Smart ICRSS User Manual

Version 1.13.0

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Welcome

Thank you for using our Smart IC Realtime Surveillance Software (Smart ICRSS)!

This user's manual is designed to be a reference tool for using the software.

It will guide you through the complete operation of all facets of Smart ICRSS operation. The software is available for download, free of charge, here.

1. Overview and Environment

1.1 Overview

Smart ICRSS is an abbreviation for Smart IC Realtime Surveillance System.

The software is designed to manage and connect to multiple IC Realtime or Clearview DVR's, NVR's, and other devices. It has the following features:

- View live video of up to 64 cameras.
- View recorded footage and snapshots from multiple cameras.
- Supports multiple scheduled alarms for immediate recognition of certain events.
- Supports e-map; you can clearly view and manage all device locations.
- Video wall plan setup and configuration. **NOTE:** Additional equipment MUST be purchased to use the Video Wall feature.
- Supports extension applications: alarm information can be sent to other programs.

1.2 PC-NVR Performance

- Supports up to 32 channels at CIF resolution.

1.3 Environments

Item	Requirements
OS	Windows XP and higher
CPU	Intel Core i3 or higher
Display card	Intel HD Graphics and higher
Memory	2GB or higher
Display Resolution	1024×768 or higher

2. Installation and Upgrade

2.1 Installation

- Double click “SmartICRSS_Setup.exe” to begin installation. See Figure 2-1.

Figure 2-1

- Click the next button, and you will see an interface as shown in Figure 2-2. This is the End User License Agreement (EULA).

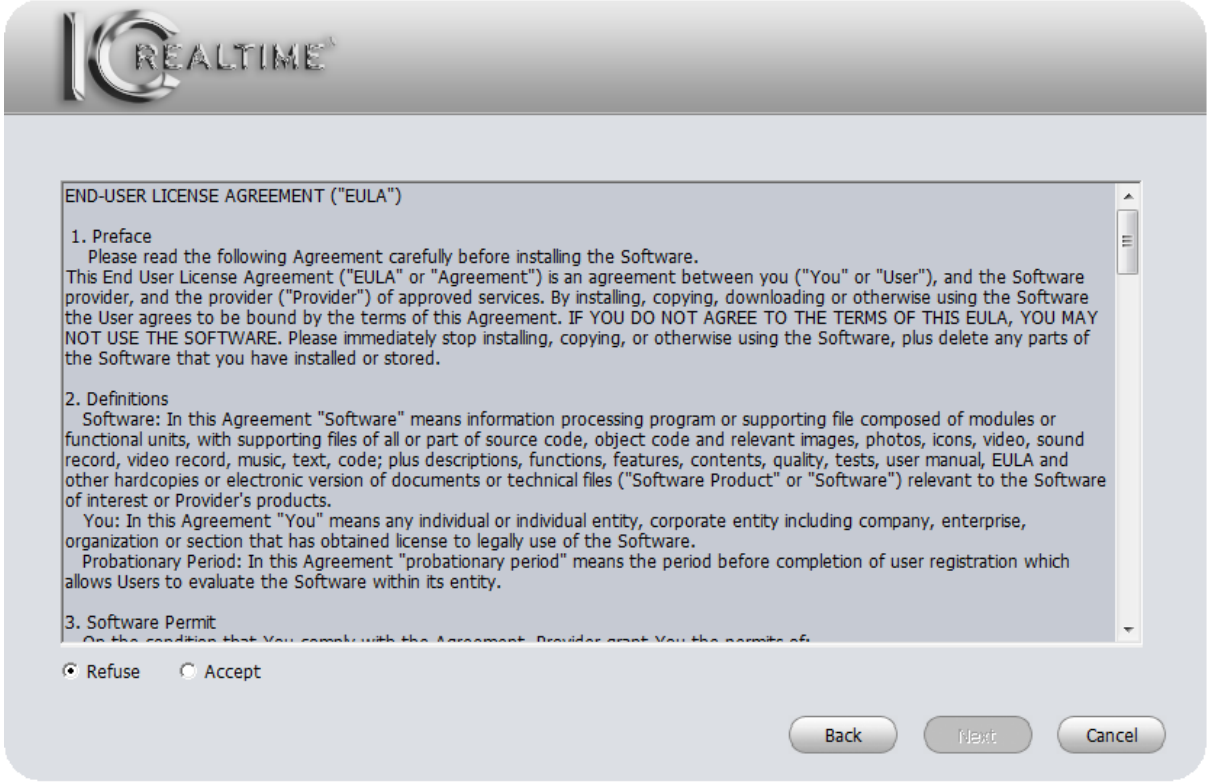


Figure 2-2

- Click the **Accept** button, then click the **Next** button to continue. The next screen is the **Module Selection** screen, as shown in Figure 2-3.

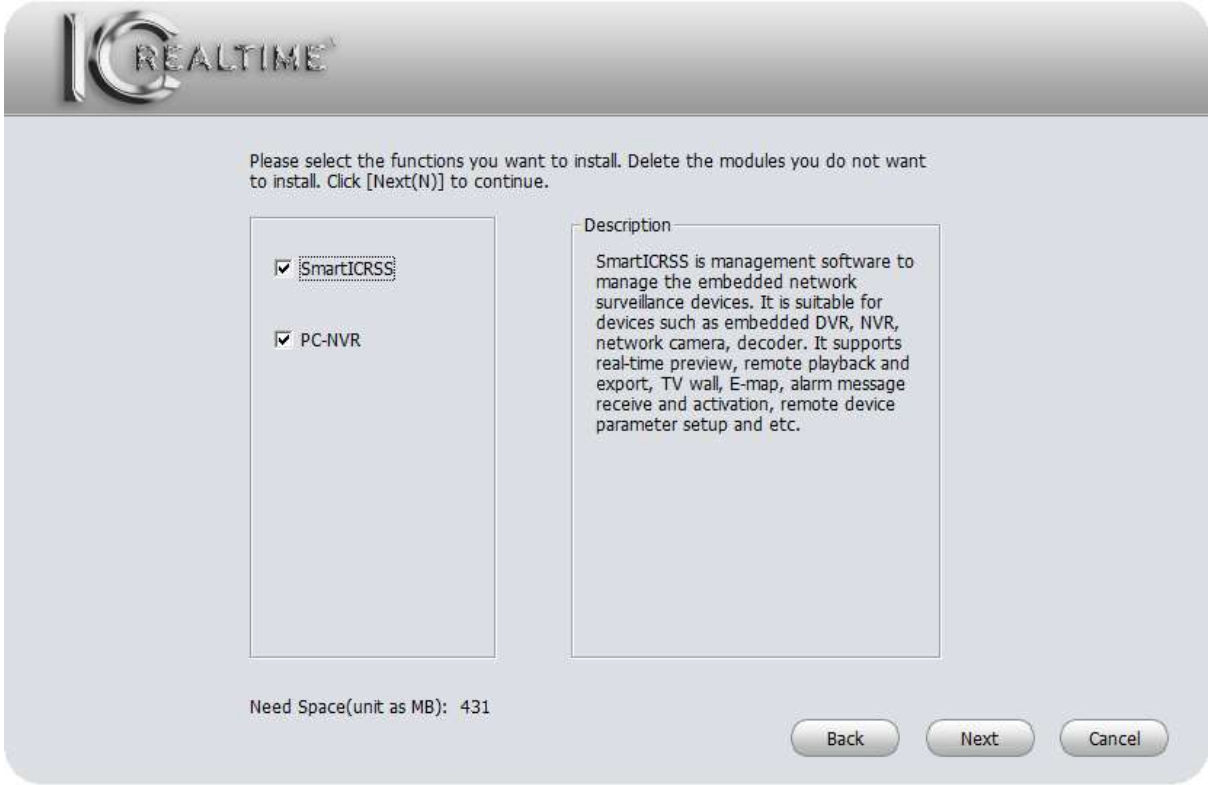


Figure 2-3

<u>NOTE:</u> PC-NVR is a separate program that allows you to create a partition on your computer hard drive that will become a virtual DVR/NVR, which is controlled using the Smart ICRSS program.

- Make sure the **Smart ICRSS** box is checked, then click **Next**. The next window will show you the default install location, or allow you to choose an alternate install location. See Figure 2.4.

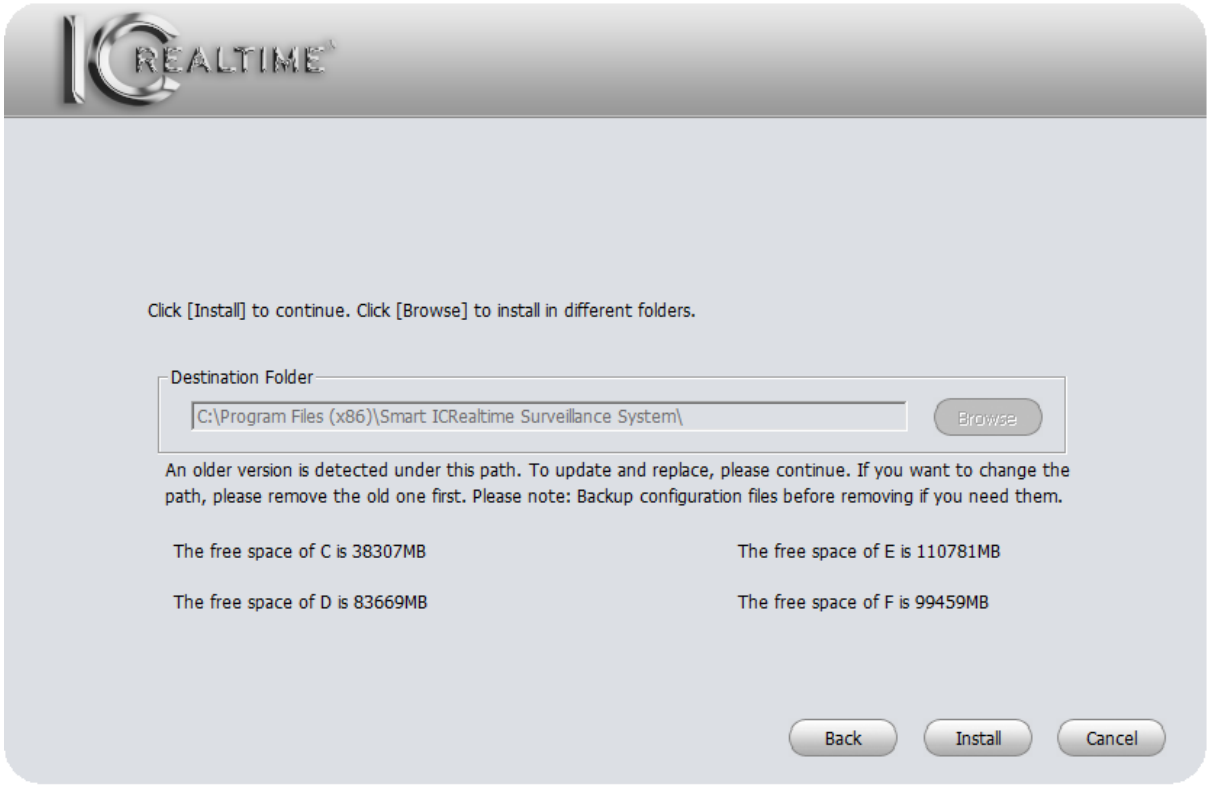


Figure 2-4

- After you confirm/select the installation location, click the **Install** button. The software will begin the installation. See Figure 2-5.

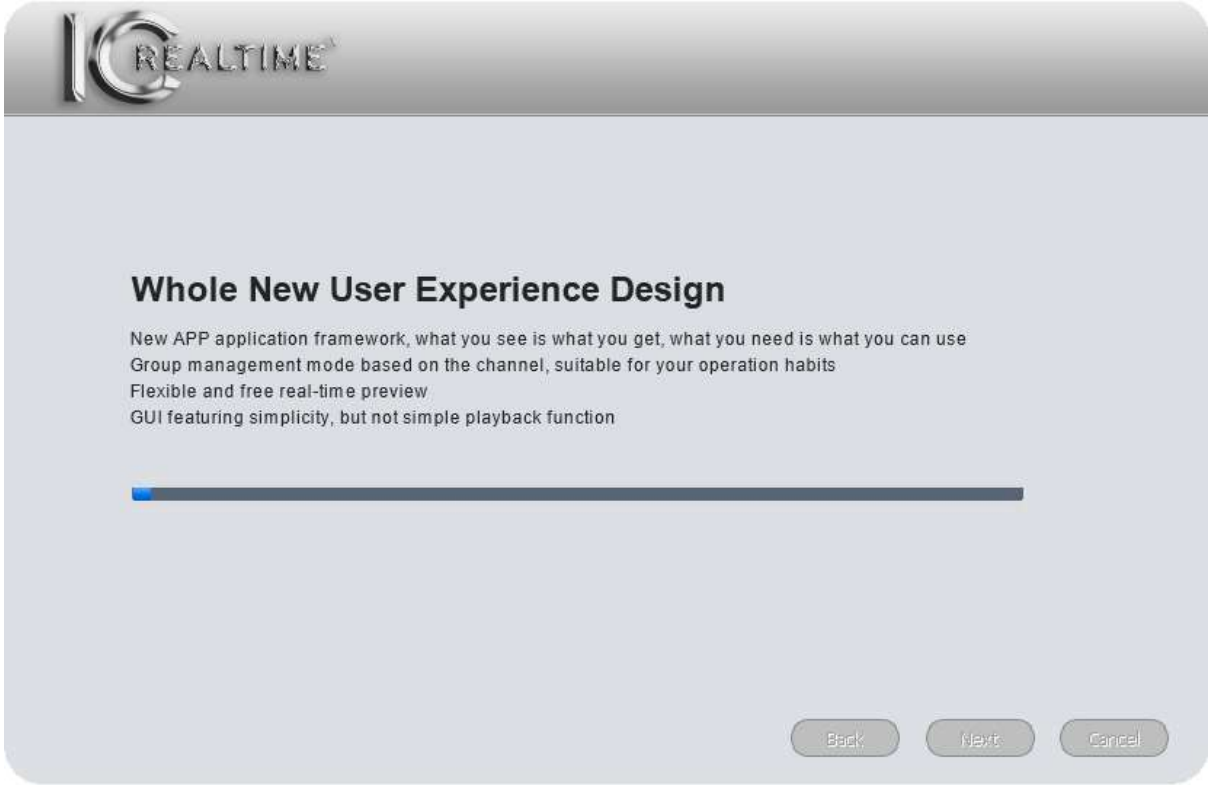


Figure 2-5

- During the installation process, you can click the **Cancel** button to stop the installation. After installation, you will see the window shown below. See Figure 2-6.

