D-Link®

Network Cameras
User Manual

ISSUE **V1.0**

About This Document

Purpose

This document describes how to use the web management system, including network access, network configuration, and troubleshooting.

Intended Audience

This document is intended for:

- Technical support engineers
- Maintenance engineers
- IP camera operators

Symbol Conventions

The symbols that may be found in this document are defined as follows.

Symbol	Description
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in equipment damage, data loss, performance deterioration, or unanticipated results. NOTICE is used to address practices not related to personal injury.

Symbol	Description
NOTE	Calls attention to important information, best practices and tips. NOTE is used to address information not related to personal injury, equipment damage, and environment deterioration.

Contents

About This Document i

1 Quick Start 1

1.1 Login and Logout 1

1.2 Main Page Layout 2

1.3 Changing the Password 3

2 Browsing Videos 5

2.1 Browsing Real-Time Videos 5

2.2 Controlling and Configuring the PTZ 7

3 Configuring the Device 11

3.1 Configuring the Device Information 11

3.2 Setting Video and Audio Stream Parameters 13

3.3 Setting SVC Stream Parameters 17

3.4 Setting Local Network Parameters 18

3.5 Configuring Device Ports 21

3.6 Viewing the ADSL Network Parameters 22

3.7 Configuring the Date and Time 23

3.8 Setting the Channel Name, Video System, and Source Resolution 26

3.9 Setting OSD Parameters 28

3.10 Configuring the Microphone 32

3.11 Configuring the Dome PTZ Address 33

3.12 Enabling the Analog Output Function 34

3.13 System Service 35

3.14 Configuring the System Language 35

4 Configuring External Devices 37

4.1 Setting External PTZ Parameters 37

4.2 Setting External PTZ Keyboard Parameters 39

5 Configuring the Alarm Function 42

5.1 Setting I/O Alarm Parameters 42

5.2 Setting Disk Alarm Parameters 44

5.3 Setting Network Alarm Parameters 45

5.4 Setting I/O Alarm Linkage Parameters 46
5.5 Setting Motion Detection Alarm Linkage Parameters 48
6 Configuring the Recording Function 51
6.1 Configuring a Recording Policy 51
6.2 Configuring a Recording Directory 54
6.3 Configuring the SD Card Recording 56
7 Configuring the Privacy Mask Function 58
8 Configuring the Network Service. 60
8.1 Setting PPPoE Parameters 60
8.2 Setting DDNS Parameters 61
9 Service Center 64
9.1 Configuring the Alarm Center 64
9.2 Setting SMTP Parameters 65
10 Configuring User Permissions 68
10.1 Configuring a Permission Group 68
10.2 Configuring a User 70
11 Setting Platform Parameters 73
11.1 Checking Protocol Information 73
11.2 Setting Security Authentication 74
12 Querying Device Logs. 75
12.1 Querying Operation Logs 75
12.2 Querying Alarm Logs 77
12.3 Reporting Logs 78
13 Maintaining the Device 79
13.1 Restarting a Device 79
13.2 Restoring a Device to Factory Settings. 80
14 Troubleshooting 81
A Acronyms and Abbreviations. 83

1 Quick Start

1.1 Login and Logout

CAUTION

You must use Internet Explorer 7, Internet Explorer 8 and Internet Explorer 9 to access the web management system; otherwise, some functions may be unavailable.

Login

Step 1 Open Internet Explorer, enter the IP address of the IP camera (default value: 192.168.0.120) in the address box, and press **Enter**.

The login page is displayed, as shown in Figure 1-1.

Figure 1-1 Login page

Step 2 Enter the user name, and password.

NOTE

- The default user name is **admin**. The default password is **admin**. Change the password when you log in to the system for the first time to ensure system security.
- You can change the system display language on the login page.

Step 3 Click **Login**.

The main page is displayed.

----End

Logout

To log out of the system, click  in the upper right corner of the main page. The login page is displayed after you log out of the system.

1.2 Main Page Layout

On the main page, you can view real-time videos, receive alarm and fault notifications, set parameters, change the password, and log out of the system. Figure 1-2 shows the main page layout. Table 1-1 describes the elements on the main page.

Figure 1-2 Main page layout

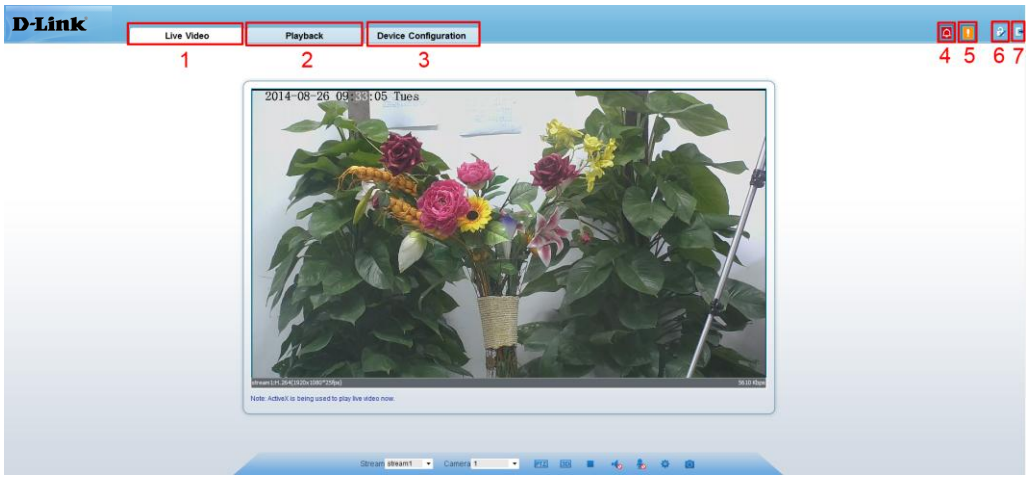


Table 1-1 Elements on the main page

No.	Element	Description
1	Real-time video area	Real-time videos are played in this area. You can also set sensor parameters.
2	Playback	You can query the playback videos in this area. NOTE Only when the SD card or NAS have videos that you can query the playback videos.
3	Device configuration	You can choose a menu to set device parameters, including the device information, audio and video streams, alarm setting, and privacy mask function.

No.	Element	Description
4	Alarm icon	When the device generates an alarm, the alarm icon  is displayed. You can click  to view the alarm information. NOTE When the device accepts an alarm signal, the alarm icon will display within 10s in the web management system.
5	Fault icon	When the device encounters an exception, the fault icon  is displayed. You can click  to view the fault information.
6	Change password	You can click  to change the password.
7	Sign Out	You can click  to return to the login page.

1.3 Changing the Password

Description

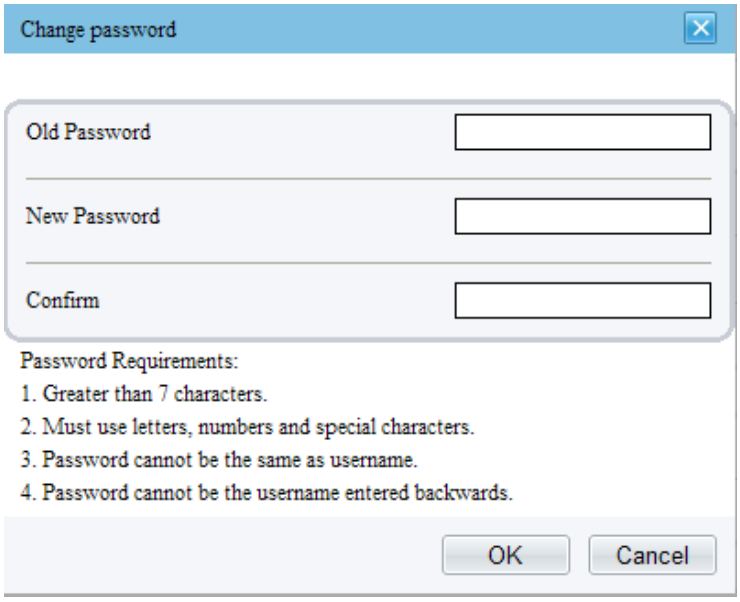
You can click  to change the password for logging in to the system.

Procedure

Step 1 Click  in the upper right corner of the main page.

The **Change Password** dialog box is displayed, as shown in Figure 1-3.

Figure 1-3 Modify Password dialog box



Step 2 Enter the old password, new password, and confirmation password.

Step 3 Click **OK**.

If the message "Change own password success" is displayed, the password is successfully changed. If the password fails to be changed, the cause is displayed. (For example, the new password length couldn’t be less than eight.)

Step 4 Click **Confirm**.

The login page is displayed.

----End

2 Browsing Videos

2.1 Browsing Real-Time Videos

You can browse real-time videos in the web management system.

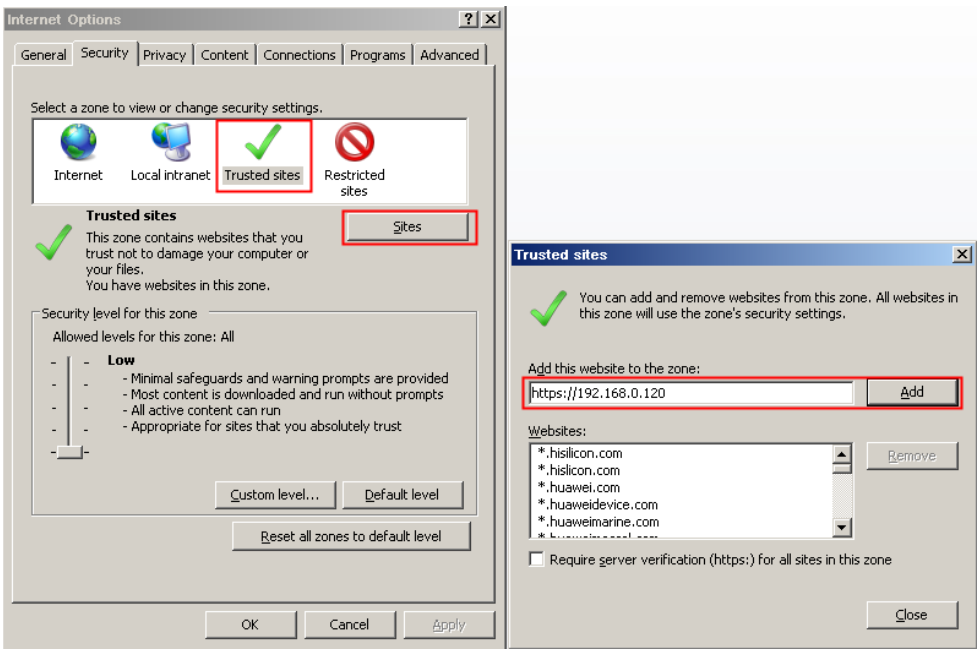
Preparation

To ensure that real-time videos can be played properly, you must perform the following operations when you log in to the web management system for the first time:

Step 1 Open Internet Explorer. Choose **Tools > Internet Options > Security > Trusted sites > Sites**.

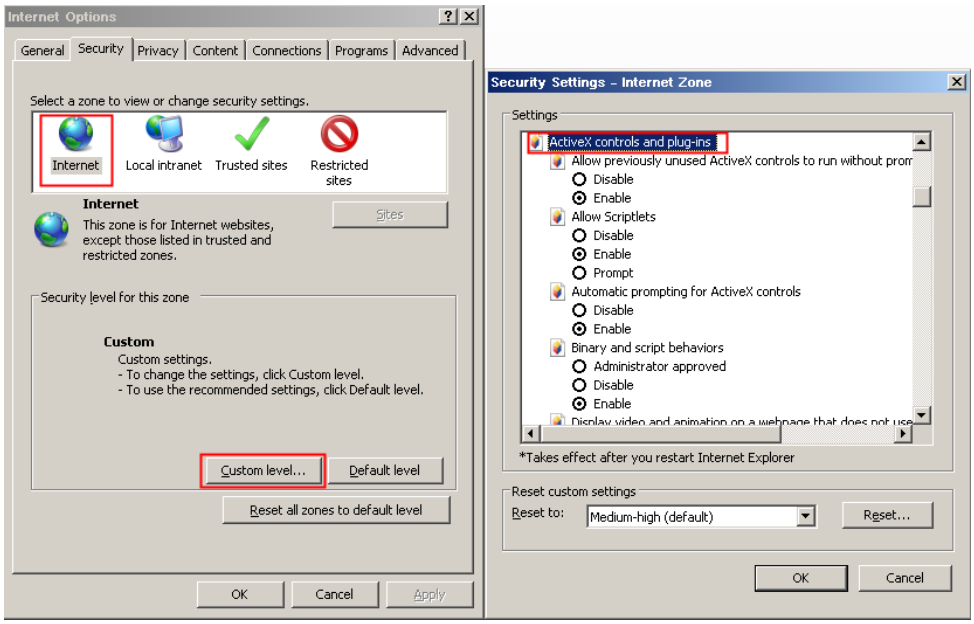
In the displayed dialog box, click **Add**, as shown in Figure 2-1.

Figure 2-1 Adding a trusted site



Step 2 In Internet Explorer, choose **Tools** > **Internet Options** > **Security** > **Customer level**, and set **Download unsigned ActiveX controls** and **Initialize and script ActiveX controls not marked as safe for scripting** under **ActiveX controls and plug-ins** to **Enable**, as shown in Figure 2-2.

Figure 2-2 Configuring ActiveX controls and plug-ins



Step 3 Download and install the player control as prompted.

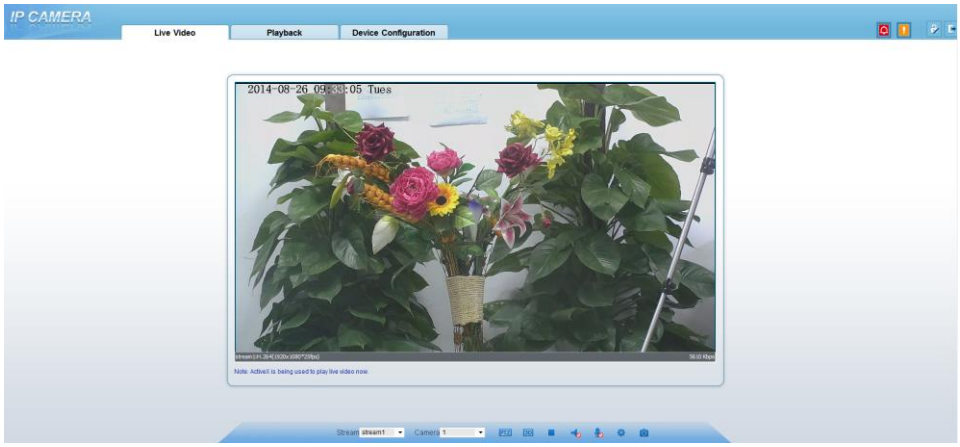
NOTE If the repair tips displayed when installing the control , please ignore the prompt, and continue the installation, the login page is displayed when the control is loaded.

----End

Description

To browse real-time videos, click **Live Video**. The **Live Video** page is displayed, as shown in Figure 2-3.

Figure 2-3 Live Video page



On the **Live Video** page, you can perform the following operations:

- Click  to stop playing a video.
- Click  to play a video.
- Double-click in the video area to enter the full-screen mode, and double-click again to exit.
- Configure the PTZ. For details, see Configuring the PTZ.
- Control the PTZ. For details, see Controlling the PTZ.
- Switch among preset streams 1, 2, and 3. For details about how to configure streams, see 3.2 Setting Video and Audio Stream Parameters.
- Configure the sensor.

  You can right-click in the video area. A shortcut menu is displayed and allows you to enter the full-screen mode, set sensor parameters, zoom in or out, and return to the default view.

  To set sensor parameters, click  to open the **Sensor Setting** page. On the **Sensor Setting** page, you can adjust the image, mirror, camera mode, focus setting, Iris setting, white balance, and noise filteras prompted.

2.2 Controlling and Configuring the PTZ

Prerequisite

All PTZ functions are only available to High Speed Network Dome and device connected to an external PTZ.

