DSS Pro V7.01.000
User Manual
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Welcome

Thank you for using our Digital Surveillance System (DSS) Pro!
This user’s manual is designed to be a reference tool for operation of your system.
Here you can find detailed operation information about DSS.
Important Safeguards and Warnings

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

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

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

Special Announcement
- This manual is for reference only.
- All the designs and software here are subject to change without prior written notice.
- All trademarks and registered trademarks are the properties of their respective owners.
- If there is any uncertainty or controversy, please refer to the final explanation of us.
- Please visit our website for more information.
1 Overview

1.1 Product

DSS Professional is an importance surveillance platform product of Dahua Security Software family. It is designed for medium-large project. DSS Professional can effectively combine business of surveillance and user-friendly method to complete video view, PTZ control, talk, record play, event link and etc. DSS Professional has is simple, reliable, expansible, and other features. It provides users with HD, intelligent, secure and other terrific experiences. Meanwhile, DSS Professional adopts B/C, C/S structures taking into account needs of different users. It supports multi-point operation and management.

1.2 Highlight

- Control client supports two types of skin (deep and light colors), and user can select accordingly.
- Hardware decoding, output more HD videos by maximizing PC performance.
- Import domain user, batch import corporate users.
- Find device, quickly add device, quickly manage device.
- Lock user when password input is wrong. Find back password.
- https certificate import.
- Remote disaster recovery and backup (DRB).
- ONVIF protocol device import, provide secondary development SDK matching to improve product expansibility.
2 Overall Flow Word

Start

- Configure Server parameters
- Install DSS Server
- Launch DSS Server
  (encoder/decoder/alarm host)
- Add device
- Add and format Net Disk
- Add user
- Add role
- Add record plan (alternative)
- Add video wall (alternative)
- Add alarm scheme (alternative)
- Configure Map (alternative)
- Operation (Preview/Playback)
  (Map/Alarm/Video wall)
  (Smart track/Bi)
- Login DSS Control Client

Figure 2-1
3 DSS Server Installation and Uninstallation

3.1 Server Config Requirement

<table>
<thead>
<tr>
<th>Requirement of DSS Server</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recommend</td>
</tr>
<tr>
<td>CPU: E5-2640 <a href="mailto:v3@2.60GHz">v3@2.60GHz</a> 2.60GHz 8core</td>
</tr>
<tr>
<td>RAM: 16GB</td>
</tr>
<tr>
<td>Ethernet port: 1Gbps</td>
</tr>
<tr>
<td>System Disk: 1TB, 500G free for DSS.</td>
</tr>
<tr>
<td>Low-end</td>
</tr>
<tr>
<td>CPU: E3-1220 v5 @3.00GHz 3.00GHz 4core</td>
</tr>
<tr>
<td>RAM: 8GB</td>
</tr>
<tr>
<td>Ethernet port: 1Gbps</td>
</tr>
<tr>
<td>System Disk: 1TB, 500G free for DSS.</td>
</tr>
</tbody>
</table>

Chart 3-1

3.2 Installation

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

Figure 3-1

Step 2. Check I have read and agree the agreement, click Next.
Step 3. Select installation path, and you can use the default path, or customize path.

Note:
- After you select path, it will show space required to install and available space in the selected path, see Figure 3-2.
If "Install" button is grey, please check if installation path is correct, or if space available in installation path is enough.

Step 4. Customize installation path, click Install to start installation.

Step 5. It shows progress bar of installation and this takes about 3-5 minutes, please wait.

Step 6. Installation is complete, click Start New to enable DSS Pro, see Figure 3-5.

Step 7. Open DSS Server shortcut icon to check server status which is normally running.
3.3 Uninstall

Step 1. Click Start> All Programs, select DSS Professional folder, click Uninstall DSS Professional.

Step 2. Click Uninstall button in Figure 3-7.
Step 3. After uninstallation is complete, if you see the pop-up, click OK.

This programme has been uninstalled from your computer!

Figure 3-7

Figure 3-8
4 Distributed Deployment

4.1 Slave Server Installation

Step 1. Double click to enter installation mode, see Figure 4-1. Check "I have read and agree the agreement". Click Next to enter installation mode.

Step 1. Note:

Step 2. Program name includes version no. and date, please check it before installation.

Step 2. Select installation mode, see Figure 4-2. Master is master mode, slave is slave mode. Set Https port, click Next to enter installation directory.
Step 3. Select storage path, you can use system default installation directory, as well as click to customize installation directory. After you select installation directory, it shows space required and available path, see Figure 4-3.
Step 4. Select storage path, you can use system default installation directory, as well as click to customize installation directory. It shows space required for installation and available space in the path, see Figure 4-4.

![Figure 4-4](image)

Note:
- If “Install” button is grey, please check if installation directory is correct, or space of installation directory is enough for the installation.

Step 5. Customize the installation directory, click “Install”, see Figure 4-5.
Step 6. Installation is complete, click “Start Now” to enable the program, see Figure 4-6.

Step 7. Open “DSS Server” to check server status, see Figure 4-7.
### 4.2 Slave Server Config

Slave server only configures master server’s IP and port as to register on master server.

Step 3. Open DSS Server system on slave server, see Figure 4-8. Click the config button, and in pop-up interface, set master server IP address and port, default port is 80.

**Figure 4-7**

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Service Port</th>
<th>Status</th>
<th>Edit</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMS/Device Management Service</td>
<td>9200</td>
<td>Online</td>
<td></td>
</tr>
<tr>
<td>MTS/Medium Transfer Service</td>
<td>9020</td>
<td>Online</td>
<td></td>
</tr>
<tr>
<td>SS/Storage Service</td>
<td>9220</td>
<td>Online</td>
<td></td>
</tr>
<tr>
<td>AAS/Active Register Service</td>
<td>9000</td>
<td>Online</td>
<td></td>
</tr>
<tr>
<td>POPS/Proxy control Proxy Service</td>
<td>14018</td>
<td>Online</td>
<td></td>
</tr>
<tr>
<td>P hears Transfer Service</td>
<td>8081</td>
<td>Online</td>
<td></td>
</tr>
</tbody>
</table>
Step 4. Set server IP and port, click OK button. System will auto check master server IP and port for validity. If valid, it will auto reboot each server of slave server. DSS Server system will re-load. If invalid, then it pops up Figure 4-9, and you must set again.

![Prompt](image)

Server connection abnormal, please check IP or port.

4.3 Slave Server Status Display

Registration and operation status shall be viewed on master server manager, detailed path is: master server manager-operation and management statistics.

Step 1. Log in master server manager, enter operation and maintenance statistical module. In status info module, you can see quantity and status of all server, see Figure 4-10.
Step 2. Click Service to view server details, see Figure 4-11. Device ID is master as master server, and others are slave servers.
Step 3. Click to expand server details of this server, see Figure 4-12.
### Server Status

<table>
<thead>
<tr>
<th>Name</th>
<th>IP Address</th>
<th>Server Status</th>
<th>Device ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center Server</td>
<td>172.10.1.177</td>
<td>Running</td>
<td>master</td>
</tr>
</tbody>
</table>

**Video Unit**

<table>
<thead>
<tr>
<th>Name</th>
<th>Service Type</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARS(001)</td>
<td>ARS(Active Register Service)</td>
<td>Online</td>
</tr>
<tr>
<td>MTS(001)</td>
<td>MTS(Medium Transfer Service)</td>
<td>Online</td>
</tr>
<tr>
<td>DMS(001)</td>
<td>DMS(Device Management Service)</td>
<td>Online</td>
</tr>
<tr>
<td>POP(9001)</td>
<td>POP(http)Proxy List Control Proxy Service</td>
<td>Online</td>
</tr>
<tr>
<td>MCDRADAR(4001)</td>
<td>MCDRADAR(Radar Management Service)</td>
<td>Online</td>
</tr>
<tr>
<td>MCOPOS(3001)</td>
<td>MCD_POS(Multi-Control Device)</td>
<td>Online</td>
</tr>
<tr>
<td>BT(1001)</td>
<td>BT(Storage Service)</td>
<td>Online</td>
</tr>
<tr>
<td>PTL(31001)</td>
<td>PTL(Picture Transfer Service)</td>
<td>Online</td>
</tr>
</tbody>
</table>

**Figure 4-12**
5 Enable/Disable Server

5.1 Stop Server

Warning:
For security reason, DSS Server only can be opened on DSS server.
To stop server:
Step 1. Login DSS installation server, double click DSS Server desktop shortcut.
Step 2. Click STOP DSS button, see Figure 5-1.
Step 3. In pop-up box below, click **OK** to stop server.

5.2 Enable Server
Step 1. Login DSS installation server, double click DSS Server desktop shortcut.

Step 2. DSS server needs a few minutes to boot up, please wait. It will show Figure 5-3.

Step 3. Successfully boot system, see Figure 5-4.

5.3 **Reboot DSS Server**

Step 1. Login DSS Server, double click DSS Server desktop shortcut.

Step 2. Click button to reboot all DSS servers, see Figure 5-5.
Step 3. In figure below, click **[OK]** button to reboot all servers.

**Figure 5-5**

Step 4. Double click to open **DSS Server desktop shortcut** to confirm all boot up statuses.

**Figure 5-6**
6 Change Server Port

6.1 Change CMS Port

Step 1. Login DSS installation server, double click to open DSS Server desktop shortcut.
Step 2. Click Config button at the upper-right corner, see Figure 6-1.

![Figure 6-1](image1.png)

Step 3. Fill in CMS port value, see Figure 6-2. Click OK button and system will reboot server.

![Figure 6-2](image2.png)
6.2 Change Other Server Port

Step 1. Login DSS installation server, double click to open DSS Server desktop shortcut.
Step 2. Click , to modify corresponding server port info. If it has LAN/WAN setup, you shall change LAN and WAN to a identical customized value by user. See Figure 6-3.

For example to change DMS server port to 9201.

Step 3. Click button of DMS server, and fill in port value.

Step 4. Click button to save config. If the port is occupied, you will see Figure 6-5.
Step 5. Click **OK** to modify port again. If you change to 9202, you can confirm it in server list after being successfully modified.

![Figure 6-5]

**Figure 6-5**

<table>
<thead>
<tr>
<th>Service Name</th>
<th>Service Port</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMS</td>
<td>9202</td>
<td>Online</td>
</tr>
</tbody>
</table>

![Figure 6-6]

**Figure 6-6**
7 LAN/WAN Mapping

Warning:
Current DSS Server config system does not differentiate LAN and WAN, and their port config are the same.

7.1 Flow

![Flow Diagram]

Figure 7-1

7.2 Router Config

We recommend DMZ mapping. If it is not supported by the environment, you need to open the following ports: 80, 61616, 9090, 14509, 9500, 9600, 9320, 9100, 9200. Please see appendix 1. If port is occupied already, for example port 80 has been occupied and instead to use port 81, see Ch 4.2., and add mapping rule on router.

7.3 DSS Platform Config

Step 1. Login DSS installation server, double click DSS Server desktop shortcut.
Step 2. Click Config button at the upper-right corner, see Figure 7-2.
Step 3. Fill in WAN address, which is mapping address, see Figure 7-3. Click **OK** to complete server config and reboot.
8 Login to the DSS Manager

For login to the DSS PROFESSIONAL platform, IE9 and higher, Google Chrome, or Firefox is required.

8.1 Login Web

Step 1. Input the IP address of the DSS platform in IE and click “Enter”, The system will display the “Login” interface as shown in Figure 8-1. Click to download the Client

![Figure 8-1]

Step 2. Enter username and password, default is system and 123456 respectively. For the homepage pops up after logging in. See Figure 8-2.

Note

When logging in with the initial password, a dialogue box for changing the password will pop up. In order to continue logging in, users must change the initial password.

If it's your first-time logging into the DSS system, then please add this IP to the trust list.
In order to change the password or log out, click username on the right upper corner.

Quick entry of commonly used modules are displayed on the interface. To display all functional modules or open a new one, click the $+$ on the right of the Home button.

Overview: For displaying the online/offline status of devices, users, services, etc., as well as the occupied space on the hard discs.

Authorization: To view the authorization details, and purchase the license file by following related procedures if necessary.

Help: To view the user guide, operation manual for mobile clients, FAQ files, etc.

