User’s Manual

DSS Express

V1.00.001
# Table of Contents

1 Overview .......................................................................................................................... V

2 Before Installation ............................................................................................................. 1
   2.1 Set Server IP Address ................................................................................................. 1
   2.2 Set Server System Time .............................................................................................. 3

3 Install & Run DSS Express .............................................................................................. 6
   3.1 Install Server .............................................................................................................. 6
      3.1.1 Server Config Requirement .................................................................................... 6
      3.1.2 Install & Run ......................................................................................................... 6
   3.2 System Config ............................................................................................................ 9
   3.3 Install Client ............................................................................................................... 11
      3.3.1 PC Config Requirement ....................................................................................... 11
      3.3.2 Install and Run ..................................................................................................... 11
   3.4 Change Initial Password ............................................................................................ 15
   3.5 Homepage ............................................................................................................... 18

4 Local Config ..................................................................................................................... 20

5 Configuration .................................................................................................................. 23
   5.1 Backup ...................................................................................................................... 23
      5.1.1 Function ............................................................................................................... 23
      5.1.2 Auto Backup ......................................................................................................... 23
      5.1.3 Manually Backup ................................................................................................. 25
   5.2 Restore ...................................................................................................................... 27
      5.2.1 Function Introduction ........................................................................................... 27
      5.2.2 Local File Restore ............................................................................................... 27
      5.2.3 Server File Restore .............................................................................................. 29
   5.3 FTP ............................................................................................................................ 32
      5.3.1 Function ............................................................................................................... 32
      5.3.2 Config Method ..................................................................................................... 32
      5.3.3 Usage Display ....................................................................................................... 34
   5.4 Info Storage ............................................................................................................... 35
      5.4.1 Function ............................................................................................................... 35
      5.4.2 Config Method ..................................................................................................... 35
   5.5 Time Sync .................................................................................................................. 37
      5.5.1 Time Sync ............................................................................................................. 37
      5.5.2 Client Sync Time ................................................................................................. 40
   5.6 Email .......................................................................................................................... 44
      5.6.1 Function ............................................................................................................... 44
      5.6.2 Config Method ..................................................................................................... 44
   5.7 License ....................................................................................................................... 46
      5.7.1 License ................................................................................................................. 46
      5.7.2 Apply License ....................................................................................................... 48
      5.7.3 Load License ....................................................................................................... 50

6 Add Encoder ..................................................................................................................... 53
   6.1 Create Organization ................................................................................................. 53
   6.2 Add Encoder .............................................................................................................. 55
6.2.1 Manually Add ................................................................. 55
6.2.2 Auto Add................................................................. 59

7 User ................................................................................. 64
7.1 Add User ........................................................................ 64
7.2 Modify User .................................................................... 66
7.3 Delete User ................................................................. 67

8 Preview ........................................................................... 69
8.1 Organization Preview .................................................. 69
8.2 Device Preview ............................................................ 71
8.3 Channel Preview .......................................................... 72
8.4 Show Preview .............................................................. 73

9 Record Config ............................................................... 78
9.1 Local Storage Disk Setup ............................................ 78
9.2 Network Disk Setup....................................................... 80
9.3 Create Storage Plan ...................................................... 82

10 Playback ....................................................................... 85
10.1 Record Search&Playback .......................................... 85
10.2 Download Record ........................................................ 88
10.3 Locking Videos .......................................................... 90

11 Download Center ........................................................ 91
11.1 Download Record ....................................................... 91
11.1.1 Timeline Cut .......................................................... 92
11.1.2 Select Record List .................................................. 94
11.1.3 Tag Record ............................................................. 95
11.2 Download Management ............................................. 97
11.2.1 Download Complete .............................................. 97
11.2.2 Pause/Start Download ........................................... 97
11.2.3 Delete Download Task ........................................... 98

12 Map Application .......................................................... 99
12.1 Add Map ................................................................. 99
12.2 Add Sub Map .......................................................... 103
12.3 Add More Maps ........................................................ 105
12.4 Map Application ........................................................ 107
12.4.1 Main Map Setup ...................................................... 107
12.4.2 Pane Application .................................................... 108
12.4.3 Filter Device Type .................................................. 109
12.4.4 Tool ....................................................................... 110

13 Event ............................................................................. 112
13.1 Alarm Scheme Config .............................................. 112
13.2 Alarm Manager ........................................................ 117
13.2.1 Alarm Prompt ......................................................... 117
13.2.2 Real-time Alarm Processing ................................... 118
13.2.3 History Alarm Search&Process ............................... 123

14 Video Wall ................................................................. 127
14.1 Business Flow .......................................................... 127
14.2 Add Decode Device .................................................... 127
14.3 Add Video Wall .......................................................... 130
14.4 Video Wall Control ................................................................. 135
  14.4.1 Instant Output to Wall .................................................. 135
  14.4.2 Output to Video Wall .................................................. 136
  14.4.3 Wall Schedule ......................................................... 138
  14.4.4 Control Function ...................................................... 142

15 Person .................................................................................. 147
  15.1 Add Department ............................................................... 147
  15.2 Add Person ................................................................. 149
    15.2.1 Add A User ........................................................... 149
    15.2.2 Batch Add ............................................................ 158
    15.2.3 Import Person ....................................................... 162
  15.3 Delete User .................................................................. 166
  15.4 Batch Issue Card ......................................................... 168

16 Access Control .................................................................... 171
  16.1 Add Access Control Device ............................................. 171
  16.2 Time Template&Holiday Group ....................................... 173
  16.3 Access Control Console .................................................. 175
    16.3.1 Door Config ........................................................... 176
    16.3.2 Access Control Channel Control ............................... 178
    16.3.3 Event Detail ........................................................... 183
    16.3.4 Global Control ....................................................... 183
    16.3.5 Scheme Management ............................................. 187
  16.4 Door Group .................................................................. 191
  16.5 Add Person .................................................................. 195
  16.6 Advanced Function ....................................................... 195
    16.6.1 First Card Unlock ................................................... 195
    16.6.2 Multiple Card Unlock .............................................. 197
    16.6.3 Anti-passback.......................................................... 202
    16.6.4 Inter-lock ............................................................... 206
    16.6.5 Remote Verification .................................................. 208
  16.7 Access Control Log Search ............................................. 210

17 ANPR .................................................................................. 213
  17.1 Add ANPR Device ........................................................... 213
  17.2 Picture Storage Keyboard Setup ..................................... 214
  17.3 Road Surveillance Application ......................................... 215
    Passed vehicle .................................................................. 215
    17.3.1 Passed Vehicle Record Search .................................. 218
    17.3.2 View Passed Vehicle Record .................................... 221
    17.3.3 Export Passed Vehicle Record ................................... 221

18 Face Recognition ............................................................... 223
  18.1 Add Face Recognition Device ......................................... 223
  18.2 Storage Plan Setup ......................................................... 225
    18.2.1 Picture Storage ........................................................ 225
    18.2.2 Record Storage ....................................................... 225
  18.3 Face Library Management ............................................. 227
    18.3.1 Add Face library ..................................................... 227
    18.3.2 Add Person ............................................................ 231
18.3.3 Face library Arm

18.4 Face Recognition Application
  18.4.1 Face Recognition
  18.4.2 Record Search
  18.4.3 Face library Search
  18.4.4 Recognition Search
  18.4.5 Show Report

19 Video intercom
  19.1 Add Device
    19.1.1 Set Unit Enable
    19.1.2 Manage Device
  19.2 Sync Contacts
  19.3 Call Management
    19.3.1 Device Group Config
    19.3.2 Add Management Group
    19.3.3 Relationship Group Config
  19.4 Video Intercom
    19.4.1 Call Center
    19.4.2 Send Message
  19.5 Video Intercom Log Search

19.6 Video intercom Log

20 Log

Appendix 1 Shortcut List
Appendix 2 Delete Center Server Record
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 supports simple, reliable, open and more features which bring user with HD, smart, safe experience. By extending to 512 channels via License, it needs to integrates access control and VDP device organizations in order to provide solutions. DSS Express is widely used for residence, supermarket, factory, casino and etc.

- **Highlights**
  - GPU decoding, meantime support preview of more HD camera.
  - Raster graph design, perfect support of 4F display.
  - Administrator and operator both use the client with powerful control experience.
  - Export device list from SmartPSS, and import device list on DSS Express.
  - Within LAN, auto search device in different network segment and show device list. One-click to join management.
  - Mobile phone APP.
  - Auto and manual backup of database, when system has error, it can quickly recover.
  - Lock record, permanent storage of important record, without being overwritten.
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.

Step 3. In-pop up page, select “Change adapter settings”, see Figure 2-2.
Step 4. In Figure 2-3, select corresponding network card to set IP V4 address. See Figure 2-4.
2.2 Set Server System Time

Step 1. Click system time at the lower right corner in windows, see Figure 2-5.
Step 2. In Figure 2-6, set time and time zone.
Settings

Home

Find a setting

Time & language

Date & time

Region & language

Speech

Date and time

4:22 PM, Wednesday, May 23, 2018

Set time automatically

On

Set time zone automatically

Off

Change date and time

Change

Time zone

(UTC+08:00) Beijing, Chongqing, Hong Kong, Urumqi

Adjust for daylight saving time automatically

Off

Formats

First day of week: Sunday
Short date: 5/23/2018
Long date: Wednesday, May 23, 2018
Short time: 4:22 PM
Long time: 4:22:48 PM

Change date and time formats

Related settings

Additional date, time, & regional settings
Add clocks for different time zones

Figure 2-6
3 Install & Run DSS Express

3.1 Install Server

3.1.1 Server Config Requirement

Server config requirement is in Chart 3-1.

<table>
<thead>
<tr>
<th>DSS Server Hardware Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommend</strong></td>
</tr>
<tr>
<td>CPU: Intel® Xeon® CPU E3-1220 v5 @3.00GHz</td>
</tr>
<tr>
<td>Memory: 8GB</td>
</tr>
<tr>
<td>Ethernet card: 1Gbps</td>
</tr>
<tr>
<td>DSS path capacity: 500G and higher</td>
</tr>
<tr>
<td><strong>Low-end</strong></td>
</tr>
<tr>
<td>CPU: E3-2120</td>
</tr>
<tr>
<td>Memory: 8GB</td>
</tr>
<tr>
<td>Ethernet card: 1Gbps</td>
</tr>
<tr>
<td>DSS path capacity: 200G and higher</td>
</tr>
</tbody>
</table>

Chart 3-1

3.1.2 Install & Run

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

**Note:**
Program name includes version no. and date, please check before installation.
Step 2. Please check I have read and agree the DSS agreement, see Figure 3-2. Click “Next” button to enter next step.

Step 3. Server default installation path is C:\DSS Express\Server. The system auto detects that this path is available, see Figure 3-3. If you want to change path, click “Browse” and select other path. Click “Install” to start installation.

Note:
If “Install” button is gray, then check if installation path is correct, or if space of this path is higher than required space.
Step 4. Progress is in Figure 3-4. The whole process needs about 5-10 minutes, please wait.

Step 5. Installation is complete, click "Run" button to open server, see Figure 3-5. After the server is running, system shows DSS Express system config page, see Figure 3-6.
3.2 System Config

It introduces operation of system config.
<table>
<thead>
<tr>
<th>No.</th>
<th>Function</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Server Management</td>
<td>Server management, support the following three operations:</td>
</tr>
<tr>
<td></td>
<td>• RestartAll</td>
<td>click this icon to reboot all servers.</td>
</tr>
<tr>
<td></td>
<td>• StopAll</td>
<td>click this icon to stop all servers.</td>
</tr>
<tr>
<td></td>
<td>• Refresh</td>
<td>click this icon to refresh server.</td>
</tr>
<tr>
<td>2</td>
<td>Language Management</td>
<td>The system supports Chinese and English. It supports to switch language and please reboot to let switch take effect.</td>
</tr>
<tr>
<td>3</td>
<td>Setup</td>
<td>Set CMS IP is Express server installation IP address. If it is in LAN/WAN, then you shall set mapping address as WAN IP address.</td>
</tr>
<tr>
<td>4</td>
<td>About</td>
<td>Click this icon to view software version and release date.</td>
</tr>
<tr>
<td>5</td>
<td>Min</td>
<td>Click this icon, set tool page minimization.</td>
</tr>
<tr>
<td>6</td>
<td>Close</td>
<td>Close config tool.</td>
</tr>
<tr>
<td>7</td>
<td>Server Total Status Display</td>
<td>Show server total status, include:</td>
</tr>
<tr>
<td></td>
<td>• Normal</td>
<td>All servers of the server is normal, server total status is shown as normal.</td>
</tr>
<tr>
<td></td>
<td>• Abnormal</td>
<td>Any server of the server is abnormal, server total status is shown as abnormal.</td>
</tr>
<tr>
<td>8</td>
<td>Server Display</td>
<td>Show status of each server and server status. Click to change server no., after modification system auto reboots.</td>
</tr>
</tbody>
</table>
3.3 Install Client

3.3.1 PC Config Requirement

Requirement of PC used to install DSS Express client is in Chart 3-3.

