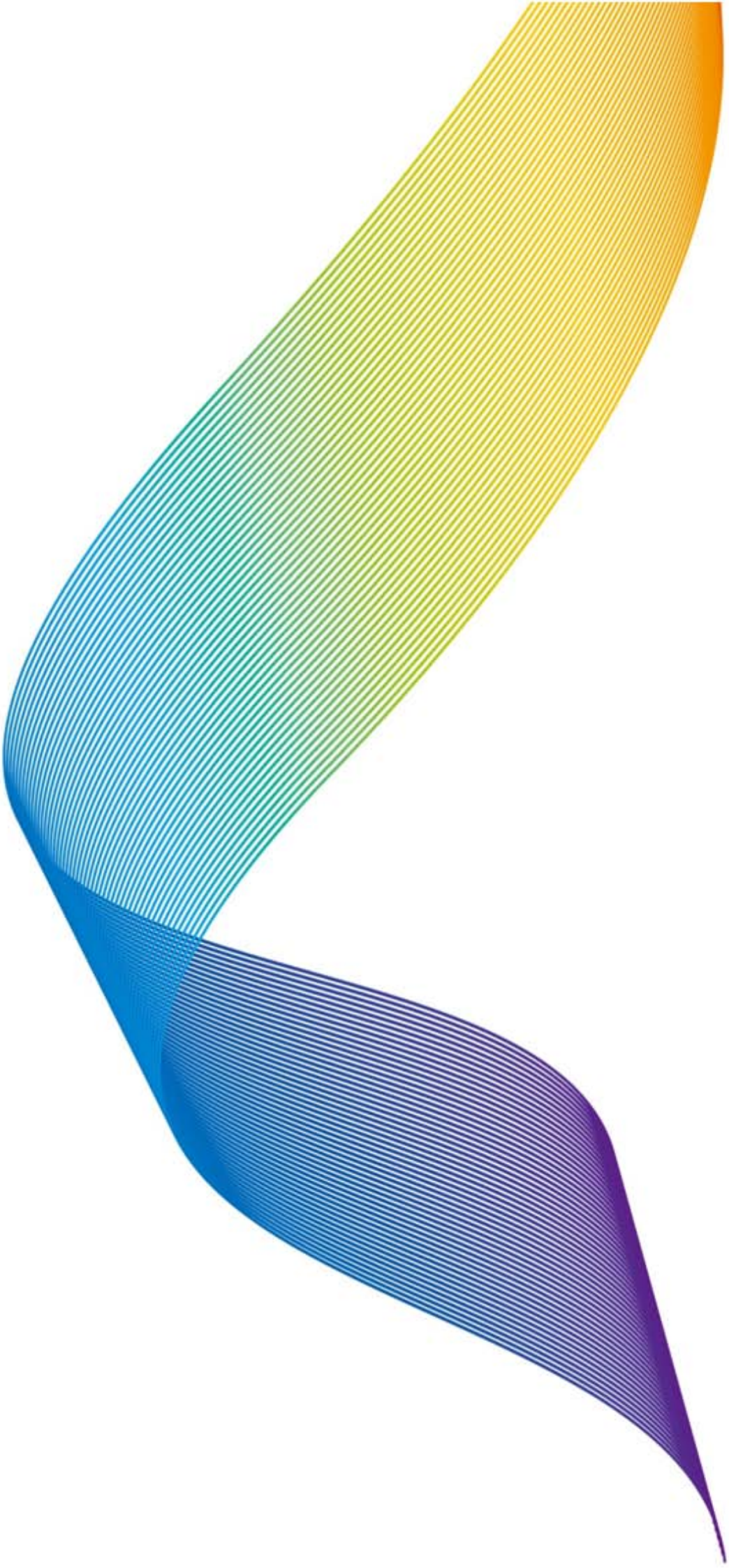
KEDACOM

KDM2410M
User Guide



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Contents

About This Document 5
Intended Audience 5
Document Versions 5
Compatibility 5
About the KDM2410M 6
Product Introduction 6
Specification 6
Accessing the Mobile NVR 8
Preparations 8
Login 9
Getting Started 11
Live Viewing 15
Adding Cameras 15
Viewing 15
PTZ Control 16
Other Controls 18
Recording 19
Alarm Triggering 19
Manual Starting 19
Periodic and Scheduled Recording 19
Local Playback 20
Snapshots 23
Local Settings 24
User Management 24
Save Paths 24
Miscellaneous 25
Device Settings 27
System 27
Network 31
Video Source 32
Image 34
Audio 35
Recording 37
Snapshot 40
COM Port 42
Alarming 43
Geographical Position 45
Wireless 46
System Status 51
System Service Status 51
Video Channel Status 51
Audio Channel Status 52
Alarm Channel Status 52
Recording Channel Status 53

System Maintenance 54
System 54
Disk 55
Abbreviations and Acronyms 56

About This Document

Intended Audience

This document is intended for the personnel who:

- Work with the Mobile Network Video Recorder (NVR)
- Know video surveillance basics

Document Versions

Version 00 (2016-08-23)
This is a draft.

Compatibility

The following table provides the products and Mobile NVR software version to which this document applies.

Product	KDM2410M-V21
NVR Software Version	V1R1B2

About the KDM2410M

Product Introduction

Kedacom Mobile NVR KDM2410M (hereinafter referred to as the Mobile NVR) supports 3G/4G/WiFi/WiFi-AP wireless network transmission, satellite positioning, and H.264 and H.265 encoding formats. The Mobile NVR accommodates two SIM cards, one 2.5-inch hard disk drive (HDD) or solid-state drive (SSD), and one secure digital (SD) card. For storage devices, the Mobile NVR adopts the hard disk vibration damping technology. The Mobile NVR can connect to PTZ cameras and control them. The Mobile NVR can be controlled by Kedacom Video Management System (VMS), which is a comprehensive platform for managing cameras, NVRs, encoders, and decoders.

Specially, the Mobile NVR features the following:

- Embedded design, more stable, reliable and secure
- Support H.264 and H.265 high efficient video compression, with 4 channels high definition IP camera / standard definition analog camera accessible
- Aviation plug design for audio, control signal and power supply simultaneously, more reliable and stable
- Suspension hard disk drawer, easy to change hard disk, also support SD card storage
- Support USB interface, easy to connect to PC directly to back up recordings
- Integrated with 3G/4G network module (WCDMA, EVDO, and TD-LTE)
- Integrated with WIFI module, providing the WIFI-AP function
- Integrated with GPS module, which can locate vehicle position accurately
- Support delay shutdown
- Support 2 SIM cards combined use to increase the bandwidth effectively
- Integrated design with heat dissipation shell and better dust and water proof experience

Specification

Video	
Encoding Format	H.264, H.265
Resolution	1080, 720P, D1, CIF, QCIF (Dual stream support)
Video Frame Rate	1 - 30 fps
Video Bit Rate	64 kbps - 4 Mbps
Audio	
Encoding Format	G.711A/U, ADPCM
Coding Rate	24 kbps - 64 kbps
Audio Function	Bi-directional audio / acoustic echo cancelling / Mute / Dumb / Remix
Storage	
Max. Internal HDDs	1×SATA, hard disk drawer, 1 x 2.5” hard disk support: 1×SD card
	Max. 4TB
Network	
Network Protocol	TCP/IP, ARP, FTP, TELNET, HTTP, RTP/RTCP, SNTP, VSIP, KWTP

Function	NAT / Multiple network access / Packet loss recovery / Auto network organizing
Wireless	3G: WCDMA, EVDO (optional) 4G: TD-LTE (optional) WIFI: 2.4 GHz
Interfaces	
Ethernet	1 × RJ45, 10Base-T/100Base-TX
Audio In / Out	1 × Mic In, 1 × Phone Out
Aviation Plug	4 × 10 core: 4×video input, 4 × audio input, 4 × 12 V DC output, 4 × RJ45 1 × 4 core: power supply for PTZ 1 × 10 core: local playback 1 × 9 core: wide range input 6-36 V
Alarm In / Out	4 x Inputs / 1 x Outputs
Control	1 × RS485, 1×RS232
Antenna	1 × WIFI Antenna, 1 × GPS Antenna
Extension module	3 × extension module (support 3G, 4G SIM card, GPS)
Environmental	
Operating Temperature	-40°C-70°C
Operating Humidity	10%-85% (no condensation)
Elevation	-60 m-5000 m
Electrical	
Power	9-36 V DC
Power Consumption	15 W (HDD not included)
Mechanical	
Weight	2.45 kg (HDD not included)
Dimensions	252 x 188.4 x 60 mm

Accessing the Mobile NVR

Preparations

For better user experience, your personal computer (PC) must meet the following fundamental requirements:

- Intel® Core® 2 Duo CPU 2.0 GHz
- 2 GB of RAM
- Windows XP or later
- Internet Explorer 6 or7

The default IP addresses of three network ports on the Mobile NVR are as follows:

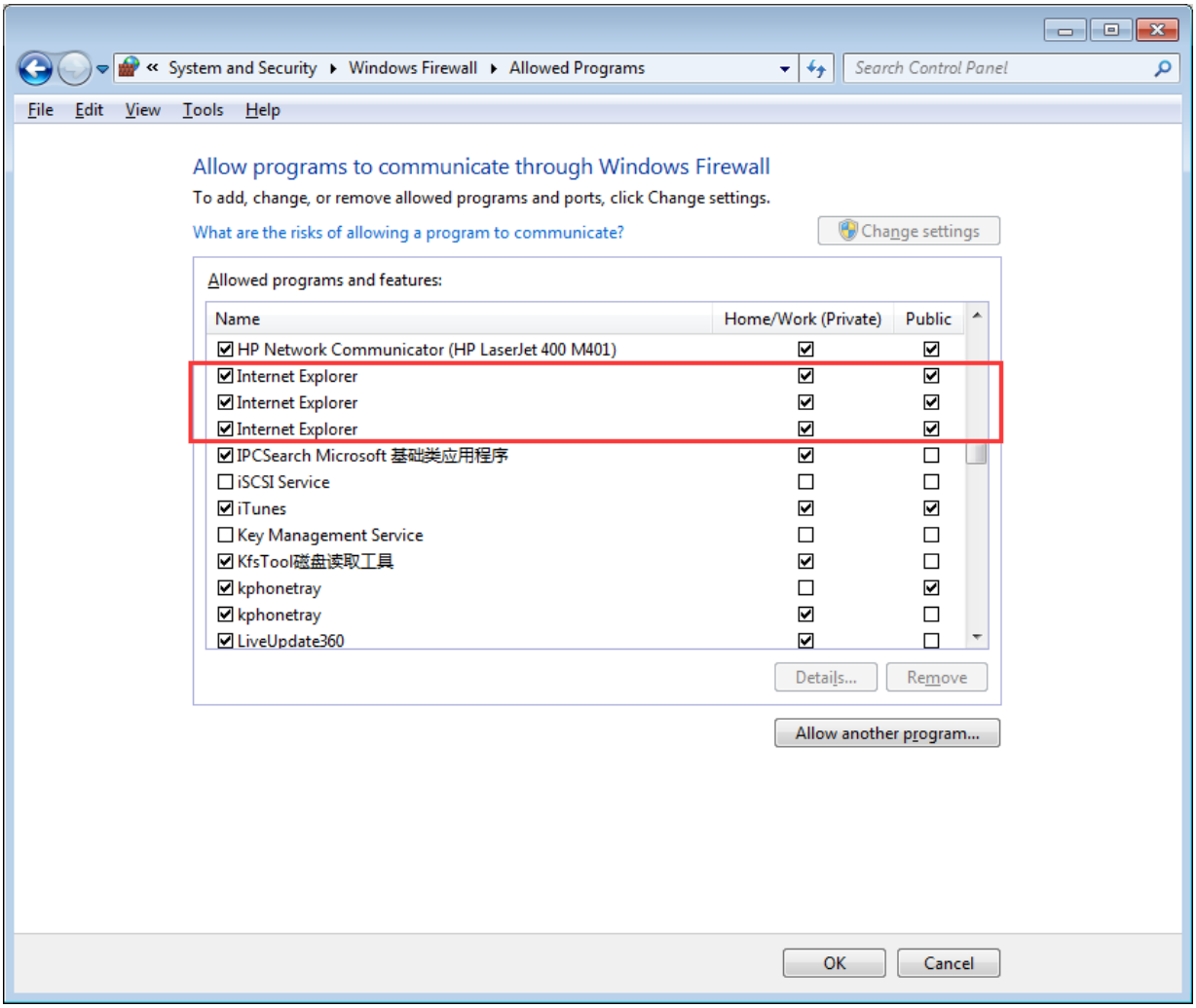
- Front panel: 192.168.0.99
- Rear panel: 192.168.100.199

Before accessing the Mobile NVR through your PC, ensure that your PC can reach the Mobile NVR.

NOTE

- You are not advised to use the Windows XP operating system since Microsoft stops providing security and other updates for Windows XP on April 8, 2014.
- If you use the Windows 7 or 8 operating system and the Windows Firewall is turned on, allow the Internet Explorer to communicate through the Windows Firewall.

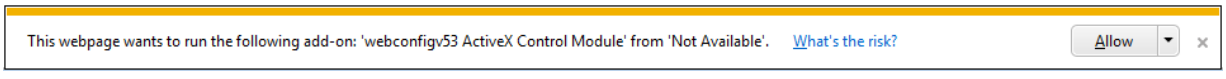
  To allow the Internet Explorer to communicate through the Windows Firewall, choose **Control Panel** > **System and Security** > **Windows Firewall** > **Allow programs to communicate through Windows Firewall** and then select all Internet Explorers as follows.



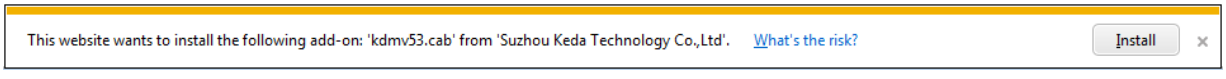
Login

To log in to the Mobile NVR as an administrator:

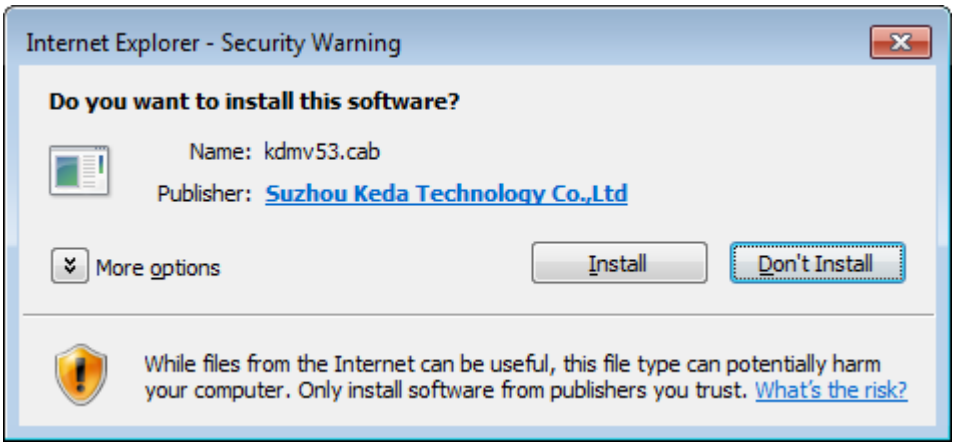
1. Run the Internet Explorer as an administrator.
2. Enter the IP address of the Mobile NVR into the address bar of the Internet Explorer.
3. Run the add-on "**webconfigv53 ActiveX Control Module**".



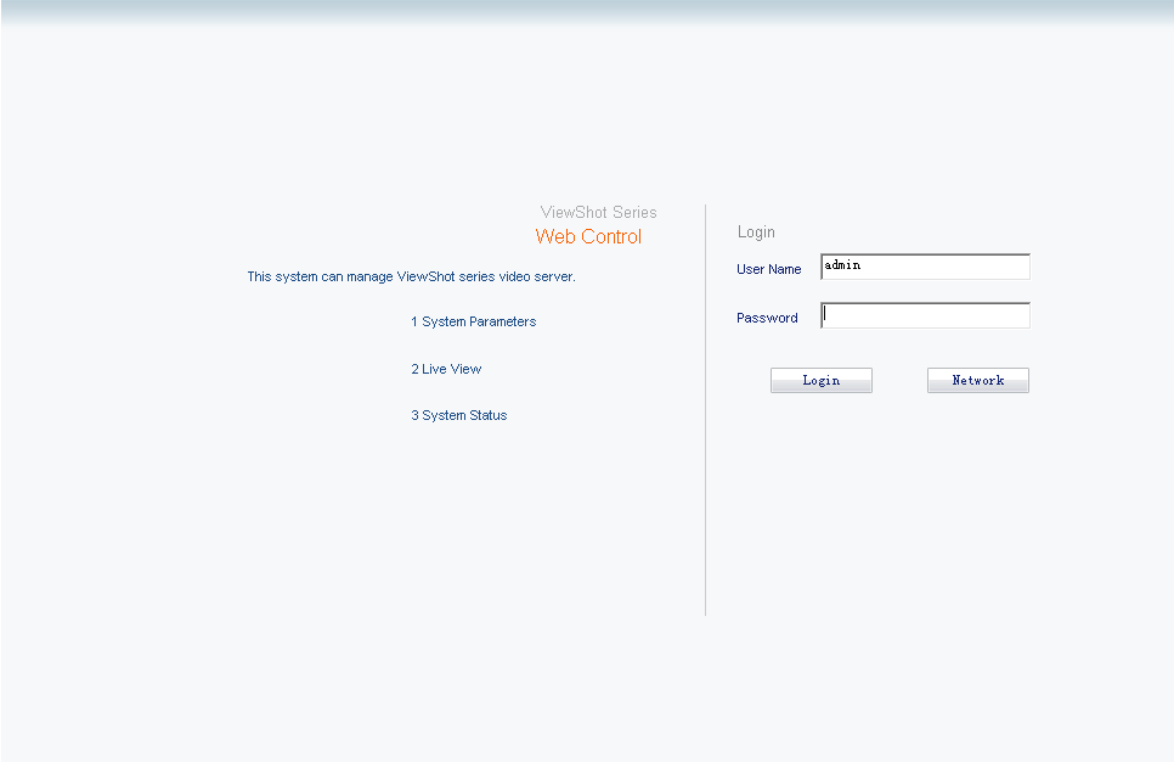
4. Install the add-on.



5. Click **Install**.



6. Configure **User** and **Password**.
   In this document, the administrator account is applied.



   The Mobile NVR comes with the following accounts:
   - Administrator: both user name and password are admin.
   - Standard user: both user name and password are user.

   If you enter an incorrect password, you can keep trying without bothering to be locked.
   If you forget your password, press the **Reset** button on the front panel of the Mobile NVR to reset the Mobile NVR to factory defaults.
   If you create your own password, enter 1-16 characters.
7. Click **Login**.

NOTE

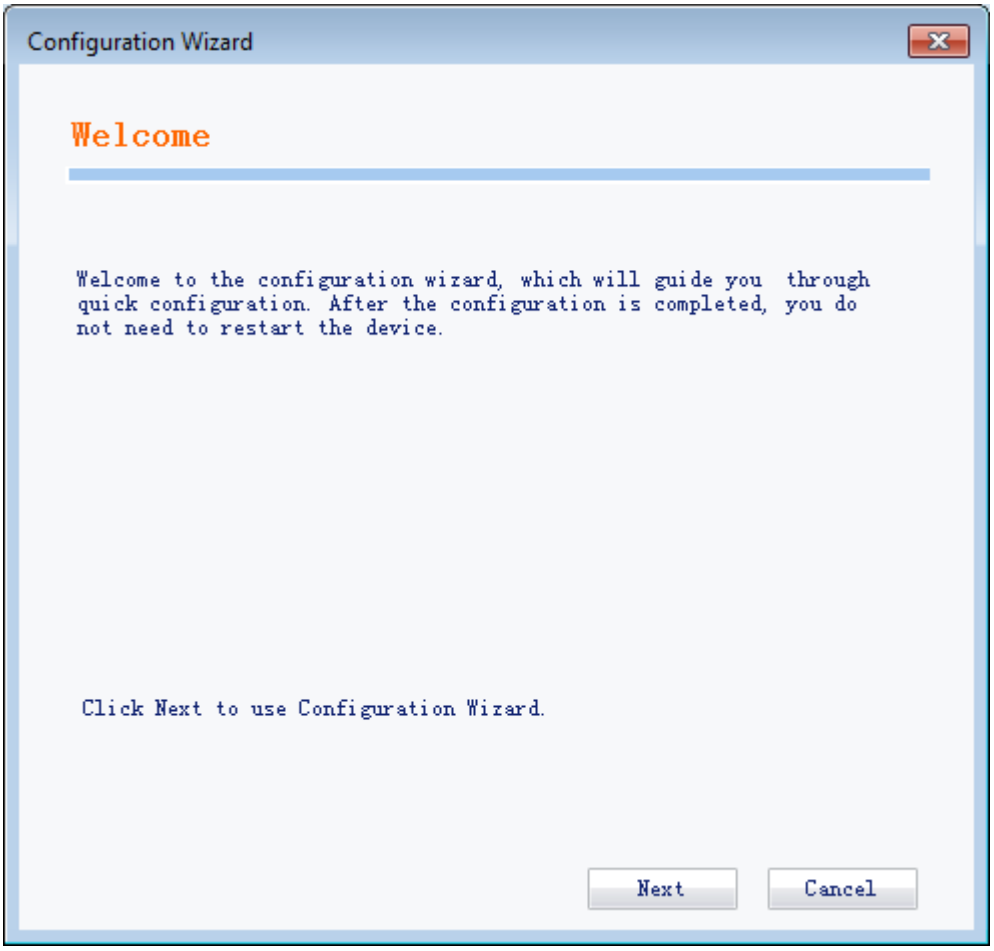
A maximum of 1 administrator and 4 standard users can log in to the Mobile NVR at the same time.

Getting Started

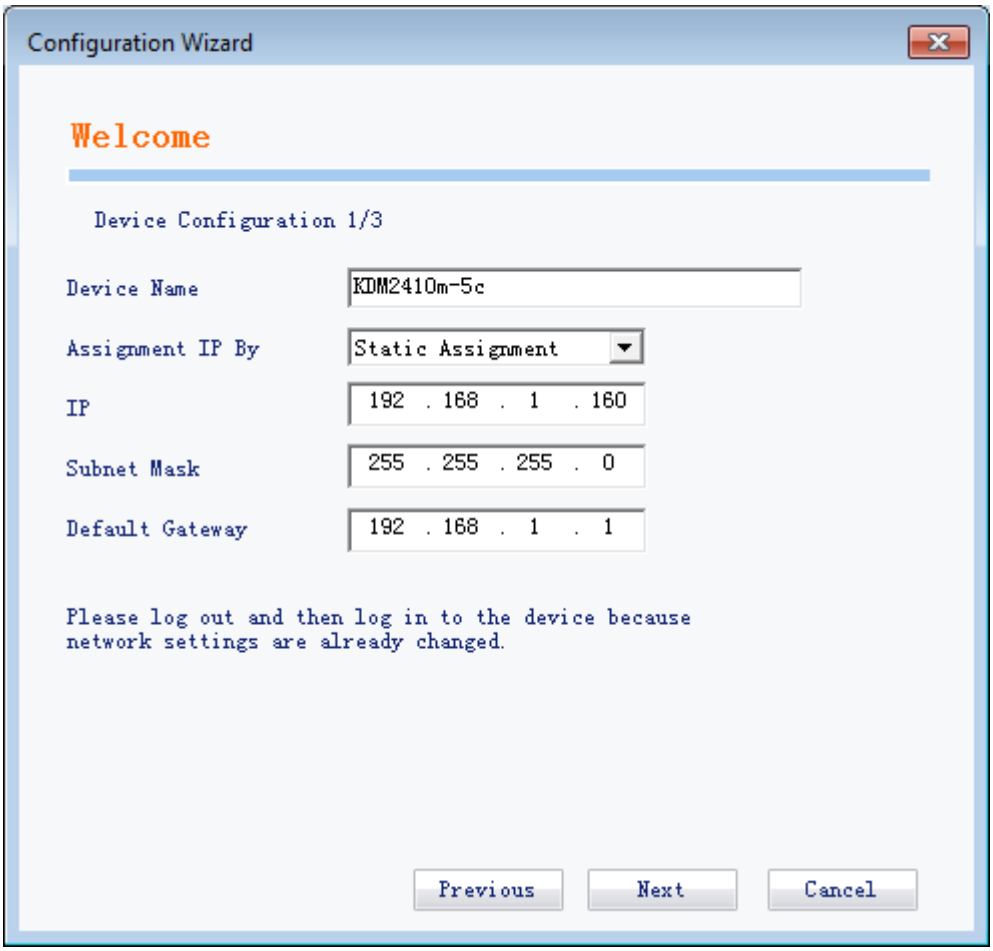
After logging in to the Mobile NVR, click **Configuration** to enable the Configuration Wizard, which will guide you through the initial configuration.

