

# Cloud Information Release System

User's Manual

V1.0.0

ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.

# Safety Instructions

The following categorized signal words with defined meaning might appear in the Manual.

Signs	Description
Warning	Indicates a medium or low potential hazard which, if not avoided, could result in slight or moderate injury.
<b>A</b> CAUTION	Indicates a potential risk which, if not avoided, could result in property damage, data loss, lower performance, or unpredictable result.
©— <sup>n</sup> TIPS	Provides methods to help you solve a problem or save you time.
₩ NOTE	Provides additional information as the emphasis and supplement to the text.

## Frequently used icons

The following categorized icons/buttons with defined meanings as followings might appear in the Manual.

Icon/Button	Description
<b>Q</b> Search	Enter the filtering criteria and click this icon to search for
C Search	matching information.
<b>⊞</b> Delete	Select programs you want to delete, and click this icon to
■ Delete	delete them.
•	Click this icon to preview the program effect.
	Click this icon to edit the program information.
×	Click this icon to delete the program.
	Click this icon to copy the program information.
	Click this icon to modify the folder name.
Q	Click this icon to view the review process.
1	Select materials you need, and click this icon to download
<u> </u>	them.

# Revision History

Manual version	Software version	Revision Content	Release date
V1.0.0	V2.20	First release	November,2018.

# **Product Overview**

#### 1.1 Introduction

Push multimedia contents (images, videos, etc.) to various display terminals by using the Cloud Information Release system (Hereinafter referred to as the System) to sync information and guide users. Currently, the System is widely used in office buildings, smart buildings, public transportation systems, financial sector and government buildings.

#### 1.2 Features

- Highly scalable, low hardware config requirements.
- BS architecture, no need to install the client.
- Timed downloading of planned tasks, reduced bandwidth requirements of the system.
- Faster downloading of material files via P2P technology.
- Multi-level review to increase information security.

## 1.3 User Type

#### Administrator

Administrator is the system user who possesses the highest system privilege. The administrator can add new departments, roles, users, release programs and subtitles, review programs, and conduct remote upgrade.

### Operator

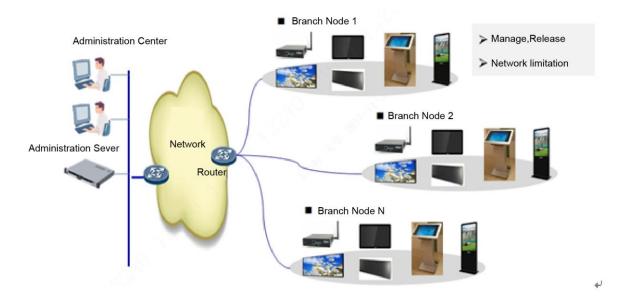
Operator is the operation user whose system operation permissions vary in accordance with the selected role.

Operation users can only operate devices at the same departmental level, but not those at different departmental levels.

## 1.4 Typical Networking

The networking graph of the Cloud Information Release terminal. See Figure 1-1.

Figure 1-1 Typical networking



# 2 Display Terminal Installation

# 2.1 Preparation before Installation

Refer to the following checklist and check the package. If you find device damage or component loss, contact the after-sales service.

Check Sequence	Check Item		Check Content		
Ocquence	Overall packing	Appearance	No obvious damage.		
1		Packing	Not distorted or broken.		
		Component	No missing.		
		Label	Not torn up.		
	Back of		Do not tear up or throw away the labels;		
2	the device		otherwise the warranty services are not		
2			ensured. You need to provide the serial		
			number of the product when calling the		
			after-sales service.		
		Model on label	Matches purchase order.		
	Screen	Appearance	No obvious damage.		
3			No loose connection.		
		Data cable, power line			
			Contact the after-sale service staff		
			immediately if these cables or lines are loose.		

# 2.2 Display Terminal Installation

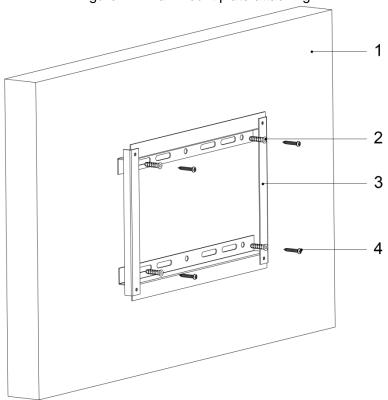


- We suggest that the height from the device to the ground should be 1.5m–2m. The final installation height depends on your installation environment.
- The installation surface is required to sustain at least 3 times the total weight of the bracket and the device.
- We do not provide wall-mounted bracket and wall mounted board in the packing box. You
  can purchase them separately and ensure that the bracket and the board you bought
  conform to the VESA standard.

For the wall mount operations of the display terminal, the following figures are for reference only and subject to your specific terminal for installation.

<u>Step 1</u> Attach the wall-mount plate to the mounting surface with the four plastic expansion bolts and self-tapping screws in the accessory bag. You can calibrate mounting position with a spirit level.

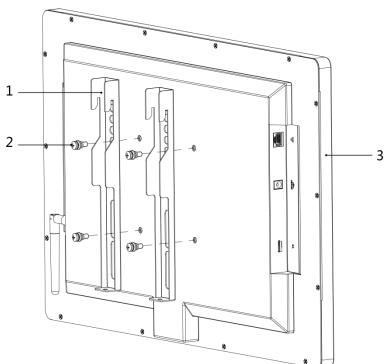
Figure 2-1 Wall-mount plate attaching



	No.	Component	No.	Component
Ī	1	Mounting surface	3	Wall-mount plate
Ī	2	Expansion pipe	4	Self-tapping screw

Step 2 Fix the wall-mount bracket into the installation holes of the Device with four M5 screws (spring washers and flat gaskets included) in the accessory bag.

Figure 2-2 Bracket fixing

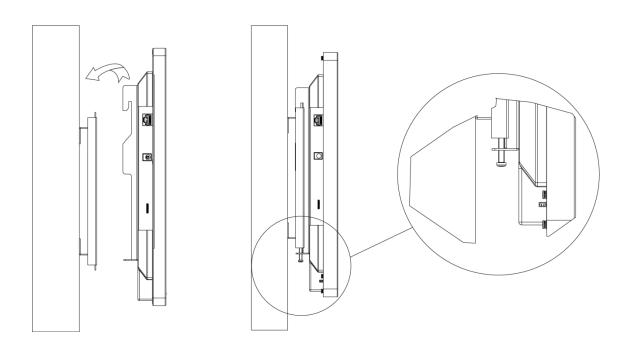


No.	Component	No.	Component
1	Wall-mount bracket	3	Signage

No.	Component	No.	Component
2	M5 screws (spring washers and		
_	flat gaskets included)		_

Step 3 Fasten hooks of the wall-mount bracket to the wall-mount plate, and secure it with two M4 screws.

Figure 2-3 Device installation



# **Product Deployment**

For the procedures for deploying the product, see Figure 3-1.

Start Preparation Deploying Cloud Information Release System **Deploying Display Terminal** 

Figure 3-1 Product deployment

# 3.1 Preparations

Make sure the deployment takes place under the same LAN and all devices are powered on as intended.

End

You can refer to Table 3-1 to start preparations before deployment.

Table 3-1 Preparations

Name	Quantity
Windows server	1
Cloud terminal device (display terminal)	1
Mouse or remote control	1
Keyboard	1
Display	1

## 3.2 Cloud Information Release System Deployment

## 3.2.1 Obtaining Software Installation Package

You can get the software installation package necessary for deployment from the technical support, such as General\_CIRS\_Chn\_V2.00.000.R.170731.exe. The screenshot is just an example. The software name might vary between different versions.

#### 3.2.2 Software Installation

Step 1 Double-click the installation package to run the program.

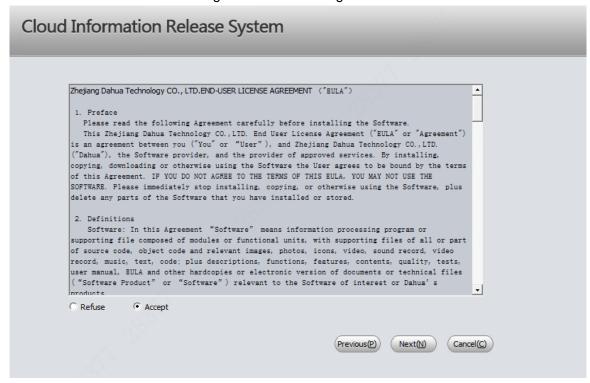
The interface of the Cloud Information Release System is displayed. See Figure 3-2. Figure 3-2 Cloud Information Release System



Step 2 Click Next.

The license agreement interface is displayed. See Figure 3-3.

Figure 3-3 License agreement



Step 3 Read the license agreement, check **Accept** and click **Next**. The destination folder interface is displayed. See Figure 3-4. Figure 3-4 Destination folder

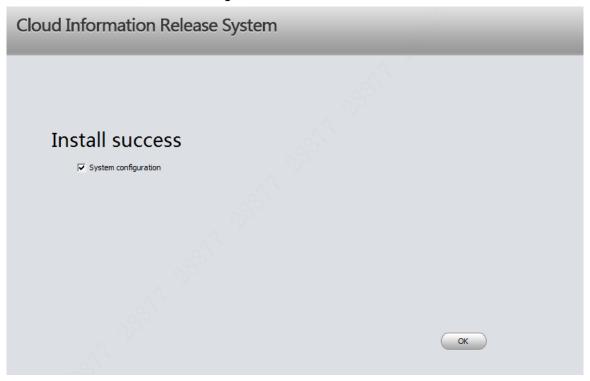


Step 4 Click Browse and select the destination folder.

#### Step 5 Click Install.

After the installation is successful, the successful installation interface is displayed. See Figure 3-5.

Figure 3-5 Install success



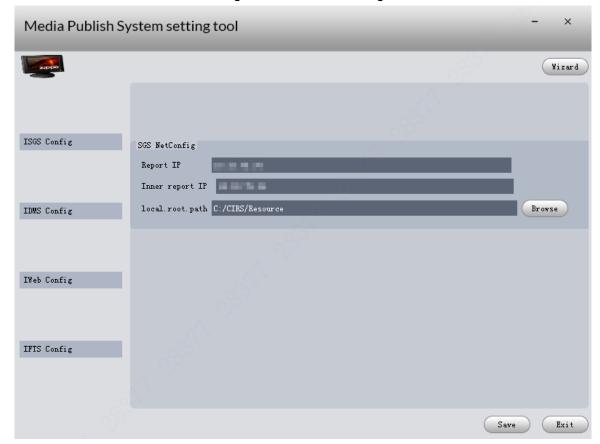
## 3.2.3 Login to the System Setting Tool Interface

Step 1 On PC, select Menu > Cloud Information Release System > System Config. The DSS system setting tool login interface is displayed. See Figure 3-6. Figure 3-6 System setting tool login interface



Step 2 Select the IP address and port number (9092 by default) of the server, and click **Login**. The service config interface is displayed. See Figure 3-7.

Figure 3-7 Service config



Step 3 Click Save.

The Config will take effect in the next start of the service program prompt box is displayed. Click OK, and the service is enabled automatically. When the service is successfully started, a red sign appears at the bottom right corner of the desktop. See Figure 3-8.

Figure 3-8 Signs

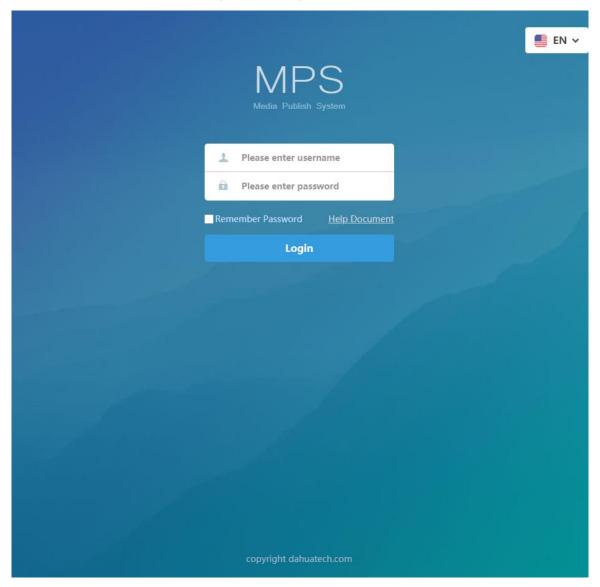
## 3.2.4 Logging in System

Use of Google Chrome browser to access the WEB platform of the system is recommended. If using IE browser, follow instructions to download necessary plug-ins.

Step 1 In the browser, enter http:// (Server IP address):9080/mps/, and press Enter.

The Cloud Information Release System interface is displayed. See Figure 3-9.

Figure 3-9 Login Interface (1)



Step 2 Enter username and password, and then click Login.

The login interface is displayed.



The username is system and the password 123456 by default. Modify the default password in your first login.

# 3.3 Display Terminal Deployment

Deploy the IP address of the display terminal and register it to the system. After successful registration, the display terminal shows programs successfully released by the system. The system can control the display terminal to open/close the display or restart.

### 3.3.1 Display Terminal Initialization

When you are opening the device for the first time or you have allowed your system to be restored the factory settings, you need to initialize the device. Only after that can you operate and configure your device.

Step 1 Plug the device's power line into a socket.

The device boots up and the Device Initialization interface is displayed. See Figure 3-10.

Figure 3-10 Device Initialization



Step 2 Enter password and confirm it.

Step 3 Click OK.

The device initialization begins. After that, the main interface is displayed.

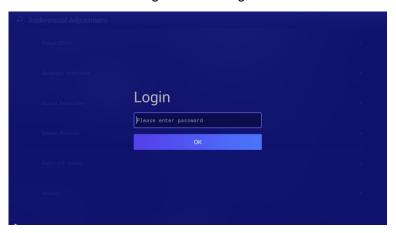
## 3.3.2 Login to the Display Terminal

The system will be locked automatically when you: log in for the first time and finish the initialization, lock the screen manually or don't operate the device for the time you have set. You need to type your password to unlock the system.

Step 1 Click any position on the screen.

The Login interface is displayed. See Figure 3-11.

Figure 3-11 Login



Step 2 Enter your password.

Step 3 Click OK.

The homepage or the interface before the lock screen is displayed. The homepage is displayed in the first login. SeeFigure 3-12.

Figure 3-12 Homepage



## 3.3.3 Network Setting



Make sure the IP address of the display terminal is on the same segment as the platform.

Step 1 Select System Setting > Network Setting.

The **Network Setting** interface is displayed. See Figure 3-13.

Figure 3-13 Network setting



Step 2 Select the network type as needed and set the network.

The following steps are based on Ethernet. See Table 3-2 for others.

- 1) Select Ethernet.
- 2) Select "Manually set IP address" to set the IP address of the display terminal. See Figure 3-14.