<table>
<thead>
<tr>
<th>PC Config Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommended Config</strong></td>
</tr>
<tr>
<td>CPU: i5-6500</td>
</tr>
<tr>
<td>CPU: 3.20GHz</td>
</tr>
<tr>
<td>Memory: 8GB</td>
</tr>
<tr>
<td>Graphic Card: Intel® HD Graphics 530</td>
</tr>
<tr>
<td>Ethernet Card: 1Gbps</td>
</tr>
<tr>
<td>DSS client installation directory space: 100GB</td>
</tr>
<tr>
<td><strong>Min Config</strong></td>
</tr>
<tr>
<td>CPU: i3-2120</td>
</tr>
<tr>
<td>Memory: 4GB</td>
</tr>
<tr>
<td>Graphic Card: Intel (R) Sandbridge Desktop Gra</td>
</tr>
<tr>
<td>Ethernet Card: 1Gbps</td>
</tr>
<tr>
<td>DSS client installation directory space: 50GB</td>
</tr>
</tbody>
</table>

Step 1. 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 3-8.
Step 2. Double click to install, see Figure 3-9.

Step 3. Check I have read and agree the agreement, see Figure 3-10. Then click “Next” button to go to next.
Step 4. System default installation path is in Figure 3-11. If you want to change installation directory, click “Browse” button to change. After you select a path, click “Install” button to start installation.

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 5. Progress is in Figure 3-12, and this process needs about 1-3 minutes, please wait.
Step 6. Installation is complete in Figure 3-13, click “Start now” button to run the client.

Note:
If version updates, then when you log in client, system prompts to upload client. Please update this client accordingly, otherwise client cannot use.
3.4 Change Initial Password

If this is the first time you log in server, you can shall set login password and password security via the client.

Step 1. Log in Express Client, see Figure 3-14.

![Figure 3-14](image)

Step 2. Please click to expand server config page.

Step 3. 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 3-15.
Step 4. Enter new administrator password, and click "Next" button to enter security question setup.
Step 5. According to security question, and click OK.
Step 6. After you click OK, system complete change and auto log in.
### 3.5 Homepage

Express client homepage is in Figure 3-19.

![Figure 3-19](image)

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Note</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Function Tab</td>
<td></td>
<td>Default shown Homepage tab and <img src="image" alt="icon" />. After you enter other function page, it will be hidden. Now click <img src="image" alt="icon" /> to show Homepage and enter homepage.</td>
</tr>
<tr>
<td>2</td>
<td>Alarm</td>
<td></td>
<td><img src="image" alt="icon" />: Event tone ON/OFF, default is ON. Click this icon, it changes to <img src="image" alt="icon" />, turn off tone. <img src="image" alt="icon" />: alarm, when this number is not zero, you can click it to quickly enter event center to view alarm message.</td>
</tr>
<tr>
<td>3</td>
<td>User</td>
<td></td>
<td><img src="image" alt="icon" />: Click this icon <img src="image" alt="icon" />, see Figure 3-20. Show system login username and platform IP address. Click “Change Password”, enter &quot;Old Password&quot;, &quot;New Password&quot; and &quot;Confirm Password&quot;, click &quot;OK&quot;, to change current login password. Click “Lock Client”, enter username to lock current client. Click “Help”, to open help document. Click “About”, to view client version info and date. Click &quot;Logout&quot;, confirm it and return to client login page.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Config</td>
<td>Click this icon, to achieve basic config, video setup, video playback, snapshot setup, record, alarm shortcut and etc. See Ch 4.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>System Status</td>
<td>Click this icon, to view server network, CPU and memory status.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Function Area</td>
<td>Show live preview, video playback, map, event center, video wall, download center, user management, access control and plate recognition. You can click corresponding function to enter.</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Management Area</td>
<td>Show device management, user management, config management and log management. Click it to enter detailed management page. Click arrow above to hide this area.</td>
<td></td>
</tr>
</tbody>
</table>

Chart 3-4

Figure 3-20
After first time login, you shall set system parameters, including General, Video, Playback, Snapshot, Record, Alarm, Shortcut and etc. Parameters are actually in the same page, which you can scroll down to view parameters under other tabs. Click Save when you are complete.

Step 1. Click at the upper right corner. See Figure 4-1.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>General</strong></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Choose the language for the interface, including Chinese, English.</td>
</tr>
<tr>
<td>Client Size</td>
<td>Select client screen resolution. support 960×680, 1024×768, 1280×800,</td>
</tr>
<tr>
<td></td>
<td>1280×1024, 1440×900 and 1680×1050.</td>
</tr>
<tr>
<td>Enable net time</td>
<td>Check or not to determine whether to respond to net time. In the future, if the server starts time sync request, client can respond to server time sync as:</td>
</tr>
<tr>
<td></td>
<td>If checked, then the client will start net time, PC of the client will respond.</td>
</tr>
<tr>
<td></td>
<td>If not checked, then the client will not perform net time when services initiate net time. PC of the client will not respond</td>
</tr>
<tr>
<td>Auto Login</td>
<td>If checked, auto login is allowed when Client starts running.</td>
</tr>
<tr>
<td>Auto restart after reboot</td>
<td>If checked, auto reboot of the Client is allowed when the PC power is on.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Display</td>
<td>If checked, it would revert to the last Live video played automatically after rebooting the client.</td>
</tr>
<tr>
<td>Previous live image when it boots</td>
<td></td>
</tr>
<tr>
<td>Self-adaptive audio talk parameter</td>
<td>If checked, the system will adapt to “Sampling Frequency”, “Sampling Bit”, and “Audio Format” to the device automatically during audio talk.</td>
</tr>
<tr>
<td>Show device node</td>
<td>If checked, device tree will display both device and path, or only the path will be displayed.</td>
</tr>
<tr>
<td>Default split</td>
<td>Set number of splits for the initial screen of the “Live Preview”.</td>
</tr>
<tr>
<td>Stream type</td>
<td>Defines bit stream type for video transmission. With main bit stream as default, the auxiliary bit stream will be used when number of window splits is greater than the value selected here.</td>
</tr>
<tr>
<td>Play Mode</td>
<td>Play mode to be selected as required, including “Real Time Priority”, “Fluency Priority”, “Balance Priority”, as well as user-defined modes.</td>
</tr>
<tr>
<td>Video buffer time</td>
<td>Set video buffer time, max support 1500ms.</td>
</tr>
<tr>
<td>Instant playback time</td>
<td>Select time for the real time playback of the video.</td>
</tr>
</tbody>
</table>
| Enable hardware acceleration       | Let client PC GPU complete data decoding of some part. This reduces work of CPU, meantime lowers possibility of video lag. Requirement of PC graphic card:  
                                          ATI HD2000 and higher  
                                          NVIDIA Gefoce 8200 and higher  
                                          Intel X4500 HD core |
| Double click video to maximize window and exchange to main stream | Live video select sub stream to play, double click window to switch stream type.  
Note: Window split is more than 9, double click a window to maximize this window. Now stream of this window will be switched to main stream. |
| Playback                          | Set “record playback” page initialization page split number.                                                                      |
| Default split                     | Set record stream type.                                                                                                            |
| Dev record stream                  | Set record stream type.                                                                                                            |
| Enable high definition adjustment  | Record playback is 8x speed. If it is HD video, stream is large, 8x speed is higher. To reduce decoding pressure, bandwidth pressure and forward pressure of client during playback, It uses frame playback. |
| Format                            | Picture storage format, as BMP and JPEG.                                                                                           |
| Picture path                      | Local snapshot, picture storage path.                                                                                              |
| Picture name                      | Set picture storage naming rule.                                                                                                  |
| Snapshot                          | Set interval of continuous snapshot, not fewer than 100ms                                                                         |
| Snapshot interval                 | Set continuous snapshot, min=2, max=10.                                                                                           |
| Record                            | Local storage path                                                                                                                |

21
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Record Name</td>
<td>Set naming rule of record.</td>
</tr>
<tr>
<td>Max Size of</td>
<td>For local record, max size of a single record.</td>
</tr>
<tr>
<td>Record</td>
<td></td>
</tr>
<tr>
<td>Play alarm sound</td>
<td>Tone of alarm.</td>
</tr>
<tr>
<td>Loop</td>
<td>Loop alarm sound.</td>
</tr>
<tr>
<td>Alarm Type</td>
<td>Select alarm type and alarm tone.</td>
</tr>
<tr>
<td>Sound Path</td>
<td>Upload audio file and play.</td>
</tr>
<tr>
<td>Map flashed</td>
<td>Select alarm type, and whether flash on map when alarm occurs.</td>
</tr>
<tr>
<td>when alarm</td>
<td></td>
</tr>
<tr>
<td>occurred</td>
<td></td>
</tr>
<tr>
<td>Alarm Type</td>
<td>Include video loss, external alarm, motion detection, video tampering</td>
</tr>
<tr>
<td></td>
<td>and channel offline.</td>
</tr>
<tr>
<td>Display alarm</td>
<td>When alarm occurs, whether to open video.</td>
</tr>
<tr>
<td>link video</td>
<td></td>
</tr>
<tr>
<td>when alarm</td>
<td></td>
</tr>
<tr>
<td>occurred</td>
<td></td>
</tr>
<tr>
<td>Display Type</td>
<td>When alarm occurs, play link video and select client. Select client</td>
</tr>
<tr>
<td></td>
<td>display type.</td>
</tr>
<tr>
<td>Shortcut Key</td>
<td>Set shortcut of each function. Set rocker and USK keyboard, PC</td>
</tr>
<tr>
<td></td>
<td>keyboard shortcuts. Default PC keyboard shortcut is in Appendix 1.</td>
</tr>
</tbody>
</table>

Chart 4-1

Step 2. Set info of general, video, playback, snapshot, record, alarm and etc.

Step 3. Click Save.
This chapter introduces function and configuration of backup, restoration, info storage, FTP sync time, email and authorization.

While storage and segmentation config are introduces in their related function chapters, so skipped here.

5.1 Backup

5.1.1 Function

In order to ensure security of user data, the platform provides backup function of data which includes auto backup and manually backup.

5.1.2 Auto Backup

Step 1. Log in Express Client.

Step 2. In Express Client homepage, click Config, see Figure 5-1. Config page is in Figure 5-2.

![Figure 5-1](image-url)
Step 3. Click Backup, see Figure 5-3.

Step 4. Click Auto Backup to enable auto backup. Select period of time. Period includes: backup by day, week and month. Time, depends on period you selected, is the execution time of backup.

Step 5. Click OK to save. System pops up backup file password page.

Step 6. Enter password, click OK.

By setting file password, it ensures backup data security. Please remember the password,
which is required when you open or back up file. Backup file path is "..\DSS Express\Client\Backup File".

5.1.3 Manually Backup

Step 1. Log in Express Client.

Step 2. In Express Client homepage, click Config. See Figure 5-4. Config page is Figure 5-5.
Step 3. Click backup, see Figure 5-6.

![Figure 5-5](image)

Step 4. Click Manual Backup. See Figure 5-7.

![Figure 5-6](image)

Step 5. Set password and storage path, click OK to complete backup.

At the lower right corner in Browser, it prompts backup status. Click  to view backup file. See Figure 5-8.
5.2 Restore

5.2.1 Function Introduction

When user database is abnormal, you can restore system and data to the most recent saved backup. Warning: When system is restoring, you must stop usage of other users. Be careful! This function will change data.

5.2.2 Local File Restore

Local file restoring usually restores manually stored file to local server.

Step 1. Log in Express Client.
Step 2. In Express Client homepage, click Config, see Figure 5-9. System enters config page, see Figure 5-10.
Step 3. Click Restore, system enters restore page, see Figure 5-11.

Step 4. Click **Browse** to select backup file. Click **Restore**, system pops up Figure 5-12.
Step 5. Enter administrator password and file password. Click OK. Data restoring process is shown, and after successfully restore, you can see prompt at the lower right corner. And then system reboots.

5.2.3 Server File Restore

Select backup file at slave server to restore data. However, the prerequisite is that auto backup function is enabled, and server periodically backs up file.

   Step 1. Login Express Client.

   Step 2. In Express Client, click Config. See Figure 5-14. System enters config page, see Figure 5-15.
Step 3. Click Restore. See Figure 5-16.
Step 4. In Figure 5-16, select backup file in the red box, click **Restore**. See Figure 5-17.

Step 5. Enter administrator password and file password. Click OK to restore. Data restoring show progress, after data is successfully restored, you can see prompt at the lower right corner, see Figure 5-18.
5.3 FTP

5.3.1 Function
Enable FTP, device uploads alarm snapshot to FTP. FTP is provided by platform, you also can set FTP created by FTP. Alarm picture uploaded to FTP will be saved 30 days by default. If free space is below 10G, the system auto clears space until space is over 10G.

5.3.2 Config Method
Step 1. Login Express Client.
Step 2. In Express Client homepage, click Config. See Figure 5-19. System enters config page, see Figure 5-20.
Step 3. Click FTP, system enters FTP config page, see Figure 5-21.

Step 4. Set FTP address and username, password.
   Note:
   Parameter with * is mandatory. FTP address standard format is: ftp://x.x.x.x/. FTP address provided by the platform is the IP of platform server. Username and password are dss/dss by default.

Step 5. Click OK to save.
5.3.3 Usage Display

Step 1. On PC desktop, open My Computer.

Step 2. In address field, enter user set FTP address, such as ftp://172.10.1.201/, click Enter. See Figure 5-23.

Step 3. If FTP address is accessed, you can see FTP login page. Default username and password is dss/dss.

Step 4. Click Login, to enter FTP server.
5.4 Info Storage

5.4.1 Function
Set storage length of log message and alarm message, default storage is 30 days. Max storage is 3650 days.

5.4.2 Config Method
Step 1. Login Express Client.
Step 2. In Express Client homepage, click Config. See Figure 5-25. System enters config page, see Figure 5-26.
Figure 5-26

Step 3. Click Storage, see Figure 5-27.