To complete the initial configuration:

1. Enable the Configuration Wizard by clicking **Configuration**.



2. Click **Next**.
3. Configure parameters displayed.

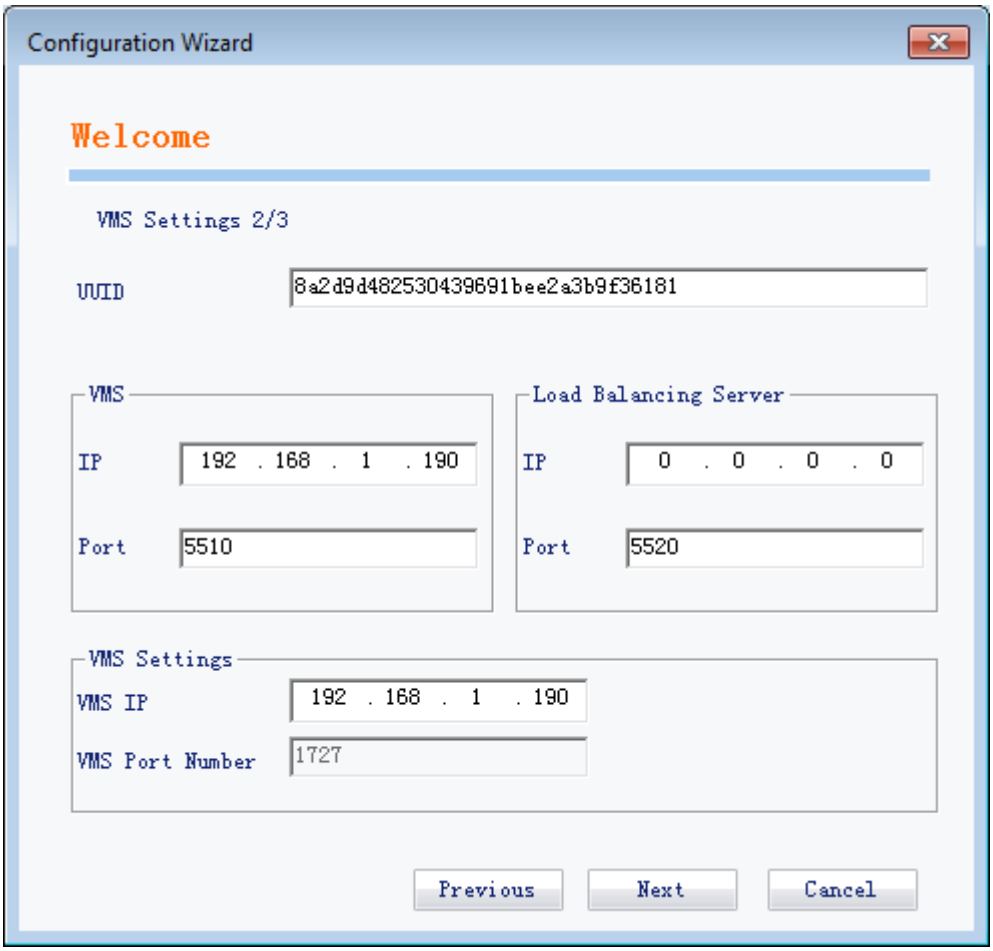


The **Assignment IP By** parameter is unconfigurable.

The Mobile NVR comes with the following default IP addresses:

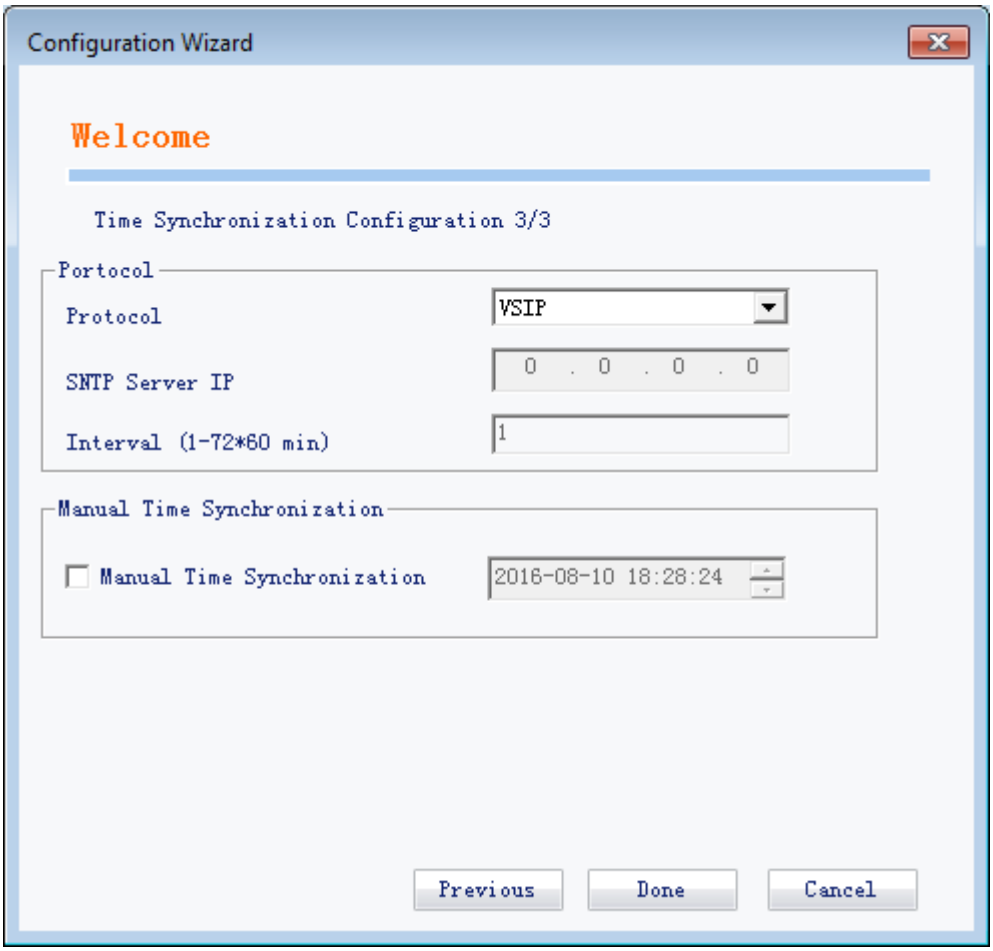
- Front panel: 192.168.0.99
- Rear panel for WIFI: 192.168.200.199

4. Click **Next**.
5. Configure VMS settings.



- For the **UUID** parameter, you can leave it unconfigured. After registering the Mobile NVR with the VMS, you can enter or update the value for this parameter.
  For details on how to register the Mobile NVR with the VMS, see chapter Managing Front-End Devices of *VMS Configuration Guide*.
- Under **VMS**, the **IP** parameter indicates the IP address of the VMS and the **Port** parameter indicates the VSIP-based start listening port of the VMS.
- Under **VMS Settings**, the **VMS IP** parameter indicates the IP address of the VMS and the **VMS Port Number** parameter indicates the network management port of the VMS.

6. Click **Next**.



Under **Protocol**, if you set **Protocol** to **VSIP**, the Mobile NVR synchronizes the time with the VMS. If you select the **SNTP** value, configure **SNTP Server IP** and **Interval** which indicates the synchronization interval between the Mobile NVR and the SNTP server.

Alternatively, select **Manual Time Synchronization** and enter a time.

7. Click **Done**.

Adding Cameras

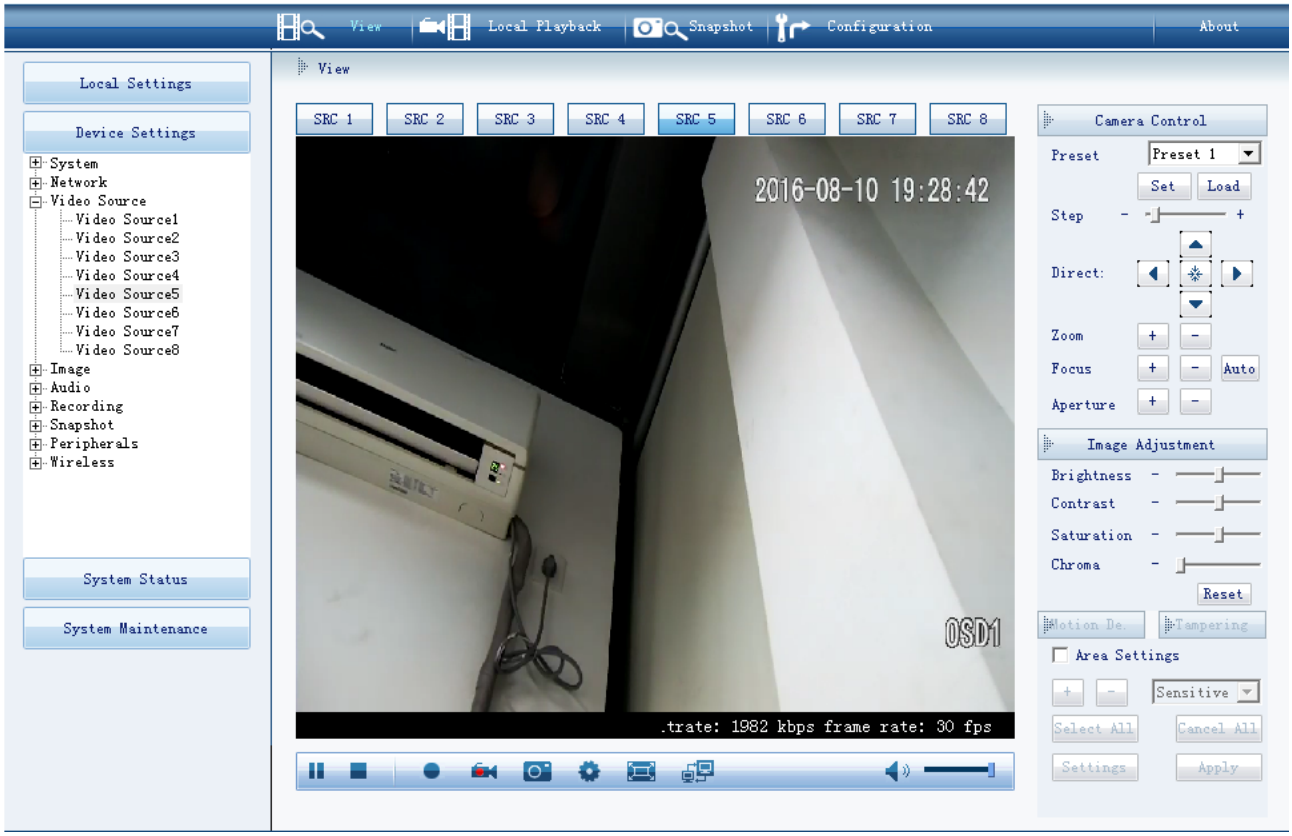
To add a camera:

1. Choose **Device Settings** > **System** > **Enable Channel**.
2. Configure a channel from the range of channels 5 through 8. (This is because Channels 1 through 4 are not in use.)

   1) Select the **Enable** check box.
   2) Enter an IP address into the **IP** text field.
   3) Enter a port number into the **Port** text box.
3. Click **Apply**.

Viewing

After a camera is added, you can view the live video sent from the camera, as shown in the following figure.

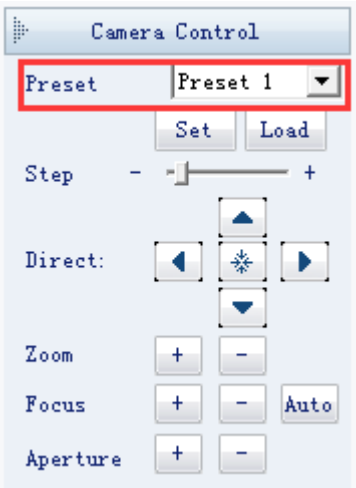


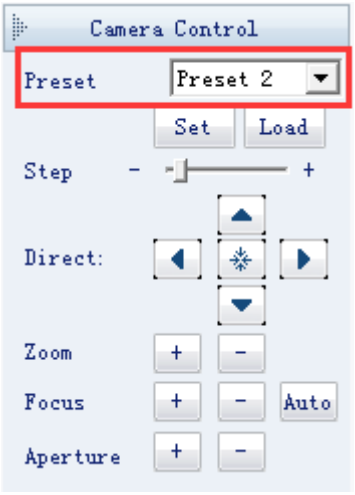
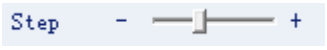
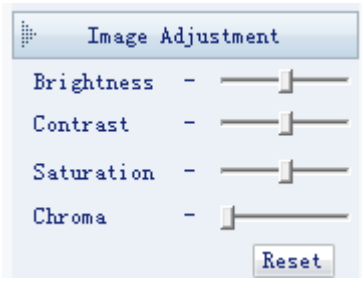
If you add a camera to channel 5 (as described in section Adding Cameras), double-click **SRC 5** to view the live video from the camera.

If you double-click the video display area, the video will be displayed in full screen.

PTZ Control

PTZ controls are described in the following table.

Item	Description
Preset position	To create a preset: 1. Click arrow buttons to move the camera to a position. 2. Select a preset number. 

Item	Description
	3. Click **Set**. To load a preset: 1. Select a preset.  2. Click **Load**.
Adjusting the P/T speed	To adjust the pan/tilt (P/T) speed, adjust the following speed bar. 
Zooming	Click to zoom in and to zoom out.
Focusing	Click to adjust the focus. Click **Auto** for autofocus.
Adjusting the aperture	Click to adjust the focus.
Configuring image settings	To configure image settings, adjust the following bars. 
Motion Detection	Not supported
Tampering	Not supported

NOTE

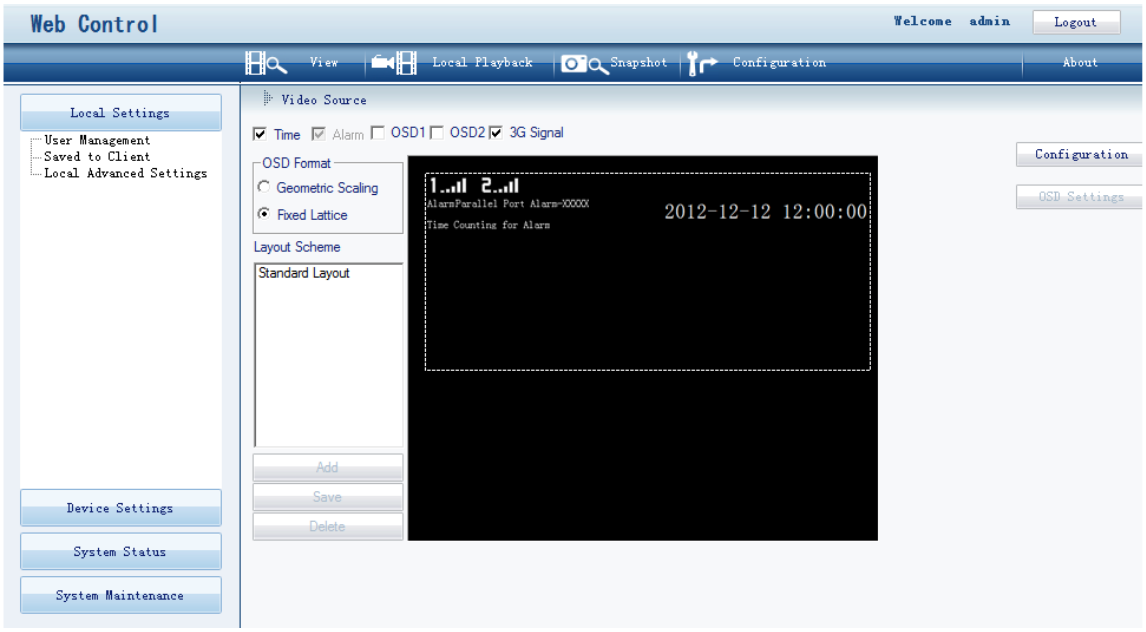
The user interface of the Mobile NVR is continuously changed. Therefore, do not be alarmed when you find the screenshots in this document are different from actual ones. We greatly appreciate your understanding.

If you find some options are missing or not functional, contact the system administrator to check whether your Mobile NVR supports these options. If so, contact the local authorized Kedacom agent.

Other Controls

When you are viewing the live video, you can find the following controls under the video display area.

The following table helps you read these controls.

Item	Description
	Pause the live view.
	Stop the live view.
	Start recordings and save them on your PC. The save path can be configured in section Save Paths.
	Start recordings and save them on the camera.
	Take snapshots and save them on your PC. The save path can be configured in section Save Paths.
	Configure the video source. For details on configuring video sources, see section Video Source. 
	View the live video in full screen mode.
	Switch between the main stream and secondary stream.

Recording

Recordings that will be stored on the Mobile NVR can be started in the following ways:

- Triggered by Parallel Port Alarm and Motion Detection Alarm
- Manually started on the mobile client (Wireless Surveillance System) side
- Periodic and scheduled recordings

Alarm Triggering

For details on how to enable the Parallel Port Alarm to trigger a recording, see section Alarming.

Manual Starting

For details on how to manually start a recording on the Wireless Surveillance System, see the online help of the Wireless Surveillance System.

Periodic and Scheduled Recording

For details on how to schedule recordings and enable periodic recording, see section Recording.

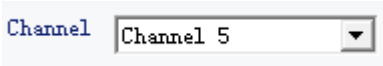
Local Playback

During a local playback, recordings are started in the following ways:

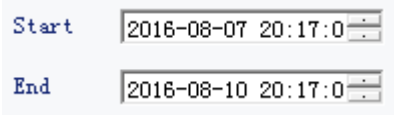
- Triggered by Parallel Port Alarm and Motion Detection Alarm
- Manually started on the mobile client (Wireless Surveillance System) side
- Periodic and scheduled recordings

To start a local playback:

1. Click **Local Playback**.
2. Select a channel from the **Channel** drop-down list.



3. Select a start time and an end time by specifying **Start** and **End**.



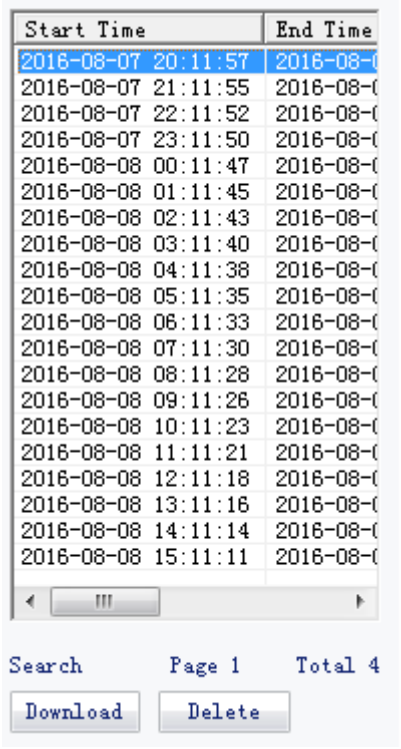
4. Specify **Type**.

   The following table describes all the parameter values.

Parameter Value	Description
File Recording	All the recordings that are started in the following ways: • Triggered by Parallel Port Alarm and Motion Detection Alarm • Manually started on the mobile client (Wireless Surveillance System) side • Periodic and scheduled recordings
All Type	All the recordings that are started in the following ways: • Triggered by Parallel Port Alarm and Motion Detection Alarm • Manually started on the mobile client (Wireless Surveillance System) side • Periodic and scheduled recordings
Parallel Port Alarm	Recordings triggered by the Parallel Port Alarm. For details on how to enable the Parallel Port Alarm to trigger a recording, see section Alarming.
Motion Detection Alarm	Recordings triggered by the Motion Detection Alarm. However, the Mobile NVR does not support the Motion Detection Alarm.
Manually Recording	Recordings started on the mobile client (Wireless Surveillance System) side. For details on how to manually start recordings on the Wireless Surveillance System, see the online help of the Wireless Surveillance System.
Scheduled Recording	Scheduled recordings. For details on how to schedule recordings, see section Recording.
Periodic Recording	Periodic recordings.

Parameter Value	Description
	For details on how to enable periodic recording, see section Recording.

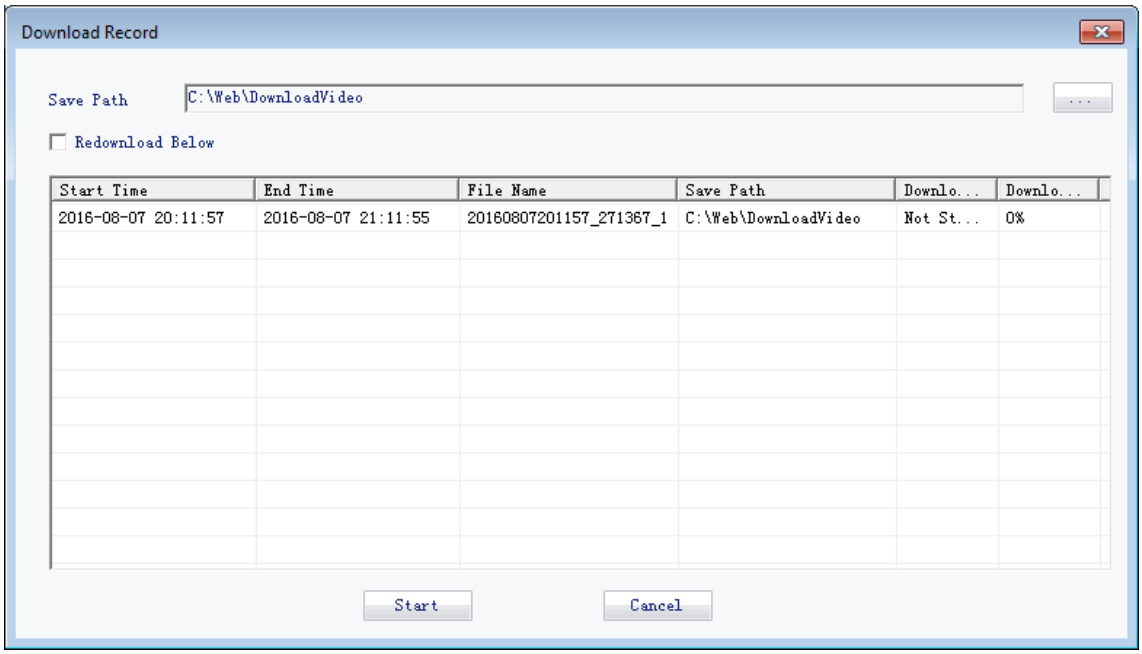
5. (Optional) Enable the system to automatically play back recordings after recordings are searched by selecting the **Auto Play** check box.
   If you select the **Auto Play** check box, recordings will be played back automatically after you specify **Start** and **End** and click **Search**.
6. Click **Search**.
7. From the search results, double-click a result entry to play back a recording.