Figure 3-14 Ethernet

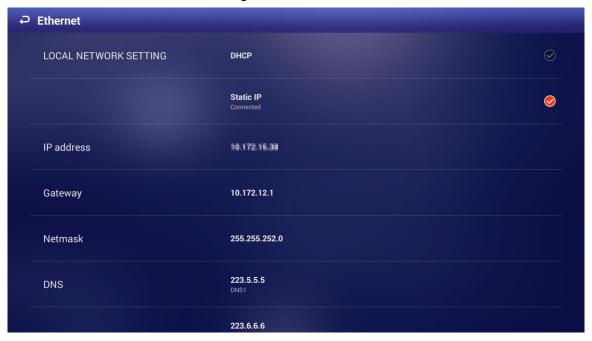


Table 3-2 Network setting

Table 3-2 Network Setting		
Network Type	Description	
Ethernet	<ul> <li>Connect your device to network by Ethernet and there are two kinds of methods for you to give an IP to your device.</li> <li>DHCP: When there is a DHCP server in the network, after selecting the DHCP option, the Device automatically obtains IP address from the DHCP server.</li> <li>Static IP: After selecting Static IP, respectively click IP ADDRESS, DEFAULT GATEWAY or NETMASK, and enter the IP address, default gateway and net mask according to the network plan.</li> </ul>	
WLAN	<ul> <li>Click if Wi-Fi is available near the device. After turning on this function, you can connect to Wi-Fi in the following ways.</li> <li>Adding after auto search: Click a given Wi-Fi, type its password and click Connect.</li> <li>Adding Wi-Fi manually: Click to display the Add Network interface. Then type Network SSID and select Security from None, WEP, WPAWPA2 PSK and 802.1x EAP. Click Save to finish configuration.</li> </ul>	
4G	You can connect a 4G mobile network card with USB interface to your device and select <b>Enable Data Network</b> to connect your device to the network through the mobile network.	
Portable Hotspot	An enabled hotspot can be shared to other terminal devices for use.	
VPN	Connect your device to VPN (Virtual Private Network). Then your device can get programs from VPN.	

## 3.3.4 Register to the System

Step 1 Select **Network Release** in the main interface of the display terminal. The Network Release interface is displayed. See Figure 3-15.

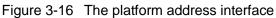


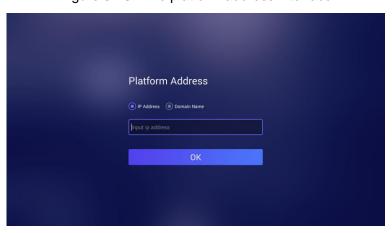


Step 2 Click at the upper right corner.

The platform interface for device registration is displayed.

Step 3 Enter the IP address of the Cloud Information Release System, and click OK. The **Device Registration Success** interface is displayed. See Figure 3-16.





# 4.1 System Login

# 4.1.1 System Login/Logout

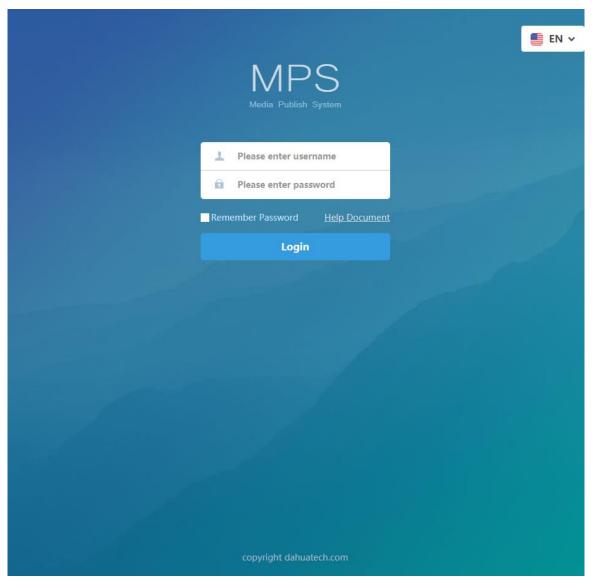
## System login

It is recommended to use Google Chrome browser to access the WEB platform of the system. If using IE browser, follow instructions to download necessary plug-ins.

Step 1 In the browser, enter http:// (Server IP address): WEB port number/mps/, and press Enter.

The login interface is displayed. See Figure 4-1.

Figure 4-1 Login interface (2)



Step 2 Enter username and password and click Login.

The main interface of the system interface is displayed.



- The username is system, and the password is 123456 by dafault. Modify the default password in your first login.
- Web service port number is 9080 by default.
- Select Remember Password and there is no need to enter the password next time when you logging in the web.
- Click **Help Document** to view the corresponding operation manual of the system.
- You can select Chinese, English, Portuguese, French and Polish as needed.

#### System logout

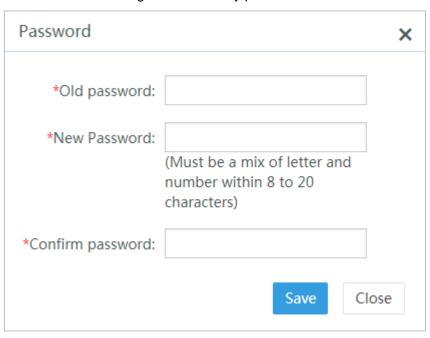
The system automatically logs out if there is no operation within 30 minutes.

You can also click system at the upper right corner and then select Logout to exit the system.

## 4.1.2 Modifying Password

at the upper right corner, select then click Change Password. You can periodically change your password to keep the system safe. See Figure 4-2. The login password is recommended to include at least 8 characters combining numbers and letters.

Figure 4-2 Modify password



## 4.2 Information Release Management

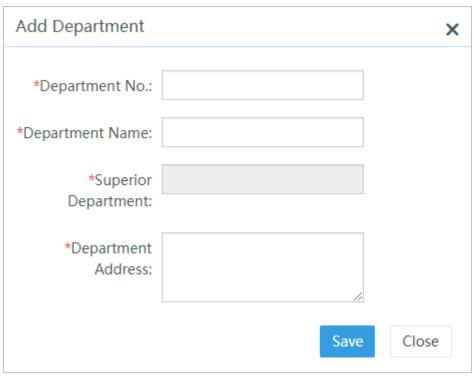
## 4.2.1 Preparations

#### 4.2.1.1 Adding Department

Slect System Setting > Department Management, and then click Add to add a department for easily managing users and devices. See Figure 4-3.

If you do not add a department, added users/devices are automatically placed under the default node (root node).

Figure 4-3 Newly added department



- Every added department must have the unique **Department No.** and **Department Name**.
- As first-level node, the root node allows for adding up to 10 levels of nodes.

### 4.2.1.2 Adding User

Add a role before adding users.

#### 4.2.1.2.1 Add Role

Select System Setting > Role Management, and then click Add to create a role for the user and configure corresponding menu authorities for the role. See Figure 4-4.

When an added user selects this role, the user subsequently inherits the menu authorities from this role. Menu authorities of a role include: Program Manager permission, Device Manager

permission, Material Manger permission, Statistical Report permission and System Setting permission. See Figure 4-4.

Add role × \*Role Name: Description: Menu Authority ■ System Menu ■ Program Manager Program Release Plan Scrolling Marquee Logo

■ Device Manager ■ ■ Material Manager ■ Statistical Report 

Figure 4-4 Add role

#### **4.2.1.2.2 Adding User**

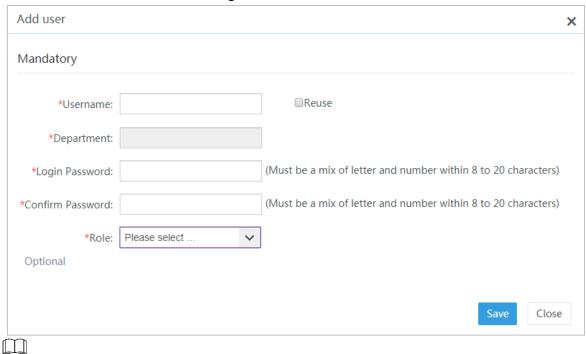
Select System Setting > User Management, and click Add to add a user, and set username, password, department and role for the user. See Figure 4-5.

Save

Cancel

The newly added user can login to the system with its own username and password, and operate the menus corresponding to its role. Menus corresponding to the role are displayed by default. Menu authorities not granted are not displayed on the system interface of the user.

Figure 4-5 Add new user



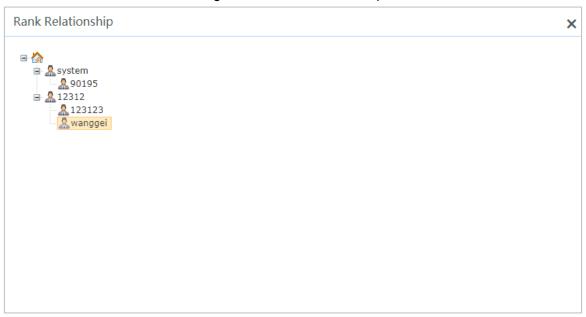
- The **Username** must be unique.
- Reuse: When enabled, multiple users can use this username and password to login to the system simultaneously.

#### 4.2.1.2.3 Configuring Rank Relationship

Select System Setting > User Management, and then click Rank Relationship to create rank relationship for the user. Select the needed user and move it under the corresponding superior user. See Figure 4-6.

- When a user belongs to a superior organization, plans added in the Program Manager > Release Plan interface cannot be released without the approval of the superior organization.
- When a user does not belong to any superior organization, plans added in the Program **Manager** > **Release Plan** interface can be directly released.

Figure 4-6 Rank relationship

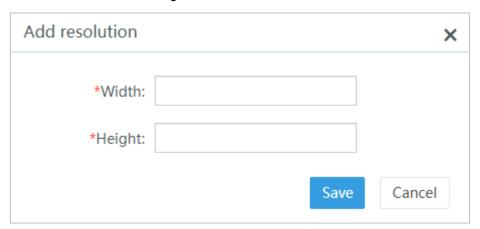


#### 4.2.1.3 Adding Resolution

Set the resolution based on that of the terminal. For instance, if the resolution of type A display terminal is 1920×1080, enter 1920 for the width and 1080 for the height.

Select System Setting > Resolution Management, and then click Add to set the resolution of the display terminal. See Figure 4-7.

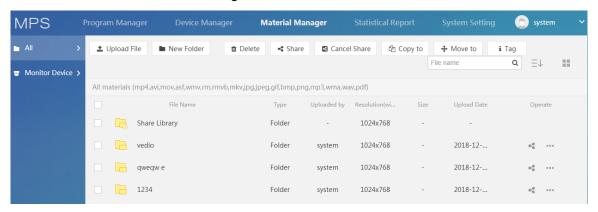
Figure 4-7 Add resolution



## 4.2.1.4 Adding Materials

Select Material Manager > All, and then click Upload File to upload materials. See Figure 4-8. See Table 4-1 for other operations.

Figure 4-8 Add materials



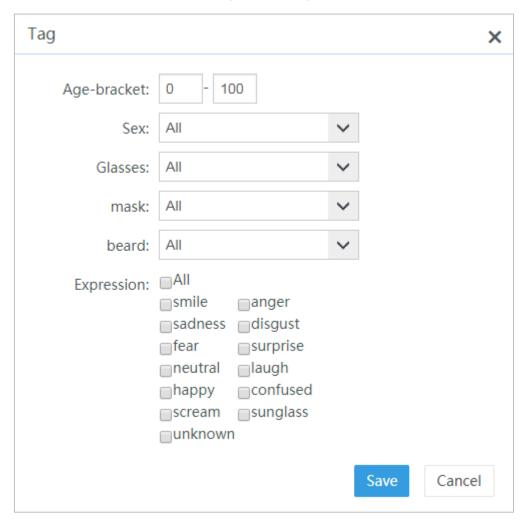


You can upload materials in these formats: MP4, AVI, MOV, ASF, WMV, RM, RMVB, MKV, JPG, JPEG, GIF, BMP, PNG, MP3, WMA, WAV, and PDF.

Table 4-1 Material Manager interface

Name	Description	
New folder	To create a new folder, click <b>New Folder</b> and enter the folder name.	
Delete	$\triangle$	
	Files being used by a program cannot be deleted.	
	To delete files or folders, select them and click <b>Delete</b> .	
Share	To share files or folders, select them and click <b>Share</b> . By default, all	
	users can access shared files and folders.	
Cancel share	To cancel sharing of files or folders, select them and click Cancel	
	Share.	
Copy to Select files you want to copy and click <b>Copy to</b> . Select the		
	and click <b>OK</b> . A dialog box then pops up with a prompt of successful	
	copy. The copied files are still kept in the original folder.	
Move to	Select files you want to move and click Move to. Select the target	
	folder and click <b>OK</b> . A dialog box then pops up with a prompt of	
	successful movement. The moved files are no longer kept in the	
	original folder.	
Tag	Select target files or folders and click Tag to configure corresponding	
	parameters. See Figure 4-9.	

Figure 4-9 Tag

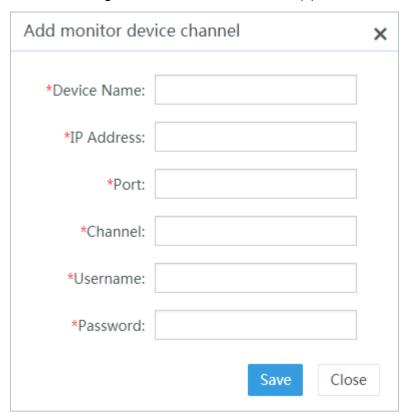


## 4.2.1.5 Adding IPC

You can add IPC monitor devices in the **Material Manager > Monitor Device** interface. Step 3 Click Add.

The **Add monitor device channel** interface is displayed. See Figure 4-10.

Figure 4-10 Add monitor device (1)



Step 4 Configure the parameters. See Table 4-2.

Table 4-2 Parameter config

Name	Description
	When selecting direct connection, enter the IP address of the IPC.
IP Address	When selecting connection via the platform, enter the IP address of
	the DSS platform server.
Port	Enter the port number of the IPC.
Username	The username and password used to login to the web interface of
	IPC.
Password	The username and password used to login to the web interface of
	IPC.
Channel	The channel number consists of the device number and the serial
	number of the channel. For example in 100000\$1, 100000 is the
	device number in the DSS platform, and 1 is the serial number of the
	channel.

Step 5 Click **Save** to complete configuration.

# 4.2.2 Releasing Programs of Industrial/General Templates



The operational process is suitable for releasing image carousel programs, videos and document programs.

For the operational process for releasing programs, see Figure 4-11.