Controlling the PTZ

When browsing real-time videos shot by a dome camera or a camera connected to an external PTZ, you can control the PTZ to view videos shot in different directions.

Click PTZ below the **Live Video** page to open the **PTZ Control** page as shown in Figure 2-4, you can click the four arrow keys to move the PTZ in four directions. You can also zoom the lens and adjust the focal length.

Figure 2-4 PTZ Control area

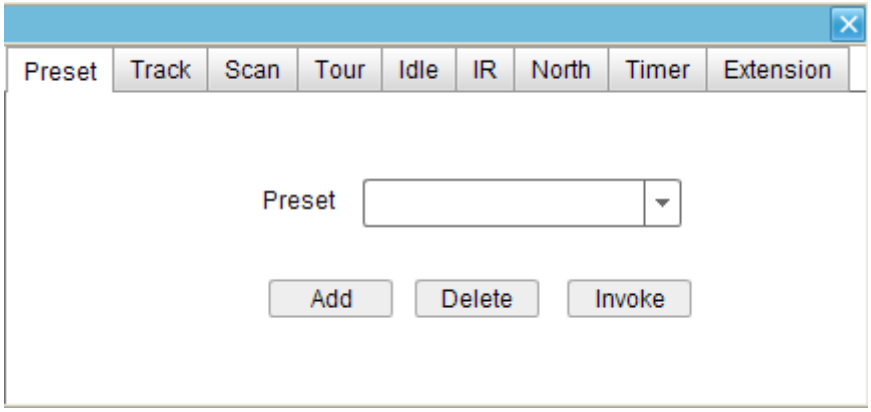
In the PTZ control area, you can perform the following operations:

- Slide the slider left or right beyond the PTZ rotation keys, you can adjust the PTZ rotation speed.
- Click **Zoom** − + to zoom the lens in or out.
- Click **Focus** − + to adjust the focal length.

Configuring the PTZ

If a camera has the PTZ or is connected to a PTZ, you can configure the PTZ in the **PTZ Configure** area, as shown in Figure 2-5.

Figure 2-5 PTZ Configure area



In the PTZ configure area, you can perform the following operations:

- Add, delete, and invoke preset positions.

- Add, delete, and invoke tracks.
- Add, delete, and invoke scans.
- Add, delete, and invoke tours.
- Set the idle.
- Set the IR.
- Set the direction to due north.

  Any direction can be set as the reference due north.
- Set the timer.
- Set Light On/Off and Brush function.

  Brush is used to clean the lens. Light On/Off is used to control the infrared camera shields on and off.

NOTE
- **Brush** is available only to a camera with a brush or a camera shield.
- **Light On/Off** is available only to specific camera shields.

3D Positioning

Click  below the Live Video page to configure the 3D positioning function.

The 3D positioning function quickly rotates the PTZ and changes the focal length in specific scenarios. You can also change the focus by drawing rectangle frames.

NOTE
The default value of 3D Positioning is ON.

Configuring and Invoking Preset Positions

You can configure preset positions and quickly rotate the camera to a preset position by invoking the preset position.

The procedure is as follows:

Step 1 Configure a preset position.

1. Click **Add**.

   The **Add Preset** page is displayed.
2. Set the preset ID and name.
3. Click **setting** to finish the preset position setting.

Step 2 Invoke a preset position.

Select a preset position from the **Preset** drop-down list box to invoke the preset position.

----End

Configuring and Invoking Tracks

You can record a track to allow the camera to repeatedly rotate based on the preset track.

Step 1 Configure a track.

1. Click **Add**.

The **Track Add** page is displayed.

2. Set the track ID and name.
3. Click **start** to set the starting position of the track.
4. Use arrow keys in the **PTZ Control** area to set a required a track.
5. Click **End** to finish the track setting.

Step 2 Invoke a track.

Select a track name from the **Track** drop-down list box to invoke the track.

NOTE
A maximum of six tracks can be configured.

----End

3 Configuring the Device

3.1 Configuring the Device Information

Description

The device information includes:

- Device ID, name, type, model, and MAC address.
- Hardware and software versions.
- Number of video channels, number of alarm input channels, number of alarm output channels, and number of serial ports.

NOTE

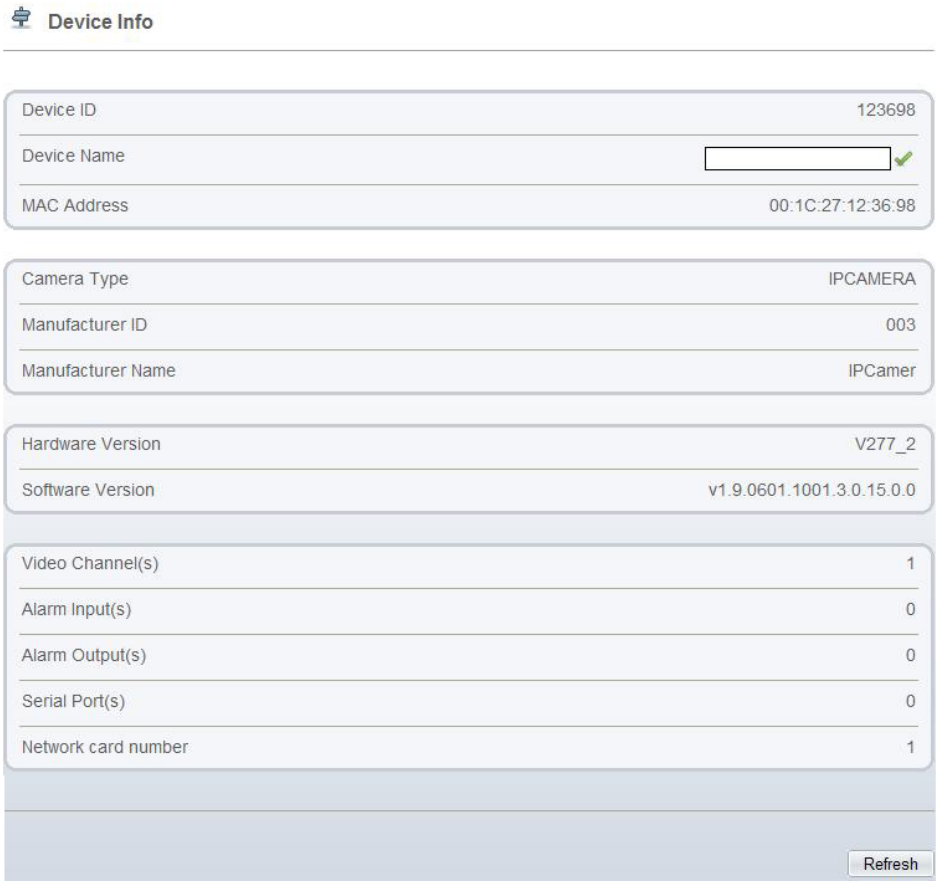
- You can modify the device name. All other parameters can only be viewed.
- When the device is upgraded, the device information is updated automatically.

Procedure

Step 1 Click **Device Info**.

The **Device Info** page is displayed, as shown in Figure 3-1.

Figure 3-1 Device Info page



Step 2 View the device information, set the device ID and name according to Table 3-1.

Table 3-1 Device parameters

Parameter	Description	Setting
Device ID	Unique device identifier used by the platform to distinguish the devices.	[Setting method] The parameter cannot be modified.
Device Name	Name of the device. NOTE The device name cannot exceed 32 bytes or 10 simplified characters; otherwise, the modification fails.	[Setting method] Enter a value manually.
MAC Address	N/A	[Setting method] These parameters cannot be modified.
Camera Type		
Manufacturer ID		
Manufacturer Name		

Parameter	Description	Setting
Hardware Version		
Software Version		
Video Channel(s)		
Alarm Input(s)		
Alarm Output(s)		
Serial Port(s)		
Network card number		

Step 3 Click  .

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.
- If the message "Apply failed!" is displayed, you must apply for the Parameter Configure permission from an administrator. For details, see 10.1 Configuring a Permission Group.

----End

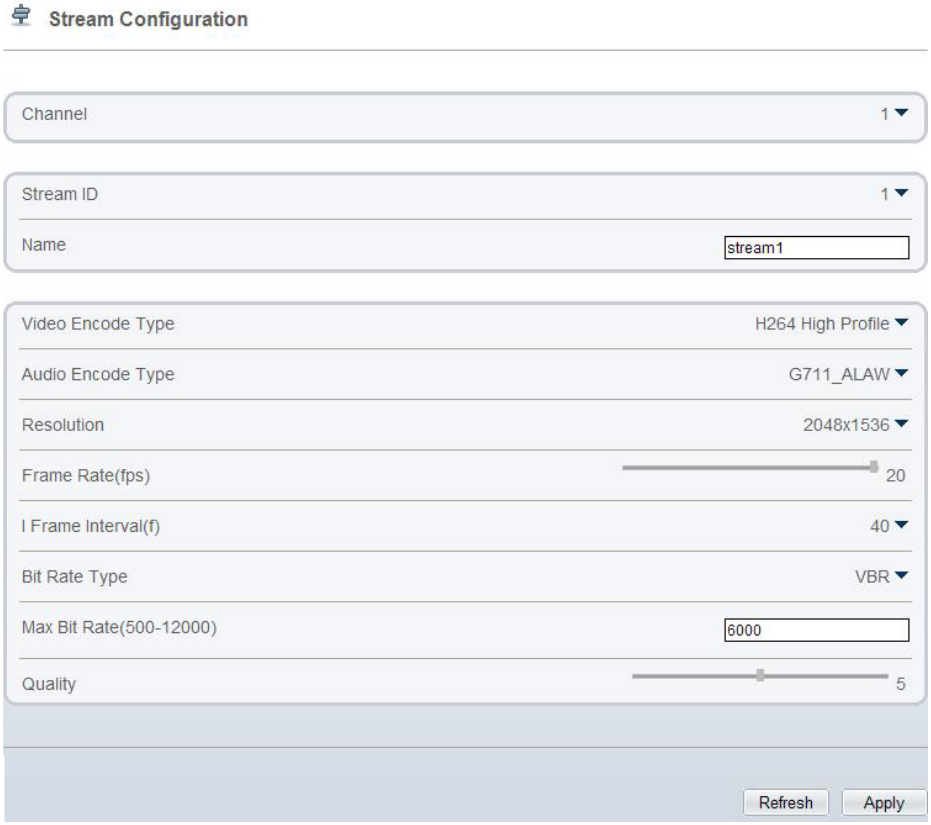
3.2 Setting Video and Audio Stream Parameters

Procedure

Step 1 Click **Stream Configuration> Base Stream**.

The **Stream Configuration** page is displayed, as shown in Figure 3-2.

Figure 3-2 Stream Configuration page



Step 2 Set the parameters according to Table 3-2.

Table 3-2 Stream configuration parameters

Parameter	Description	Setting
Channel	ID of the video output channel. NOTE An IP camera has only one video output channel. Therefore, only the default value **1** is available.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Stream ID	The device supports two streams. • Streams 1 and 2 use the H.264 codec. • The maximum resolution can be set for streams 1. • Only a low resolution can be set for stream 2.	[Setting method] Select a value from the drop-down list box.

Parameter	Description	Setting
Name	Stream name. NOTE The stream name is combined with chinese character, number, character and underline.	[Setting method] Enter a value manually. The value cannot exceed 32 bytes. [Default value] stream1
Video Encode Type	The video codec determines the image quality and network bandwidth required by a video. Currently, the following codec standards are supported: • MJPEG MJPEG is a standard intra-frame compression codec. The compressed image quality is good. No mosaic is displayed on motion images. MJPEG does not support proportional compression and requires large storage space. Recording and network transmission occupy large hard disk space and bandwidth. MJPEG is not applicable to continuous recording for a long period of time or network transmission of videos. It can be used to send alarm images. • H.264 H.264 consists of H.264 Base Profile, H.264 Main Profile, and H.264 High profile. The performance of H.264 High Profile is higher than that of H.264 Main Profile, and the performance of H.264 Main Profile is higher than that of H.264 Base Profile. If a hardware decoding device is used, select the appropriate codec based on the decoding performance of the device. H.264 High Profile has the highest requirements on the hardware performance, and H.264 Base Profile has the lowest requirements on the hardware performance.	[Setting method] Select a value from the drop-down list box. [Default value] H.264 High Profile NOTE The H.264 High Profile codec means high requirements on the hardware. If the hard decoding capability is low, use H.264 Main Profile or H.264 Base Profile.
Audio Encode Type	The following audio codec standards are supported: • G711_ULAW: mainly used in North America and Japan. • G711_ALAW: mainly used in Europe and other areas. • RAW_PCM: codec of the original audio data. This codec is often used for platform data.	[Setting method] Select a value from the drop-down list box.
Resolution	A higher resolution means better image quality. NOTE IP cameras support the different resolutions based on the model.	[Setting method] Select a value from the drop-down list box.

Parameter	Description	Setting
Frame Rate(fps)	The frame rate is used to measure displayed frames. A higher frame rate means smoother videos. A video whose frame rate is higher than 22.5 f/s is considered as smooth by human eyes. Frame rates for different frequencies are as follows: • 50 Hz: 1–25 f/s • 60 Hz: 1–30 f/s NOTE The frequency is set on the **Device Configuration** > **Camera** page. The biggest mjpeg coding format frame rate is 12 frames per second.	[Setting method] Select a value from the drop-down list box.
I Frame Interval(f)	I frames do not require other frames to decode. A smaller I frame interval means better video quality but higher bandwidth.	[Setting method] Select a value from the drop-down list box.
Bit Rate Type	The bit rate is the number of bits transmitted per unit of time. The following bit rate types are supported: • Constant bit rate (CBR) The compression speed is fast; however, improper bit rate may cause vague motion images. • Variable bit rate (VBR) The bit rate changes according to the image complexity. The encoding efficiency is high and the definition of motion images can be ensured.	[Setting method] Select a value from the drop-down list box.
Max Bit Rate(500-12000)	Indicates the maximum value of the bit rate.	[Setting method] Enter a value manually.
Quality	The video quality the camera output.	[Setting method] Slide the slider left or right. [Default value] 5

Step 3 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.
- If the message "Apply failed!" is displayed, you must apply for the Parameter Configure permission from an administrator. For details, see 10.1 Configuring a Permission Group.
- If a message indicating that the bit rate is out of range is displayed, enter a new bit rate value.

----End

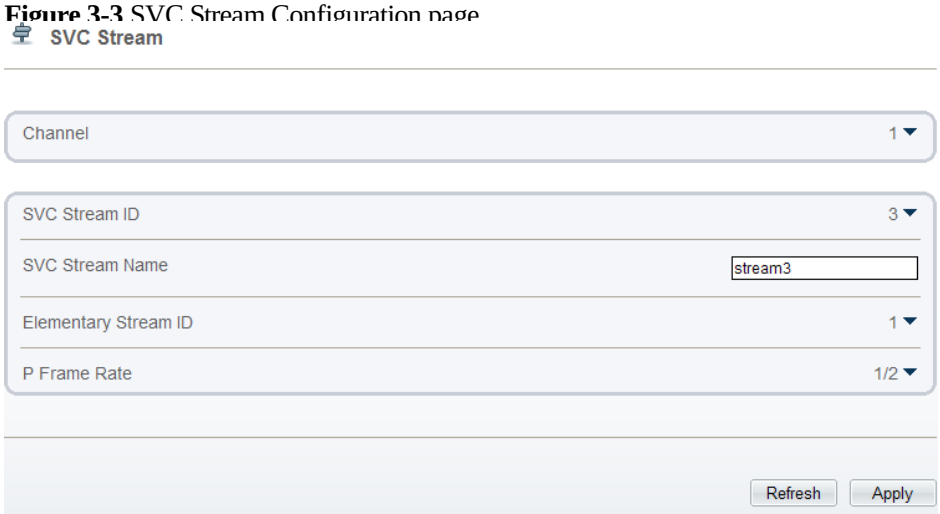
3.3 Setting SVC Stream Parameters

Procedure

Step 1 Click **Stream Configuration> SVC Stream**.

The **SVC Stream** page is displayed, as shown in Figure 3-3.

