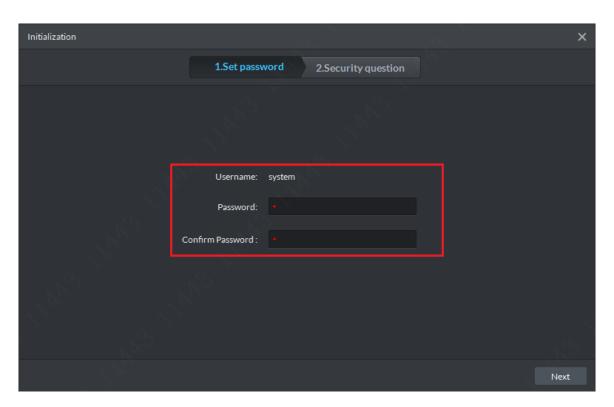


Figure 3-15

Step 11. In Figure 3-16, complete security questions accordingly, clicklock" button to complete initial password change.

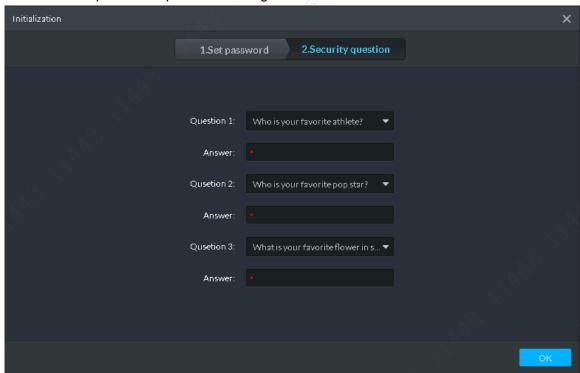


Figure 3-16

Step 12. Click "OK" button and system completes change and auto log in client homepage, see Figure 3-17.

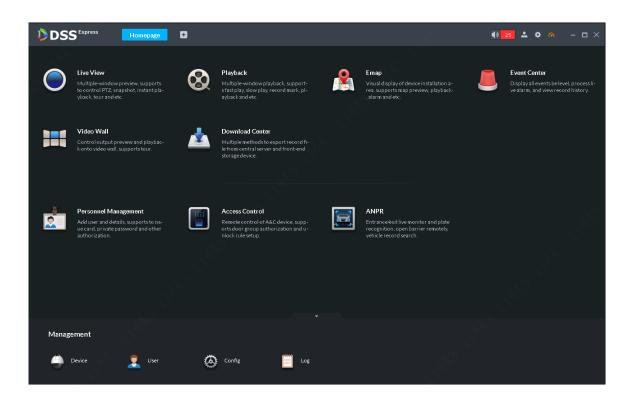


Figure 3-17

3.4 DSS Server Login

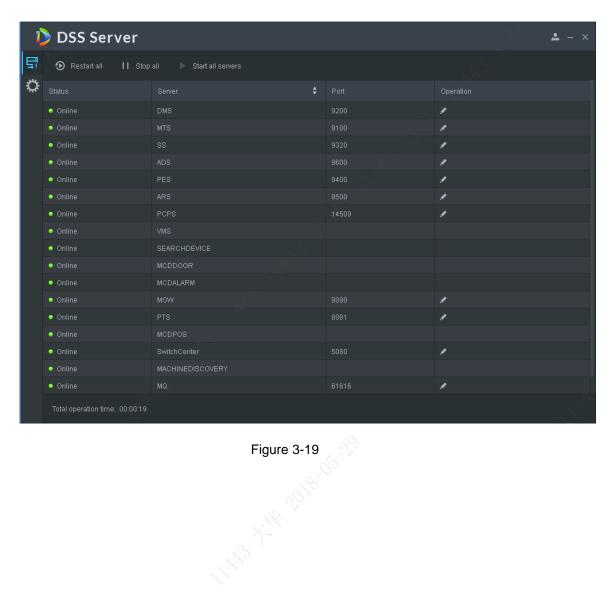
Step 1. On desktop of DSS Express server, double click DSS Server icon to log in DSS Express config system. Follow the instructions to enter username and password, and click "Login "button to log in DSS Server system, see Figure 3-18.



Figure 3-18

Step 2. View if server is online or not, its normal status is in Figure 3-19.





4.1 Manually Add

Log in DSS Express Client, and enter device module in management bar to add, edit and delete device. Steps:

Step 1. In Express Client homepage, click "Device "module to enter Device, see Figure 4-1.

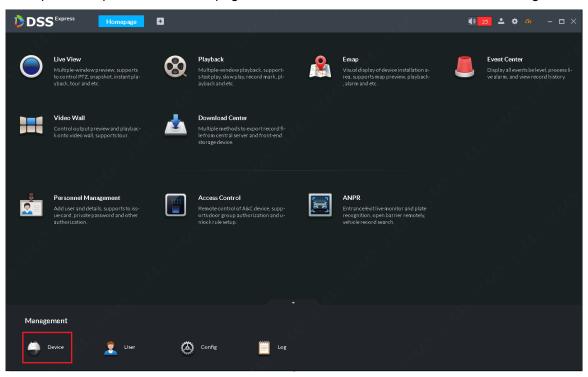


Figure 4-1

Step 2. Device management page is in Figure 4-2, click "Add" button to manually add.

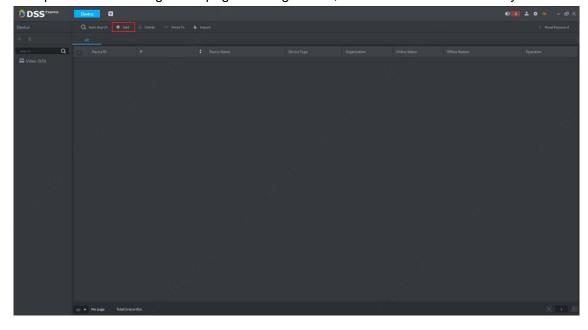


Figure 4-2

Step 3. Add device page is in Figure 4-3, first select add device method to be IP address, and device category is "Encode",

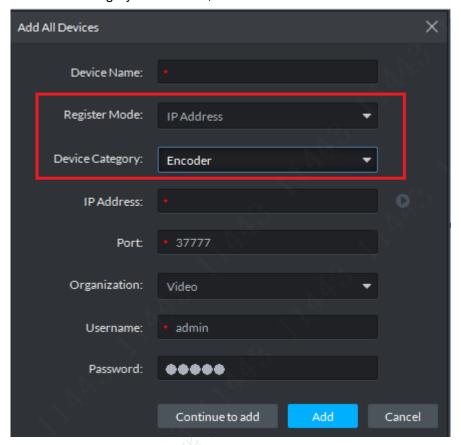


Figure 4-3

Step 4. According to page requirement, fill in device info, include: device name, IP address, port no. (default is 37777), username. If you have not created organization node, then the device is under node Video by default. See Figure 4-4. Confirm the info all be right, click"Add" button to add. Device network communication is properly working, then server will auto get device type and channel info.