8.2 System Configuration

For the first-time login to the DSS system, please configure the system parameters first to ensure a normal operation. Steps for configuring system parameters:

Step 1. Click $+$ on the right side of the “Home” button, all functional blocks will be displayed on the interface, as shown in Figure 8-3.
Step 2. Click “System”, The system will display the interface as shown in Figure 8-4.
### Parameter | Note
--- | ---
**Info Retention Time Setup** |  
Log | Set the maximum retention time for logs. The default retention period is 30 days.  
Alarm Info | Set the maximum retention time for Alarm Info. The default retention period is 30 days.  
GPS Info | Set the maximum retention time for GPS Info. The default retention period is 30 days.  
Heatmap | Set the maximum retention time for Heatmap Info. The default retention period is 30 days.  
**Time Interval Setup** |  
3G Flow Search Setup | Check to enable the item, and set up time interval for querying 3G flow consumption.  
GPS Upload Setup | Check to enable the item, and set up time interval at intervals. The GPS Info will be uploaded to the platform at intervals of the setting value.  
**FTP Setup** |  
LAN Path | LAN path of the ftp server for placing files.  
WAN Path | WAN path of the ftp server for placing files.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Username/Password</td>
<td>Username and password used for login to the ftp server.</td>
</tr>
<tr>
<td>Device Sync</td>
<td>Check the item to enable the Device Sync function.</td>
</tr>
<tr>
<td>Start Time</td>
<td>Set up the start time for device synchronization.</td>
</tr>
<tr>
<td>Sync Interval</td>
<td>Taking the time of the server as standard, synchronize the device with the server. The default value is 2 hours, which means that the system will, taking the time of the server as standard and synchronize the device with the server at intervals of 2 hours.</td>
</tr>
<tr>
<td>Server Sync</td>
<td>Check the item to enable the Server Sync function.</td>
</tr>
<tr>
<td>Server IP</td>
<td>Set up IP and update period for the server, which is taken as standard to synchronize other servers.</td>
</tr>
<tr>
<td>Sync Time</td>
<td>Click this button to start the synchronization immediately.</td>
</tr>
<tr>
<td>Mail Server Setup</td>
<td>Enter information including IP and port of the mail server, cipher mode, username/password, sender, test recipient, etc.</td>
</tr>
<tr>
<td>Active Directory Setup</td>
<td>Configure domain information.</td>
</tr>
<tr>
<td>HTTPS Setup</td>
<td>Enable HTTPS Secure Validation.</td>
</tr>
</tbody>
</table>

Table 8-1

Step 3. Configure relevant parameters.
Step 4. Click “Save”.
9 Add Organization and Login Users

Directly enter IP address of the DSS platform in IE address bar, to login to the DSS Manager.

9.1 Add Organization

For the sake of management, adding organizations to deploy, organize, and manage layers of users and devices. Or put the newly added users and devices under the default organization without adding a new organization.

The first level organization defaults to "Root"; newly added organizations will be placed on the next level subordinated to "Root".

Detailed steps are listed below:

Step 1. Click on the right side of the “Home” button.

All functional blocks will be displayed on the interface, as shown in Figure 9-1.

Step 2. Click “Organization”.

The organization management interface will be displayed as in Figure 9-2.
Step 3. Choose the root organization, and click + Add.
Add new organizations under the root level, as shown in Figure 9-3.

Step 4. Enter organization name, for example, NewGroup1, then press “Enter”.

Step 5. Check devices under the root organization, click + Move To, choose “NewGroup1”, and click “OK”. Devices then will be added under the new organization, as shown in Figure 9-4.

- Click beside the organization name to change the name.
9.2 Add User Role

It's supported by the DSS platform to create user roles and then add users. The created users can login as Administrator as well as Client. User permission varies depending on the user role.

Permissions of a user role includes Device Rights, Administrator Menu Rights and Operator Menu Rights. A user needs to be granted with these rights before performing corresponding operations.

Detailed steps are listed below:

Step 1. Click the + icon on the right side of the "Home" button.
All functional blocks will be displayed on the interface, as shown in Figure 9-5.

Step 2. Click "Account".
Account management interface will be displayed, as in Figure 9-6.
Step 3. Click in the “Role” interface. An “Add Role” dialogue box will pop up.
Step 4. Input “Role Name”.

Note
For a quick configuration, check “Copy Role” next to “Name” and select one role from the Dropdown list, then the information of the selected role will be copied to the new role.

Step 5. Check “Device Rights”, “Control Rights”, and select “Users”. The system will display the interface as shown in Figure 9-7.
Note
For device rights or control rights that are not checked, users with this role have no such corresponding device rights or control rights.

Step 6. Click “OK” to finish adding the role.

9.3 Add User

If a user role has been added, you can add users with this role.

Detailed steps are listed below:

Step 1. Click “User” tab to show the interface as in Figure 9-8.

![Figure 9-8](image)

Step 2. Click Add.

An “Add User” dialogue box will pop up.

Step 3. Configure “User Name”, “Password”, “Confirm Password”, “Expiry(Days)”, “Email Address”, “PTZ Control Permission” and so on. Check the roles below, then device rights and control rights of the corresponding roles will display on the right.

The system will display the interface as shown in Figure 9-9.
Note

- If no role is selected, then the user has no “Device Rights” or “Control Rights”.
- You can select multiple roles at a time.

Step 4. Click “OK” to add the user.

Click 🔄 to freeze the user, then the user will be signed out from the client.
Click ✐ to change user information other than username/password.
Click ✕ to delete the user.
10 Domain User

10.1 Scene

For application of a company with domain information and want to set domain user as login user, this function can simplify project deployment.

10.2 Domain Info Setup

Step 1. Click + next to Home.

Step 2. Select System tab, see Figure 10-1.

Step 3. Click Active Directory Setup tab, see Figure 10-2.
Figure 10-2

Step 4. After you set domain info, click to auto get Base DN info.

Step 5. After you get DN info, click to test if domain info it valid, and you will receive a prompt if OK. See Figure 10-3.

Figure 10-3

Step 6. Click to save. See Figure 10-4.

Figure 10-4
Then you can import domain user in Account management, see next Ch.

10.3 Import Domain User

Step 1. Click \[+\] to open new tab, click \[Account\] to enter Account interface. See Figure 10-5.

![Figure 10-5](image)

Step 2. Select \[User\] tab, on the right click \[Import Domain User\] to import domain user, see Figure 10-6.

![Figure 10-6](image)

Step 3. In list of gotten user, select user info to import, see Figure 10-7.
You also can search keyword in search field, see Figure 10-8.
Step 4. Click **Next** to enter next step.

Step 5. Select corresponding permission group for the selected user. After you check, on the right it shows device info and function right info of this permission group, click **OK**, see Figure 10-9.

![Figure 10-9](image)

Step 6. In user info, confirm that domain user has been successfully imported, see Figure 10-10.

![Figure 10-10](image)

You can login Client with domain username, see next Ch.

**10.4 Domain User Login**
Step 1. In Client login interface, user type dropdown list, select **Domain User**, see Figure 10-11.

![Figure 10-11](image)

Step 2. Enter domain username, password, server address, port and etc., click Login, see Figure 10-12.

![Figure 10-12](image)

After you log in, the interface is the same with login as general user, so here skip introduction.
11 Device

11.1 Device Initialization

Since newly manufactured devices do not have default username and password, therefore uninitialized devices cannot use this function. Device initialization function is mainly designed to create device username and password. Default username is admin and cannot be changed. A user can initialize device one by one or as a batch.

Step 1. Login DSS Manager, enter device module, see Figure 11-1. In auto search, find a device to check one or more devices for initialization. Click button.

Figure 11-1

Step 2. In pop-up box, enter password you are going to set (mush match rule of password). Default username is admin, which cannot be changed, after setup is complete click button.

See Figure 11-2.
Step 3. In the interface, enter email address for password security. Click to enter IP modification interface.
Step 4. In the interface, fill in modified IP address. This is optional, if you do not change IP, just click OK. Initialization is complete.
11.2 **Modify Device IP Address**

Step 1. Login DSS Manager, enter device management module, see Figure 11-6. In auto search device, check device IP you want to modify, and click “Change IP” button.
Step 2. In the figure, fill in correct username and password of login device, click “Change IP” button.
Step 3. In the pop-up figure, enter IP address, subnet mask and gateway info, click OK.

![Figure 11-7](image)

11.3 **Modify Device Password**

Device password modification function is for device added on platform only, including online and offline devices.

1. In unit device display area in Manager device, see Figure 11-9 and check device you want to modify password, click ![Reset Password](image), fill in new password.
2. In new pop-up interface, enter device existing password and new password, click OK. See Figure 11-10.

![Bulk Reset Password Interface](image)

**Figure 11-10**
12 Installation and Uninstallation of the Client

12.1 Requirement for PC

To install the DSS Client, the PC must meet the requirements as shown in Chart 12–1.

<table>
<thead>
<tr>
<th>Requirement of DSS Control Client</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommend</strong></td>
</tr>
<tr>
<td>CPU: Intel Core i5, 64 bits 4 Core Processor</td>
</tr>
<tr>
<td>Memory@8GB</td>
</tr>
<tr>
<td>Graphics Card: NVIDIA® GeForce®GT 730</td>
</tr>
<tr>
<td>Ethernet port@1000Mbps</td>
</tr>
<tr>
<td>Hard Drive Capacity: 200G free for DSS Control Client</td>
</tr>
<tr>
<td><strong>Low-end</strong></td>
</tr>
<tr>
<td>CPU: Intel Core i3, 64 bits 4 Core Processor</td>
</tr>
<tr>
<td>Memory@4GB</td>
</tr>
<tr>
<td>Graphics Card: Intel® HD Graphics 4400</td>
</tr>
<tr>
<td>Ethernet port@1000Mbps</td>
</tr>
<tr>
<td>Hard Drive Capacity: 100G free for DSS Control Client</td>
</tr>
</tbody>
</table>

12.2 Installation

Steps to install the DSS Client:

Step 1. Download and install the software.

1. Input IP address of DSS in IE.

The login interface of the DSS Manager will be displayed as shown in Figure 12–1.
2. Click 📀️ to download the C/S Client. System pops up the “File Downloads” dialogue box.
3. Click “Save” to download and save the DSS client software on the PC.

Step 2. Install the client program and check “Auto Run”, as shown in Figure 12–2.
Step 3. Click “Finish”.

12.3 **Uninstall**

Step 1. Select “All programs > DSS Control Client > uninstall DSS Control Client”. See

Uninstallation interface will pop up, as shown in Figure 12–3.
Step 2. Click “Uninstall”. Then the uninstallation starts, when it’s completed, the message box “Successfully removed from your computer!” will pop up.

Step 3. Click “OK”.

Figure 12–3
13 Login to the Client

13.1 Logging In

Login interface of DSS Client is shown in Figure 13–1.

Step 1. Enter “User Name” and “Password”.
Step 2. Input “Server IP” and “Port”.
“Server IP” means the IP address of the DSS platform Manager, while “Port” defaults to “80”.
Step 3. Click “Sign in”.
A “Preview Page” shows as the default page. See Figure 13–2.
Figure 13–2

- Turn on/off the alarm sound.

- Click and jump to the “Alarm Center” page to see details of alarms.

- Click to show login username and server IP. You can also change the password, lock the client, view the Help section and the Version, and log off here.

- Unfold “Local Config”.

- View system conditions, including network, CPU, and usage of the internal memory.

### 13.2 Local Configuration

After logging into the client for the first time, you need to configure the system parameters, including General setup, and setup of Video, Playback, Snapshot, Record, Alarm and the Shortcut Key.