Figure 3-3 SVC Stream Configuration page



Step 2 Set the parameters according to Table 3-3.

Table 3-3 Stream configuration parameters

Parameter	Description	Setting
Channel	ID of the video output channel. NOTE An IP camera has only one video output channel. Therefore, only the default value **1** is available.	[Setting method] Select a value from the drop-down list box. [Default value] 1
SVC Stream ID	The ID of the SVC stream.	[Setting method] Select a value from the drop-down list box. [Default value] 3

Parameter	Description	Setting
SVC Stream Name	Stream name. NOTE The stream name is combined with chinese character, number, character and underline.	[Setting method] Enter a value manually. The value cannot exceed 32 bytes. [Default value] stream3
Elementary Stream ID	ID of the elementary stream.	[Setting method] Select a value from the drop-down list box.
P Frame Rate	The P frame rate of SVC stream and elementary stream.	[Setting method] Select a value from the drop-down list box.

3.4 Setting Local Network Parameters

Description

Local network parameters include:

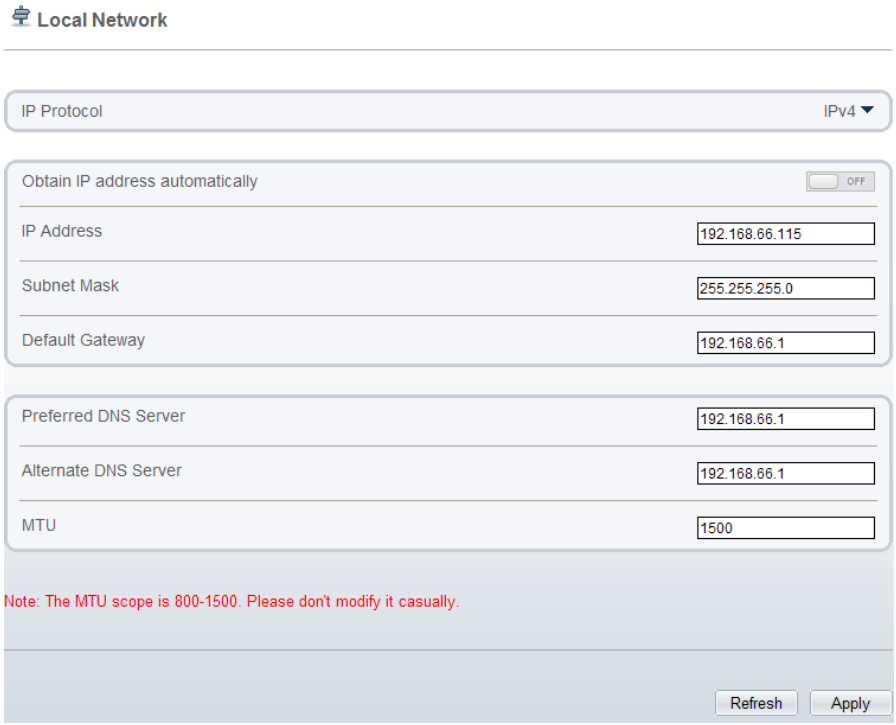
- IP protocol
- IP address
- Subnet mask
- Default gateway
- Dynamic Host Configuration Protocol (DHCP)
- Preferred Domain Name System (DNS) server
- Alternate DNS server
- MTU

Procedure

Step 1 Choose **Device Configuration > Local Network**.

The **Local Network** page is displayed, as shown in Figure 3-4.

Figure 3-4 Local Network page



Step 2 Set the parameters according to Table 3-4.

Table 3-4 Local network parameters

Parameter	Description	Setting
IP Protocol	IPv4 is the IP protocol that uses an address length of 32 bits.	[Setting method] Select a value from the drop-down list box. [Default value] IPv4
Obtain IP address automatically	The device automatically obtains the IP address from the DHCP server.	[Setting method] Click the button on to enable **obtain IP address automatically**. NOTE To query the current IP address of the device, you must query it on the platform based on the device name.
DHCP IP	IP address that the DHCP server assigned to the device.	N/A

Parameter	Description	Setting
IP Address	Device IP address that can be set as required.	[Setting method] Enter a value manually. [Default value] 192.168.0.120
Subnet Mask	Subnet mask of the network adapter.	[Setting method] Enter a value manually. [Default value] 255.255.255.0
Default Gateway	This parameter must be set if the client accesses the device through a gateway.	[Setting method] Enter a value manually. [Default value] 192.168.0.1
Preferred DNS Server	IP address of a DNS server.	[Setting method] Enter a value manually. [Default value] 192.168.0.1
Alternate DNS Server	IP address of a domain server. If the preferred DNS server is faulty, the device uses the alternate DNS server to resolve domain names.	[Setting method] Enter a value manually. [Default value] 192.168.0.2
MTU	Set the maximum value of network transmission data packets.	[Setting method] Enter a value manually. NOTE The MTU value is range from 800 to 1500, the default value is 1500, Please do not change it arbitrarily.

Step 3 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings. The message "Set network parameter success, Please login system again" is displayed. Use the new IP address to log in to the web management system.
- If the message "Invalid IP Address", "Invalid Subnet Mask", "Invalid default gateway", "Invalid primary DNS", or "Invalid space DNS" is displayed, set the parameters correctly.

----End

3.5 Configuring Device Ports

Description

You must configure the HTTP port, control port, Real Time Streaming Protocol (RTSP) port and RTMP port for device route mapping in a LAN.

Procedure

Step 1 Choose **Device Configuration** > **Device Port**.

The **Device Port** page is displayed, as shown in Figure 3-5.

Figure 3-5 Device Port page

Step 2 Set the parameters according to Table 3-5.

Table 3-5 Device port parameters

Parameter	Description	Setting
Control Port	Port used for audio and video transfer and signaling interaction.	[Setting method] Enter a value manually. [Default value] 30001
HTTP Port	Port used in web access.	[Setting method] Enter a value manually. [Default value] 80
RTSP Port	RTSP protocol port.	[Setting method] Enter a value manually. [Default value] 554

Parameter	Description	Setting
RTMP Port	RTMP protocol port.	[Setting method] Enter a value manually. [Default value] 8080

NOTE

It's not recommended to modify the control port, for details about the value ranges of the control port, HTTP port, RTSP port and RTMP port, see the communication matrix.

Step 3 Click **Apply**.

- If the "This operation will lead to the device to restart, continue?" dialog box is displayed, click **Confirm**. The system automatically restarts and saves the settings.
- If the message "Invalid Control Port, Please input an integer between 1025 and 65535" is displayed, enter correct port numbers.

----End

3.6 Viewing the ADSL Network Parameters

Description

If a Point-to-Point Protocol over Ethernet (PPPoE) connection is used, the **ADSL Network** page displays the IP address that is automatically obtained.

Procedure

Choose **Device Configuration** > **ADSL Network**.

The **ADSL Network** page is displayed, as shown in Figure 3-6.

Figure 3-6 ADSL Network page

NOTE

- If the device uses PPPoE to connect to the Internet, the current IP address is displayed in **IP Address**.
- If the device connects to the Internet in other modes, the currently IP address is not displayed in **IP Address**.

3.7 Configuring the Date and Time

Description

On the **Date&Time** page, you can modify the date and time. Parameters that can be set include:

- Time zone and daylight saving time (DST)
- Date and time
- Network Time Protocol (NTP) server

Procedure

Step 1 Choose **Device Configuration** > **Date**.

The **Date** page is displayed, as shown in 错误!未找到引用源。. 错误!未找到引用源。 describes the parameters.

Figure 3-7 Time page

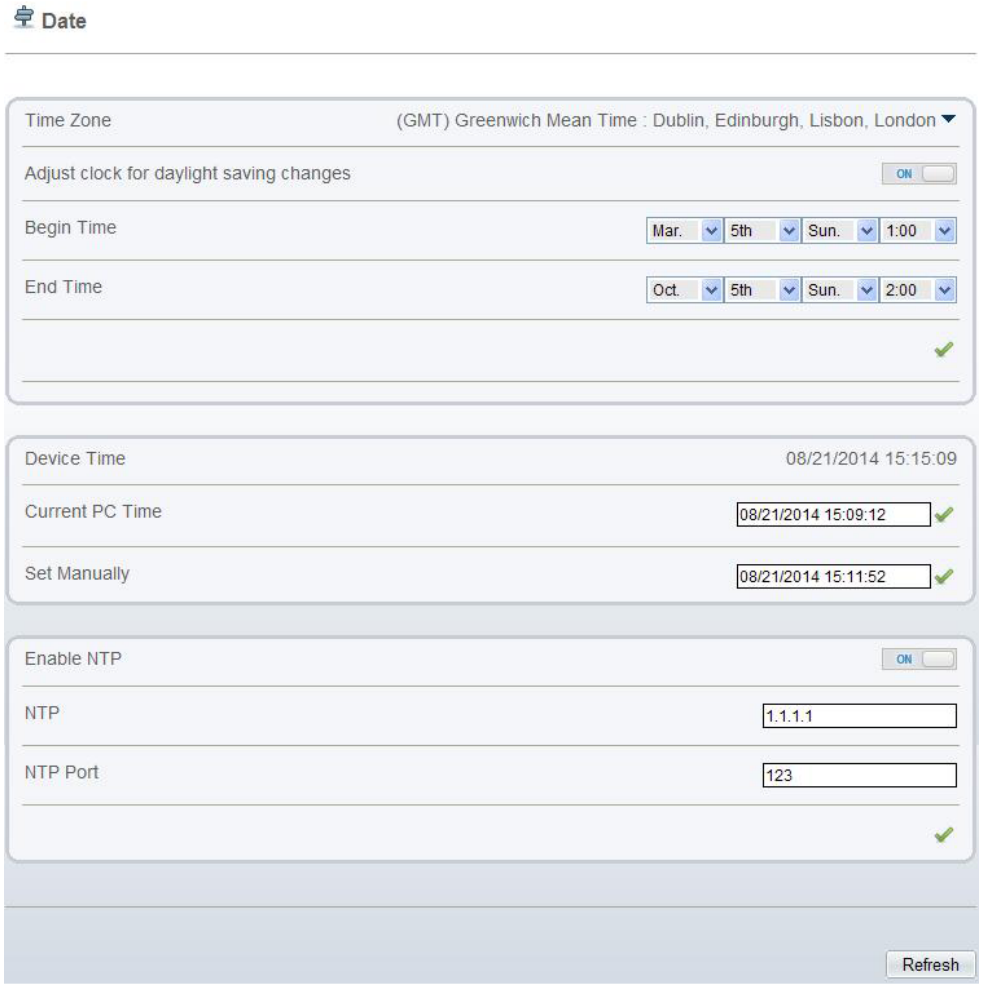


Table 3-6 Time parameters

Parameter	Description	Setting
Time Zone	N/A	[Setting method] Select a value from the drop-down list box. [Default value] Greenwich mean time

Parameter	Description	Setting
Adjust clock for daylight saving changes	When the DST start time arrives, the device time automatically goes forward one hour. When the DST end time arrives, the device time automatically goes backward one hour. NOTE DST is the practice of advancing clocks so that evenings have more daylight and mornings have less. Currently, about 110 countries in the world use DST. Different countries have different DST provisions. Since March 27, 2011, Russia has started to use permanent DST.	[Setting method] Click the button on to enable **Adjust clock for daylight saving changes**.
Device Time	Device display time.	[Setting method] • Synchronize the time from the PC. • Enter a value manually.
Current PC Time	Time on the current PC.	N/A
Set Manually	Enables you to manually set the device time.	[Setting method] Click **Set Manually** and set the date and time in the format *YYYY-MM-DD HH:MM:SS*.
NTP	IP address or domain name of the NTP server.	[Setting method] Click the button on to enable **NTP** and enter a value manually.
NTP Port	Port number of the NTP server.	[Setting method] Enter a value manually. [Default value] 123

Step 2 Select a time zone from the **Time Zone** drop-down list box.

Step 3 (Optional) Click the button on to enable **Adjust clock for daylight saving changes** and specify the DST start time and end time.

Step 4 Modify the device time.

- Synchronizing time from the PC

  Click **Current PC Time**.
- Manually setting the device time
  - Click **Set Manually**.

    A time setting control is displayed.

- Set the date and time.

Step 5 Configure the NTP.

1. Click the button on to enable **NTP**.
2. Enter the IP address or domain name of the NTP server and the port number.

Step 6 Click .

The message "Apply succeed!" is displayed.

Step 7 Click **Confirm**.

The system saves the settings.

----End

3.8 Setting the Channel Name, Video System, and Source Resolution

Procedure

Step 1 Choose **Device Configuration** > **Camera**.

The **Camera** page is displayed, as shown in Figure 3-8. Table 3-7 describes the parameters.

Figure 3-8 Camera page

Table 3-7 Camera parameters

Parameter	Description	Setting
Camera	ID of the video output channel.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Channel Name	Channel name within the length of 0 to 32 bytes.	[Setting method] Enter a value manually.
Video System	The options are as follows: • 50 Hz: corresponds to the PAL system or video systems used in Europe and China mainland. • 60 Hz: corresponds to NTSC system or video systems used in USA and Japan.	[Setting method] Select a value from the drop-down list box. [Default value] 50 Hz NOTE Whether the video system can be changed depends on the device model.

Step 2 Enter a channel name.

NOTE
The channel name must be within the length of 0 to 32 bytes, it is combined with digital and character (except for some special character).

Step 3 Click .

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

NOTE
If the video system and source resolution are modified, the message "The device will be restart, are you sure to modify?" is displayed, and the system automatically saves the settings. The settings take effect after the device restarts.

----End

3.9 Setting OSD Parameters

Description

The on-screen display (OSD) function allows you to display the device name, channel ID and name, time, and other customized contents on videos.

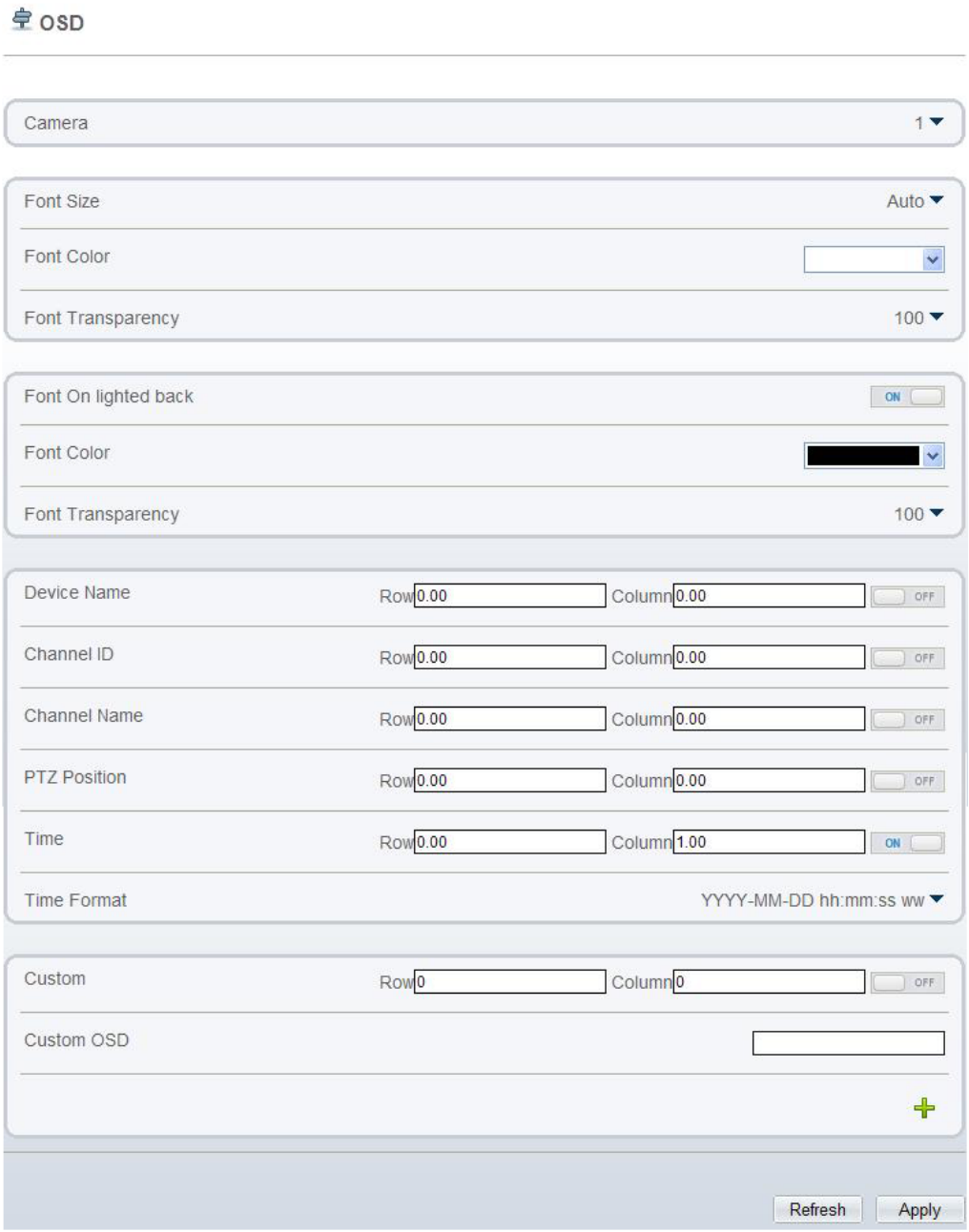
- When the resolution is D1 and CIF, the OSD customed in web interface can show at most 22 words normally.
- The OSD support simplified Chinese, English, digital and some special character only.