Start Adding Industrial/General Programs Adding Release Plan Rank Relationship Program Review No Rank Relationship Review Successfully End

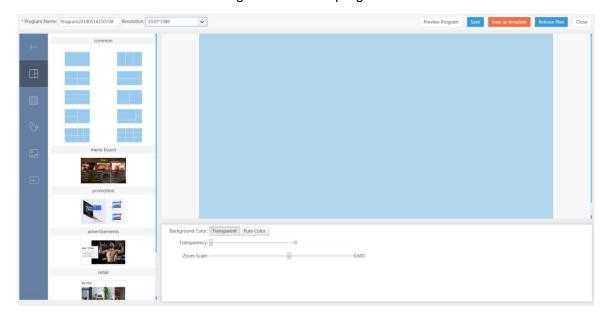
Figure 4-11 Flow chart of releasing programs

#### 4.2.2.1 Adding Industrial/General Programs

Select Program Manager > My Program, and then click Add Program.

The Add Program interface is displayed. See Figure 4-12.

Figure 4-12 Add program



Step 1 Enter the **Program Name** and select the **Resolution**.



General templates and industrial templates both exist when the resolution has a height or width of 1920. For other resolutions, only general templates exist.

Step 2 Click and select the general template or industrial template.

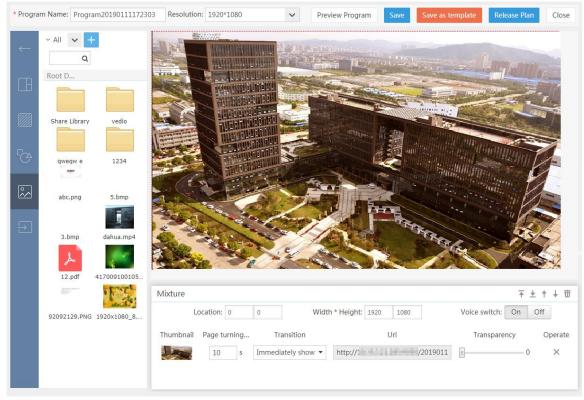
Step 3 Click to add materials.

> In the material library on the left, double-click to add the materials to the play window. See Figure 4-13.



You can add multiple materials.

Figure 4-13 Adding Materials

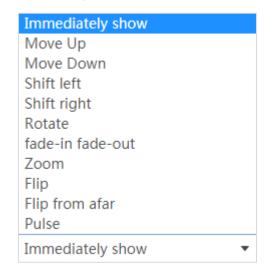


2) Adjust the sequence of materials (optional).

When multiple materials are selected, you can click to adjust their sequence.

3) Adjust the page turning speed, transparency and transition of images (optional). When selecting image materials, you can select the transition, including "Rotate, fade-in fade-out, Zoom, Flip, Flip from afar, Pulse". See Figure 4-14.

Figure 4-14 Transition



Step 4 Click Preview Program at the upper right corner to preview the program effect. See Figure 4-15.



Figure 4-15 Preview program

Step 5 Click **Save** to save the program.

## 4.2.2.2 Adding Release Plan

Select Program Manager > Release Plan, add Normal Plan, Instant Plan and Emergency Plan as needed.

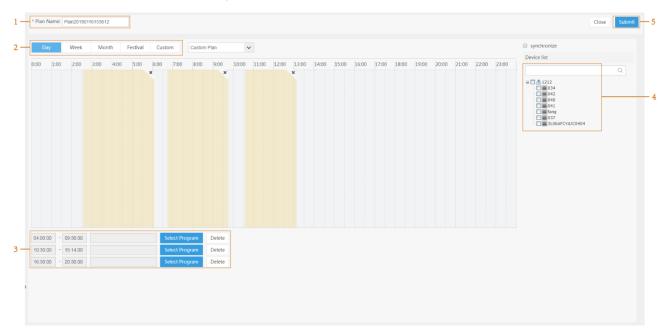
- Normal Plan: Play different programs during the preset periods.
- Instant Plan: Play different programs immediately after setup.
- Emergency Plan: Play the same program throughout all periods.

If the same period includes three different program plans, the priority is: Instant Plan > Normal Plan > Emergency Plan.

#### 4.2.2.2.1 Normal Plan

Select Program Manager > Release Plan > Normal Plan, and then click Add to add normal plans. See Figure 4-16.

Figure 4-16 Add normal plans



- Step 1 Select Program Manager > Release Plan > Normal Plan, and enter the Plan Name.
- Step 2 Select the time of plan by Day, Week, Month, Festival and Custom.
- Step 3 Click **Select Program**, and double-click the program you want to play.
- Step 4 Select the corresponding display terminal from the **Device list** on the right.
- Step 5 Click Submit.

The program is successfully released when it passes the superior review and the review status (See Figure 4-17) is diaplayed as "Review successfully and release".



- When a user does not belong to any superior organization, plans added in the Program Manager > Release Plan interface can be directly released.
- Synchronize: If the selected program includes videos in MP4, AVI, MOV, ASF, WMV, RM, RMVB and MKV format, when you select multiple display terminals, check synchronize for multiple display terminals to play the program simultaneously.

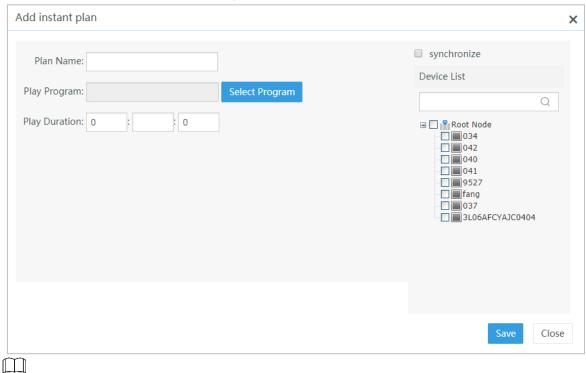
Figure 4-17 Review status



#### 4.2.2.2.2 Instant Plan

Select Program Manager > Release Plan > Instant Plan, and click Add to add instant plans. See Figure 4-18. An instant plan can be directly released without superior review.

Figure 4-18 Instant plan



Synchronize: If the selected program includes videos in MP4, AVI, MOV, ASF, WMV, RM, RMVB and MKV format, when you select multiple display terminals, check **synchronize** for multiple display terminals to play the program simultaneously.

#### 4.2.2.2.3 Emergency Plan

In the Program Manager > Release Plan > Emergency Plan, and then click Add and select the **Emergency Plan** to add emergency plans. See Figure 4-19.

7:00 8:00 9:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00 23:00 00:00:00 - 23:59:59

Figure 4-19 Backup plan



Synchronize: If the selected program includes videos in MP4, AVI, MOV, ASF, WMV, RM, RMVB and MKV format, when you select multiple display terminals, check synchronize for multiple display terminals to play the program simultaneously.

#### 4.2.2.3 Program Review

Program review differs by strategy. If users of newly added release plans (normal plan and emergency plan) have rank relationship, the superior approval must be in place prior to program release. Number of times for review is subject to the number of superior users. For example, two reviews are needed in the case of two superior users, and direct release in the case of no superior users.

See Figure 4-20. Wangwei has only one superior user, so the program needs one review before release.

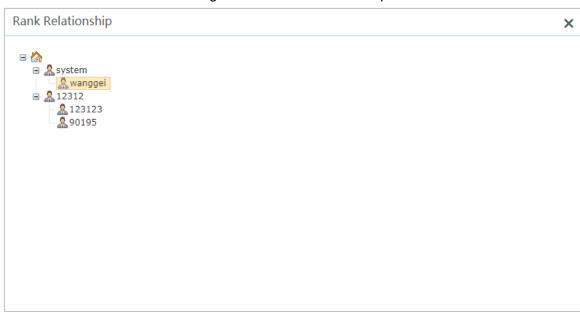


Figure 4-20 Rank relationship

After wangwei releases his plan, his superior user will review the program in the following steps:

<u>Step 1</u> Login to the system, select **Program Manager > Release Plan**.

The system prompts that it needs to review the release plan. See Figure 4-21.

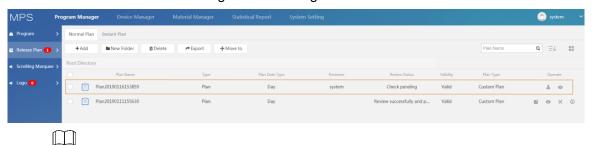
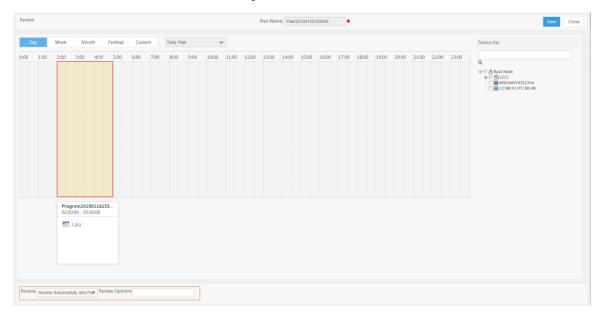


Figure 4-21 Program review

The number next to the Release Plan and Logo stands for the number of programs that the login user needs to review. To review a logo program, just select Program Manager > Logo.

Step 2 Click and select Review successfully and release at the bottom left corner of the review interface. See Figure 4-22.

Figure 4-22 Review



#### Step 3 Click Save to complete the review.

The effect of a successful program release can be viewed at the corresponding display device. Another way is to select the display device in the Device Manager > Device Monitor interface, and click View View to view the program effect. See Figure 4-23.



Figure 4-23 Successful program release

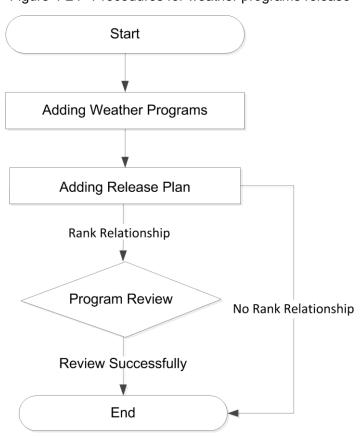
### 4.2.3 Weather Programs Release



The following operation procedures are applicable for releasing weather, clock and countdown programs.

For the procedures for weather programs release, see Figure 4-24.

Figure 4-24 Procedures for weather programs release



## 4.2.3.1 Adding Weather Programs

- Step 1 Select Program Manager > My Program, and click New to add a program.
- Step 2 Enter the **Program Name** and select the **Resolution**.
- and select the general template. Step 3 Click

 $\square$ Industry-specific templates only allow for importing images and videos, but not

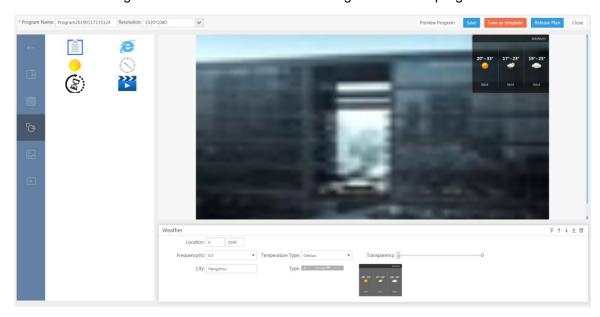
materials like weather, clock, countdown, streaming media, webpage and IPC videos.

- Step 4 Click to add materials. See "4.2.2.1 Adding Industrial/General Programs."
- and double-click the weather icon to select it. Step 5 Click

The system automatically adds weather information to the preview window.

Step 6 Select a proper location for displaying the weather information in the preview window. Enter the address of the City, and select the Type of weather to display. See Figure 4-25.

Figure 4-25 Release RSTP streaming media video programs



Step 7 Click Save. You can also click Release Plan to directly go to the plan release interface.

#### 4.2.3.2 Adding Release Plan

For the specific steps to release the plan, see "4.2.2.2 Adding Release Plan."

#### 4.2.3.3 Program Review

For the specific steps to review the program, see "4.2.2.3 Program Review."

### 4.2.4 Releasing RSTP Streaming Media Video Programs



These procedures apply for the release of webpage programs, RTSP streaming media video programs, etc.

For the procedures for releasing RSTP streaming media video programs, see Figure 4-26.

Start Adding RSTP Streaming Media Video Programs Adding Release Plan Rank Relationship **Program Review** No Rank Relationship Review Successfully

Figure 4-26 Procedures for releasing RSTP streaming media video programs

#### 4.2.4.1 Adding RSTP Streaming Media Video Programs

End

- Step 1 Select Program Manager > My Program, and then click Add Program to add a program.
- Step 2 Enter the **Program Name** and select the **Resolution**.
- Step 3 Click and select the general template.

 $\coprod$ 

Industry-specific templates only allow for importing images and videos, but not materials like weather, clock, countdown, streaming media, webpage and IPC videos.

and double-click the streaming media icon to select it.

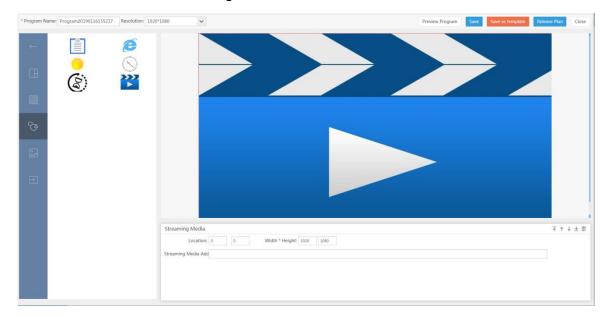
The system automatically adds the streaming media icon to the preview window.

 $\square$ 

- You can add only one stream media content.
- You can overlay multiple webpage contents and place them in a certain order.

Step 5 Enter the streaming media address. See Figure 4-27.

Figure 4-27 Weather release



Step 6 Click Save. You can also click Release Plan to directly go to the Release Plan interface.

### 4.2.4.2 Adding Release Plan

For the specific steps to release the plan, see 4.2.2.2 Adding Release Plan."

## 4.2.4.3 Program Review

For the specific steps to review the program, see "4.2.2.3 Program Review."

# 4.2.5 Releasing IPC Video Programs



Make sure you have added the IPC device. See 4.2.1.5 Adding IPC."

For the procedures for releasing IPC video programs, see Figure 4-28.

Start Adding IPC Video Programs Adding Release Plan Rank Relationship **Program Review** No Rank Relationship Review Successfully

Figure 4-28 Release IPC video programs

## 4.2.5.1 Adding IPC Video Programs

 $\square$ 

<u>Step 1</u> Select **Program Manager > My Program**, and then click **New** to add a program.

End

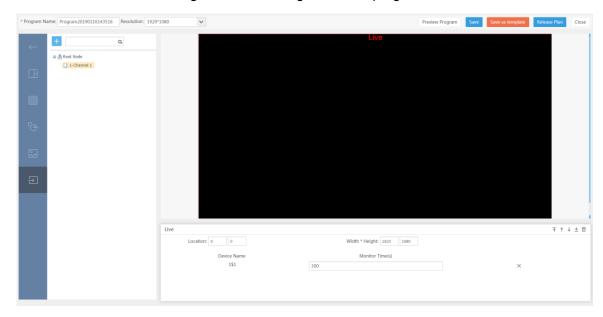
- Step 2 Enter the **Program Name** and select the **Resolution**.
- Step 3 Click and select the general template.