Detailed steps are listed below:

Step 1. Click on the right upper part of the “Preview Page” on the Homepage. Then “Local Config” interface will be displayed, as shown in Figure 13–3.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic setup</strong></td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>Choose the language for the interface, including Chinese, English,</td>
</tr>
<tr>
<td></td>
<td>Spanish, Portuguese, etc.</td>
</tr>
<tr>
<td>Theme</td>
<td>Choose between Dusty Blue and White Blue.</td>
</tr>
<tr>
<td>Resolution</td>
<td>Choose the resolution for DSS client, either 1024<em>768, 1024</em>800,</td>
</tr>
<tr>
<td></td>
<td>1280<em>1024, 1440</em>900, etc.</td>
</tr>
<tr>
<td>Enable net time</td>
<td>Check or not to determine whether to respond to net time.</td>
</tr>
<tr>
<td></td>
<td>- If checked, then the client will start net time when services</td>
</tr>
<tr>
<td></td>
<td>initiate net time.</td>
</tr>
<tr>
<td></td>
<td>- If not checked, then the client will not perform net time when</td>
</tr>
<tr>
<td></td>
<td>services initiate net time.</td>
</tr>
<tr>
<td>Auto Login</td>
<td>If checked, auto login is allowed when Client starts running.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Auto Reboot</td>
<td>If checked, auto reboot of the Client is allowed when the PC power is on.</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>Instant Playback Time</td>
<td>Select time for the real time playback of the video.</td>
</tr>
<tr>
<td>Double click on RT window to</td>
<td>If auxiliary bit stream is used in the RT video, double click on the window to switch to main bit stream.</td>
</tr>
<tr>
<td>switch to main bit stream</td>
<td></td>
</tr>
<tr>
<td>Note</td>
<td>If the number of the window split is greater than 9, double clicking one the window will maximize the window and switch the bit stream of the channel to the main bit stream, whatever the previous bit stream is.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Playback Setup</strong></td>
<td></td>
</tr>
<tr>
<td>Default Split</td>
<td>Set number of splits for the initial screen of the “Record Playback”.</td>
</tr>
<tr>
<td>Enable high definition adjustment</td>
<td>Records playback is at 8-times speed, for HD video with high bit stream, the playback stream is even higher with 8-times speed. To mitigate pressure of decoding, bandwidth, and forwarding on the Client during playback, frame extracting is used to play back HD record.</td>
</tr>
<tr>
<td><strong>Snapshot setup</strong></td>
<td></td>
</tr>
<tr>
<td>Format</td>
<td>Picture storage format, including BMP and JPEG.</td>
</tr>
<tr>
<td>Picture Path</td>
<td>Storage path for pictures got from local snapshot.</td>
</tr>
<tr>
<td>Picture Name</td>
<td>Set standards for naming pictures to be stored.</td>
</tr>
<tr>
<td>Snapshot interval</td>
<td>Set time interval for continuous snapshot, at least 1s.</td>
</tr>
<tr>
<td>Continuous Amount</td>
<td>Set number of captures for continuous snapshot, with a minimum of 2 and a maximum of 10.</td>
</tr>
<tr>
<td><strong>Record setup</strong></td>
<td></td>
</tr>
<tr>
<td>Record path</td>
<td>Storage path for local records.</td>
</tr>
<tr>
<td>Record Name</td>
<td>Set rules for naming records to be stored.</td>
</tr>
<tr>
<td>Max Size of Record</td>
<td>Maximum size of single record when videotaping locally.</td>
</tr>
<tr>
<td><strong>Alarm Input</strong></td>
<td></td>
</tr>
<tr>
<td>Play alarm sound</td>
<td>Enable audio alarm when alarm occurs.</td>
</tr>
<tr>
<td>Loop</td>
<td>Check to loop the alarm sound.</td>
</tr>
<tr>
<td>Alarm Type</td>
<td>Select different alarm types and assign corresponding alarm sound to each alarm type.</td>
</tr>
<tr>
<td>Sound Path</td>
<td>Upload audio files from the path and play.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Map Flashes</td>
<td>Select and check various types of alarm, when such alarms occur, the map will flash in corresponding positions of the alarms.</td>
</tr>
<tr>
<td>Play Video</td>
<td>If a video shall be played, when an alarm occurs.</td>
</tr>
<tr>
<td>Display Type</td>
<td>Choose to play the alarm linked video in a client pop-up or open it in the preview interface when an alarm occurs.</td>
</tr>
<tr>
<td>Shortcut Key</td>
<td>Set shortcut keys for various functions of various preview interfaces.</td>
</tr>
</tbody>
</table>

Table 13-1
Table 13-2

Step 2. Configure the basic information, and the information of Video, Playback, Snapshot, Record and Alarm, etc.
Step 3. Click “Save”. 
14 Video Preview

14.1 Flow

14.2 ADD General Encoding Device

14.2.1 Add Manually

Before using various functions of the Client, add organizations and devices from the Manager. Directly enter IP address of the DSS platform in IE address bar, to login to the DSS Manager. Detailed steps to be followed:
Step 1. Click on the right side of the “Home” button.

All functional blocks will be displayed on the interface, as shown in Figure 14–1.

Step 2. Click “Device”.

Device management interface will be displayed, as shown in Figure 14–2.
Step 3. Click Add. A dialogue box of “Add All” pops up, see Figure 14–3.

![Add All dialogue box](image)

**Figure 14–3**

Step 4. Select “Adding Protocols”, “Manufacturer”, “Add Type”, “Device Category”, “Org” and “Video Server”, and input “IP Address”, “Device Port” and “Username/Password”, then click “Add”.

System continues to add encoder, as in Figure 14–4.
### Add Type

Ways to add devices. Parameters and descriptions:

- **IP Address**: If a device has static an IP, then users can add it by adding the IP.

- **IP Segment**: For a number of devices with successive IPs (for example, 192.168.1.50 to 192.168.1.100), if, excluding IP, all the other parameters (e.g., Device Port, Channel Amount and Org) of these devices are the same, then you can batch adding these devices by entering the start IP and end IP.

- **Domain Name**: Add device by adding the domain name. As the domain name of a device is unique, you can add a device via adding its domain name when the IP of the device is unknown.

- **Auto Register**: If a device has dynamic IP or it's in LAN, “Auto Register” is needed to add it in the DSS device list. For example, add on-board equipment by auto register.

- **ONVIF**: For device supportive of ONVIF protocol, add the device via ONVIF.

### Video Server

Server to which the video belongs.

Click text box to select corresponding center server or distribution unit from the dropdown list.

### Device type

Device types supported by the system include: DVR, IPC, NVS, MDVR, NVR, Smart NVR, MPT300, EVS, Smart IPC, VTT and Thermal Camera.

### Zero Channel Coding

Mix multiple windows into one channel for transmission.

---

**Step 5.** Choose “Device Type” and input “Device Name”, “Video Channel”, “Alarm Input / Output Channel”, etc.

**Step 6.** Click “OK”.

If you want to continue adding devices, click “Add More”.

When adding device completed, the interface is shown as Figure 14–5.
14.2.2 Auto Search Encoder

“Auto Search” can be used to add device when channel of the device is in the same LAN as the platform server.

Steps to automatically add encoder by system:

Step 1. Click in the upper part of “Device Management” interface.

System will automatically search devices. See Figure 14–6 for the search results.

Step 2. You can reconfigure IP by clicking or click to search devices of IP within the range.

Note
Devices on the same network segment are to be searched by default.

Step 3. Check devices to be added, and click .

A dialogue box “Batch Add” pops up. See Figure 14–7.
Step 4. Select “Org” and “Video Server” from the dropdown list, and input “Username” and “Password”.

“Username” and “Password” are username and password to login to device, default values being both “admin”.

Step 5. Click “OK”.

System will add device into corresponding organization.

### 14.3 Live Preview

Login to DSS Client and “Preview” interface will be displayed by default.

#### 14.3.1 Organization Preview

Device Tree on the left side counts number of total devices and online devices by category of organization. See Figure 14–8.

![Device Tree](image)

Figure 14–8

Right click Organization, as shown in Figure 14–9.
Video Tour can be enabled by right-click, with Tour intervals selected from 10s, 30s, 1min, 2min, 5min and 10min.

Device Tree is supported to display by name or by IP.

Device Tree is supported to display in an ascending, descending, or default order.

Right click to hide offline node.

### 14.3.2 Device Preview

From "Local Config > General", check "Device Tree display model". See Figure 14–10.

Then Device Tree in the Preview interface shows devices and channels, as in Figure 14–11.
Right click device, as shown in Figure 14–12.
Video Tour can be enabled here by right-click, with Tour intervals selected from 10s, 30s, 1min, 2min, 5min and 10min.

14.3.3 Channel Preview

Uncheck “Device Tree display model” from “Local Config > General”, then device tree in the preview interface will be displayed by channel. See Figure 14–13.
Right click Channel to add it to the favorite.

14.3.4 **Display Previous live Image when it boots**

Check “Show Last Live When Login” from "Local Config > General". See Figure 14-14.
Open live video from the “Preview” interface, and click at the bottom of the interface to save the video as View. You can open the video by directly clicking view channel on the left.

Shut down the client and restart it, then the Client will restore the video saved as View before shutdown.

14.3.5 Preview Display

Step 1. Choose channel from the device list on the left side of the “Preview” interface, and double click, or drag it to video window. If you double click device, then all channels of the device will be opened.

Real time monitoring interface is displayed in the video window, as in Figure 14–14.
Here displays encoding format, bit stream info and quick-start buttons. Description for quick-start buttons:

- ○: Turn on/off Instant Playback, playback time can be set in "Local Config". There shall be center record or device record for instant playback as precondition, center record be played back with priority.
- ☑: Turn on/off Audio.
- ✨: Turn on/off Device Audio Talk. Check “Self-adaptive Audio Talk Parameters” from “Local Config > General”; when audio talk is on, it will automatically adapt to various parameters without showing a pop-up box.
- ❌: Turn on/off Local Record.
- ✨: Launch Snapshot.

Search is supported by input device name or channel name in the Search bar here.

- ✪: Add, Delete or Rename Favorite. Favorite Tour supported.
<table>
<thead>
<tr>
<th>Serial Number</th>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Map Resource</td>
<td>Map can be opened in preview window, both GIS map and Raster map.</td>
</tr>
<tr>
<td>4</td>
<td>View</td>
<td>Live video window can be saved as View. Three-level directory is adopted for view, with level one as root node, level two for group and level three for view. Video Tour is supported from root node and group node, with tour intervals selected from 10s, 30s, 1min, 2min, 5min and 10min. Maximum of 100 views can be created.</td>
</tr>
<tr>
<td>5</td>
<td>PTZ</td>
<td>More info about PTZ of Speed Dome, see “14.5 PTZ Setup”.</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Live video can be saved as view.</td>
</tr>
<tr>
<td>7</td>
<td>Aspect Ratio</td>
<td>Aspect ratio of the video window, selected from two modes for video play: actual scale and fit in window.</td>
</tr>
<tr>
<td>8</td>
<td>Window Split Mode</td>
<td>Select from modes among 1 to 64 to set window split mode, or click to define split mode.</td>
</tr>
<tr>
<td>9</td>
<td>Full Screen</td>
<td>Switch the video window to “full screen” mode. To exit “full screen”, press the Esc key, or right click to select “exit full screen”.</td>
</tr>
</tbody>
</table>

Step 2. To configure active video window, right click preview window. See Figure 14–15.

![Figure 14–15](image)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close Video</td>
<td>Close active video window.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Close All Videos</td>
<td>Close all video windows.</td>
</tr>
<tr>
<td>Audio Enable</td>
<td>Same as 📺, to enable or disable camera audio.</td>
</tr>
<tr>
<td>Audio Talk Enable</td>
<td>Same as 📺, to enable or disable audio talk of corresponding device. Check “Self-adaptive Audio Talk Parameters” from “Local Config &gt; General”; when audio talk is on, it will automatically adapt to various parameters without showing a pop-up box.</td>
</tr>
<tr>
<td>Start Local Record</td>
<td>Same as 📹, to record audio/video of the active video window and save them in local PC.</td>
</tr>
<tr>
<td>Snapshot</td>
<td>Same as 📸, to save image of the active video window as picture (one picture for each snapshot).</td>
</tr>
<tr>
<td>Continuous Snapshot</td>
<td>To save image of the active video window as picture (three snapshots each time by default).</td>
</tr>
<tr>
<td>Set Alarm Window</td>
<td>Turn on/off alarm output.</td>
</tr>
<tr>
<td>Switch Bit Stream</td>
<td>Switch among “Main stream”, “Sub stream” and “Third stream”. Note: If selecting “Sub stream” or “Third stream”, you need to check “enable Sub Stream” and “enable Third Stream” in the “Bit Stream” dropdown list when adding encoder from the Manager.</td>
</tr>
<tr>
<td>Play Mode</td>
<td>Switch between the modes of “Real Time Priority”, “Fluency Priority”, “Balance Priority” and custom defined mode.</td>
</tr>
<tr>
<td>Video Adjustment</td>
<td>Perform video adjustment and video enhancement.</td>
</tr>
<tr>
<td>Screen Mode</td>
<td>Three modes supported: Standard mode, 1+3 mode and 1+5 mode.</td>
</tr>
<tr>
<td>Fisheye Installation Mode</td>
<td>Supporting wall mount, in-ceiling mount and ground mount.</td>
</tr>
<tr>
<td>Fisheye View</td>
<td>For different fisheye installation modes, there are different views:</td>
</tr>
<tr>
<td></td>
<td>Panoramic View: 360-degree panoramic view</td>
</tr>
<tr>
<td></td>
<td>Double Panoramic View: Two 180-degree panoramic views</td>
</tr>
<tr>
<td></td>
<td>Four Splits: Split the whole window into 4 parts in vertical and horizontal direction, allowing direction adjustment for each part separately</td>
</tr>
<tr>
<td></td>
<td>Single Window: only one single window</td>
</tr>
<tr>
<td>Add To Favorite</td>
<td>You can add the active channel or all channels into Favorite.</td>
</tr>
<tr>
<td>Full Screen</td>
<td>Switch the video window to “full screen” mode. To exit “full screen”, double click video window, or right click to select “exit full screen”.</td>
</tr>
<tr>
<td>Switch to Playback</td>
<td>You can switch between live preview interface and playback interface quickly, without going back to homepage first.</td>
</tr>
</tbody>
</table>

### 14.4 Electronic Focus

Devices with electronic focus function can focus automatically.
Step 1. In the interface shown when the device adding is completed, click 🔄 to the right of the device with the electronic focus function, as in Figure 14–16.