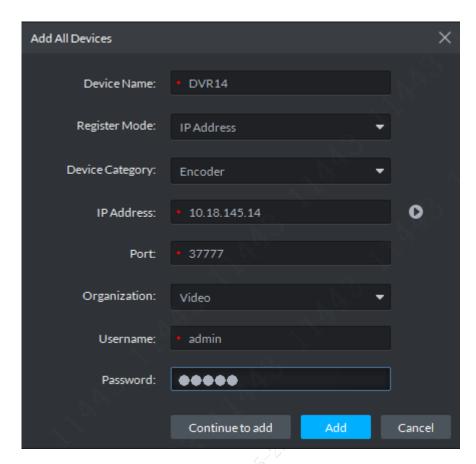


Figure 4-4

Step 5. After device is added, you can see device list as in Figure 4-5. You can edit, device and set online device.

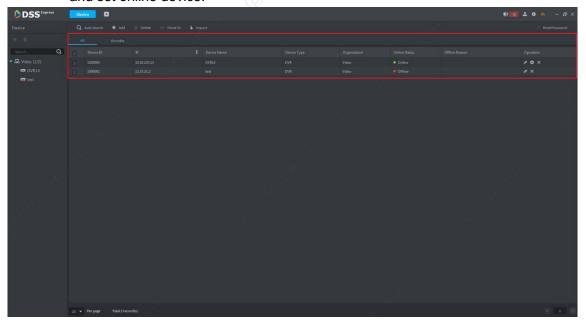


Figure 4-5

Step 6. If the system gotten device type is incorrect or needs to be changed, please click Edit button of corresponding device, see Figure 4-6.



Figure 4-6

Step 7. Device edit page is in Figure 4-7. A user can modify corresponding info accordingly. Device category cannot be changed here, but you can change device type. See Figure 4-7 and Figure 4-8.

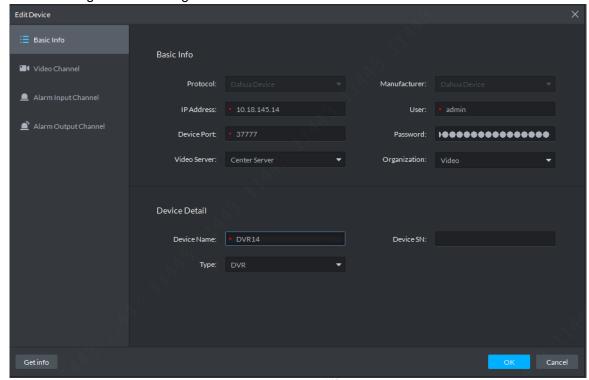


Figure 4-7

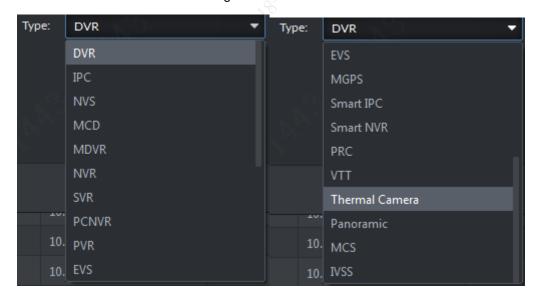


Figure 4-8

4.2 Auto Add

4.2.1 Auto Search Encoder

Auto search function allows user to search all devices in DSS Express server network, or all users in network segment set by user. A user can add device he/she wants. Steps:

Step 1. In Device page, click "Auto Search "button to enter auto search page, see Figure 4-9.

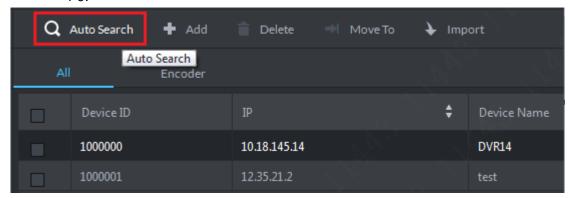


Figure 4-9

Step 2. Default search page and results are in Figure 4-10.

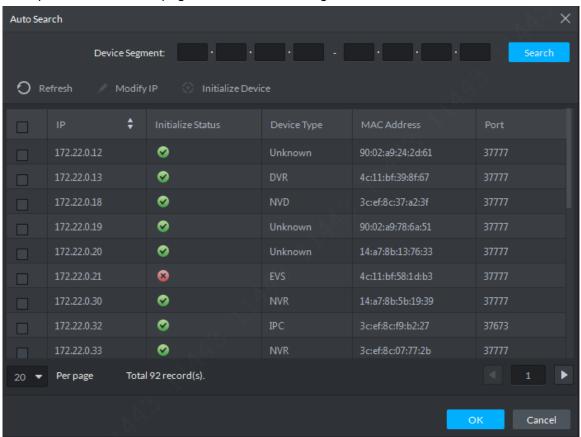


Figure 4-10

Step 3. In search result, a user can select one, select multiple or select all (current page), see Figure 4-11. Confirm and clicklock" button to add device into DSS Express platform.

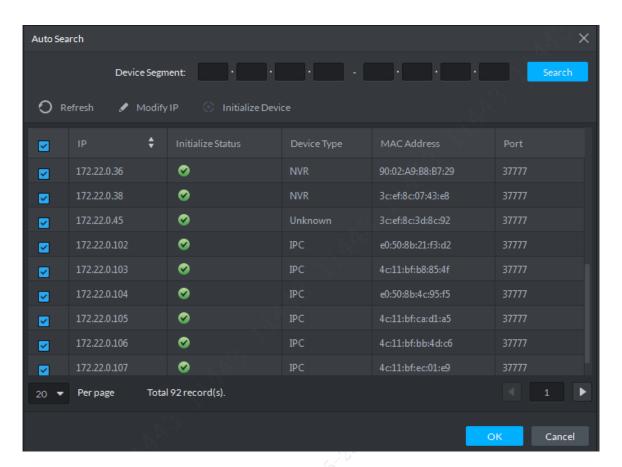


Figure 4-11

Step 4. According to system prompt, select server, organization, and fill username and password to batch log in device. See Figure 4-12. Confirm info and click "OK" button.

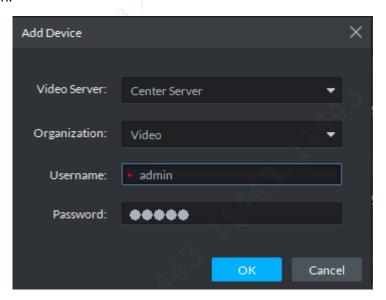


Figure 4-12

Step 5. After you add device, see Figure 4-13.