Industry-specific templates only allow for importing images and videos, but not materials like weather, clock, countdown, streaming media, webpage and IPC videos.

Step 4 Click to add IPC video channels. See Figure 4-29.

You can overlay multiple IPC video channels and adjust their order.

Figure 4-29 Adding IPC video programs



Step 5 Click Save.

You can also click Release Plan to directly go to the Release Plan interface.

### 4.2.5.2 Adding Release Plan

For the specific steps to release the plan, see 4.2.2.2 Adding Release Plan."

## 4.2.5.3 Program Review

For the specific steps to review the program, see "4.2.2.3 Program Review."

# **4.2.6 Releasing Targeted Programs**



- Make sure you have added IPC. See 4.2.1.5 Adding IPC."
- Make sure you have added tags to the material files. See Table 4-1.

When IPC detects figures matching the tags, the system automatically plays proper programs in a targeted release process.

For the procedures for releasing the targeted program, see Figure 4-30.

Start Releasing Targeted Programs Adding Release Plan Rank Relationship **Program Review** No Rank Relationship Review Successfully End

Figure 4-30 Procedures for releasing the targeted program

## 4.2.6.1 Adding Release Plan

For the specific steps to release the plan, see 4.2.2.2 Adding Release Plan. "

## 4.2.6.2 Program Review

For the specific steps to review the program, see "4.2.2.3 Program Review."

# 4.2.7 Releasing Scrolling Marquee

For the procedures for releasing the scrolling marquee, see Figure 4-31.

Start Adding Scrolling Marquee Adding Release Plan Rank Relationship **Program Review** No Rank Relationship Review Successfully End

Figure 4-31 Procedures for releasing the scrolling marquee

## 4.2.7.1 Adding Scrolling Marquee

Select Program Manager > Scrolling Marquee, and then click New to add scrolling marquee. See Figure 4-32.

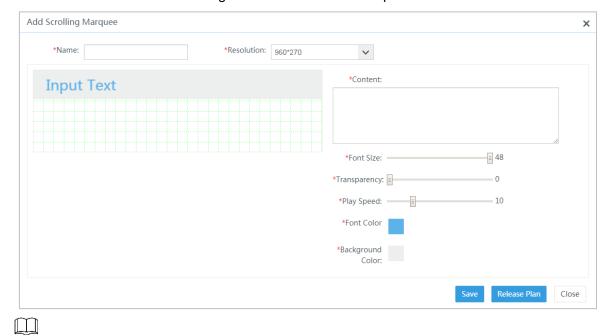


Figure 4-32 Add scroll marquee

Transparency: It is used toadjust the transparency of the background of scrolling marquee.

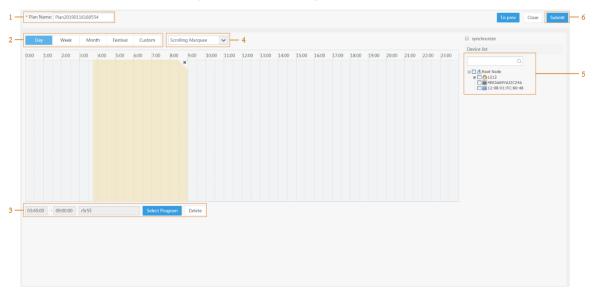
## 4.2.7.2 Adding Release Plan

Select Program Manager > Release Plan > Normal Plan, and then click New to add a release plan for scrolling marquee. See Figure 4-33.

See the following specific steps:

- Step 1 Enter the plan name.
- Step 2 Select the time of plan by day, week, month, festival and custom.
- Step 3 Click **Select Program**, and double-click the program you want to play.
- Step 4 Select **Scrolling Marquee** as the plan type.
- <u>Step 5</u> Select the corresponding display terminal from the **Device list** on the right.
- Step 6 Click Submit.

Figure 4-33 Scrolling marquee plan



## 4.2.7.3 Program Review

See "4.2.2.3 Program Review."

# 4.2.8 Releasing Logo

Procedures for releasing the logo. See Figure 4-34.

Start Adding Logo Adding Release Plan Rank Relationship **Program Review** No Rank Relationship Review Successfully End

Figure 4-34 Procedures for releasing the logo

# 4.2.8.1 Adding Logo

Select Program Manager > Logo, and then click New to add a logo after configuring the parameters in the interface. You can move the logo as needed. See Figure 4-35.

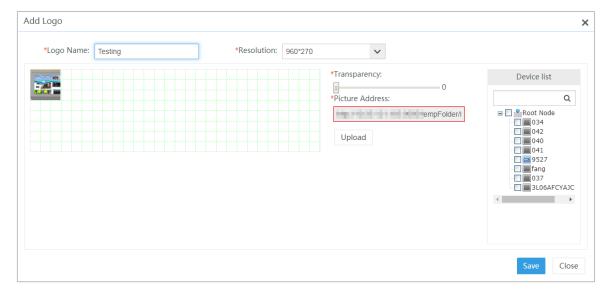


Figure 4-35 Release logo

#### 4.2.8.2 Program Review

After passing the review of adding logo, you can view the effect on the corresponding corresponding display device. Another way is to select the display device in the Device Manager > Device Monitor interface, and click View Screenshot to view the logo release

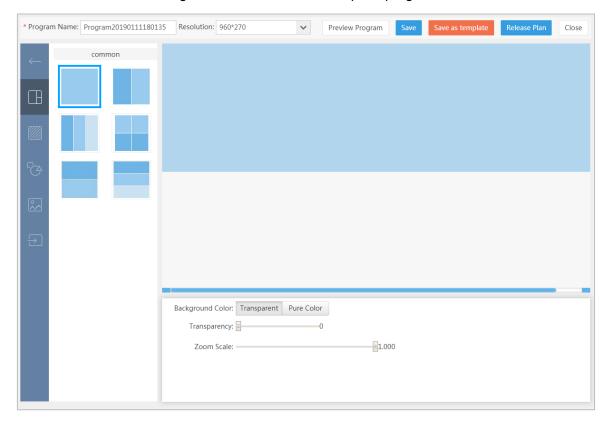
For the specific steps to review the program, see "4.2.2.3 Program Review."

## 4.2.9 Releasing Custom Template Programs

You can customize what to display in divided blocks as needed.

#### 4.2.9.1 Adding Custom Template Programs

<u>Step 1</u> Select **Program Manager > Program**, and then click **New**. The add program interface is displayed. See Figure 4-36. Figure 4-36 Add custom template programs



Step 2 Ente the **Program Name** and select the **Resolution**.

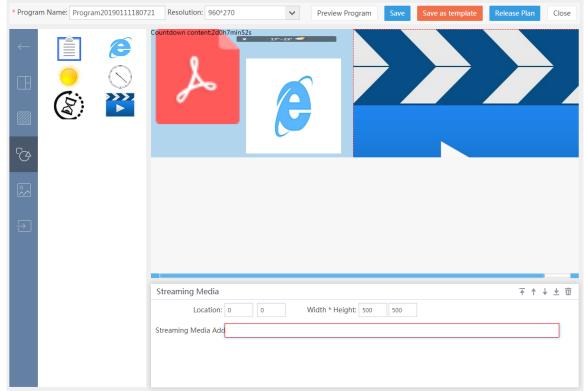
General templates and industrial templates both exist when the resolution has a height or width of 1920. For other resolutions, only general templates exist.

- and select the general template for undivided areas, that is, the first template Step 3 Click at the upper left corner.
- Step 4 Click or ich and double-click to select the target files to add as materials.

- Step 5 Adjust the size of the material.
- Step 6 Repeat step 4 step 5.

The interface showing successful addition is displayed. See Figure 4-37.

Figure 4-37 Add multiple contents



Step 7 Click Save as template at the upper right corner to complete the custom template addition.

Select Program Manager > Program, click New and then select the program template tab to view the added custom template.

# 4.2.9.2 Adding Release Plan

For the specific steps to release the plan, see "4.2.2.2 Adding Release Plan."

# 4.2.9.3 Program Review

For the specific steps to review the program, see 4.2.2.3 Program Review."

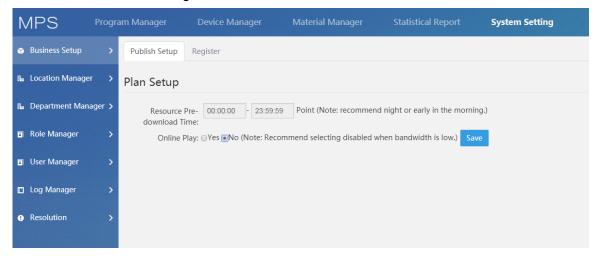
# 4.2.10 Setting the Timed Download of Materials

Select System Setting > Business Setup > Publish Setup, and set the pre-download time of materials in the play plan in Publish Setup interface.

Step 1 Select **No** if you do not want to play it online.

The timing download interface is displayed. See Figure 4-38.

Figure 4-38 Timed download of materials



Step 2 Set Resource Pre-download Time and click Save to complete the setting.



A pre-download time in the early morning or at night is recommended.

#### 4.2.11 P2P Download

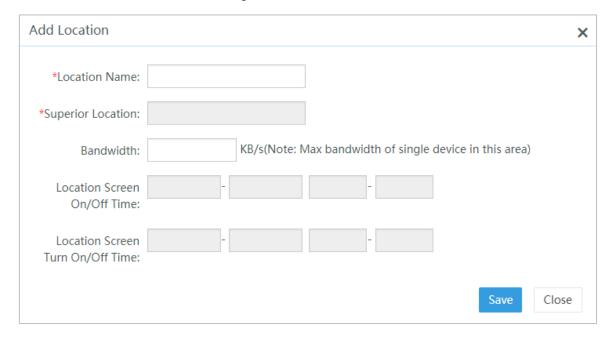
You can download the material files of each other when multiple display devices belong to the same location.

After a display device finishes downloading materials, it can provide a download address to other display devices belonging to the same location.

#### 4.2.11.1 Add Location

Select System Setting > Location Manager, and then click New to add a location. This makes it easier to collectively manage the ranks of devices and the time to turn on/off the display devices belonging to the same location and their screens. See Figure 4-39.

Figure 4-39 Add location



#### 4.2.11.2 Setting Location

You can set the location which a display device belongs to in the Device Manager > Device List interface. See 4.3.1.9 Changing Affiliation Settings."

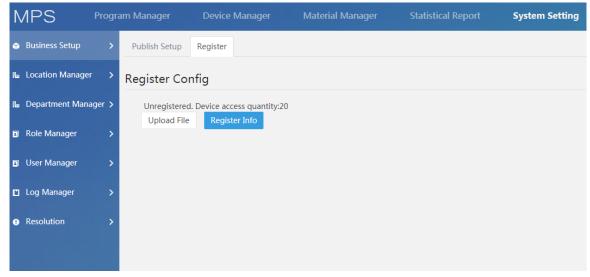
## 4.2.12 Soft Encryption Register Method

An unauthorized system allows up to 20 devices to access it. For more devices to access the system, you need to complete soft encryption register.

Step 1 Select System Setting > Business Setup > Register.

The **Register** interface is displayed. See Figure 4-40.

Figure 4-40 Registration



- Step 2 Click Register Info and download it in DAT format.
- Step 3 Send the register info to the technician, who will turn them to encrypted files and send them back.
- Step 4 Click **Upload File** to upload the encrypted register files and complete the authorization.

# 4.2.13 Viewing Program Issue Status and Re-issuing Program

Select Statistical Report > Device Plan Statistics, and you can view the program issue status and manually re-issue failed plans. See "4.5.8 Device Plan Statistics."

# 4.3 Device Manager

#### 4.3.1 Device List

Select **Device Manager > Device List**, you can perform a series of operations on the device, such as screen on/off, rebooting Android, hotspot, powering on/off, switching interfaces, and affiliation settings.

#### 4.3.1.1 Screen On

Select the display device which you want to turn on the screen, and click Screen On. The display device turns on its screen, at the same time the system displays the screen-on status. See Figure 4-41.

Reboot Android Root Node HITCHE V2.002.0000000.8.R.181219 V2.002.0000000.8.R.181219 Root Node MITTER V2.002.0000000.8.R.181221 V2.002.0000000.8.R.181221 V2.002.0000000.8.R.181219 V2.002.0000000.8.R.181219 HITUE V2.002.0000000.8.R.181219 V2.002.0000000.8.R.181219 V2.002.0000000.8.R.181219 V2.002.0000000.8.R.181219 042 Root Node HTV:36 = V2.001.11YW000.0.T.2018... V2.001.0000000.8.R.180131 3L06AFCYAJC0404 V2.002.0000000.8.R.181214 V2.002.0000000.8.R.181215 Root Node V2.002.0000000.1.R.180803 V2.002.0000000.1.R.180803

Figure 4-41 Screen on

#### 4.3.1.2 Screen Off

Select the display device which you want to turn off the screen, and click Screen Off. The display device turns off its screen, at the same time the system displays the screen-off status. See Figure 4-42.

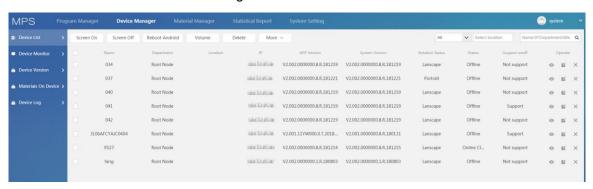


Figure 4-42 Screen off

## 4.3.1.3 Rebooting Android

Step 1 Select the display device which you want to reboot the Android system, and click Reboot Android.

The **Restart Android system** interface is displayed. See Figure 4-43.

Restart Android system × Instant Restart: Select restart time: 1:00:00 Save Close

Figure 4-43 Restart Android system

Step 2 Select the reboot mode.

- Select restart time: Select the restart time, click Save, and the display device will automatically restart at the preset time.
- Instant restart: Select Instant Restart and click Save. The display device immediately restarts.

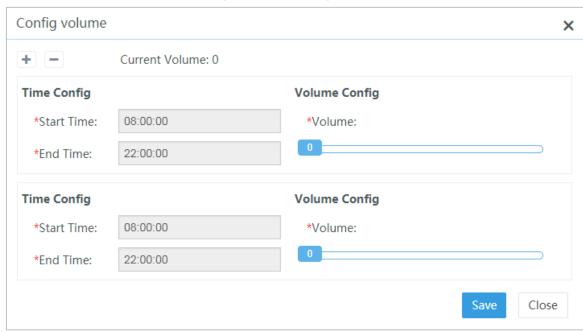
## 4.3.1.4 Volume Config

Set different volumes for each period.

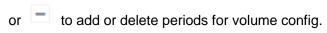
Step 1 Select the display device which you want to adjust the volume, and click Config

The **Config volume** interface is displayed. See Figure 4-44.