Figure 5-27

Step 4. Set log and alarm message and storage time.

Step 5. Click OK.
5.5 Time Sync

5.5.1 Time Sync

5.5.1.1 Function

Device time sync is to sync time between front-end device and platform server based on time of platform server. The platform supports device connected Dahua and ONVIF protocol to sync time. It supports auto sync time and manual sync. Auto time sync is to automatically sync time in set period and at system time. Manual sync is to manually sync time and system immediately responds to the request.

5.5.1.2 Auto Sync

Step 1. Log in Express Client.
Step 2. In Express Client homepage, click Config. See Figure 5-28. System enters config page, see Figure 5-29.

Figure 5-28
Step 3. Click Time Sync, see Figure 5-30.

Step 4. Click Enable to enable time sync to set time and period.

Step 5. Click OK to save. During set period, system can sync time of front-end device.

5.5.1.3 Manual Sync

Step 1. Log in Express Client.
Step 2. In Express Client homepage, click Config, see Figure 5-31. System enters config page, see Figure 5-32.

Step 3. Click Time Sync, system immediately sync front-end device.
5.5.2 Client Sync Time

5.5.2.1 Function

Client time sync is to sync time between client and platform server based on time of platform server. It supports auto sync time and manually sync time. Auto sync time is system auto sync time in the set period. Manually sync time is a user manually sync time, and system respond this request to sync time.

5.5.2.2 Auto Sync Time

Step 1. Log in Express Client.

Step 2. Click at the upper right corner of client, open Local Config.

Step 3. Click General tab, enable client time sync, click Save to save. See Figure 5-33.

   Note:

   To enable client sync time of local config, client immediately sends sync time request to server.

   ![Local Config](image)

   Figure 5-33

Step 4. In Express Client homepage, click Config. See Figure 5-34. System enters config, see Figure 5-35.
Step 5. Click Time Sync, see Figure 5-36.
Step 6. Click Enter to enable switch, set time sync and period.
Step 7. Click OK to save. System sync time of PC where the client lies in the time period you have set.

5.5.2.3 Manual Sync

Step 1. Log in Express Client.

Step 2. Click \( \mathcal{U} \) at the upper right corner, open Local Config.

Step 3. Click General tab, enable client sync time, click Save to save. See Figure 5-37.

   Note:
   Enable client sync time in General config, client immediately sends one sync time request to complete sync time.
Step 4. In Express Client homepage, click Config. See Figure 5-38. System enters config page, see Figure 5-39.
Step 5. Click Sync Now to sync time of PC where client is installed.

5.6 Email

5.6.1 Function

Set email info. When the platform needs to send email, it sends email via the set email address. For example, after alarm link email is enabled, when alarm event same as alarm on platform occurs, the system automatically sends email to user from set email.

5.6.2 Config Method

Step 1. Log in Express Client.

Step 2. In Express Client homepage, click Config. See Figure 5-40. System enter config page, see Figure 5-41.
Step 3. Click Email, see Figure 5-42.
Step 4. Click Enable to enable switch. Select SMTP server type, and set email.

Note:
Encryption method is recommended to be TSL.

Step 5. Click OK.

5.7 License

5.7.1 License

License includes free version and premium version. See the following chart. If you want to enable more channels or the corresponding limited function, please apply for license of premium version.

<table>
<thead>
<tr>
<th>Module</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video</td>
<td>64 channels</td>
</tr>
<tr>
<td>Access Control</td>
<td>64 IP, 64 channels</td>
</tr>
<tr>
<td>Video intercom</td>
<td>128 IP</td>
</tr>
<tr>
<td>Plate Recognition</td>
<td>2 channels</td>
</tr>
<tr>
<td>Face Recognition</td>
<td>2 channels</td>
</tr>
<tr>
<td>Client</td>
<td>1 local client login at the same time</td>
</tr>
</tbody>
</table>

Chart 5-1

<table>
<thead>
<tr>
<th>Function Module</th>
<th>Sub Function</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Login Management</td>
<td>Multiple client login</td>
<td>×</td>
</tr>
</tbody>
</table>

Figure 5-42
<table>
<thead>
<tr>
<th>Function Module</th>
<th>Sub Function</th>
<th>Free</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Management</td>
<td>ONVIF</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Network Disk</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Note</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IPSAN storage.</td>
<td></td>
</tr>
<tr>
<td>Video</td>
<td>Customize split.</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Live preview custom split.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multi-screen Application</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>ROI</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Image Config</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Quick Switch Playback</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Instant Playback</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>View Management</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Record Lock and Record Mark</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Video Wall</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Multiple Task Download</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Record download limits in a single channel, does not support multiple channels.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sync Playback</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>GPU Decode</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Video Wall Tour</td>
<td>x</td>
</tr>
<tr>
<td>Event Management</td>
<td>Link PTZ</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Link Access Control</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Event Forward</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Actively send email</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Send email when processing event</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Temporary Disarm</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Process Alarm</td>
<td>x</td>
</tr>
<tr>
<td>E-Map</td>
<td>Multi-layer Map</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hot zone application (single-layer only)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Visual Zone</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Note:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Limit customized visual zone</td>
<td></td>
</tr>
<tr>
<td>Access Control</td>
<td>Advanced function</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>Batch Issue Card</td>
<td>x</td>
</tr>
</tbody>
</table>

Chart 5-2
5.7.2 Apply License

Step 1. Get license.

1. Log in Express Client.

2. In Express Client homepage, click Config, see Figure 5-43. System enters config page Figure 5-44.

3. Click License, see Figure 5-45.
4. Click Export in Figure 5-45, system enters export license request file page, see Figure 5-46.

5. Enter channel number or IP.

Note:
Apply License is to apply for the max login number at the same time, so no config available.

6. Click Export, to create zip format pack and save it in DSS Express client path.

Step 2. Send the license file to sales person.

5.7.3 Load License

Before you load license, please confirm you have applied and gotten license.

Step 1. Log in Express Client.

Step 2. In Express Client homepage, click Config, see Figure 5-47. System enters config page, see Figure 5-48.
Figure 5-48

Step 3. Click License, system enters license page, see Figure 5-49.

Figure 5-49

Step 4. Click Browse, select license file to upload.

Step 5. Click Import, complete license loading. After loading, system prompts that license info has been changed, and program reboots.
Step 6. Log in Express Client again, enter license config page to confirm that license condition matches the application. See Figure 5-50.
6 Add Encoder

6.1 Create Organization

Add organization is to deploy, organization and manage user or device layer for management. You cannot skip adding organization, so all added user or device will be sorted under default organization.

The system level 1 organization is “root” node by default. Newly added organization is shown in level below root node.

Step 1. In Express Client homepage, click Device module to enter device management, see Figure 6-1.

Step 2. Select organization, click △ to create lower organization, see Figure 6-2. It supports right click organization, and select Add Organization to create lower organization.
Step 3. Enter organization name, click OK.
System shows add organization info, see Figure 6-3.

Right click root node to:
- Select to create organization below root node.
- Set display by name or IP.
- Set sort sequence, support ascending, descending and default.

Right click lower organization to support to create organization below root node, to delete organization and rename organization.
6.2 Add Encoder

6.2.1 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 6-6.

Step 2. Device management page is in Figure 6-7, click “Add” button to manually add.
Step 3. See Figure 6-8. Select “IP Address” or “Onvif” as Register Mode and select “Encoder” as Device Category.

Step 4. According to page requirement, fill in device info, include: device name, IP address, port no. (default is 37777, register mode is ONVIF, device port is 80) username and password. If you have not created organization node, then the device is under node Video by default. See Figure 6-9. 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.
Step 5. After device info is filled, you can click Play button to preview video, as in Figure 6-10. Preview is in Figure 6-11.
Step 6. After device is added, in the device list in Figure 6-12. Green means online, and red means offline. Online device can be edited, deleted and set.

Step 7. If the system gotten device type is incorrect or needs to be changed, please click Edit button of corresponding device, see Figure 6-13.
Step 8. Device edit page is in Figure 6-14. A user can modify corresponding info accordingly. Device category cannot be changed here, but you can change device type. See Figure 6-14 and Figure 6-15.

![Figure 6-14](image)

**Device Detail**
- **Device Name:** DVR14
- **Type:** DVR
- **Manufacturer:** Dahua Device
- **User:** admin
- **Password:** ********
- **Organization:** Video

![Figure 6-15](image)

6.2.2 Auto Add

6.2.2.1 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 6-16.
Step 2. Default search page and results are in Figure 6-17.

Figure 6-16

Step 3. In search result, a user can select one, select multiple or select all (current page), see Figure 6-18. Confirm and click "button to add device into DSS Express platform.

Figure 6-17
Step 4. According to system prompt, select server, organization, and fill username and password to batch log in device. See Figure 6-19. Confirm info and click “OK” button.

Step 5. After you add device, see Figure 6-20.
6.2.2.2 Local Input

DSS Express supports device input from local. And P2P import does not support local import currently.
Figure 6-22
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.

7.1 Add User

Step 1. Via add button in navigation bar enter homepage, and then click User icon. See Figure 7-1.

Step 2. Among three user types on the left, select user type you want to add. See Chart 7-1. And click add user button. See Figure 7-2.
**User Type**

<table>
<thead>
<tr>
<th>Administrator</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>•</td>
<td>Control right</td>
</tr>
<tr>
<td>•</td>
<td>View record, PTZ control, video intercom, lock record and record tag.</td>
</tr>
<tr>
<td></td>
<td>Menu Right</td>
</tr>
<tr>
<td></td>
<td>Device, live preview, user, record playback, e-map, video wall, config, download center, video wall, event center, e-map config, system config, log, access control management, face recognition, plate recognition, user management and intercom management.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advanced User</th>
<th>Advanced user is lack of some right of system configuration in menu.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal User</td>
<td>Normal user does not have right of device, person, config, video wall, e-map, system config and log.</td>
</tr>
</tbody>
</table>

**Chart 7-1**

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.
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.

7.2 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 7-5

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

Figure 7-6

7.3 Delete User

Step 1. Same with adding user, just enter user manager module. On the left, select username you want to delete and click .
Step 2. In the shown figure, click OK to delete.
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).

### 8.1 Organization Preview

**Step 1.** In device tree on the left, it supports display of total device of current organization and online device. See Figure 8-1. Please select window number in tools at bottom before preview.

![Figure 8-1](image)

**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 8-2. If N is 4, it will open 4 video channels in this organization.
Step 3. Select one organization, right click it to set tour preview of all channels in this organization. See Figure 8-3.

Step 4. During tour, you can click Stop button ✈ or right click in window to turn off tour, see Figure 8-4.
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.

### 8.2 Device Preview

Step 1. In “Local Config—General”, check “Show device node”, see Figure 8-5.
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.

### 8.3 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 8-6.
Step 2. A user can auto select channel and preview in window. Right click channel, to add into favorite, see Figure 8-7.

8.4 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.

![DSS Interface](image)

**Figure 8-8**

<table>
<thead>
<tr>
<th>No.</th>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Stream Info and Shortcut</td>
<td>Show encode format, stream info and shortcut. Shortcuts:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 🎥: Enable or disable instant playback, playback time is set in “Local Config”. Precondition of instant playback is that there is</td>
</tr>
<tr>
<td></td>
<td></td>
<td>record at center or locally on device. Center record has priority.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 🎧: Enable or disable audio.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 🎤: Enable or disable intercom. In “Local Config &gt; General”, check “Self-adaptive intercom”. When you enable intercom,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>no pop-up window will appear, and auto adaptive applies to all parameters.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 📸: Enable or disable local record.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 📷: Snapshot.</td>
</tr>
<tr>
<td>2</td>
<td>Favorites and Device Tree Search</td>
<td>Support 🕵️️ Search., search by device name or channel name.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 🌟: Add, delete or rename favorites. Support tour of favorites.</td>
</tr>
<tr>
<td>3</td>
<td>Map</td>
<td>Preview map info in windows. Only supports raster map.</td>
</tr>
<tr>
<td>No.</td>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>------</td>
</tr>
<tr>
<td>4</td>
<td>Map</td>
<td>Support to save current video window to video. View supports three levels: node, group and view respectively. It supports node, node tour view, tour time can be 10s, 30s, 1min, 2min, 5min, 10min. Max 100 views.</td>
</tr>
<tr>
<td>5</td>
<td>PTZ</td>
<td>Speed dome PTZ adjust.</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Save current video as view.</td>
</tr>
<tr>
<td>7</td>
<td>Aspect Ratio</td>
<td>Select video window aspect ratio, it supports to play video in actual aspect ratio or full screen.</td>
</tr>
<tr>
<td>8</td>
<td>Split</td>
<td>Split video. You can slip video into 1 to 64 windows, or click to customize.</td>
</tr>
<tr>
<td>9</td>
<td>Full Screen</td>
<td>Set video to full screen. To exit, you can click Esc or right click and select exit full screen.</td>
</tr>
</tbody>
</table>

Chart 8-1
Right click preview window, you can set current video, see Figure 8-9.