Step 2. Select “Video Channel” tab from “EditDevice” interface, then select “Support Electronic Focus” from “Function” dropdown list. See Figure 14–17.

Step 3. Click “OK”.
Step 4. Login to DSS Client.
Step 5. In the “Preview” interface, open the video of channel with electronic focus function, as in Figure 14–18.
Drag to zoom in/out video window.

Drag to adjust screen focus.

Click to reset the window to the initial image, as in Figure 14–19.

Click to automatically focus to get clear image, as in Figure 14–20.
14.5 PTZ Setup

Step 1. In the interface of adding device completed, click 📊 to the right of the speed dome device, as in Figure 14–21.

Step 2. Select the “Video Channel” tab from the “Edit Device” interface, then select “Speed Dome” from the “Camera Type” dropdown list, as in Figure 14–22.
Step 3. Login to DSS Client, and open the speed dome video in the “Preview” interface. PTZ operation shows on the left side, as in Figure 14–23.

Step 4. Click in the left lower part, to unfold PTZ operation, as in Figure 14–24.
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
</table>
| ![Lock](image) | Click ![Lock](image) to lock the current PTZ. Locked status shows as ![Lock](image). Control over PTZ varies depending on user level.  
- When user of low level locks PTZ, user of high level can unlock and enable the PTZ by clicking ![Unlock](image).  
- When user of high level locks PTZ, user of low level can't unlock the PTZ, unless PTZ automatically unlock itself.  
- Users of the same level can unlock PTZ locked by each other. |  
| ![Note](image) | **Note**  
Default time for automatically unlocking PTZ is 30s. |
<p>| <img src="image" alt="Direction Key" /> | Control speed dome with mouse. |
| Direction Key | Set rotation direction of PTZ, eight directions are available in total: up, down, left, right, upper left, upper right, lower left and lower right. |</p>
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>3D Location and Partially Zoom In (for Speed Dome PTZ), to zoom in or zoom out the selected area.</td>
<td>This function can be controlled with mouse only.</td>
</tr>
<tr>
<td>Step Size</td>
<td>Adjust rotation speed of PTZ, to set the step size chosen from 1 to 8.</td>
</tr>
<tr>
<td>Zoom</td>
<td>to control zoom operation of speed dome.</td>
</tr>
<tr>
<td>Focus</td>
<td>to adjust focus.</td>
</tr>
<tr>
<td>Aperture</td>
<td>to adjust brightness.</td>
</tr>
<tr>
<td>Set Preset Point and you can rotate camera toward the preset point.</td>
<td></td>
</tr>
<tr>
<td>Set Cruise, so that the camera can cruise among different preset points.</td>
<td>This function requires no support from speed dome. To cruise, speed dome only needs to support preset point.</td>
</tr>
<tr>
<td>Cruise Track is equivalent to a record process.</td>
<td></td>
</tr>
<tr>
<td>Aux functions</td>
<td>It supports auto rotation, wiper, light and infrared lamp.</td>
</tr>
</tbody>
</table>

## Preset Point

By adding “preset point”, you can rotate the camera toward the preset position.

Steps to add preset point:

1. Click direction key of the PTZ to rotate the camera to the needed place.
2. Click .
3. Place mouse over 1 and click .
4. Input preset point SN, and click .

Adding preset point completed.

To the right of , click , then camera will be rotated to the related position.

## Cruise

Set “Cruise” to enable camera to cruise among different preset points.

This function requires no support from speed dome. To cruise, speed dome only needs to support preset point.

Steps to add Cruise:
Step 1. Click 

Step 2. Place mouse over 1 and click 
A dialogue box with “New Cruise” pops up.

Step 3. Input “name”, and click “Operation” bar 

Step 4. Choose preset points from the dropdown list on the left, as shown in Figure 14–25.

Step 5. Click “OK”.
System prompts “Cruise Saved Successfully”.
Step 6. Click “OK”.

To start cruise, place mouse over 1 and click , then camera starts cruise among the preset points of “Cruise 1”.

**Cruise Track**

Cruise Track is equivalent to a record process.

Step 1. Click 

Step 2. Place mouse over 1 and click then operate 8 buttons of PTZ to set cruise track.

Step 3. Click to complete cruise track setup.

Step 4. Click , and the camera will rotate following the cruise track set.
Linear Scan

Step 1. Click 🔁.

Step 2. Click PZT button, and rotate PTZ toward left to a position, then click ⬅️ to set left boundary.

Step 3. Continue to rotate PTZ toward right to a position, and click ➡️ to set right boundary.

Step 4. Click ⏬️ to start linear scan, then PTZ will rotate back and forth within the two boundaries.

14.6 Single Window with Multiple Splits

Live preview from Client supports Normal mode, 1+3 mode and 1+5 mode.

Right click to select “Screen Mode” in the live preview window, as in Figure 14–26.

For example, to select 1+3 mode. See Figure 14–27.
Step 1. In the “Preview” interface, double click a channel on the left side to open the video.

Step 2. Click in the lower part, then a dialogue box of “Save The View” pops up, as in Figure 14–28.

Step 3. Input “View Name”, select “View Group”, and click “OK”. Check the added view under View tab on the left, as in Figure 14–29.
Step 4. Right click View, as in Figure 14–29, to select “New Directory”. A dialogue box of “Create Folder” pops up, as in Figure 14–30.

Figure 14–30

Step 5. Input “Folder Title” and click “OK”.

Step 6. Right click View to select Tour interval, for example, 10s. Then for each view group, a Tour will be initiated at intervals of 10s, as in Figure 14–31.
Step 7. Click 🔄 to stop Tour.

14.8 Favorite

Step 1. In the “Preview” interface, click ⭐ on the left, as in Figure 14–32.

Step 2. Right click Root as in Figure 14–31, to select “New Directory”. A dialogue box of “Create Folder” pops up, as in Figure 14–32.

Step 3. Input “Folder Title” and click “OK”.
Step 4. Under device tree, you can right click a channel to add it to the Favorite. A dialogue box of “Add Favorite” pops up, as in Figure 14–33.

![Add Favorite Dialogue Box](image)

Figure 14–33

Step 5. Choose favorite, and click “OK”. You can check the channel added under the favorite directory, as in Figure 14–34.

![Channel Added Under Favorite](image)

Figure 14–34

Step 6. Double click a channel to open the video.
Step 7. Right click Favorite name, to select Tour interval, for example, 10s. Then Tour will be initiated at intervals of 10s for each channel under the favorite. See Figure 14–35.
Step 8. Click 🔄 to stop Tour.
15 Panorama PTZ

15.1 Application Scene and Function

Panorama PTZ device has two types of combination:
1. 1 tracking speed dome + 1 180° splicing camera.
2. 1 tracking speed dome + 2 180° splicing cameras.

This is mainly applied in wide-range area, with IVS rule the tracking speed dome can auto track intrusion object, so manpower for monitoring could be reduced and the detection of intrusion is more smart.

15.2 Add Device

Step 1. Login DSS Manager, enter device module, in Figure 15-1 click + Add to add.

![Figure 15-1](image)

Step 2. Enter add device page, select encoder in device type, enter panorama PTZ IP address, port, username and password. Select organization and server, click Add.
Step 3. Click Add button, if the device can be connected, the system can auto get type and channel info. See Figure 15-3. If not, you shall manually enter device type, input channel info, and click OK.
Step 4. In device list, panorama PTZ is in Figure 15-4, you can see device online/offline status, device type, organization and etc. If it is offline, you also can see reason it became offline.
15.3 **Client Application**

15.3.1 **Preview**

Step 1. Login client, in live view module, select panorama PTZ device, double click or drag it to preview window to open. Select any of the two IPC channels, right click master-slave mode, there are 1+1 and 2+1 available. 1+1 means to open currently selected IPC channel and tracking speed dome channel. 2+1 means to open 2 IPC channels and 1 tracking speed dome channel. See Figure 15-5.

15.3.2 **Auto Track**

Step 1. Set device.

Firstly, login device WEB to set rule of IPC channel. Now it supports tripwire and intrusion.
Step 2. DSS client application. Select one panorama PTZ device, right click, see Figure 15-7. In menu, you can turn on and off auto tracking of panorama PTZ device. On device, please set rule, and when an object enters the ruled area, there will be a green box, and the tracking speed dome will auto rotates to position of the object and moves following it.
E-Map

For normal use of electronic map function on the Client, you first need to select a map type in the Manager, including raster map, Google and Google offline map, and then drag video devices and alarm devices onto the map from the DSS Manager. E-Map supports alarm prompt, video view and record playback.

Note
- **Raster Map:** A picture on display, suitable for indoor scenarios. Place the camera in a fixed indoor position, such as parking lot of planar character, and indoor scenario of passenger flow statistics or retail. Server uses raster map by default.
- **Google:** For online Google map, network permission is required to access to Client of Google map. Online Google map can be zoomed in and out. It displays image of a city as a whole, as well as image of certain position in the city.
- **Google offline Map:** Google offline map is deployed on other servers. Accessing to map Client and servers where offline map is deployed, you can use the offline map, which is of the same function as online map.

16.1 Flow

![Diagram of E-Map flow](image)

16.2 Add Map

16.2.1 **Google Online Map**

Directly enter IP address of the DSS platform in IE address bar, to login to the DSS Manager.

Detailed steps to be followed:

Step 1. Click the “Home” button.

All functional blocks will be displayed on the interface, as shown in Figure 16–1.
Step 2. Click “Map”. System displays map interface, as in Figure 16–2.

Step 3. Click 🆕 from Google map above. System pops up an interface to modify map, as in Figure 16–3.
Step 4. Choose Google online map, and configure map info, then click “OK”.

16.2.2 Google Offline Map

Detailed steps to be followed:

Step 1. Choose Google offline map from Figure 16–3, as shown in “Figure 16–4”.

![Figure 16–3](image)
Step 2. Click “Import” to import offline map, configure map info, and click “OK”.

16.2.3 Raster Map

Step 1. As in “Figure 16–2”, click in the interface. A dialogue box of “Add Main Map” pops up, as in Figure 16–5.
Step 2. Input “Name”, choose Picture to be loaded up, and click “Submit”. You can continue to add more raster maps.

Step 3. Click Google map or raster map added on the left, and a tab of adding hot zone shows on the right, as in Figure 16–6.

Step 4. Click “Add Hot Zone”, and configure map info. Hot zone in the main map above is added.

Figure 16–5

Figure 16–6
16.2.4 Channel Display

When adding Google online/offline map and raster map completed, click any map to drag channels on the left to the map, as in Figure 16–7.

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Device Display</td>
<td>Filter to display video device and alarm input channel.</td>
</tr>
<tr>
<td>Move Device</td>
<td>Click to move device position on the map.</td>
</tr>
<tr>
<td>Click</td>
<td>Click to select device.</td>
</tr>
<tr>
<td>Border Select</td>
<td>Select device via border selection.</td>
</tr>
<tr>
<td>Clear Screen</td>
<td>Clear border selection mark on the screen.</td>
</tr>
<tr>
<td>Add Hot Zone</td>
<td>Click “Add Hot Zone” to select area on the map and add it as hot zone. You can also add sub-level hot zone when entering this hot zone. Click Hot Zone on the map of Client, System will automatically link the map to area of the hot zone.</td>
</tr>
<tr>
<td>Tool</td>
<td>Including distance measurement, area measurement, mark and reset.</td>
</tr>
<tr>
<td></td>
<td>- Distance Measurement: to measure the actual distance between two points on the map.</td>
</tr>
<tr>
<td></td>
<td>- Area Measurement: to measure actual area of a region on the map.</td>
</tr>
<tr>
<td></td>
<td>- Mark: to mark on the map.</td>
</tr>
<tr>
<td></td>
<td>- Reset: to restore map to the default initial state.</td>
</tr>
</tbody>
</table>
To modify hot zone info, click hot zone. Double click hot zone to jump to the hot zone map. You can drag channel onto the hot zone map.