Procedure

Step 1 Choose **Device Configuration** > **OSD**.

The **OSD** page is displayed, as shown in Figure 3-9.

Figure 3-9 OSD page



Step 2 Set the OSD font.

Step 3 Set the parameters according to Table 3-8.

NOTE

The size of characters that can be displayed in a row or column varies according to the resolution. When the OSD font is auto:

- If the resolution is 1920 x 1080 and the size of each character is 48 x 48, then the maximum row of OSD is 22 (1080/48), and the maximum column is 40 (1920/48);
- If the resolution is 704 x 576 and the size of each character is 32 x 32, then the maximum row of OSD is 18 (576/32), and the maximum column is 22 (704/32);
- If the resolution is 640 x 360 and the size of each character is 16 x 16, the maximum row of OSD is 22(360/16) characters, and a maximum column is 40(640/16).

Table 3-8 OSD parameters

Parameter	Description	Setting
Camera	ID of the video output channel.	[Setting method] Select a value from the drop-down list box.
Font Size	Set the font size.	[Setting method] Select a value from the drop-down list box. [Default value] Auto
Font Color	Set the font color.	[Setting method] Select a value from the drop-down list box. [Default value] Blank
Font Transparency	Set the font transparency.	[Setting method] Select a value from the drop-down list box. [Default value] 100
Font on lighted back	Enable the font on lighted back.	[Setting method] Click the button on to enable **Font on lighted back**.
Font color	Set the font color on lighted back,	[Setting method] Select a value from the drop-down list box. [Default value] Black
Font Transparency	Set the font transparency on lighted back.	[Setting method] Select a value from the drop-down list box. [Default value] 100
Device Name	Indicates whether to display the device name on videos.	[Setting method] Select the check box.

Parameter	Description	Setting
Channel ID	Indicates whether to display the channel ID.	[Setting method] Select the check box.
PTZ Position	Indicates whether to display the PTZ position.	[Setting method] Select the check box.
Time	Indicates whether to display the time.	[Setting method] Select the check box.
Time Format	Format in which the time is displayed.	[Setting method] Select a value from the drop-down list box. [Default value] YYYY-MM-DD hh:mm:ss ww
Custom	Enables you to enter a line of characters and specify the row and column where the characters start to display. The origin point is located in the upper left corner of the video window.	[Setting method] • Select **Custom**. • Enter values in **Row** and **Column**. • Enter a value within the length of 0 to 32 characters in **Custom OSD**.
Row	Row where the information starts to display.	[Setting method] Enter a value manually. [Default value] 0 (original point)
Column	Column where the information starts to display.	[Setting method] Enter a value manually. [Default value] 0 (original point) NOTE The default value of the time column is **1**.

Step 4 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 5 Click **Confirm**.

The system saves the settings.

----End

3.10 Configuring the Microphone

Description

On the **Microphone** page, you can set the microphone input mode and volume.

Procedure

Step 1 Choose **Device Configuration** > **Microphone**.

The **Microphone** page is displayed, as shown in Figure 3-10. Table 3-9 describes the parameters.

Figure 3-10 Microphone page

Table 3-9 Microphone parameters

Parameter	Description	Setting
Camera	ID of the video output channel.	N/A
Enable Microphone	Indicates whether to enable the microphone function.	[Setting method] Click the button on to enable microphone.
Microphone Type	Microphone types include: • Internal • Line In An active audio input is required.	[Setting method] Select a value from the drop-down list box.

Parameter	Description	Setting
Microphone Volume	Allows you to adjust the microphone volume.	[Setting method] Select a value from the drop-down list box. [Default value] 50 NOTE The value ranges from 0 to 100.

Step 2 Click **Apply**.

The message "Microphone Parameter Updated" is displayed.

Step 3 Click **Confirm**.

The system saves the settings.

----End

3.11 Configuring the Dome PTZ Address

Description

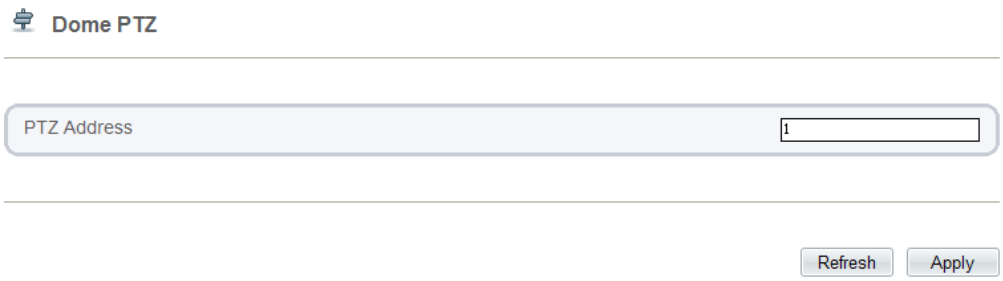
This function is available to an IP dome camera.

Procedure

Step 1 Choose **Device Configuration** > **Dome PTZ**.

The **Dome PTZ** page is displayed, as shown in Figure 3-11.

Figure 3-11 Dome PTZ page



Step 2 Set the dome PTZ address.

NOTE

- The PTZ address must be the same as that of the PTZ connected to the camera.
- The PTZ address is a number within the range of 1 to 255

Step 3 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

----End

3.12 Enabling the Analog Output Function

Preparation

Connect a display device to the VIDEO OUT port.

Description

When the analog output function is enabled, the IP camera can send analog signals to a video server or display device through the VIDEO OUT port.

Procedure

Step 1 Choose **Device Configuration** > **CVBS config**.

The **BNC Output** page is displayed, as shown in Figure 3-12.

Figure 3-12 BNC config page

Step 2 Click the button on to enable **BNC Output**.

Step 3 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

----End

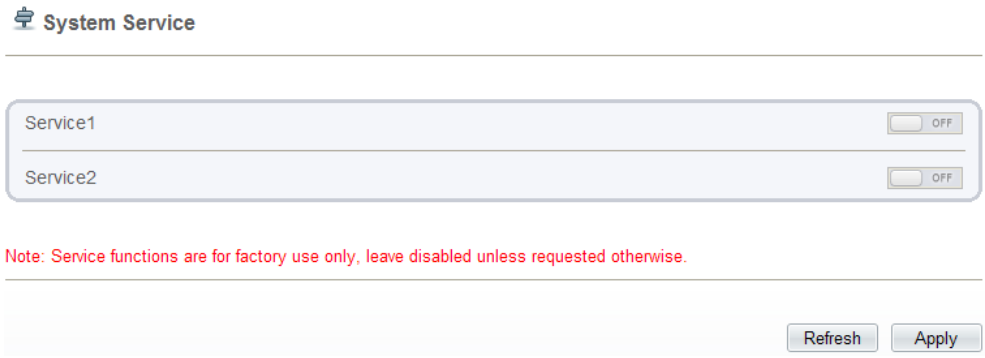
3.13 System Service

Procedure

Step 1 Choose **Device Configuration** > **System Service**.

The **System Service** page is displayed, as shown in Figure 3-13.

Figure 3-13 System Service page



Step 2 Click the button on to enable **Service1** or **Service2**.

NOTE Service functions are for factory use only, leave disabled unless requested otherwise.

Step 3 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

----End

3.14 Configuring the System Language

Description

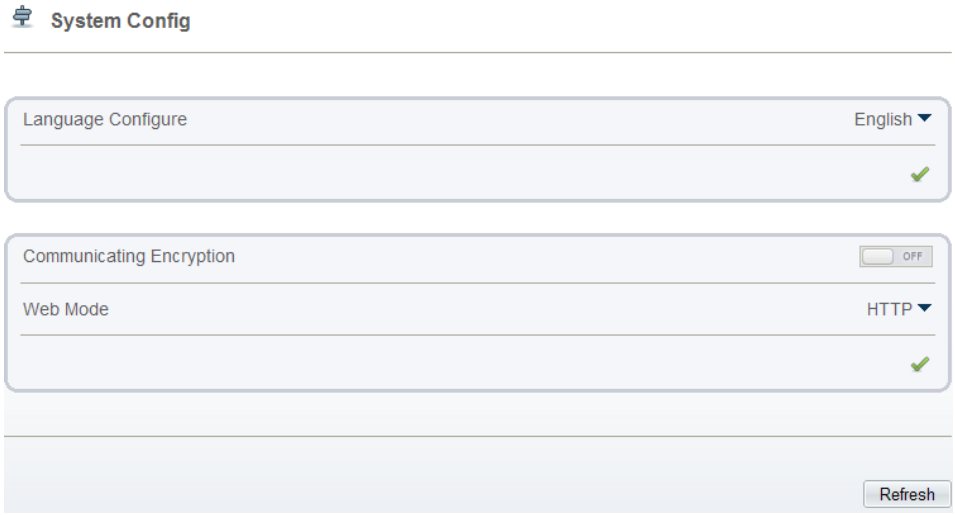
On the **System Config** page, you can configure the language used by the time displayed in the video window and alarm emails and web mode.

Procedure

Step 1 Choose **Device Configuration** > **System Configuration**.

The **System Config** page is displayed, as shown in Figure 3-14.

Figure 3-14 System config page



Step 2 Select a language from the language drop-down list box.

Step 3 Click .

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

Step 5 Click the button on to enable **Communicating encryption**.

Step 6 Select a web mode from the web mode drop-down list box.

Step 7 Click .

The message "This operation will lead to the device to restart, continue?".

Step 8 Click **Confirm**.

The message "Apply succeed!" is displayed, the system restart.

----End

4 Configuring External Devices

4.1 Setting External PTZ Parameters

Description

When the IP camera connects to an external PTZ, you can set external PTZ parameters, such as **PTZ Protocol**, **PTZ Address**, **Baud Rate**, and **Data Bits**.

CAUTION

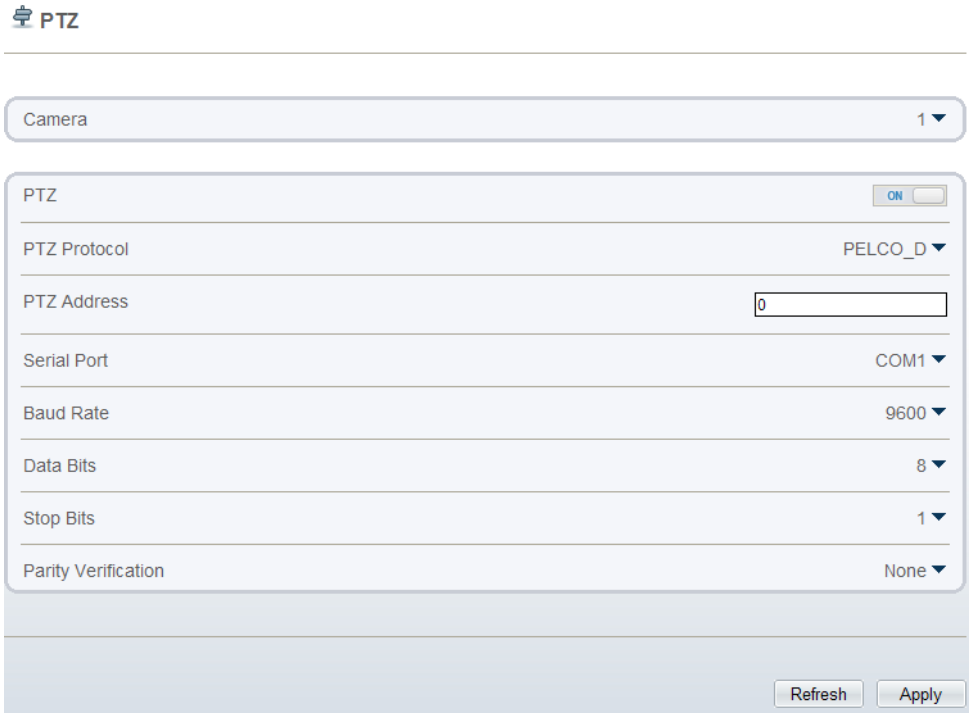
This function is available only to a camera connected to an external PTZ. The PTZ address must be set to the address of the external PTZ; otherwise, the external PTZ cannot be used.

Procedure

Step 1 Choose **External Device** > **PTZ**.

The **PTZ** page is displayed, as shown in Figure 4-1.

Figure 4-1 PTZ page



Step 2 Set the parameters according to Table 4-1.

Table 4-1 PTZ parameters

Parameter	Description	Setting
PTZ	Enable this function if the device connects to an external PTZ. NOTE This check box is dimmed for an IP dome camera.	[Setting method] Click the button on to enable PTZ configuration.
PTZ Protocol	Protocol used by the external PTZ.	[Setting method] Select a value from the drop-down list box. NOTE When configuring the external PTZ parameters, these parameters must match the settings on the external PTZ.
PTZ Address	Address of the external PTZ.	
Serial Port	The default value is **COM1**.	
Baud Rate	Baud rate used by the external PTZ. The value ranges from 300 bit/s to 115200 bit/s. The default value is **4800** bit/s.	
Data Bits	The value must match the setting used by the external PTZ. It can be set to a value ranging from 4 to 8. Generally, the value is 8.	
Stop Bits	N/A	
Parity Verification	N/A	

Step 3 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

----End

4.2 Setting External PTZ Keyboard Parameters

NOTE

You need to set external PTZ keyboard parameters only for an IP dome camera.

Description

When the IP camera connects to an external PTZ keyboard, you can set external PTZ keyboard parameters, such as **Interface Type**, **Serial Port**, **Baud Rate**, and **Data Bits**.

CAUTION

The camera keyboard address must be set to the address of the external PTZ keyboard; otherwise, the external PTZ keyboard cannot be used.

Procedure

Step 1 Choose **External Device** > **PTZ Keyboard**.

The **PTZ Keyboard** page is displayed, as shown in Figure 4-2.

Figure 4-2 PTZ Keyboard page

Step 2 Set the parameters according to Table 4-2.

Table 4-2 PTZ keyboard parameters

Parameter	Description	Setting
Enable	Click the button on to enable PTZ keyboard configuration if the device connects to an external PTZ keyboard.	[Default value] OFF
Interface Type	Interface type used by the external PTZ board.	[Setting method] Select a value from the drop-down list box.
Serial Port	The default value is **COM1**.	
Baud Rate	Baud rate used by the external PTZ keyboard. The value ranges from 300 bit/s to 115200 bit/s. The default value is **4800** bit/s.	
Data Bits	The value must match the setting used by the external PTZ keyboard.	
Stop Bits	The value must match the setting used by the external PTZ keyboard.	
Parity Verification	The value must match the setting used by the external PTZ keyboard.	