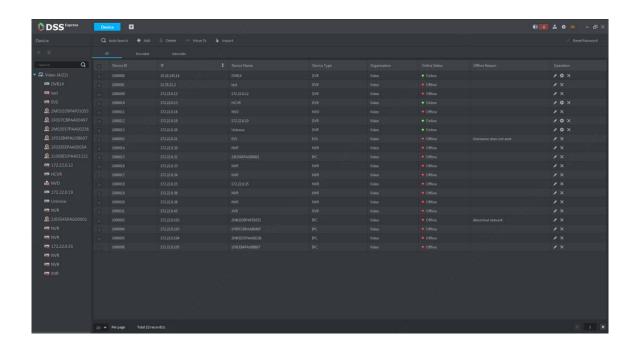


Figure 4-13

4.2.2 Other Platform Input

DSS Express supports device input from P2P platform and local PSS.

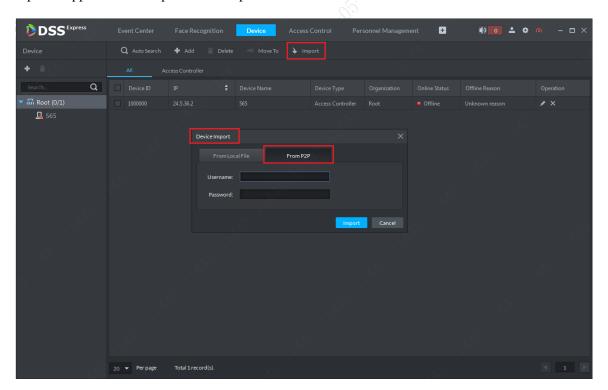


Figure 4-14



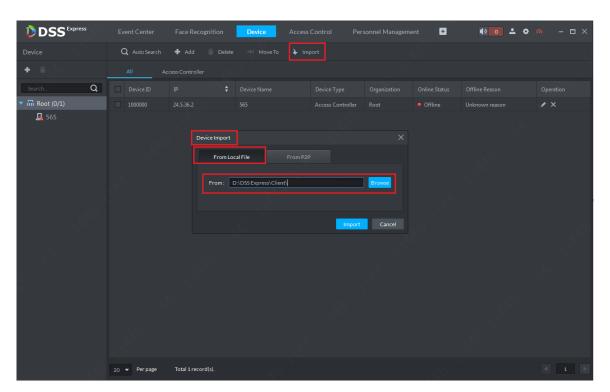


Figure 4-15

User manager module mainly add user, modify user, delete user and set user right. The system has 3 types of user by default as administrator (all rights), advanced user, general user. All added user must be in these types, and different user types have different rights. Rights within each user type can be adjusted within the range.

5.1 Add User

Step 1. Via add button in navigation bar enter homepage, and then click User icon.

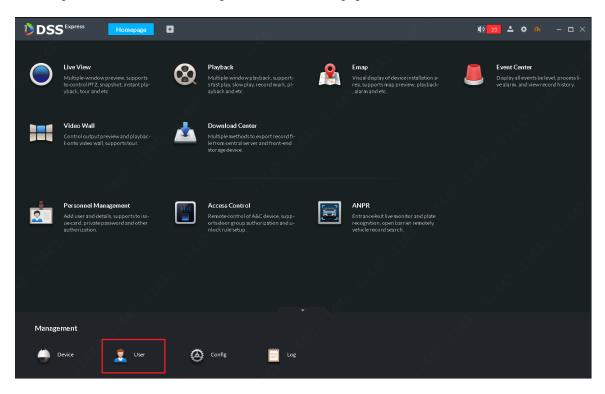


Figure 5-1

Step 2. On the left, select user type within the 3 types. An administrator has all rights, followed by advanced user and general user respectively. If you want to add an advanced user, then select Advanced User on the left. Click ...

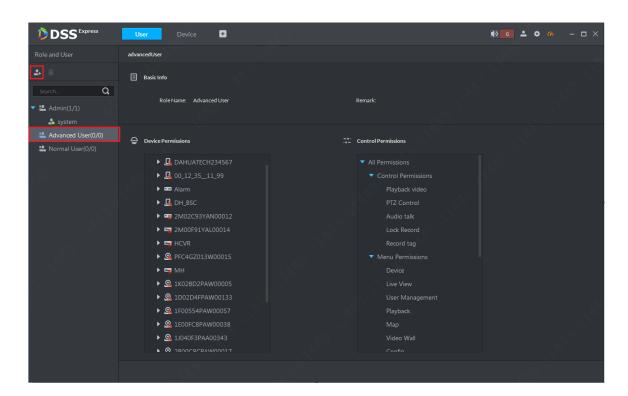


Figure 5-2

Step 3. Fill in user info according to your need. You can select to verify MAC address (for PC Client only), set user validity and etc. In device and right list, you also can select corresponding device and right module accordingly. After setup, click Add button to add user.

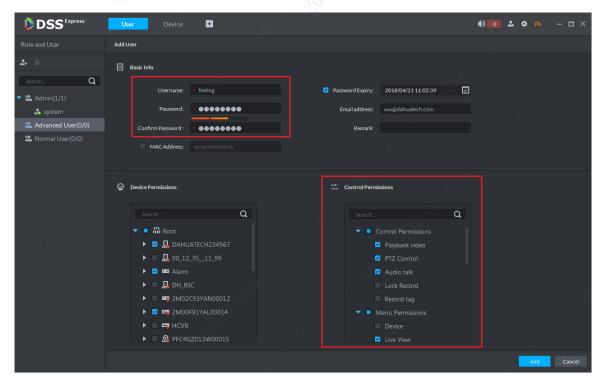


Figure 5-3

Step 4. After you add user, added user will be shown on the left. Click the username to view user info and right. Green means online while red means offline.

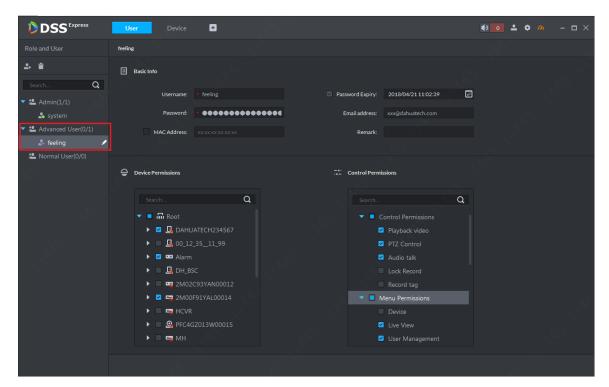


Figure 5-4

5.2 Modify User

You can modify user basic info and right, but you cannot change user type. To change user type, you shall delete the user and add again.