Figure 4-44 Config volume



Step 2 Select the period to configure the volume and the volume level. You can also click



Step 3 Click **Save** to complete volume config.

#### 4.3.1.5 Delete device

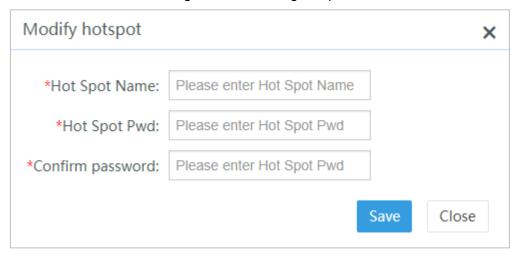
Select the display device you want to delete and click Delete to delete it. You can also select multiple display devices to batch delete them.

## 4.3.1.6 Setting Hotspot

Select the display device of which you want to set the hotspot. select Hotspot In the More dropdown box, and you can set the hotspot information of the display device in the Modify Hotspot interface. See Figure 4-45.

After setting, the hotspot of this display device can be shared to other devices.

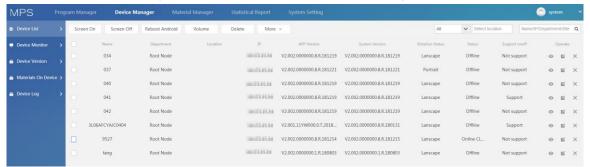
Figure 4-45 Setting hotspot



## 4.3.1.7 Timed Powering On/Off and Screen On/Off

Before powering on/off the device, make sure that the device supports these operations. See Figure 4-46.

Figure 4-46 Whether to support powering on/off



Step 1 Select the display device to set the timed screen on/off and powering on/off. In the More dropdown box, select Screen On/Off or Screen turn on.

The Screen On/Off or Power On/Off interface is displayed. See Figure 4-47 and Figure 4-48.

Figure 4-47 Screen on/off

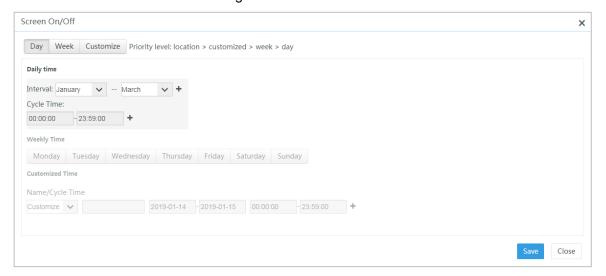
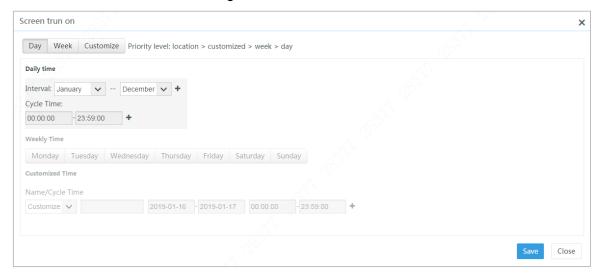


Figure 4-48 Screen turn on



Step 2 Add the periods of screen on/off or powering on/off by Day, Week, or Customize as needed.



- If different power on/off and screen on/off time settings exists in the same period, the priority is location > customized > week > day.
- See 4.2.11.1 Add Location" for procedures to set the time of power on/off and screen on/off by location.

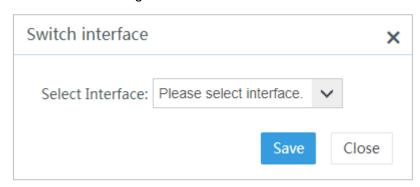
Step 3 Click **Save** to complete the addition.

#### 4.3.1.8 Interface Switch

Select the display device that needs to switch interface. In the More dropdown box, select Switch Interface. You can switch the display interfaces of the display device. See Figure 4-49.

- Select NVR Interface: The device enables the NVR function and displays the NVR interface.
- Select Multi-Media Interface: The device disables the NVR function and displays the multi-media interface which serves as the display device.

Figure 4-49 Interface switch



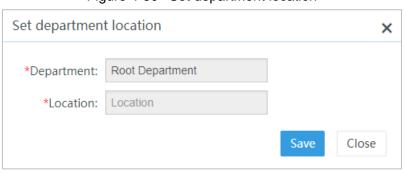
#### 4.3.1.9 Changing Affiliation Settings

Select the display device which needs ro chang affiliation settings. In the More dropdown box, select Affiliation Settings. You can set the department and location which the display device belongs to in the Set department location interface. See Figure 4-49.

 $\coprod$ 

A logged-in user can operate devices of departments at the same rank, but not devices of different levels.

Figure 4-50 Set department location



#### 4.3.2 Remote Screenshot of Device

Select Device Manager > Device Monitor, and you can view the remote screenshots of the device.

Step 1 From the device list on the left, select the display device and the date to view screenshots.

The program plans played by the display device within the selected date and the download status of program materials are displayed. See Figure 4-51.

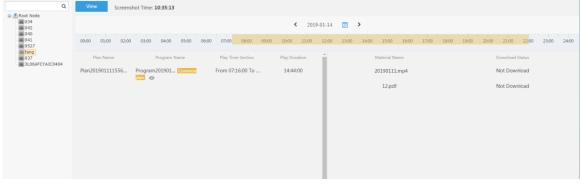


Figure 4-51 Remote screenshot of device

The download status of materials depend on the config strategy of the program plan. In the case of online play, the materials are downloaded while being played; in the case of resource pre-download, the materials are downloaded during preset periods. See 4.2.10 Setting the Timed Download of Materials."

Step 2 Click View.

The images being played at the display device are displayed. See Figure 4-52.

Figure 4-52 Remote screenshot (2)



# 4.3.3 Device Material Manager

Select Device Manager > Device Material Manager, and you can search, view or delete materials released by all display devices.

# 4.3.3.1 Searching Materials

From the device tree on the left, select the display device you want to view and select Material Type (for example, image), click Search. All materials released by the display device (including images, videos and audios) are displayed. See Figure 4-53.

Figure 4-53 Device material search



# 4.3.3.2 Viewing Materials

Select the corresponding material and click oview its contents.

## 4.3.3.3 Deleting Materials

Select the corresponding material and click to delete it; you can also select multiple materials and click **Delete** to delete them.

# 4.4 Log Management

## 4.4.1 Device Log

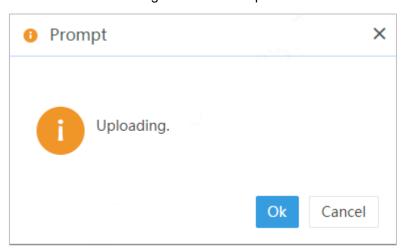
Select Device Manager > Device Log, and you can search and download logs of the display device for technician to use in debugging.

Step 1 Select the display device from the device list on the left.

Step 2 Select the log type you want to search (APP log/Android device log/Sonia underlying protocol), and click Upload.

The system queries whether matching logs exist. If yes, it will pops up the Uploading dialog box. See Figure 4-54.

Figure 4-54 Prompt



#### Step 3 Click Search.

The corresponding logs of the display device are displayed. See Figure 4-55.

Figure 4-55 Device log

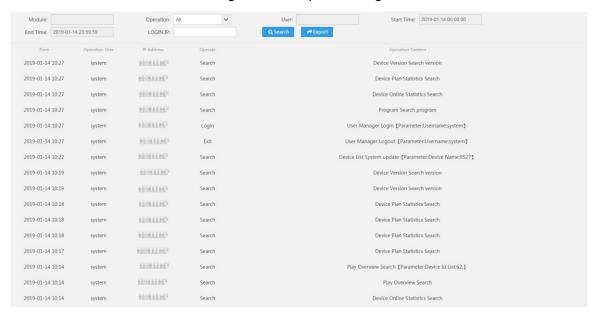


Step 4 Click to download log information in .zip format.

# 4.4.2 Operation Log

SelectSystem Setting > Log Manager, and then set the filtering criteria, and click Search to view the IP address used by uses for login and the detailed operations. See Figure 4-56.

Figure 4-56 Operation log



Click Export to export matching log, and store the logs in .xls format on PC for the reference of the technician when troubleshooting.

# 4.5 Report Manager

This section displays the online rate, online/offline status, exception record, issue plan record, material memory capacity, material play record, material download record and play record. Click **Export** to export report statistics of the corresponding tab.

#### 4.5.1 Statistics of Online Rate of Devices

Select Statistical Report > Statistics of Online Rate of Devices, select the filtering criteria from the location organization tree on the left, and click Search to view the number of online display devices and the online rate. See Figure 4-57.

Figure 4-57 Statistics of online rate of devices



## 4.5.2 Statistics of Material Contents

Select Statistical Report > Statistics of Device Contents, and you can view the number of materials and the size of occupied memory. See Figure 4-58.

Figure 4-58 Statistics of material contents



## 4.5.3 Statistics of Material Play

Select Statistical Report > Statistics of Material Play, set the filtering criteria, and then click Search to view the total play times of materials, the total duration and the total number of display devices. See Figure 4-59.

Figure 4-59 Statistics of material play



#### 4.5.4 Statistics of Material Download

Select Statistical Report > Statistics of Material Download, and then select the display device from the device tree on the left. Set the filtering criteria and click Search to view the download status and time of each material. See Figure 4-60.

Material Name: End Time: Start Time: Download Status: All 105410.mp4 034 2018-12-20 17:25:03 Downloaded successfu... 417009100105410.mp4 2018-12-20 17:24:50 Downloaded successfu... 034 2018-12-20 17:17:01 Downloaded successfu... 2018-12-20 17:16:55 1920x1080\_8.gif 034 4170091.pdf 2018-12-20 17:16:57 Downloaded successfu... 2018-12-20 17:16:55

Figure 4-60 Statistics of material download

# 4.5.5 Device Play Overview

Select Statistical Report > Device Play Overview, and then select the display device from the device tree on the left. Set the filtering criteria and click Search to view the play status of each display device, including the play plan name, plan type, program name, start time and end time. See Figure 4-61.

Figure 4-61 Device Play Overview



# 4.5.6 Device Exception Record

Select **Statistical Report > Device Exception Record**, and then select the display device from the device tree on the left, and click **Search** to view the exception status of each display device, such as **Offline**, **Online Open/Online Close**, **Has plan/No plan**, **Unknown**. See Figure 4-62.

Q Search 12:9B:( Online Cli Has plan No plan Unknown 2019-01-14 09:13:12 9527 Online Open Online Screen-on 2019-01-14 09:11:54 12:9B:01:FC:80:48 2019-01-14 09:09:57 12:9B:01:FC:80:48 9527 Offline 2019-01-11 18:11:27 Offline 12:9B:01:FC:80:48 9527 Online Open Online Screen-on 2019-01-11 17:00:11 12:9B:01:FC:80:48 9527 No plan No plan 2019-01-11 17:00:03 12:9B:01:FC:80:48 Online Open Online Screen-on 2019-01-11 16:59:50 12:9B:01:FC:80:48 9527 Offline Offline 2019-01-10 18:08:57 12:9B:01:FC:80:48 12:9B:01:FC:80:48 9527 Online Screen-off 2019-01-10 12:51:19 Online Close 12:9B:01:FC:80:48 Online Screen-on 2019-01-10 11:37:41 12:9B:01:FC:80:48 9527 2019-01-09 19:18:07 Offline 3I 06AFCYAIC0404 3L06AFCYAJC0404 No plan No plan 2019-01-09 19:03:46

Figure 4-62 Device exception record

## 4.5.7 Online/Offline Device Statistics

Select **Statistical Report > Online/Offline Device Statistics**, select the display device from the device tree on the left, and then click **Search** to view the online/offline records of each display device, including **Device Code**, **Device Name**, **Online/Offline Time** and **Online/Offline Duration**. See Figure 4-63.

Figure 4-63 Device online/offline records



#### 4.5.8 Device Plan Statistics

Select **Statistical Report > Device Plan Statistics**, and then select the display device from the device tree on the left. Select the plan name and click **Search** to view the issue status (failed/successful) of the play plan. See Figure 4-64. If a play plan fails to be issued, select this failed plan and click **Re-Issue** to manually issue the plan again to the corresponding display device.

Figure 4-64 Device plan statistics



# 4.6 Remote Update of Device

# 4.6.1 Upload Update File

Select **Device Manager > Device Version**, click **Add** to upload the update file for the APP or Android system. See Figure 4-65 and Figure 4-66.

Figure 4-65 Adding update file

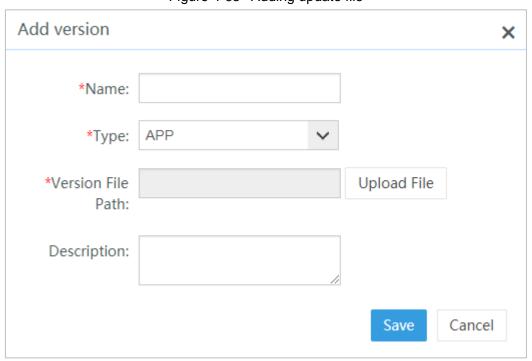


Figure 4-66 Update file management



## 4.6.2 System Update

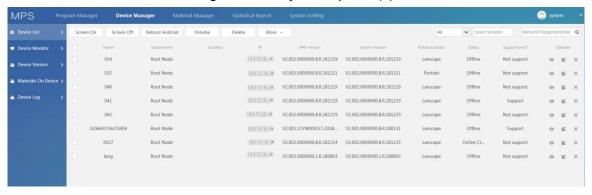


Before using this function, make sure you have uploaded the update file necessary for the Android system.

You can update the system by the following steps.

<u>Step 1</u> Select **Device Manager > Device List**, and then select the display device to be updated. See Figure 4-67.

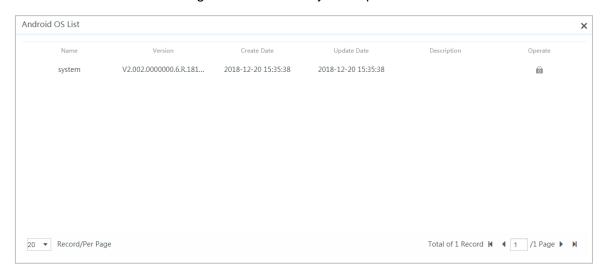
Figure 4-67 System update (1)



Step 2 In the More dropdown box, select System Update.

The matching system update file is displayed. See Figure 4-68.

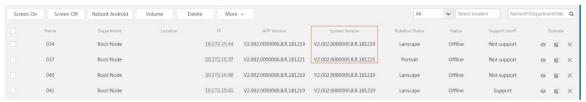
Figure 4-68 Select system update file



Step 3 Click and select the update file to update the system.

The update progress is displayed. After the update, the information of the updated system version is displayed. See Figure 4-69.