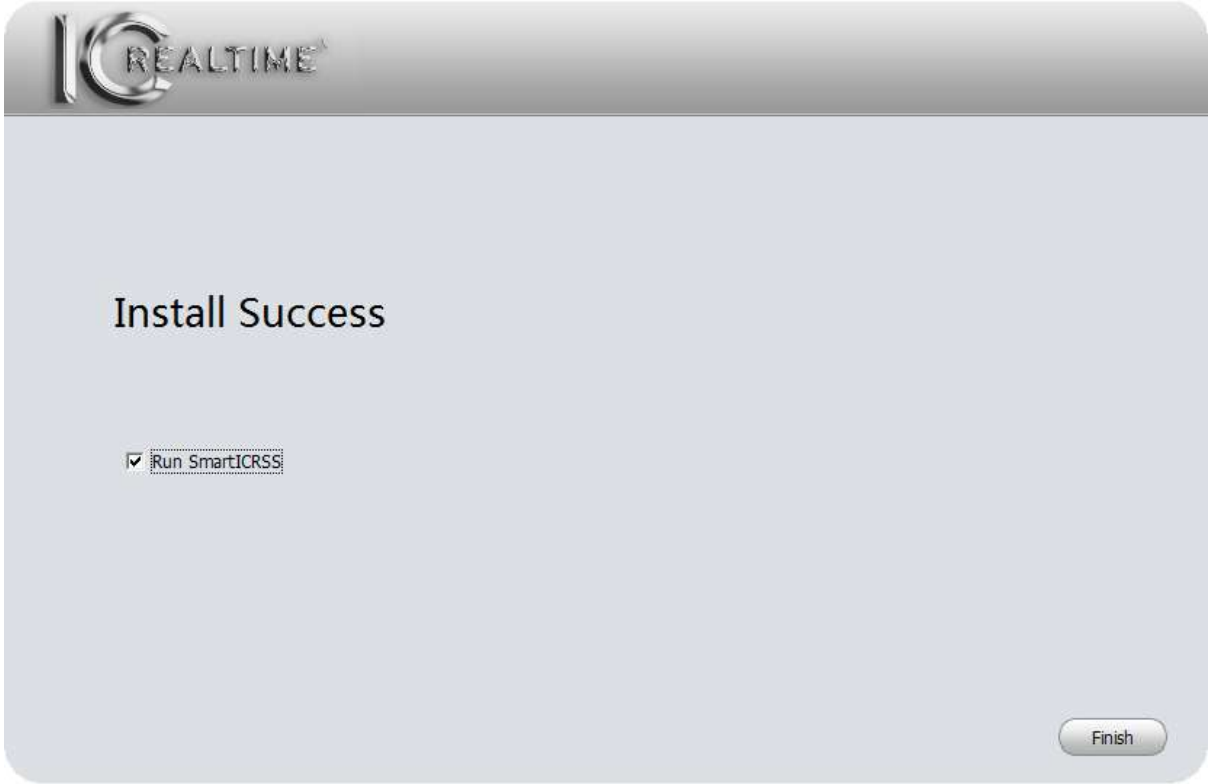


Figure 2-6

Click the **Finish** button to complete the installation. If you have the box next to **Run Smart ICRSS** checked, the program will start after you click the **Finish** button.

2.2 Uninstallation

- From Start -> All programs->Smart ICRSS, select **Uninstall Smart ICRSS**. System pops up the following dialogue box. See Figure 2-7.

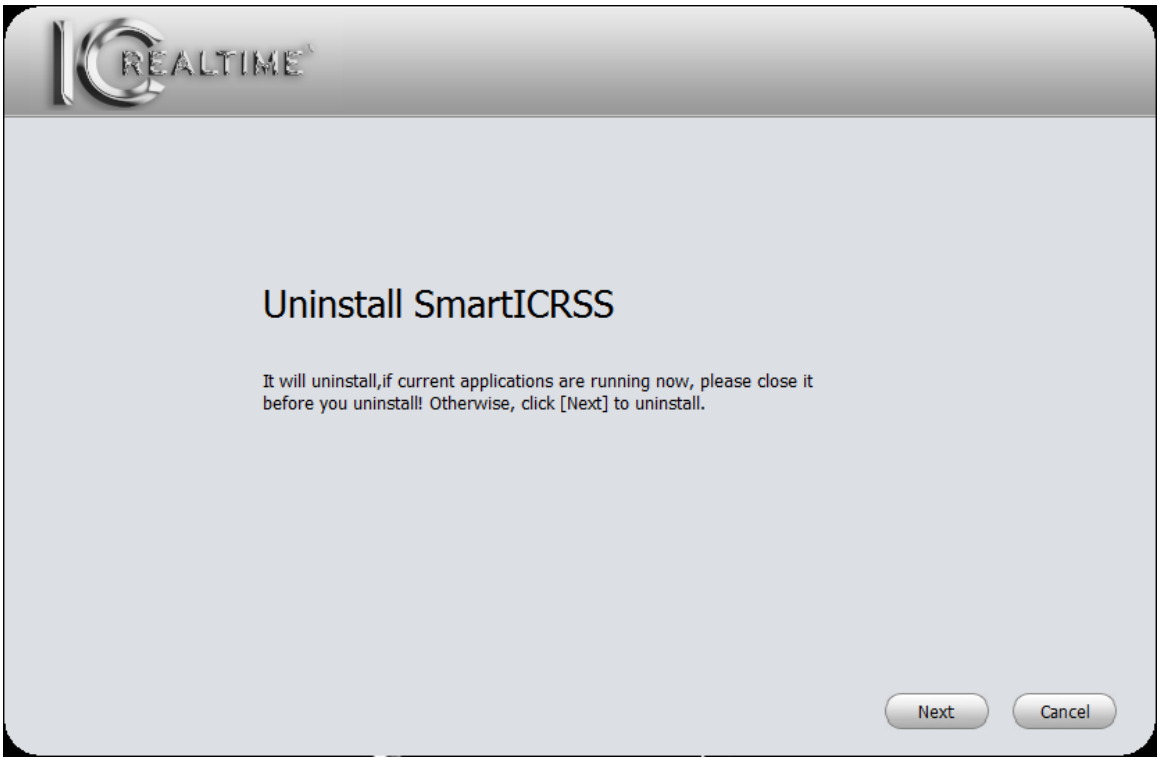


Figure 2-7

- Click the **Next** button. You will see the window shown in Figure 2-8. Check the corresponding boxes here to remove Smart ICRSS and/or PC-NVR. Click the **Uninstall** button to begin the process.

REALTIME
Please choose the components that you want to uninstall,Delete the modules you do not want to install.Click [Uninstall(U)] to continue.
PC-NVR
SmartICRSS
Uninstall
Cancel

Figure 2-8

3. Setting

Double click the **Smart ICRSS** icon to bring up the login interface.

3.1 Login Interface

Login interface is shown as in Figure 3-11.

Figure 3-1

- User Name: The user name **admin** is already filled in.
- Password: Enter **admin** in the password field. If you do not plan to change your password, you may check the box next to **Remember Password**.
- Click the **Login** button to open the software.
- Click **Exit** to exit the software.
- The first time you open the software, you will see the **Devices** screen below. See Figure 3-2. This screen will be covered in Chapter 3.5.

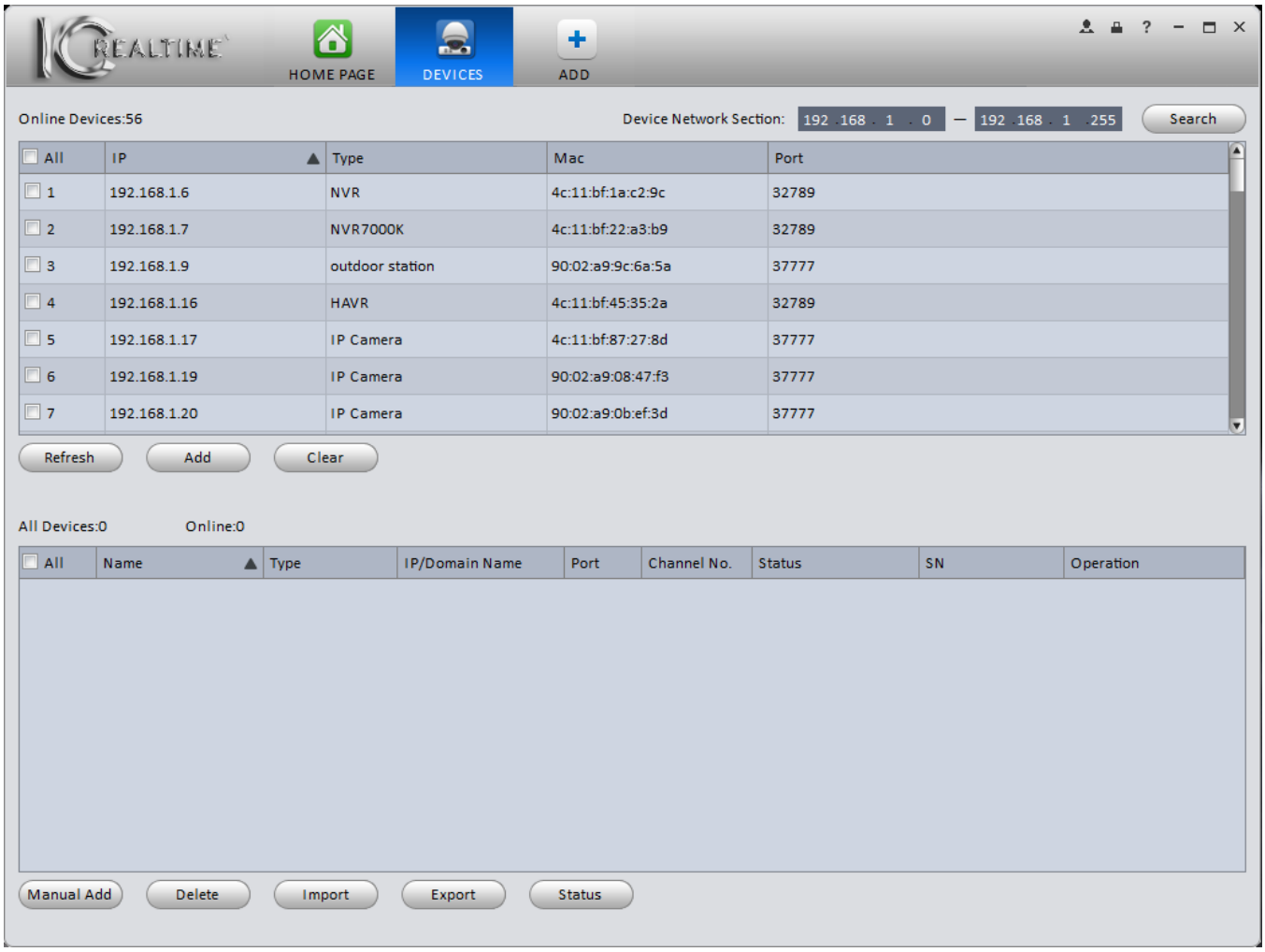


Figure 3-2

3.2 Homepage

- Once you click the **Login** button, the software starts. After your initial login, you will see the screen below. See Figure 3-13.

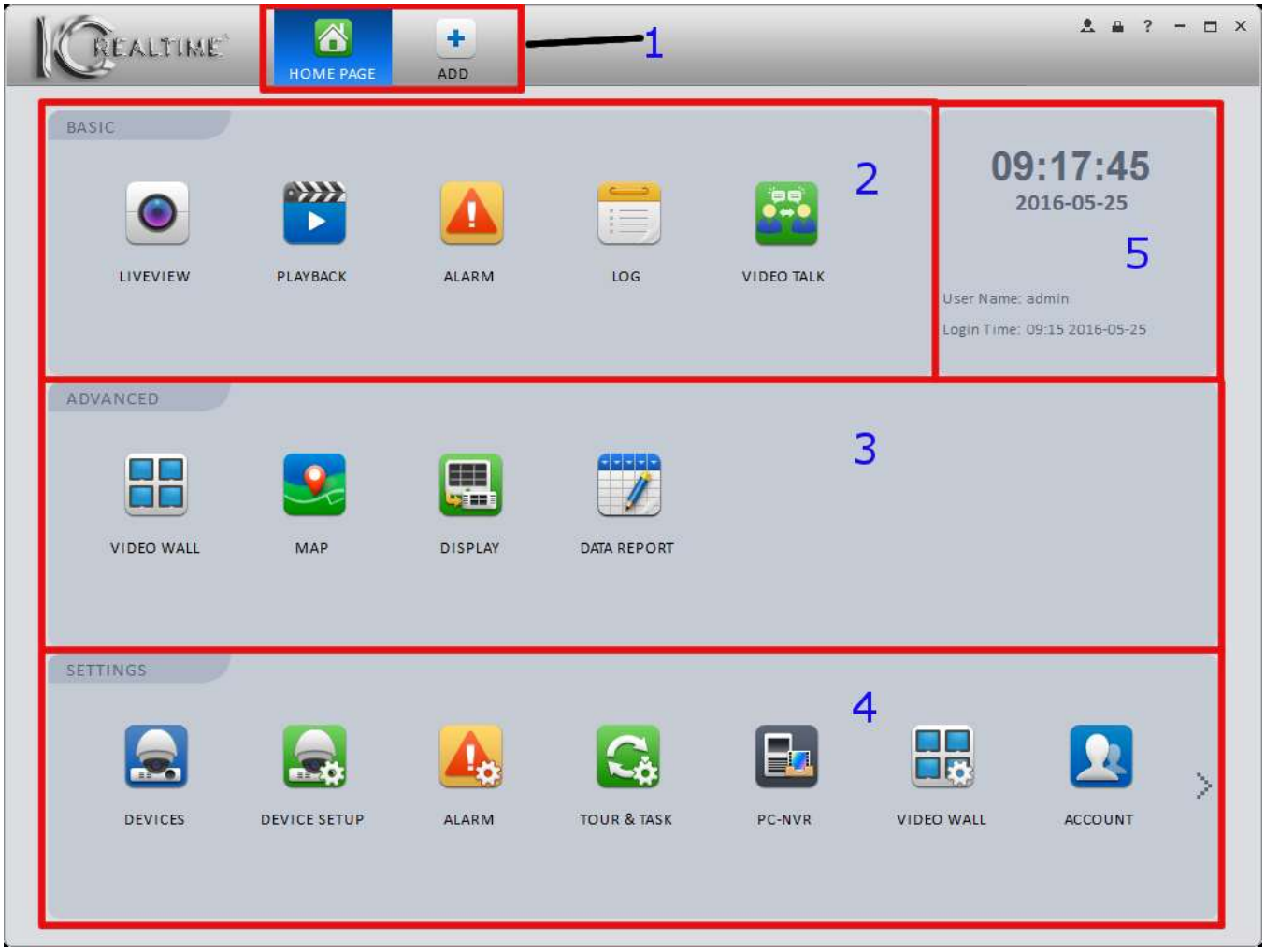


Figure 3-1

Please refer to the following table for detailed information.

SN	Parameter	Function
1	Menu	Shows the **Home Page** tile and all other open function tiles. Click the **ADD** button to add a function tile to the top pane.
2	Basic	Liveview, Playback, Alarm Information, Log, and Video Talk functions.
3	Advanced	Video Wall, Map, Display, and Date Report functions
4	Settings	Device Manager, Device Setup, Alarm Setup, Tour & Task setup, PC-NVR setup, Video Wall setup, Account setup (software user accounts only), and General setup functions.
5	General Information	Displays the current time and date, username, and Login Time.

3.3 General

The first time you login to Smart ICRSS, you should set some system parameters. Please refer to the steps listed below.

Click the button to open the general interface. See Figure 3-2.

3.3.1 Basic

You can set your Log Saved Time, your Instant Playback Time, Network Capability, Language, and Auto-Login capabilities on this first screen.