Figure 8-9
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close Video</td>
<td>Close current window.</td>
</tr>
<tr>
<td>Close All</td>
<td>Close all windows.</td>
</tr>
<tr>
<td>Enable Audio</td>
<td>Same as 😃, turn on or off audio of camera.</td>
</tr>
<tr>
<td>Enable Talk</td>
<td>Same as 😃, turn on or off corresponding talk function of device. In &quot;Local Config &gt; General&quot; check &quot;Self-adaptive talk&quot;, to enable talk, no pop-up to auto adjust parameter.</td>
</tr>
<tr>
<td>Start Local Record</td>
<td>Same as 😃, record A/V in current window, and save to local PC.</td>
</tr>
<tr>
<td>Snapshot</td>
<td>Same as 😃, save image in current window as picture file to picture folder (Save one picture every time you call).</td>
</tr>
<tr>
<td>Continuous Snapshot</td>
<td>Same as 😃, save image in current window as picture file to picture folder (Snapshot three pictures every time).</td>
</tr>
<tr>
<td>Alarm Output Control</td>
<td>Control alarm output ON/OFF.</td>
</tr>
<tr>
<td>Stream Type</td>
<td>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 &quot;support sub stream 1&quot;, “support sub stream 2”.</td>
</tr>
<tr>
<td>Live/Fluency</td>
<td>Enter “live priority”, “fluency priority”, “balance priority” or custom.</td>
</tr>
<tr>
<td>Video Adjustment</td>
<td>Adjust image and enhance video.</td>
</tr>
<tr>
<td>Window Mode</td>
<td>Support standard mode, 1+3 and 1+5.</td>
</tr>
<tr>
<td>Fisheye Installation</td>
<td>Wall-mount, ceiling and grounding.</td>
</tr>
<tr>
<td>Fisheye View</td>
<td>Fisheye view has different installation modes and angles: Panoroma-360 degrees, Dual panorama-Two 180 degrees, 4-split-Split entire video into four splits, up/down/left/right, each block can be adjusted direction separately, Single video-one video</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Add to Favorite</td>
<td>Add this channel or all channels into favorites</td>
</tr>
<tr>
<td>Full Screen</td>
<td>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.</td>
</tr>
<tr>
<td>Switch to Playback</td>
<td>Switch preview to playback without going back to homepage.</td>
</tr>
</tbody>
</table>

Chart 8-2
9.1 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 9-1.

Figure 9-1

Step 2. In config page, click "Storage" to enter storage config, see Figure 9-2.

Figure 9-2

Step 3. DSS Express server will auto detects Express server installation disk info(Not PC Client disk info), see Figure 9-3.
Step 4. Click split button to create DSS Express storage, see Figure 9-4.

Step 5. Select storage space type, video or picture, see Figure 9-5. If you need to save ANPR device picture, you shall set storage space type to be picture.

Step 6. According to need and disk free space, set storage space size. Min value is 10GB, see Figure 9-6. Confirm it and click button to complete setup.
Step 7. After disk is complete, see Figure 9-7. In the red box, the value is 50GB just set.

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 9-8.

9.2 Network Disk Setup
Step 1. First park of operation here is same with local storage disk setup, see Figure 9-9.
Click Add button to add network disk.

Figure 9-9
Step 2. In system pop-up page, fill in network storage device IP address, confirm and click “OK” button to add, see Figure 9-10.

Figure 9-10
Step 3. Format disk.
Step 4. Network disk list is in Figure 9-11. Green means there is free space and red means storage is already full and is overwriting.
9.3 Create Storage Plan

Step 1. In Client homepage, click “Config” in management bar to enter Config module, see Figure 9-12.

Step 2. Please select one video channel on the left, and then click record config button on the right, see Figure 9-13.
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 9-14.

Note:
To delete record stored on server, please see Appendix 2.

Step 4. After record plan is added, see Figure 9-15. A user can open and close plan, modify and delete plan.
Figure 9-15
10.1 Record Search & Playback

Step 1. In DSS Express Client homepage, click “Playback” to enter record playback module, see Figure 10-1.

Figure 10-1

Step 2. Record playback page is in Figure 10-2. Firstly, select channel and storage location for playback. If you set this channel in record plan, it is stored on server.
Figure 10-2

Step 3. Select time to search, click to open calendar, if there is record, you can see a blue dot on date, see Figure 10-3. Please select date with record to search.
Step 4. Record search result is in Figure 10-4. Double click time with record on time axis to playback record by time (you can scroll to zoom in time axis). Click play button in window to start play from the earliest time.

Note:

Click 🔄 to filter record by record type. Record type includes scheduled record, alarm record, motion detection, video loss and video tampering.

Step 5. During playback, you can control record via tools at bottom, see Figure 10-5.
10.2 Download Record

Step 1. Follow previous section, in playback page, click cut button, and select start time and end time on time axis to download record. See Figure 10-6. Record download supports many formats: dav, avi, mp4, flv and asf.

Step 2. Click download and go to download center, see Figure 10-7. A user can pause and
delete downloading task via control button.

Figure 10-7

Step 3. You can click download button ☐ to enter download center, you can download record by record list and tag. See Figure 10-8.

Figure 10-8
10.3 Locking Videos

You can select a time period of a channel and lock the corresponding video. When the storage device is full, the video you have locked will not be covered and replaced.

Step 1. On the Playback interface, set a certain conditions to select the recorded video you want.

Step 2. Click and then you can select start time and end time on time axis.

Step 3. Click OK to finish video locking. See Figure 10-9
Download center provides 3 types of download modes, including timeline, record list and tag. You can pause, delete downloaded record.

11.1 Download Record

Before downloading, please select channel, time, storage position accordingly to search record, see Figure 11-1. Result in Figure 11-2.
11.1.1 Timeline Cut

Step 1. In search result, click Timeline tab, and select display of timeline, see Figure 11-3.

Step 2. Move mouse to timeline, you can see a small pair of scissors. You can click timeline to select start time and end time, then in system pop-up prompt box, confirm the selected time range and select record storage format. See Figure 11-4. There are 5 formats: dav, avi, mp4, flv and asf. Please select accordingly.
Step 3. Confirm download info and click OK to start downloading. See Figure 11-5.

Step 4. Progress of download is shown below. A user you pause, start and delete the downloading.
11.1.2 Select Record List

Step 1. In search result, click File tab and select record display method, see Figure 11-7.

Step 2. A user can check more than one record file to download. Click Download to batch download, or user can click corresponding download button of a file, see Figure 11-8.
Figure 11-8

Step 3. Progress of downloading record is shown below. A user can pause, play and delete record accordingly. See Figure 11-9.

Figure 11-9

11.1.3 Tag Record

Step 1. In search result, click Tag and select tag display method, see Figure 11-10.
Step 2. A user can check more than one record file to download. Click Download button to batch download, or you can click corresponding download button of a record file. A prompt box pops up, please select length of tagged record you want to download and select record format. Then click OK. See Figure 11-11.

Figure 11-10

Figure 11-11
11.2 Download Management

11.2.1 Download Complete

After download is complete, the system will auto pop up a box at the lower right corner, see Figure 11-12. Click folder icon to enter the folder.

![Figure 11-12](image)

11.2.2 Pause/Start Download

In download management page, you can pause all current download tasks or a specific task, control button is shown in Figure 11-13. Button 1 is pause all, and button 2 is pause one task. To start task(s) again, buttons are shown in Figure 11-14.

![Figure 11-13](image)
11.2.3 Delete Download Task

For task in downloading or paused, you can delete it accordingly, control button is shown in Figure 11-15. Button 1 is to delete all tasks in list. Button 2 is to delete corresponding task. Please select as you need, and please be aware that no prompt will appear.
DSS Express platform currently supports raster map. You can set more maps at the same time. Default display is map which set as main map by you.

12.1 Add Map

Step 1. When you first time enter map application module, map info is blank. The system will prompt you to add map info, please follow instructions and click Here to add map picture. See Figure 12-1.

Figure 12-1

Step 2. Please set map name as you need, and select picture file. Then click OK button to add.
Figure 12-2

Figure 12-3

Step 3. After you complete adding of map, you can scroll mouse to zoom in.
Step 4. In device list, expand device info. You can drag video channel, access control channel, alarm channel into map as you want, see Figure 12-5. In map edit mode, all operations take effective immediately.

Step 5. If you need to adjust position of each channel on the map, please click button first to enable drag function. See Figure 12-6. When the button changes to blue, then you can move it. After you adjust position, please click it again to disable drag function.
- device position move enable: enable it then you can move channel on map.
- sub map add: click to and select position of sub map, click mouse to add.
- pane button: click it and pane device on map, which forms a temporary preview, playback, delete and etc.
- device type filter: click it and select device type you want to show on map.
mark and reset.

12.2 Add Sub Map
One map can have multiple layers, and in map editing status, click button to add sub map:

Step 1. In map application mode, select map you want to add as sub map, click Edit to enter map edit mode, see Figure 12-8.

![Figure 12-8](image)

Step 2. In edit mode, click sub map add button, see Figure 12-9.
Step 3. Click add button, and the mouse will turn into a map icon. On map, select target position and left click mouse to add map, see Figure 12-10.

Step 4. After sub map is added, double click to enter sub map page. If you want to add lower-level map in the sub map, the steps are same as above.
DSS Express supports multiple maps, to add:

Step 1. In map application mode, select map you want to add sub map, click Edit to enter edit mode, see Figure 12-13.
Step 2. On the left, click Add button to add map, see Figure 12-14.

Step 3. In this page, set map name as you need, and select map picture, click OK. See Figure 12-15.
Step 4. After you complete adding of multiple maps, see Figure 12-16.

12.4 Map Application

12.4.1 Main Map Setup
When you add more than one map, you can set default map as main map, please select this map and
click button in the figure below. After setup is complete, you can see a yellow icon. See Figure 12-17 and Figure 12-18.

![Figure 12-17](image1)

![Figure 12-18](image2)

12.4.2 Pane Application

In map application, you can pane device to preview, playback.

Step 1. In map application, click pane button and in map pane area, it will generate a
temporary list. In this list, you can select channel to preview and playback.

Figure 12-19

Step 2. After you select device, click preview button on map to preview.

12.4.3 Filter Device Type

On map, you can set display/no display of certain types of device. Click button to show type selection. See Figure 12-20. If you do not want to show video channel, just uncheck it. See Figure 12-21.
12.4.4 Tool

In tool of map, you can set mark on map and restore default size of map. See Figure 12-22. In map application page, click "Tool" button and select content to execute, effect is in Figure 12-23.
Note:

- **Visual area**: This is monitoring visual range/angle of this device.
Event manager includes alarm scheme config and alarm processing. Firstly you must set alarm scheme of actual channel you need in config.

### 13.1 Alarm Scheme Config

Step 1. In Client homepage, click Config icon to enter config module, see Figure 13-1.

![Figure 13-1](attachment:image)

Step 2. Config page is shown. After you enter config module, select device/channel to set alarm scheme, and click Event Configuration button to enter event config page.
Step 3. In shown config page, select alarm type to config, and enable this type of alarm (red box 2 in Figure 13-3), set alarm level and arm time. Set alarm link action according to need. If no need, you can click OK to complete event setup (alarm scheme).

Step 4. Link PTZ. When an alarm occurs, you can select certain speed dome channel to turn to its position for monitoring, as setting this speed dome to a certain preset, see Figure 13-4.
Step 5. Link video setup. In event setup page, click Link Video tab to enter link video setup, including link video setup when an alarm occurs and snapshot, pop up video on Client and etc.

Record storage path can select: on device, on center disk, not save.
Stream can select: main stream, sub stream1, sub stream2.
For other info, please see page prompt.

Step 6. Link alarm output. If there is external alarm output device, you can click Alarm Output tab and select corresponding output channel, and set alarm length, see Figure 13-6.
Step 7. Link email setup. When an alarm occurs, you can send email to inform related users. In event setup page, click Email tab to enter email setup page. Click Address button to select receiver. See Figure 13-7. You can customize email title, and content or select provided content. See Figure 13-8.
Step 8. Alarm link access control. When an alarm occurs, you can set open or close of multiple access channel. Each channel can be set independently. See Figure 13-9. After setup, click OK button to complete.

Step 9. Event (alarm scheme) config is complete and see Figure 13-10. Be careful with alarm type since each type must be separately set corresponding link, no batch setup available.
13.2 Alarm Manager

When an alarm occurs, you can click to process in Alarm at client navigation bar, as well as going to Event manager module.

13.2.1 Alarm Prompt

When a new alarm occurs, at navigation bar in client, you can view obvious alarm prompt. Click alarm quantity prompt to enter event manager page. See Figure 13-11.
13.2.2 Real-time Alarm Processing

In event manager module you can process alarm: select alarm processing method (process, ignore, transfer); view alarm linked view, snapshot and record. One-click to clear alarm message and etc.

Step 1. In Express Client homepage, click Event Center to enter event module, see Figure 13-12.
Step 2. Real-time alarm is shown in Figure 13-13. Double click to view alarm details. Click hand button in operation bar to claim the alarm. After alarm is claimed, the icon in operation bar becomes an "eye". If one alarm is claimed by user A, then other user will not see it in alarm record, but it is visible in alarm history. However, other users cannot process it in alarm history.

![Figure 13-13](image)

Step 3. Double click to view alarm detail. Default display of alarm detail include alarm time, alarm type, alarm source (channel/device) and alarm level. See Figure 13-14. A user can select alarm processing accordingly or a user can select process method after viewing video, snapshot and record. The following example selects after viewing all info.

![Figure 13-14](image)
Step 4. In alarm detail page, click Live View tab to view alarm corresponding channel video info, see Figure 13-15.

Step 5. In alarm detail page, click Snapshot tab to view alarm corresponding channel's snapshot info, see Figure 13-16.