16.3 Map Use

16.3.1 Preview Window

Detailed steps to be followed:

Step 1. In the “Preview” interface, click under the device tree on the left. System displays map and hot zone map added from Manager.

Step 2. Double click map to show maps and added devices in the video window. On the map, you can play live video, play back record, cancel alarm, etc..

Step 3. Select one channel and click to play live video in the video window. This is shown in Figure 16–8.

16.3.2 Alarm flashes on the Map

16.3.2.1 Configure Alarm Scheme on the Manager

Detailed steps to be followed:

Step 1. Login to DSS Manager

Step 2. Click on the right side of the “Home” button.
All functional blocks will be displayed on the interface, as shown in Figure 16–9.

Step 3. Click “Event”. System displays event management interface.

Step 4. Click “Add”. A dialogue box of “Add Alarm Scheme” pops up, as in Figure 16–10.
Step 5. Select alarm type from the dropdown list of “Alarm Type” on the left, and check devices in device tree below. See Figure 16–11.

Note
Make sure to drag onto map the channel triggering alarm.

![Figure 16–11]

Step 6. Click “Link Cameras→”.
Steps 2 to 5 are optional. For more details.
Step 7. To step 6, system displays “Alarm Info” interface.
Step 8. Input “Name”, and choose “Time Template” and “Priority”, as in Figure 16–12.

![Figure 16–12]

Step 9. Click “Finish”.

41
16.3.2.2  **Activate Alarm Flash from the Client**

Step 1. Login to DSS Client.
Step 2. Click on the upper right corner to open the “Local Config” interface.
Step 3. Choose “Alarm Input” tab, check “Map Flashes When Alarm Occurred” on the right, and select “Alarm Type” that triggers flash, as in Figure 16–13.

![Figure 16–13](image)

Step 4. Click “Save”.

16.3.2.3  **Client Triggers Alarm**

Step 1. Click to the right of “Preview”, and choose “Map”.

System displays “Map” interface, as in Figure 16–14. You can enter Google map or raster map.
Step 2. Take raster map as example. Double click on the raster map below.

Step 3. When alarm is triggered, the alarm channel will flash on the map, as in Figure 16–15.
16.3.3 Channel Filtration

In the E-Map interface, click “Display” and check video device or alarm input channel, then the selected channels will be displayed on the map, as in Figure 16–16.

![Figure 16–16](image)

Click channel on the map to show Asset No., Name, Manufacture and Channel No., as in Figure 16–17.

![Figure 16–17](image)
• Click  to play channel video.

• Click  to play back record.

• Click  to cancel alarm.

16.3.4 Initial Angel Adjustment
Zoom in map and click “Initial Angel” above to adjust the angel according to the actual installation position of device with visible range, as in Figure 16–18.

Note
To use the visible range function, speed dome with visible range must be added.

Step 1. Again click “Initial Angel” to disable the button.
Step 2. Click “Visible Range”.
You can check visible range of device with visible range on the map, as in Figure 16–19.
Step 3. Open live video of the device in the “Preview” interface, and click the direction key of the PTZ, visible range of corresponding device will change accordingly; for the same reason, rotate the visible range of device on the map, the live video of the device in the preview window will also change accordingly.

Step 4. Click PTZ, visible range of corresponding device on the map will also be shortened or elongated.

Step 5. Click “Visible Range” again to disable the button.
17 Record Service

System can search and play back records from the device storage or center storage, which enables you to search, play back and download records of different channels, different times and different types from the Client. If there exists record, system displays different colors in date selection region.

- Device Storage: Record to be stored in front-end SD card, or disks like DVR or NVR. Storage plan is configured on the device automatically.

- Center Storage: Record to be stored in network storage server or DSS disks. For detailed configuration, see Storage config in System Introduction. To play back the record, you need to configure the record plan first, then system will store the record in network storage server within the set time period.

17.1 Flow

17.2 Configure Storage Plan

17.2.1 Storage Config

Detailed steps to be followed:
Step 1. Login to DSS Manager

Step 2. Click on the right side of the "Home" button.

All functional blocks will be displayed on the interface, as shown in Figure 17–1.

Step 3. Click “Storage Config” tab.

Disk list is empty before you add net disk for the first time, as in Figure 17–2.

Step 4. Click , input IP address, and click to add net disk, as in Figure 17–3.
Step 5. Check disk list and format.

As in Figure 17–4, check disk info, and click to format selected disk, or click to the right of the disk, to format the disk.

Step 6. Select Disk Type, as in Figure 17–5, and click to perform formatting operation.

Note

Current version only supports video format.

Step 7. Confirm Formatting.
In a warning box as in Figure 17–6, click **OK** to confirm formatting.

![Warning](image)

Are you sure to format the selected net disk?

**OK**  **Cancel**

Figure 17–6

Step 8. Check disk formatting result. Disk status is Normal, and Disk type is Video, with correct capacity and free capacity, as in Figure 17–7.

![Figure 17–7](image)

17.2.2 Record Plan Setup

Detailed steps to be followed:

Step 1. Click “Record Plan”, and then click **Add**, to add record plan, as in Figure 17–8.

![Figure 17–8](image)

Step 2. Check video channels to be stored, input “Plan Name”, “Record Stream”, select “Time Template” and “Position”, as in Figure 17–9, and click **OK** to create plan.
Note

Record stream includes main stream, sub stream and third stream.
Time template can be chosen from default templates, or templates created by user.
Position can be server or encoder.

Step 3. Check record plan status, as in Figure 17–10.

17.2.3 Enable/disable Record Plan

Click \(\text{ON}\), to the right of the record plan, to enable or disable the record plan, as in Figure 17–11.

17.2.4 Modify Record Plan

Click \(\text{Edit}\), to the right of record plan, to modify the record plan. The interface to modify plan is the same as the interface to add plan.
This is shown in Figure 17–12.
17.2.5 **Delete Record Plan**

Step 1. Click **x**, to the right of record plan, to delete the record plan, as in Figure 17–13.

Step 2. Confirm whether to delete the record plan in warning box as Figure 17–14. To delete, click **OK**.

17.2.6 **Add Time Template**

Step 1. When adding record plan, select “New Time Template” from the dropdown list of Time Template, as in Figure 17–15.
Step 2. In the dialogue box of “New Time Template”, input “Template Name”, and then draw time period with mouse directly, as in Figure 17–16.

Figure 17–16
Step 3. To draw time periods of multiple days, click check buttons in Figure 17–17.
Step 4. Click 🌟, then set specific periods in the pop-up of “Period Setup”, as in Figure 17–18.

**Figure 17–17**

Step 5. Set time and click OK, to see result in the following image.
Step 6. You can select the newly created time template in the dropdown list of the time template when adding plan, as in Figure 17–20.

![Figure 17–20](image)

**Note**

No editing or deleting is allowed to the default time template of the system.

### 17.2.7 Add Makeup Record Plan

System supports record makeup to the device record of the previous day, and a cross-day execution time of the makeup record plan is allowed, with makeup record condition of the time, or WIFI.

**Note**

“Condition” could be time, or WIFI. For time condition, record makeup will be initiated automatically by following the set time; for WIFI condition, record makeup will be initiated automatically when device connects to the WIFI.

#### 17.2.7.1 Condition Being Time

Detailed steps to be followed:

Step 1. Click “Makeup Record Plan” tab, as in Figure 17–21.
Step 2. Click Add, to add makeup record plan.

A dialogue box of “Add Makeup Record Plan” pops up, as in Figure 17–22.

Step 3. Select video channel required for makeup record plan on the left, input “Plan Name”, and select Time from the dropdown list of the Condition, thus time is selected as the makeup record condition. See Figure 17–23.

Step 4. In the interface as Figure 17–24, drag timeline to set time period of makeup record plan. For example, set start time being 17:47 of the first day while end time being 08:30 of the second morning.
Step 5. Set makeup record length within the range of 1 to 24 hour.

![Figure 17–24](image)

Step 6. Click **OK**, to save the plan.

### 17.2.7.2 Condition Being WIFI

Detailed steps to be followed:

Step 1. Click "Makeup Record Plan" tab, as in Figure 17–26.

![Figure 17–26](image)

Step 2. Click **Add**, to add makeup record plan.

A dialogue box of "Add Makeup Record Plan" pops up, as in Figure 17–27.
Step 3. Select video channel required for makeup record plan on the left, input “Plan Name”, and select [WIFI] from the dropdown list of the Condition, thus WIFI is selected as the makeup record condition, as in Figure 17–28.

Step 4. Click [OK], to save the plan, as in Figure 17–29. When the device needing makeup record switches to WIFI, makeup record will be automatically initiated.
17.2.8 **Group Quota**

17.2.8.1 **Function introduction**
In single server units, group the disks and assign the storage path of video channels to specific disk groups. The grouping and assigning method helps to achieve targeted storage, as well as time storage via the ratio of disk capacity to channels.

17.2.8.2 **Configuration Steps**
Detailed steps to be followed:

Step 1. Click “Group Quota” tab. System shows the online the status of the server, as in Figure 17–30.

Step 2. Click ✍️ to the right of the “Online” server. A dialogue box of “Edit ISCSI” pops up, as in Figure 17–31.
Step 3. Select the unallocated disks on the left, and click ➔, to add them to the group list on the right.

Step 4. Click "Next" to allocate channels for disk group.

Step 5. Select channels from device list on the left, and click ➔, to add them to the disk group on the right.

This is shown in Figure 17–32.
Step 6. Click “Finish”.

17.2.9 Preview Remote Record

Open video in the preview window of the Client, then you can start center record of the channel from the right-click menu, provided that the center storage disk has been configured and the channel is not configured with a central storage plan.

Detailed steps to be followed:

Step 1. Login to DSS Client.
Step 2. Open video in the live preview window.
Step 3. Right click in the window, and select “Start Remote Record”, as in Figure 17–33.
Step 4. Stop Remote Record.
Close video in the preview window, or right click “Stop Remote Record”.

17.3 Record Search

17.3.1 Procedures

17.3.2 Select Search Time

Detailed steps to be followed:

Step 1. Login to DSS Client.

Step 2. Click , to the right of “Preview”, and select “Record Playback”.
System displays “Record Playback” interface.

Step 3. Check channel to be searched, click , and select search time, as in Figure 17–34.
Blue point on the upper right corner of a date represents existing record on the date.

Step 4. Select dates with existing records, and click “Search”.
Green color appears on the time progress bar of the corresponding channel. If no record exists, system prompts “No Record”.

Step 5. Double click any point of the green bar, to play back record, as in Figure 17–35.
Step 6. Right click playback window and select “Playback on Wall”. A “Choose Window” dialogue box pops up, then record on wall will be initiated after being decoded by selected decoder.

Note
Currently, three types of decoder, namely, M60, M70 and NVD are supported by playback on wall. This is shown in Figure 17–36.
17.3.3 **Select Storage Path**

Record can be searched by storage path, for example, you can select “Records Stored on Server” or “Records Stored in Video Recorder”.

This is shown in Figure 17–37.

![Figure 17–37](image)

17.4 **Video playback**

17.4.1 **Video filter**

In “Record Playback” interface, right click time progress bar below, as in the picture, and select “Record Filter”.

“Record Filter” box pops up.
Record types include: Schedule Record, Alarm Record, Motion Detect, Video Loss and Tampering.

Choose record types and click “OK”.

17.4.2 Record Control

For buttons at the bottom of record playback interface and the description, see Chart 17–1.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>📡</td>
<td>to lock record</td>
</tr>
<tr>
<td>❌</td>
<td>to cut record</td>
</tr>
<tr>
<td>🔃</td>
<td>to download record</td>
</tr>
<tr>
<td>🕵🏻♂️</td>
<td>Synchronization of different playback windows</td>
</tr>
<tr>
<td>⚙️</td>
<td>Backwards</td>
</tr>
<tr>
<td>✸火花</td>
<td>Stop/pause playback</td>
</tr>
<tr>
<td>🎥</td>
<td>Single frame playback</td>
</tr>
<tr>
<td>🎥 1x</td>
<td>Fast/slow playback</td>
</tr>
<tr>
<td>🧪</td>
<td>During playback, you can drag time progress bar to play back record at the specific time</td>
</tr>
</tbody>
</table>

Chart 17–1 Playback Buttons Description

17.4.3 Lock Record

Note

You can only lock center records stored on the server and the part recorded half an hour ago.