Step 1. Same with adding user, just enter user manager module. On the left, select username you want to modify, and click button.

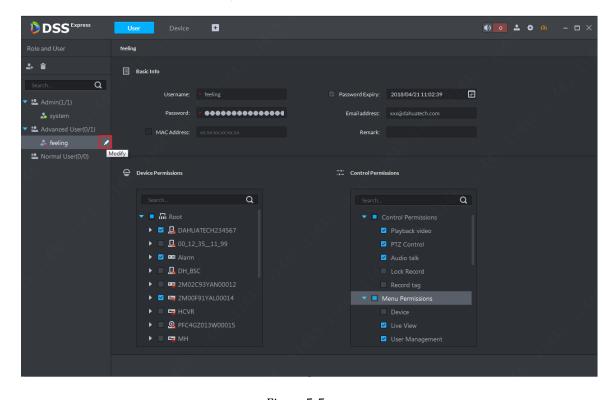


Figure 5-5

Step 2. In shown user modification page, change basic info and right, click OK.

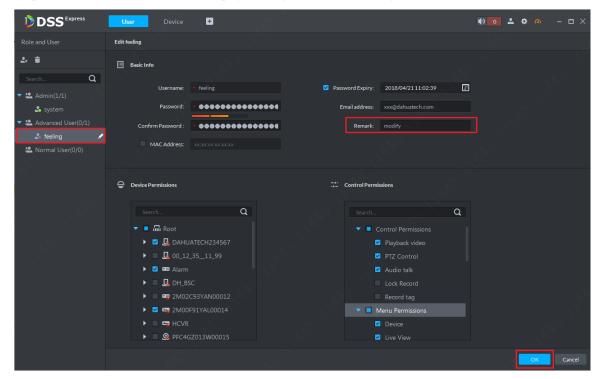


Figure 5-6

5.3 Delete User

Step 1. Same with adding user, just enter user manager module. On the left, select username you want to delete and click .

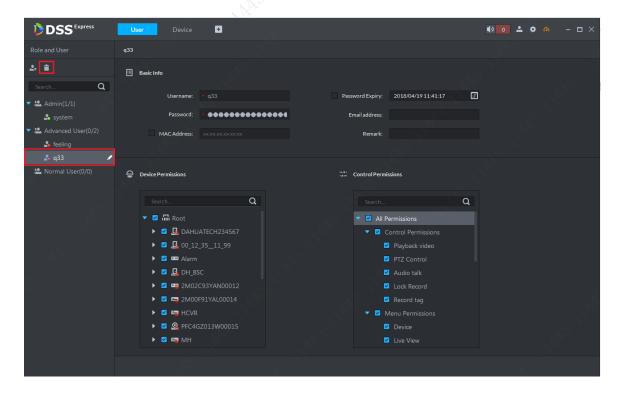


Figure 5-7

Step 2. In the shown figure, click OK to delete.



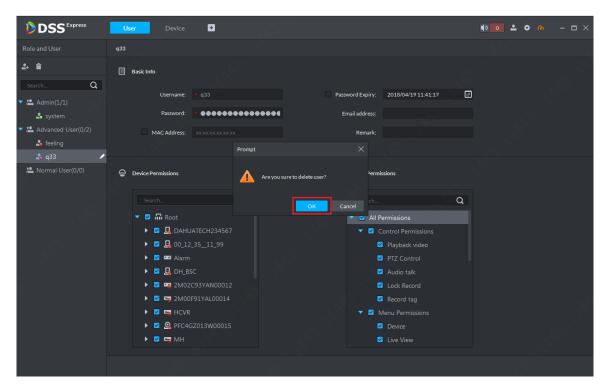


Figure 5-8



Log in DSS Express client, and in homepage, enter Live Preview module. It supports organization preview, preview by device, free channel preview and preview by view(must add view first).

6.1 Organization Preview

Step 1. In device tree on the left, it supports display of total device of current organization and online device. See Figure 6-1. Please select window number in tools at bottom before preview.

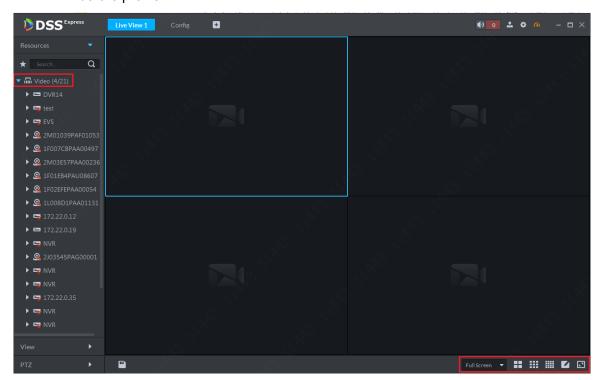


Figure 6-1

Step 2. Drag organization node to the right window, and system will open the first N video channels in this organization, N is number of windows. See Figure 6-2. If N is 4, it will open 4 video channels in this organization.

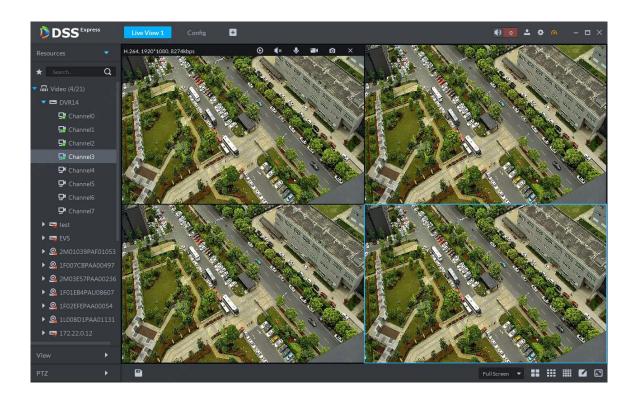


Figure 6-2
Step 3. Select one organization, right click it to set tour preview of all channels in this

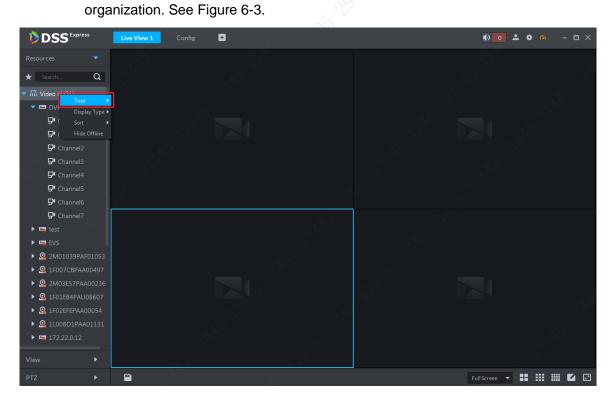


Figure 6-3

Step 4. During tour, you can click Stop button or right click in window to turn off tour, see Figure 6-4.