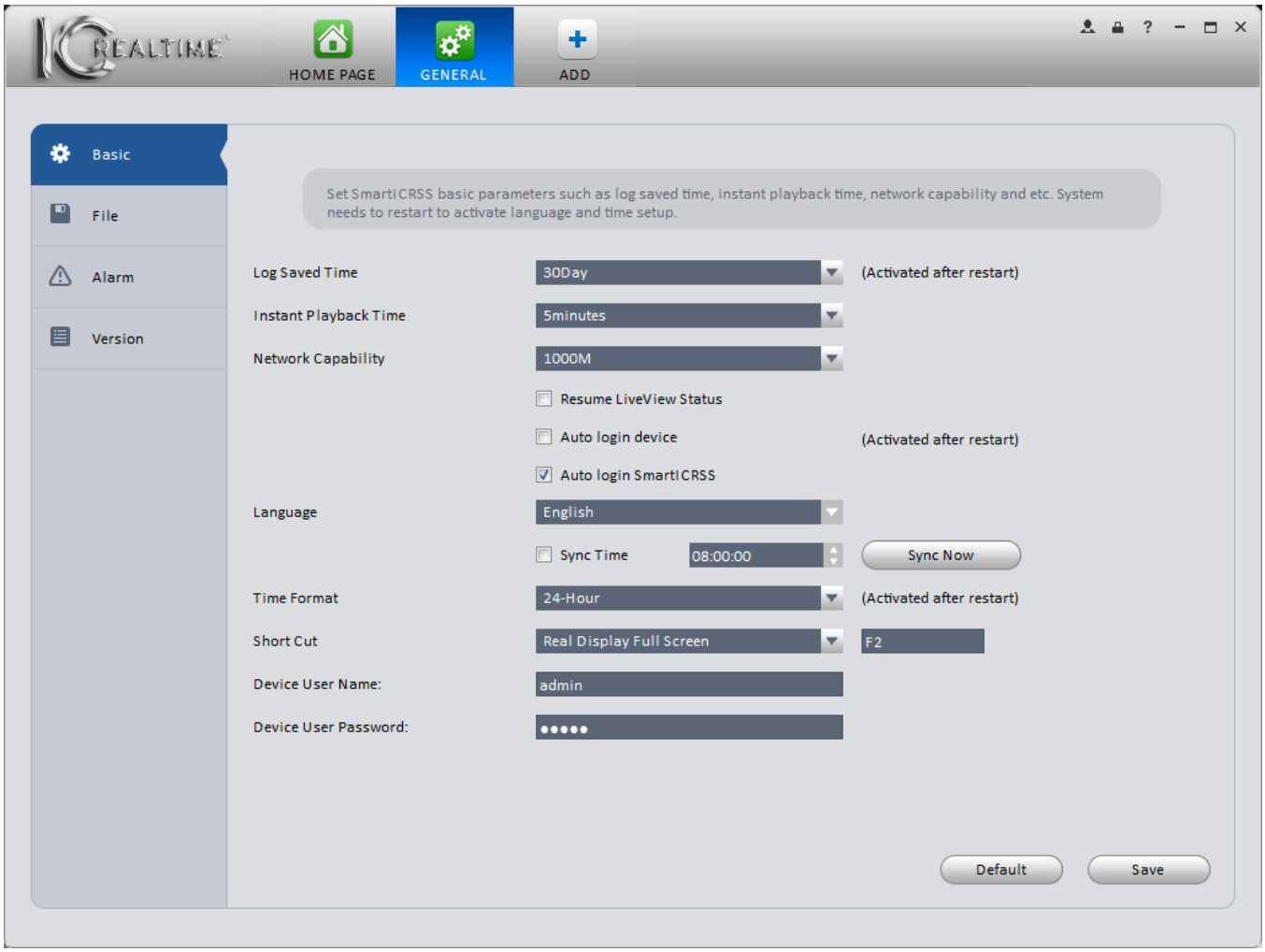


Figure 3-2

Please refer to the following table for detailed information.

Item	Function
Log Saved Time	Select how long you want the software to save its log files. The software will automatically overwrite files after the specified period elapses.
Instant Playback Time	Specify your default Instant Playback time. Clicking the Instant Playback icon in Liveview will automatically rewind the footage to the time you specify here.
Network Capability	Select your network parameters. Options are Low, 10M, 100M, and 1000M.
Resume LiveView Status	The software will automatically show the last camera(s) viewed when you open it up.
Auto login device	The software will automatically login to all your devices whenever you open it.

Item	Function
Auto login Smart ICRSS	The software will automatically open up without having to enter your password or click the Login button. **NOTE** you must have **Remember Password** checked on the login window.
Language	Select your preferred language for the software.
Sync Time	Check the box to have the software sync time with the computer at the time you specify. Click the **Sync Now** button to synchronize the time manually.
Time Format	Select either 12-Hour or 24-Hour time display format.
Short Cut	Set keyboard shortcuts for various software functions.
Device User Name	Set the default user name when adding a new device. By default, it is set to admin.
Device User Password	Set the default password when adding a new device. By default, it is set to admin.

3.3.2 File Path

File configuration interface is shown as below. See Figure 3-3.

Set your default file locations for Snapshots, Videos, and Config files downloaded using the software.

Config Path: Set your default file location for downloading a config file. The config file captures all the device information from your **DEVICES** screen, allowing you to quickly add multiple devices to the software at the same time.

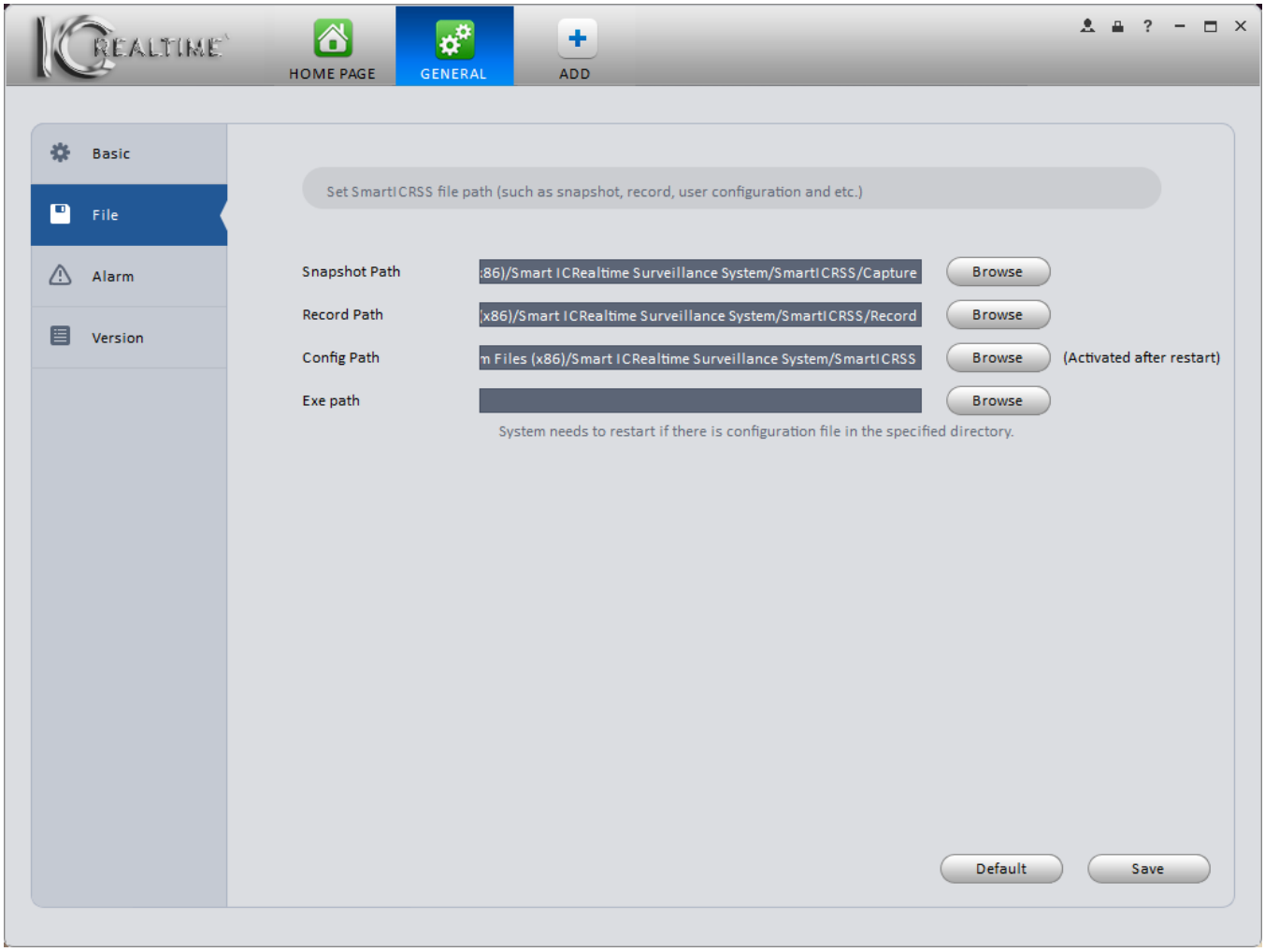


Figure 3-3

3.3.3 Alarm Prompt

This page allows you to set alarm Video options (which video stream is shown), as well as set alarm sounds using any sound stored on your computer. You may also enable or disable the E-Map flashing during an alarm. See Figure 3-4.

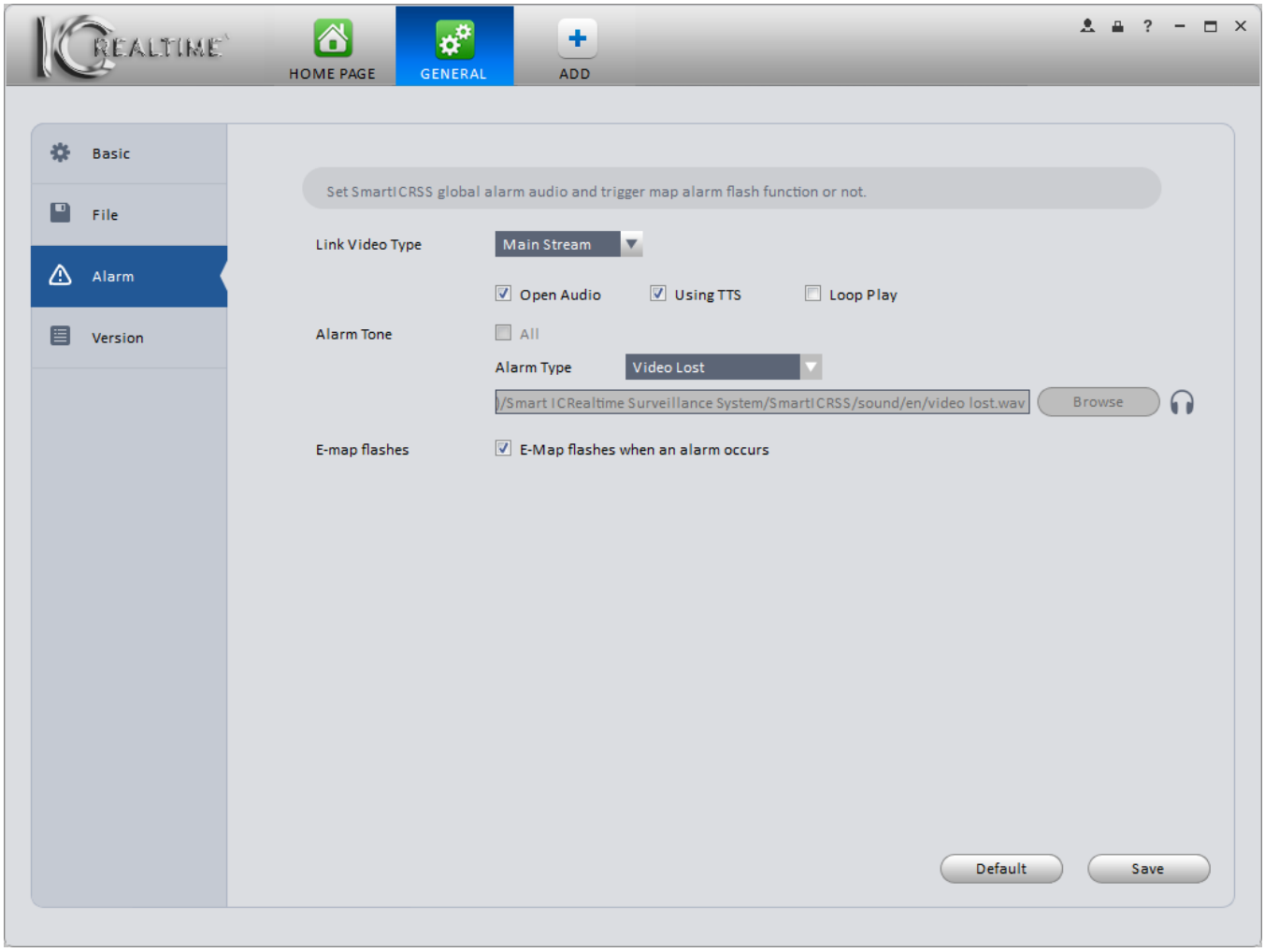


Figure 3-4

Tips

You can click the **Default** button to reset the software to factory defaults.

3.3.4 Version

See the Version screen below.

View software version information. See Figure 3-7.

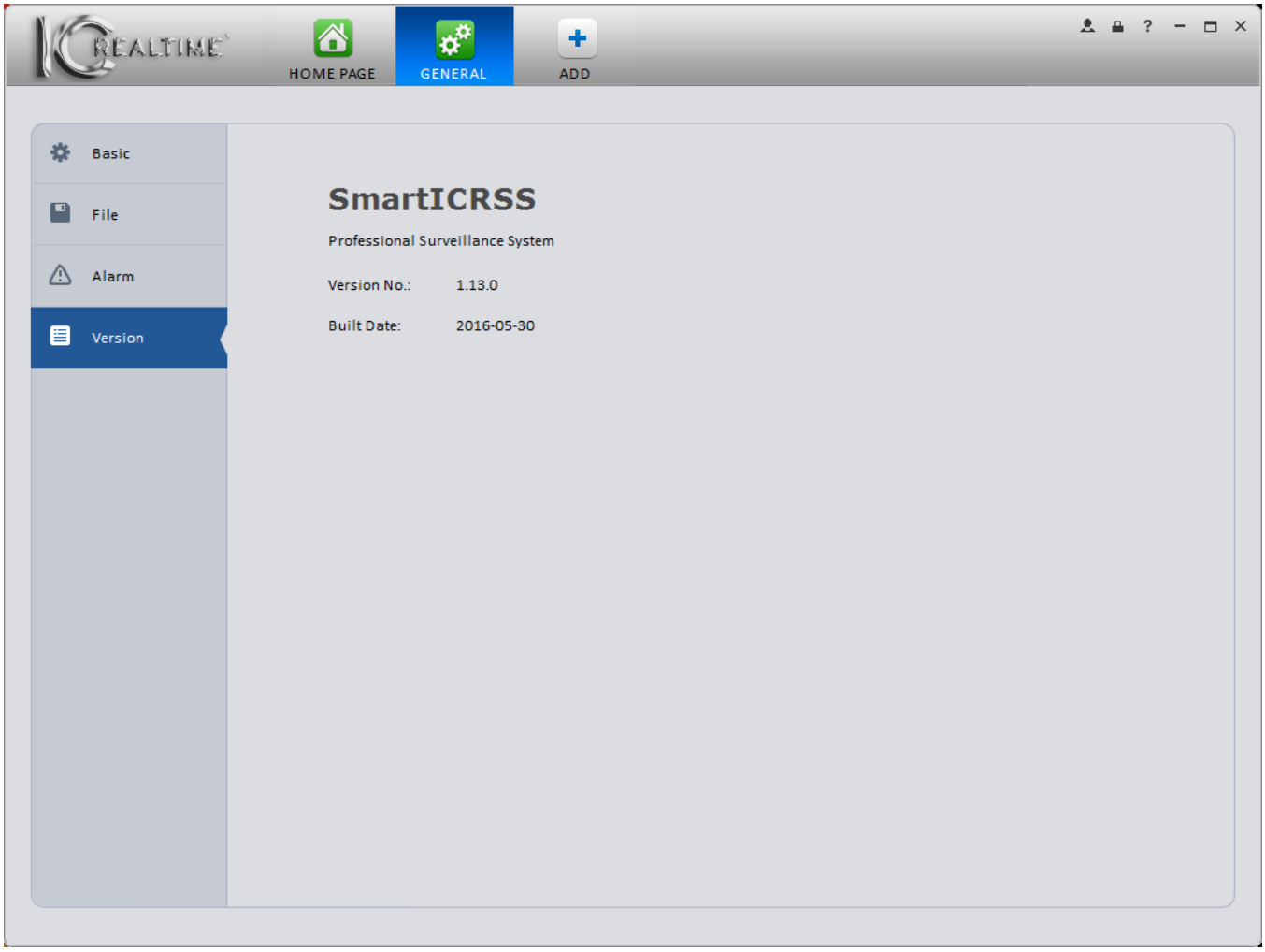


Figure 3-7

3.4 Account

Add, Modify, and Delete software users and roles.

3.4.1 Add role

1) Click in the Settings pane, then click the **Role** tab, to go to the following interface. See Figure 3-8.