Step 1. Click 🕷️ at the bottom of the “Record Playback” interface, as in Figure 17–39.
Step 2. Click the time progress bar to select lock start time, then drag mouse as in Figure 17–39, and click to select end time. A “Save Lock Record” box pops up, as in Figure 17–40.

Step 3. Input “Reason” and click “OK”.

17.4.4 Add Mark

You can mark records that interest you by “Add Mark” in order for a subsequent search and location.

Steps to add record:
Step 1. Click 🎥 at the bottom of “Record Playback” interface. “Add Mark” box pops up, as in Figure 17–41.

![Add Mark dialog box](image)

Figure 17–41

Step 2. Input “Name” and “Desc”, then click “Make Tag”. System prompts “Tag Creation Successful”.

17.5 Download Record

17.5.1 Record Search

Specific steps are same as those in “17.3 Record Search”.

17.5.2 Cut Record

Click 🎥, at the bottom of record playback interface, then on the green progress bar, as in  ❌

未找到引用源。, click to start cutting, and drag mouse as in 🎥, then click to end cutting. “Save Download” box pops up, as in Figure 17–43.
17.5.3 **Timeline**

Step 1. Click 📼 at the bottom of "Record Playback" interface.

System shows record download interface, as in Figure 17–44.
Step 2. Select “TimeLine” tab.

Step 3. Select time period from timeline, then download box pops up, as in Figure 17–45.

Step 4. Click “Download”.

Download process shows below, as in Figure 17–46.
17.5.4 File list

Step 1. Click “File” tab.
System shows record files, as in Figure 17–47.
Figure 17–47

Step 2. Directly click in the “Operation” column, or check multiple files and click “Download Selected Files”. Download process shows directly at the bottom of the interface.

17.5.5 Label

Step 1. Click “Label” tab. System display record files with labels, as in Figure 17–48.
Step 2. Directly click "Download" in the “Operation” column, or check multiple files and click “Download Selected Files”. Download process shows directly at the bottom of the interface.

17.6 Download Management

17.6.1 Downloading

If there are record files in downloading process, download process shows under the “Downloading” tab at the bottom of the interface, as in Figure 17–49.

![Figure 17–49](image)

17.6.2 Completed

Files completing download shows under the “Downloaded” tab, as in Figure 17–50.
Click [folder] to jump to storage path of the record file.
18 Alarm

18.1 Intro to Flow

![Diagram of alarm flow process]

**Figure 18-1**

18.2 Add Alarm Source

DSS platform supports to add alarm. You shall add alarm source on device. For different devices, you shall set different alarm types. For example, the device is a NVR, the following is steps of setup.

Step 1. Directly login web, or on DSS Manager, go to Device interface, click Edit next to NVR device.

Step 2. Open EVENT tab.

Step 3. Click VIDEO DETECTION. Video detection includes Motion Detect, Video Loss, Tampering, Video Diagnose. For example, set Motion Detect, see Figure 18-2.

![Motion Detection settings interface]

**Figure 18-2**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable</td>
<td>Enable.</td>
</tr>
<tr>
<td>Period</td>
<td>Set monitoring period.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Anti-dither</td>
<td>Set anti-dither period.</td>
</tr>
<tr>
<td>Region</td>
<td>Set monitoring region.</td>
</tr>
<tr>
<td>Record Channel</td>
<td>Record channel.</td>
</tr>
<tr>
<td>Delay</td>
<td>Set alarm delay time.</td>
</tr>
<tr>
<td>Alarm Out</td>
<td>Select alarm output.</td>
</tr>
<tr>
<td>PTZ Activation</td>
<td>PTZ activation.</td>
</tr>
<tr>
<td>Tour</td>
<td>Select alarm video exit.</td>
</tr>
<tr>
<td>Snapshot</td>
<td>Set snapshot channel.</td>
</tr>
<tr>
<td>Show Message</td>
<td>Send Email: send email when alarm occurs.</td>
</tr>
<tr>
<td></td>
<td>Alarm Upload: report alarm to DSS platform. Here you shall check,</td>
</tr>
<tr>
<td></td>
<td>otherwise the platform will not receive alarm.</td>
</tr>
<tr>
<td></td>
<td>Buzzer: prompt alarm.</td>
</tr>
<tr>
<td></td>
<td>Message: send message of alarm.</td>
</tr>
<tr>
<td></td>
<td>Log: log created when alarm occurs.</td>
</tr>
</tbody>
</table>

**Chart 18-1**

Step 4. Set parameter, click OK.

Step 5. According to alarm info you need, you can click FACE DETECTION, AUDIO DETECT, ALARM and other tabs.

For example, to set Local Alarm in ALARM tab.

Step 1. Select ALARM>Local Alarm, see

![Figure 18-3](image-url)

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable</td>
<td>Enable</td>
</tr>
<tr>
<td>Alarm Name</td>
<td>Alarm name</td>
</tr>
<tr>
<td>Period</td>
<td>Set alarm period.</td>
</tr>
<tr>
<td>Anti-dither</td>
<td>Anti-dither</td>
</tr>
<tr>
<td>Type</td>
<td>Type</td>
</tr>
<tr>
<td>Record Channel</td>
<td>Record channel.</td>
</tr>
<tr>
<td>Delay</td>
<td>Set alarm delay time.</td>
</tr>
<tr>
<td>Alarm Out</td>
<td>Select alarm output.</td>
</tr>
<tr>
<td>PTZ Activation</td>
<td>PTZ activation.</td>
</tr>
<tr>
<td>Parameter</td>
<td>Note</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Tour</td>
<td>Select alarm video exit.</td>
</tr>
<tr>
<td>Snapshot</td>
<td>Set snapshot channel.</td>
</tr>
<tr>
<td>Show</td>
<td>Send Email: send email when alarm occurs.</td>
</tr>
<tr>
<td>Message</td>
<td>Alarm Upload: report alarm to DSS platform. Here you shall check,</td>
</tr>
<tr>
<td></td>
<td>otherwise the platform will not receive alarm.</td>
</tr>
<tr>
<td></td>
<td>Buzzer: prompt alarm.</td>
</tr>
<tr>
<td></td>
<td>Message: send message of alarm.</td>
</tr>
<tr>
<td></td>
<td>Log: log created when alarm occurs.</td>
</tr>
</tbody>
</table>

Chart 18-2

Step 2. Set parameter, click OK.

### 18.3 Add Alarm Device

For example, too add ARC5805C-C.

Step 1. Login PC of this platform, ping ARC5808C-C to connect the platform.

Step 2. Login DSS Manager.

Step 3. Click Device, see Figure 18-4.

![Figure 18-4](image)

Step 4. Click `Add`.

Step 5. In Device Category, select Alarm Host, enter device IP, see Figure 18-5.
Step 6. Set protocol, manufacturer, add type, organization and etc. Click Add, see Figure 18-5.

```
| Protocol: Dahua | Manufacturers: Dahua |
| Add Type: IP Address |
| Device Category: Alarm Host |
| IP Address: 10.15.23.102 |
| Device Port: 37777 |
| User: admin |
| Password: **** |
| Org: root |
| Video Server: Cantar Server |
```

Step 7. Click OK.

Because platform server and alarm device have time interaction, so new device show OFFLINE status, you can click other tab and return to Device tab, or refresh Device interface,
the device will become ONLINE.

18.4 **Create Alarm Scheme**

Step 1. Login DSS Manager.

Step 2. Click next to Home. See Figure 18-7.

![Figure 18-7](image)

Step 3. Click Event, see Figure 18-8.

![Figure 18-8](image)

Step 4. Click Add, see Figure 18-9.
Step 5. On the left, select alarm type in alarm type dropdown list, and check device in device tree below, see Figure 18-10.

Note:
Alarm type includes:
- Device: disk full, disk failure, device offline.
- Video channel: video loss, motion detect, tampering, channel offline.
- Alarm input channel: external alarm.
- System: high temperature alarm, Raid degrade, server auto shift, server manual shift, server status change, host spare and etc.
- Alarm controller: alarm controller alarm, fire alarm, zone invalid, low battery, city grid outage.
- Thermal image: thermal image flame point alarm, hot point abnormal alarm.

Step 6. Click link camera.

Step 7. On the left, check video channel. On the right, check position, record stream, enter record time, prerecord time. Determine to check “Snapshot a picture of camera when alarm is triggered” and “Open camera video on client when alarm is triggered”. See Figure 18-11.

Note:
If you want to set prerecord, then you must select device with device record.

![Figure 18-11](image)

Step 8. Click Link Action.

Step 9. Check alarm output channel, set duration. Click PTZ tab on the left, check speed domw device, and preset position on the right, see Figure 18-12.
Step 10. Click Video Wall.
Step 11. Create video wall.
   Step 1. Click add video wall.
   Step 2. Enter video wall name, select window layout, see Figure 18-13.
Step 3. Click Select Channel.
Step 4. In device tree, select decoder you want to bind, and drag it to corresponding video wall. See Figure 18-14.
Step 5. Click Done, see Figure 18-15.
Step 6. Click Save.

Step 12. In video wall interface, check device on the left and channels are shown on the right. Select corresponding video wall and window, see Figure 18-16.

Step 13. Click Email, the system shows Set Email to Receive Alarm Info interface, see Figure 18-17. Check user to receive email.
Step 14. Click Event Attribute.
Step 15. Enter name, select time template, priority, see Figure 18-18.

Note:
You can select current time template, or add time template, see Ch 9.1.2.
Step 16. Click Done. In alarm scheme interface, click ON, see Figure 18-19.
18.5 **Alarm Link Video Preview**

Function note: When an alarm occurs, open user linked video channel in preview window or pop-up window on Client.

Step 1. Login DSS Manager.

Step 2. Click 

next to Home. See Figure 18-20.

Step 3. Click Event, see Figure 18-21.

Step 4. Click Add, see Figure 18-22.
Step 5. Select alarm type from alarm type dropdown list, and check device in device tree, see Figure 18-23.

Note:
Alarm type includes:

- Device: disk full, disk failure, device offline.
- Video channel: video loss, motion detection, video tampering, channel offline.
- Alarm input channel: external alarm.
- System: high temperature alarm, Raid degrade, server auto shift, server manual shift, server
status change, host to spare, spare to host, spare failure, spare failure recovery.

- Alarm controller: alarm controller alarm, fire alarm, zone invalid, low battery, city grid offline.
- Thermal image: thermal image fire alarm, thermal image point abnormal alarm.

Step 6. Click Link Cameras.
Step 7. Check channel to preview when an alarm occurs.
Step 8. Check to enable link video.

Figure 18-24

Step 9. Complete alarm scheme config.
Step 10. Login client.
Step 11. Open local setup and select open video method, and open preview in window and pop-up window.
Step 12. If you select to open in preview interface, then right client to set it as alarm window, see Figure 18-26.

Step 13. Effect of alarm link video. See Figure 18-27 and Figure 18-28.
18.6 **Alarm Sound**

Login DSS client. Click 📣 at the upper-right corner, see Figure 18-29.
### Chart 18-3

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Play</td>
<td>Send out alarm sound when alarm occurred.</td>
</tr>
<tr>
<td>Loop</td>
<td>Loop alarm sound when alarm occurs.</td>
</tr>
<tr>
<td>Alarm Type</td>
<td>Select alarm type and set corresponding alarm sound.</td>
</tr>
<tr>
<td>Sound Path</td>
<td>Upload sound file, click Play to test.</td>
</tr>
<tr>
<td>Map Flash</td>
<td>When alarm is triggered, flash occurs at corresponding position on map.</td>
</tr>
<tr>
<td>Alarm Type</td>
<td>Select alarm type corresponds to map flash.</td>
</tr>
<tr>
<td>Display Video</td>
<td>When alarm is triggered, auto open linked video.</td>
</tr>
<tr>
<td>Open Video Method</td>
<td>Preview video in pop-up or in preview interface.</td>
</tr>
</tbody>
</table>

### 18.7 View Alarm

Step 1. Click at the upper-right corner of DSS client, the system jumps to event center interface, or click next to live, see Figure 18-30.
Step 2. Click in operation column, in a window pops up at the lower right corner, see Figure 18-31.