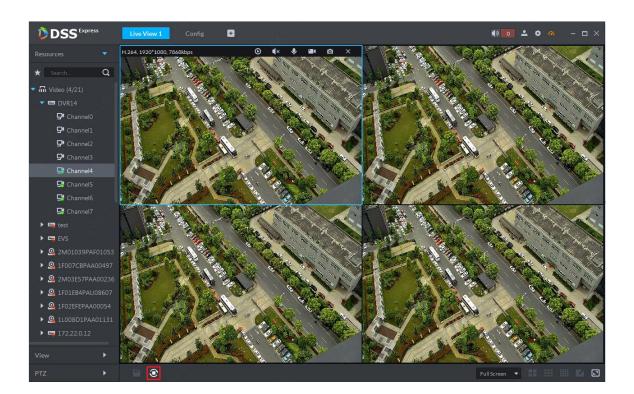


Figure 6-4

It supports right click to enable video tour of organization node, tour time can be:10s, 30s, 1min, 2min, 5min, 10min.

It supports display of device tree by name or IP.

It supports ascending/descending/random display of device tree.

It supports right click to hide offline node.

6.2 Device Preview

Step 1. In "Local Config—General", check "Show device node", see Figure 6-5.

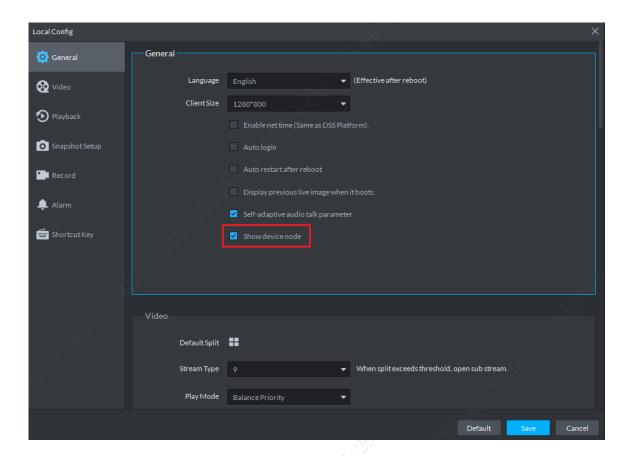


Figure 6-5

Step 2. Other operations are same with organization preview, as you drag a device into preview window to open its video, and right click to set tour.

6.3 Channel Preview

Step 1. Cancel check of "Local Config—General"-"Show device tree mode" (save this setup and client will auto reboot), preview device tree in channel mode, see Figure 6-6.

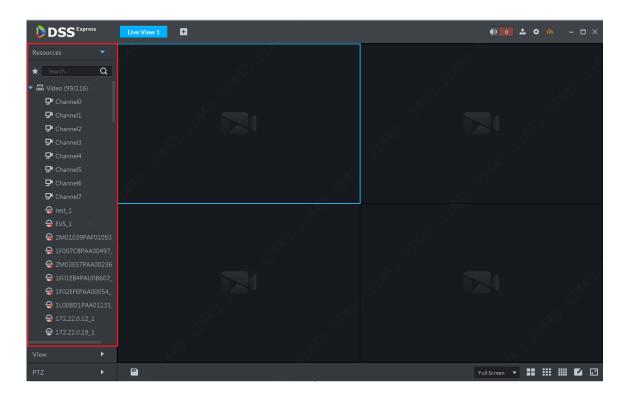


Figure 6-6

Step 2. A user can auto select channel and preview in window. Right click channel, to add into favorite, see Figure 6-7.

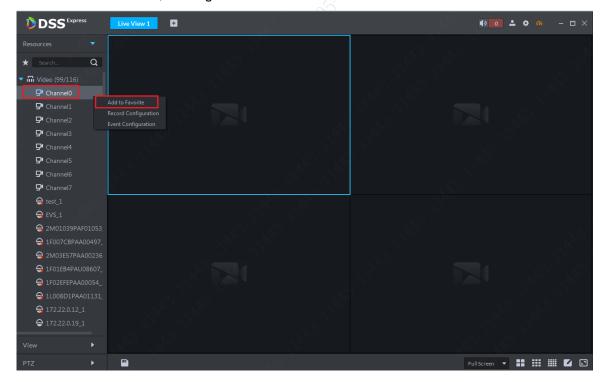


Figure 6-7

6.4 Show Preview

Step 1. In "Live" interface, device list is on the left, select channel and double click it or drag it into video window. If you double click device, then you can open all channels of the

device. Window shows live preview of this device.

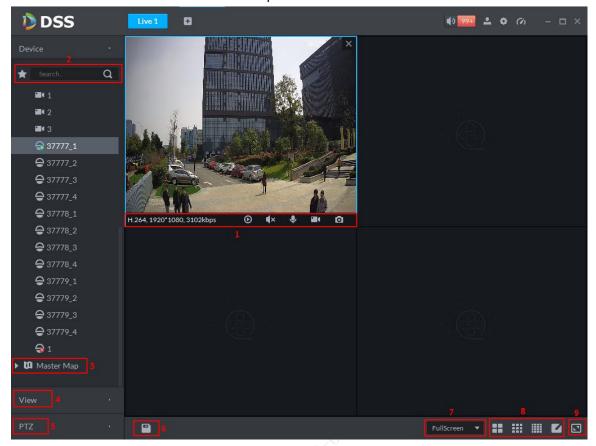


Figure 6-8

	Figure 6-8			
No.	Parameter	Note		
1	Stream Info and Shortcut	 Show encode format, stream info and shortcut. Shortcuts: Enable or disable instant playback, playback time is set in "Local Config". Preconditon of instant playback is that there is record at center or locally on device. Center record has priority. Enable or disable audio. Enanle or disable intercom. In"Local Config>General", check "Self-adaptive intercom". When you enable intercom, no pop-up window will appear, and auto adaptive applies to all parameters. Enable or disable local record. Snapshot. 		
2	Favorites and Device Tree Search	 Support Search. Q , search by device name or channel name. Add, delete or rename favorites. Support tour of favorites. 		
3	Мар	Preview map info in windows: GIS map and reaster map.		

No.	Parameter	Note
4	Мар	Support to save current video window to video. View supports three levels: node, group and view respectively. It supports node, node tour viewo, tour time can be 10s, 30s, 1min, 2min, 5min, 10min. Max 100 views.
5	PTZ	Speed dome PTZ adjust.
6		Save current video as view.
7	Aspect Ratio	Select video window aspect ratio, it supports to play video in actual acpect ratio or full screen.
8	Split	Split video. You can slip video into 1 to 64 windows, or click to customize.
9	Full Screen	Set video to full screen. To exit, you can click Esc otr right click and select exit full screen.