In this step, you can download or delete a recording.

To download a recording:

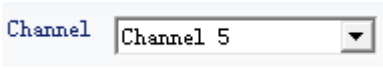
1) Select the recording.
2) Click **Download**.
3) In the displayed dialog box, specify a save path and click **Start**.


Download Record
Save Path
C:\Web\DownloadVideo
...
Redownload Below
Start Time
End Time
File Name
Save Path
Downlo...
Downlo...
2016-08-07 20:11:57
2016-08-07 21:11:55
20160807201157_271367_1
C:\Web\DownloadVideo
Not St...
0%
Start
Cancel

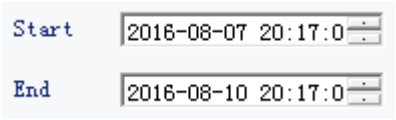
Snapshots

To query snapshots that are saved on the Mobile NVR:

1. Click **Snapshot**.
2. Select a channel from the **Channel** drop-down list.



3. Select a start time and an end time by specifying **Start** and **End**.



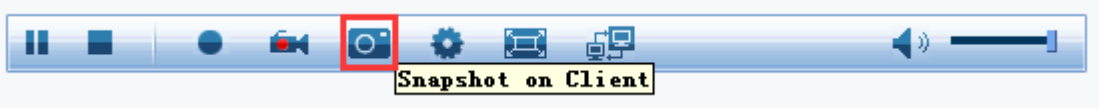
4. Specify **Type**.
   The following table describes all the parameter values.

Parameter Value	Description
All Type	All the snapshots that are captured in the following ways: • Captured due to the generation of the Parallel Port Alarm • Captured on the mobile client (Wireless Surveillance System) side
Parallel Port Alarm	Snapshots captured due to the generation of the Parallel Port Alarm. For details on how to enable the Parallel Port Alarm to trigger snapshot capturing, see section Alarming.
Manually Captured	Snapshots captured on the mobile client (Wireless Surveillance System) side. For details on how to manually capture snapshots on the Wireless Surveillance System, see the online help of the Wireless Surveillance System.

5. Click **Search**.
6. From the search results, double-click a result entry to query details of a specific snapshot.

NOTE

You cannot query snapshots that are saved on your PC. In other words, you cannot query snapshots that are taken by clicking the following button.



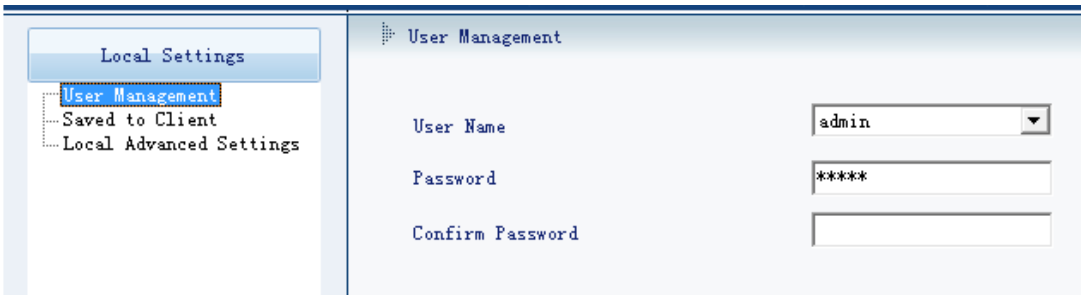
You can query only snapshots that are taken due to the generation of the Parallel Port Alarm and manually taken on the mobile client (Wireless Surveillance System) side.

For details on how to enable periodic snapshot capturing, see section Snapshot.

Local Settings

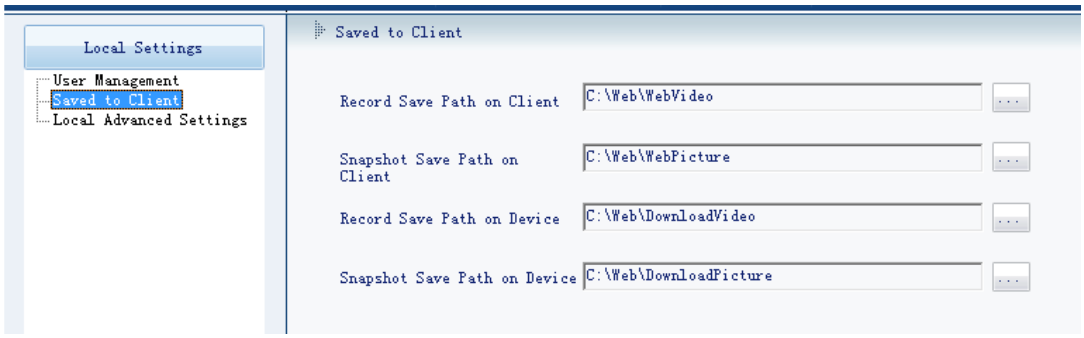
User Management

On the **User Management** tab page, you can change the password of an account.



Save Paths

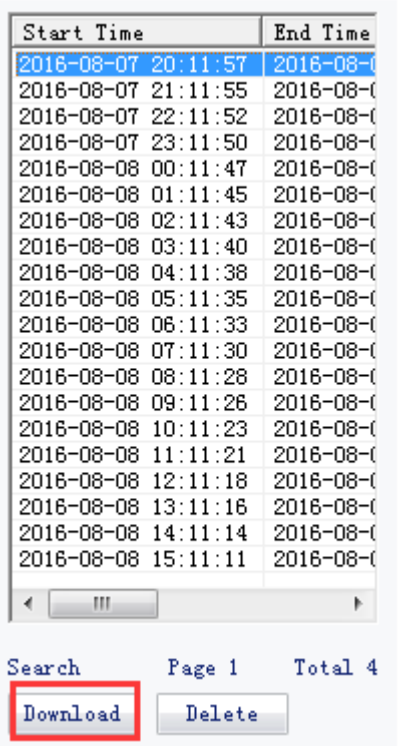
On the **Saved to Client** tab page, you can configure various save paths.



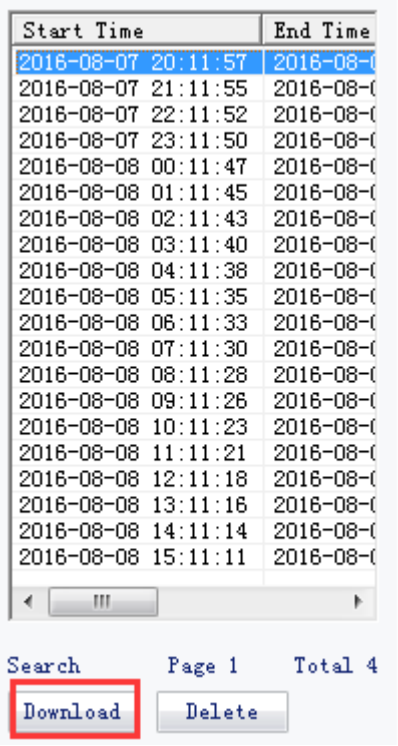
The **Record Save Path on Client** stores recordings started by clicking on the **View** page.

The **Snapshot Save Path on Client** stores snapshots taken by clicking on the **View** page.

The **Record Save Path on Device** stores recordings downloaded by clicking **Download** on the **Local Playback** page.

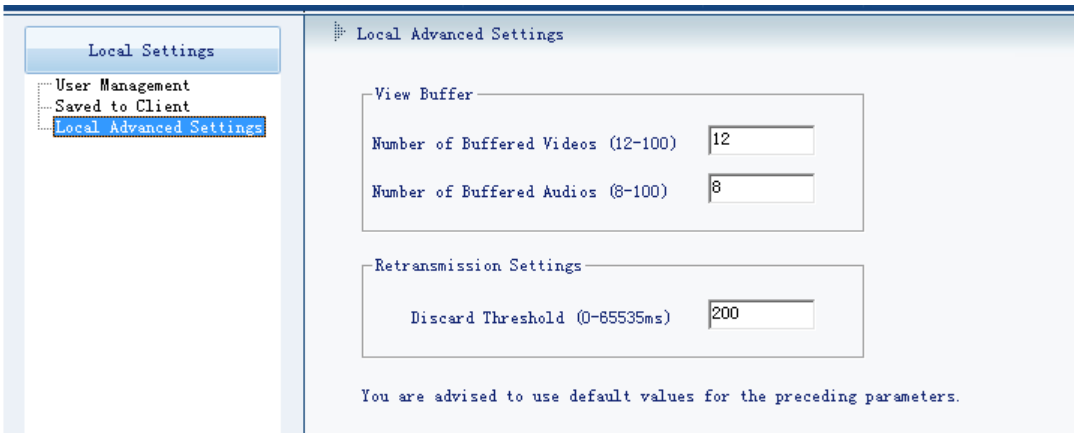


The **Snapshot Save Path on Device** stores snapshots downloaded by clicking **Download** on the **Snapshot** page.



Miscellaneous

On the **Local Advanced** Settings, you can configure the following.

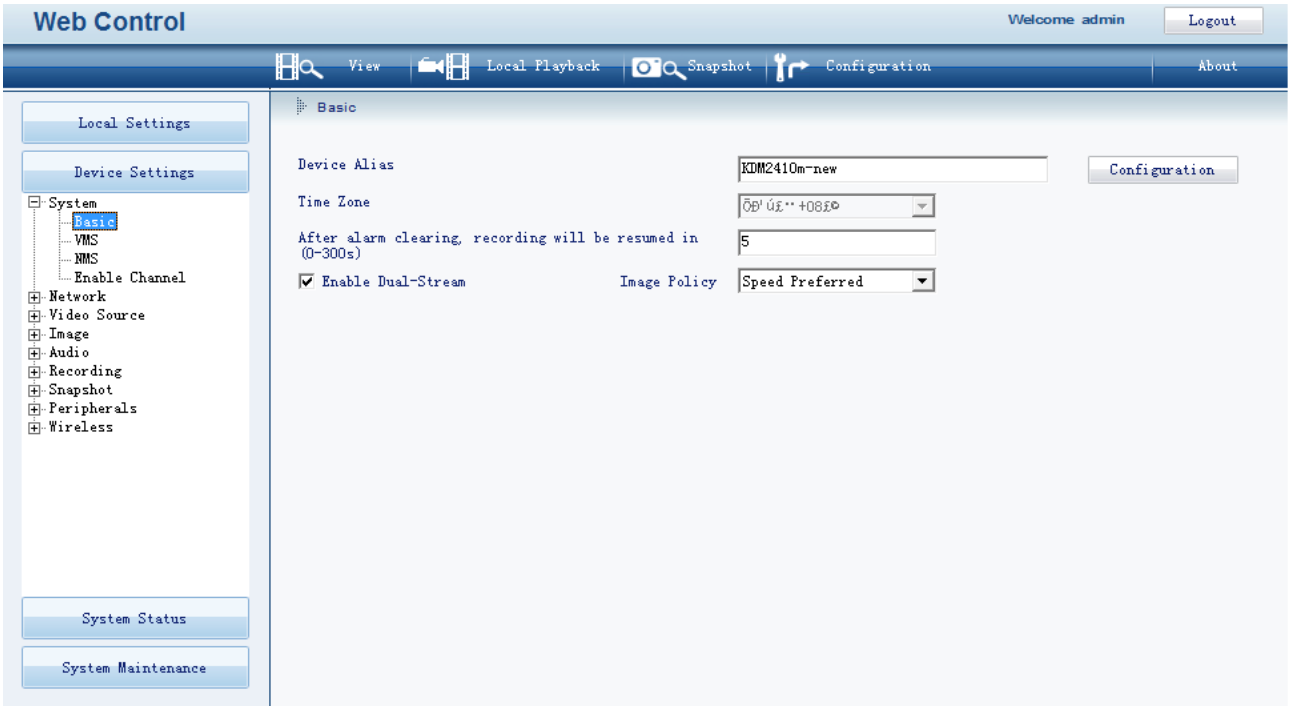


The **Discard Threshold** parameter indicates the threshold for discarding data packets. For example, the receiver is expecting packets 1 through 5 but actually receives packets 1, 3, 4, and 5. If the receiver does not receive packet 2 in 200ms, the receiver will discard packets 1 and 3.
You are advised to apply the default values of the preceding parameters.

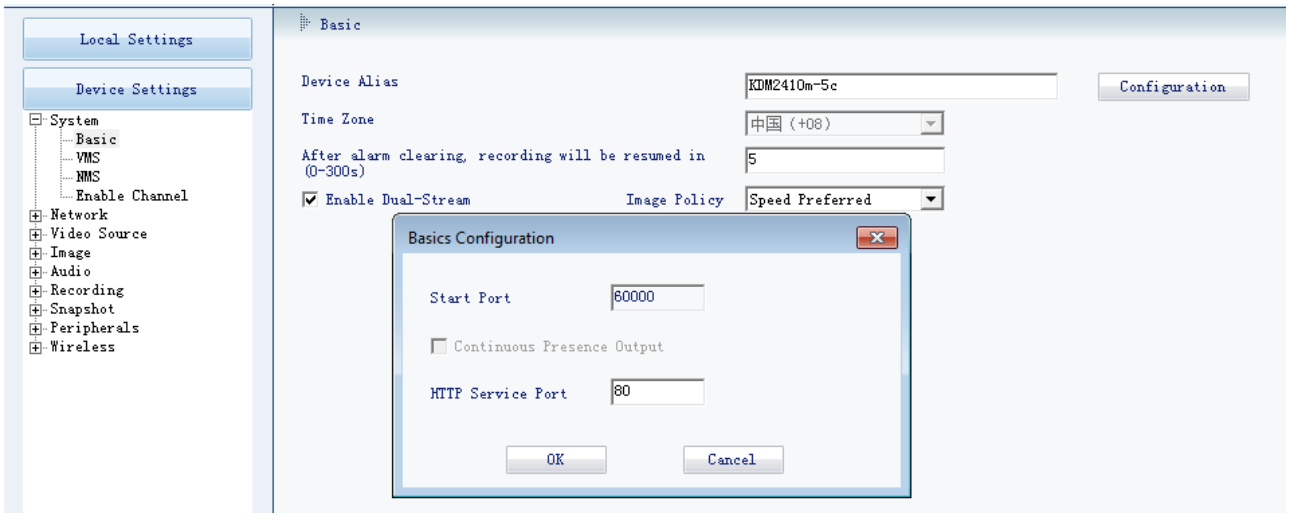
System

Basic

On the **Basic** tab page, you can configure the following.



If you click **Configuration**, you can configure the following.

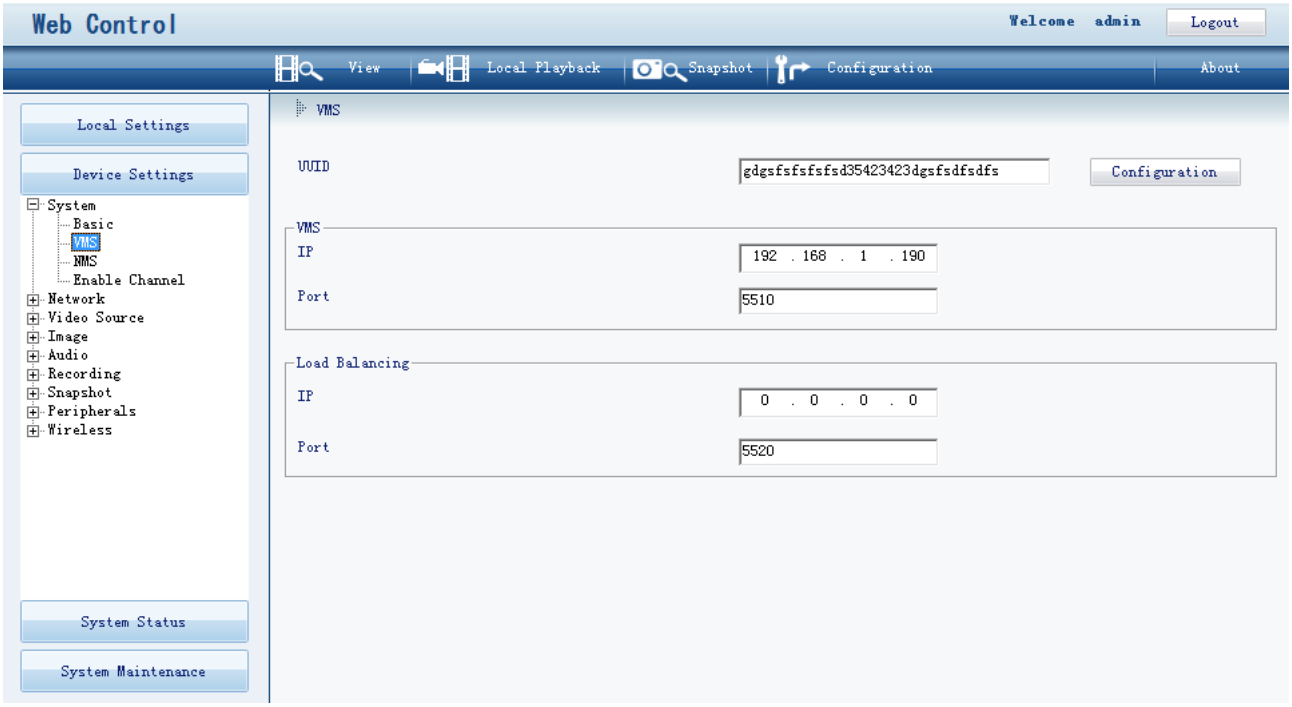


Parameter	Description
Start Port	Number of start port for receiving streams from the Mobile NVR. This port is on your PC.
HTTP Service Port	Number of port for users to access the Mobile NVR. For example, if you want to access the Mobile NVR, you are expected to enter **http://192.168.0.99:80** in the address bar of a webpage browser.

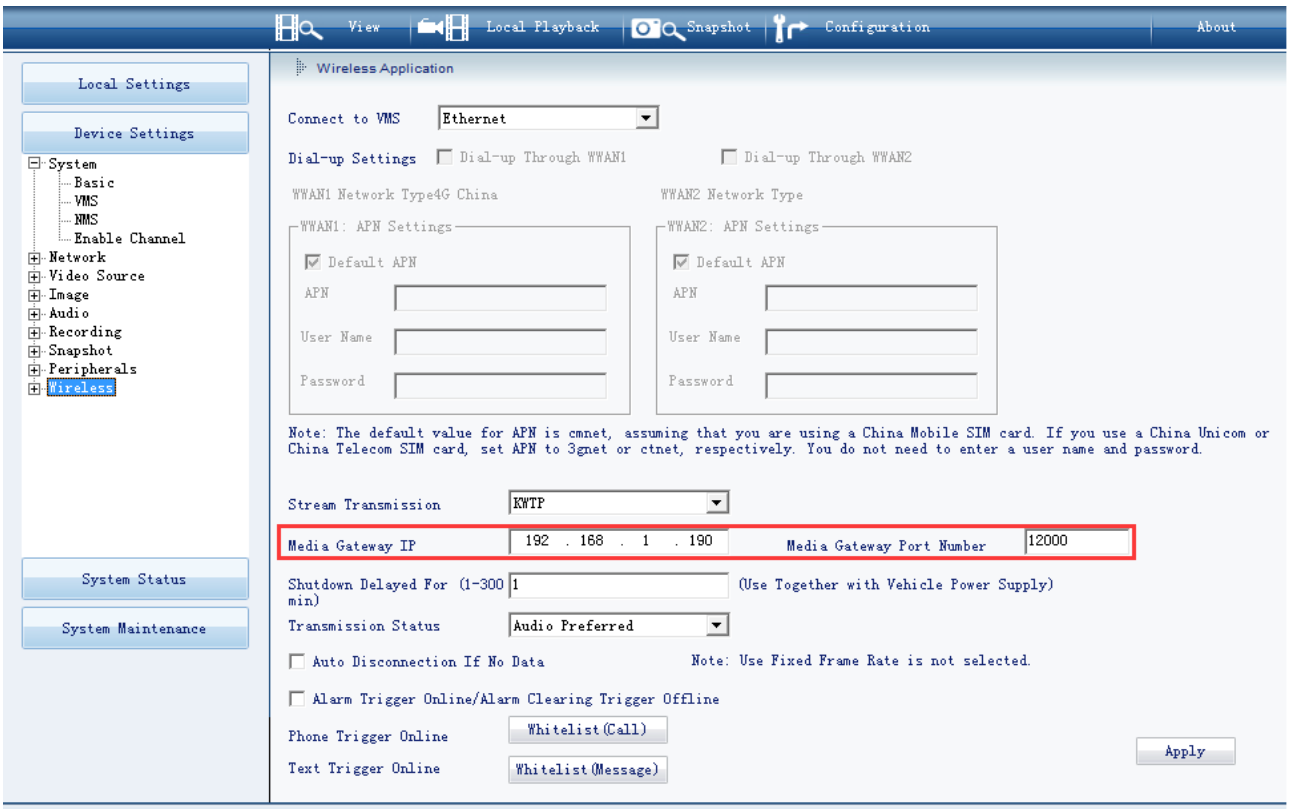
	However, you do not need to enter this port number. Therefore, if you enter **http://192.168.0.99** in the address bar, you can still access the Mobile NVR.

VMS

On the **VMS** tab page, you can configure the following.



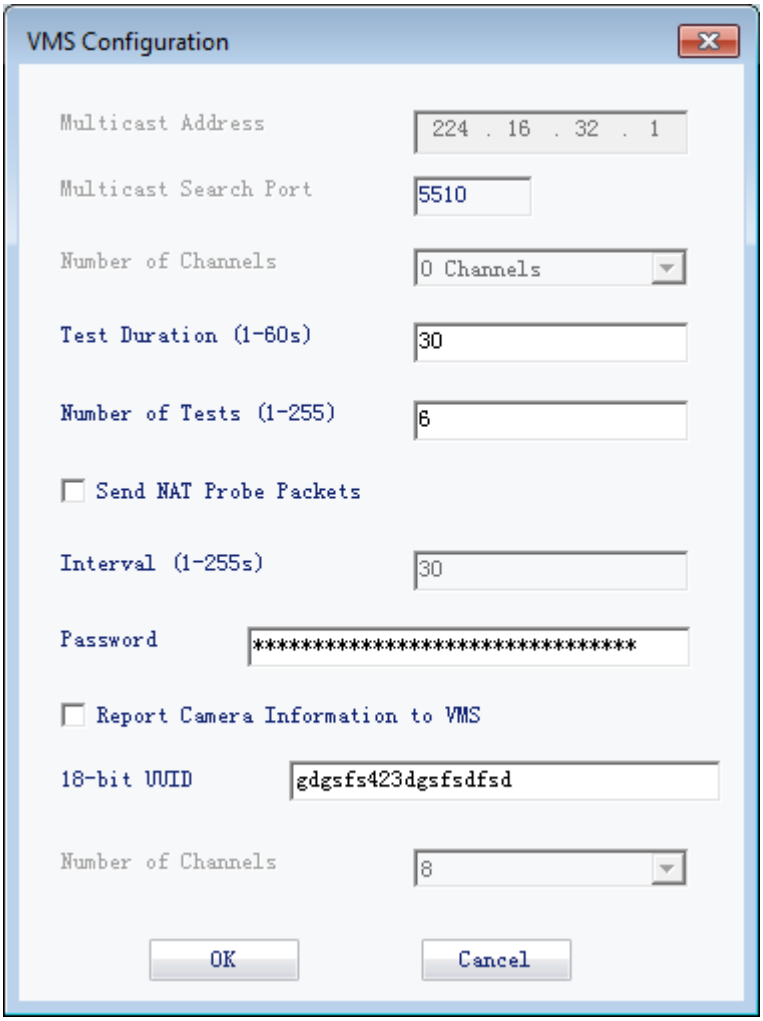
Before accessing the VMS, you must configure **IP** and **Port** under **VMS**. The **Port** parameter indicates the signaling port of the VMS. As for the data port of the VMS, you must configure the **Media Gateway IP** and **Media Gateway Port Number** parameters on the following page.