Step 6. In alarm detail page, click Record tab to view alarm corresponding channel's record, see Figure 13-17.
Step 7. In alarm detail page, click Map tab to view map info when alarm occurs, see Figure 13-18.

Step 8. According to actual condition, you can select processing method and you can enter note.
Step 9. Temporary disarm. When you process alarm, you can click Temporary Disarm button to set minutes of temporary disarm of this channel and this type of alarm. See Figure 13-20.

Step 10. Manually send email. When you process alarm, you can click Send Mail button to manually send email to related person. You also can add email address, set title and content of email. After you complete setup, click Send button.
### 13.2.3 History Alarm Search & Process

**Step 1.** In event center click  tab to enter alarm manager history page. See Figure 13-22. First please select channel to search and click first dropdown list and select alarm type.

**Step 2.** According to actual condition, select actual range of alarm search, see Figure 13-23.
Search range must be in the same month.

Figure 13-23
Step 3. Select alarm level, see Figure 13-24. If not select, all levels will be selected by default.

Figure 13-24
Step 4. Select to claim alarm. A user can search a user to claim this alarm according to actual need, see Figure 13-25.
Step 5. Select alarm status, a user can select different statuses of alarm message, see Figure 13-26.

Step 6. After you select criteria, click Search button to search alarm. Result is shown below.
Step 7. You can view or process searched alarm. Steps and method are same with processing alarm. Please process referring to real-time alarm.
14.1 Business Flow
Add decode device—add video wall—output video to wall+task on wall+plan on wall

14.2 Add Decode Device
Before you add video wall and output video to wall, you must add decode device. Currently DSS Express platform supports decode device: decoder and decode matrix. To add:

Step 1. In DSS Express client homepage, click Device to enter device manager module.

Step 2. In device manager page, click button, and then in pop-up box, select add device method as by IP. For device type, select decoder or matrix.
Step 3. Please follow instructions in page to complete info input and selection. Make sure you have considered capability of decoder before you check Support Combination box and please select decoder (direct, push, pull). After setup is complete, click Add button.
Figure 14-3

Step 4. Decoder device is shown below. Device status is red, meaning the device is offline. Green means device is online. After decode device is added, you can see Decoder option in device type.
14.3 Add Video Wall

Step 1. In DSS Express client homepage, click Video Wall to enter device manager module, see Figure 14-5.

Step 2. In video wall page, click Video Wall dropdown list and click add video wall button to add.
Step 3. In system pop-up box, fill in video wall name and note accordingly, see Figure 14-7.

Step 4. Select video wall number accordingly, and then place button of corresponding number at random position on screen. See Figure 14-8. Click Next button to continue.
Step 5. If you want to set several screens into a combined screen, please hold Shift button and select adjacent screens, then click Combine. After combined, you can see Figure 14-10. Click Next button to continue.
Step 6. If you want to clear video wall config, please click button. Click it than the entire screen will be cleared.

Step 7. Enter decode channel binding setup. Drag decode channel on the left to corresponding screen on the right. Be careful, if 4 screens are combined into one,
you must bind one decode channel to each of the 4 screens, so you cannot bind just one channel to the combined channel. One video wall can bind multiple channels of decode device. After you complete binding, click Finish button.

Figure 14-12

Figure 14-13

Step 8. In video wall control page, it shows the latest video wall.
14.4 Video Wall Control

Video wall plan includes binding between video channel and decode channel, wall mode selection (task output to wall/instant output to wall), wall task and plan adding, stream setup.

14.4.1 Instant Output to Wall

Drag video channel to corresponding screen, do not click wall button, it will be auto displayed.

First in video wall list, select one video wall schedule, and open instant video wall switch Apply Now, and drag video channel into corresponding decode screen. Click Detail icon in figure to show bound video channel in currently selected decode window. You can go to Detail setup, set stream type and adjust sequence of channel display.
14.4.2 Output to Video Wall

Step 1. For any one video wall combination, click Save as tack button to set wall task.

Step 2. In pop-up box, enter task name and click OK.
Step 3. Save current wall layout as task, and system will show this task by default. Now instant wall switch will turn off. If a user updates bound video channel in this task page, then he/she needs to click to control video wall.

Step 4. If you want to view live of a certain channel, please go to Detail and select corresponding channel, click Play button. At the lower left corner, you can view live of the channel.
14.4.3 Wall Schedule

Wall schedule is setup of video wall task according to work time and length.

Step 1. In video wall page, click 📅 at the upper right corner to add schedule. In pop-up page, click Add button to add schedule.
Step 2. A user can select plan schedule or tour plan accordingly. Differences between schedule and tour: schedule includes detailed start time and end time of each task and if set task time is shorter than one day, user can set execution of other tasks as remaining time when two tasks are already executed. Tour plan sets sequence of multiple tasks plus interval in between, forming a cycle, without concept of remaining time.
Step 3. Add schedule. Select schedule, enter schedule setup page. You can set execution time of each task and remaining time task. After setup is complete, click Save.

Step 4. Successfully add schedule, see Figure 14-24.

Step 5. Add tour plan. Select Tour to add tour plan. A user can set task sequence and stay length according to actual need. A user can adjust sequence in operation bar. Then click Save.
Step 6. After successfully saved, enable schedule switch.

Step 7. If you want to stop the schedule, click button. If you want to switch to other schedule, click output plan button to enter schedule manager to switch.
14.4.4 Control Function

14.4.4.1 Eagle Eye

When you set output channel in Client, if you cannot see screens clearly, you may zoom in certain part of video wall via eagle eye function. Drag blue box and adjust its size to zoom in.
14.4.4.2 One-click Clear Screen

It supports one-click to clear all info of current decode channel. Click this button to do so.

![Figure 14-28](image)

14.4.4.3 Lock Window

This lock window function is used when combined screen is open. If you lock window, then all windows in this locked window cannot be moved. You must unlock window to move inner windows.

![Figure 14-29](image)
14.4.4.4 Sync Play in Client

In video wall decoding window, it shows live of corresponding video channel. If the window does not respond, please click mouse in other window and then click this window to activate it.
14.4.4.5 Screen Switch

In Client, you can control switch to enable/disable some/all screens of decoding matrix.

Click 📷 in screen, and in pop-up box select screen to switch.
Figure 14-34
15.1 Add Department

Step 1. In Client homepage, click Personnel Management to enter person management module, see Figure 15-1.

![Figure 15-1](image)

Step 2. On the left, in department management bar, select directory root and click department. See Figure 15-2.
Step 3. In the system prompt page, enter department name and click OK to complete adding. See Figure 15-3.

Step 4. After you all department list, see Figure 15-4. Select corresponding department of added user.
15.2 Add Person

You can add a single person and batch person, and import user info. Furthermore, if you add VTH in intercom module, it will auto create person. According to fixed person generated by room no. extracted by SIP, person ID is the room no. When you add person, the collected person info will be uploaded to server for protection.

15.2.1 Add A User

Step 1. In Client homepage, click “Personnel Management” to enter user management module, see Figure 15-5.
Step 2. In User management page, click “Add” button to add user, see Figure 15-6.

Step 3. In system pop-up, upload person image (Images can be edited), or click Snapshot to snapshot face to upload (PC with this client needs to carry camera), fill in user info and please be noted user ID is mandatory. After you complete filling, please switch to “Authentication” to set authentication.
Step 4. Click **Authentication** page to enter authentication setting. Here you can set password, add card no., collect fingerprint and etc.

Step 5. For password setting, click “Change” button, see Figure 15-9.
Step 6. In the Figure 15-10, enter password of this user, click “OK” button.

Step 7. After you set password, click “Add” button to add card no., and in this page, enter card no. of this user, click “OK” button to add card. You also can add card by reading card on reader of access control device which you must click button and select read card first.
Step 8. After you add card, see Figure 15-12. To collect fingerprint, refer to step 9.

Step 9. Collect fingerprint, you must specify access control channel, and click collect fingerprint button to select reader of access control channel. See
Step 10. After access control reader is selected, you shall manually select finger. Select a specific finger via mouse, such as middle finger of left hand.

Step 11. After you select finger, as shown in system prompt, click add fingerprint button and place your corresponding finger on reader you selected,
remember to record three times (other fingers could be recorded as well). When you hear a beep, rise your finger and place down again until three times of recording are complete. You will receive a notice informing you all of three times of recordings are done and Client fingerprint status will change. See Figure 15-15 to Figure 15-18.

![Figure 15-15](image1.png)

![Figure 15-16](image2.png)
Step 12. After fingerprint recording is complete, click “Authorize” button to authorize access control channel, and you can select set door group in channel, see
Step 13. Access channel is selected, then click "OK" in add user page, see user list below. If there is authorized fingerprint and card, then icon will be blue.
15.2.2 Batch Add

When you batch add, you can authorize card, but you cannot batch authorize password or fingerprint. If you need, you can edit user right one by one.

Step 1. In Client homepage, click "Personnel Management "to enter user management module, see Figure 15-21.

Step 2. In system pop-up page, click button to batch add new user.

Step 3. In system prompt page, enter user start ID and batch user quantity see Figure 15-23.
When you complete filling, click “Next” button to enter batch issue card page. If you do not have card info, you can click “Save and Exit” button to save user info and exit.

Step 4. Enter batch issue card page, see Figure 15-24. Enter user card no. and click “Issue Card” button to complete card issuing. Then you can enter next card no. until you have added all card no.
Figure 15-24
Step 5. After card no. are filled in, please select validity time and expiration, then click “Next” to enter.

Figure 15-25
Step 6. Enter batch authorize setup, you can select channel or door group with authorized access control, see Figure 15-26. Click “Finish” button to complete adding and setup.
Step 7. After you add, user list is in Figure 15-27. Click button to delete user.

Figure 15-26

Step 8. If you want to edit user info, you can click ☑ at bottom to show user info and edit info. See Figure 15-28. You can upload or change user photo, complete user basic info, update user authorization method (Batch add card only, here you can set password and fingerprint), and update access control channel.

Figure 15-27

Step 9. Edited info will take effective immediately. Click ☑ to refresh user list, see Figure 15-29.

Figure 15-28

Figure 15-29
15.2.3 Import Person

15.2.3.1 Export Person

Export person info in xls format saved at local. Saved file can be imported to quickly resume person info via importing info, or on other platforms set same person info which can quickly complete config via importing.

Step 1. In client homepage, click Personnel Management to enter person management, see Figure 15-30.
Step 2. On the left, select organization, click ![Import](import.png). In the prompt box, select export path, click OK to export all person info. You can see progress of export. See Figure 15-31.

![Figure 15-31](image.png)

**15.2.3.2 Import Person**

Edit info of person you want to add into an excel file, and import the edited excel chart. Now person info is added. Import file format supports xls, size is within 1M.

Step 1. In Client homepage, click Personnel Management, to enter person management module, see Figure 5-30.
Step 2. In system pop up page, click **Import** to add person, see Figure 15-33.

Step 3. Click **Template Download** to get import template and import user info according to template edit person info. Save file.

Step 4. Click **ImportFile**, select import file. After you upload file, platform will analyze, and shows progress of analysis. If analysis failed, there will be prompt. After analysis is
complete, click OK to import person info. See Figure 15-34. Successfully imported persons are shown in user list. See Figure 15-35.

Import may have the following conditions:

- If there is person of platform exists, then system will prompt.
- Person ID to be imported is repeated, if there is no person exists, process as adding new person. If person ID exists in the platform, then system will prompt.
- Fill in error for imported user info, and field length is abnormal. According to length limit of client, if it fails to library due to timeout, it will prompt.
- Default value is abnormal. Default rule is: Gender (female), Property (general card), Department (root node), ID type, Marriage (null), Education (no education). Expiry start time is current time by default. Expiry time is year 2028.
- Person does not exist in the platform, and if the platform does not exist, then create new department under the root node. If department exists, then create new user in corresponding department. Department info is matched by name.
- Cannot read content, direct analysis has error.
15.3 Delete User

It supports delete one/multiple/all users:

Step 1. After you enter user manager module, check user to delete and click Delete.
Step 2. In pop-up box, click OK to delete.

Step 3. After you delete it, you can search see if you successfully delete it.
15.4 Batch Issue Card

It supports to issue card as batch.

Step 1. Enter user manager module, check users you want to issue card, and click Batch Issue Card button.

Step 2. In this page, enter card no. (or swipe card at reader), and then click Issue Card.
Step 3. Issue card to all designated users, so these users do not need authorization of access control channels. Click Save and Exit.

Step 4. If you want to authorize user with access control right, please click Next button to enter next step. In access control channel page, select channel or set access
control group, and then click Finish button.

Figure 15-43
16.1 Add Access Control Device

Log in DSS Express Client. and in management bar, enter device management module, you can add, edit and delete access controller, steps:

Step 1. In Express Client homepage find management bar, click “Device” module to enter device management, see Figure 16-1.

Step 2. Device management page shown, click “Add” button to add device manually.
Step 3. See Figure 16-3. First select device register mode to be IP Address, and set device category to be “Access”.

Figure 16-3
Step 4. According to page requirement, fill in device info, including: device name, IP address, port no. (default is 37777), username and password. If you have not created organization node and device is under root node Video, see Figure 16-4. Confirm info and click “Add” button to add.
16.2 Time Template&Holiday Group

Step 1. In Client homepage, click “Access Control” to enter access control module. See Figure 16-6 to enter access control module.
Step 2. Select time template tab and then in the page, click add time template button to add time template.