Chart 6-1

Step 2. Right click preview window, you can set current video, see Figure 6-9.

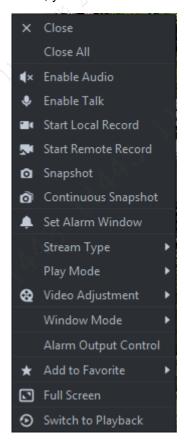


Figure 6-9

Parameter	Note
Close Video	Close current window.
Close All	Close all windows.
Enable Audio	Same as 🚺, turn on or off audio of camera.
Enable Talk	Same as turn on or off corresponding talk function of device. In "Local Config > General" check "Self-adaptive talk", to enable talk, no pop-up to auto adjust parameter.
Start Local Record	Same as record A/V in current window, and save to local PC.
Snapshot	Same as , save image in current window as picture file to picture folder (Save one picture every time you call).
Continuous Snapshot	Same as , save image in current window as picture file to picture folder (Snapshot three pictures every time).
Alarm Output Control	Control alarm output ON/OFF.
Stream Type	Switch among "main stream", "sub stream 1", "sub stream 2". Note: If you select "sub stream 1", "sub stream 2", and when you add encoder in Manager, in dropdown list of "Stream", select "support sub stream 1", "support sub stream 2".
Live/Fluency	Enter"live priority", "fluency priority", "balance priority"or custom.
Video Adjustment	Adjust image and enhance video.
Window Mode	Support standard mode, 1+3 and 1+5.
Fisheye Installation	Wall-mount, ceiling and grounding.
Fisheye View	Fisheye view has different installation modes and angles: Panoroma-360 degrees Dual panoroma-Two 180 degrees 4-split-Split entire video into four splits, up/down/left/right, each blockcan be adjusted direction seperately Single video-one video

Parameter	Note
Add to Favorite	Add this channel or all channels into favorites
Full Screen	Switch video window to "full screen"mode. If you want to exit"full screen", you can double click window or right click and select exit.
Switch to Playback	Switch preview to playback without going back to homepage.

Chart 6-2



7 Record Config

7.1 Local Storage Disk Setup

DSS Express will auto detect all disk and storage space, and provide a more convenient storage disk method, steps:

Step 1. In Client homepage, click "Config" to enter config module, see Figure 7-1.

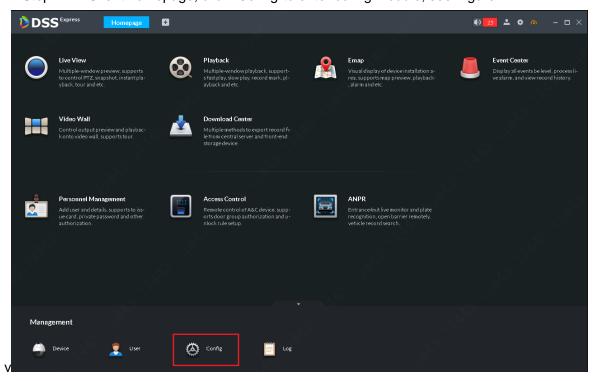


Figure 7-1

Step 2. In config page, click "Storage" to enter storage config, see Figure 7-2.

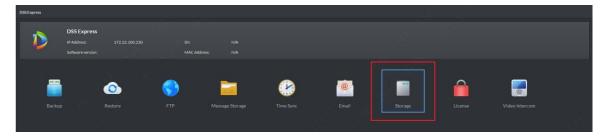


Figure 7-2

Step 3. DSS Express server will auto detects Express server installation disk info(Not PC Client disk info), see Figure 7-3.

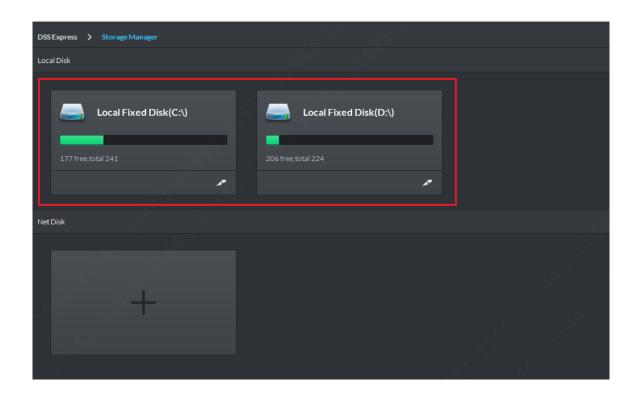


Figure 7-3
Step 4. Click split button to create DSS Express storage, see Figure 7-4.

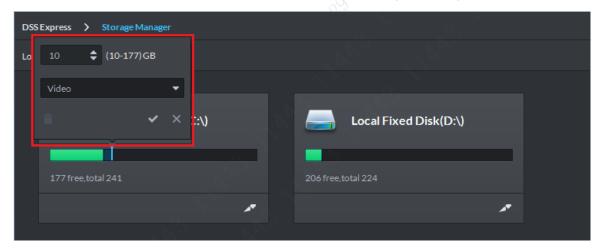


Figure 7-4

Step 5. Select storage space type, video or picture, see Figure 7-5. If you need to save ANPR device picture, you shall set storage space type to be picture.

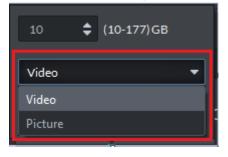


Figure 7-5

Step 6. According to need and disk free space, set storage space size. Min value is 10GB, see Figure 7-6. Confirm it and click button to complete setup.

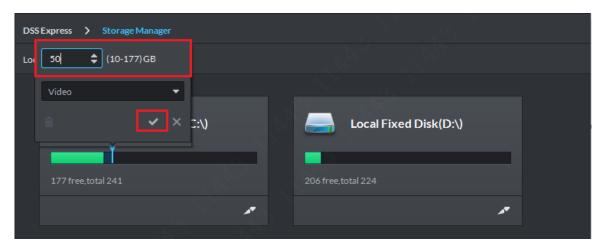


Figure 7-6

Step 7. After disk is complete, see Figure 7-7. In the red box, the value is 50GB just set.

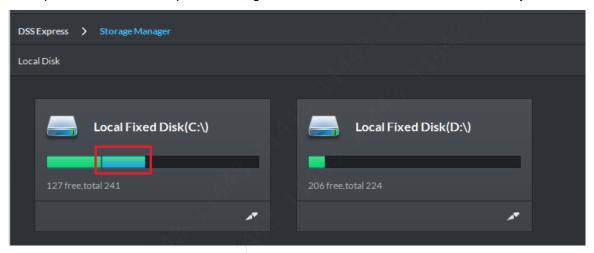


Figure 7-7

Step 8. If you want to this storage space, you can click this segment in disk, and click Delete button in prompt page, see Figure 7-8.