Under **Load Balancing**, **IP** and **Port** indicate the IP address and port number of the load balancing

server, respectively.

If you click **Configuration**, you can configure the following.



The following table helps you read the parameters displayed on the preceding figure.

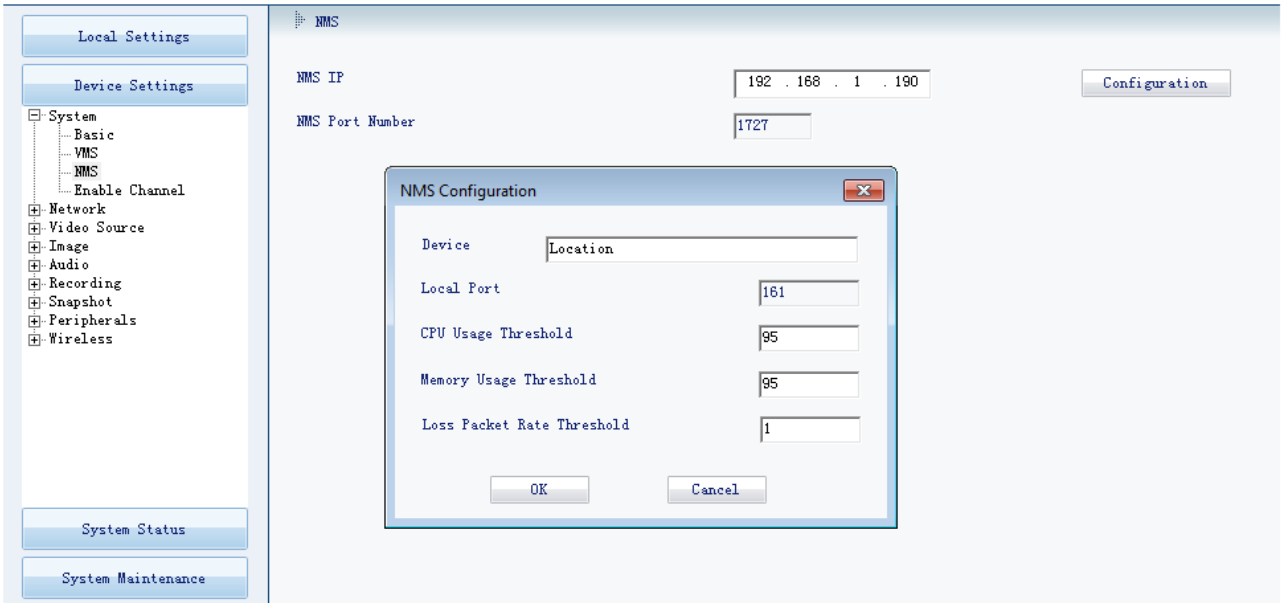
Parameter	Description
Test Duration	This parameter is used to test the connection between the Mobile NVR and VMS.
Number of Tests	Number of tests conducted on the connectivity between the Mobile NVR and VMS
Send NAT Probe Packets	Whether to enable the Mobile NVR to send NAT probe packets to the VMS
Interval	Interval at which the Mobile NVR sends NAT probe packets to the VMS
Password	UUID of the Mobile NVR. You do not need to configure this parameter.
Report Camera Information to VMS	Whether to enable the Mobile NVR to report camera information to the VMS
18-bit UUID	This is an internal parameter. Do not configure it.
Number of Channels	Number of cameras that the Mobile NVR supports

NMS

On the **NMS** tab page, you can configure the following.

Under **NMS**, the **NMS IP** and **NMS Port Number** parameters indicate the IP address and network management port number (optional) of the VMS, respectively.

If you click **Configuration**, you can configure the following.



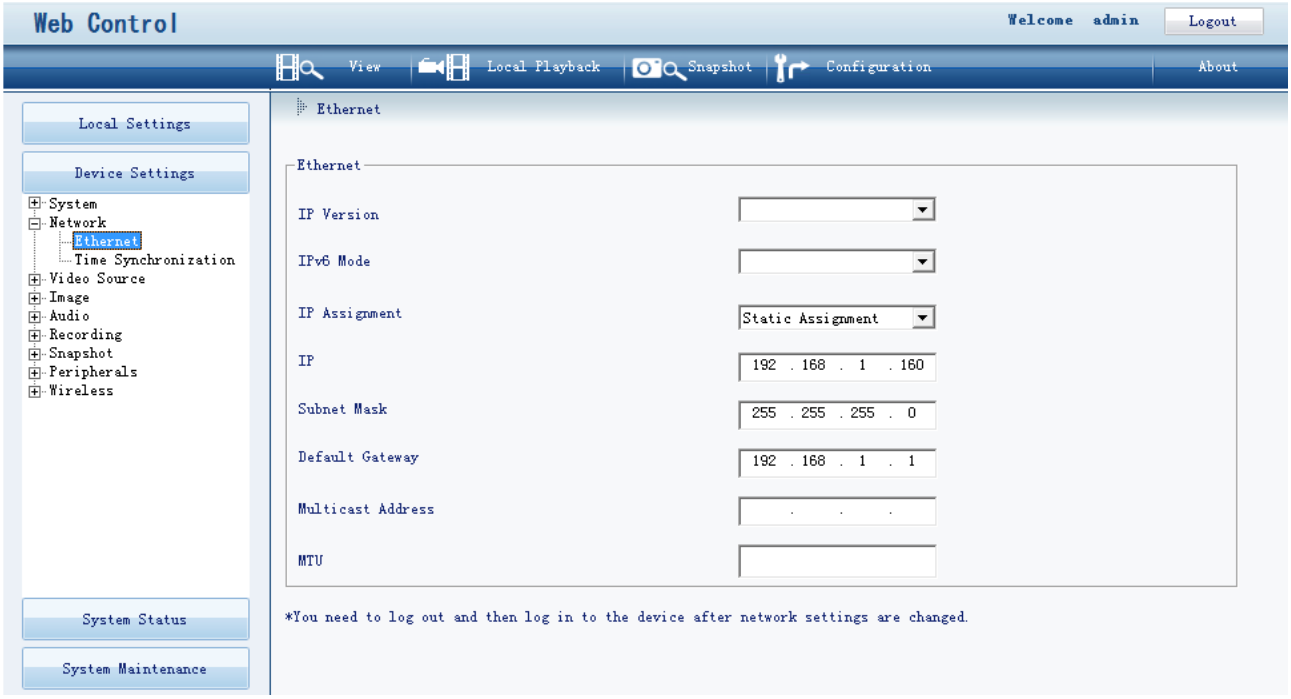
The following table helps you read the parameters displayed on the preceding figure.

Parameter	Description
Device	VMS alias
Local Port	Port for the VMS to manage the Mobile NVR
CPU Usage Threshold	CPU usage threshold of the Mobile NVR. If this threshold is reached, a High CPU Usage message will be sent from the Mobile NVR to the VMS.
Memory Usage Threshold	Memory usage threshold of the Mobile NVR. If this threshold is reached, a High Memory Usage message will be sent from the Mobile NVR to the VMS.
Loss Packet Rate	Loss packet rate threshold of the Mobile NVR.

Threshold	If this threshold is reached, a High Loss Packet Rate message will be sent from the Mobile NVR to the VMS.

Network

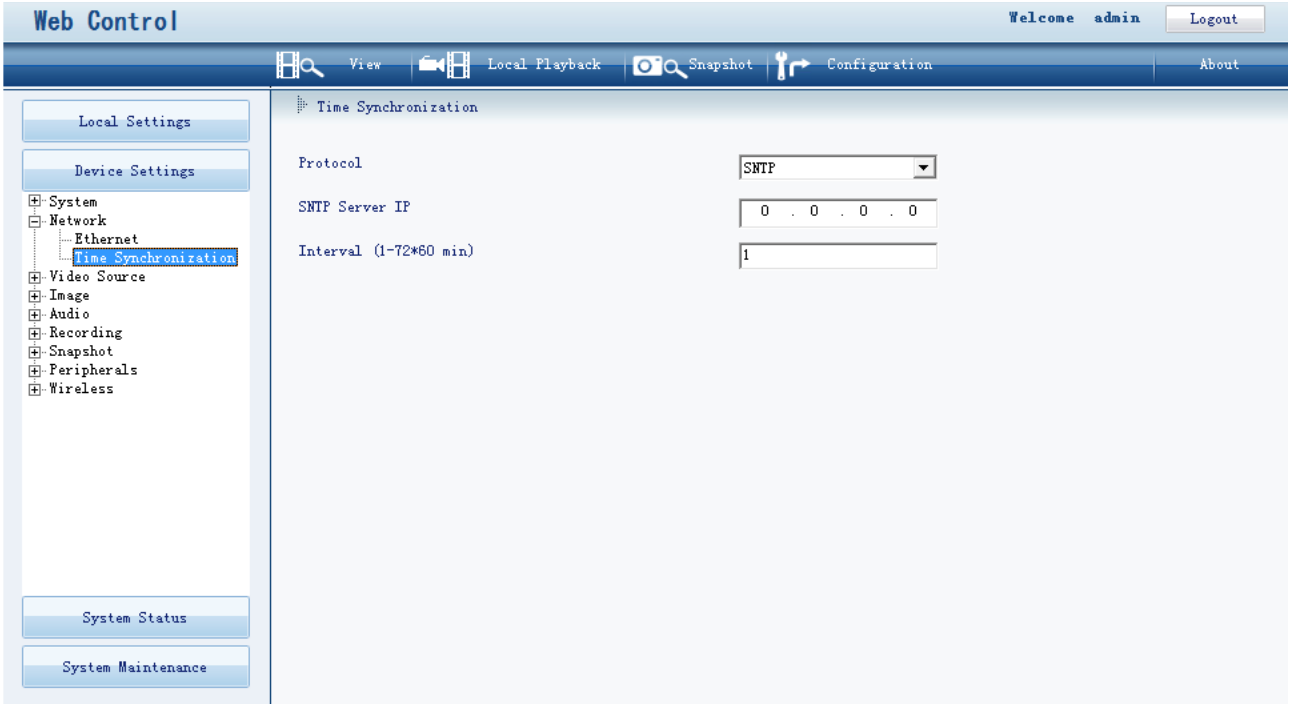
On the **Ethernet** tab page, you can configure the following.



The following table describes the parameters displayed on the preceding figure.

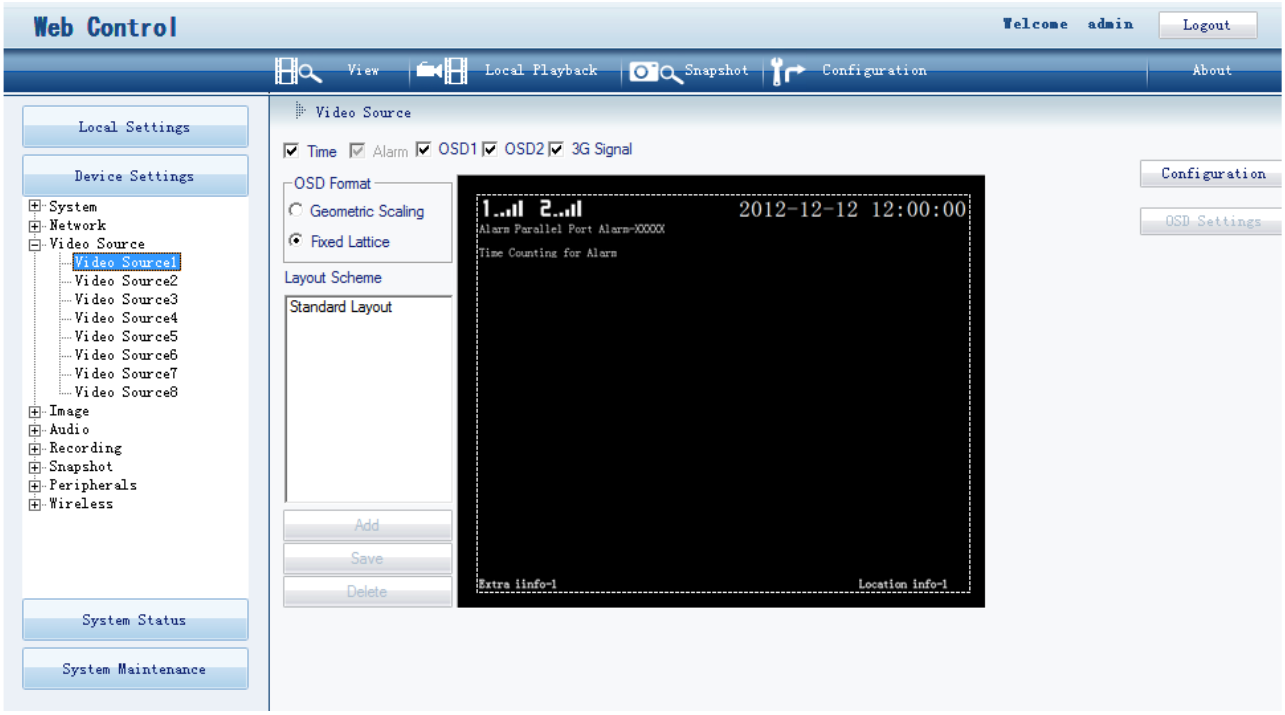
Parameter	Description
IP Version	IP version. This parameter is optional.
IPv6 Mode	IP V6 mode. Currently, the Mobile NVR does not support IPv6.
IP Assignment	Only one parameter value is available.
IP	IP address of the Mobile NVR
Multicast Address	This parameter is optional.
MTU	Maximum transmission unit. This parameter is optional.

On the **Time Synchronization** tab page, you can configure the following.



Video Source

On the **Video Source** tab page, you can configure each camera.



The following table helps you read the parameters or options displayed on the preceding figure.

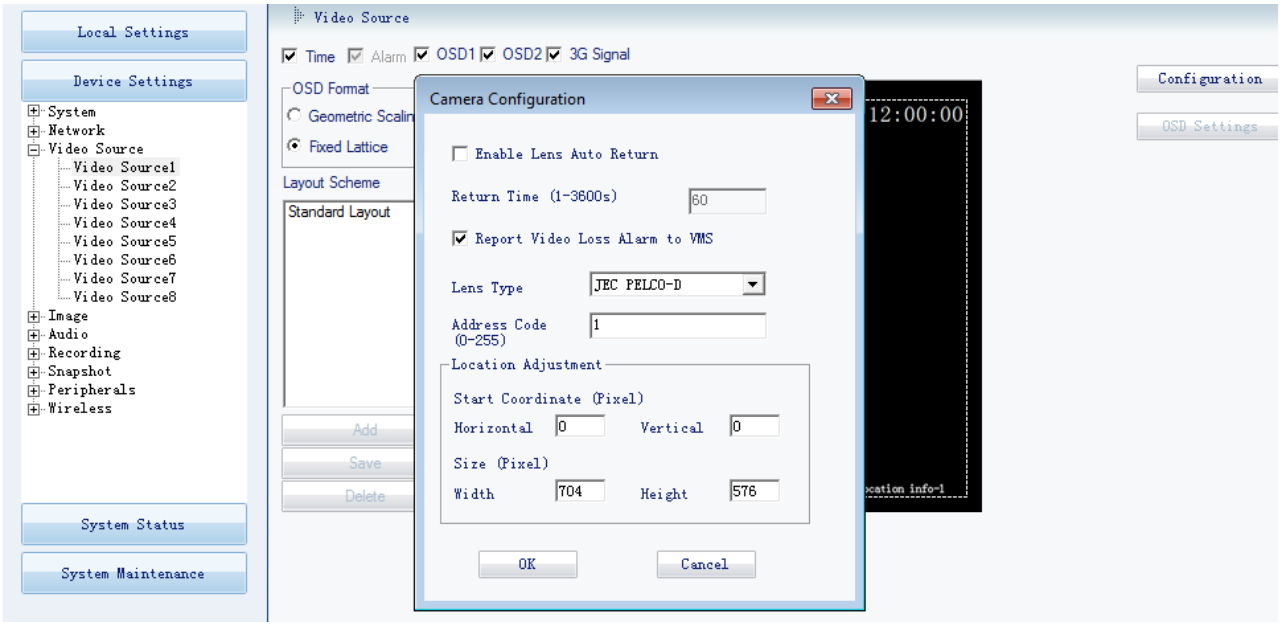
Parameter or Option	Description
Time	When this option is selected, the system time will be displayed on the video display area. If you want to change the time display location, move your cursor to the time

	text box and drag the time text box to the target location.
OSD1	You can use this option to display extra information on the video display area. When this option is selected, the corresponding extra information is displayed. To edit the extra information, double-click the **Extra info-1** text box.
OSD2	You can use this option to display extra information on the video display area. When this option is selected, the corresponding extra information is displayed. To edit the extra information, double-click the **Location info-1** text box.
3G Signal	When this option is selected, the 3G signal bar will be displayed on the video display area. If you want to change the signal bar display location, move your cursor to the signal bar and drag it to the target location.
Geometric Scaling	Fit the video image according to the screen size.
Fixed Lattice	Adjust the video image according to the screen size.
Layout Scheme	You can create layout schemes here.

NOTE

All the preceding options or parameters take effect only on analog cameras.

If you click **Configuration**, you can configure the following.

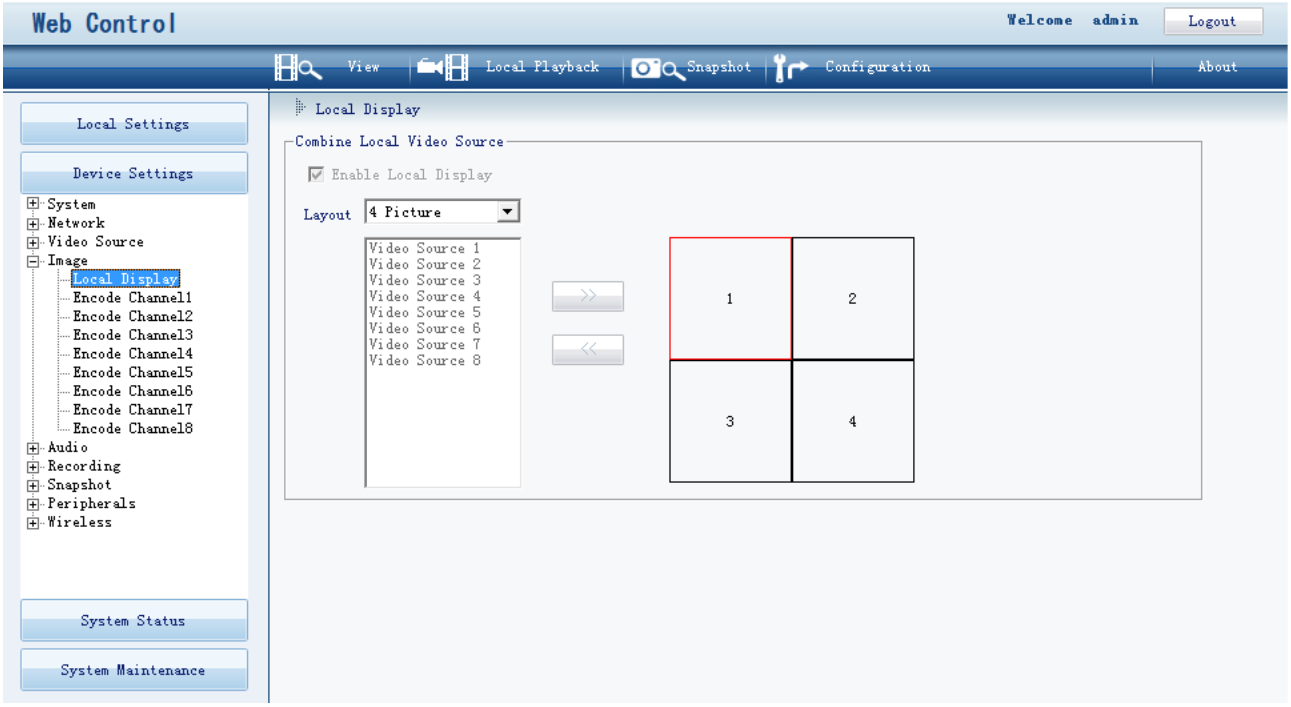


The following table helps you read the parameters or options displayed on the preceding figure.

Parameter or Option	Description
Enable Lens Auto Return	Whether to enable the Lens Auto Return function. This function enables a lens to automatically return to the factory default pan/tilt location. This parameter is used together with the **Return Time** parameter.
Return Time	Time after which a lens returns to the factory default pan/tilt location. This parameter is used together with the **Enable Lens Auto Return** parameter.
Report Video Loss Alarm to VMS	Whether to enable the camera to report the video loss alarm to the VMS
Location Adjustment	Adjust the location of the video image.

Image

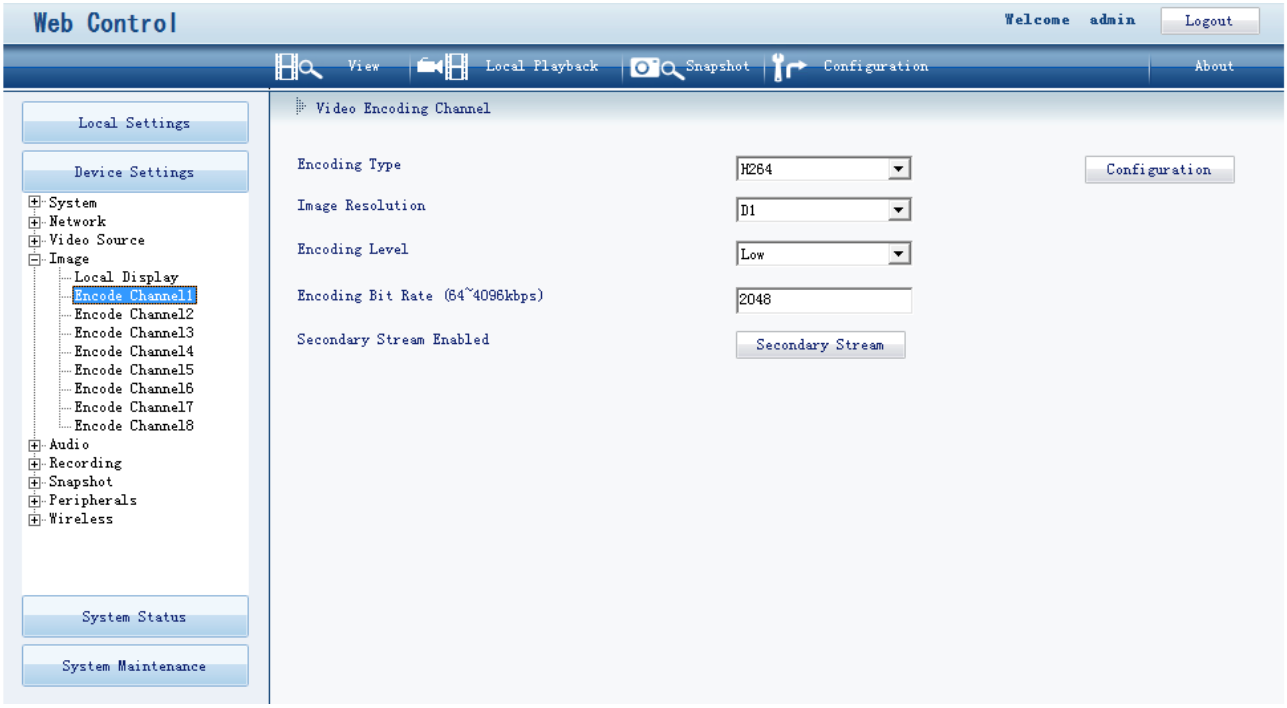
On the **Local Display** tab page, you can configure the following.