Step 3. In time template setup page, enter name. On time axis, draw out period you need, see Figure 16-8. A pen sign is draw button, and eraser sign is clear button. When you are done, click "OK" button to complete.
Step 4. Time template list update is shown below.

16.3 Access Control Console
In console, you can unlock, lock, open video (must set linked channel in door config first) and etc. plus right click to remotely unlock/lock, set door and etc.
16.3.1 Door Config

Door config module can set door channel name.

Step 1. Enter Access Control module console, on the left, select one access control channel and right click mouse. In pop-up menu, select Door Config to enter config page. See Figure 16-10.

Step 2. Access control channel config page is shown in Figure 16-11. Please set parameters accordingly, and click “OK” button to complete setup and enter config homepage.
Step 3. In config homepage, click Resource Bind to enter video channel bind page. See Figure 16-12.

Figure 16-11

Step 4. Video channel bind page is shown, please select video channel and click “OK” button.

Figure 16-12
16.3.2 Access Control Channel Control

Step 1. Unlock door. Enter access control module console, on the left, select access control channel and then on the right, click unlock button 
, it will generate corresponding unlock record. See Figure 16-14 and Figure 16-15.
Step 2. Within certain time (can be set in door config, default is 5s, here uses 10s), door will auto lock and a record is created in event column. See Figure 16-16.
Step 3. Lock door. When a door is open, click unlock button to unlock it. See Figure 16-17.

Step 4. Unluck effect and event record is in Figure 16-18.
Step 5. View live preview. When door is bound to video channel, click  to view live video. See Figure 16-19 and Figure 16-20. During preview, a poo-up window shows all event info except lock door event. See Figure 16-21.
Step 6. View link video. Click video play button to preview video of channel bound to this access control channel, see Figure 16-22. You can overlay info on video.
16.3.3 Event Detail

In event list, select one record and click to view details, include: event info, live video, snapshot, record. Live video must be bind video channel to door in door config first before you can view live here. You must link video in scheme example management first before you can snapshot and record here. Please refer to scheme management chapter.

Figure 16-23

16.3.4 Global Control

Global control main function is to select one or more access control channel and NO/NC and restore to normal. Steps:
Step 1. In access control module console, on the left click config button to select channel, button is in Figure 16-24.

![Figure 16-24](image)

Step 2. In pop-up channel list, select channel for global control, see Figure 16-25 and click "OK" button to take effect.
Step 3. Currently front door is closed, and you can click NO button to unlock it. This operation must be operated with password, so please enter password of current user in system box, and click “OK” button. （After global control unlock, the door will not close automatically after set time, instead please manually click replay or click button to close door.）
Step 4. On the right, in access control channel list, you can see selected door status become open status. See Figure 16-27.

Step 5. Click NC button, and follow system instructions to enter current username password, click “OK”button to start. See Figure 16-28.
Step 6. Exit global control, please click to restore normal via button “Resume”.

16.3.5 Scheme Management

Scheme management function includes setup of access control channel's alarm type and you can determine alarm priority, scheme work period, link PTZ preset, linked video open in preview window, linked snapshot and record, linked alarm output, alarm email sending, linked access control channel in NC/NC status and etc.

Warning:

Every alarm type in link config shall be separately set, since you cannot set them together as a batch.

Step 1. Enter access control module console, and on the left, select one access control channel and right click mouse, in pop-up menu, select Door Config to enter config page. See Figure 16-29.
Step 2. Enter event config page, first please select alarm type, and then enable alarm, set alarm level, select alarm arm work time (select time template), see Figure 16-30. After you execute, you also can select other alarm type and follow the same steps to set. Each alarm type can be set to different levels and arm time.

Step 3. Link PTZ preset config. When event property config is complete, please go to event config page, and select Link PTZ tab. See Figure 16-31. Select one speed dome channel, and then select the preset which speed domes rotated to when event...
occurred. If preset list is null, you can skip this step and click edit scheme to set PTZ link.

Figure 16-31
Step 4. Link video-category setup, please select Link Video tab, see Figure 16-32. You can drag video channel into preview window to preview video. You can select if to save record when event occurs and stream type, time to save plus whether to enable snapshot, open video in preview window and etc. Please set accordingly.

Figure 16-32
Step 5. Link alarm output channel, if alarm output channel connects to buzzer alarm or other alarm devices, you shall let the system auto enable alarm at occurrence, and set alarm length, see Figure 16-33.
Step 6. Link email config. If when an event occurs, users shall be notified via email, you can link email config and select receiver in address or manually enter. Email title shall be filled in according to actual event, content must contain event time, event type, event source. Please select items you contain in email (all of the three items are recommended), and you also can edit email, see Figure 16-34.

Step 7. Link access control channel config. When an event occurs, you can set to auto unlock or lock certain door in Link AC. You can select access control channel and set status of this channel. Each channel setup is independent, and after setup is
complete, click “OK”. See Figure 16-35.

Figure 16-35

Step 8. Scheme is shown in Figure 16-36.

Figure 16-36

16.4 Door Group

Door group and door rule are non-standard config, and user can select to set or not.

Step 1. In Client homepage, click "Access Control" to enter access control module, see
Step 2. Click "Access Control" tab to enter door group & rule setting page, in Door Group page click "Add" button, see Figure 16-38.

Step 3. Door group setting page is shown. Please follow instructions to fill in door group name, select time template, select access control channel, click "OK" button to save.
Step 4. Door group is added and user can edit and delete if need.
Step 5. Click Door tab, set door rule, see Figure 16-41.

Step 6. Click Add, set door rule name, select person and door group, click OK.
16.5 Add Person

See Ch 13.1.

16.6 Advanced Function

16.6.1 First Card Unlock

First card unlock node: after you set first card unlock only this first user swipe card, then other users may swipe card to unlock door. You may set more than one first card, as long as one first user swipes card, others can swipe card. Steps:
Step 1. Enter access control control module, and select advanced function tab, in "First Card Unlock" tab, click Add button to add first card unlock scheme, see Figure 16-43.

Figure 16-43

Step 2. Select access control channel (select one only), time, door status, user with first card unlock (support multiple choice) in add page, set and click "OK" to add. Scheme takes effect.

Figure 16-44
Step 3. First card unlock scheme list is sown below, in this page the user can select to enable/disable this scheme, or edit and delete scheme.

![Image of card unlock interface](image)

**Figure 16-45**

16.6.2 Multiple Card Unlock

Multiple card unlock note: for a certain access control channel, more than one group of user shall swipe card in set sequence in order to unlock it and you can set valid number of user of each group as changing valid unlock user number in the group. Max of 4 groups and accumulated valid user cannot exceed 5. Steps:

Step 1. Enter access control module and select advance function tab, click "Multi-Card Unlock" tag to enter multiple card setup page. When first time set, please add user group first. In this page, click “Add user group” button to add user group.
Step 2. In the system, click “Add” button to add.

Step 3. In shown page, set group name, and check group member in corresponding
organization. Click “OK” button to add. This step only selects member, without concerning sequence.

Figure 16-48

Step 4. User list is shown below, if you want to add, click “Add” button. If you do not continue to add, click close button at the upper right.
Step 5. Click “Add” button to continue to add 3 groups, and you can see Figure 16-50 when complete.
Step 6. Click user group adding, and return to multiple card setup page. Click “Add” to add multiple card unlock scheme. See Figure 16-51. Please select access control channel in list.
Step 7. Access control channel is selected and then select user group. Adjust group sequence, valid user in each group, unlock method (card, password, fingerprint) and etc. After setup is complete, click “OK” button to complete. See Figure 16-52.

16.6.3 Anti-passback

Anti-pass back note: Set single/multiple user unlock path, so these users can only unlock in this sequence.

If you have set 1 2 3 anti-pass back, and then swipe 1 and then swipe 3, it will trigger anti-pass back alarm (after general access control alarm, you can still unlock in set sequence), then swipe 1 2 3 will not successfully unlock. You must unlock door until access controller reset time ends.

Steps:

Step 1. After you enter access control module, select advanced function tab, in “Anti-Pass Back” tag, click Add button to add anti-pass back scheme, see Figure 16-53.
Step 2. In Add page, select access controller, set scheme name, and follow instructions and your need, set door group quantity and reader in each group. See Figure 16-54. After setup is complete, click “Next” button to enter user selection page.

Note:
The Reset Time and Time Template are displayed only when you select collective control device of door access as the Device. Otherwise, the Reset Time and Time Template will not be displayed.
Step 3. In user selection page, please select use of this setup (multiple users are OK), and then click "OK" button to complete.
Step 4. After adding is complete, see list in Figure 16-56.
16.6.4 Inter-lock

Inter-lock function node: General access control is in-group inter-lock, and centralized controller is group-group inter-lock. General access control: In inter-lock group, as long as one door is open, you cannot open other doors. Centralized access control: channels in the same group are not related, so you can open them as you wish, however, as long as one channel in a group is open, you cannot open channel in other groups.

The following takes centralized controller as an example:

Step 1. After you enter access control module, select advanced function tab, in “Inter-Lock” tab, click New button to add inter-lock plan. First please select access control device in Device list. See Figure 16-57.

Note:
The Time Template are displayed only when you select collective control device of door access as the Device. Otherwise, the Time Template will not be displayed.
Step 2. In Add page, set inter-lock name, select period of plan, and add access control in each door group. If the default two groups do not meet your needs, you can click “Add” button to add more groups. See Figure 16-58. Click “OK” to complete.

Step 3. Successfully added plan is shown in Figure 16-59.
16.6.5 Remote Verification

Remote verification function note: set remote verification device, and within set period, when a user unlocks door via card, fingerprint, password and etc., he/she must click confirm box in Client to confirm unlock before he/she can unlock, steps:

Step 1. Enter access control module and select advance function tab, in “Remote verification” tab, click New button to add remote verification plan, see Figure 16-60.
Step 2. In pop-up add page, select remote verification period and channel requiring remote verification. See Figure 16-61. Click “OK” button to complete.

Figure 16-61

Step 3. After you complete adding, each channel can be independently opened and closes.
Step 4. When corresponding access control channel has operations of card, fingerprint, password and etc., the Client will pop up box, so you can select to unlock or ignore it. Click corresponding button and the box will disappear.

16.7 Access Control Log Search

It supports to view access control log via the following method:

- In console, click 🗃️ to go to access control log search page, you can set log info which matches search criteria. See Figure 16-64 and Figure 16-65
In client homepage, click Log to enter log module, see Figure 16-66. Click **Export** to enter access control log search page. See Figure 16-65. Click **Export** to export log and save at local.
Figure 16-66
17.1 Add ANPR Device

Step 1. In DSS Express Client homepage, click Device to enter device manager module.

![Device Manager Module](image)

Figure 17-1

Step 2. In device manager page, click **Add** button, and then in pop-up box, select method to add device as by IP. Select ANPR for device type. According to instructions, fill in each info. Click Add button.
Step 3. After you add device, device list is shown below. Red is offline. Green is online.

17.2 Picture Storage Keyboard Setup
You must set corresponding storage disk of ANPR channel before entering road surveillance application. If you do not set storage disk, all pictures from road surveillance will not be shown. See Ch 7.
17.3 Road Surveillance Application

Passed vehicle

Step 1. In Express Client homepage, click Entrance to enter road surveillance application.

![Image of Express Client homepage showing ANPR channel](image1.png)

Figure 17-4

Step 2. In this page, select tab to enter road surveillance application. Default is single window of an electronic map, you can manually change the number of windows.

![Image of Expression Client showing multiple windows](image2.png)

Figure 17-5

Step 3. In this shown page, click button to select ANPR channel of passed vehicle.
Step 4. In system pop-up page, select corresponding ANPR channel.

Step 5. After you select channel, system will mark the selected channel, and show the latest picture of passed vehicle in picture scrolling area.
Step 6. Double click picture to view picture detail, including plate no., snapshot time, ANPR channel name, logo, vehicle color and etc.

Step 7. Refresh pause. In actual application, if you want to pause refresh of passed vehicle record, click button shown below.
17.3.1 Passed Vehicle Record Search

In actual application, you can search record of passed vehicle.

Step 1. In road surveillance application, click button to enter search page.

Step 2. Enter passed vehicle record search page. First select channel to search accordingly, and then select search time, plate no., plate color, vehicle type, logo, vehicle color, speed and etc. Click Search button.
Step 3. Result is shown below. There are thumbnail and list modes of display. Here uses thumbnail.

Step 4. Double click picture to view details, including: zoom in vehicle picture, plate no., snapshot time, ANPR channel name, lane, speed, plate color, vehicle type, logo, vehicle color.
Step 5. If the system recognize some mistake in vehicle detail, you can click Edit button to manually change.

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.
17.3.2 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.

17.3.3 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.

Step 2. Please select storage path following system prompt.

Step 3. Click Open File button in the prompt to view export file.
18.1 Add Face Recognition Device

Step 1. In DSS Express Client homepage, click Device to enter device management module, see Figure 18-1.

Step 2. In device management page, click Add and then select add device method to be IP address, and device category is “Encode”. According to prompt in this page, fill in each parameter, see Figure 18-2 and then click Add button to add device.

After you successfully add device, see Figure 18-3. Red is offline. Green is online.

Note:
- Express supports face recognition device, including IVSS and face recognition camera, which is added according to actual condition.
- If you want to add IVSS, then you shall add camera in IVSS config page, see IVSS use’s manual.
Figure 18-2

Figure 18-3
18.2 Storage Plan Setup

18.2.1 Picture Storage

- Snapshot picture is stored at server installation path:
  \WEBCLIENT\webclient\apache-tomcat\webapps\upload\face.