Step 3. In Claimant column, claim user, see Figure 18-32.

Note:
For those claimed alarms, other users cannot process those alarms.

18.8 Process Alarm
Double click alarm, below the interface shows alarm video, time, type, source, priority and etc. See Figure 18-33.

Select method to process alarm: processed, ignore, forward to other user, send email and etc.

Figure 18-33
19 Email Server

19.1 Scene
When you set alarm link on manager and process alarm on client, you can set to send email to user, so you must set email server first.

19.2 Email Server Config

Step 1. Click + next to Home, see Figure 19-1.

Step 2. Select mail server setup, check Enable to enable email server, see Figure 19-2.

Step 3. In SMTP server type dropdown list, select server type, see Figure 19-3.
Step 4. Set email info, see Figure 19-4.

Step 5. Click Mail Test to test if server is valid. If test is successful, you will see a prompt and test account will receive a test email.

Step 6. After test is successful, click Save to save config info.

### 19.3 User Email Config

You can set email address when you create user or add email address when you edit existing user. Here makes adding user as an example:

Step 1. Login Manager, enter user management module, click User tab.
Step 2. Click **Add**, see Add User box. Here please set username, login password, confirm password, expiry, email address, PTZ control permission and etc. Check role below, to see device right of corresponding role on the right. See Figure 19-7.

**Step 3.** Select existing user, click **Email** button to add email address, see Figure 19-8 and Figure 19-9.
20 Video Wall

20.1 General Video Wall Flow

20.2 Alarm Video Wall Flow

20.3 Add Decoding Device

Step 1. Login DSS Manager.
Step 2. Select Device, see
Step 3. Click Decoder tab below, click Add. See Figure 20-2.
Step 4. Enter IP address, click Add, see Figure 20-3.

Step 5. Enter device name, video channel and etc., select device type, click OK.

20.4 Create Video Wall

Step 1. In DSS Manager, click next to Home, see Figure 20-4.
Step 2. Click Video Wall, see Figure 20-5.

Step 3. Click Add Video Wall, see
Step 4. Enter video wall name, select window layout, see Figure 20-7.
Step 5. Click Select Channel.
Step 6. In device tree, select decoder to bind, and drag it to corresponding video wall. See
Step 7. Click Done.

20.5 Execution of TV Wall

Step 1. Login DSS Client.

Step 2. Click 📺 next to Live, select TV Wall. See
Step 3. Select TV wall, and drag channel on the left info TV wall window, see Figure 20-10.
<table>
<thead>
<tr>
<th>No.</th>
<th>Interface</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TV Wall Plan</td>
<td>Select TV wall in dropdown list.</td>
</tr>
<tr>
<td>2</td>
<td>Save Task</td>
<td>Save video wall task, and select saved task in dropdown list.</td>
</tr>
<tr>
<td>3</td>
<td>TV Wall Plan</td>
<td>▪️  add timer plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  add tour plan.</td>
</tr>
<tr>
<td>4</td>
<td>Window Split</td>
<td>▪️  screen split.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  custom screen split.</td>
</tr>
<tr>
<td>5</td>
<td>Advanced</td>
<td>▪️  clear screen.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  enable/disable tour plan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  lock window.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  add frame.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  display.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  screen on/off.</td>
</tr>
<tr>
<td>6</td>
<td>Video Wall</td>
<td>▪️  open, when you finish task setup, it auto outputs task video to wall.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>▪️  click to output to video wall.</td>
</tr>
</tbody>
</table>
Channel List

- Click  
  Show screen, window, channel binding info.
  - Click  , preview in Preview below, to view if you need channel.
  - Click  , to adjust sequence.
  - Click  , to delete added window signal source.

Chart 20-1

- Step 4. Click  . System pops up Save box.
- Step 5. Enter task name, click OK.

20.6 Create Video Wall Plan

20.6.1 Timer Plan

- Step 1. In TV Wall interface, click  
- Step 2. Select  
- Step 3. Enter plan name, select video task and set start time and end time, see Figure 20-11.

Step 4. Click Save. If you select Enable remaining time plan, and set task, then it will shot other task during period out of this planned period.
20.6.2 **Tour Plan**

Step 1. Click ☐, and select ☐.

Step 2. Enter plan name, select video task, and set stay time, see Figure 20-12.

![Figure 20-12](image)

Step 3. Click Save.

20.7 **Execution of TV Wall**

After you successfully add plan, see Figure 20-13.

![Figure 20-13](image)

Click ☐, open button, to execute plan.
Or you can select plan from dropdown list, click to execute.
21 ITC

21.1 Business Flow

Login DSS Manager  Add ANPR device

Login DSS Client  Set blacklist

Enter road monitoring module

road monitoring  vehicle pass record  vehicle pattern  arm record

Enter violation module  violation search

21.2 Add ANPR Device

Step 1. Login DSS Manager, enter device module, in Figure 21-1 click + Add .
Step 2. Enter Add Device interface, in device type select “ANPR Device”, fill in ANPR device IP, port, username and password. Select device organization, video server, and picture server. Be careful, ANPR device has one more option as picture server. Please select according to actual deployment, See Figure 21-2.
Step 3. In Figure 21-3, enter ANPR device name, select corresponding device type, device model, organization, enter device SN and channel number, click OK. Device model includes: Dahua intelligent analytics box, Dahual ITC, and Dahua speed measurement Device.
Step 4. After you add, in device list you can see device status. See Figure 21-4.
21.3 Vehicle Blacklist

Step 1. Login DSS Manager, open new tab, select Vehicle Blacklist module. See Figure 21-5.

Step 2. Enter vehicle blacklist module, in Figure 21-6 click to add blacklist info.
Step 3. Figure 21-7, enter plate no., start time, end time, vehicle type, plate color, vehicle brands and arm type, click OK.
Figure 21-7

Step 4. Arm type is in Figure 21-8.

<table>
<thead>
<tr>
<th>Over Speed Vehicle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theft Vehicle</td>
</tr>
<tr>
<td>Accident Vehicle</td>
</tr>
<tr>
<td>Suspicious Vehicle</td>
</tr>
<tr>
<td>Intercept Vehicle</td>
</tr>
<tr>
<td>Check</td>
</tr>
<tr>
<td>Track</td>
</tr>
<tr>
<td>High-risk Vehicle</td>
</tr>
</tbody>
</table>

Figure 21-8
21.4 Road Monitoring Application

21.4.1 Default Display

Step 1. Login Client and open new tab, click “ANPR” module to enter road monitoring. See Figure 21-9.

![Figure 21-9](image)

Step 2. In Figure 21-10, select tab and enter road monitoring application, it shows E-map in a single window by default, you can manually switch number of window.

![Figure 21-10](image)
21.4.2 Passed Vehicle Picture Browse

Step 1.  In Figure 21-11 interface, click button to select ANPR channel.

![Figure 21-11](image)

Step 2.  View passed vehicle picture, see Figure 21-12.  means selected number of device.  Click button to stop refresh. Double click picture to view details.

![Figure 21-12](image)

21.4.3 Video/Picture Preview

Step 1.  Switch to four windows. Double click one ANPR channel of video on device tree. In the opened video window, right click and you can switch to picture preview mode.
21.5 ANPR

Step 1. Enter ANPR module, see Figure 21-14. Select icon to enter ANPR app. First select ANPR device and channel (multiple choice), and select criteria of search, including: period, plate no., plate color, vehicle manufacturer, brand logo, vehicle color, vehicle speed and etc. Click button to search.

Step 2. See Figure 21-15 for result. Click or button to export record, click to view total records.
Step 3. Click button to view record info of this record.

Step 4. Click button to search vehicle pattern, see Figure 21-17. It will auto search all passed vehicle records of this vehicle. It will show all time on time axis, and you click vehicle pattern on e-map which connects ANPR device where vehicle passed.
Step 5. See Figure 21-18.

21.6 Vehicle Pattern

Enter road monitoring module, see Figure 21-19. Select icon to enter vehicle pattern app, select period, enter plate no., click button to search vehicle pattern. See Ch 21.5 step 4-5.
21.7 Arm Record

Arm record is the record of vehicle on blacklist.

Step 1. Enter road monitoring module, See Figure 21-20, select 🚗 icon to enter passed vehicle record app. First select ANPR device and channel (multiple choices), and select search criteria, including: period, plate no., plate color, vehicle manufacturer, brand logo, vehicle color, vehicle speed and etc. Click Search button to search.

21.8 Violation Search

Step 1. Log in DSS Client, open a new tab, click “Violation” module to enter violation search application. See Figure 21-21.
Step 2. Enter Violation module, see Figure 21-22. Select start time and end time you want to search, enter plate no. (optional), click Search button to start.

Step 3. Search result is in Figure 21-23. You can switch display in list and icon.
Step 4. Click button to view record info of this record, see Figure 21-24.

Note:
- You must add record storage disk first, and set alarm link plan in Manager before you playback record.
- Ensure that PC time zone and time match with server.

Step 5. Export search list. You can export selected result or all searched info. Click to export.
Step 6. Successfully exported, and you can see prompt as below.

Figure 21-26
22 POS

22.1 POS Business Flow

22.2 Add POS Device

Step 1. Log in DSS Manager, enter Device module, in Figure 22-1. Click button to enter Add interface.

Step 2. In Figure 22-2, device category is "POS", enter IP address, port, username and password of POS device, select device organization and server. Click button to go to next step.
Step 3. In Figure 22-3, enter POS device name, select role, click OK.
Step 4. When you complete, in device list you can see device status as in Figure 22-4.
22.3 Bind POS and Video Channel

One POS device can bind up to 16 video channels. After binding, you can show POS printing info in corresponding video channel.

Step 1. Login DSS Manager, open new tab, in the figure select Bind Resource module. See Figure 22-5.
Step 2. Enter Bind Resource Module, and in Figure 22-6, select POS Relation tab, click button to set binding.

Step 3. In the figure, you can set binding, and select POS channel. Select video channel (max 16 channels), click OK to save.
Step 4. In Figure 22-8, you can view created POS binding list, click to edit this rule. Click to delete this rule.

22.4 Set POS END

Step 1. In DSS Manager, enter system setup module, select tab, set POS END info, click Save button.
22.5 Client Demonstration

Log in DSS PRO Client, and in Live module, you can view video channel bound by POS device and POS transaction info.

Step 1. In Client Live module, it shows POS resource list. Double click or drag POS channel to preview window to open video. When POS device has info printed, the window auto overlay transaction info.

Step 2. In Figure 22-11, right click to set POS demonstration format.
Step 3. See Figure 22-12, you can drag black box on the left to set POS info demonstration position, you can set other info: overlay mode (flip/scroll), font size (small/medium/large), background and font color.

![Figure 22-11](image1)

**Figure 22-11**

22.6 View Report

Step 1. In Client click button, in Figure 22-13, click to enter Business
Analysis module.

Figure 22-13

Step 2. In the figure, click to enter report mode. Then select search period (Y/M/D), and click of corresponding button. On the right, select different tab to display, see Figure 22-14 and Figure 22-15.

Figure 22-14
Figure 22-15
23 People Count

23.1 Flow

Login Web Manager  Add Smart IPC

Preview video  Edit Channel to open Business Intelligence function

Check real-time data  Open Business Intelligence Tab  Check heat map

Login DSS Control Client  Check Period Statistics Chart

23.2 Add Smart IPC

Before you can use people count, please add SmartIPC device on DSS Manager.
Step 1. Login DSS Manager.
Step 2. In Device Manager interface, click Add.
Step 3. Enter IP address, click Add.
Step 4. Enter device name, select Smart IPC for device type, see

![Figure 23-1]

Step 5. Click OK.
Step 6. Click next to complete Smart IPC device, see Figure 23-2.

![Figure 23-2]

23.3 People Count Statistics

Step 1. Login DSS Client. Click next to Preview, select people count. See Figure 23-3.

![Figure 23-3]

Step 2. Enter People Counting, see Figure 23-4.
Step 3. Click on the left, and select device channel. Below select report type, statistical time, click Search, see Figure 23-5.
You can view line chart or list.

23.4 View People Count in Preview

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

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

Step 1. Click tab.