NOTE

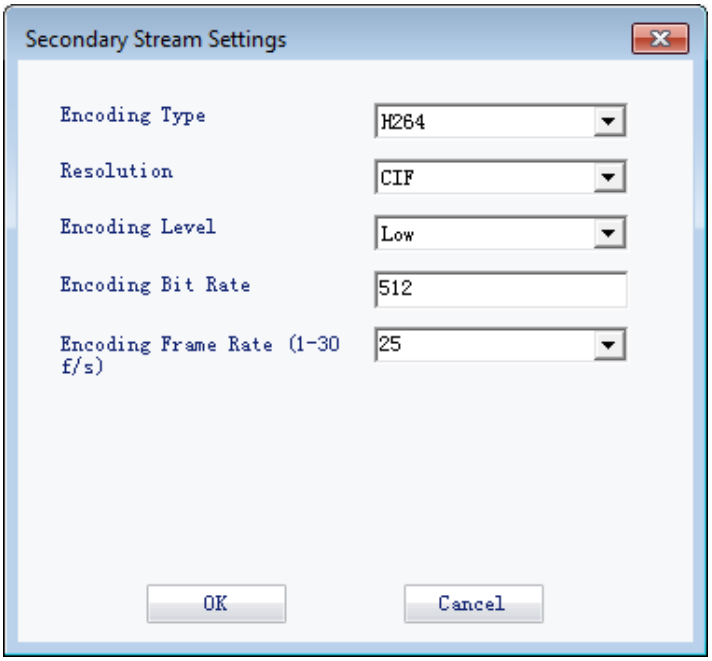
All the parameters or options displayed on the preceding figure take effect only on analog cameras.

On the **Encode Channel*X*** tab page, you can configure the following.

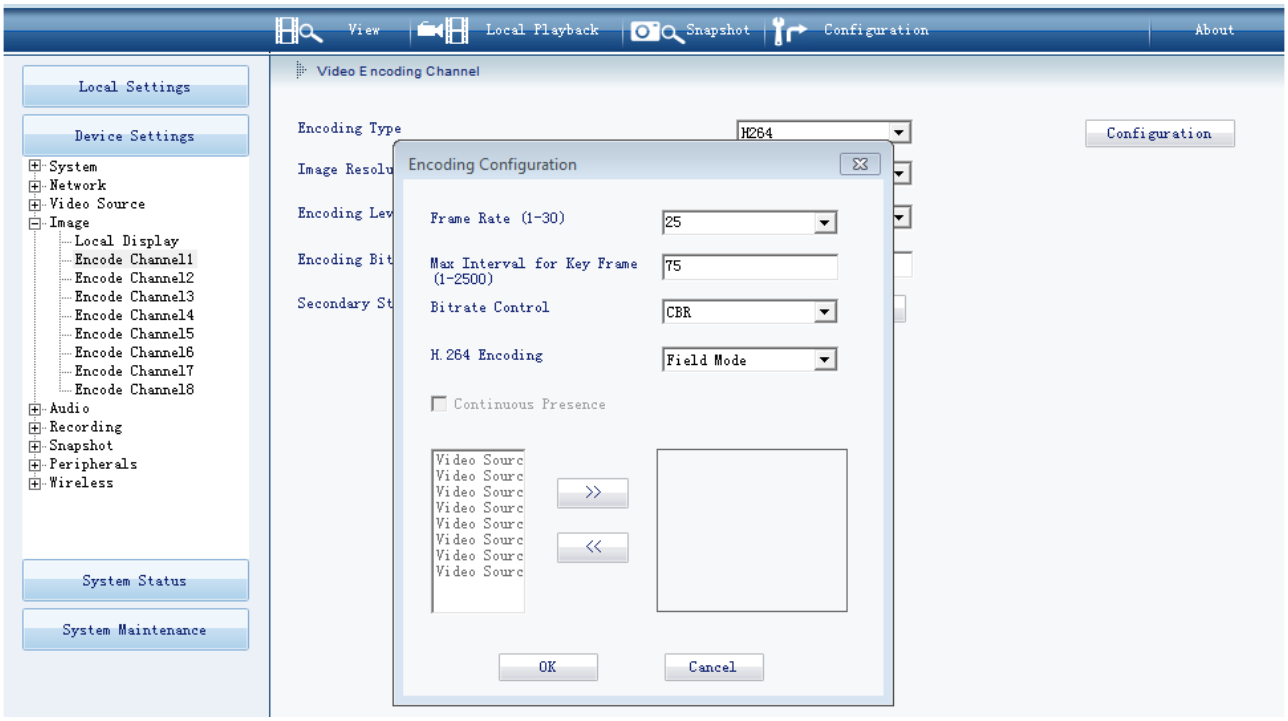


For the **Encoding Level** parameter, the **High** value can guarantee high image quality.

If you click **Secondary Stream**, you can configure secondary streams.



If you click **Configuration**, you can configure the following.



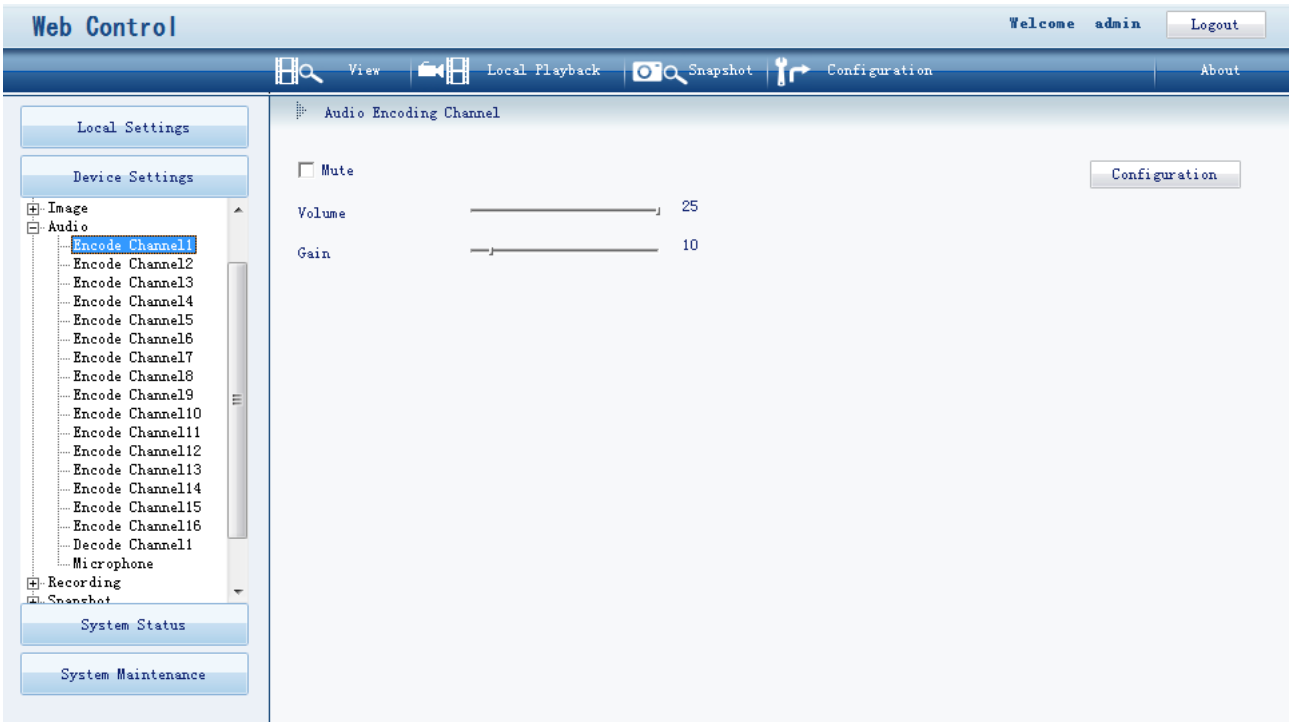
The **H.264 Encoding** parameter takes effect on only analog cameras.

As for parameter values:

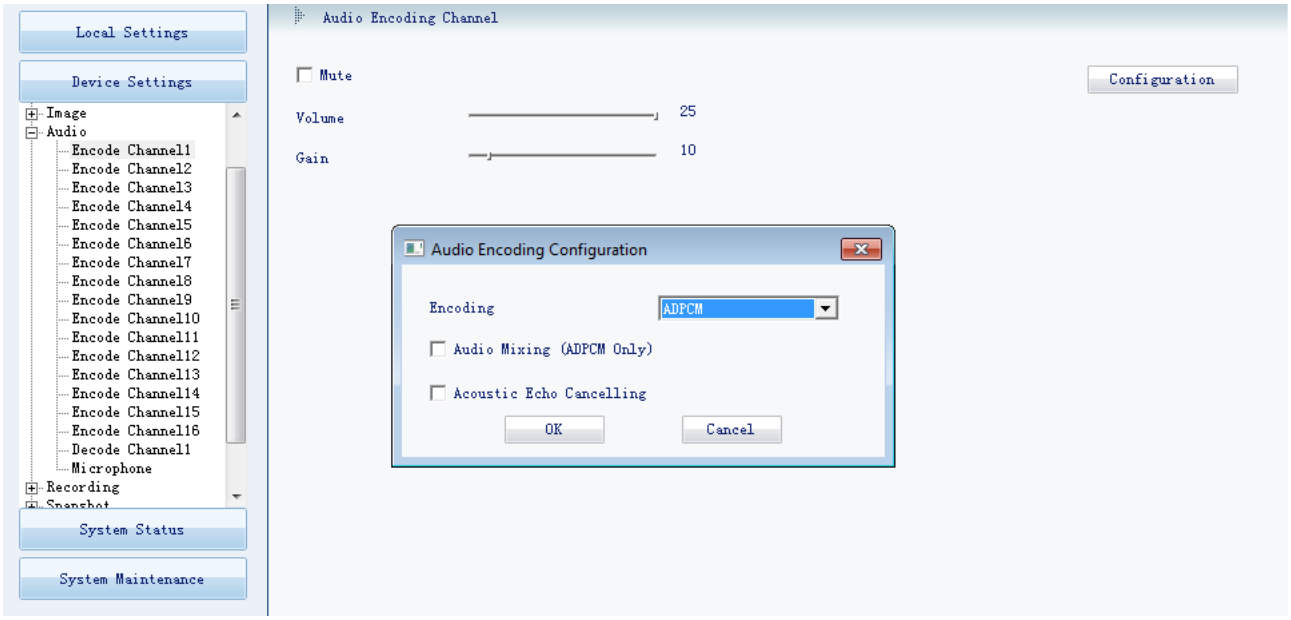
- Field Mode: If you select this mode, bandwidth resources are saved.
- Frame Mode: If you select this mode, image quality is guaranteed.

Audio

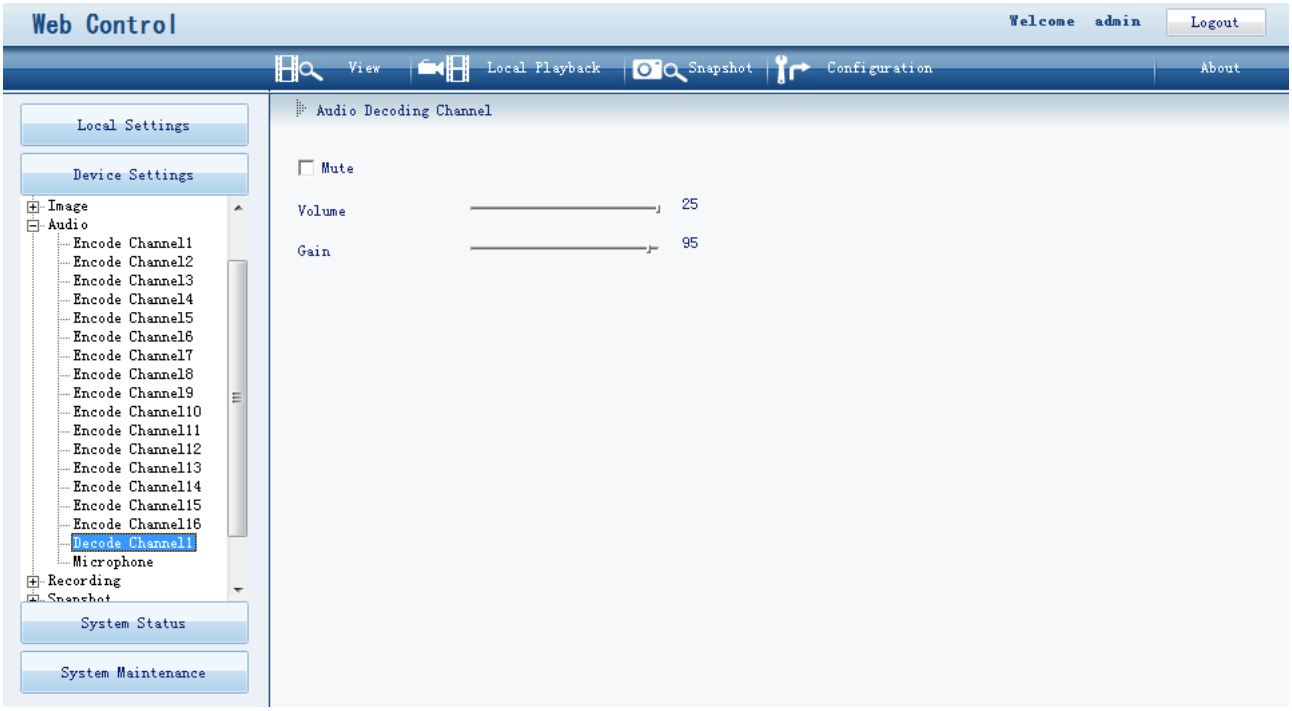
On the **Encode Channel*X*** tab page, you can configure the following.



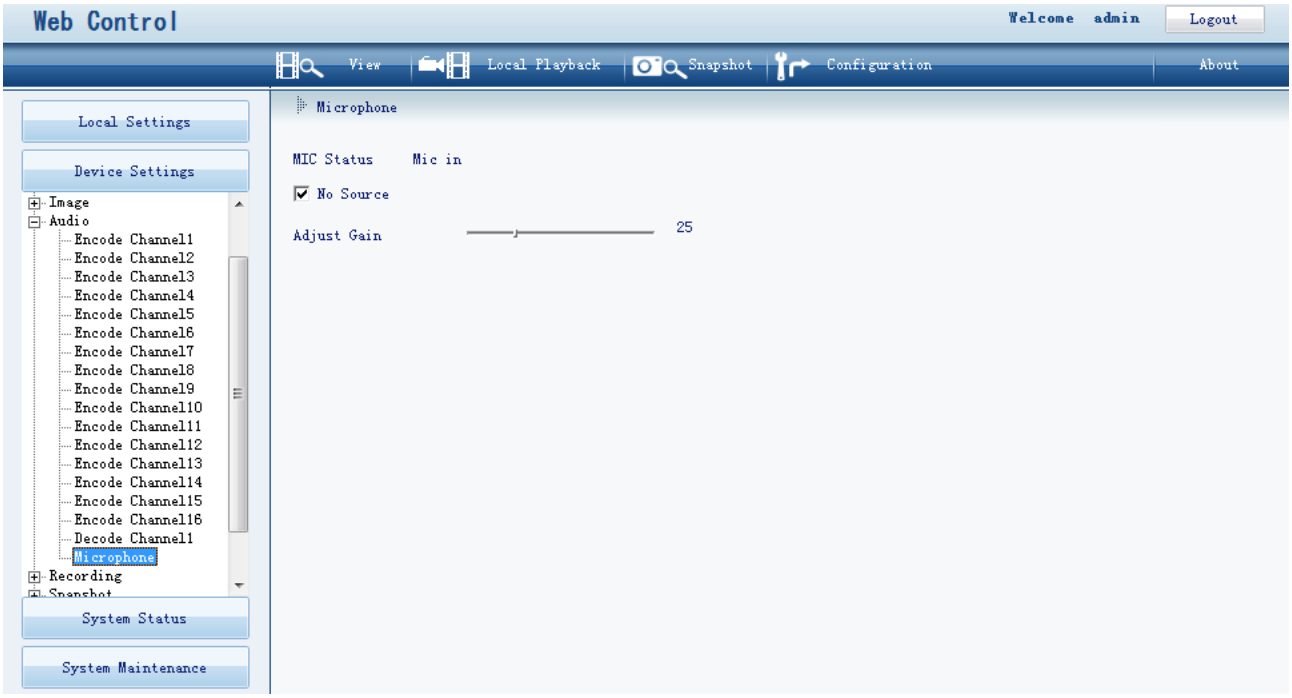
If you click **Configuration**, you can enable the Audio Mixing and Acoustic Echo Cancelling functions.



On the **Decode Channel*X*** tab page, you can configure the following.



On the **Microphone** tab page, you can configure the following.

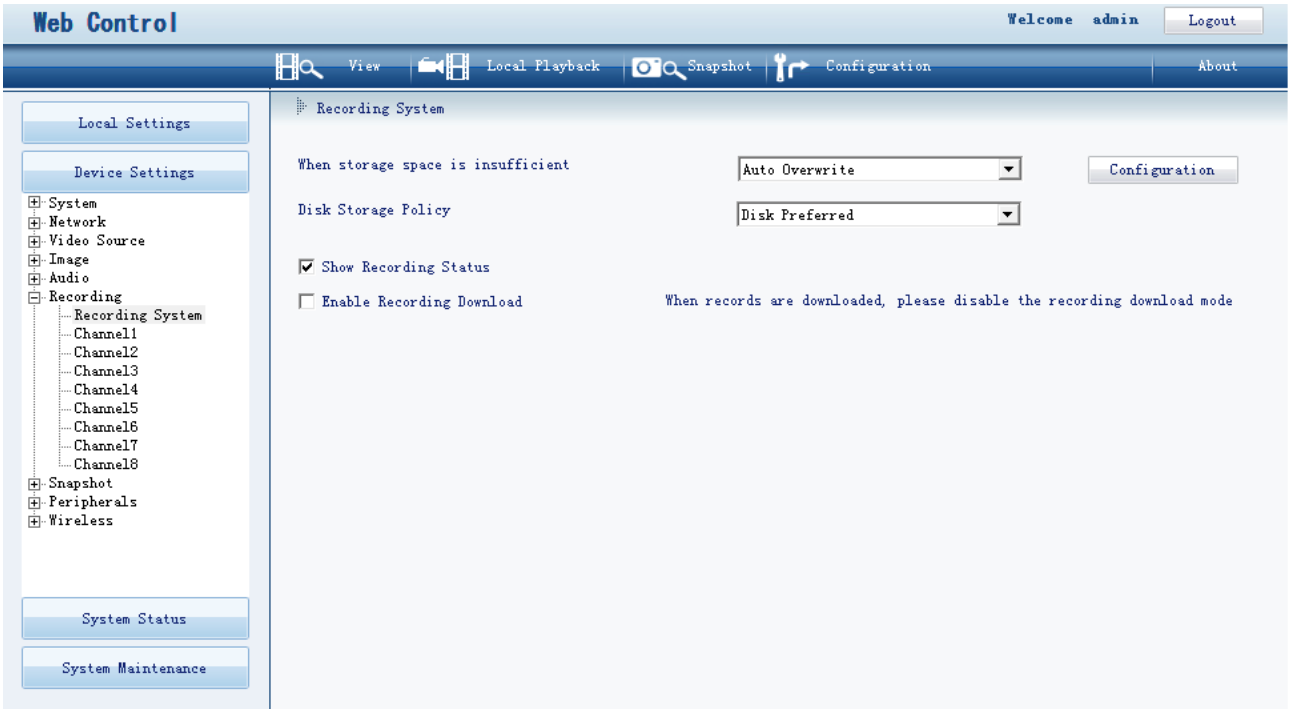


For the **No Source** option, keep the default value.

For the **Adjust Gain** parameter, keep the default value.

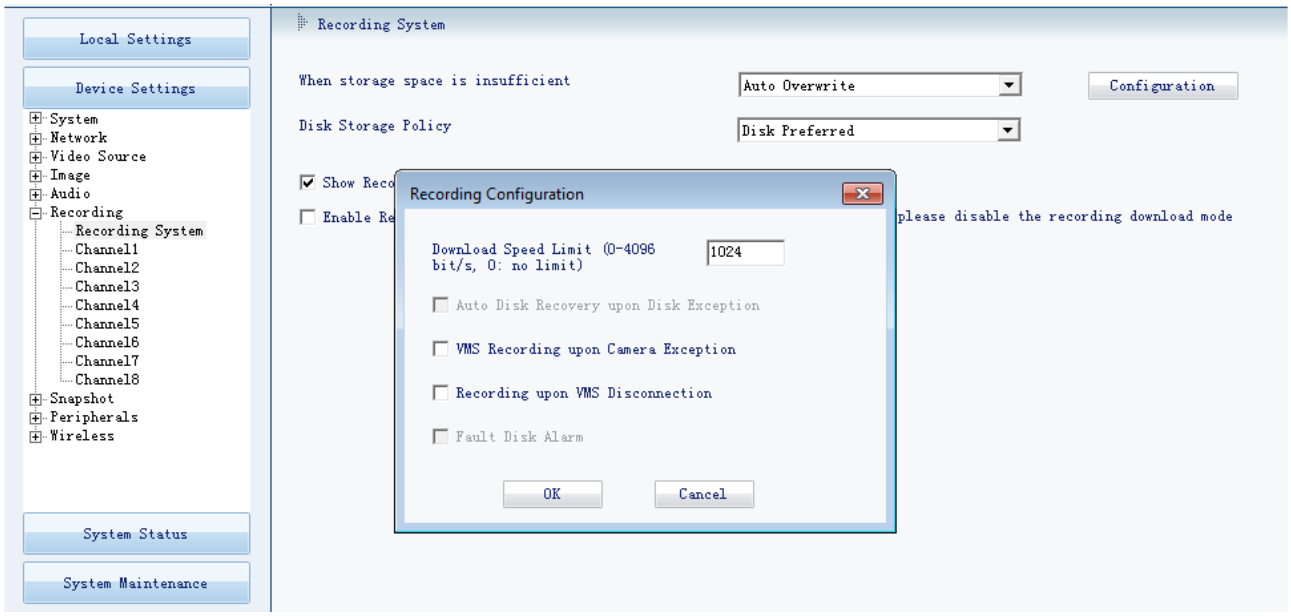
Recording

On the **Recording System** tab page, you can configure the following.