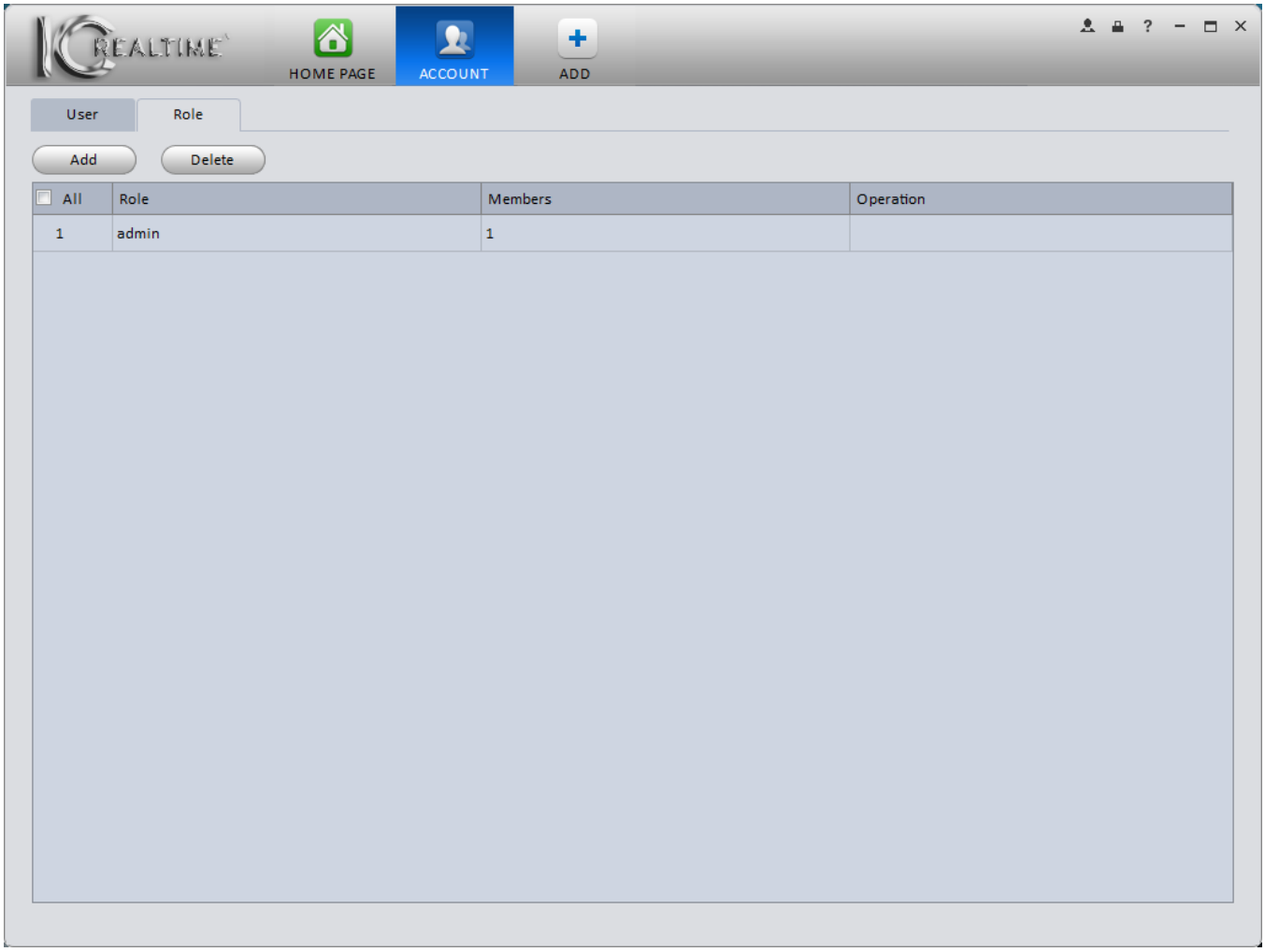


Figure 3-8

2) Click Add button, the interface is shown as in Figure 3-9.

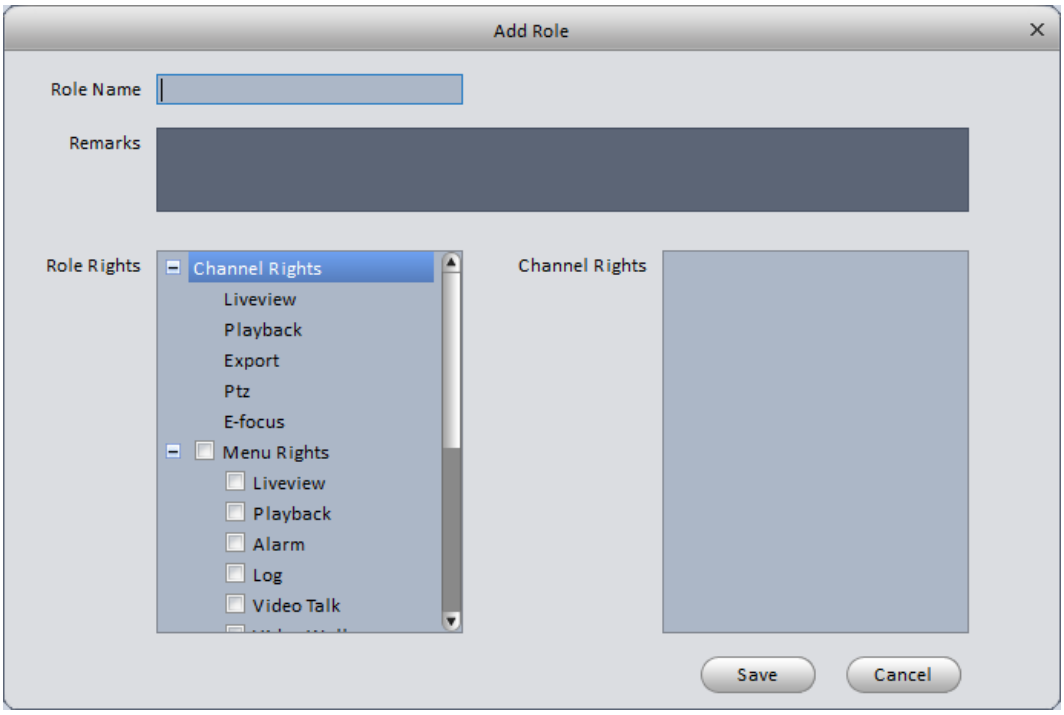


Figure 3-9

3) Enter a name for your new role and check the corresponding role rights. You can input reference information if necessary.

4) Click the **Save** button.

Tips

Select a role, then click Modify/Delete button (under **Operation**) to quickly modify or delete a role.

3.4.2 Add user

1) Click in the Settings pane, and then click the **User** tab, to go to the following interface. See Figure 3-1010.

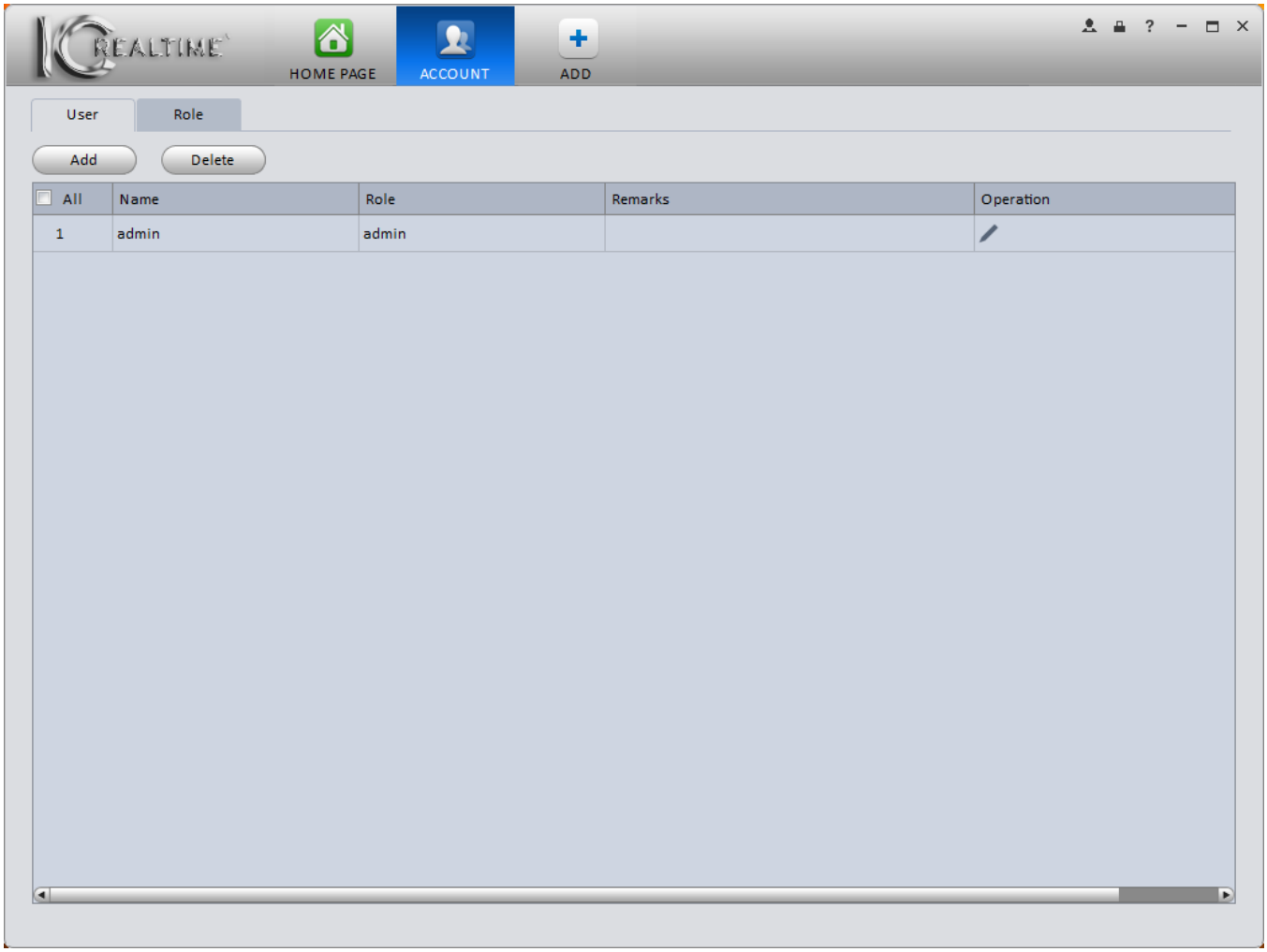


Figure 3-10

2) Click the **Add** button, and you will see the following interface. See Figure 3-51.

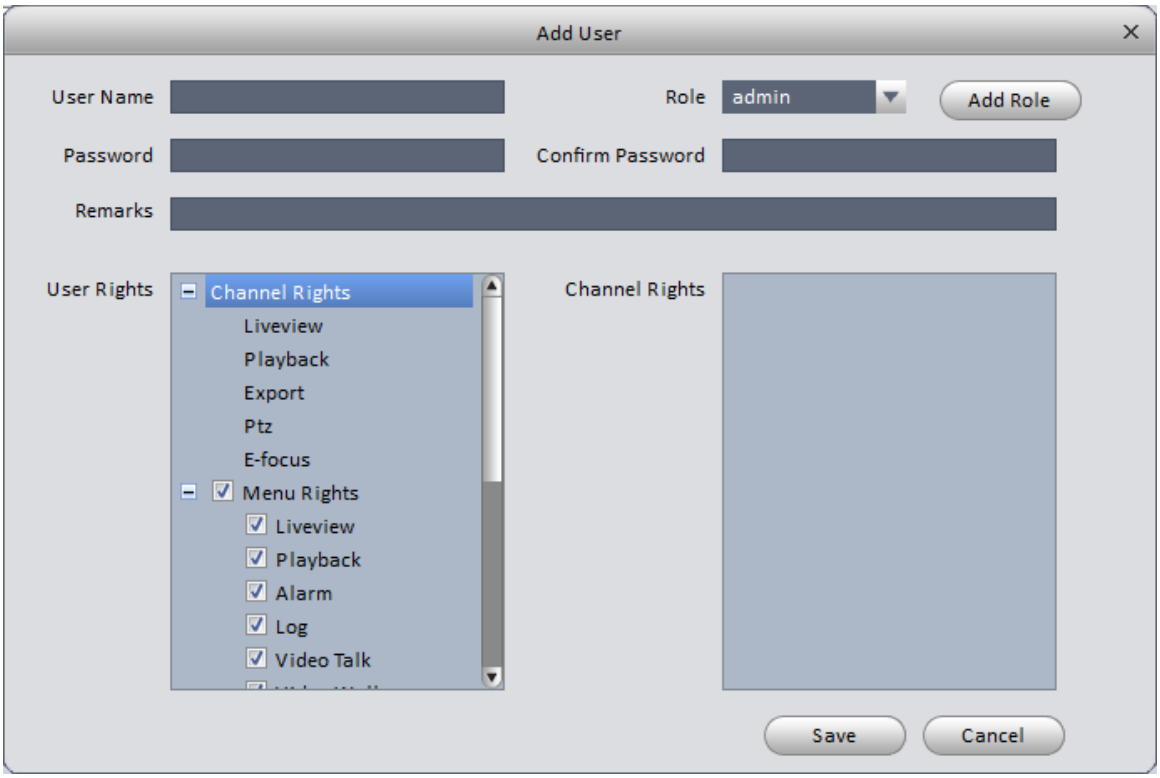


Figure 3-51

3) Select a **Role** from the dropdown list, input desired user name, password, and confirm password. You may also enter information in the **Remarks** field, if you like. You may also choose to restrict the user's rights in the **User Rights** field.

4) Click the **Save** button to add your new user to the software. **NOTE:** Users and roles added as above are added to the software only, not to any of the devices.

Please refer to the following table for detailed information.

Item	Function
User Name	Username for the account.
Role	Select an existing role, or add a new role by clicking the **Add Role** button.
Password	Password for your user
Confirm Password	Input the same password as in the previous field. If the 2 passwords do not match, you will get an error message and will have to enter them again.
User Rights	The rights your new user has within the software. By default, whatever rights are associated with the given **Role** are assigned to your new user(s).

5) Click the **Save** button to save your new user.

Tips

Select a user name and then click the button to modify password or user rights.

3.5 Device Manager

Used to add, modify, and delete devices. Devices can also be assigned to groups.

Auto Add

1) Click the icon to go to the device manager interface.

2) Click the **Refresh** button to search for devices within the LAN. You may also specify a range on the LAN using the 2 boxes next to **Device Network Section**. Once your range is specified, click the **Search** button to begin your targeted search. The number next to **Online Devices** indicates how many IC Realtime devices are found on the network. See Figure 3-12.

Figure 3-12

3) Place a checkmark next to the IP address of all devices you want to add (under the column marked **All**, directly below the Online Devices counter. If you want to automatically add all the devices found on your scan, place a checkmark in the box next to **All**. Once you have checked all the devices, click the **Add** button to add them to the software. They will show up in the lower section of the screen, beneath the words **All Devices**. The number next to **All Devices** shows the amount of devices you have added. See Figure 3-13.