Step 3 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

----End

5 Configuring the Alarm Function

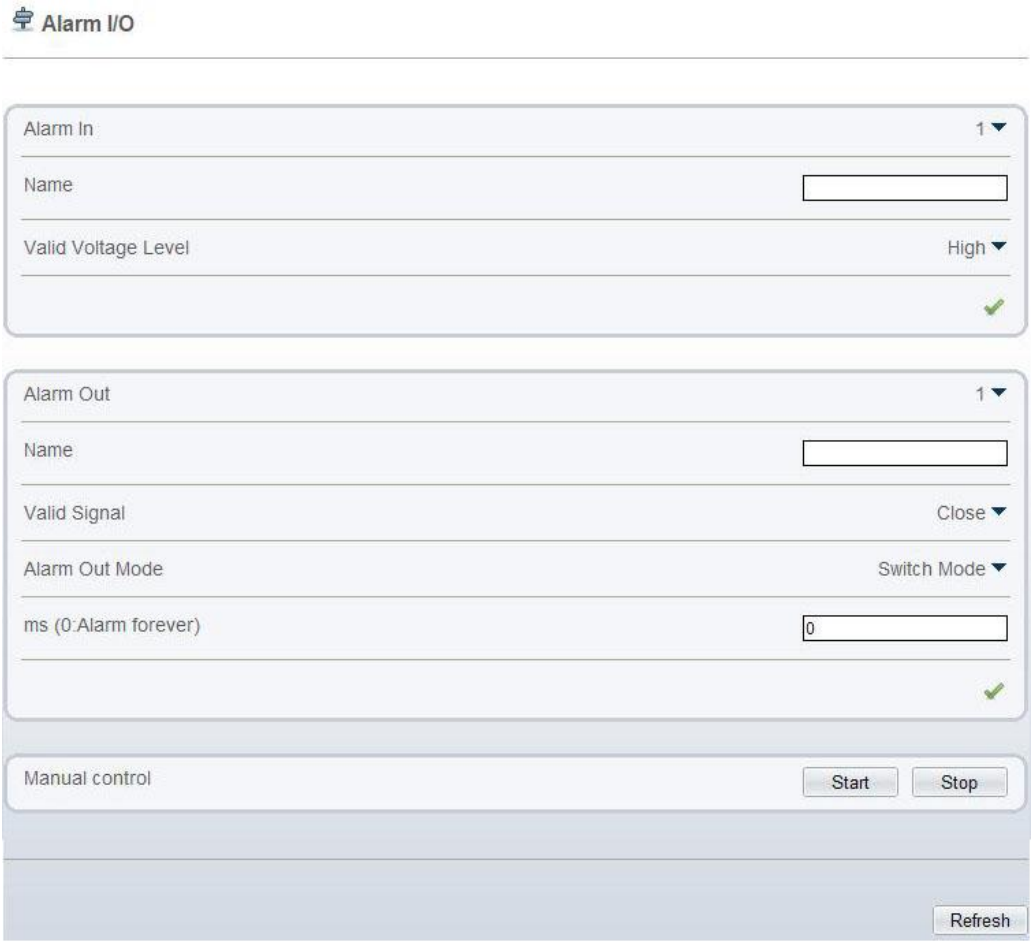
5.1 Setting I/O Alarm Parameters

Procedure

Step 1 Choose **Alarm Configuration** > **Alarm I/O**.

The **Alarm I/O** page is displayed, as shown in Figure 5-1.

Figure 5-1 Alarm I/O page



Step 2 Set the parameters according to Table 5-1.

Table 5-1 Alarm I/O parameters

Parameter	Description	Setting
Alarm In	ID of the alarm input channel. NOTE The number of alarm input channels depends on the device model.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Name	Alarm input channel name.	[Setting method] Enter a value manually. [Value range] 0 to 32 bytes
Valid Voltage Level	For the high speed dome network camera, in alarm configuration web: • If the alarm level is set to **High**, the camera will generate alarm signal when the COM terminal and the IN terminal is connected. • If the alarm level is set to **Low**, the camera will generate alarm signal when the COM terminal and the IN terminal is disconnected. For other network camera , in alarm configuration web: • If the alarm level is set to **Low**, the camera will alarm when the alarm input terminal signal is the high level (DC 5V~12V). • If the alarm level is set to **High**, the camera will alarm when the alarm input terminal signal is the low level (0V).	[Setting method] Select a value from the drop-down list box. [Default value] High
Alarm Out	ID of the alarm output channel. NOTE The number of alarm output channels depends on the device model.	[Setting method] Select a value from the drop-down list box. [Default value] 1
Name	Alarm output channel name.	[Value range] 0 to 32 bytes
Valid Signal	The options are as follows: • **Close**: An alarm is generated when an external alarm signal is received. • **Open**: An alarm is generated when no external alarm signal is received.	[Setting method] Select a value from the drop-down list box. [Default value] Close

Parameter	Description	Setting
Alarm Out Mode	When the device receives I/O alarm signals, the device sends the alarm information to an external alarm device in the mode specified by this parameter. The options include the switch mode and pulse mode. NOTE ● If the switch mode is used, the alarm frequency of the device must be the same as that of the external alarm device. ● If the pulse mode is used, the alarm frequency of the external alarm device can be configured.	[Setting method] Select a value from the drop-down list box. [Default value] Switch Mode
Frequency	Frequency of the pulse generated by the device when the device receives I/O alarm signals. NOTE This parameter is valid only when the square wave alarm input mode is customed.	[Setting method] Enter a value manually. [Default value] 0
ms (0: Alarm forever)	Alarm output duration. The value **0** indicates that the alarm remains valid.	[Setting method] Enter a value manually. [Default value] 0 [Value range] 0 to 86400 seconds
Manual Control	Control the alarm output.	-

Step 3 Click  .

The message "Apply succeed!"is displayed.

Step 4 Click **Confirm**.

The system saves the settings.

----End

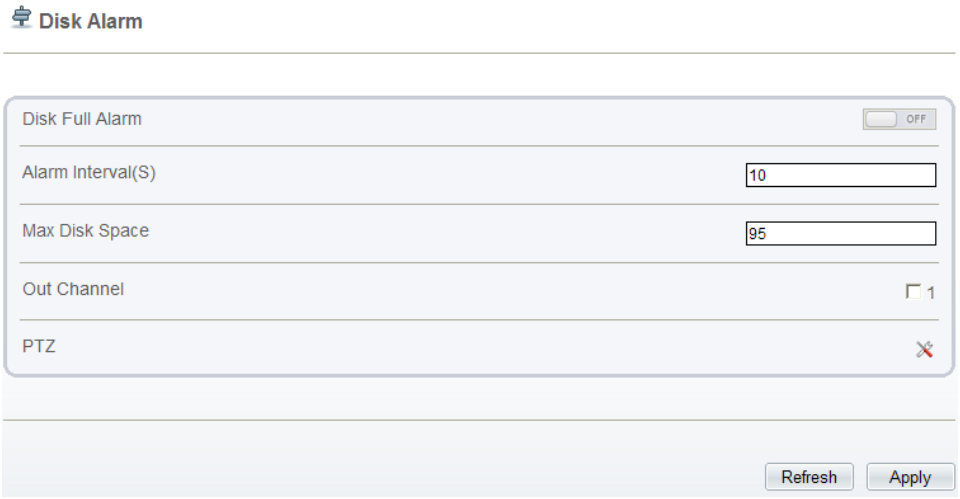
5.2 Setting Disk Alarm Parameters

Procedure

Step 1 Choose **Alarm Configuration** > **Disk Alarm**.

The **Disk Alarm** page is displayed, as shown in Figure 5-4.

Figure 5-2 Disk Alarm page



Step 2 Click the button on to enable disk alarm.

Configure the **alarm interval** and **Max Disk Space** parameters.

Step 3 Select **Out channel** number.

Step 4 Click  and configure the PTZ linkage policy.

Set the **Channel**, **PTZ Type**, and **Value** parameters.

Step 5 Click **OK**.

Step 6 Click **Apply**.

The message "Apply succeed!"is displayed.

Step 7 Click **Confirm**.

The system saves the settings.

----End

5.3 Setting Network Alarm Parameters

Procedure

Step 1 Choose **Alarm Configuration** > **Network Alarm**.

The **Network Alarm** page is displayed, as shown in Figure 5-3.

Figure 5-3 Network Alarm page

Step 2 Click the button on to enable exceptional alarm.

Step 3 Configure the network exceptional alarm interval.

Step 4 Select **Out Channel** number.

Step 5 Click  and configure the PTZ linkage policy.

Set the **Channel**, **PTZ Type**, and **Value** parameters.

Step 6 Click **OK**.

Step 7 Click **Apply**.

The message "Apply succeed!"is displayed.

Step 8 Click **Confirm**.

The system saves the settings.

----End

5.4 Setting I/O Alarm Linkage Parameters

Prerequisite

The PTZ linkage policy is applicable only to a camera with the PTZ or connected to an external PTZ.

Description

Alarm linkage refers to linkage alarm output and camera PTZ linkage. When receiving an alarm from the alarm input port, the camera performs linkage alarm output and enables PTZ linkage based on the preceding parameters, and rotates based on the linkage policy.

On the **I/O Alarm Linkage** page, you can perform the following operations:

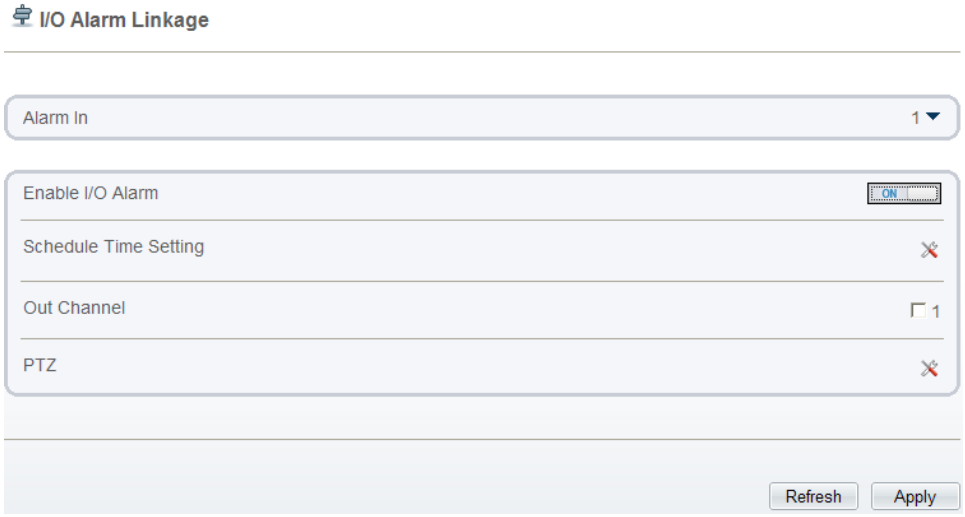
- Enable the I/O alarm function.
- Configure the I/O alarm schedule.
- Configure the alarm output channel.
- Configure the PTZ linkage policy.

Procedure

Step 1 Choose **Alarm Configuration** > **I/O Alarm Linkage**.

The **I/O Alarm Linkage** page is displayed, as shown in Figure 5-4.

Figure 5-4 I/O Alarm Linkage page



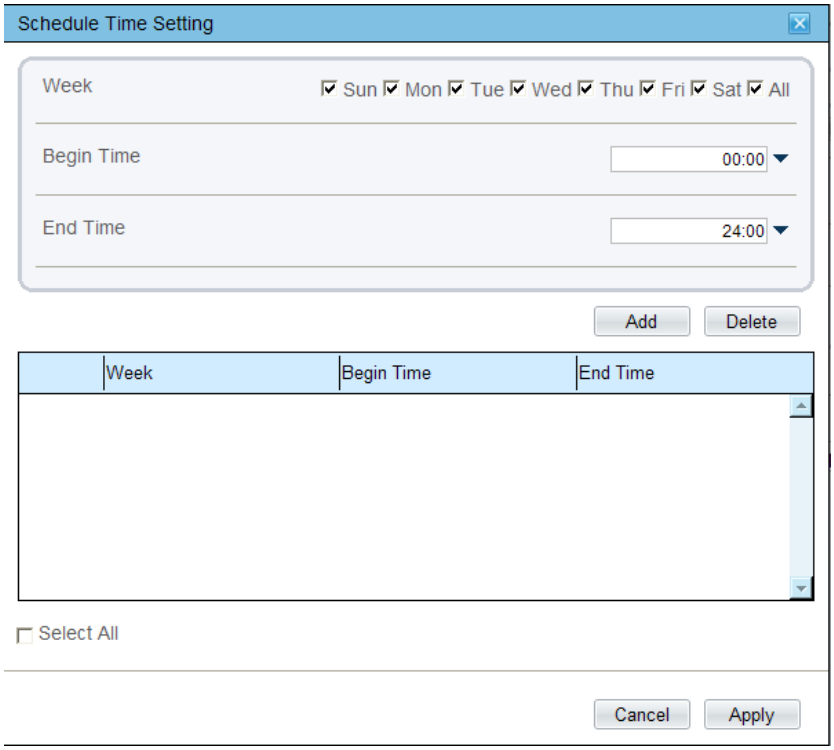
Step 2 Click the button on to enable I/O Alarm.

Step 3 Configure the I/O alarm schedule.

1. Click .

   The **Schedule Time Setting** page is displayed, as shown in Figure 5-5.

Figure 5-5 Schedule Time Setting page



2. Configure time segments as required.
3. Click **Apply**.
   The parameters are configured successfully.

Step 4 Select **Out Channel**.

Step 5 Click  on the right of PTZ parameters and configure the PTZ linkage policy.

Set the **Camera**, **PTZ Type**, and **Name** parameters.

Step 6 Click **OK**.

Step 7 Click **Apply**.

The message "Apply succeed!"is displayed.

Step 8 Click **OK**.

The system saves the settings.

----End

5.5 Setting Motion Detection Alarm Linkage Parameters

Description

On the **Motion Alarm** page, you can perform the following operations:

- Enable the motion detection function.
- Set the motion detection arming time.
- Set the motion detection area.
- Configure the motion alarm output channel.

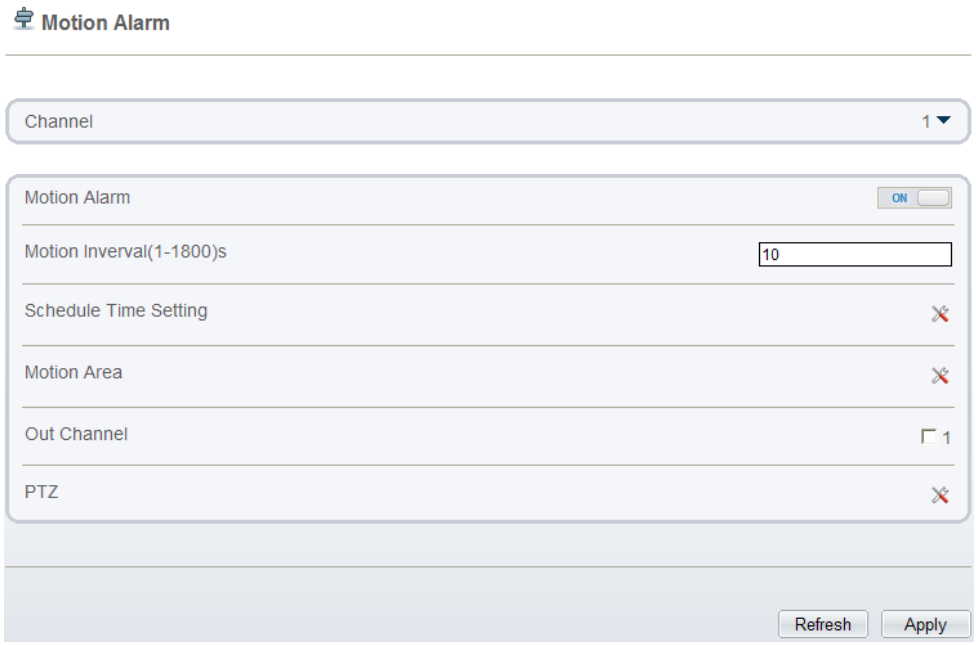
  When the alarm output function is enabled and the camera detects that an object moves into the motion detection area within the schedule time, the camera generates an alarm and triggers linkage alarm output.
- Configure the PTZ linkage policy

Procedure

Step 1 Choose **Alarm Configuration** > **Motion Alarm**.