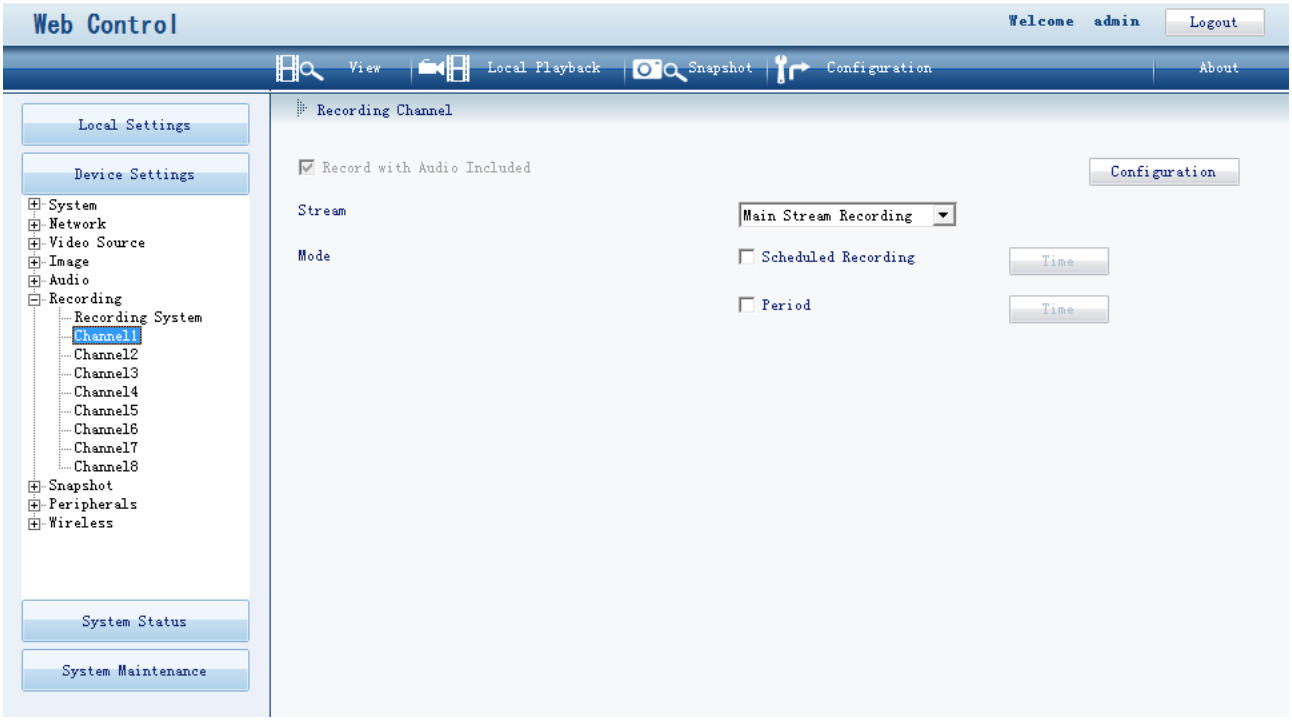
If you select the **Enable Recording Download** option, the download speed can be guaranteed. After records are downloaded, please deselect this option. You are advised to select this option only when you want to download large records.

If you click **Configuration**, you can configure the following.



Option	Description
VMS Recording upon Camera Exception	If this option is selected, the VMS will start a recording when an error occurs on the camera side.
Recording upon VMS Disconnection	If this option is selected, a recording will be started on the camera side when the Mobile NVR disconnects from the VMS.

On the **Channel*X*** tab page, you can configure the following.

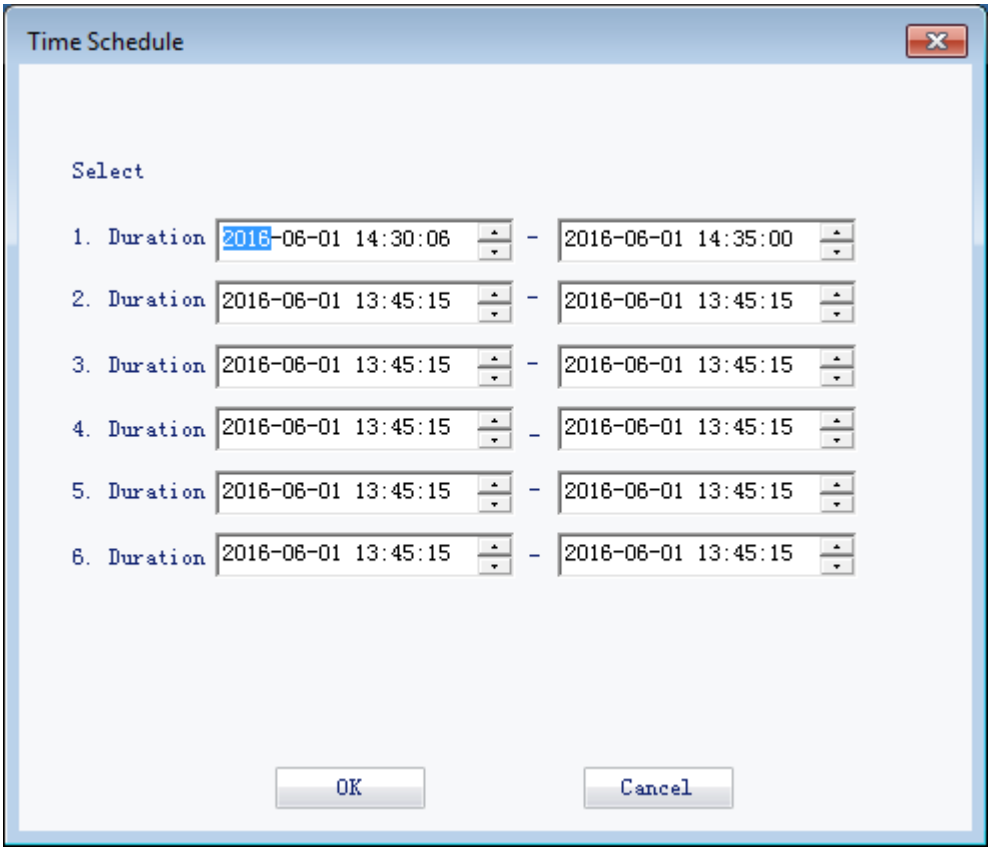


If you select **Scheduled Recording**, you can schedule recordings.

If you select **Period**, you can achieve periodical recordings that can be started and ended at specified time.

To schedule a recording:

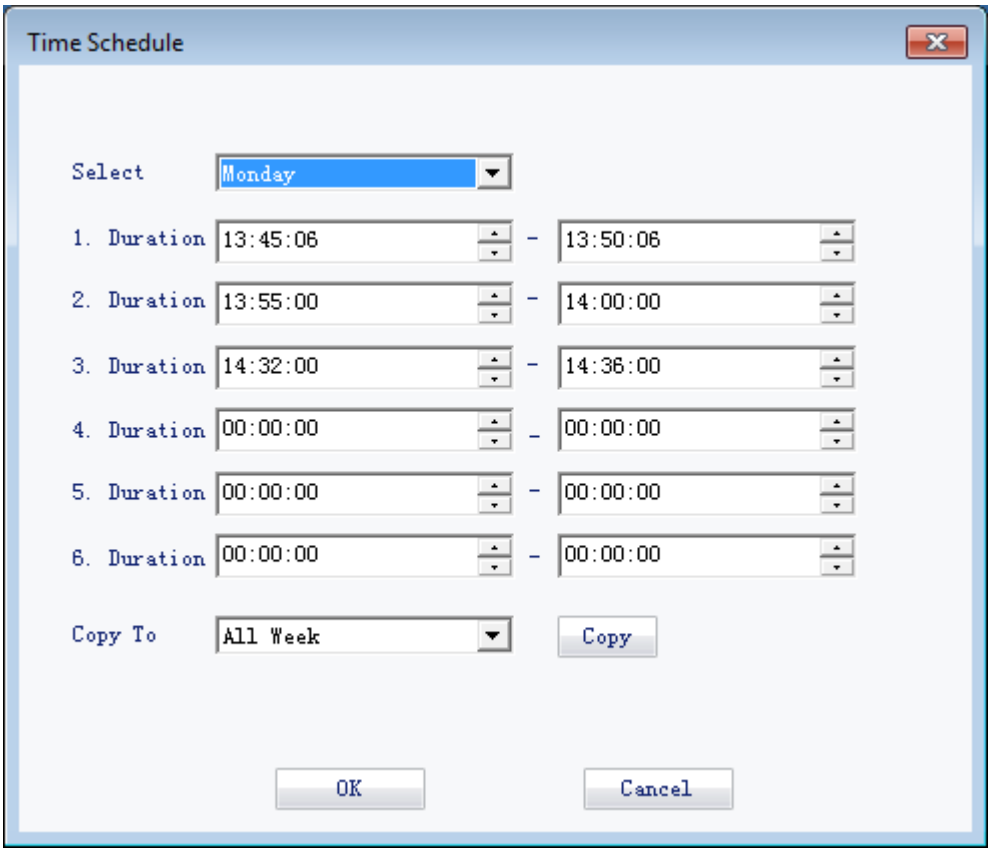
1. Select **Scheduled Recording**.
2. Click **Time** next to **Scheduled Recording**.
3. Select durations.



4. Click **OK**.

To enable periodical recording:

1. Select **Period**.
2. Click **Time** next to **Period**.
3. Select days and durations.



In this step, you can click **Copy** to copy the settings to specific or all days.

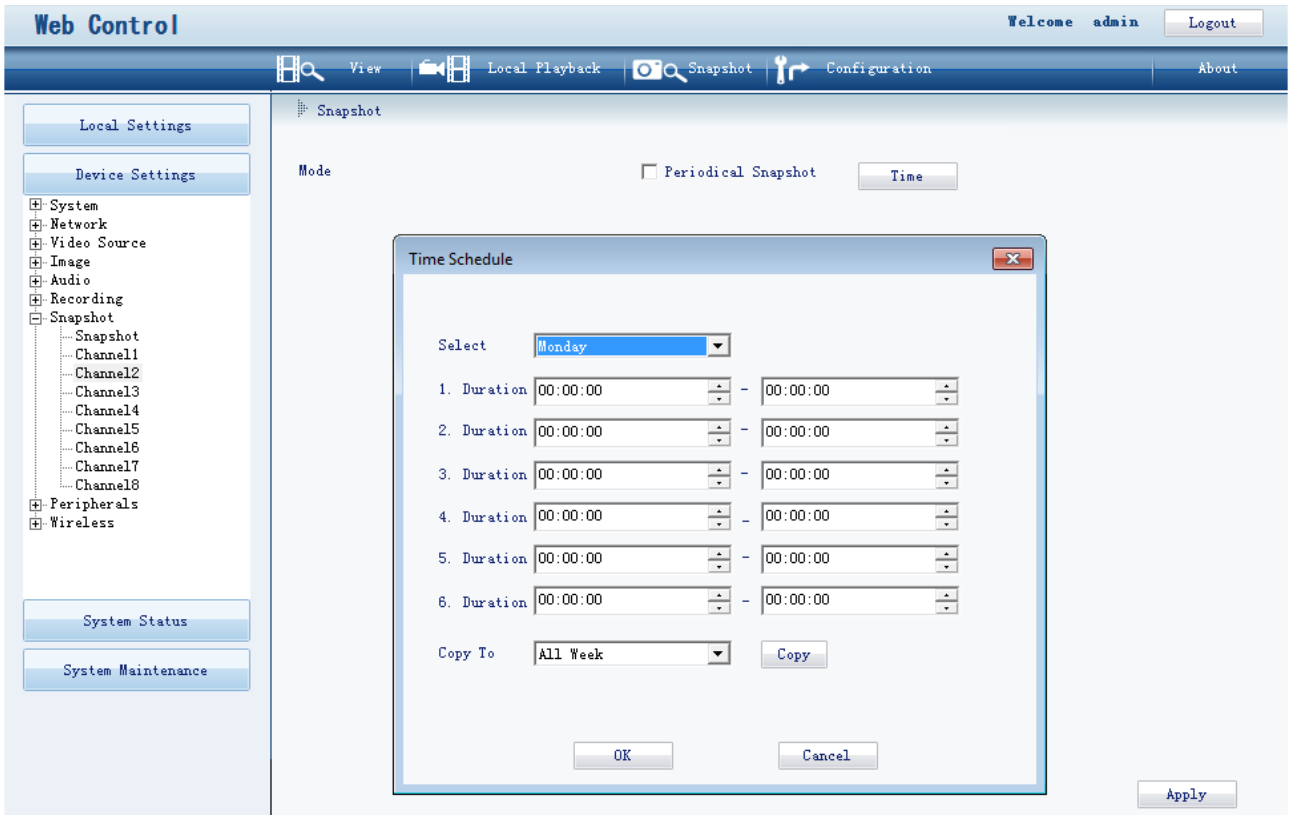
4. Click **OK**.

Snapshot

On the **Snapshot** tab page, you can configure the following.

Option	Description
Number of Snapshots for One Alarm	Number of snapshots taken upon the generation of a single alarm
Capturing Interval for One Alarm	Interval at which the system takes snapshots upon the generation of a single alarm

On the **Channel*X*** tab page, you can enable periodical snapshot.

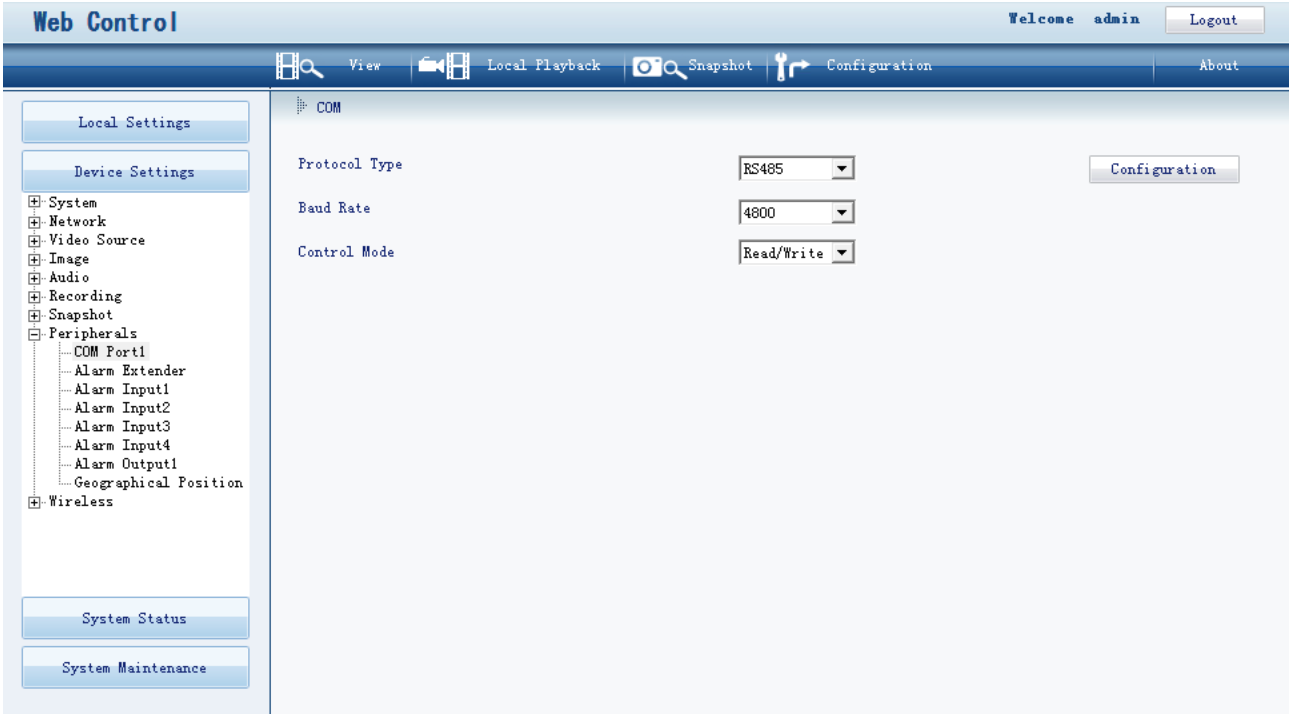


To enable periodic snapshot capturing:

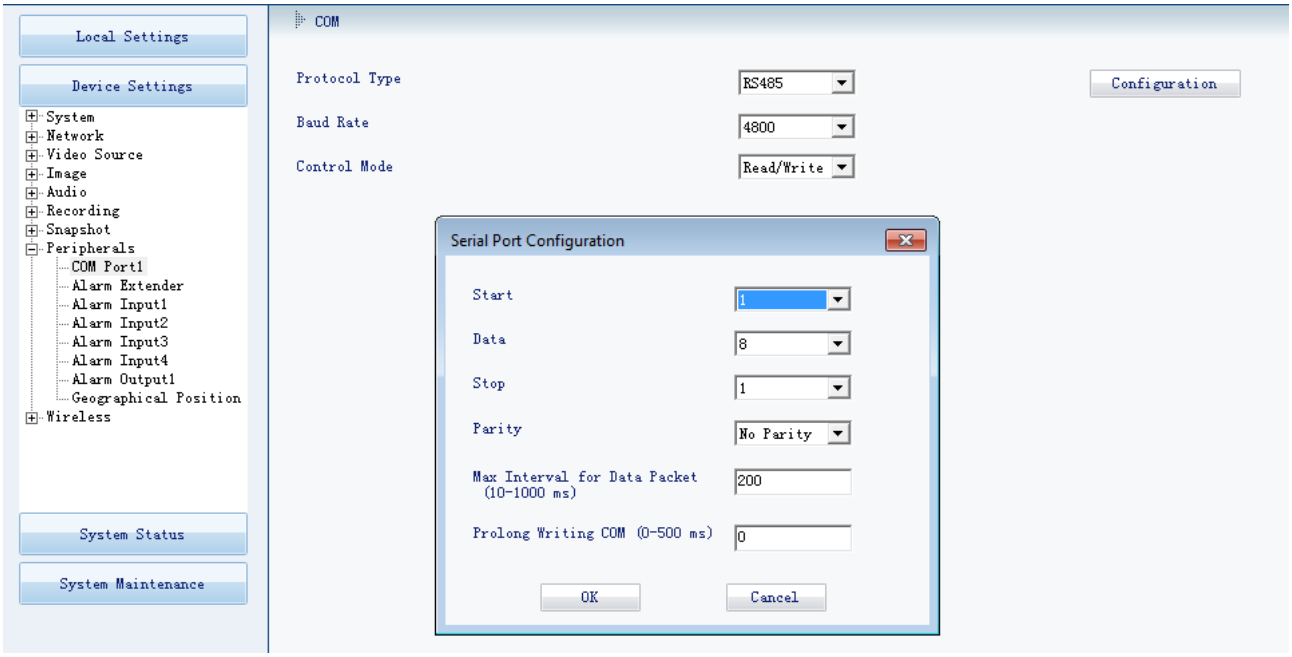
1. Select **Periodical Snapshot**.
2. Click **Time** next to **Periodical Snapshot**.
3. Select days and durations.
   In this step, you can click **Copy** to copy the settings to specific or all days.
4. Click **OK**.

COM Port

On the **COM Port1** tab page, you can configure the COM port.



If you click **Configuration**, you can configure the following.



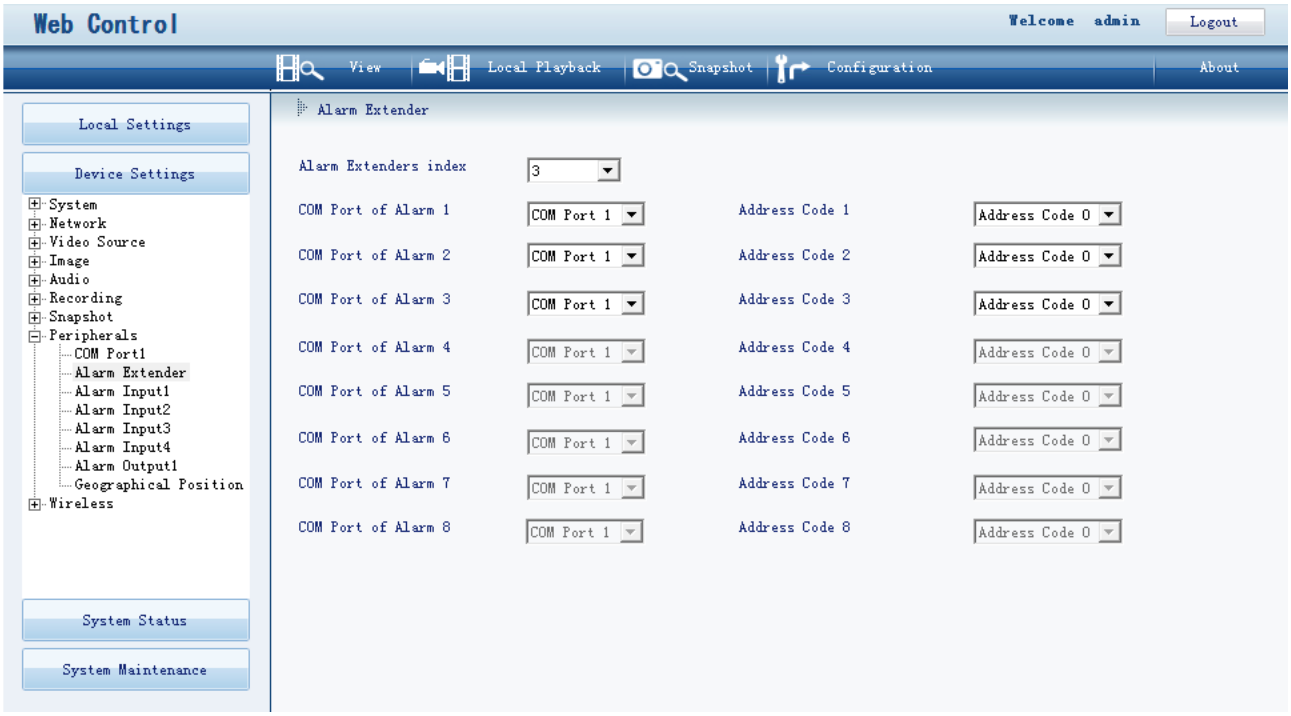
The following table helps you read the parameters displayed on the preceding figure.