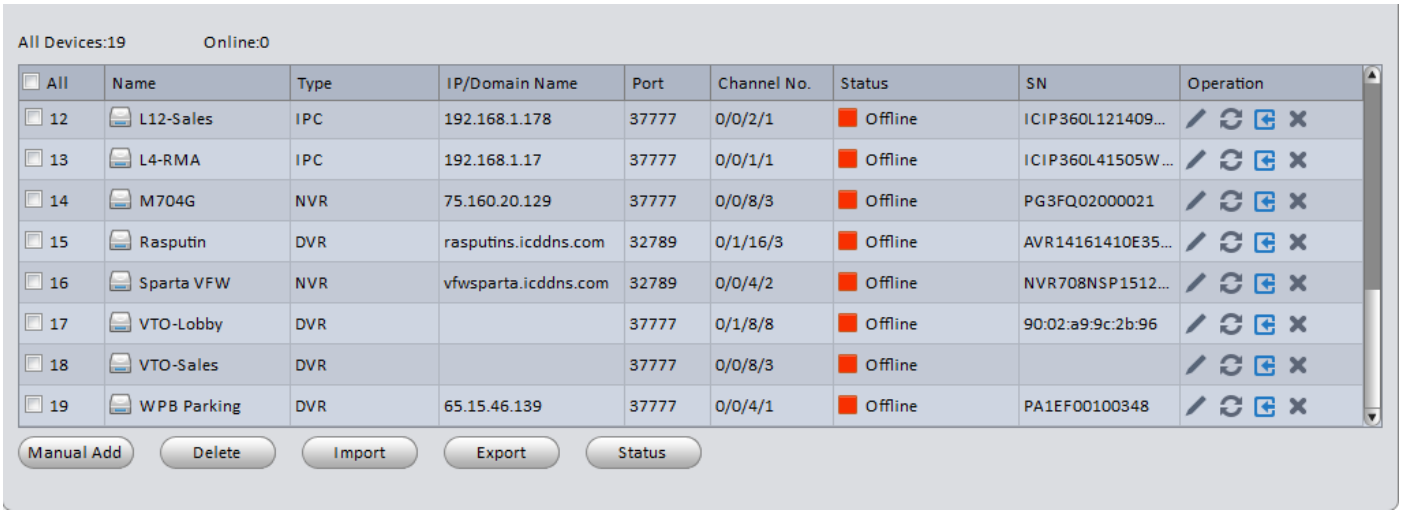


Figure 3-13

Note: When you add devices using this method, the **User Name** and **Password** are automatically filled out by the software. If you have changed the password for the **admin** account on any of your devices, you will have to use the **Manual Add** option, described below.

Manual Add

1) Click the **Manual Add** button to bring up a window for you to enter the device information and add devices manually. Use this option if: A: Your computer is not on the same network as the device being added; B: The password for your device is no longer set to the default; or C: You are adding a device using the **P2P** or **icDDNS** method.

2) The **Manual Add** window is shown below. See Figure 3-14.

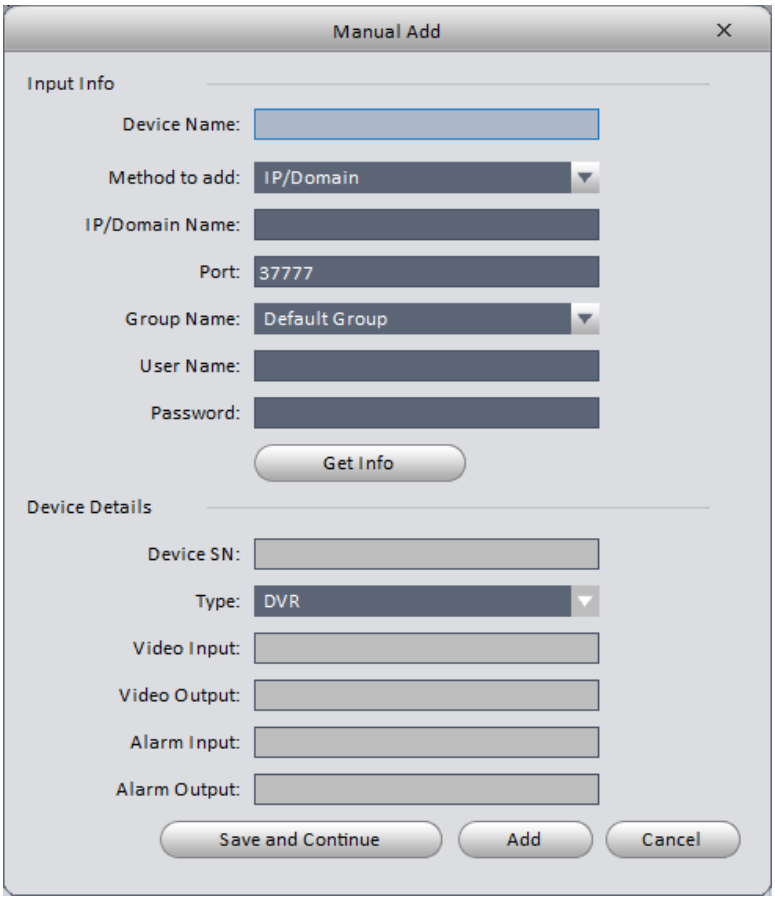


Figure 3-14

Please refer to the following table for how to use the **Manual Add** window.

Item	Function
Device Name	Assign a name to your device.
Method to add	Choose **IP/Domain** if you are using the IP address or DDNS address of your device. Choose **P2P** if you have the device Serial Number (SN). If using an ICDDNS address, select **icDDNS**. See below. IP/Domain P2P icDDNS
IP/Domain name	Enter the Device IP or DDNS address here if adding with the **IP/Domain** method.
SN	Device serial number, when adding a **P2P** device.
Domain Name	ICDDNS Domain for the **icDDNS** method.

Item	Function
Port	Device TCP port. When adding a device using **IP/Domain**, you will have to know this number and enter it here. If using **P2P** or **icDDNS**, the software will automatically enter the port once you click the **Get Info** button.
Group Name	If you have already created groups in the software, you may select the group here. If not, leave it alone.
User Name	User account used to login to device.
Password	Password used to login to device.

3) Enter in all the required information, then click the **Get Info** button. If all your information is correct, the software will automatically fill out the information under **Device Details**. See Figure 3-15.

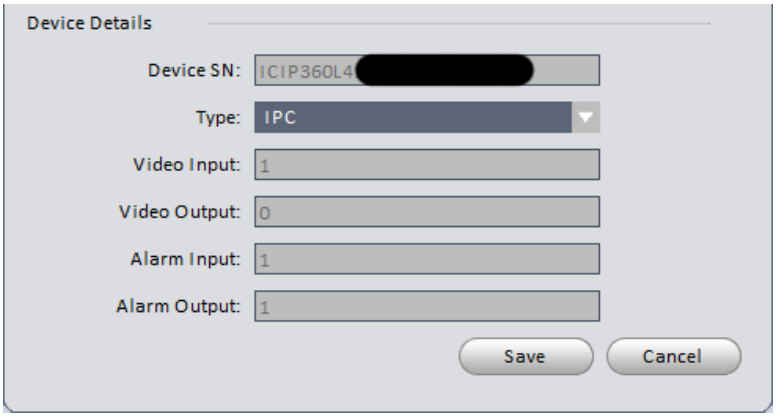


Figure 3-15

Item	Function
Device SN	Device Serial Number.
Type	Device type (DVR, NVR, IP Camera (IPC)).
Video Input	Number Video Inputs on device.
Video Output	Number of Video Outputs on device.
Alarm Input	Amount of Alarm Input channels on device.
Alarm Output	Amount of Alarm Output channels on device.

4) Click **Add** to add a single device. If adding multiple devices, click **Save and Continue** to enter the information for additional devices. All devices added will show up underneath See Figure 3-16.

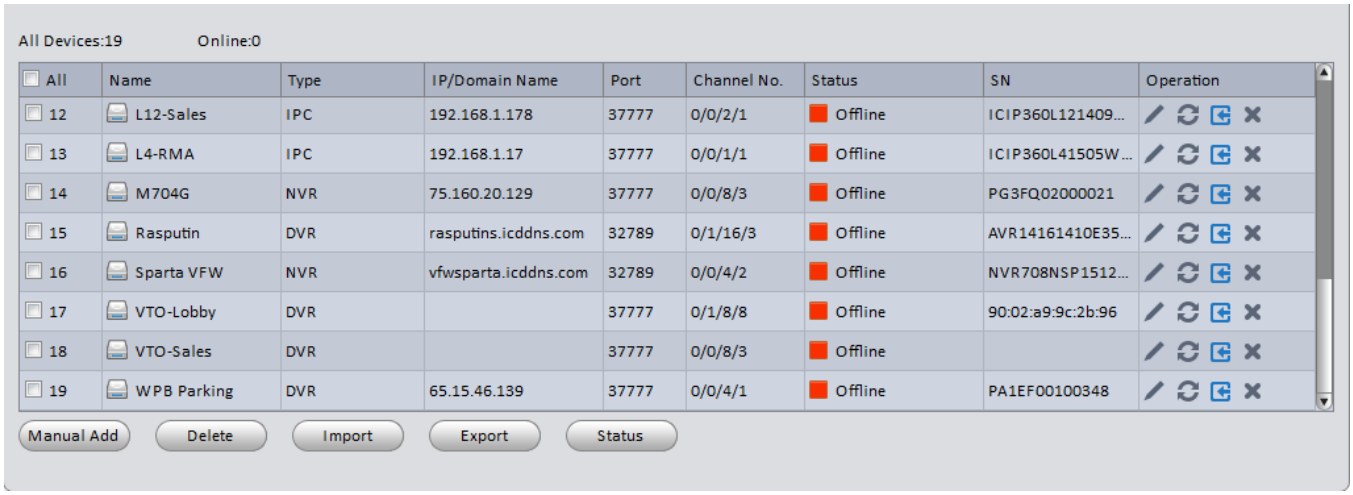


Figure 3-16

Refer to the table below to identify the buttons in the **Operation Column**.

Item	Function
	Modify Device Information. Only the Device Name, Port (if device was added using **IP/Domain** method), Group, User Name, and Password can be changed once a device is added.
	Refreshes the **Status** information for device.
	Manual Login (only shows when **Status** is Offline).
	Manual Logout (only shows when **Status** is Online).
	Delete device.
	Modify Device password. This will change the password on the device itself and within the software.

Tips

- To delete multiple devices, place a check in the box left of the Name, then click the **Delete** button.
- Click the **Import** button to if you have A: previously-exported *.xml list of devices; B: devices added to your account on myeasyip.com; or C: devices added to your account at www.icddns.com. These allow you to add the same devices to multiple computers. See Figure 3-17.

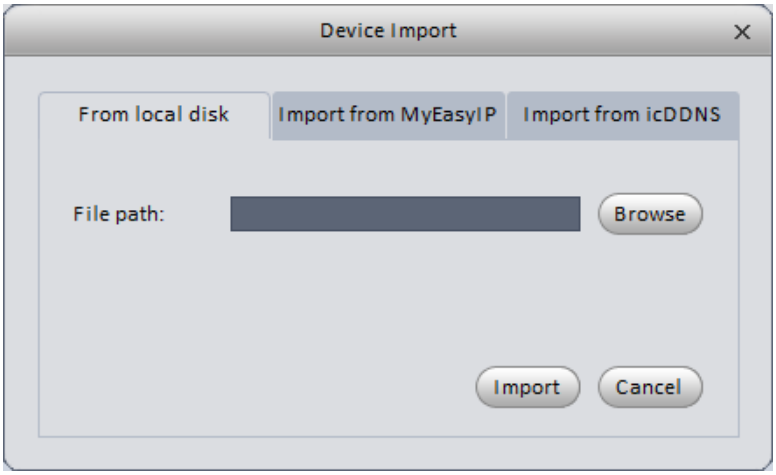


Figure 3-17

- Click the **Export** button, then select a save location to save a list of added devices in *.xml format, which can then be imported to the software on other computers.
- Click the **Status** button to view Network status, Disk Status, Disk space remaining, Disk total space, External Alarm, Motion Detect, Video Loss, and Video Tampering information for all your devices.

3.6 Device Setup

After you add device(s), you can go to the **Device Setup** interface to set parameters. On the homepage, click the button in the Settings pane to go to the following interface. See Figure 3-68.

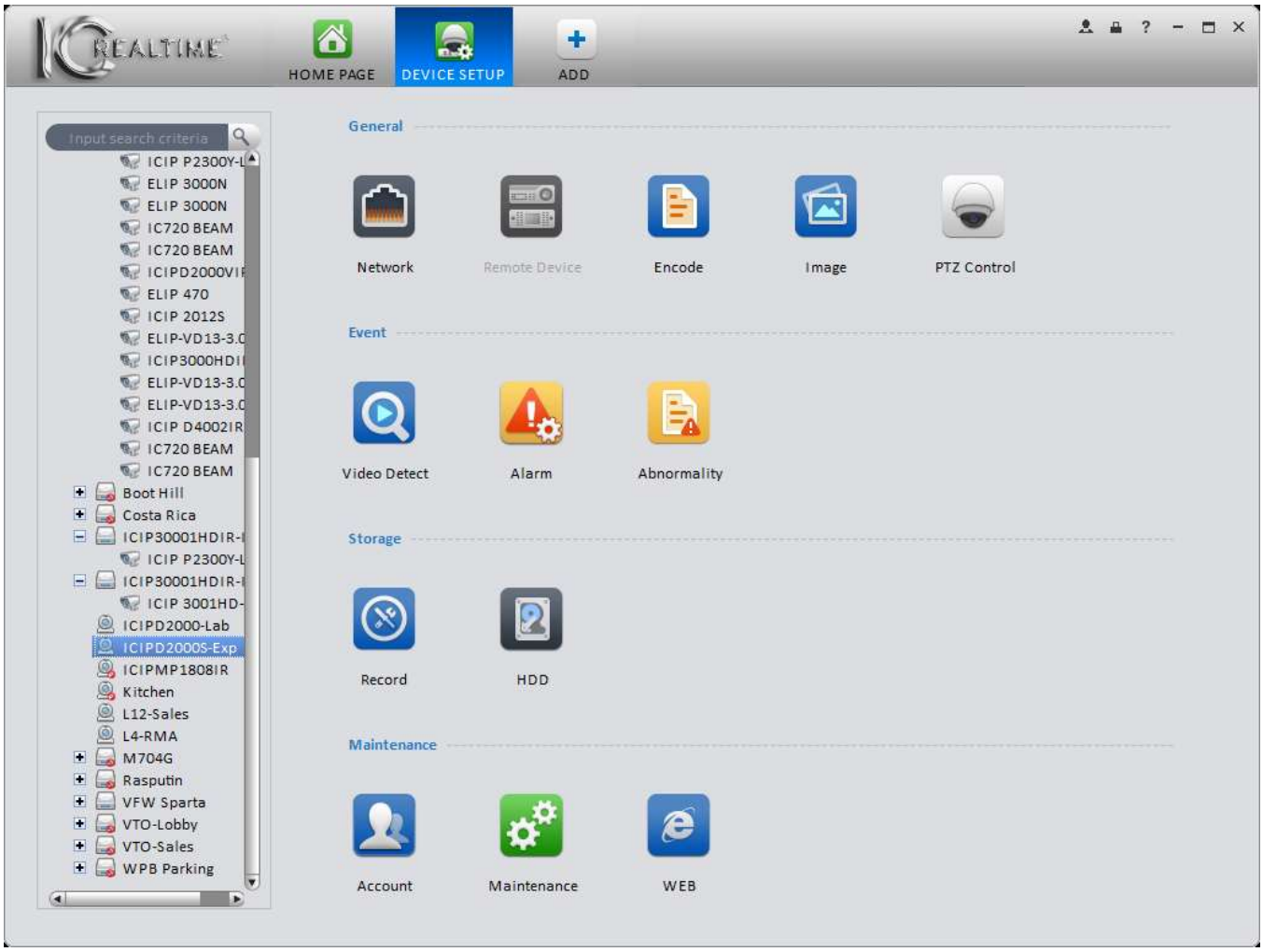


Figure 3-68

3.6.1 General

3.6.1.1 Network

In the Network portion of the Device Setup screen, you can see and configure several different Network parameters for your device(s).

3.6.1.1.1 TCP/IP

View and edit any of the IP Address settings. Click the **Apply** button to save changes to the device. Clicking the **Save** button will save the changed on the device and take you back to the **Device Setup** screen. See Figure 3-79.