The **Motion Alarm** page is displayed, as shown in Figure 5-6.

Figure 5-6 Motion Alarm page



Step 2 Click the button on to enable motion alarm.

Step 3 Configure the motion interval.

Step 4 Configure the schedule time setting.

For details about how to set **Schedule**, see 5.4 Step 3.

Step 5 Configure the detection area.

1. Click .

   The **Motion Area Setting** page is displayed, as shown in Figure 5-7.

Figure 5-7 Motion Area Setting page

2. Press and hold the left mouse button, and drag in the video area to draw a detection area.

NOTE

- Click **Clear** to delete a detection area.
- Click **Reverse** to select the area out of specified frames as the detection area.

Step 6 Select the **Out Channel**.

Step 7 Configure the PTZ linkage policy.

For details about how to set **PTZ**, see 5.4 Step 4.

Step 8 Click **OK**.

Step 9 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 10 Click **Confirm**.

The system saves the settings.

----End

6 Configuring the Recording Function

6.1 Configuring a Recording Policy

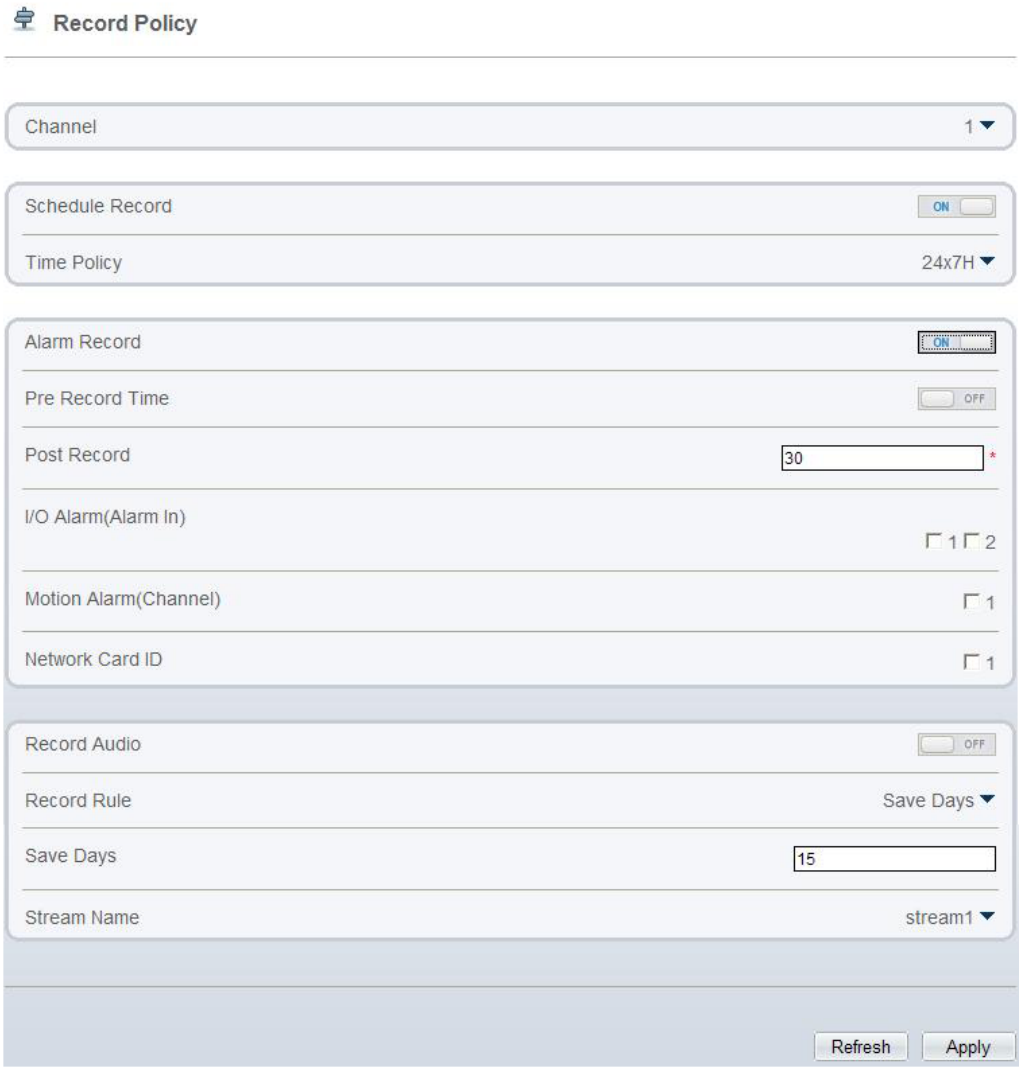
You can configure the scheduled recording function, alarm recording function, recording quality, and recording rules.

Procedure

Step 1 Choose **Local Record** > **Record Policy**.

The **Record Policy** page is displayed, as shown in Figure 6-1.

Figure 6-1 Record Policy page



Step 2 Set the parameters according to Table 6-1.

Table 6-1 Recording policy parameters

Parameter	Description	Setting
Channel	ID of the video output channel.	[Setting method] Select a value from the drop-down list box. [Default value] 1

Parameter	Description	Setting
Schedule Record	Enables schedule record that you can configure the time policy.	[Setting method] Click the button on to enable schedule record. [Default value] OFF
Time Policy	Indicates whether to record videos around the clock. The options are as follows: • 24*7H Record • Schedule	[Setting method] Select the check box.
Alarm Record	Function that triggers alarm recording when an alarm is found.	[Setting method] Click the button on to enable alarm record.
Pre Record Time	Enables users to query videos that are shot in a specified duration before an alarm is generated. The pre-recording duration depends on the bit rate. A higher bit rate means a short duration. NOTE Pre-recording duration = 5 MB (5 x 1024 kbit/s, cache size)/Bit rate. The maximum value is 30 seconds.	[Setting method] Click the button on to set prerecord duration.
Post Record	Recording duration (in seconds) after an alarm is generated.	[Setting method] Enter a value manually.
I/O Alarm(Alarm In)	ID of the alarm input channel.	[Setting method] Select the check box. NOTE Set the parameter based on the site requirements.
Motion Alarm(Channel)	ID of the motion detection alarm channel.	[Setting method] Select the check box. NOTE Set the parameter based on the site requirements.
Network card ID	ID of the exceptional alarm network card.	[Setting method] Select the check box. NOTE You have to insert the SD card and format it to enable this function,

Parameter	Description	Setting
Record Audio	Indicates whether to record audios together with videos.	[Setting method] Click the button on to enable record audio.
Record Rule	Rule for saving recordings. The options are as follows: • **Cycle Write**: Saves recordings in cycles. • **Save Days:** Duration (in days) for saving a recording. The duration can be a maximum of 99999 days. NOTE The value **0** indicates that recordings are not overwritten.	[Setting method] Select a value from the drop-down list box.
Save days	Save days of the record.	[Setting method] Enter a value manually.
Stream Name	Name of the stream.	[Setting method] Select a value from the drop-down list box.

Step 3 Configure a recording plan.

You can configure the system to record videos around the clock or in schedule.

For details about how to set **Schedule**, see 5.4 Step 3.

Step 4 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.
- If other information is displayed, set the parameters correctly.

-----End

6.2 Configuring a Recording Directory

Description

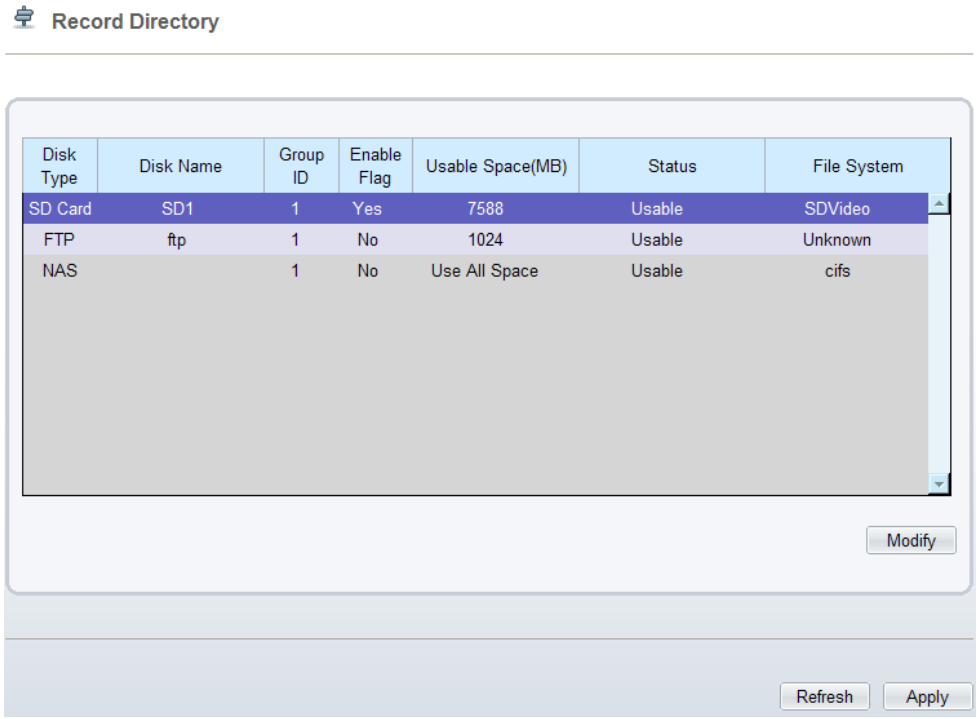
Recordings can be stored in an SD card.

Procedure

Step 1 Choose **Local Record** > **Record Directory**.

The **Record Directory** page is displayed, as shown in Figure 6-2.

Figure 6-2 Record Directory page



Step 2 Set the parameters according to Table 6-2.

Table 6-2 Recording directory parameters

Parameter	Description	Setting
Disk Name	Recording disk name. The camera automatically detects recording disk names. The option is as follows: SD1	N/A
Disk Type	Recording directory type, which can be an SD card.	[Setting method] The parameter cannot be set manually.
Group ID	Indicates the group ID.	
Enable Flag	Indicates whether to enable the recording directory.	
Usable Space	Maximum disk space read automatically.	
Status	Status of the connection between the current camera and recording directory detected automatically.	
File System	File system type.	

6.3 Configuring the SD Card Recording

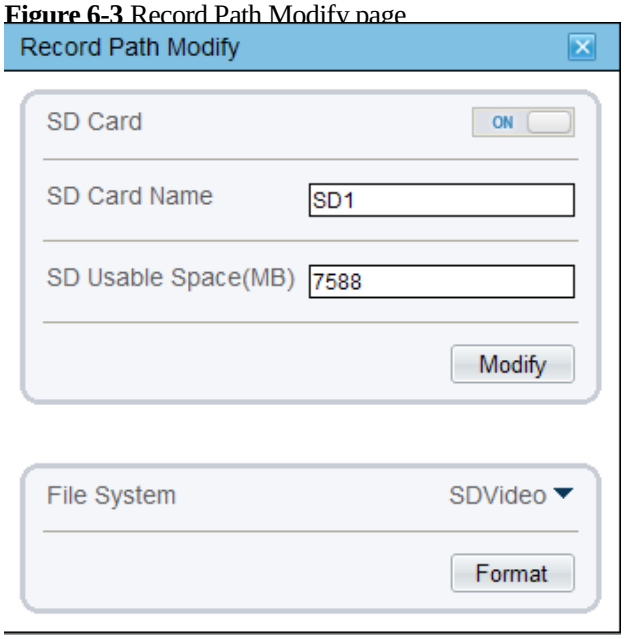
Procedure

Step 1 Choose **Local Record** > **Record Directory**.

Step 2 Click **Modify**.

The **Record Path Modify** page is displayed, as shown in Figure 6-3.

Figure 6-3 Record Path Modify page



Step 3 Set the parameters according to Table 6-3.

Table 6-3 SD card recording parameters

Parameter	Description	Setting
SD Card Name	Recording disk name. The camera automatically detects recording disk names. The option is as follows: SD1	N/A
SD Usable Space(MB)	Maximum disk space read automatically.	[Setting method] The parameter cannot be set manually.
File System	Method to organize files on the SD card.	[Setting method] Select a value from the drop-down list box.

Parameter	Description	Setting
Format	Button for formatting the SD card.	[Setting method] Click the button. NOTE • You need to format an SD card when using it for the first time. • Formatting is effective only when the scheduled recording function is disabled.

Step 4 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 5 Click **Confirm**.

The system saves the settings.

-----End

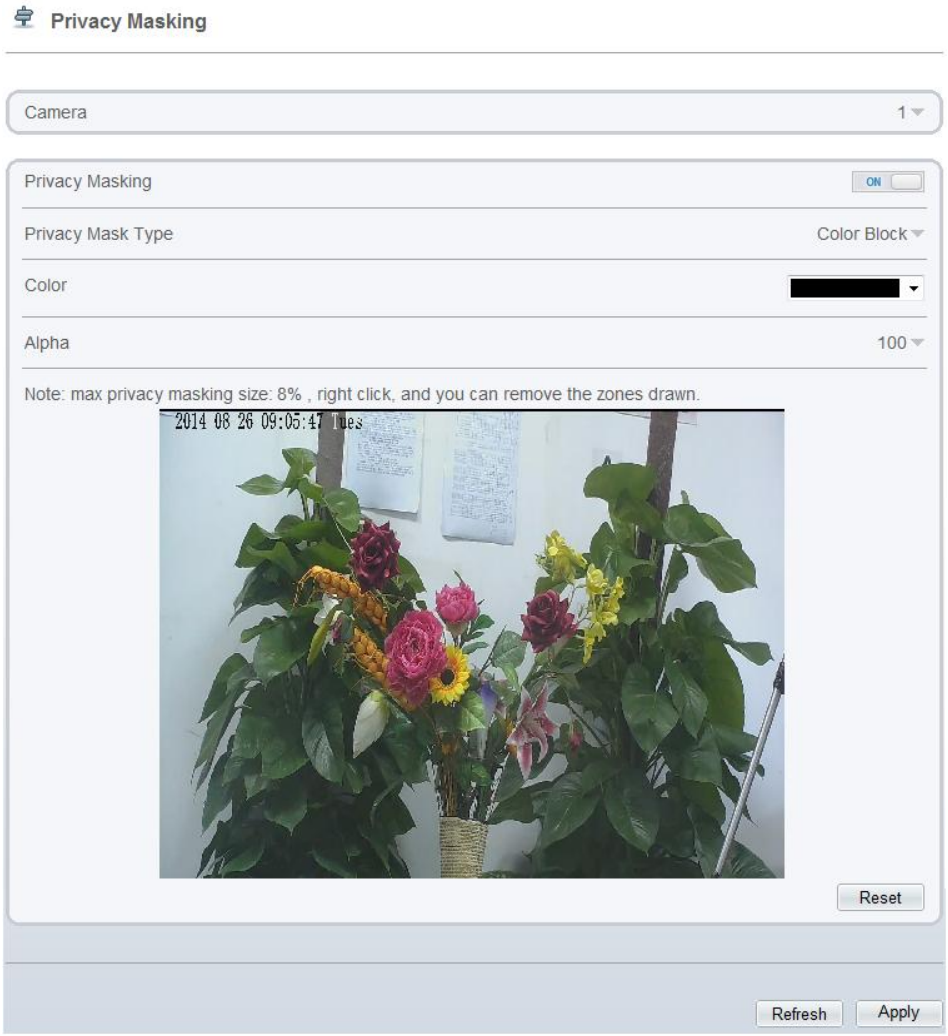
7 Configuring the Privacy Mask Function

Procedure

Step 1 Click **Privacy Masking**.