- Storage capacity, snapshot two pictures at once, one is face snapshot, one is panorama. In general picture size is 100KB.

- Default storage of snapshot is 30 days. If you want to change, please set reasonable storage days in accordance with server storage capacity.

  To change: server installation path.
  Under directory of ..\DSS\Express\Server\WEBCLIENT\webclient\apache-tomcat\bin\webapps-conf\config, open configurations.properties to change snapshot storage days.

  #Face ClearDays
  face.clearDays=30

18.2.2 Record Storage

If you have set record storage plan, video before and after the video at snapshot time is stored, and then the platform supports 10s before and after this moment of video, so up to 20s. If you has not set record storage plan, then there will be no record available.

  Step 1. You can set record storage config via the following methods.

  - In face recognition preview page, right click channel, select Record Configuration to enter record plan setup, see Figure 18-4.
In client homepage, click Config to enter config management module, see Figure 18-5. Please select one video channel on the left in this page, and click record config button on the right.

Step 2. Complete record config, see Ch 9.
18.3 Face Library Management

Face library management includes the following:

- When you add person, used to store user info which is convenient for future control by person in the library. It supports to edit and delete face library.
- Add person, support to add person into face library. It supports to edit and delete person.
- Arm/disarm face library. After arming, face recognition (such as face recognition camera, IVSS and etc.) compare person snapshot and person picture in person picture. If it determines similarity value, then face recognition device (such as face recognition camera, IVSS and etc.) compare two persons and find the two persons are the same one by default, and upload record to the platform.

18.3.1 Add Face library

Step 1. In DSS Client homepage, click Face Recognition to enter face recognition module, see Figure 18-6.

Step 2. Click to enter face library management page, see Figure 18-7.
Step 3. Click to add face library. In Figure 18-8, enter face library name, select face library color (mark only with one color), enter note info and click OK to complete.

See Figure 18-9.
More operations:

- Delete face library
  - Delete one

  Click 🗑 above face library, and delete face library following prompt, see Figure 18-10.

- Batch delete
Select multiple person library, click Delete to delete multiple face library. See Figure 18-11.

**Tips:**

If you want to delete all person libraries, and quantity of library is high, please click “Check All” at the upper right corner, you can select all libraries at the same time.

- **Edit Face library**

Click above face library, support to change face library color and note, see Figure 18-12. You cannot change name of user library.
18.3.2 Add Person

If person info includes user picture which is collected, then the platform supports one or batch add of person info into the library. Meantime it supports to sign up snapshot person into face library.

18.3.2.1 Add Single Person

Step 1. Enter add person page.

You can add person via the following methods.

- In Face library page, click button to enter add person page, see Figure 18-13.
In face library management page, click face library, see Figure 18-14. Enter face library list page, see Figure 18-15. Click + Add to enter add person page.
Step 2. According to prompt, upload person picture, and fill in person info. For person type, you can set following the prompt. Click OK to submit. See Figure 18-16.

After you add, face library quantity is updated. See Figure 18-17.

Note:

Upload person picture, picture only supports jpeg and jpg formats. Picture size cannot exceed 5M.
More operations:
In face library page, click face library, enter user list, to support operation.
• Click ☐, to change person picture and modify person info, see Figure 18-18.

Figure 18-18

• Delete Person
  ◊ Delete One

Click ☐ of a certain person, and confirm to delete face library, see Figure 18-19.

Figure 18-19

◊ Batch Delete
Select multiple persons, click to delete multiple persons, see

Tips:
If you want to delete all persons, and there are multiple persons, please select “Check All” at the upper right corner, you can select all persons at once.

18.3.2.2 Batch Add Person

Step 1. In Face library page, click face library, see Figure 18-21 to enter person list in library page, see Figure 18-22.
Step 2. Click to download upload template, and upload file according to template.

1. Edit person excel form. In picture column enter info request match person picture

Note:

Click in Figure 18-15, support config person type. Select when you add person.
file name. See Figure 18-23.

<table>
<thead>
<tr>
<th>Name</th>
<th>ID</th>
<th>Type</th>
<th>Gender</th>
<th>Birthday</th>
<th>Nationality</th>
<th>Remark</th>
<th>Face Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jerry</td>
<td>35125</td>
<td>Staff</td>
<td>Male</td>
<td>1988/5/6</td>
<td>China</td>
<td>Joined on October 24th</td>
<td>face.jpg</td>
</tr>
</tbody>
</table>

Figure 18-23

2. Compress person picture and person info excel form into a zip/rar/7z pack.

Step 3. Click and prompt to upload pack.

After you upload, system shows the result.

18.3.2.3 Snapshot Person Sign Up Library

Step 1. Enter person sign up page.

It supports to enter person sign up page.

- In face recognition page, double click person snapshot. See Figure 18-24. Enter person detail page, see Figure 18-25. Click to enter sign up page.
In face recognition page, move mouse to person snapshot page, right click and select “sign up”, to enter sign up page, see Figure 18-26.

Note:

If snapshot person has corresponding recognition record, then default person is in the face library, right click will no more show sign up option.
- In result of record search page, click to enter sign up page. See Figure 18-27. Double click search result to enter person detail, click to enter sign up page.

![Figure 18-27](image)

Step 2. Select face library to be added, enter person info. Click Confirm to complete sign up. See Figure 18-28.

![Figure 18-28](image)
18.3.3 Face library Arm

Step 1. In Face Recognition page, click 🔄 to enter face library management page.

Step 2. In Start Arm or 🔄 of face library, see Figure 18-29.

Start Arm button is shown after face library is created and before being armed. After being armed, this button will not be shown in the page.

Step 3. Arm config page is in Figure 18-30. First select channel where you want to arm this person (multiple choice is OK), and then set similarity of comparison. When actual comparison similarity is higher than or equal to this set value, it reports recognition record. Set and click OK button to arm.
18.4 Face Recognition Application

Application of face recognition business client includes:

- **Live Preview**
  
  Live preview supports view of live view, person snapshot and recognition record. Meantime it supports view of corresponding panorama and link video of person snapshot, download link video, sign up snapshot person and etc.

- **Snapshot Search**
Via feature info or person picture, search matched person in face library or snapshot record.
- Recognition Search
  Via set feature info, search matched recognition record in recognition record.
- Report
  For a certain channel, according to snapshot time, snapshot person age, create a report of snapshot person.

18.4.1 Face Recognition

18.4.1.1 Live Preview

Step 1. In DSS Express client homepage, click Face Recognition to enter face recognition module.

Step 2. Click 📹 to enter face recognition preview page.

Step 3. Enable live monitoring, to enable live preview page, see Figure 18-31.
  - Select monitor window, double click channel in channel list on the left, enable live monitoring.
  - Drag channel on the left to monitoring window.

![Figure 18-31](image)
<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Device Tree</td>
<td>Display device and device channel info.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Right click root node, support display type. You can set display</td>
</tr>
<tr>
<td></td>
<td></td>
<td>by name and IP. Support ranking, by ascending and descending and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>default sequence. Support to hide and show offline node.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Right click device, select tour, support to set all channel tour</td>
</tr>
<tr>
<td></td>
<td></td>
<td>preview of this device. After you enter touring, if you want to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>stop touring, then you can right click in preview video, select</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Stop Touring”, to end tour.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Right click channel to enter Record Configuration and Event</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Configuration.</td>
</tr>
<tr>
<td>2</td>
<td>PTZ</td>
<td>Speed dome adjust. If you want to expand PTZ operation zone,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>click behind PTZ to hide PTZ area. When PTZ area is hidden, click</td>
</tr>
<tr>
<td></td>
<td></td>
<td>behind PTZ to expand PTZ area.</td>
</tr>
<tr>
<td>3</td>
<td>Pause Refresh/Start</td>
<td>![page shows this icon. snapshot area does not refresh face</td>
</tr>
<tr>
<td></td>
<td>Refresh</td>
<td>snapshot. Click this icon, live refresh face snapshot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>![page shows this icon. Snapshot display area shows refresh of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>face snapshot. Click this icon, refresh face snapshot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Picture Display Scale</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support full screen and original scale.</td>
</tr>
<tr>
<td>4</td>
<td>Window Switch</td>
<td>![page shows this icon. Snapshot display area shows refresh of</td>
</tr>
<tr>
<td></td>
<td>Number</td>
<td>face snapshot. Click this icon, refresh face snapshot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>![page shows this icon. Snapshot display area shows refresh of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>face snapshot. Click this icon, refresh face snapshot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support switch display of window quantity, and customized setup.</td>
</tr>
<tr>
<td>5</td>
<td>Monitor Window</td>
<td>![page shows this icon. Snapshot display area shows refresh of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>face snapshot. Click this icon, refresh face snapshot.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Show channel preview channel.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multiple window/single window switch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multiple window display mode, double click window, switch to</td>
</tr>
<tr>
<td></td>
<td></td>
<td>single display mode and double click again to return to multiple</td>
</tr>
<tr>
<td></td>
<td></td>
<td>window display mode.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Full screen mode</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Right click window to select to enter full screen mode. If it is</td>
</tr>
<tr>
<td></td>
<td></td>
<td>already in full screen mode, right click to exit full screen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Exit tour.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>If it is in touring mode, to stop touring, you can right click in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>the preview window and select “Stop Tour”.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Show full screen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support full screen and original scale.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Support switch display of window quantity, and customized setup.</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Note</td>
</tr>
<tr>
<td>-----</td>
<td>------</td>
<td>------</td>
</tr>
</tbody>
</table>
| 5   | Person Snapshot Record Display Area | Show snapshot face snapshot. Move mouse to person snapshot and right click the snapshot, you can:  
If this person is only snapshot but not recognized  
- Select “sign up”, add person to library following prompt.  
- Select “record search”, go to snapshot search page and search picture by picture. In snapshot history record, search all snapshots of this person.  
- Select “Export”, save person snapshot to client locally. Path is default path:  
..\DSS Express\Client\Picture\Face\Export\Capture.  
If this person is recognized  
- Select “Recognition Record Search”, go to search page, and in snapshot history record search all recognition records of this person.  
- Select “Export”, save person snapshot and pictures this person in library all to client locally. Path is default path:  
..\DSS Express\Client\Picture\Face\Export\Recognize.  
Double click person snapshot, to view person details, including snapshot person cutout and panorama. Snapshot detail page operation is in Ch 18.4.1.2. |
| 5   | Recognition Record Display Area | Show recognition record.  
Move mouse to person snapshot, and right click support to:  
- Select “Recognition Record Search”, go to recognition search page, and in snapshot history record, search all recognition records of this person.  
- Select “Export”, to save person snapshot and snapshot of this person already uploaded to library all to client locally, default path is  
..\DSS Express\Client\Picture\Face\Export\Recognize.  
Double click recognition record, you can view person cutout, panorama, used to person picture and info in face library. See Ch 18.4.1.3.  
Click 📈 at the upper right corner, go to recognition search page. |

Chart 18-1
18.4.1.2 Snapshot Detail View and Process

- **Snapshot Detail View**

  In area of person snapshot record, double click person snapshot to view face cutout and panorama, see Figure 18-32.

![Snapshot Detail](image)

Figure 18-32

- **Sign Up Snapshot Person**

  Step 1. In snapshot detail window, click 📸 to enter sign up page, see Figure 18-33.
Step 2. Select face library, please fill info according to actual condition. While Name, ID, User Type are mandatory and click Confirm button to complete.

- View/Down Record
  - In snapshot detail window, click to enter download center, according to record
you want to download, see Ch 11.

◇ In snapshot detail window, click ![button](image) to enter record playback page. If person snapshot has corresponding record, then the system will playback record, otherwise system will prompt no record file.

- **Search Record**

In snapshot detail window, click ![magnifying glass](image) to enter record search page, search picture by picture. See Figure 18-35. Set search time and channel, click Search to search result. See Figure 18-36.
18.4.1.3 Recognition Record Detail View and Process

- Recognition Detail View
  In recognition record display area, double recognition record to view snapshot person cutout, panorama, person picture and person info used to compare, see Figure 18-37.

- View/Download Record
  - In recognition detail window, click to enter download center, and according to download record, see Ch 11.
  - In recognition detail window, click to enter record playback page. If person snapshot has corresponding record, then the system will playback record, otherwise system will prompt no record file.

- Search Record
  - In recognition detail window, click to enter recognition search page, see Figure 18-38. Set criteria, click Search.
18.4.2 Record Search

It supports search person by feature info or picture in snapshot record.

18.4.2.1 Search Picture by Picture

Note:
If the system does not search a person by comparing his/her faces to those in the faces storage, then the platform does not support this way too and when you select a channel on the platform, the platform will prompt the channel is not supported.

Step 1. In Face Recognition page, click 📸 to enter snapshot search page, see Figure 18-40.

Step 2. For Search In, select Record to enter record search page.

Step 3. Select “Picture” in picture upload area, upload one picture and set similarity to search. Select channel (multiple choice is OK), set search time range, click Search button to start search. See Figure 18-41. Search result is in Figure 18-42.
More Operations:

- Search detail
  Double click to view details.

- Download link record
  Click 📦, go to download page, according to record you want to download, see Ch 11.

- View link record
Click ◇, to show record playback window. If person snapshot has corresponding record, then the system will playback record, otherwise system will prompt no record file.

- **Sign Up Snapshot Person to Library**

Click  to show sign up person window.