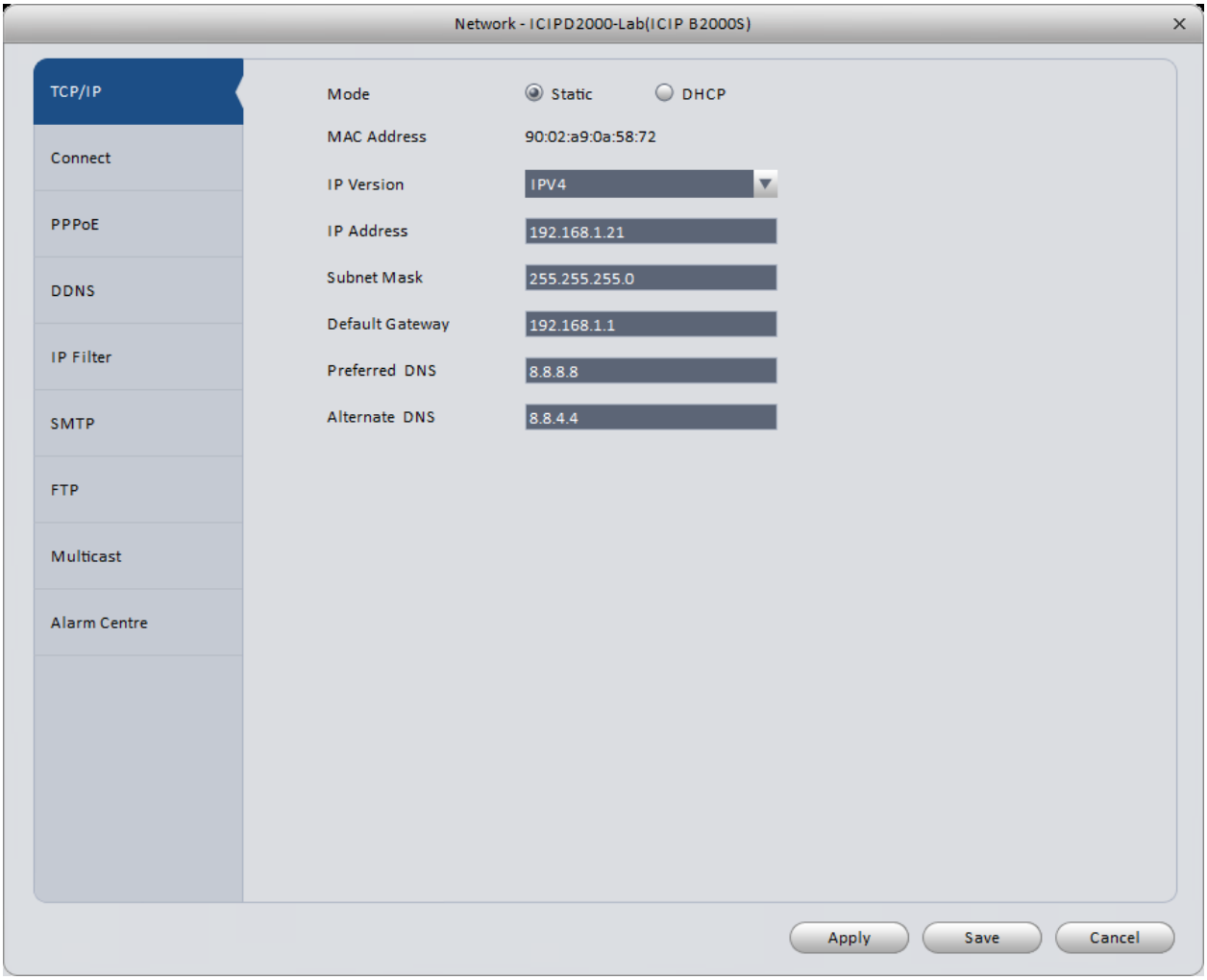


Figure 3-79

3.6.1.1.2 Connect

View and edit Maximum Connections and Port information. See Figure 3-20.

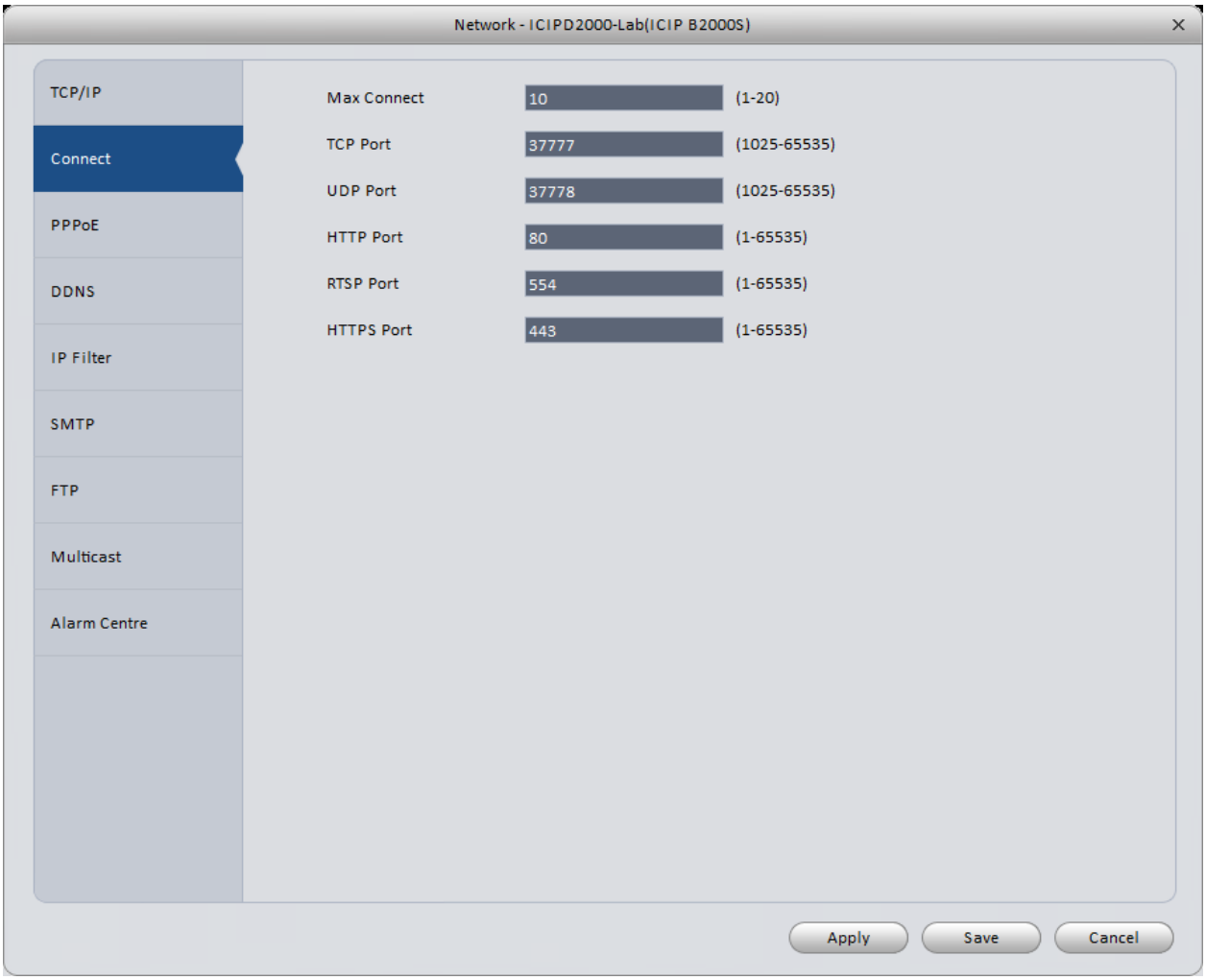


Figure 3-20

3.6.1.1.3 PPPoE

PPPoE interface is shown below. See Figure 3-21.

Enter the User and Password information, given to you by your Internet Service Provider (ISP). While this function is supported on IC Realtime units, you will have to work with your ISP for any troubleshooting.

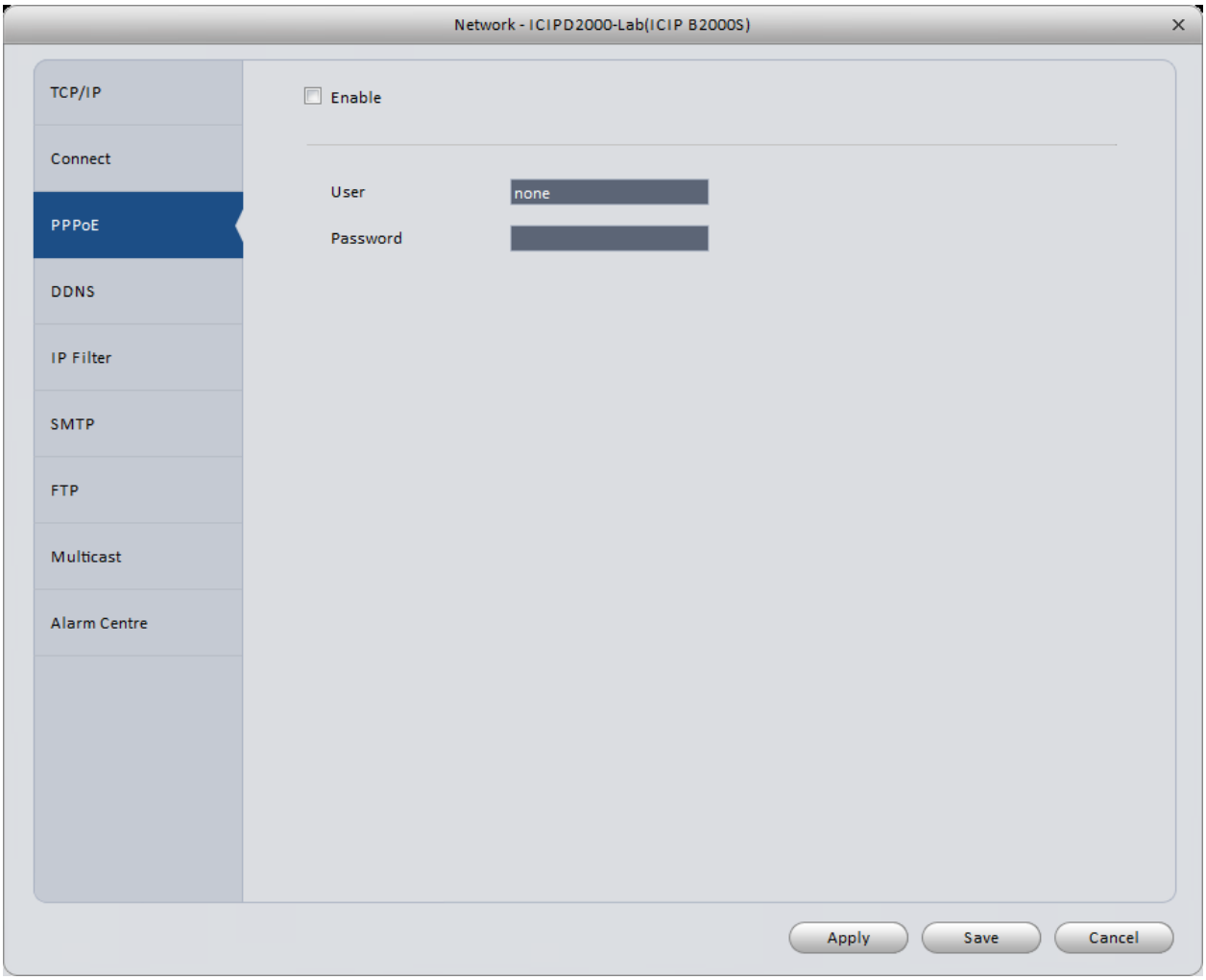


Figure 3-21

3.6.1.1.4 DDNS

DDNS setup interface shown in Figure 3-22.

Your device must be connected to the internet for DDNS to work.

Select your Server Type (ICDDNS, QUICK DDNS, No-IP, and Dyn DNS will work with IC Realtime devices).

ICDDNS/QUICK DDNS Setup: ICDDNS and QUICKDDNS options are both free for IC Realtime equipment. Select whichever one is available as your **Server Type**, and check the **Enable** box. The server IP should be: www.icddns.com for an ICDDNS address, and www.quickddns.com if you use the QUICK DDNS type. Next to **Domain Type**, select **Custom Domain Name**. Enter the name you would like (you may use all or part of your last name, street name, etc.), then click the **Test** button. A message will pop up in the lower-right corner of your monitor to let you know if the address was registered or not. If you get an error message, you may have to set the address using either the web interface (Internet Explorer is preferred), or registering the address directly at your device, using an attached monitor and mouse. If the test succeeds, press the **Save** button.

Dyn DNS/No-IP Setup: If you use either of these options, you will first have to create an account on the corresponding site, using a web browser on your computer. Once your account is created and you have created a Domain Name, choose the correct Server Type, and check the **Enable** box. Leave the Server IP and Port information alone. Enter your Domain Name, then your User Name and Password for your Dyn DNS or No-IP account, then click the **Save** button.

After entering or changing DDNS information, it is always a good idea to reboot your device after saving.

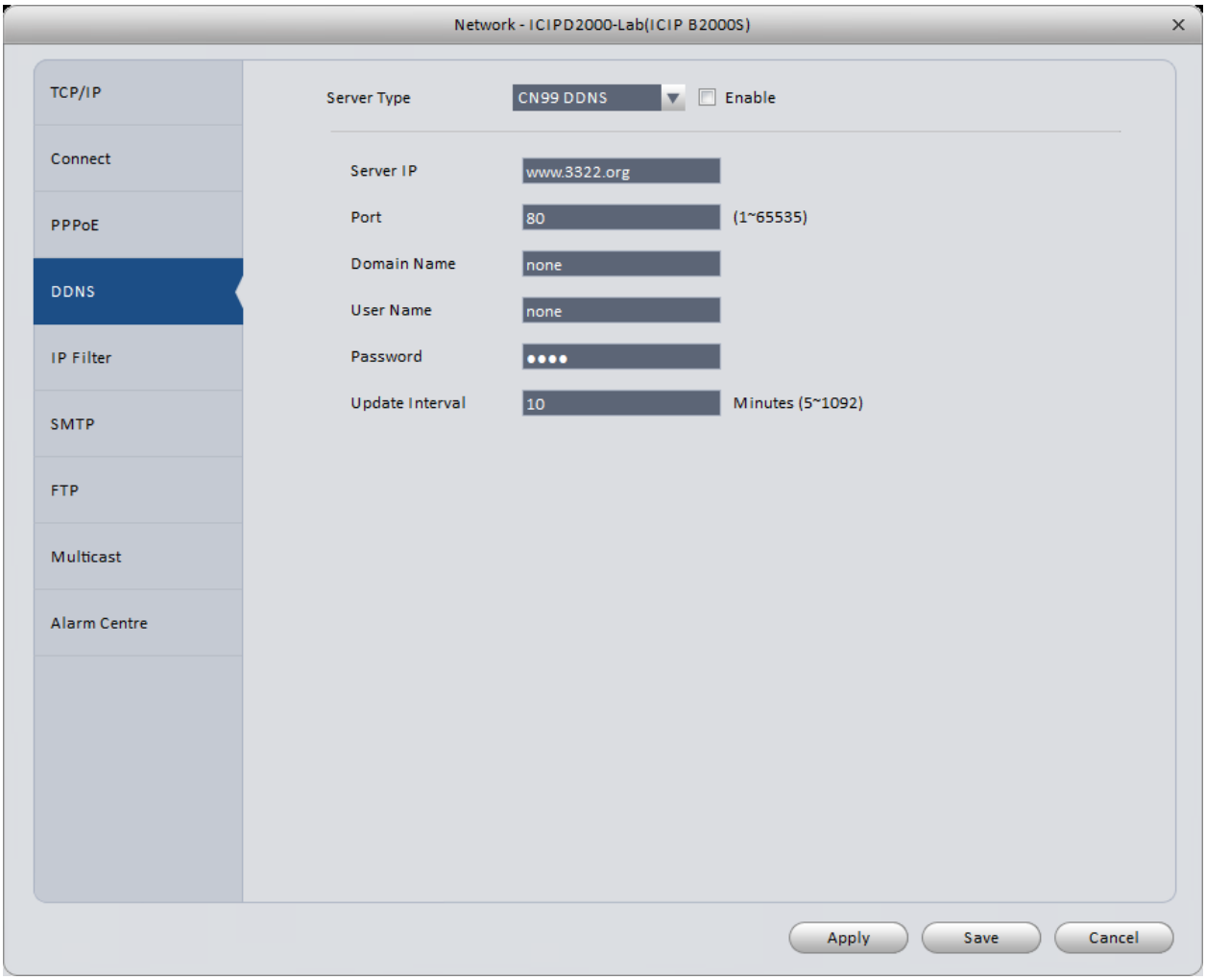


Figure 3-22

Please refer to the following table for detailed information.