Figure 4-69 System version



## 4.6.3 APP Update

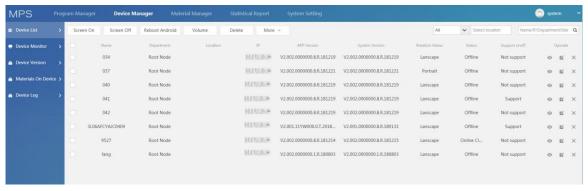


Before using this function, make sure you have uploaded the update file necessary for the APP system.

You can update the system in the following steps.

Step 1 Select Device Manager > Device List, and then select the display device to be updated. See Figure 4-70.

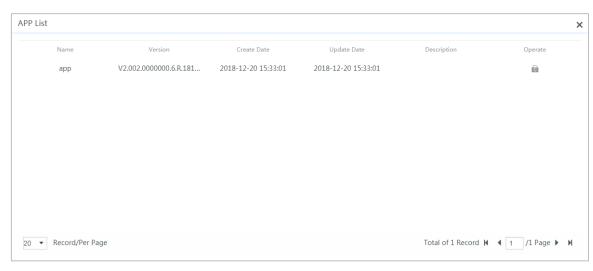
Figure 4-70 System update (2)



Step 2 In the More dropdown box, select System Update.

The matching system update file is displayed. See Figure 4-71.

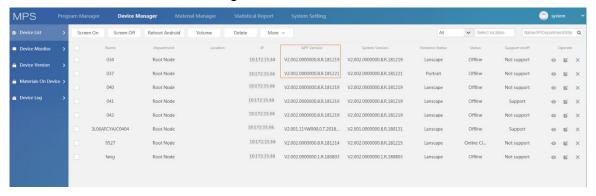
Figure 4-71 Select APP update file



Step 3 Click and select the update file to update the system.

> The update progress is displayed. After the update, the information of the updated APP version is displayed. See Figure 4-72.

Figure 4-72 APP version



# **Client Operations**

# 5.1 Basic Operations

The Signage's operation system is developed based on the Android OS. You can connect the Signage to the online platform of information release & management. Then you can use the platform to release a multi-media program to the Signage, turn on/off the Signage and reboot the Signage. You can implement the operations such as local release, app management and system setting.

# 5.1.1 Booting Up and Shutting Down



- Before booting up the Signage, check if input voltage matches rated voltage of the Device.
- Refer to international standard to offer the power input (power input that is with stable power value and less interference) to ensure the device works stably and prolong its service life.
- To boot up the Signage: Plug the power line into a socket.
- To shut down: Unplug the line.

## 5.1.2 Initializing Signage

When you are opening the Signage for the first time or you have allowed your system to be restored the factory settings, you need to initialize the Signage. Only after that can you operate and configure your Signage.

Step 4 Plug the Signage's power line into a socket.

The Signage boots up and the **Device Initialization** interface is displayed. See Figure 3-10.

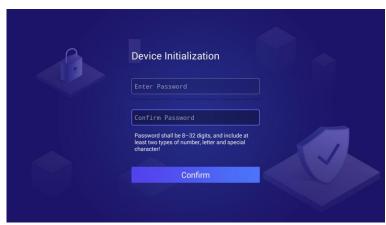


Figure 5-1 The device initialization interface

Step 5 Type your screen lock password and type it again to confirm it.

Step 6 Click Done on your virtual keyboard.

Click Confirm on the Device Initialization interface.

Initialization begins. After that, the main menu is displayed. See Figure 5-2.

Figure 5-2 Main menu



# 5.1.3 Logging in Signage

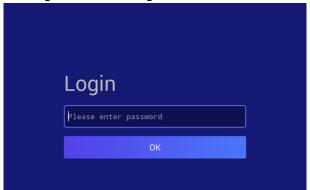
You need to type your password to unlock the Signage screen, and the screen will be locked under each of the following conditions:

- You have just finished initializing the Signage.
- Plug the Signage's power line into a socket.
- Turn on the Signage with your remote control.
- Do not operate the Signage for the time you have set.

Step 1 Click any position on the screen.

The Login interface is displayed. See Figure 5-3.

Figure 5-3 The login interface



Step 2 Type your password.

Step 3 Click OK.

The main menu or the interface before the system is locked is displayed.

# 5.1.4 Operating Quick Tool Bar

Move your pointer to the bottom of any an interface to display the quick tool bar. See Figure 5-4 and Table 5-1 for details.

Figure 5-4 Quick tool bar



Table 5-1 Description of quick tool bar

Icon	Description
·O·	Click this icon to adjust the backlight value.
9	Click this icon to select an input source from "local" and "HDMI." VGA is not supported now.
$\odot$	Click this icon to enter the quick play interface.
<b>?</b>	Click this icon to lock your Signage.
<u>=</u>	Click this icon to disconnect your USB from the Signage.

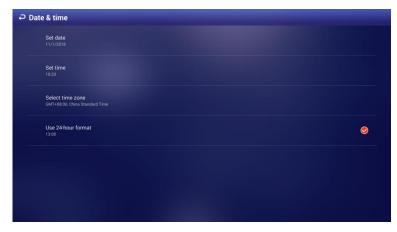
# 5.1.5 Configuring Date & Time

You can set date and time for your Signage. Remember to select a correct time zone based on where the Signage lies.

Step 1 In the main menu, select Settings > Date & Time.

The Date & Time interface is displayed. See Figure 5-5.

Figure 5-5 The date & time interface



Step 2 Set date, time and time zone. You can also enable the 24-hour display format here. Your settings will take effect at once.

# 5.1.6 Displaying Programs

Connect the Signage to the platform and then you use the platform to send programs to your Signage. Or, you can insert a USB drive into the Signage and operate the Signage to play the videos & pictures in the USB drive.

# **5.1.7 Displaying Programs from Platform**

#### 5.1.7.1 Procedure

Figure 5-6 Procedure



Table 5-2 Procedure description

No.	Description	No.	Description
1	Logging in	2	Connecting Signage to network
3	Connecting Signage to platform	4	Receiving programs from platform

## **5.1.7.2 Connecting Signage to Network**

#### 5.1.7.2.1 Connecting Signage to Network

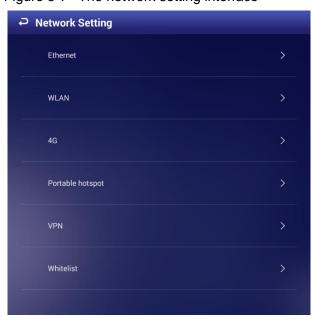
Connect your Signage to network by Ethernet, WLAN, 4G or Virtual Private Network (VPN). 

After your Signage is networked, it can be used as a hotspot for other devices.

Step 1 In main menu, select **Settings** > **Network Setting**.

The **Network Setting** interface is displayed. See Figure 5-7.

Figure 5-7 The network setting interface



Step 2 Select and configure the network type you want to use. See Table 5-3 for details.

Table 5-3 Network types description

Network Type	Description	
Ethernet	<ul> <li>Connect your Signage to network by Ethernet and there are two kinds of methods for you to give an IP to your Signage.</li> <li>DHCP: When there is a DHCP server in the network, after selecting the DHCP option, the Signage automatically obtains IP address from the DHCP server.</li> <li>Static IP: After selecting Static IP, respectively click IP ADDRESS, DEFAULT GATEWAY or NETMASK, and enter the IP address, default gateway and net mask according to the network plan.</li> </ul>	
WLAN	Connect your Signage to network by Wi-Fi. Click to turn on Wi-Fi first. Then, to connect your Signage to network, you can:  Click a given Wi-Fi, type its password and click Connect.  Or you can add a Wi-Fi manually: click to display the Add Network interface. Then type Network SSID and select Security from None, WEP, WPA/WPA2 PSK and 802.1x EAP. Click Save to finish configuration.	
4G	You can connect a 4G mobile network card to your device and select <b>Data</b> Enabled to finally get your device networked.	
VPN Connect your device to VPN. Then your device can get programs from VPN.		

#### 5.1.7.2.2 Configuring Whitelist

Configure the IP that are allowed to access the Signage, and only IP addresses in the whitelist can access the Signage. This is to enhance data security.

Step 1 In main menu, click Settings > Network Setting > Whitelist. The Whitelist interface is displayed.

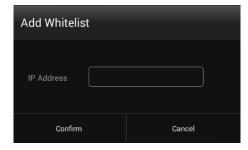
Step 2 Click to enable whitelist and make it take effect officially.

Step 3 Add an IP address to your whitelist.



The Add Whitelist interface is displayed. See Figure 5-8.

Figure 5-8 The add whitelist interface



- 2) Type an IP address.
- 3) Click Confirm.

The IP address you have added is displayed.

Repeat Step 3 to add multiple IP addresses to your whitelist.

#### 5.1.7.3 Connecting Signage to platform

Connect the Signage to the platform. Then you can use the platform to send programs.

 $\coprod$ 

To use the platform to send programs, stop playing programs from the USB drive first.

#### Preparation

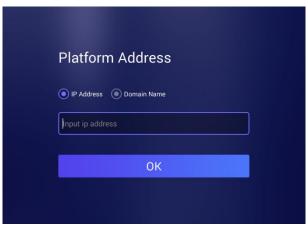
- Your Signage and the platform have been connected to each other. To connect Signage to network, see "5.1.7.2.1 Connecting Signage to Network."
- Ensure the platform's IP address has been added to your whitelist if you have enabled it. To configure whitelist, see "5.1.7.2.2 Configuring Whitelist."

#### **Procedure**

Step 1 In main menu, click Network Release.

The **Platform Address** interface is displayed. See Figure 5-9.

Figure 5-9 The platform address interface



Step 2 Configure the IP address or domain name of platform.

- Select IP Address, and set the IP address
- Select Domain Name, and set the IP address

#### Step 3 Click OK.

After registering successfully, the no program interface is displayed.

Move the mouse pointer to the top of the interface, and the floating windows is displayed. Then you can do the following operations:

- Click to return to the main interface.
- View the status of registering to the platform. 

  indicates that the register is

successful, and indicates that the register is failed

Step 4 Receive programs from the platform.

# 5.1.8 Displaying Programs from USB Drive

## 5.1.8.1 Releasing Programs by General Templates

#### 5.1.8.1.1 Quick Play

Use the given templates to quickly display information.

### Preparation

You have inserted your USB drive into the Signage. You need to previously prepare images or videos in your USB drive and you must save them under a file named after "USBPLAY."

#### **Procedure**

<u>Step 1</u> In the main menu, select **Local Release** > **General** > **Quick Play**. The **Quick Play** interface is displayed. See Figure 5-10.



Figure 5-10 The quick play interface

Step 2 Select a template.

The system will display images & videos information according to their layout in the template. And, an image is displayed for 10 seconds by default and a video to the end.

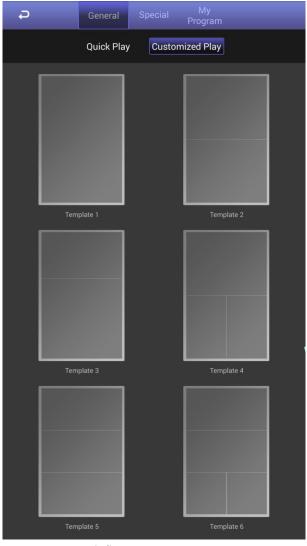
#### 5.1.8.1.2 Customized Play

Define your own templates to release information.

<u>Step 1</u> In the main menu, select **Local Release** > **General** > **Customized Play**.

The Customized Play interface is displayed. See Figure 5-11.

Figure 5-11 The customized play interface



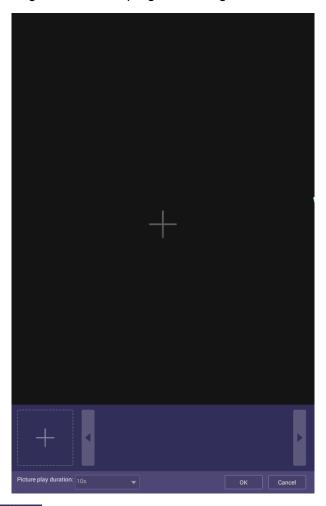
Step 2 Click a template you want to define.

The template's interface ready for configuration is displayed.

Step 3 Define the template.

to configure this region's display sequence and content. A program waiting box of images & videos is displayed. See Figure 5-12.

Figure 5-12 The program waiting box



- on the lower left corner.
  - The "File Manager" interface is displayed.
- 2) Then you can select an image or a video and upload it to the program waiting box. Then, you can select duration of displaying an image from 5s, 10s, 20s, 30s and 60s. Images are displayed for 10 seconds by default and videos to the end. You can repeat 2)-3) to upload multiple images or videos to the program waiting box.
- 3) Click OK.



If there are multiple separate regions in your template which can be identified by the sign (find and add the sign in your manual), to make the template effective, you need to repeat step1-4 to add programs for other regions.

- Step 4 Operate the template you have almost finished. On the upper right corner of the current interface:
  - Click **Preview** to preview your template.
  - Click Save to save your template. You can view and use the template in Local Release > My Program then.
  - Click **Publish** to play your template immediately.

# 5.1.8.2 Releasing Programs by Special Use Templates

There are six special use templates, including "Face Attendance", "Catering & Life", "Special Offer & Promotion", "Brand Publicity", "Supermarket & Hotel", and "Info & News", each of which conforms to a specific scenario. Select according to your needs.

- For configuration of "Face Attendance" template, see "5.1.8.2.1 Configuring Face Attendance Template."
- For configuration of other five templates, see "5.1.8.2.2 Configuring Other Five Templates."

#### **5.1.8.2.1 Configuring Face Attendance Template**

Add a camera channel, and face information captured by the camera will be displayed, such as the similarity between the face captured and face saved in the database, and capture time.  $\square$ 

The 29-inch and 37-inch devices do not support the face attendance function.

#### Preparation

- Your camera can do the face detection and face comparison and its face database is ready.
- You Signage, your camera and the DSS (or PSS, or IVSS) have been connected to each
- When you choose to connect your camera to the Signage by DSS or PSS, you need to operate DSS or PSS to give out a registration code to your Signage to achieve the connection between the DSS or PSS and your Signage.

#### Procedure

- Step 1 In the main menu, select Local Release > Special. The **Special** interface is displayed.
- Step 2 Click Face Attendance, and the face attendance template is displayed. See Figure 5-13.

2018-12-24 Mon Attendance Result No Info! No Info! No Info! No Info! No Info! ος No Info!

Figure 5-13 Configuring face attendance template

Step 3 Click

The **Add Device** interface is displayed. See Figure 5-14. Figure 5-14 The add device interface



Step 4 Configure the parameters. See Table 5-4.