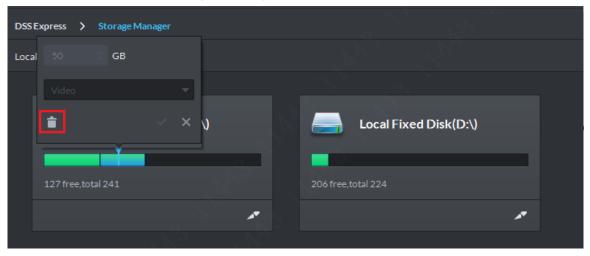


Figure 7-8

7.2 Network Disk Setup

Step 1. First park of operation here is same with local storage disk setup, see Figure 7-9.

Click Add button to add network disk.

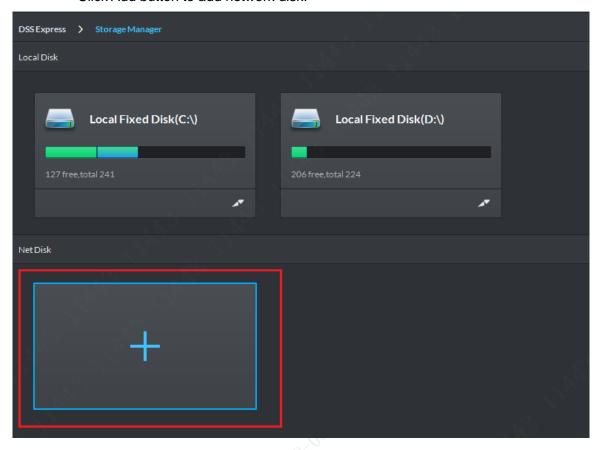


Figure 7-9

Step 2. In system pop-up page, fill in network storage device IP address, confirm and click "OK" button to add, see Figure 7-10.

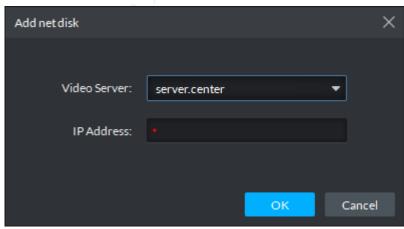


Figure 7-10

- Step 3. Format disk.
- Step 4. Network disk list is in Figure 7-11. Green means there is free space and red means storage is already full and is overwriting.

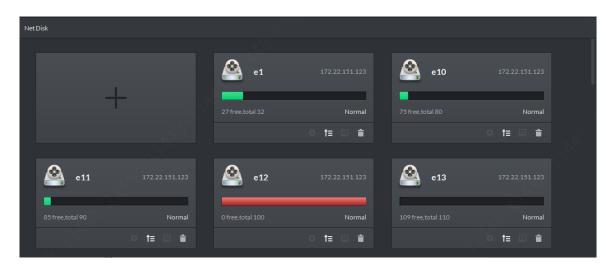


Figure 7-11

7.3 Create Storage Plan

Step 1. In Client homepage, click "Config" in management bar to enter Config module, see Figure 7-12.

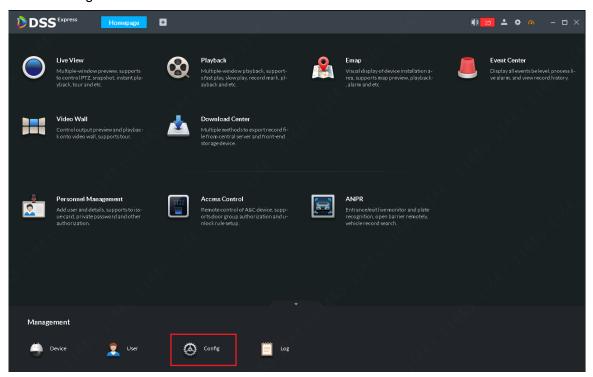


Figure 7-12

Step 2. Please select one video channel on the left, and then click record config button on the right, see Figure 7-13.

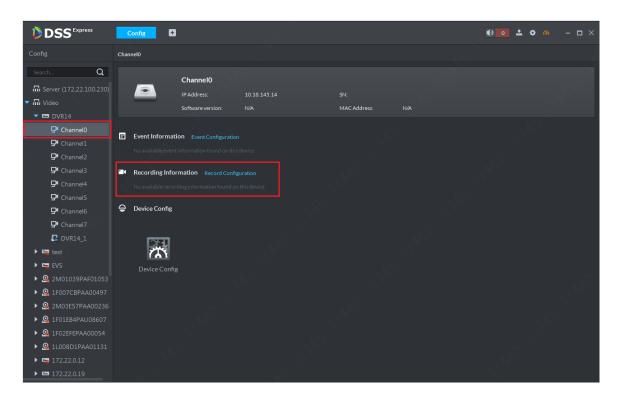


Figure 7-13

Step 3. In system pop-up page, please select record storage path (server/device), stream type (main stream, sub stream 1, sub stream 2), time template, confirm info and click "OK" button to create record plan for this channel, see Figure 7-14.

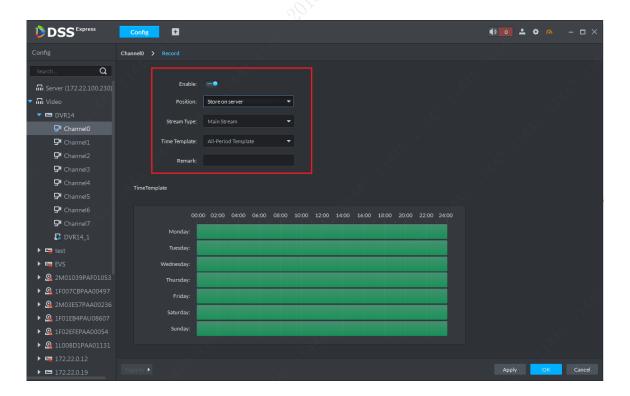
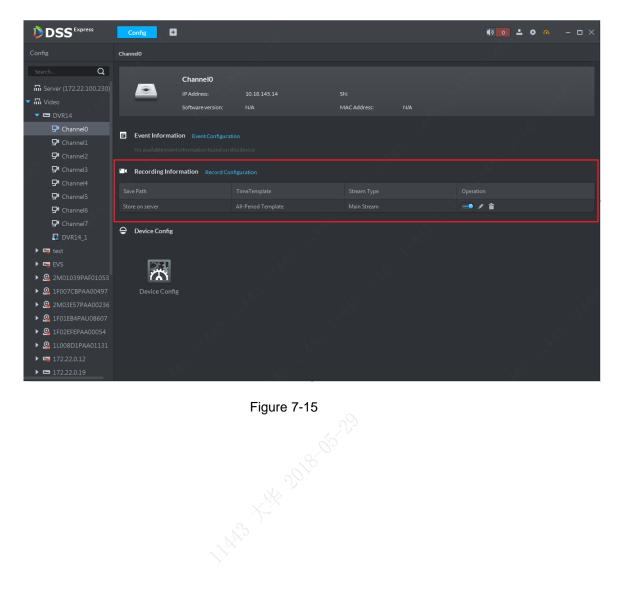


Figure 7-14

Step 4. After record plan is added, see Figure 7-15. A user can open and close plan, modify and delete plan.