The **Privacy Masking** page is displayed, as shown in Figure 7-1.

Figure 7-1 Privacy Masking page



Step 2 Click the button on to enable Privacy Masking, and configure the privacy mask type, color and alpha parameters.

Step 3 Press and hold the left mouse button, and drag on the preview image to cover the part to be masked.

NOTE
- The maximum percentage of an image that can be masked depends on the device model. Read the tip displayed on the page. A maximum of five areas can be masked.
- You can click **Reset** to configure the masked areas again.

Step 4 Click **Apply**.

The message "Apply succeed!" is displayed.

Step 5 Click **Confirm**.

The system saves the settings.

----End

8 Configuring the Network Service

8.1 Setting PPPoE Parameters

Preparation

Obtain the PPPoE user name and password from the network carrier.

Description

If a PPPoE connection is used, you need to enter the user name and password on the **PPPoE** page. After you restart the device, the PPPoE settings take effect and the device obtains a public IP address.

Procedure

Step 1 Choose **Network Service** > **PPPoE**.

The **PPPoE** page is displayed, as shown in Figure 8-1.

Figure 8-1 PPPoE page

Step 2 Click the button on to enable **PPPoE**.

Step 3 Set the parameters according to Table 8-1.

Table 8-1 PPPoE parameters

Parameter	Description	Setting
PPPoE	Indicates whether to enable the PPPoE service.	[Setting method] Click the button on. [Default value] OFF
Accounts	PPPoE user name provided by the network carrier.	[Setting method] Enter a value manually.
Password	Password provided by the network carrier.	[Setting method] Enter a value manually.

Step 4 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.
- If other information is displayed, set the parameters correctly.

----End

8.2 Setting DDNS Parameters

Preparation

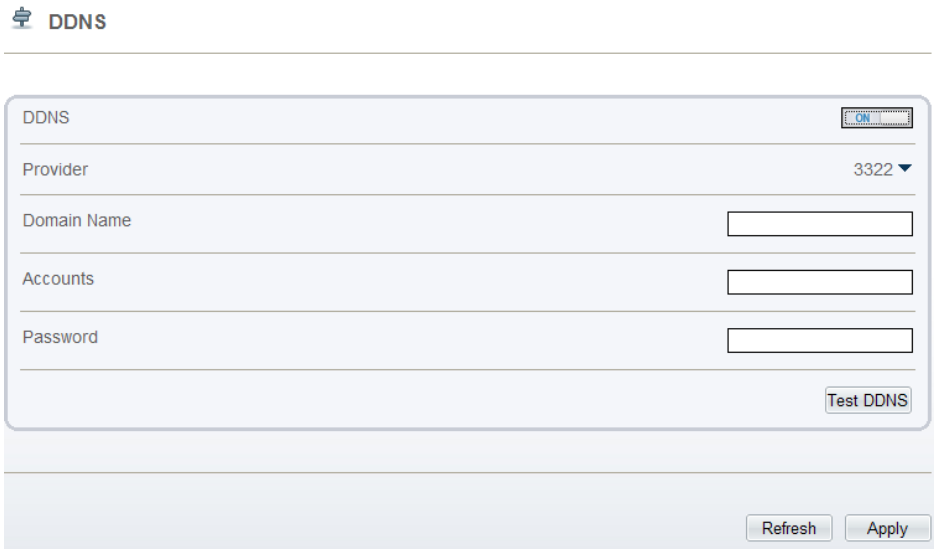
Connect the specified camera to the Internet, and obtain the user name and password for logging into the Dynamic Domain Name System (DDNS) server.

Procedure

Step 1 Choose **Network Service** > **DDNS**.

The **DDNS** page is displayed, as shown in Figure 8-2.

Figure 8-2 DDNS page



Step 2 Set the parameters according to Table 8-2.

Table 8-2 DDNS parameters

Parameter	Description	Setting
DDNS	Indicates whether to enable the DDNS service.	[Setting method] Click the button on to enable DDNS. [Default value] OFF
Provider	DDNS service provider. Currently, only 3322 and DynDns are supported.	[Setting method] Select a value from the drop-down list box. [Default value] 3322 NOTE Set this parameter based on the site requirements.
Domain Name	Domain name customized by a user.	[Setting method] Enter a value manually. [Default value] Blank
Accounts	User name for logging in to the DDNS server.	[Setting method] Enter a value manually. [Default value] Blank

Parameter	Description	Setting
Password	Password for logging in to the DDNS server.	[Setting method] Enter a value manually. [Default value] Blank

Step 3 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.
- If other information is displayed, set the parameters correctly.

----End

9 Service Center

9.1 Configuring the Alarm Center

Description

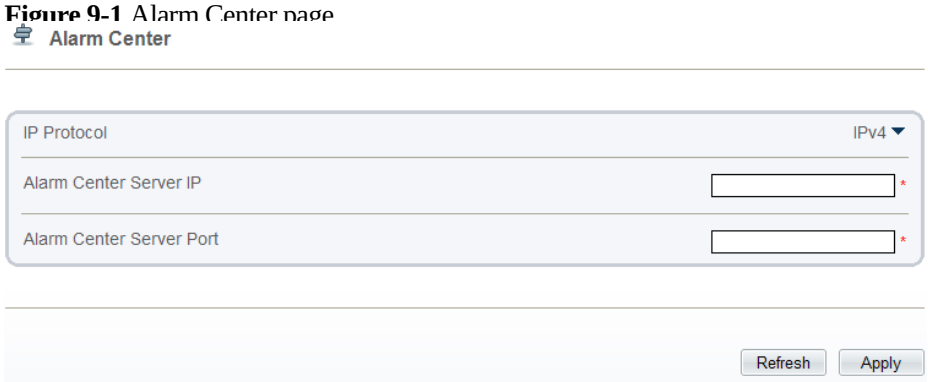
When the device receives alarm information, it can send the alarm information to an alarm center or send an alarm image to a recipient.

Procedure

Step 1 Choose **Service Center** > **Alarm Center**.

The **Alarm Center** page is displayed, as shown in Figure 9-1.

Figure 9-1 Alarm Center page



Step 2 Set **Alarm Center Server IP** to the IP address of the platform server.

Step 3 Set **Alarm Center Server Port** to the required alarm center port number.

Step 4 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.
- If other information is displayed, set the parameters correctly.

----End

9.2 Setting SMTP Parameters

Description

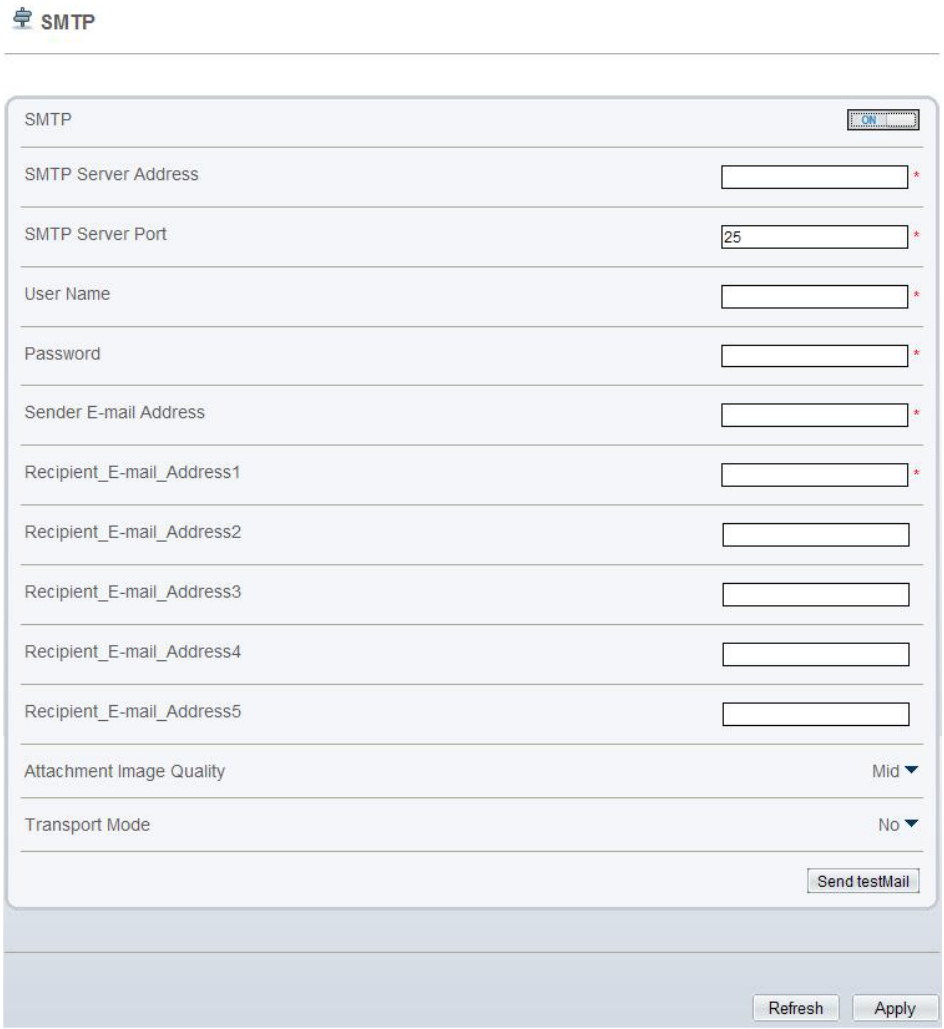
If the Simple Mail Transfer Protocol (SMTP) function is enabled, the device automatically sends JPG images and alarm information to specified email addresses when an alarm is generated.

Procedure

Step 1 Choose **Service Center** > **SMTP**.

The **SMTP** page is displayed, as shown in Figure 9-2.

Figure 9-2 SMTP page



Step 2 Set the parameters according to Table 9-1.

NOTE

Parameters marked with * are mandatory.

Table 9-1 SMTP parameters

Parameter	Description	Setting
SMTP	N/A	[Setting method] Select the check box.
SMTP Server Address	IP address of the SMTP server.	[Setting method] Enter a value manually.
SMTP Server Port	Port number of the SMTP server.	[Setting method] Enter a value manually. [Default value] 25
User Name	User name of the mailbox for sending emails.	[Setting method] Enter a value manually.
Password	Password of the mailbox for sending emails.	[Setting method] Enter a value manually.
Sender E-mail Address	Mailbox for sending emails.	[Setting method] Enter a value manually.
Recipient_E-mail_Address1	(Mandatory) Email address of recipient 1.	[Setting method] Enter a value manually.
Recipient_E-mail_Address2	(Optional) Email address of recipient 2.	
Recipient_E-mail_Address3	(Optional) Email address of recipient 3.	
Recipient_E-mail_Address4	(Optional) Email address of recipient 4.	
Recipient_E-mail_Address5	(Optional) Email address of recipient 5.	
Attachment Image Quality	A higher-quality image means more storage space. Set this parameter based on the site requirement.	N/A
Transport Mode	Email encryption mode. Set this parameter based on the encryption modes supported by the SMTP server.	[Setting method] Select a value from the drop-down list box. [Default value] No Encrypted

Step 3 Click **Apply**.

- If the message "Apply succeed!" is displayed, click **Confirm**. The system saves the settings.

- If other information is displayed, set the parameters correctly.

----End

10 Configuring User Permissions

10.1 Configuring a Permission Group

Description

You can add, modify, and delete permission groups, and select available permissions to grant them to the corresponding group.

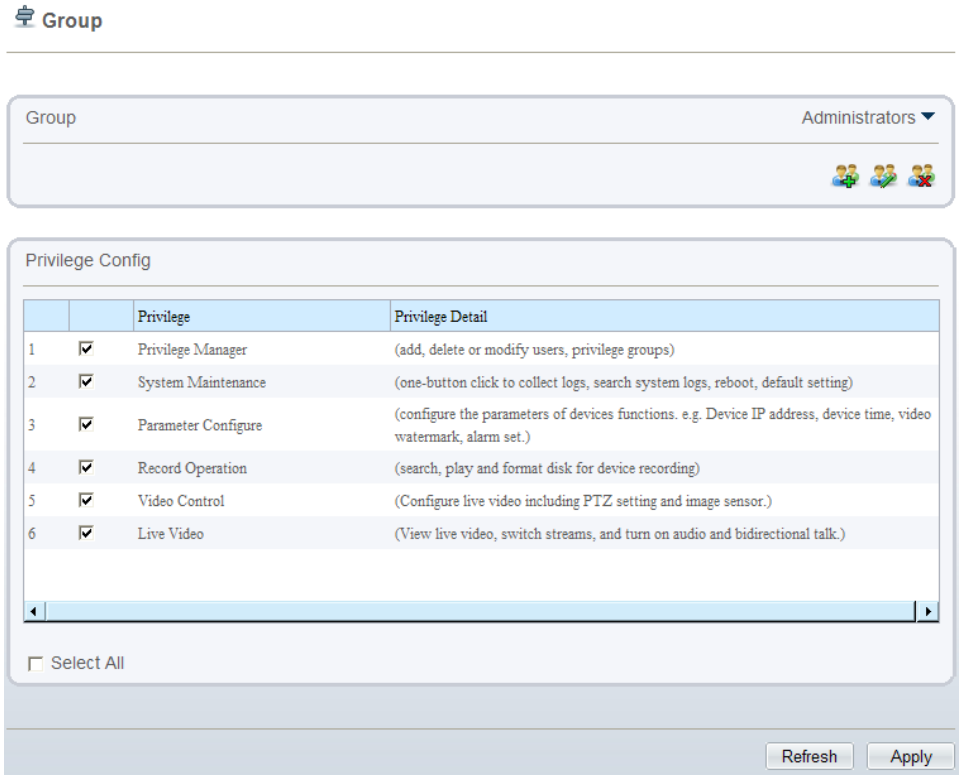
NOTE
Only the users with the **Privilege Manage** permission can access the **Group** and **User** pages.

Procedure

Step 1 Choose **Privilege Manager** > **Group**.

The **Group** page is displayed, as shown in Figure 10-1.

Figure 10-1 Group page



NOTE

The default permission groups are **Administrators**, **Operator**, and **Media user**, where the **Administrators** group cannot be deleted. Their permissions are described as follows:

- Administrators: Privilege Manage, System Maintenance, Parameter Configure, Record Operation, Video Control, and Live Video
- Operator: System Maintenance, Parameter Configure, Record Operation, Video Control, and Live Video
- Media user: Video Control and Live Video

Step 2 Add, modify, or delete a group as required.

Table 10-1 describes the operations.

Table 10-1 Operation description

Function	Procedure	Description
Add	1. Click  . The **Add Group** page is displayed. 2. Enter a group name. 3. Click **OK**. The group is added successfully. The **Group** page is displayed. 4. Select the group from the Group drop-down list box. 5. Assign permissions to the group.	Add a group.

Function	Procedure	Description
	6. Click **Apply**. The permission of the added group is set successfully.	
Modify	1. Click  . The **Modify Group** page is displayed. 2. Modify the group name. 3. Click **OK**. The group is modified successfully. The **Group** page is displayed.	Modify the name of a group.
Delete	Select the group from the Group drop-down list box. Click  , the message "Are you sure to delete the group?" is displayed, click **confirm**, then the group is deleted successfully.	Delete a group.

----End

10.2 Configuring a User

Description

You can add, modify, and delete a user and unlock a user that is locked after entering an incorrect password for specified consecutive times. The **Privilege Manage** permission is required to unlock a user.

Procedure

Step 1 Choose **Privilege Manager** > **User**.

The **User** page is displayed, as shown in Figure 10-2. Table 10-2 describes the parameters.

Figure 10-2 User page

Table 10-2 User parameters

Parameter	Description	Setting
User	User name for logging in to the camera.	[Setting method] Select a value from the drop-down list box.
Group	Permission group where a user belongs. The default permission groups are **Administrators**, **Operator**, and **Media user**. Their permissions are described as follows: • Administrators: Privilege Manage, System Maintenance, Parameter Configure, Record Operation, Video Control, and Live Video • Operator: System Maintenance, Parameter Configure, Record Operation, Video Control, and Live Video • Media user: Video Control and Live Video	[Setting method] Click  or  , then select a value from the drop down list in the displayed web.
Unlock	Indicates whether a user is in the normal state or locked.	The parameter cannot be set manually.
Multi Login	Supports multi user to login.	[Setting method] Click **Add**, then click the **Multi Login** button on to enable multi login in the displayed web.