Table 5-4 Parameter description

Name	Description	
Protocol	According to the connection method you want between the camera and your Signage, you can select from <b>IPC</b> , <b>DSS</b> , <b>PSS</b> and <b>IVSS</b> .	
	If you want to connect the camera directly to your device, you can select <b>IPC</b> . If you want to connect the camera to your device by the third-party platform or device, you can select <b>DSS</b> , <b>PSS</b> or <b>IVSS</b> .	
IP Address	Address of your camera or the platform.	
User Name	You need to fill in the two items when you select <b>IPC</b> or <b>IVSS</b> as the <b>Protocol</b> .	
Password	<b>,</b>	
Port	Port number when you log in your camera or the platform.	
Channel	You need to configure this parameter only when you select IPC or IVSS as the Protocol.  When you select IPC as the Protocol, you directly connect only one IPC to the device. Fill 1 in the Channel box.  When you select IVSS as the Protocol, to determine the channel number you want:  Type <a href="http://xxx/cgi-bin/LogicDeviceManager.cgi?action=getCameraAll">http://xxx/cgi-bin/LogicDeviceManager.cgi?action=getCameraAll</a> ("xxx" refers to the IP address of IVSS) in your browser to view the channels.  Determine the channel which you want to add to your device.  Add 1 to the channel's UniqueChannel value.  Fill the new value in the Channel box.	
Registration Code	You need to configure this parameter only when you select <b>DSS</b> or <b>PSS</b> as the <b>Protocol</b>	

# Step 5 Click **OK**.

After adding the camera to the face attendance template successfully, the live camera shooting image and face comparison information is displayed.

- Connect you Signage to the camera by IPC or IVSS, and there will be only one camera's shooting image.
- Connect you device to the camera by DSS or PSS, and there will be at most four cameras' shooting images (numbers of cameras' shooting windows vary with numbers of cameras attached to the platform). To attach a camera to the platform, see platform's user manual.

Click on the camera shooting image, you can:

- Click **Change Device** to configure a new camera shooting window.
- Click **Delete Device** to delete a camera shooting window.

## **5.1.8.2.2 Configuring Other Five Templates**

The other five templates are similar in configuration and "Supermarket & Hotel" template is taken as an example.

<u>Step 1</u> In the main menu, select **Local Release > Custom**.

The **Custom** interface is displayed.

Step 2 Click a template you want to define.

The template's interface ready for configuration is displayed.

Step 3 Configure the template.

Click a to configure this region's display sequence and content. A program waiting box of images & videos is displayed. See Figure 5-15.

Figure 5-15 The program waiting box



The "File Manager" interface is displayed.

- Then, you can select duration of displaying an image from 5s, 10s, 20s, 30s and 60s. Images are displayed for 10 seconds by default and videos to the end. You can repeat step2-3 to upload multiple images or videos to the program waiting box.
- Click OK.

If there are multiple separate regions in your template which can be identified by the

to make the template effective, you need to repeat step1-4 to add programs sign for other regions.

Step 4 Operate the template you have almost finished. On the upper right corner of the current interface:

- Click **Preview** to preview your template.
- Click Save to save your template. You can view and use the template in Local Release > My Program then.
- Click **Publish** to play your template immediately.

# **5.1.8.3 Managing My Program**

In main menu, select Local Release > My Program and the My Program interface is displayed. See Figure 5-16. You can view the programs that have been played and the templates you have saved. You can also:

- Click an item to start playing.
- Click and select one or several items to delete; Click and click Select All to delete all items.

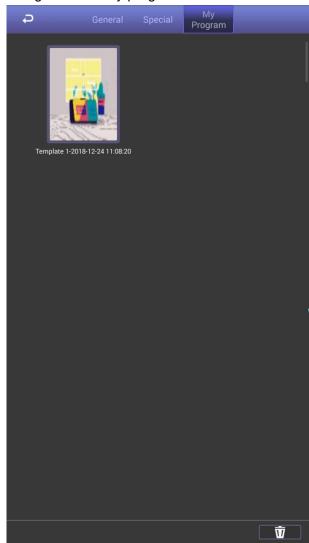


Figure 5-16 My program interface

# 5.1.9 Managing Apps

In main menu, click App Manager and then you can install/uninstall an app, view and operate the files, and log in the browser to surf on the Internet after the browser is connected to the Internet. See Figure 5-17.

Figure 5-17 Apps



# 5.1.10 Installing an App

You can install an app to your Signage.

Step 1 In main menu, select App Manager > App Center.

The App Center interface is displayed.

Step 2 Click install App.

The **Select Location** interface is displayed. See Figure 5-18.

Figure 5-18 The select location interface



Step 3 Click your USB drive icon.

The system will automatically find an app file for you.

Step 4 Click the installation file and follow the system prompt to finish installation.

You can use and view the app you have installed in "App Center."

# **5.1.11 Operating File Manager**

View and operate files.

Step 1 In main menu, select App Manager > App Center.

The App Center interface is displayed.

Step 2 Click File Manager.

The File Manager interface is displayed.

Step 3 Select a storage path, for example, "Internal Storage."

Files in different classifications are displayed. See Figure 5-19.

Click a file classification to view and operate files.

Figure 5-19 Files in different classifications



# **5.1.12 Viewing Terminal Information**

In main menu, select **Settings > Terminal Info**. The **Terminal Info** interface is displayed. See Figure 5-20. You can view information such as Device Name, S/N, APP Version No..

→ Terminal Info **Device Name** 4D04FD2YAJ51B12 S/N 4D04FD2YAJ51B12 APP Version No. V2.002.0000000.7.R.181126 System Version No. V2.002.0000000.6.R.181127 U58 Version No. 513 **Storage Capacity** Available 5192MB / Total 5297MB **Operation System** Android 4.4.2

Figure 5-20 The terminal info interface

# 5.2 Configuring System Settings

# 5.2.1 Configuring Visual & Audio Parameters

Adjust the screen's display effect and the Signage volume.

<u>Step 1</u> In main menu, select **Settings** > **Audiovisual Adjustment**.

The Audiovisual Adjustment interface is displayed. See Figure 5-21.

Figure 5-21 The audiovisual adjustment interface



Step 2 Configure visual & audio parameters. See Table 5-5 for details.

Table 5-5 Description of visual & audio parameters

Item	Description			
Image Effect	Adjust the display image's chroma, contrast and saturation. The default values			
image Effect	are recommended.			
	Adjust the display's background brightness manually or in an automatic way.			
	<ol> <li>Click Backlight Brightness to adjust its value.</li> </ol>			
	It's set by default that the auto adjustment of background brightness is			
Backlight	enabled and the background brightness will be adjusted according to			
	the surrounding lighting condition.			
Brightness	You can drag the brightness bar to adjust the background brightness			
	manually and the auto adjustment of background brightness is			
	disabled in the meanwhile.			
	2. Click <b>OK</b> to finish configuration.			
Output	Select resolution of the screen under work from 1080P 60Hz, 1080P 50Hz,			
Resolution	<b>720P 60Hz</b> and <b>720P 50Hz</b> .			
Screen	Detete very and advertises Detete 000 Detete 4000 veril Detete 0700			
Rotation	Rotate your screen and select from Rotate 90°, Rotate 180° and Rotate 270°.			
Auto Look	You can set a Signage idle time (the time when you do not operate the			
Auto Lock Screen	Signage) beyond which your Signage screen will be locked. Select <b>Never</b> and			
	the screen will not be locked automatically.			

Item	Description	
Volume	Adjust speaker volume. And "0" represents mute.	
	Click <b>OK</b> to finish configuration.	

# **5.2.2 Selecting Input Source**

You can select input source from "Local" and "HDMI" and "Local" is set by default (VGA is not supported now). Select "Local" to play programs input by your USB or given by the platform; Select HDMI to play programs from the HDMI input source, for example, your PC.

Step 3 In the main menu, select **Settings** > **Input Source Setting**.

The **Input Source Setting** interface is displayed. See Figure 5-22.

Figure 5-22 The input source setting interface



Step 4 Select from "local" and "HDMI."



If there is no HDMI input source (your PC, for example) but you still select HDMI, the screen will turn blank for certain time and exits the blank interface automatically. After you select from "Local" and "HDMI", the configuration takes effect immediately.

# 5.2.3 Selecting System Language

Step 1 In the main menu, select **Settings > Language**.

The **Language** interface is displayed. See Figure 5-23.

Figure 5-23 The language interface



Step 2 Select the language you want.

The configuration takes effect immediately.

# 5.3 System Maintenance

# **5.3.1 Maintenance Requirements**

It is recommended to:

- Modify the user password every three months.
- Reboot this device regularly.
- Upgrade firmware regularly.

# 5.3.2 Modifying Password

For system security, regularly change the password and adopt the strong password. Keep the password properly after your modification.

Step 1 In main menu, select Settings > Password Setting.

The **Password Setting** interface is displayed. See Figure 5-24.

Figure 5-24 The password setting interface



Step 2 Type old password, new password. Then type your new password again to confirm it. Step 3 Click Save.

# 5.3.3 Rebooting Your Signage

Manually reboot your device to handle problems such as system non-fluency.

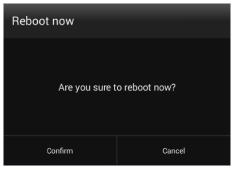
Step 1 In main menu, select **Settings** > **Maintenance and Upgrade**.

The Maintenance and Upgrade interface is displayed.

Step 2 Click Reboot Now.

The **Reboot Now** interface is displayed. See Figure 5-25.

Figure 5-25 The rebooting now interface



Step 3 Click Confirm and system reboots.

# **5.3.4 Configuring Auto Reboot Time**

Configure an auto reboot time for your device. And your device will reboot at a fixed time every day.

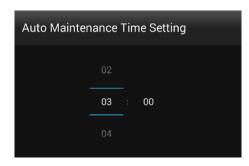
Step 1 In main menu, select **Settings** > **Maintenance** and **Upgrade**.

The Maintenance and Upgrade interface is displayed.

Step 2 Click Auto Maintenance Time Setting.

The **Auto Maintenance Time Setting** interface is displayed. See Figure 5-26.

Figure 5-26 The auto maintenance time setting interface



Step 3 Drag your mouse up and down to select a time. Click any position out of the Auto Maintenance Time Setting interface to finish configuration.

# 5.3.5 Upgrading System

# Preparation

Contact our after-sales service to get an upgrade package. Insert a USB drive with the package into your Signage.

## Procedure

<u>Step 1</u> In main menu, select **Settings** > **Maintenance and Upgrade**.

The **Maintenance and Upgrade** interface is displayed.

Step 2 Click System Upgrade.

The **System Upgrade** interface is displayed. See Figure 5-27.

**D** or **E** represents your USB drive.

Figure 5-27 The system upgrade interface



Step 3 Select the upgrade package to start upgrade.

Your Signage reboots after being upgraded.

# 5.3.6 Restoring Your Signage to Factory Settings

Restore your Signage to factory settings to handle problems such as storage insufficiency and system error. Be cautious because this may cause data lose.

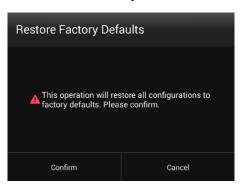
<u>Step 1</u> In main menu, select **Settings > Maintenance and Upgrade**.

The Maintenance and Upgrade interface is displayed.

Step 2 Click Restore Factory Defaults.

The Restore Factory Defaults interface is displayed. See Figure 5-28.

Figure 5-28 The restore factory defaults interface



Step 3 Click **Confirm** to begin this operation.

After that, your system will reboot.

# **6.1 Port Conflicts**

Step 1 Enter the CMD command in the Start menu of the PC. The CMD interface is displayed. See Figure 6-1.



- Step 2 Enter the netstat-ano comand line, and press Enter.
- Step 3 Check if the designated port of the current PC is occupied.

For example, Port 8081. The red frame Figure 6-2 indicates the port number is occupied.

0.0.0.0:135 0.0.0.0:0 644 TCP LISTENING LISTENING TCP 0.0.0.0:445 0.0.0.0:0 4 0.0.0.0:1025 0.0.0.0:0 804 TCP LISTENING TCP 0.0.0.0:1026 0.0.0.0:0 LISTENING TCP 0.0.0.0:1027 0.0.0.0:0 248 LISTENING 0.0.0.0:1052 0.0.0.0:0 924 TCP LISTENING TCP 0.0.0.0:1053 0.0.0.0:0 LISTENING 916 TCP 0.0.0.0:3389 0.0.0.0:0 1244 LISTENING TCP 0.0.0.0:8081 0.0.0.0:0 LISTENING 1328 TCP 0.0.0.0:47984 0.0.0.0:0 LISTENING 2536 TCP 0.0.0.0:47989 0.0.0.0:0 LISTENING 2536 TCP 10.33.7.13:139 0.0.0.0:0 LISTENING 4 TCP 10.33.7.13:1074 10.30.51.130:3260 **ESTABLISHED** 248 10.33.7.13:1076 10.30.51.131:3260 248 TCP ESTABLISHED 10.33.7.13:1078 10.30.51.136:3260 TCP 248 **ESTABLISHED** TCP 10.33.7.13:45609 10.1.2.80:445 **ESTABLISHED** 4 TCP 10.33.7.13:45710 10.30.21.101:445 **ESTABLISHED** 4 TCP 10.33.7.13:45765 10.1.2.11:5061 **ESTABLISHED** 4736 10.33.7.13:47099 10.1.0.136:80 5656 TCP **ESTABLISHED** TCP 10.33.7.13:50815 172.7.2.71:22 **ESTABLISHED** 5524

Figure 6-2 Active connection

Step 4 View the PID code corresponding to this port number, look up and end corresponding processes.

For example, Port 8081 corresponds to the PID code 1328.

<u>Step 5</u> Press Ctrl + Alt + Delete and select **Enable Task Manager**.

## Step 6 Click the **Process** tab.

The progress interface is displayed. See Figure 6-3.

Figure 6-3 Process

			-,	17.63H @ _ T 64	
fcagte. exe	13240	00	7,420 K	McAfee DLPe Text Extractor	
fcagte. exe	13240	00	6,872 K	McAfee DLPe Text Extractor	
fcagte. exe	13240	00	6,596 K	McAfee DLPe Text Extractor	
lync. exe *32	13240	00	162, 748 K	Microsoft Lync	
Foxmail.exe *32	13240	00	13,348 K	Foxmail 7.0	
jusched. exe *32	13240	00	6,892 K	Java Update Scheduler	

### Step 7 Calls out the PID process column.

If the Process tab does not contain the PID information list, follow the steps below.

- In the View dropdown box, select Select Column .... The Select Process Tab Column interface is displayed. See 错误!未找到引用 源。.
- 5) Select PID (process identifier) and click OK. The **Process** tab displays the PID information list. See Figure 6-4.