### 18.4.2.2 Search by Criteria

**Step 1.** In Face Recognition page, click  to enter snapshot search page, see Figure 18-40.

**Step 2.** For “Search In” select “Record”, enter record search page.

**Step 3.** Select “Feature”, select channel (multiple choice is OK), and enter search criteria (time, age period, gender), click Search see Figure 18-43. Search result is Figure 18-44.

![Figure 18-43](image-url)
More Operations:

- Search Details
  Double click to view details.
- Download link record.
  Click 🔗 to go to download page, download snapshot link record file.
- View link record
  Click 📹 to show record playback page.
- Add snapshot person to face library.
  Click 📧 to add person page.

18.4.3 Face library Search

It supports to search person in face library by feature or picture.

18.4.3.1 Search Picture by Picture

Note:
If a device does not support to search picture of person by picture, then the platform cannot search picture by picture.

Step 1. In Face Recognition page, click 📊 to enter snapshot search page, see Figure 18-45.
Step 2. For Search In, select Face Library, to enter record search page.

Step 3. Select search face library, select “Picture” and upload one picture in Upload area. Set similarity you want to search, click Search button to search. See Figure 18-46. System shows search result.

More Operations:

Recognition search, click 🕵️, go to recognition search page, set criteria, to search record within
the criteria range.

18.4.3.2 Search by Criteria

Step 1. In Face Recognition page, click to enter face library search page, see Figure 18-47.

Step 2. For Search In, select Face Library, to enter face library search page.

Step 3. Select to search face library, enter search criteria (time, period, gender), click Search. See Figure 18-48.
More Operation:

Recognition search, click \( \text{Recognition search} \), go to recognition search page, set criteria, to search record within the criteria range.

18.4.4 Recognition Search

It supports to set criteria, to search matched record.

Step 1. In Face Recognition page, click \( \text{Recognition search} \) to enter recognition search page, see Figure 18-49.
Step 2. Select channel to search and search period. According to need, set user type, name, ID, age range, gender and etc. Click Search button to search, see Figure 18-50. Drag similarity at the upper right corner to filter.

More Options:
- Search Details
  Double click to view details.
• Download link record.
  Click to go to download page, download snapshot link record file.

• View link record
  Click to show record playback page.

• Export search result
  Select result, click Export to export.

18.4.5 Show Report

Step 1. In Face Recognition page, click to enter snapshot search page.

Step 2. Select channel of data report you want to view (multiple choice), select data period (day, week, month), click Search to create a report of the selected period.

• Line chart is in Figure 18-51.

![Figure 18-51](image)

• Pie chart is in Figure 18-52.
Figure 18-52

- List is in Figure 18-53.
19 Video intercom

Note:
On the platform video intercom config is available, device are required to complete config. See device user's manual.

19.1 Add Device

19.1.1 Set Unit Enable

Unit enable on the platform must match unit enable on device, otherwise after you add device, device will be offline.

Step 1. In client homepage, click Config to enter config management module, see Figure 19-1.

![Figure 19-1](image)

Step 2. In config management page, click Residence Config to enter video intercom config page, see Figure 19-2.
Step 3. According to unit enable status of device, enable or disable platform unit enable. Make unit enable on device and platform identical, click OK to complete. See Figure 19-3.

19.1.2 Manage Device

Add video intercom device, such as unit VTO, VTH, fence station to the platform, linking to the platform.
19.1.2.1 Add Single Device

Step 1. In DSS Express client homepage, click Device to enter device management module, see Figure 19-4.

Step 2. In device management page, click button, and in system pop-up box, select to add device by IP address. For device type, select Video intercom, and fill in each info. See Figure 19-5. Click Add button to add device.

After the device is successfully added, see Figure 19-6. Red is offline and green is online.
Note:
When you add VTH, person(s) will be automatically created. According to SIP extracted room no. of VTH, it creates fixes persons. Person ID is room no. You can view, edit person in Person management page.

19.1.2.2 Batch Import Device

If you have sorted device info chart according to the template, then you can batch add device by importing device.

Step 1. In DSS Express client homepage, click Device to enter device management module, see Figure 19-4.

Step 2. Click Import, to enter device import page, see Figure 19-7.
Step 3. In From Local File page, click Browse, and select to import excel chart. Click Import to import device info.

Note:
When you add VTH, person(s) will be automatically created. According to SIP extracted room no. of VTH, it creates fixes persons. Person ID is room no. You can view, edit person in Person management page.

19.1.2.3 Sync Device Info
If you change unit enable config option on device, or change SIPID, SIP password, the device will not push info to the platform. You shall get device info on Express Client.

   Step 1. In DSS Express client homepage, enter device management module, see Figure 19-4.
   Step 2. Click Video Intercom tab, to enter Video Intercom page.
   Step 3. Click behind device, to enter edit device page, click Get Info to get the latest device info. Click OK.
19.2 Sync Contacts

It syncs contacts with VTO, and on VTO screen or WEB page, you can view contacts.

Step 1. In Client homepage, click Config to enter config management module, see Figure 19-9.

Step 2. In config management page, select VTO device on the left, click contacts to enter send contact
Step 3. Select VTH, click OK. See Figure 19-11. After you complete sending contacts, you can view the contacts in VTO screen or WEB page.

19.3 Call Management
It supports to create group of device, management, and relationship. You can call other persons only
when both of you are in the same group. Only default system account can set this function.

Warning:

Click device group, management group and in relationship page, system will restore management group and relationship group to original status.

19.3.1 Device Group Config

Only when VTO and VTH join the same device group, you can call each other. When VTO, Second Confirmation VTO and fence station are added to the platform, it automatically generates corresponding device group.

- Add VTO, auto create one device group, add VTH of the same unit to this group. It achieves inter-call between VTH and VTO within group.
- Add Second Confirmation VTO, auto create one device group, which add VTH with the same room no. into this group. It achieves inter-call between VTH and second confirmation VTO.
- Add fence station, auto create one device group. Auto add all existing VTHs in the platform to this group. It achieves inter-call between fence station and all VTHs.
- Add VTH, if VTH connects to unit VTO, second confirmation VTO, fence station, and then auto join the device group created. It achieves inter-call among VTH, unit VTO, second confirmation or fence station.

Note:

Call among VTHs is not limited by device group, so VTHs in different device groups can call each other.

19.3.2 Add Management Group

Management group is grouping of platform administrator, assisting one-to-one, one-to-more, more-to-more bindings. Platform administrator includes Express person, VTS. When you add VTS, if there is default management group, the platform auto add it into this default management group.

Warning:

- Before you set management group, you shall create new user. Select right of video intercom and device, add new user into management group.
- After you set relationship of group via system user, you shall switch to login by new user.

If system account has logged in multiple clients, you cannot call as system account.

Step 1. In Video Intercom page, click to enter call management page, see Figure 19-12.
Step 2. Click **Add Group**, see Figure 19-13.
Step 3. Set management group name, select account of manager or VTS.

Step 4. Click OK, see Figure 19-14.

More Operations:
- Move member in the group. You may move a member in one group to another group on many groups.

Click , select group, to move member into corresponding group. See Figure 19-15. If only one member in the group is moved, platform will auto delete the group.
- Edit management group. Add or delete member in management group.

  Click , enter edit management group page. Select member in management group to add or delete, click OK. See Figure 19-16.

- Delete Management Group

  Click , follow instructions to delete management group, see Figure 19-17.
19.3.3 Relationship Group Config

Relationship group config is to add device group and management group into the same relationship group to link them. It achieves VTO or VTH in the same relationship group which only can call manager or VTS in this relationship group.

Binding of link includes:

- **Device group only binds one management group**
  Any one device in the device group clicks to call administrator, all online administrators in its bound management group will be called. As long as any of these administrator accepts this call, the remaining call rings will be terminated. Only when an administrator refuses the call, the call request will be refused.

- **Device group binds multiple management group**
  Among multiple management groups, there is priority. When any one device in this group click call button to call administrator, all online administrators of the highest-priority group among these administrator groups will ring. If no one answers, the call goes to the second highest-priority group. Interval of this change is 30 seconds. The call only calls up to two groups, so if the second group still not respond, device will show call timeout.

Step 1. In Video Intercom page, click ![enter call management page](image1.png) to enter call management page, see Figure 19-18.

Step 2. Click ![Add](image2.png), see Figure 19-19.
Step 3. Set relationship group name, and select device group and management group.

Step 4. Click OK. See Figure 19-20. If there is more than one management group, you can click ▲ or ▼ to adjust priority.
19.4 Video Intercom

19.4.1 Call Center

- In DSS Express client homepage, click Video Intercom to enter intercom module.
- Click ☰ enter call center page.
- In device tree, click device. See Figure 19-21.

Note:
According to fence station or VTO reported info, auto create contacts.

Via ☰ behind contacts, you can quickly search contacts. It supports fuzzy search, building no., unit no., room no. i.e. enter 1#1#, as to search all devices in building 1 unit 1. Enter 1#1#10, as to all VTHs and VTOs of room 10 in building 1 unit.
In contact page, you can call VTO, VTH and etc.

- Client call VTO

In contacts, click of corresponding VTO, call VTO. System pops up call page, see Figure 19-22.
More Operations:

◇ Click this icon to open door.

◇ Click this icon to snapshot.

◇ Click this icon to start record, and click it again to stop record.

◇ Click this icon to hand up call.

- Click call VTH.

Click ☎ on VTH card name, or click ☺ on the right, to dial number of VTH(i.e., enter 1#1#101, as building 1, unit 1, room 101). System pops up “calling room” box, see Figure 19-23.

![Calling room](image)

Figure 19-23

After VTH answers, client and VTH can have bidirectional intercom, see Figure 19-24.

Note:
If VTH has camera, then it will shot video during call.

Operations:

◇ If VTH has not answered for 30s, or VTH is busy or hangs up, then client will show that line is busy.

◇ After being answered, click ☺ to hang up.
- If VTO is calling the client.
  Client pops up VTO call box, see Figure 19-25.
Support operations:
- Click ☎️, answer call from VTO, and then bidirectional call is available.
- Click 🗝️ to unlock.
- After call is answered, click ☎️ to hang up.

- If VTH is calling Client.

Client pops up VTH call box, see Figure 19-26. Click ☎️ to talk with VTH.

![Figure 19-26]

Support operations:
- Click ☎️, answer call from VTH, and then bidirectional call is available.
- After call is answered, click ☎️ to hang up.

- Call via call record

In “Intercom” page, at the lower right corner, click record in all records of call. See Figure 19-27. Move mouse to record, click 📲 to dial.
19.4.2 Send Message

Step 1. In Video Intercom page, click \[
\begin{align*}
\text{add message icon}
\end{align*}
\] to enter send message page, see Figure 19-28.

Step 2. Click \[
\begin{align*}
\text{add new message icon}
\end{align*}
\], select VTH to send message, click Send. See Figure 19-29. When you send message successfully, VTH receives announcement message.
19.5 Video Intercom Log Search

It supports view of intercom log via the following methods:

- Call center page, click ✉️ to go to video intercom log search page, you can set log info matching criteria, see Figure 19-30 and Figure 19-31. Click 📦 Export to export log to local.
In client homepage, click Log to enter log module, see Figure 19-32. Click \( \text{Export} \) to enter video intercom log search page, see Figure 19-31. Click \( \text{Export} \) to export log to local.
The system supports to search management log, access control and video intercom log. When you search, you can filter type, select period and search by keyword. You also can search log to export in xls and txt formats. This chapter introduces operation with example of searching management log. For access control log and video intercom log search, please see their corresponding chapters.

Step 1. Log in Express Client.

Step 2. In Express Client homepage, click Config, see Figure 20-1. System enters config page. See Figure 20-2.
Step 3. Click to enter system log page.

Step 4. Select log type, event type, search time. In administrator log, set related log, click Search. Log search result is in Figure 20-3. Total item number will be shown at the lower left corner.

Step 5. Click Export, select export format and storage path. Click OK to export log info. See Figure 20-4. After you successfully export, you can view the file at storage path.
Figure 20-4
# Appendix 1 Shortcut List

PC keyboard shortcut list is in

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

If you need to delete 1000001$0 record period [2018-07-08 10:00:00 2018-07-08 10:30:00].

Step 1. Log in center server.
Step 2. Enter ..\DSS Pro\Server\SS directory, drag ./CQFSTools.exe list file into cmd command input window, find disk uuid.

Shown disk info as:

```
[Disk List]
[Disk Path] [Target (Size) (Portal) (slot)]
D:\730c4deedd9f4f7786d49ab9e7802a7a.cqd D:\730c4deedd9f4f7786d49ab9e7802a7a.cqd (10.00GB) () (-1)
11:32:57.355 TID 584188 [INFO] cmd\cmd.exe /c "getmac /FO list >cqfs_tmp_584188.txt.tmp & type cqfs_tmp_584188.txt.tmp >cqf"
[Disk List]
[Disk Path] [CQFS UUID (Service Type) (Allocation Type)]
D:\730c4deedd9f4f7786d49ab9e7802a7a.cqd {1bdb9a6e-41a6-4058-87ef-d944f630edf1} (1) (0)
```

Step 3. Search streamid.

On center server, connect to platform database with tools, and execute lower SQL, the searched ID segment is the streamed.

```
SELECT ID FROM adm_record_stream where DEVICE_CODE=device id and CHANNEL_SEQ = channel no.
```

Step 4. Execute deletClip delete command.

```
./CQFSTools.exe deletClip <streamID> <beginTS> <endTS> <diskUUID>
```