Step 2 Add, modify, or delete a user as required.

Table 10-3 describes the operations.

Table 10-3 Operation description

Function	Procedure	Description
Add	1. Click  . The **Add User** page is displayed. 2. Enter a user name, password, or group. 3. Click **OK**. The user is added successfully.	Add an administrator or a common user.

Function	Procedure	Description
Modify	1. Click  . The **Modify User** page is displayed. 2. Modify the user name, password, or group. 3. Click **OK**. The user is modified successfully. The **User** page is displayed.	Modify the user name, password, or group. NOTE A password must be set according to the following rules: ● The password length of a user (including the administrator and super administrator) must range from 8 to 32 characters. ● A password must contain at least a digit, a lower case letter, and an upper case letter. ● A password cannot be the same as the user name or the reverse of the user name.
Delete	Select the user from the User drop-down list box. Click  , the message "Are you sure to delete the user?" is displayed, click **confirm**, then the group is deleted successfully.	Delete a user.

Step 3 (Optional) Unlock a user.

NOTE This step is required only when a user is locked, and only a user with the **Privilege Manage** permission can unlock the user.

1. Select the user to be unlocked from the **User** drop-down list box.
2. Click **Unlock**.

   The user is unlocked.

----End

11 Setting Platform Parameters

11.1 Checking Protocol Information

Description

You can view the existing protocol name and version number of the current device on the **Protocol** > **Protocol Info** page, as shown in Figure 11-1. Table 11-1 describes the protocol-related parameters.

Figure 11-1 Protocol Info page

Table 11-1 Protocol-related parameters

Parameter	Description
Protocol Name	Type of the access protocol.
Protocol Version	Version number of the access protocol.
Protocol Software Version	Software version number of the access protocol.

11.2 Setting Security Authentication

Description

When an ONVIF-compliant device connects to the platform, you must authenticate the user name and password to ensure the connection security.

Procedure

Step 1 Choose **Protocol** > **Security**.

The **Security** page is displayed as shown in Figure 11-2. Table 11-2 describes the parameters on the **Security** page.

Figure 11-2 Security page

Table 11-2 Parameter description

Parameter	Description	Setting
User Verification	When you select the **User Verification** check box, the user name and password must be the same as those for logging in to the device web page. NOTE The default user name is **admin**, and the default password is **admin**.	[Setting method] Click the button on to enable **User Verification**.

Step 2 Click **Apply**.

A dialog box is displayed, indicating the parameter configuration success. To make the configuration take effect, click **Confirm** to restart the device.

----End

12 Querying Device Logs

12.1 Querying Operation Logs

Description

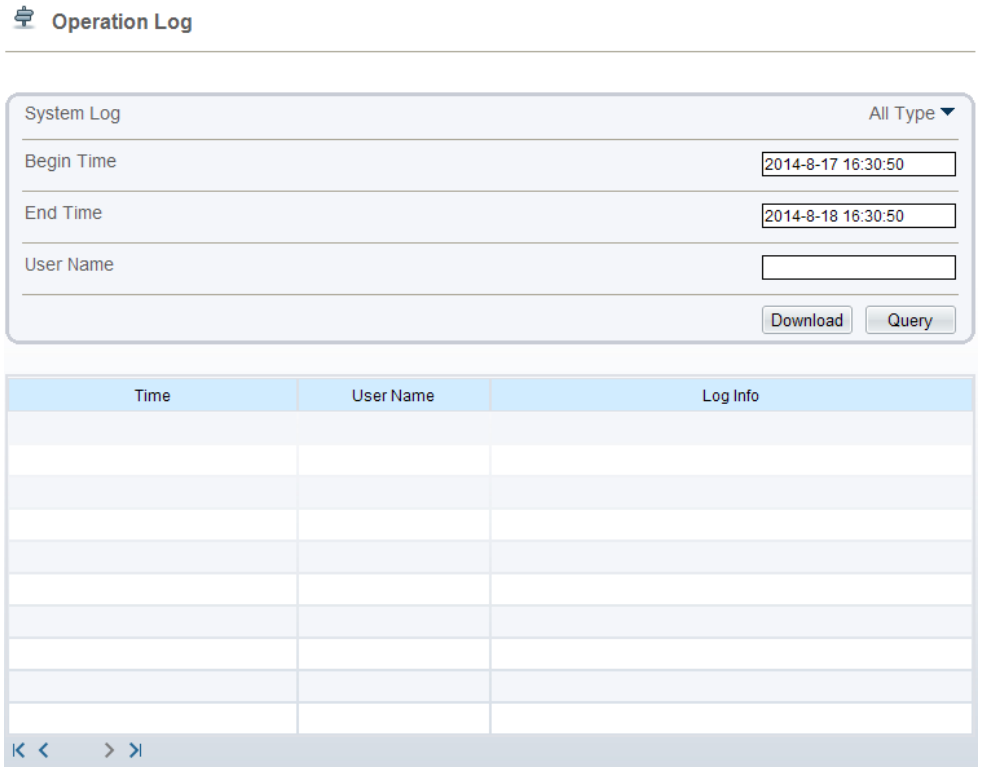
Operation logs record user operations and scheduled task commands during the running of the device. Operation logs can be classified into the following types: permission management, system maintenance, device configuration, recording operation, video control, and real-time video.

Procedure

Step 1 Choose **Device Log** > **Operation Log**.

The **Operation Log** page is displayed, as shown in Figure 12-1.

Figure 12-1 Operation Log page



Step 2 Set the search criteria.

1. Click the **Begin Time** and **End Time** text boxes respectively.

   A time setting control is displayed.
2. Set the start time and end time as required.
3. Select the type of operation logs to be queried from the **System Log** drop-down list box.
4. Enter the corresponding user name that is registered with the device from the **User Name** drop-down list box.

Step 3 Click **Query**.

The operation logs related to the specified user are displayed.

Step 4 Download the operation logs.

1. Set the start time, end time and log type.
2. Click **Download** on the right of the page.

   The log link and the message "Please download log by ’save as ‘in the right key" are displayed.
3. Right-click the link and save the logs.

NOTE

An operation log is named as **Operation Log** by default and in the following format:

Operation time user(*User name*) *Operation information*

For example:

2012-06-20 13:40:39 user() StartUpDevice

2012-06-20 13:42:46 user(admin) ConfigureDeviceName

2012-06-20 13:43:16 user(admin) ConfigureAlarmIn

----End

12.2 Querying Alarm Logs

Description

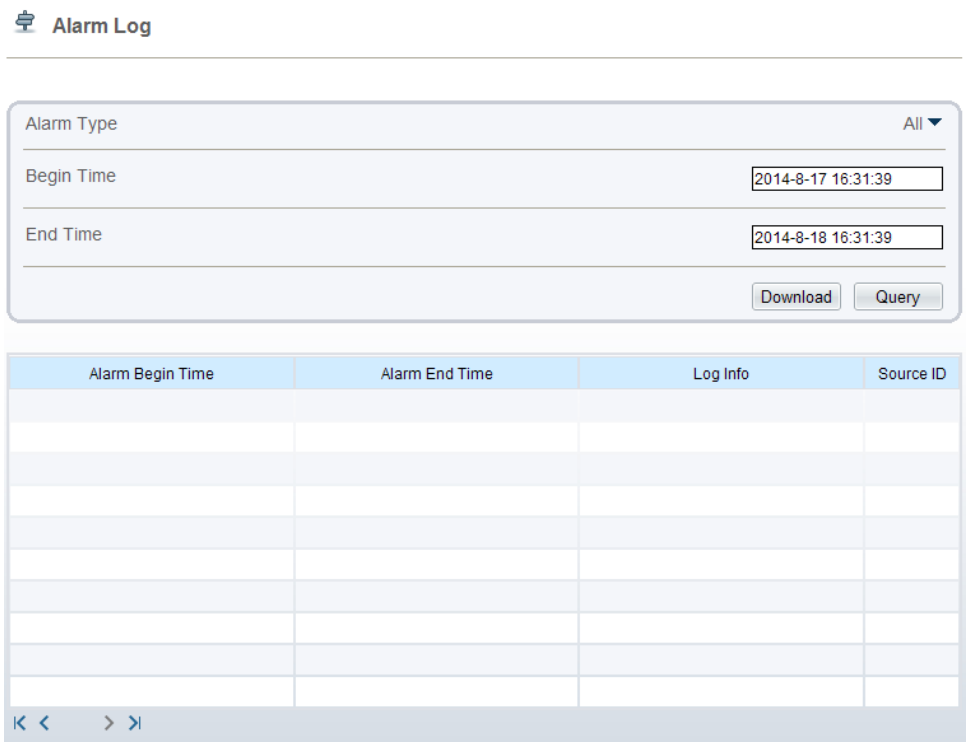
An alarm log records information about an alarm generated on a device, including the security, disk, and recording alarms.

Procedure

Step 1 Choose **Device Log** > **Alarm Log**.

The **Alarm Log** page is displayed, as shown in Figure 12-2.

Figure 12-2 Alarm Log page



Step 2 Set the search criteria.

1. Click the **Begin Time** and **End Time** text boxes respectively.
   A time setting control is displayed.
2. Set the start time and end time as required.
3. Select the type of the alarm logs to be queried from the **Alarm Type** drop-down list box.

Step 3 Click **Query**.

The alarm logs of the specified type are displayed.

Step 4 Download the alarm logs.

1. Set the start time and end time.
2. Select a log type.
3. Click **Download** on the right of the page.

   The log link and the message "Please download log by ’save as ‘in the right key" are displayed.
4. Right-click the link and save the logs.

NOTE

An alarm log is named as **Alarm Info** by default and in the following format:

Alarm start time -> Alarm end time Alarm information SourceID

For example:

2012-03-17 16:31:17 -> 2012-03-17 16:32:29 occur motion detect alarm SourceId(1:1)

2012-03-17 16:35:31 -> 2012-03-17 16:35:41 occur motion detect alarm SourceId(1:1)

----End

12.3 Reporting Logs

Description

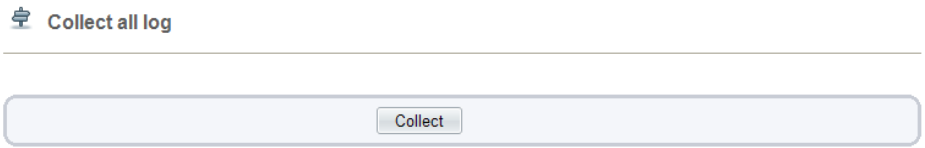
You can collect logs about a device, which help you analyze and solve possible problems occurring on the device. The logs include overview information, key parameters, operation logs, alarm logs, upgrade logs, and debugging logs.

Procedure

Step 1 Choose **Maintenance** > **Report Log**.

The **Collect all log** page is displayed, as shown in Figure 12-3.

Figure 12-3 Collect Log page



Step 2 Collect logs with one click.

1. Click **Collect**.

   The log link and the message "Please download log by ’save as ‘in the right key" are displayed.
2. Right-click the link and save the logs.

----End

13 Maintaining the Device

13.1 Restarting a Device

Description

You can restart a device in situations including the following:

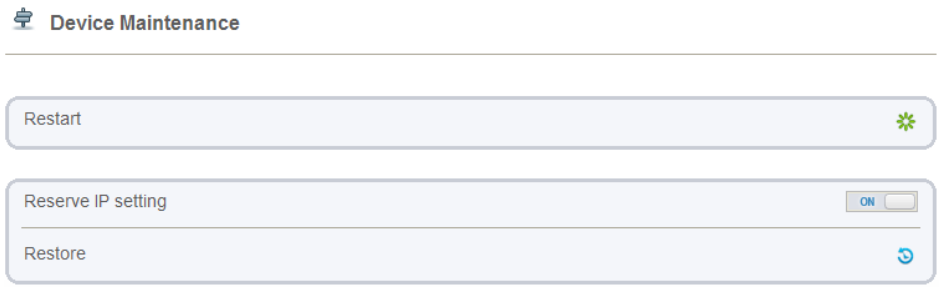
- The device parameters are set incorrectly, and the device cannot work properly.
- A user needs to reset device parameters and make the settings to take effect.
- A device needs to be restarted remotely.

Procedure

Step 1 Choose **Maintenance**.

The **Device Maintenance** page is displayed, as shown in Figure 13-1.

Figure 13-1 Device Restart page



Step 2 Click .

The message "Are you sure to restart?" is displayed.

Step 3 Click **Confirm**.

The device is restarted successfully five minutes later.

----End

13.2 Restoring a Device to Factory Settings

Description

You can restore a device to factory settings in situations including the following:

- The device parameters are set incorrectly, and the device cannot work properly.
- A user needs to reset device parameters.
- All parameters must be restored to the factory settings.

CAUTION

After you click , all parameters (you can choose whether to reserve the IP address) will be restored to the factory settings. Use this function carefully.

Procedure

Step 1 Choose **Maintenance**.

The **Device Maintenance** page is displayed.

Step 2 Click .

The message "Are you sure to restore default settings?" is displayed.

Step 3 Click **Confirm**.

The device is restored to the factory settings.

----End

14 Troubleshooting

Table 14-1 describes the common faults and solutions.

Table 14-1 Common faults and solutions

Common Fault	Possible Cause	Solution
When you enter the device IP address in the address box of Internet Explorer and press **Enter**, the message "There is a problem with this website's security certificate." is displayed.	The certificate is not installed.	Click **Continue to this website (not recommended)**.
The web management system cannot be accessed.	The network is disconnected.	• Connect the PC directly to the camera, and verify that the web management system can be accessed. • Run the **ping** command to verify that the camera is reachable.
	The IP address is used by another device.	Connect the PC directly to the camera and configure the IP address of the camera.
	The IP addresses of the PC and IP camera are on different networks.	Check the IP address, subnet mask, and gateway settings on the IP camera, and change the settings as required.

Common Fault	Possible Cause	Solution
The PTZ or dome cannot be controlled.	The protocol, baud rate, or address is incorrect.	Change the protocol, baud rate, and address in the web management system to those used by the PTZ or dome.
	The signal cable is not properly connected.	Check the signal strength and connect the signal cable properly.
After the IP camera is upgraded, the web management system cannot be accessed.	The browser cache is not deleted.	To delete the browser cache, proceed as follows: (Internet Explorer 8 is used as an example.) 1. Open Internet Explorer. 2. Choose **Tools** > **Internet Options**. 3. Click **Delete**. The **Delete Browsing History** dialog box is displayed. 4. Select all check boxes. 5. Click **Delete**. Log in to the web management system again.
The IP camera cannot be upgraded.	• The network is disconnected. • The network settings are incorrect.	• Confirm upgrade network has connections. • Check the network settings right or wrong.
	The upgrade package is incorrect.	Obtain the correct upgrade package and upgrade the IP camera again.

A Acronyms and Abbreviations

A	
ADSL	Asymmetric Digital Subscriber Line
C	
CBR	Constant Bit Rate
D	
DHCP	Dynamic Host Configuration Protocol
DNS	Domain Name Server
DDNS	Dynamic Domain Name Server
G	
GAMA	Graphics Assisted Management Application
H	
HTTP	Hyper Text Transfer Protocol
I	
ISO	International Standard Organized
IP	Internet Protocol
ID	Identity
IPC	Internet Protocol Camera
L	
LPS	Limited Power Source
M	
MJPEG	Motion Joint Photographic Experts Group
MAC	Media Access Control
N	
NTP	Network Time Protocol

NTSC	National Television Standards Committee
O	
OSD	On Screen Display
P	
PoE	Power over Ethernet
PPPoE	Point-to-Point Protocol over Ethernet
PTZ	Pan/Tilt/Zoom
S	
SMTP	Simple Mail Transfer Protocol
V	
VBR	Variable Bit Rate