Parameter	Function
Server Type	Select your DDNS provider.
Server IP	DDNS server web address. **Note** Do not change this field.
Port	DDNS server port. **Note** Do not change this field
Domain Name	Domain name used by your device.
User Name	The User Name for your Dyn DNS or No-IP account ICDDNS and QUICK DDNS options do not require a User Name..
Password	The Password for your Dyn DNS or No-IP account ICDDNS and QUICK DDNS options do not require a password.
Email Address	This field will only appear on some ICDDNS or QUICK DDNS pages. You are not required to provide an email address for these options.
Update Interval	How often your device sends an IP update to the DDNS server. Default is 5 minutes.

3.6.1.1.5 IP Filter

IP filter interface shown in Figure 3-23.

This function should only be used if you have A: a list of IP addresses for which you want to block access to your device (Blacklist); or B: an authorized user list of IP addresses (Whitelist). IP addresses may be added individually to a list, or you may enter a range of IP addresses using Start and End addresses.

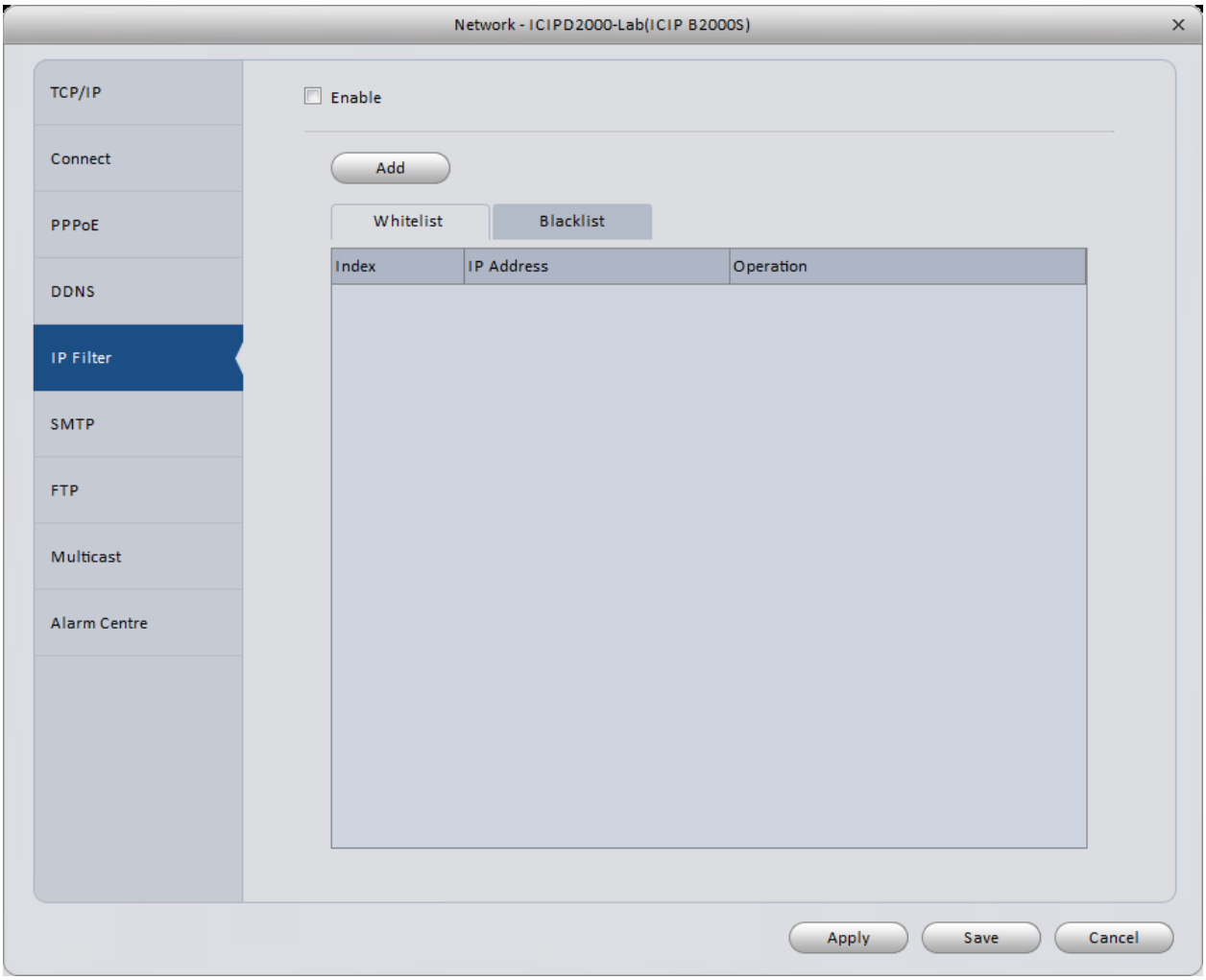


Figure 3-23

3.6.1.1.6 SMTP (Email)

The SMTP interface is shown Figure 3-24.

This module allows you to set up a Gmail or Yahoo email address for sending alerts from your device. For more information and help setting this up, click here.

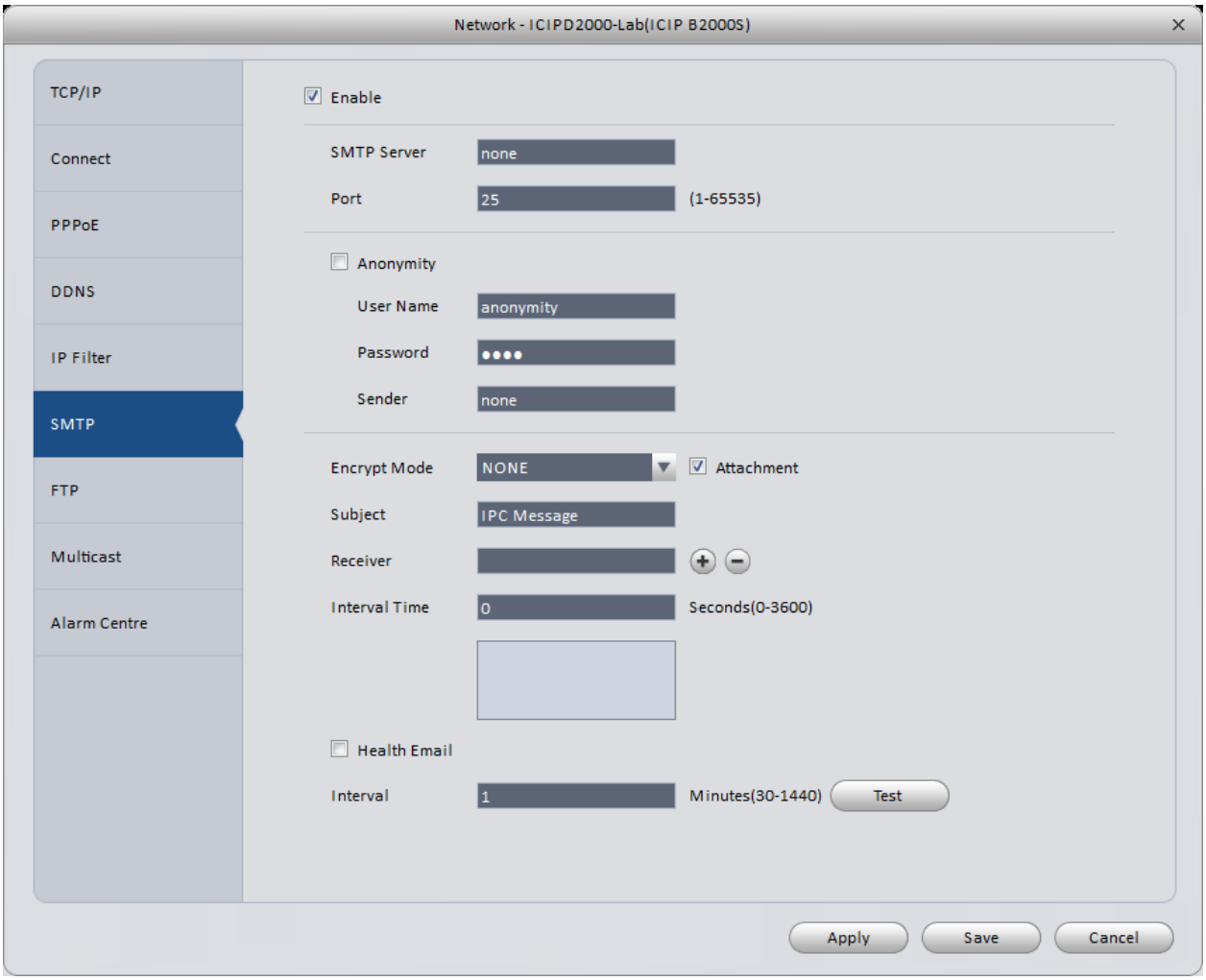


Figure 3-23

Please refer to the following table for detailed information.

Parameter	Function
Enable	Enable box must be checked.
SMTP Server	Your SMTP server address.
Port	SMTP Server port. Use 465 for Gmail or Yahoo accounts.
Anonymity	Use only if your email server allows you to logon anonymously.
User Name	Enter the full email address here.
Password	Password used for your email account.
Sender	Enter the full email address here.
Encrypt Mode	Use SSL for Gmail and Yahoo accounts.
Subject	Customize the Subject line of the email.
Attachment	Your device can send out a snapshot with each email. Additional settings need to be configured on your device for it to work properly.
Receiver	You may enter up to 3 Recipients for each email Enter each email address in the field here, then press the + button.

Parameter	Function
Interval Time	The device will wait this long prior to sending out each email alert message. You may need to adjust this for best performance. Range is from 0 to 3600 seconds.
Health mail	The device will send a status email based on the Interval specified below.
Interval	How often the Health Email is sent, in Minutes.
Test	Click this button to trigger a test email to ensure they are working correctly.

3.6.1.1.7 FTP

The FTP interface is shown in Figure 3-24.

For more detailed information on using the FTP feature, click here.

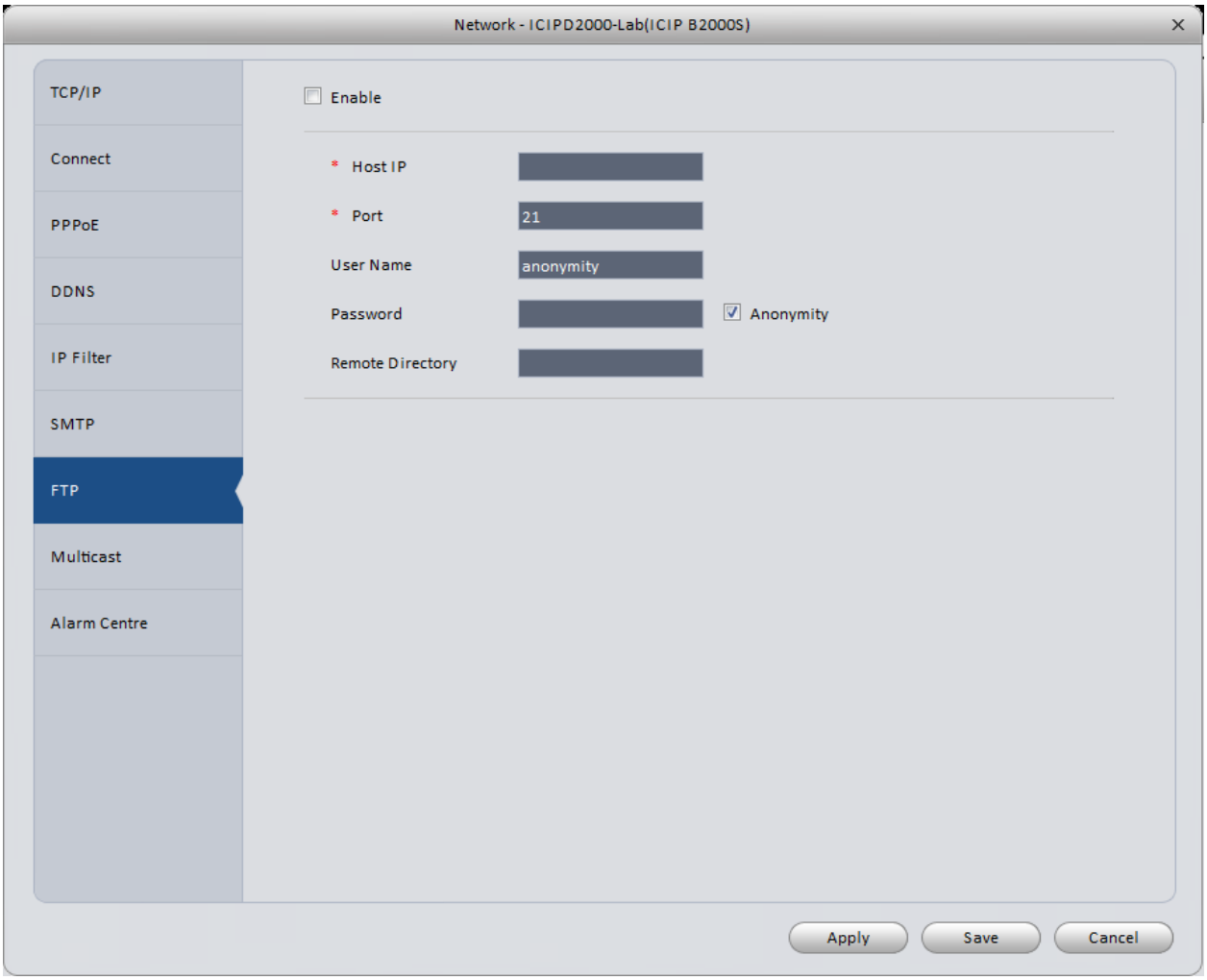


Figure 3-24

Please refer to the table below for more information.

Parameter	Function
Enable	Box must be checked for the FTP function to work.
Host IP	IP address of your FTP server or NAS device.
Port	Port 21 is the default FTP port.
User Name	User Name for your FTP server.

Parameter	Function
Password	Password for your FTP server.
Remote Directory	Folder or directory name where the files will be stored on your FTP server.

3.6.1.1.8 Multicast

The Multicast interface is shown in Figure 3-25.

Multicast is a method used to broadcast the video from your device to multiple users at once. Please consult your network provider if you want to set this up.