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

Note:
The device sends heat map data to platform on a real-time basis. Starting when device is added to platform, you can search heat map data uploaded. Unit of search is week (interval between start time and end time cannot exceed 1 week).
Click **Export** at the upper-right corner, you can export heat map in bmp format.
24 Face Recognition

24.1 Business Flow

24.2 Add IVS Server

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

Step 1. Log in DSS Manager, enter device management module, in Figure 24-1, click to add IVS server.
Step 2. In the figure, add device and select type to be “Intelligent Device”.
Step 3. In the figure, enter IVS-7500 IP address, port, username and password. Select device organization and server, click Add button to enter device info input interface.
Step 4. In Figure 24-4, enter device name, select role for the device, click OK.
Step 5. IVS device is in Figure 24-5.

24.3邦定视频通道

Step 1. Log in DSS Manager, click 🌐 to open new tab, in the figure select “Bind Resource” to
enter bind resource module.

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

Step 3. In the figure, select IVS-7500 server and video channel to bind, click OK.
24.4 User Resource Management

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

24.4.1 User Type Management

Step 1. Login DSS Manager, click + to open new tab, see the figure and select “Target Management” to enter user resource management module.
Step 2. Before you add user info, please create user type. In the figure, click **User Property Setup** button to enter setup interface.

**Figure 24-9**

Step 3. In the figure click **Add** to enter add interface.

**Figure 24-10**
Step 4. In add interface, enter user property name, click OK.
Step 5. Click ☑️ button to enter edit interface for existing user, click ✗ button to delete this type.

Figure 24-11
24.4.2 Add User-Manager

Step 1. Log in DSS Manager, click to open new tab, and in the figure select “Target Management”, to enter user resource management module.

Figure 24-12
Step 2. Enter target management interface, see figure below, click **Add** button to enter add user interface. See Figure 24-14.
Step 3. Enter add user interface, see figure below, click button to upload user image, and fill in user name, ID, select gender and DOB. Click OK.

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

24.4.3 Add User Info-Client

Step 1. Log in DSS Client, click face recognition module, see Figure 24-16.
Step 2. Open corresponding IVS channel video, and detected user image will be shown below. See Figure 24-17, user with a red box exists in user database.

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

24.5.1 Face Recognition

Step 1. Log in DSS Client and open new tab, click “Face Recognition” module to enter ANPR application, see Figure 24-19.
Step 2. Enter face recognition module, select to enter face recognition application, double click to open or drag IVS channel to video window. In scroll bar, it will show face image detected, see Figure 24-20. A red box means successful pairing with user database.

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

Step 4. Place mouse on image with red box, you can see similarity, see Figure 24-22.
Step 5. Double click red box to see detail of snapshot, see Figure 24-23.

Step 6. Double click image without red box, fill in user info, see Figure 24-24. Click “Register” button to add the user into user database.
24.5.2 **Snapshot Search**

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

![Figure 24-24](image)

**Figure 24-24**

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

![Figure 24-25](image)

**Figure 24-25**

![Figure 24-26](image)

**Figure 24-26**
Step 3. In Snapshot Record, select picture, click button to view user pattern.

![Image](image1)

Figure 24-27

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

![Image](image2)

Figure 24-28

24.5.3 Info Search

Step 1. Enter face recognition module, select mark to enter snapshot search app, see Figure 24-29 and select IVS device and channel (select one only), and select search period, user type, name, ID, gender and etc. Click button to search.
Step 2. Search result is in Figure 24-30. Match User shows match result by user type, name, ID, gender and etc. Recognition Record shows result of comparison between IVS channel snapshot record and user database.

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

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

Step 1. Enter face recognition module, see Figure 24-32. Select icon to enter picture search app, select period to search, click button.

Step 2. See Figure 24-33, click button to search total record quantity.
Step 3. Double click any one record to view details, see Figure 24-34, click Previous One or Next One button to view previous or next record.
### 25 Smart Track

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

**Note:**

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

#### 25.1 Flow

![Diagram of Smart Track Flow](image)

**Figure 25-1**

#### 25.2 Add Monitor Task

**Step 1.** Click 📊 next to Preview, select smart track.

**Step 2.** Click 📊. See Figure 25-2.
Step 3. Set monitor point name, select fisheye name and speed dome name, see Figure 25-3.

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

- Select 3-8 mark points on fisheye speed dome.
- When you find mark point on the left side of general speed dome, click to zoom out PTZ.
- Click to 3D position, and when you click a certain point on the left side of speed dome, it will auto move to the center.

Step 5. Click to marked point.

Step 6. Follow Step 4. -5 to add at least three mark which shall not be on a same straight line. See
Step 7. Click Save, see Figure 25-6.

Figure 25-6

25.3 Execution of Fisheye Monitor Task

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

Figure 25-7

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

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

Step 4. Enter view name, select group, and click OK.
26 Radar Smart Track

26.1 Business Flow

26.2 Add Radar

Step 1. Login Manager, enter Device module, in Figure 26-1 click Add to enter Add interface.
Step 2. In Figure 26-2, device category shall be “Radar Device” and enter device IP, port, username and password. Select device organization and server, click Add to go to next step.
Step 3. In Figure 26-3, fill in radar device name, select device model (currently support B100 and B300), fill in device SN, select device role and click OK.
Step 4. Radar device is shown in Figure 26-4. Click ☑️ to edit this radar device.
Step 5. Click 🖊 to edit this radar device, see Figure 26-5.

26.3 Add Smart Track

Step 1. Login Manager, enter device module, in Figure 26-6 click Add to enter Add interface.
Step 2. In Figure 26-7, for device category select “Encoder”, enter smart track dome IP, port, username and password. Select device organization and server, click **Add** to go to next step.
Step 3. In Figure 26-8 fill in smart track dome name. When network is unobstructed, the platform will auto get device type and channel info. See the figure, select device role, click OK.
Step 4. Smart track device is in Figure 26-9.
26.4 Smart Track Plan Setup

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

Step 2. Enter radar smart track module, see Figure 26-11 for initial status, click to add link plan.
Step 3. Enter add interface, see Figure 26-12 prompt “No map data, please set the map on the left first.” Because radar channel shall be dragged onto ma and if the system has not added map, you shall login Manager and add map.

Step 4. Basic config. Set plan name, select map. Enter actual length and width of map’s corresponding area. See Figure 26-13 and Figure 26-14. Click Next to enter radar config.
Step 5. Enter radar setup, see Figure 26-15, select corresponding radar channel and drag it to actual installation position on map.
Step 6. In Figure 26-16 you can set radar device installation height. Manually rotate blue shadow area to adjust radar device monitoring area as well as you can manually adjust angle value. Click Next to enter smart track dome config.

Step 7. Config dome. In Figure 26-17, click speed dome and select input box. In open device list, double click channel you want to link.
Step 8. In Figure 26-18, set speed dome installation height, XY axis data are auto gotten.

Step 9. Set calibration point. You shall link radar to monitoring position of the dome via one calibration point. See Figure 19-9. How to set: in radar monitoring area, select one blue point (detected moving object), then the blue point turns to yellow; rotate dome toward this moving object, click OK to save.
Step 10. Radar link plan view and modification. In Figure 26-20, click 📋 to edit this plan. Click 🗑️ to delete this plan.

26.5 Application Display

Step 1. In smart track module, see Figure 26-21, double click plan list to open set link plan.
Step 2. Open plan to it auto goes to live view module, see Figure 26-22, when moving object appears in monitoring range of radar, dome will auto track this object. You can freely drag the dome.

---

Figure 26-21

Figure 26-22
27 Backup and Restore

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

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

27.1 System Backup

27.1.1 Intro to Function

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

27.1.2 Manual Backup

Step 1. Login DSS Manager.

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

Step 3. Select tab, enter backup interface, see Figure 27-2.
Step 4. Manually back up data by clicking .

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

Step 6. See Figure 27-4 pop up box, enter password to encrypt this backup file.
Step 7. In default path, see Figure 27-5.

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

Step 3. Select backup period from dropdown list, you can select: never, by data, by week, by month, see Figure 27-7.
Step 4. Select backup period, and the pages show setup menu, you can set auto backup execution time. After you set time, click **OK** to save config. The system auto back up data by selected period and time to server.
Step 5. On server, view auto backup file. Default backup path is server installation directory-Servers-bak-db_backup, see Figure 27-10.

Figure 27-10

27.2 System Recovery

27.2.1 Intro to Function

When user database is abnormal, you can use the recovery function to recover data to the latest backup so DSS system can quickly recover thus minimize user loss.

Warning:
Before you restore system, you shall stop DSS operations done by other users. This function will change data info, be careful!

27.2.2 Restore Local File

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

Step 1. Select tab, enter Restore interface, see Figure 27-11.
Step 2. Click , select local file to restore, click and select file. Click to continue, see Figure 27-12.

Step 3. Enter admin password to restore, see Figure 27-13.

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

Step 5. When it successfully restores, system will reboot.
27.2.3 Restore Server File

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

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

![Figure 27-14](image)

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

![Figure 27-15](image)

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

![Figure 27-16](image)

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

28.1 Intro to Function

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

28.2 Intro to Operation

Step 1. Login DSS Manager.

Step 2. Click next to Home.

Step 3. Select log module, see

![Manual Restore]

Password: *

Encrypted password: *

This operation will clear existing data, to continue, enter login password.

![Figure 28-1]

Step 4. Select log type, event type, search time. See Figure 28-2.
Step 5. Result of log search is shown below, and total number of search is shown at the lower-left corner. See Figure 28-3.

Step 6. Click to export log info, see Figure 28-4.
Step 7. View export log result, and it shows current log pack at the lower-left corner, you also can view in Explorer download bar, see Figure 28-5.

Step 8. Open compression pack, log (PDF) is shown in Figure 28-6.
Step 9. View log final result.
Statistics

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

29.1 Overview

Step 1. Click + next to Home, see Figure 29-1.

Step 2. Select Statistics, see Figure 29-2.
29.2 Running State

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

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

### 29.3.1 Server State

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

![Server State Interface](image)

**Figure 29-4**

### 29.3.2 Device Status

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

![Device Status Interface](image)

**Figure 29-5**

Step 2. Click Export, to export real-time device status PDF format, see Figure 29-6.
Step 3. Open export file, see Figure 29-7.

Step 4. Click History tab in device status interface to view device historical status, see Figure 29-8.
Click user state, device health report tab to view corresponding details, which are skipped here.

### 29.4 Event Information

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

![Event Information](image)

**Figure 29-9**

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

![Figure 29-10](image)

Click Alarm tab to view alarm channel detail.
30 Sync Time

30.1 Device&Slave Server Sync Time

30.1.1 Function

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

30.1.2 Principle

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

30.1.3 Config

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

![Figure 30-1](image)

Step 2. Click Interval Setup tab, enable device time calibration, and set parameter, see Figure 30-2.
Note:
Start time can be selected in dropdown list, and you shall enter interval manually.

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

Step 4. Click **Save** to save.

### 30.2 Client Sync Time

#### 30.2.1 Function

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

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

#### 30.2.2 Config

Step 1. Refer to Ch 18.1.3.

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

Step 3. Select General tab, enable net time, see Figure 30-3.
Step 4. Click Save.

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

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

31.2 Config

Step 1. Click next to Home.
Step 2. Select System tab, see Figure 31-1.

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

Note:
Item with * sign is mandatory, and FTP standard format is: ftp://x.x.x.x/. System self-carried FTP address is IP address of DSS server. Username and password are “dss” by default.
Step 4. Click **Save** to save. See Figure 31-3.

![Save Successful](image)

Figure 31-3

31.3 **Usage Display**

Step 1. On PC desktop, click My Computer.
Step 2. In address field, enter FTP address you set, such as ftp://172.10.1.201/, press Enter. See Figure 31-4.

![FTP Address](image)

Figure 31-4

Step 3. After you press Enter, when the FTP is open, enter username and password. (default is dss/dss)
Step 4. Click Login, enter FTP directory.
32 Version

32.1 Client Version

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

![Figure 32-1](image-url)
33 Naming Rule Setup

Click at the upper-right corner of DSS Client, open Local Config interface. Click Snapshot and Record tab, you can set naming rule of snapshot and local record, see Figure 33-1.

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

![Figure 33-1](image-url)
34 Path Setup

Click 📺 at the upper-right corner of DSS Client, open Local Config interface. Click Snapshot and Record tab, you can view storage path of snapshot and local record, see Figure 34-1.

![Figure 34-1](https://example.com/figure341.png)
35 Help

In homepage of DSS Manager, you can view user's manual, mobile client manual and FAQ.
Shortcut of PC is in Chart 36-1.

<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>

Chart 36-1
## Appendix 1 Server Module

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

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