Parameter	Description
Start	Start bit
Data	Data bit
Stop	Stop bit
Parity	You can set this parameter to **No Parity**, **Even**, and **Odd**.
Prolong Writing COM	Time for prolonging writing data into COM ports

Alarming

Alarm Extender

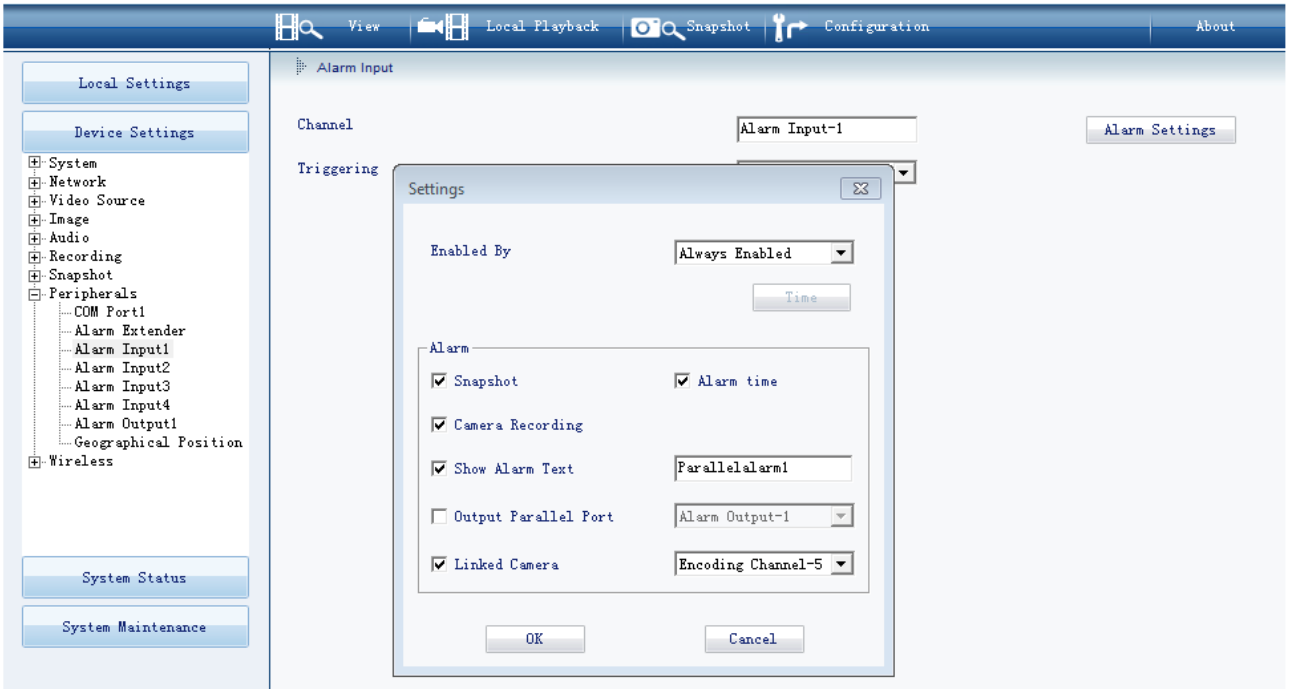
On the **Alarm Extender** tab page, you can configure alarm extenders.



When you set **Alarm Extenders index** to **2**, you can configure two alarm extenders. If you set to **3**, three alarm extenders can be configured.

Alarm Inputs

On the **Alarm Input*X*** tab page, you can configure alarm inputs.



To configure an alarm input:

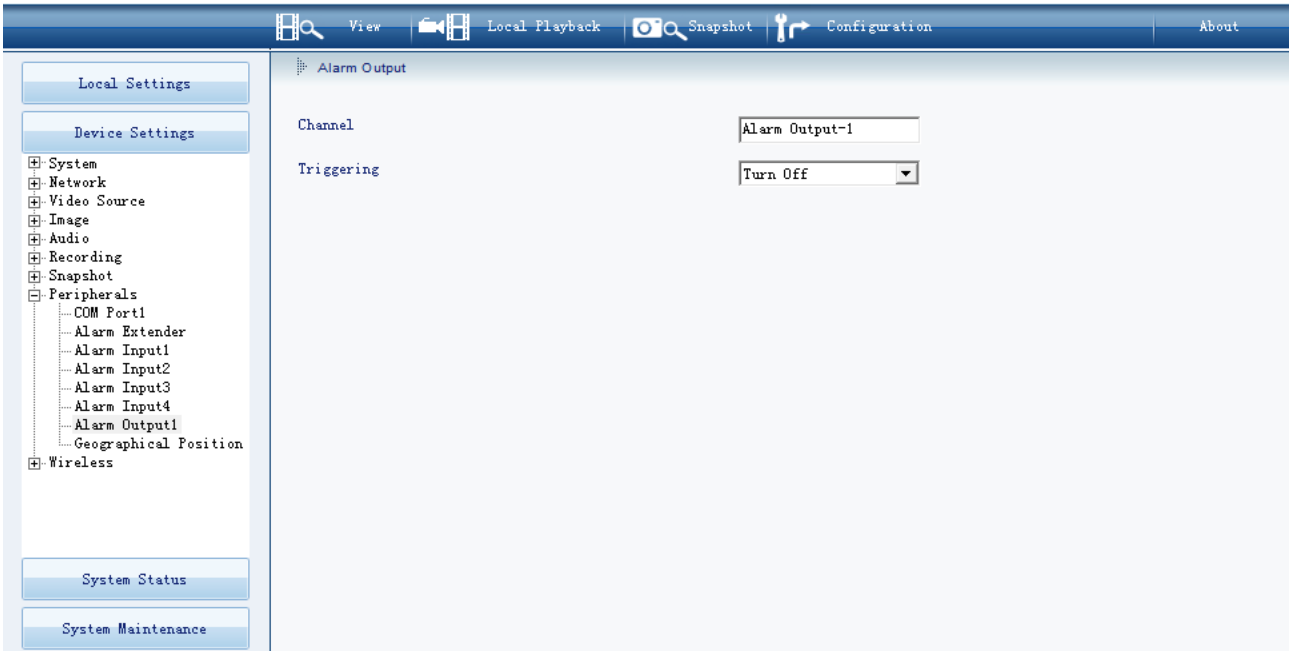
1. Select the alarm input from the **Channel** drop-down list.
2. Set **Triggering** to **Turn On**.
3. Click **Alarm Settings** to configure alarm notifications.
   The following table describes each option.

Option	Description
Snapshot	Upon alarm generation, the linked camera will take snapshots.
Alarm time	If this option is selected, the duration the alarm persists will be displayed on the linked camera.
Camera Recording	Upon alarm generation, the linked camera will start a recording.
Show Alarm Text	Upon alarm generation, pre-defined texts will be displayed on the linked camera.
Output Parallel Port	If you select this option, an alarm output is evoked upon alarm generation.
Linked Camera	Linked camera

4. Click **OK**.

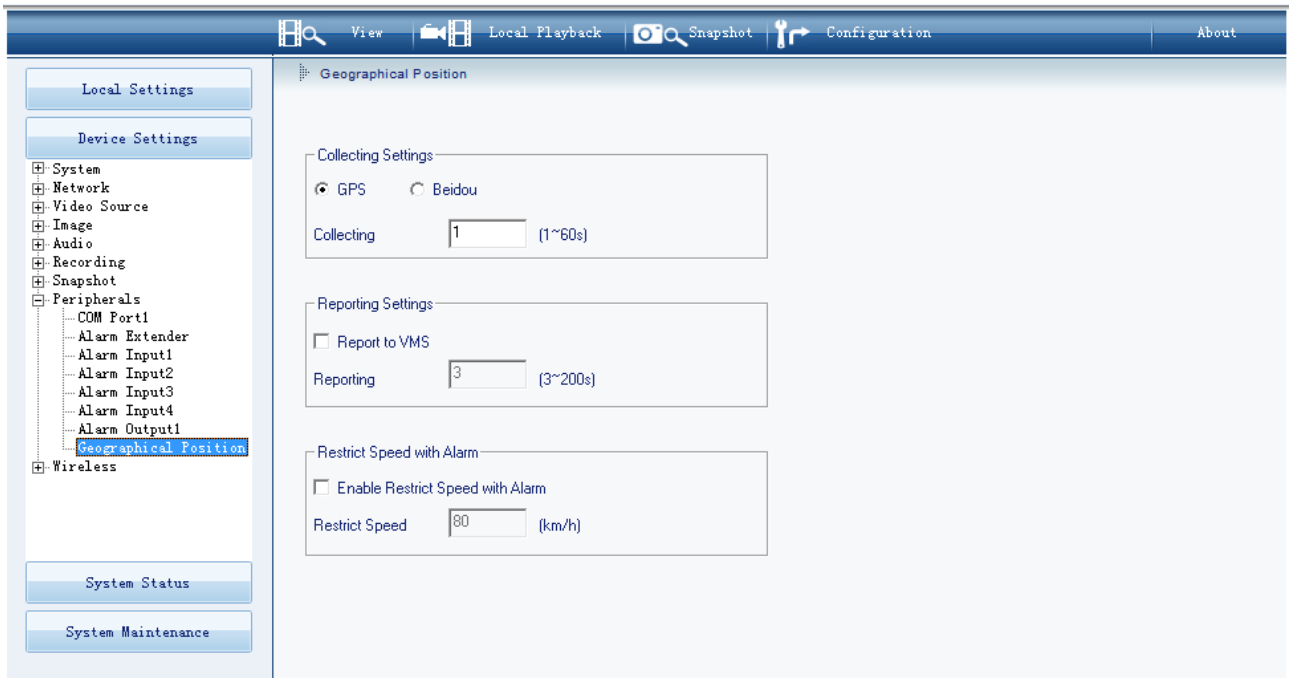
Alarm Outputs

On the **Alarm Output*X*** tab page, you can configure the following.



Geographical Position

On the **Geographical Position** tab page, you can configure the following.



The following table describes the parameters displayed on the preceding figure.

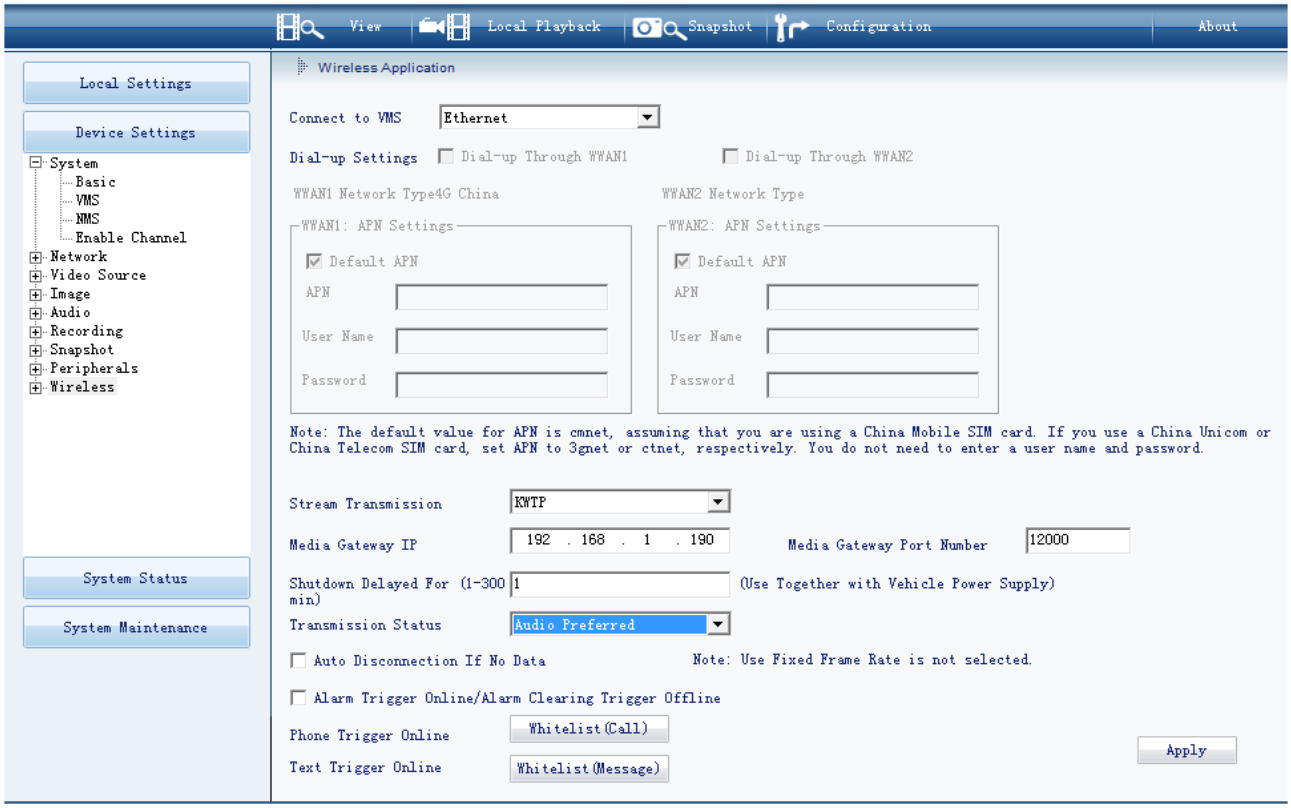
Item	Parameter	Description
Collecting Settings	GPS	Collecting location information using the GPS.
	Beidou	Collecting location information using the BeiDou Navigation Satellite System.
	Collecting	Collecting interval
Reporting Settings	Report to VMS	Report location information to the VMS
	Reporting	Reporting interval

Item	Parameter	Description
Restrict Speed with Alarm	Enable Restrict Speed with Alarm	Whether to generate a High Speed alarm when the Mobile NVR is moving fast.
	Restrict Speed	Speed upper limit for the Mobile NVR

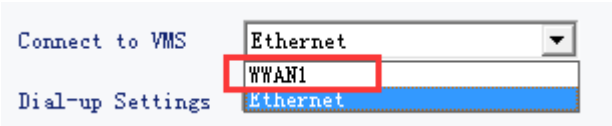
Wireless

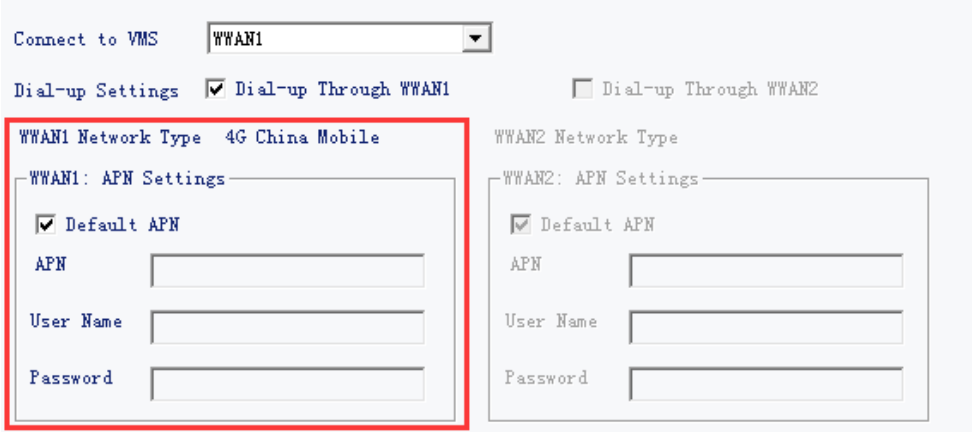
Wireless Application

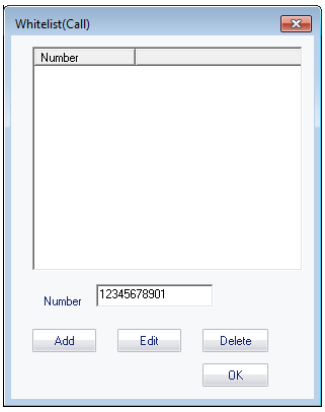
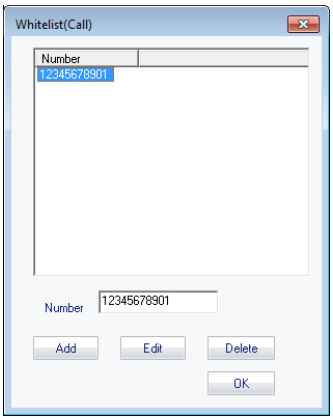
On the **Wireless Application** tab page, you can configure WIFI settings.

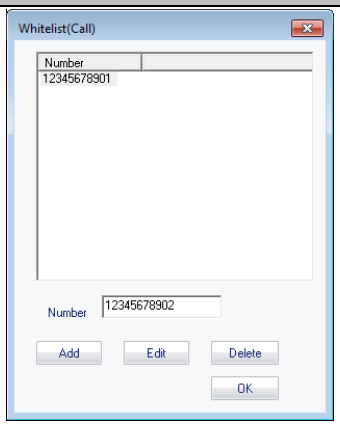


The following table helps you read the parameters displayed in the preceding figure.

Parameter or Option	Description
Connect to VMS	The way how the Mobile NVR connects to the VMS. When one 3G module is inserted to slot 1 of the Mobile NVR, the **WWAN1** parameter value is available.  When two 3G modules are inserted to slots 1 and 2 of the Mobile NVR, the **WWAN1** and **WWAN2** parameter values are available.
Dial-up Settings	When 3G modules are inserted to the Mobile NVR, dial-up settings must be configured.

Parameter or Option	Description
Dial-up Through WWAN1	This option must be selected when **Connect to VMS** is set to **WWAN1**. When this option is selected, you do not need to configure the parameters displayed blow, as shown in the following figure. 
Dial-up Through WWAN2	For details, see the description for the **Dial-up Through WWAN1** option.
Stream Transmission	The default value for this parameter is **KWTP**, which is Kedacom proprietary protocol designed on the basis of the UTP and TCP protocols.
Media Gateway IP	IP address of the media gateway. This parameter is usually set to the IP address of the VMS.
Media Gateway Port Number	Number of the port for the media gateway. This parameter is usually set to the number of the front-end-specific wireless port of the VMS.
Shutdown Delay For	When this parameter is set to **1**, the Mobile NVR will shut down in one minute after receiving the shutdown command. Note that when you install the Mobile NVR, you must connect the included aviation plug to the vehicle power supply.
Transmission Status	Transmission policy. The parameter values are **Audio Preferred**, **Audio Only**, and **Video Only**.
Auto Disconnection If No Data	If this option is selected, the Mobile NVR will disconnect from the VMS when no data is transmit between them.
Alarm Trigger Online/Alarm Clearing Trigger Offline	This option is used together with the **Auto Disconnection If No Data** option. Assuming that the **Auto Disconnection If No Data** and **Alarm Trigger Online/Alarm Clearing Trigger Offline** options are selected and currently the Mobile NVR disconnects from the VMS due to no data transmission. In such a case, the Mobile NVR will connect to the VMS upon alarm generation. The Mobile NVR will disconnects from the VMS again upon alarm clearing.
Phone Trigger Online	This option is similar with the **Alarm Trigger Online/Alarm Clearing Trigger Offline** option. When a specified number calls the Mobile NVR, the Mobile NVR will connect to the VMS. For this parameter, you need to create a call whitelist. To create a call whitelist:

Parameter or Option	Description
	1. Click . 2. In the displayed dialog box, enter a number in the **Number** text filed. The following is an example.  3. Click **Add**. 4. Repeat steps 3 and 4 for all the phone numbers you want to add to the whitelist. 5. Click **OK**. To edit a call whitelist: 1. Click . 2. In the displayed dialog box, select the number you want to edit. The following is an example.  3. Enter a new number in the **Number** text filed. The following is an example.

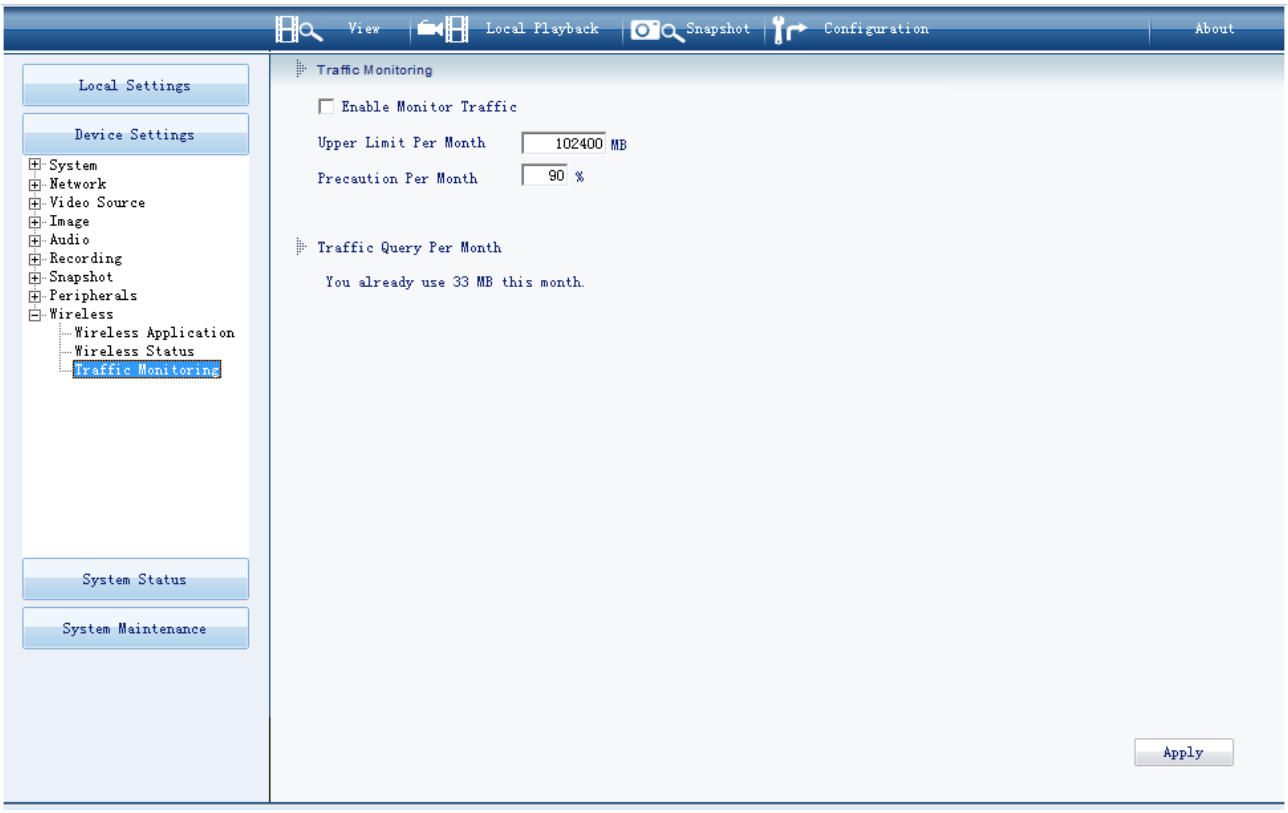
Parameter or Option	Description
	 4. Click **Edit**. 5. Repeat steps 2 through 4 for all the phone numbers you want to edit. 6. Click **OK**.
Text Trigger Online	This option is similar with the **Alarm Trigger Online/Alarm Clearing Trigger Offline** option. When a specified number sends a text message to the Mobile NVR, the Mobile NVR will connect to the VMS. For this parameter, you need to create a text message whitelist. For details, see the description for the **Phone Trigger Online** option.

Wireless Status

On the **Wireless Status** tab page, you can query wireless status.