Figure 6-4 PID process column

TSWbPrxy. exe	240	13240	00	3,280 1
WINWORD. EXE *32	488	13240	00	61,376 1
csrss.exe	812	SYSTEM	00	16, 932 1
winlogon. exe	876	SYSTEM	00	3, 492 1
NvBackend. exe *32	1328	13240	00	8,248 1
nyfedit.exe *32	1280	13240	00	6,700 1
explorer.exe	1580	13240	02	36, 424 1
conhost. exe	1660	SYSTEM	00	2,856 1
cmd. exe	1948	13240	00	2,968 1
dwn. exe	2400	13240	00	2,016 1
chrone. exe *32	2432	13240	00	51,436 1
WaldenLake. exe	2600	13240	00	960 1
UniAccessAgent.exe	2748	SYSTEM	00	9, 184 1
TowerBabel.exe	2768	SYSTEM	00	5, 208 1
ssonsvr.exe *32	2900	SYSTEM	00	1,396 1
nvstreamsvc. exe	3404	SYSTEM	00	6,912 1
explorer.exe	3492	13240	00	45, 292 1
taskhost. exe	3740	13240	00	5, 172 1
StatusTray. exe	3888	13240	00	2,620 1
conhost, exe	3916	SYSTEM	00	2,944
iexplore.exe *32	3968	13240	00	139, 964 1
fcag. exe	4000	13240	00	41, 176 1
1				

Step 8 Select the PID code you need (for instance, port 8081 corresponds to the PID code 1328). Right-click and select **Open file location** to view the conflicting programs. Then return to the Task Manager interface and click End process.



If the PC' own service process occupies the port number, the process cannot be ended. In this case, click Wizard in the DSS ConfigTool interface, and change the access port number of the Cloud Information Release system. See Figure 6-5. The changes take effect once the server is rebooted.

Media Publish System setting tool Wizard CrisWizard ISGS Config SGS N Inne loca IDMS Config IWeb Config CancelIFTS Config

Figure 6-5 Change port number

Step 9 Uninstall the conflicting programs.

# 6.2 MySQL conflicts

- Step 1 On the PC, Press Ctrl + Alt + Delete and select **Enable Task Manager**.
- Step 2 Select the Service tab.

The service interface is displayed. See Figure 6-6.

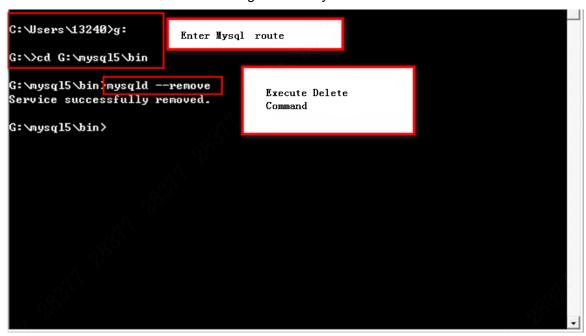
Figure 6-6 Service

. =		
McAfeeDLPAgentService	1064	McAfee DL
McAfeeFramework	1328	McAfee Fr
McShield	3008	McAfee Mc
McTaskManager	1616	McAfee Ta
mfefire		McAfee Fi
mfemms	1588	McAfee Se
mfevtp	1748	McAfee Va
MG-SOFT SNMP Trap Service		MG-SOFT S
Microsoft SharePoint Worksp.		Microsoft
MMCSS	248	Multimedi
MotoHelper		MotoHelpe
MozillaMaintenance		Mozilla M
MpsSvc		Windows F
MSDTC	L	Distribut
MSiSCSI	248	Microsoft
msiserver	197	Windows I
MSSQL\$SQLEXPRESS		SQL Serve
MSSQLServerADHelper100		SQL Activ
msvsmon80		Visual St
napagent		Network A
Netlogon	924	Netlogon
Netman	816	Network C
NetMsmqActivator		Net.Msmq
NetPipeActivator		Net.Pipe

Step 3 Search the MySQL service from the list, then search MySQL in the Control Panel > All Control Panel Items > Programs and Functions and uninstall it.

If the MySQL service item still exists after the uninstallation, open the CMD window as administrator and enter the mysqld - remove command. If the mysqld command fails, try the mysqld-nt -remove command to remove it. See Figure 6-7.

Figure 6-7 MySQL



# 6.3 Connection between the System and the Display Device

1. The Cloud Information Release system and the display device can be ping connected, but the latter still prompts "Network error. Check your Internet connection."

If the PC has installed firewall, turn it off in the Control Panel > System and Security > Windows Firewall > Turn On/Off Firewall interface.

- 2. After power-on, the screen lights up. However, when the IPs of the display device and registration platform are set, the error prompt still appears at the bottom right corner or in the config interface.
  - The platform service does not run
  - Network disconnection between the display device and platform
  - Damaged network card of the display device
  - Program reasons
- 3. Wi-Fi disconnected, device unable to be registered to the platform
  - The device connected with wired network card uses the wired network instead of the wireless network.
  - The Wi-Fi RF cable inside the device gets loosened or damaged
  - Network disconnection between the connected router and the platform
  - The external Wi-Fi antenna of the device gets loosened or uses a different frequency
- 4. After registration to the platform, the device cannot be controlled, for example, screen on/off, reboot and other functions.
  - Massive packet loss

- Device program exception
- Platform service exception

# Appendix 1 Remote Control

For Signage of specified models, you can use remote controls to operate them. There are two kinds of remote controls. Refer to one of them according to the remote control you have received. See Appendix figure 1-1, Appendix figure 1-2 and Appendix table 1-1.

Appendix figure 1-1 Remote control appearance (1)



Appendix figure 1-2 Remote control appearance (2)



Appendix table 1-1 Buttons description

Appendix table 1-1 Buttons description		
Operation Item	Buttons Needed	
Turning on/off	$(\mathbf{b})$	
device	Press or .	
Turn on/off		
device screen	Hold or for three seconds.	
Adjusting volume	<ul> <li>Volume up: Press Fn, and then press 1. Or, press and press right arrow button.</li> <li>Volume down: Press Fn, and then press 4. Or, press and press left arrow button.</li> </ul>	
Adjust background brightness	<ul> <li>Background brightness up: Press Fn, and press 2.</li> <li>Background brightness down: Press Fn, and press 5.</li> </ul>	
Typing password to log	<ol> <li>When you find the screen is locked, you can use your remote control to type the password. Press Enter on your remote control.         The "Login" interface is displayed.</li> <li>Operate arrow keys and move pointer to password box, and type password.</li> <li>Move pointer to Done on virtual keyboard.</li> <li>Move pointer to OK and press Enter on your remote control to log in the device.</li> </ol>	
Returning to the previous interface	Press Esc or .	
Representing the frequently used tool bar	Press Add or , and operate the left/right arrow keys to select a function you want.	

# Appendix 2 Security Laws and Regulations

# Appendix 2.1 Legal Information

# Copyright

© 2018 Zhejiang Dahua Vision Technology Co., Ltd. All rights reserved.

Any content of this document may not be reproduced, transmitted, distributed or stored in any form by anyone without prior written permission of Zhejiang Dahua Vision Technology Co., Ltd. (hereinafter referred to as "Dahua").

The products described in this document may contain the software that belongs to Dahua or the third party. Without the prior written approval of the corresponding party, any person cannot (including but not limited to) copy, distribute, amend, abstract, reverse compile, decode, reverse engineer, rent, transfer, sublicense the software.

## **Trademarks**

- alhua and HDCVI are trademarks or registered trademarks of Dahua.
- HDMI logo, HDMI, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC. This product has been authorized by HDMI Licensing LLC to use HDMI technologies.
- VGA is the trademark of IBM.
- The Windows logo and Windows are trademarks or registered trademarks of Microsoft.
- All the company names and trademarks mentioned herein are the properties of their respective owners.

#### Disclaimer

- To the maximum extent permitted by applicable laws, in no event shall we be liable for any special, incidental, indirect, or consequential damages or any damages whatsoever on, including without limitation, loss of profit, data, goodwill, files, or expected savings, arising out of or in any way connected with the relevant contents and described products in this document.
- All products described in this document are provided on an "as-is" basis. Unless required otherwise by applicable laws, this document is provided without a warranty of any kind, either express or implied, including but not limited to, merchantability, degree of satisfaction, fitness for a particular purpose, or non-infringement.

# Compliance to Export Control

Dahua complies with applicable export control laws and regulations, and requirements on export, re-export, and transfer of hardware, software, and technologies. You are supposed to fully understand and strictly comply with domestic and international laws and regulations on export control related to the products described in this document.

# **Privacy Protection Notice**

As the device user or data controller, you might collect personal data of others, such as face, fingerprint, car plate number, Email address, phone number, GPS, and so on. You need to be in compliance with the local privacy protection laws and regulations to protect the legitimate rights and interests of other people by implementing measures including but not limited to: Providing clear and visible identification to inform data subject the existence of surveillance area and providing related contact.

## About the Manual

- The Manual is for reference only. If there is inconsistency between the Manual and the actual product, the actual product shall prevail.
- We are not liable for any loss caused by the operations that do not comply with the Manual.
- The Manual would be updated according to the latest laws and regulations of related regions. For detailed information, see the paper manual, CD-ROM, QR code or our official website. If there is inconsistency between paper manual and the electronic version, the electronic version shall prevail.
- All the designs and software are subject to changes without prior written notice. The
  product updates might cause some differences between the actual product and the Manual.
  Please contact the customer service for the latest program and supplementary
  documentation.
- There still might be deviation in technical data, functions and operation descriptions, or errors in print. If there is any doubt or dispute, please refer to our final explanation.
- Upgrade the reader software or try other mainstream reader software if the Manual (in PDF format) cannot be opened.

# Appendix 2.2 Cybersecurity Recommendations

## **Declarations**

- By connecting the product into Internet, you have to bear related risks on your own account, including but not limited to those related to cyber attacks, hacker attacks, and virus infections. It is advised to enhance the protection for your network data, device data, and personal information. We recommend you to take necessary actions to enhance the security of your devices and network, such as changing passwords and using strong passwords whenever possible, changing passwords regularly, and updating firmware to the latest version. We are not liable for any malfunction, information leak or other problems of the product caused thereby, but we will provide security services for the product against these risks.
- To the extent not explicitly prohibited by applicable laws, we, our employees, licensors, or affiliated companies are not liable for any loss of profit, revenue, sales, or data, or the cost for purchasing substitute goods or services, property loss, personal injury, business discontinuity, commercial information loss, or any special, direct, indirect, incidental, consequential, economic, covering, or punitive damages caused by using or not able to use this product or service, regardless of on which liability theory (contract, tort, fault, or others) these damages are based, even if we, our employees, licensors, or affiliated companies have been advised of the possibility of such damages. Some jurisdictions do not allow limitations on liabilities for personal injuries, incidental or consequential damages. If you are in one of these jurisdictions, these limitations might not apply to you.
- Our total compensation for all your damages is limited to the amount you paid for buying our products or services, except where relevant laws apply if our negligence has caused personal injuries or deaths.

#### Recommendations

#### Mandatory actions to be taken towards cybersecurity:

## 1. Use a strong password

Refer to the following recommendations for setting up the password:

- A strong password contains at least eight characters.
- A strong password is comprised of at least two of these three character types: letters in upper and lower cases, numbers, and special characters.
- Do not contain the username in its forward or reverse sequence.
- Do not use continuous characters, such as 123 and abc.
- Do not use repeated characters, such as 111 and aaa.

## 2. Timely update firmware and client software

- As is standard procedure in the tech-industry, the firmware of devices should be timely
  updated to the latest version to ensure the system is current with the latest security
  patches and fixes. With the device connected into Internet, it is recommended to turn
  on automatic online update detection to timely get firmware updates launched by
  providers.
- It is recommended to download and use the latest client software.

#### Recommended measures to enhance cybersecurity:

## Physical protection

Physical protection is recommended for devices (especially storage devices), such as placing them in a special room, special cabinet, and well conduct access control and key control to prevent damages to hardware and external devices (U disk, serial ports) by unauthorized persons through physical contact.

### 2. Change Passwords Regularly

Regularly change the passwords to your devices to help ensure that only authorized users are able to access the system.

## Timely set up and update password reset

This device supports password reset. To reduce the risk of this function being attacked by hackers, it is recommended to timely set up password reset, including reserved phone number/email, and security questions. If any of such information changes, update the password reset in time. When setting up security questions, set up an answer that is difficult for someone to guess their way into your system.

#### 4. Enable account lock-down

Account lock-down is enabled by default. To keep your account safe, it is recommended to keep this setting. After hackers fail multiple attempts to hack passwords, the corresponding accounts and source IPs are locked.

## 5. Change HTTP and other default service ports

These ports can be changed to any set of numbers between 1024-65535. Avoiding the default ports reduces the risk of hackers being able to guess which ports you are using.

#### 6. Enable HTTPS

Enable HTTPS to access Web services through safe channels.

#### 7. Enable whitelist

Enable the whitelist function. When enabled, only the IPs in the whitelist can access your device. For this purpose, make sure you have added the IPs of your PC and the supporting devices to the whitelist.

#### 8. Bind MAC address

Bind the IP and MAC address of the gateway device to reduce the risk of ARP deception.

## 9. Reasonably allocate account and permission

Add users properly according to business and management needs, and allocate minimum sets of permissions to them.

## 10. Turn off unnecessary services and use safe modes

If not needed, SNMP, SMTP and UPnP can be turned off to reduce the risks for the device. If necessary, it is strongly recommended to use safe modes, including but not limited to:

- SNMP: Select SNMP v3 and set a stronger encryption password and authentication password.
- SMTP: Select TLS to access to the email server.
- FTP: Select SFTP and set a strong password.
- AP hotspot: Select WPA2-PSK encryption mode and set a strong password.

#### 11. Audio/Video encryption transmission

If your audio/video data includes important or sensitive contents, use encrypted transmission to make it more difficult for someone to steal your data.

#### 12. Use PoE connections

If the device supports PoE, use PoE connections to isolate the camera from other networks.

### 13. Security audit

- Review online users: Do this from time to time to find out illegal login, if any.
- Review device log: This gives you the IP data of a device trying to login and the critical operation information of users already in the login status.

### 14. Network log

Limited storage capacity of the device cannot store many logs for a long time. If you need to save logs for long, enable online log to ensure key logs are synced to the online log server for easy back tracking.

## 15. Building safe network environment

To keep the device safer and reduce network risks, we recommend you to:

- Turn off the port mapping of the router to prevent external networks from directly accessing services of router intranet devices.
- Divide network into different partitions as needed: If two subnetworks do not have to establish communications, use VLAN or gatekeeper for network division.
- Build up the 802.1x access authentication to reduce the risk of illegal terminals connecting with your private networks.

## More Information

Please go to PSIRT on the official Dahua website for security notices and the latest security advisories.

# ZHEJIANG DAHUA VISION TECHNOLOGY CO., LTD.

Address: No.1199, Bin'an Road, Binjiang District, Hangzhou, P.R. China

Postcode: 310053

Tel: +86-571-87688883 Fax: +86-571-87688815

Email: overseas@dahuatech.com Website: www.dahuasecurity.com