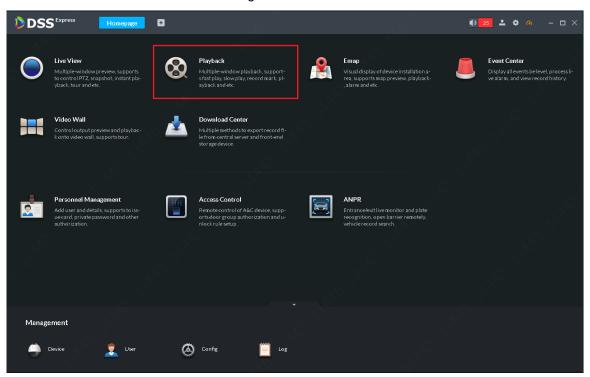




8.1 Record Search&Playback

Step 1. In DSS Express Client homepage, click "Playback" to enter record playback module, see Figure 8-1.

Figure 8-1



Step 2. Record playback page is in Figure 8-2. Firstly select channel and storage location for playback. If you set this channel in record plan, it is stored on server.

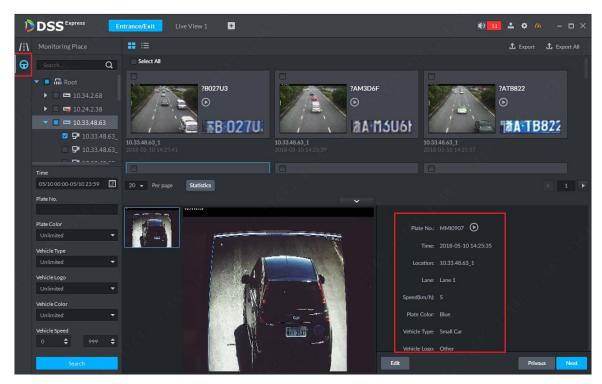


Figure 15-14

Step 5. If the system recognize some mistake in vehicle detail, you can click buttor to manually change.

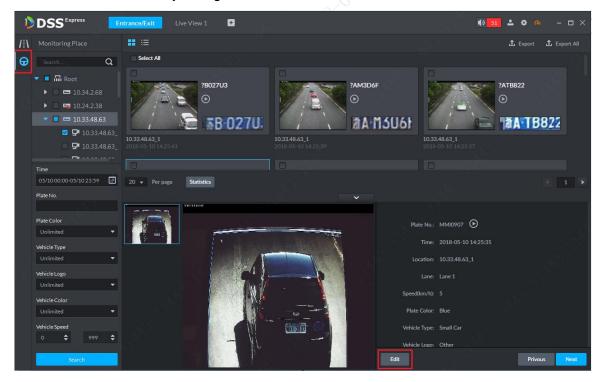


Figure 15-15

Step 6. Editable content: plate no., plate color, vehicle type, logo, vehicle color. Click Save button to save and if you want to cancel edited content, click Cancel.

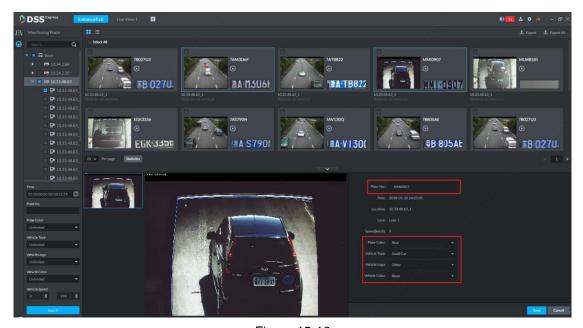


Figure 15-16

15.3.3 View Passed Vehicle Record

You must set general record plan for the ANPR channel before you can view passed vehicle record. Method of setup is similar with video channel, see Ch 6.3.

In passed vehicle record search result, select of corresponding passed vehicle record or click Play button in detail to view scenes before and after snapshot.

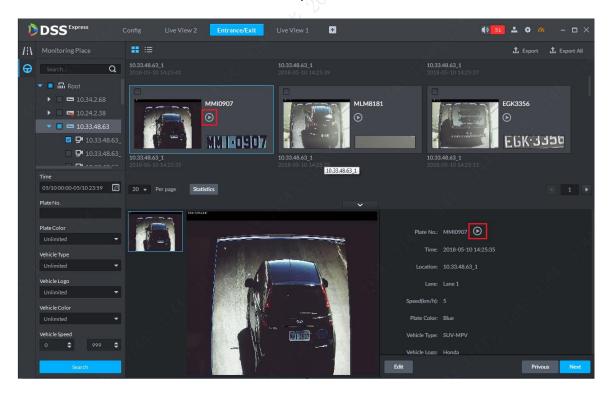


Figure 15-17

15.3.4 Export Passed Vehicle Record

A user can export some or all of passed vehicle record.

Step 1. In passed vehicle record search result, check record you want to export, click Export button. You can export all records.

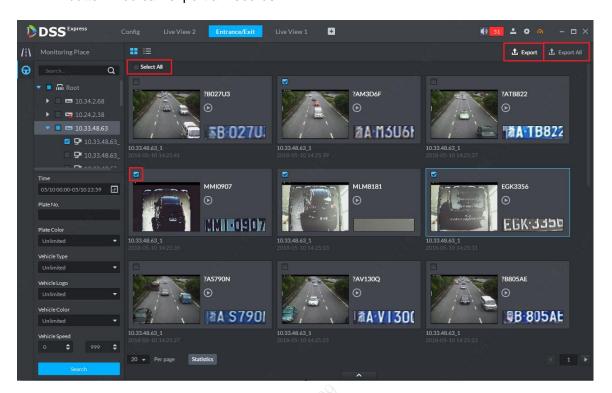


Figure 15-18

Step 2. Please select storage path following system prompt. You can see the following figure is successful.

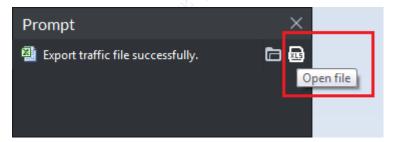


Figure 15-19