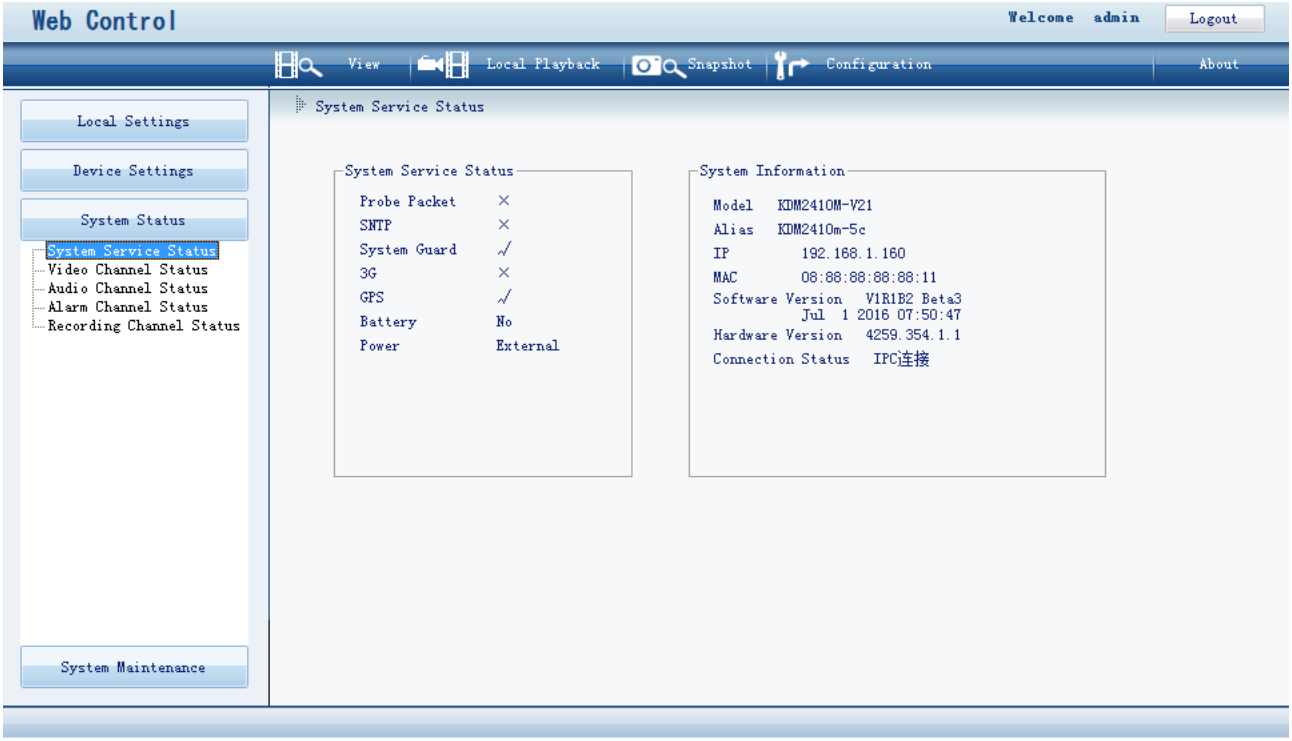
Traffic Monitoring

On the **Traffic Monitoring** tab page, you can enable the traffic monitoring function.



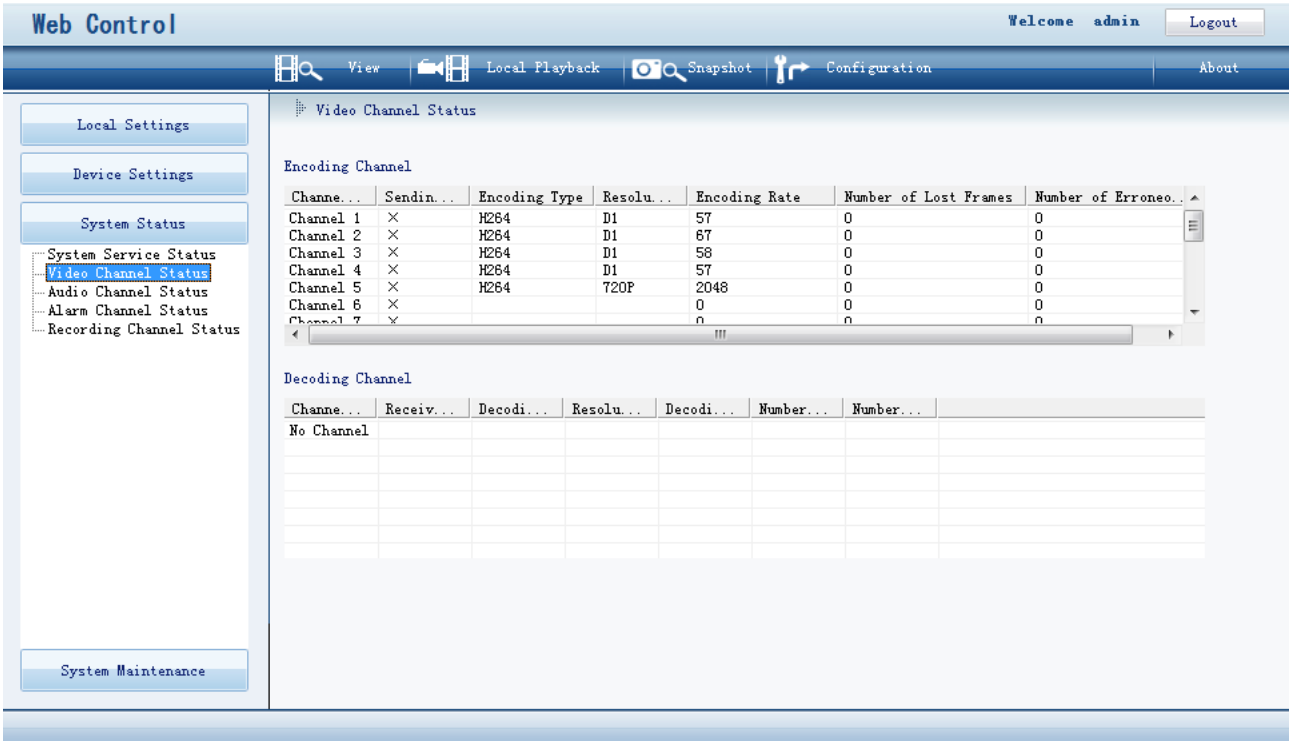
System Service Status

On the **System Service Status** tab page, you can check the basic system information and the system service status.



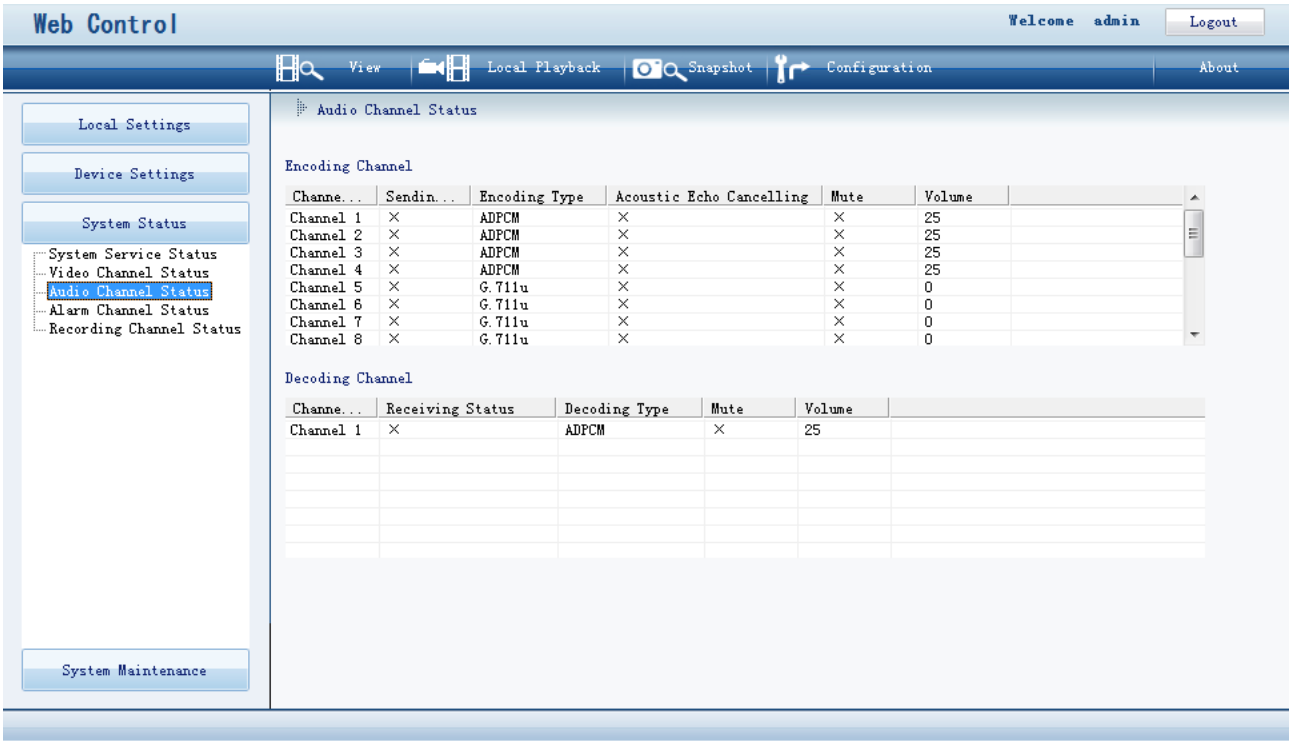
Video Channel Status

On the **Video Channel Status** tab page, you can check the status of encoding and decoding channels.



Audio Channel Status

On the **Audio Channel Status** tab page, you can check the status of audio channels.

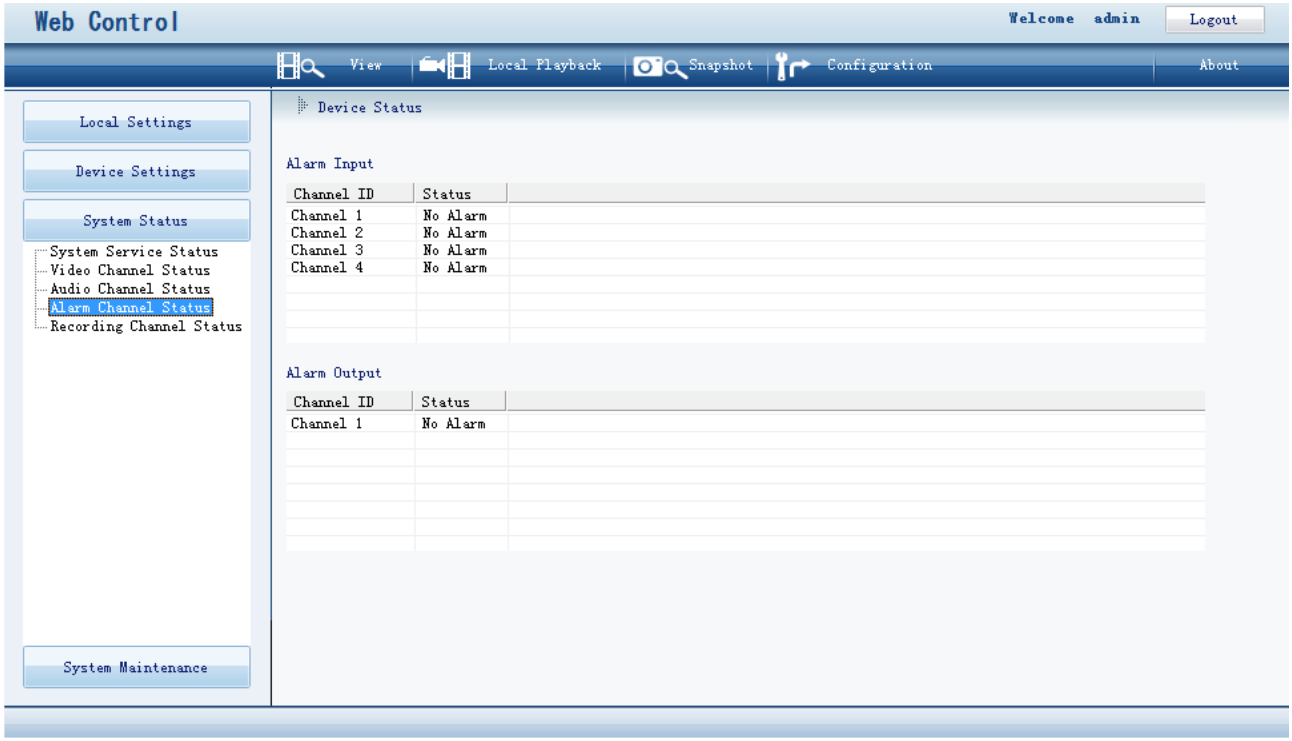


Alarm Channel Status

On the **Alarm Channel Status** tab page, you can check whether alarms are generated on alarm input

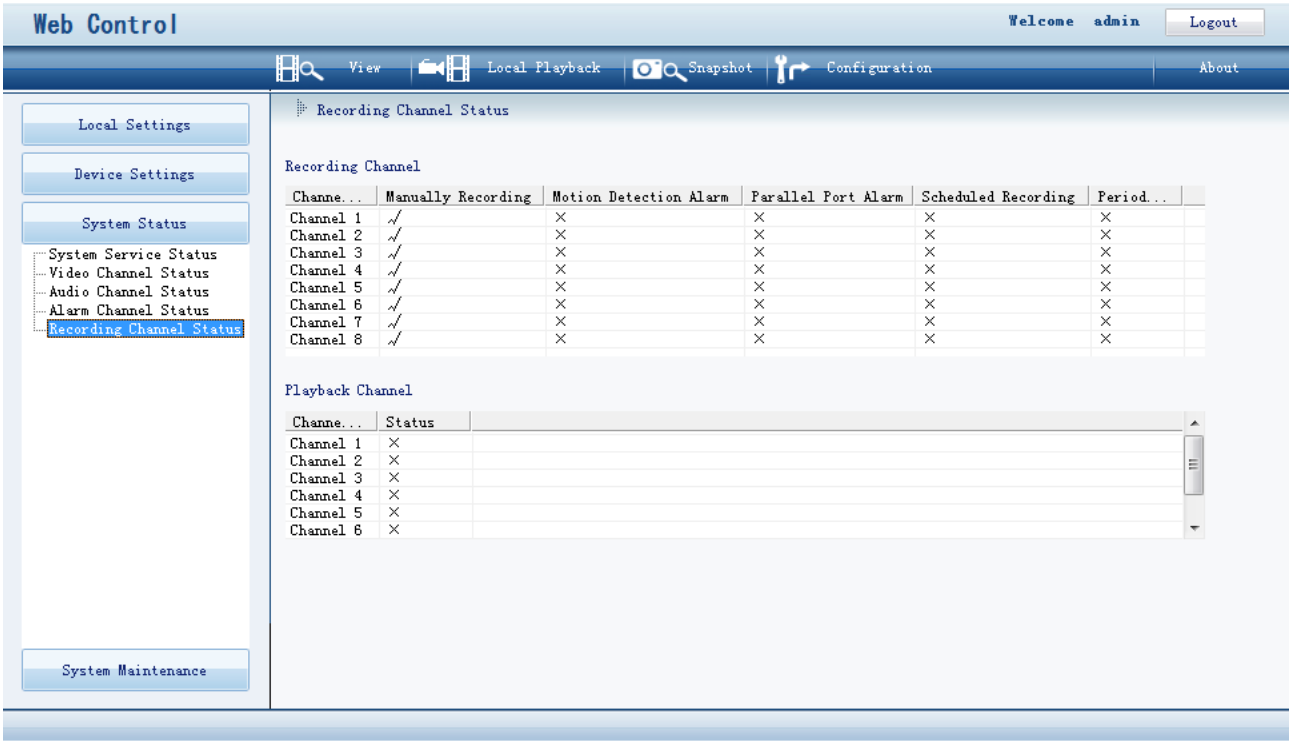
channels.

When an alarm is generated on an alarm input channel, the status is **Alarm**.



Recording Channel Status

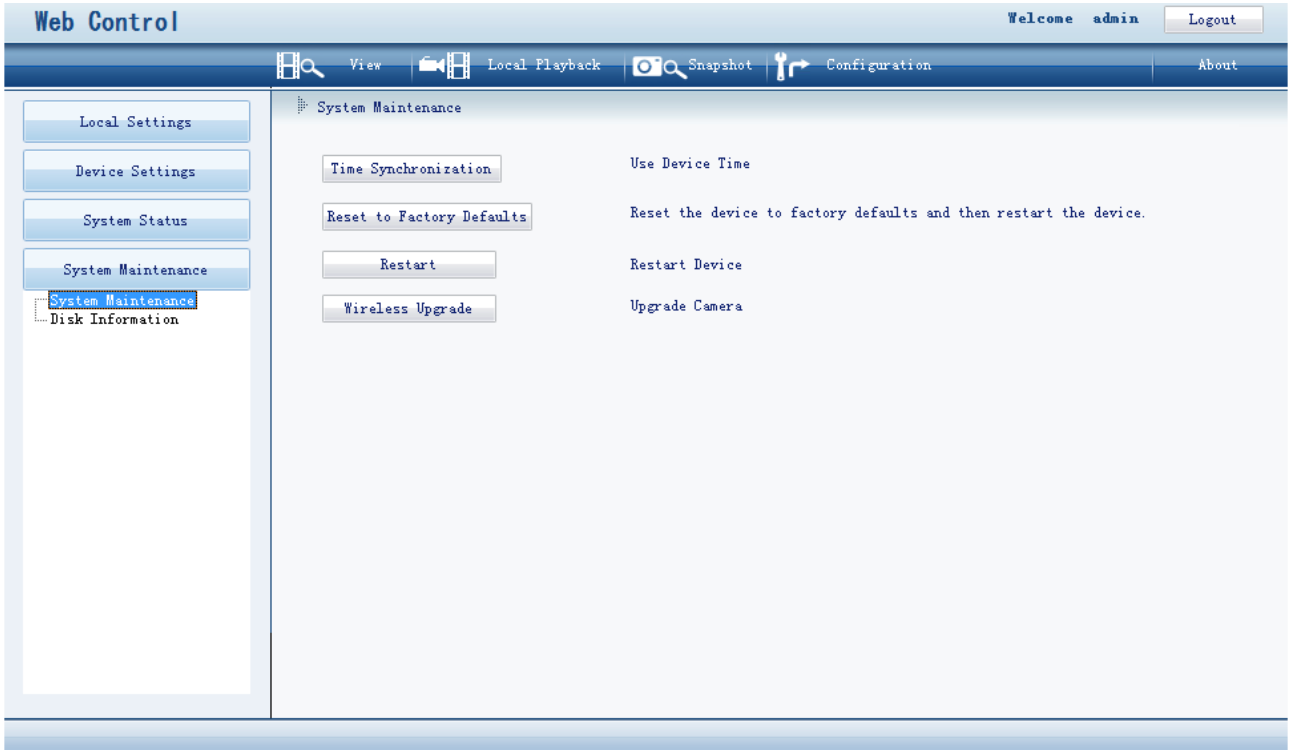
On the **Recording Channel Status** tab page, you can query the status of recording and playback channels.



System

On the **System Maintenance** tab page, you can perform the following operations:

- Setting your PC time to the Mobile NVR system time
- Resetting the Mobile NVR to factory defaults
- Restarting the Mobile NVR
- Upgrading the Mobile NVR through the VMS (upgrade packages are saved on the VMS)



To set your PC time to the Mobile NVR system time:

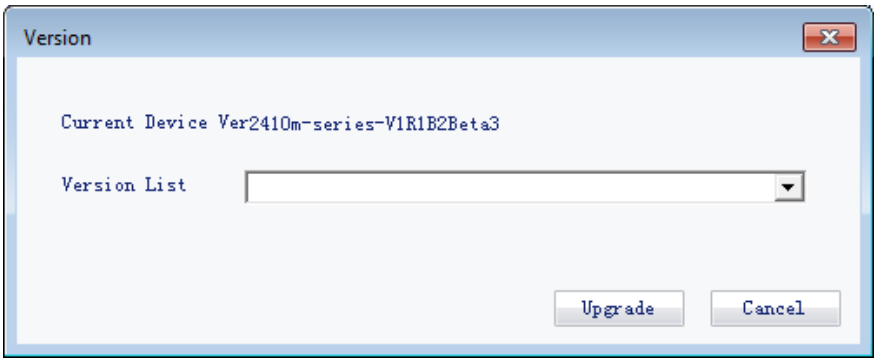
1. Click **Time Synchronization**.
2. In the displayed dialog box, you can click **OK** or enter a time.
   If you enter a time, both the Mobile NVR system time and your PC time are changed to the time.

To reset the Mobile NVR to factory defaults, click **Reset to Factory Defaults** and click **OK** to confirm your operation.

To restart the Mobile NVR, click **Restart** and click **OK** to confirm your operation.

To upgrade the Mobile NVR through the VMS:

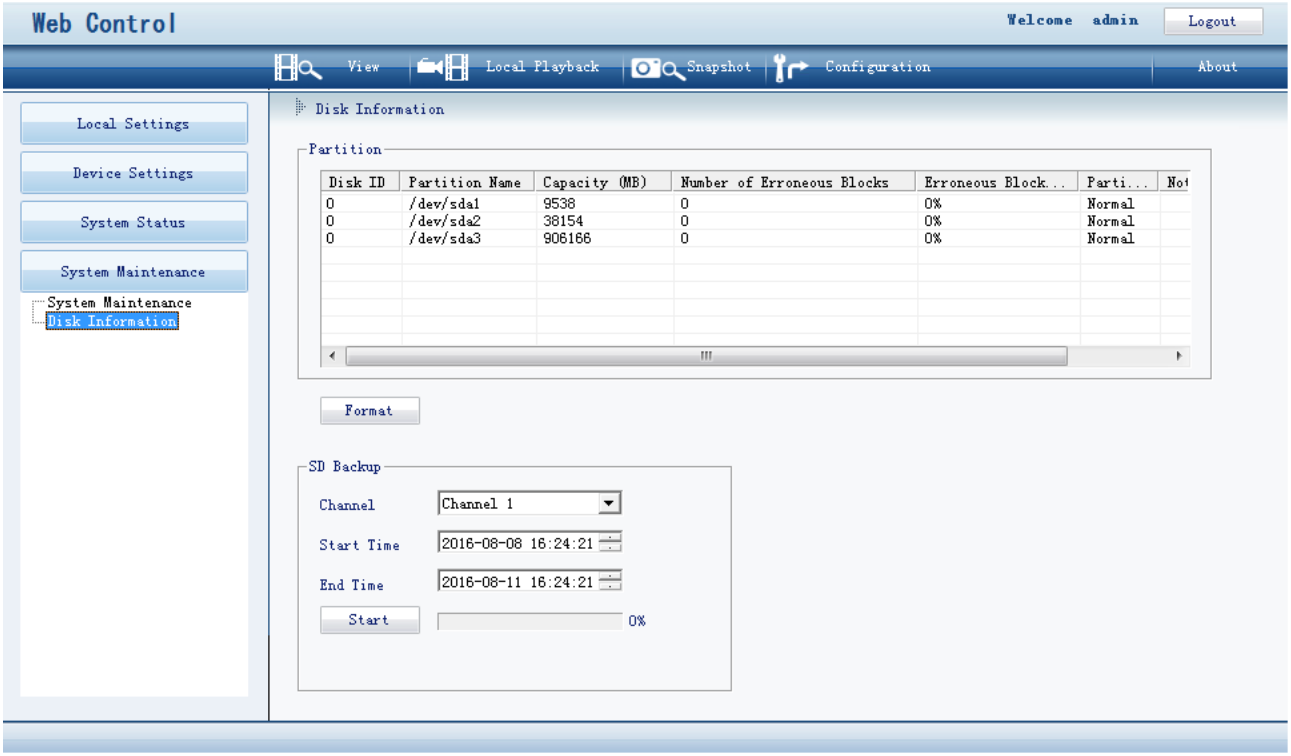
1. Click **Wireless Upgrade**.
2. Select the upgrade package from the **Version List** drop-down list.



3. Click **Upgrade**.

Disk

On the **Disk Information** tab page, you can query disk information.



Additionally, you can back up records from cameras to the SD card inserted on the Mobile NVR.

To back up records from a camera:

1. Select the related channel from the **Channel** drop-down list.
2. Specify **Start Time** and **End Time**.
3. Click **Start**.

After the preceding steps are performed, records are backed up on the SD card.

Abbreviations and Acronyms

NAT	network address translation
NVR	Network Video Recorder
ONVIF	Open Network Video Interface Forum
PC	personal computer
PMC	Platform Management Client
RTSP	Real Time Streaming Protocol
UUID	Universally Unique Identifier
VMS	Video Management Server
WDR	wide dynamic range