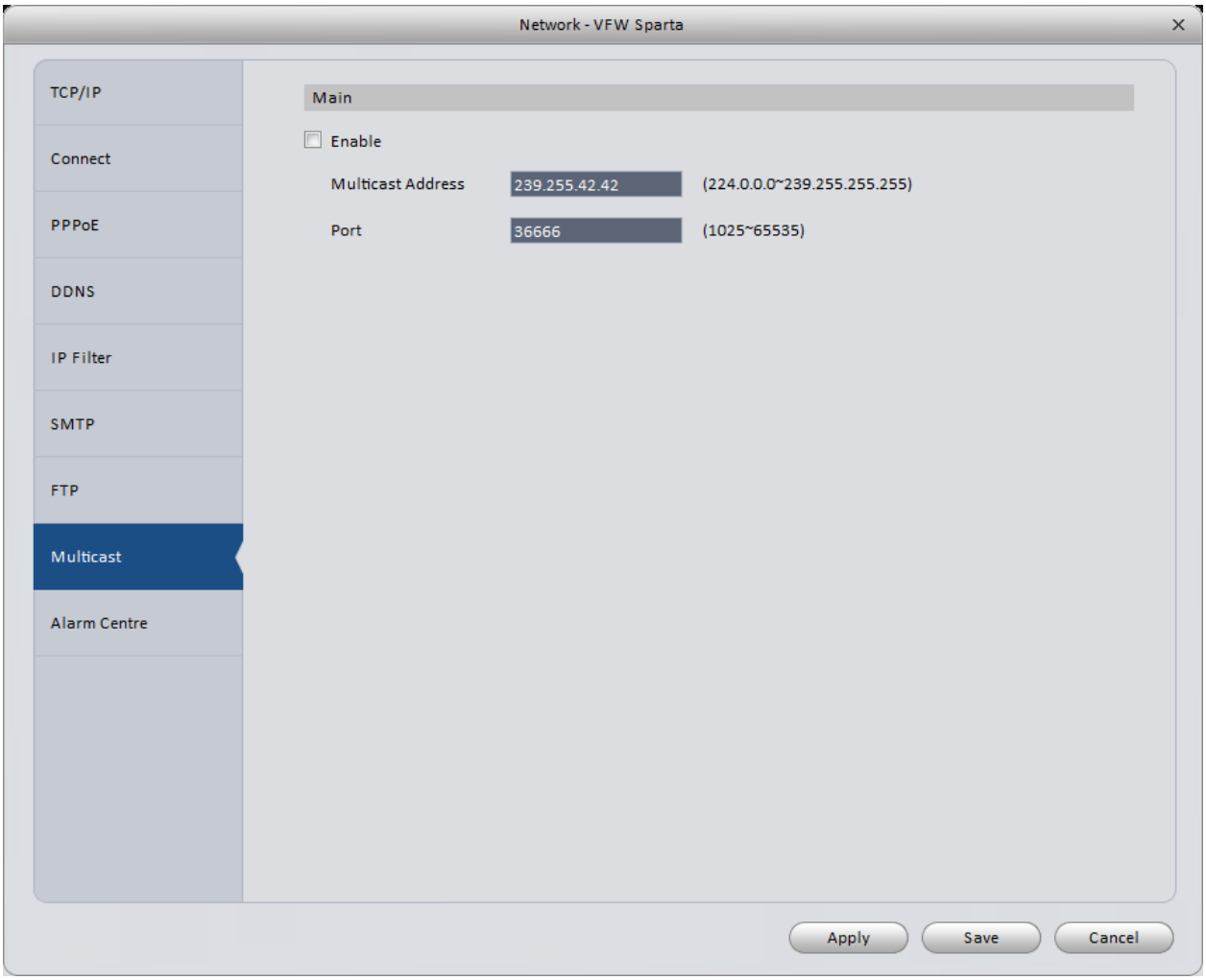


Figure 3-25

3.6.1.1.9 Alarm Centre

The Alarm Centre interface is shown in Figure 3-26.

The Alarm Centre is used to send alarms generated by your device to a home security provider for monitoring. You will have to work with your security system provider to get the required information, if you wish to use this feature.

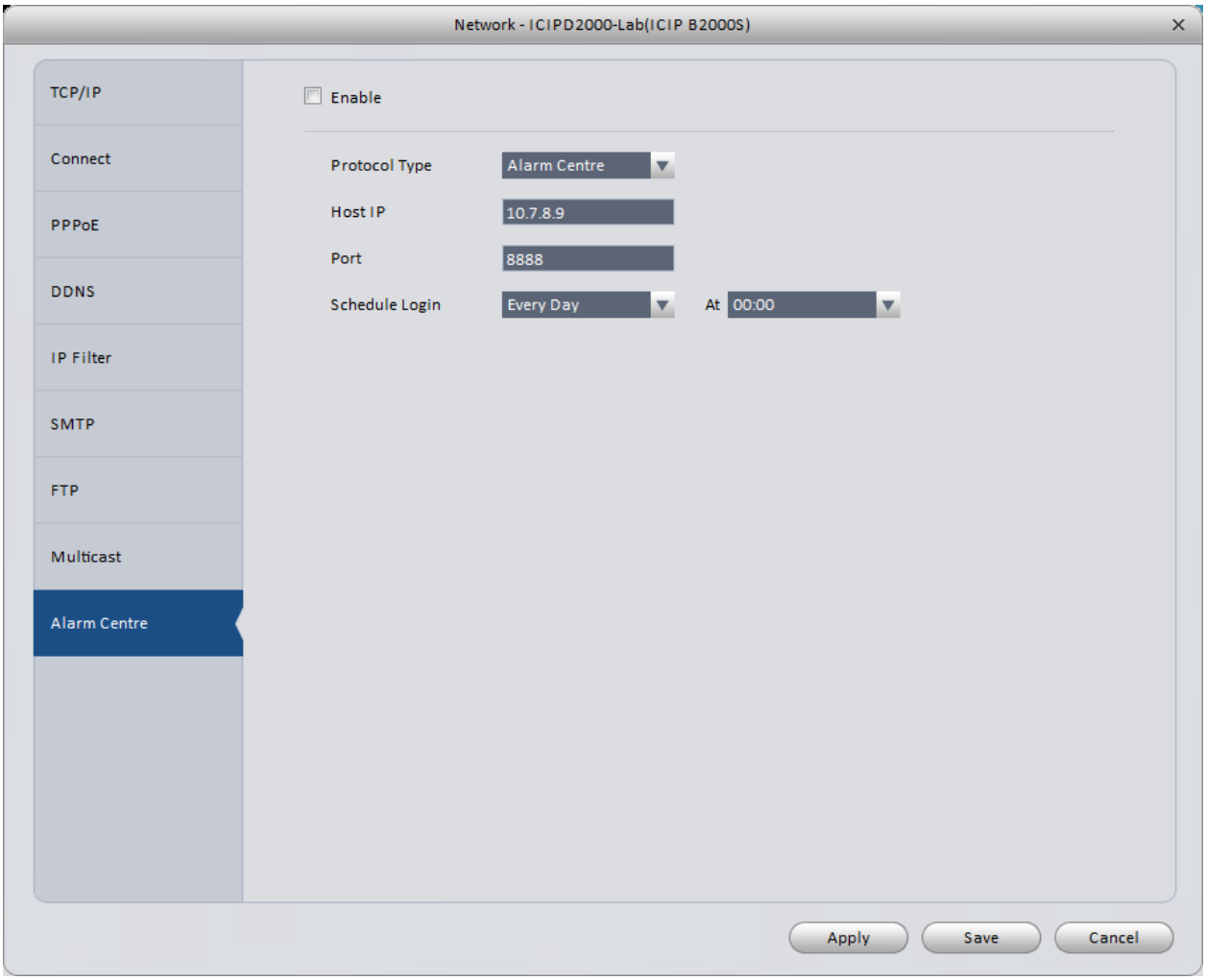


Figure 3-26

3.6.1.2 Remote Device

Used to search for, add, and delete IP cameras on an NVR. See Figure 3-27.

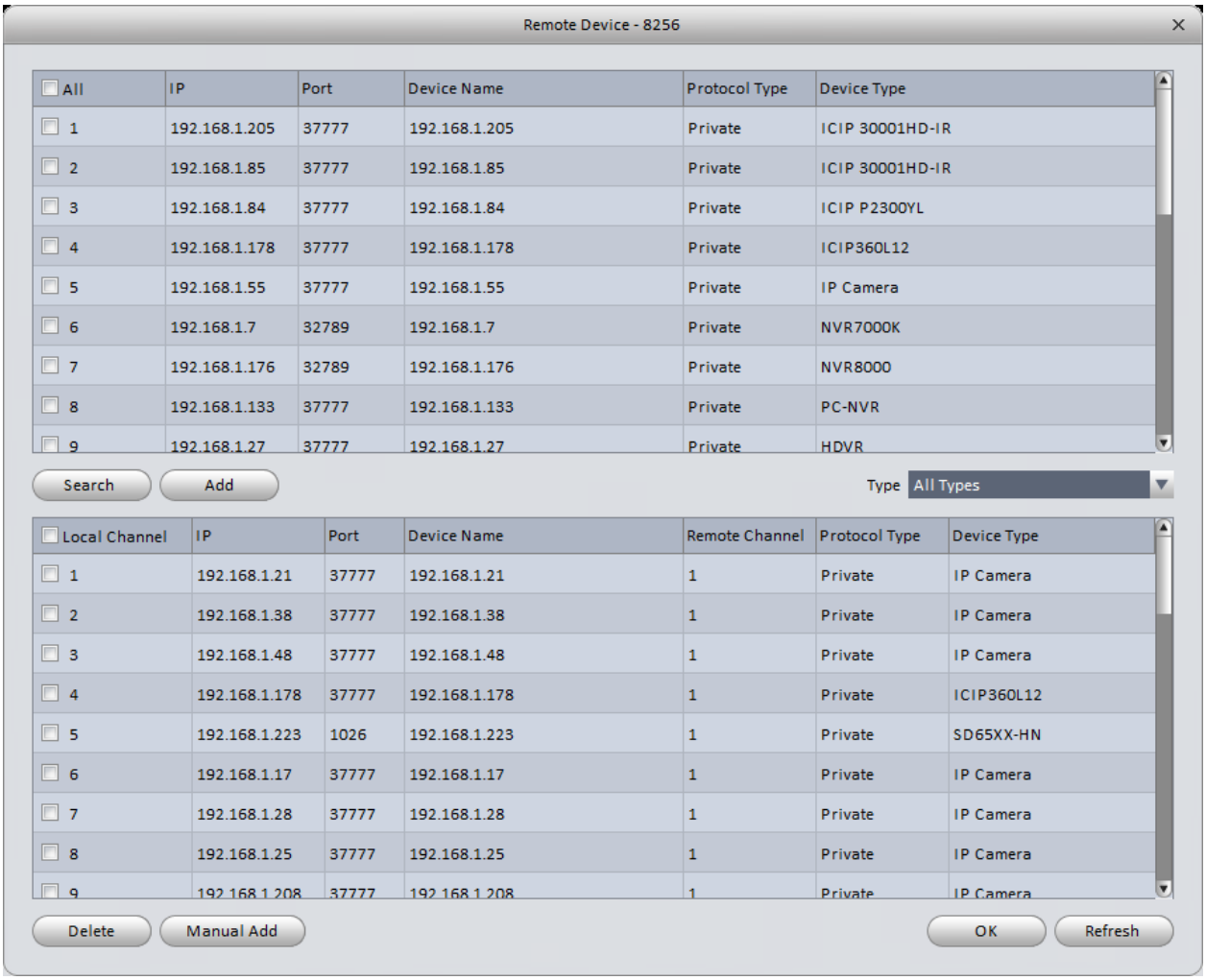


Figure 3-27

Click **Search** button to search for available IP devices on the same network as your device. Place a check in the box next to a device in the top half of the screen (above the **Search** and **Add** buttons), then click the **Add** button to add the device to your NVR.

Use the **Manual Add** option to add a device manually. See Figure 3-28.

Figure 3-88

3.6.1.3 Encode

3.6.1.3.1Audio/Video

The Audio/Video screen is shown in Figure 3-99. You may view and change your camera's Audio and Video settings from this screen.

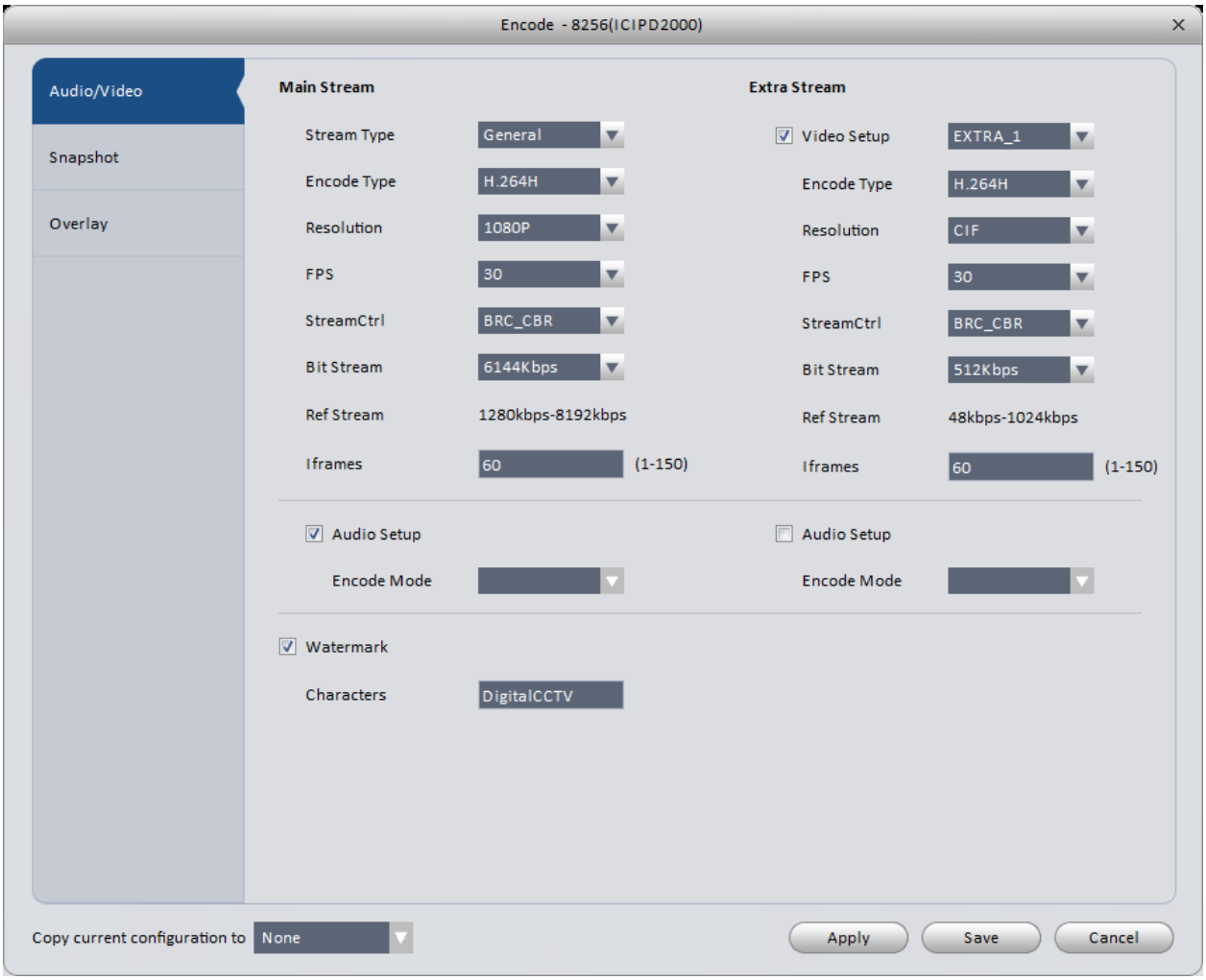


Figure 3-99

Please refer to the following table for detailed information.

Parameter	Function
Video Setup	This box needs to be checked for the camera to produce an Extra Stream. Some IP cameras have more than 1 Extra Stream available.
Stream Type	Allows you to set different FPS and BitStream settings for the different types of streams. General is for Regular streaming (i.e. there are no MD or Alarm events); MD is when there is a Motion Detection event; and Alarm is when there is an active alarm input. General MD Alarm
Encode Type	Set your encode method for each stream. H.264 is the default, but some Home Control Systems require an MJPEG stream. It is recommended to use MJPEG only on the Extra Stream (the settings on the right side of the window). H.264 MJPEG H.264B H.264H
Resolution	Each camera supports several different resolutions. Resolutions are listed in order, with the top being the highest resolution.

Parameter	Function
FPS	1 ~ 30 FPS. 15 FPS is recommended for the Main Stream, with 7 FPS on the Extra Stream in most applications.
StreamCtrl	BRC_CBR maintains a steady, Constant BitRate. BRC_VBR uses a Variable BitRate. BRC_CBR BRC_VBR
Quality	When using BRC_VBR mode, set the overall video quality. Worst Worse Bad Good Better Best
Bit Stream	Available BitRate settings that may be used. Your BitRate range changes along with the Resolution and FPS settings. It is recommended to use the highest BitRate available for best results.
Iframes	Interval between key frames. Adjusting this is generally not necessary.
Audio Encode Mode	Check the box next to Audio Setup. Select your encoding from the drop-down list. G.711U is the recommended setting. PCM G.711A G.711U AAC
Watermark Characters	This adds an extra security feature to your video. It embeds a digital watermark that can be verified using the ICRSS Player software once you have downloaded footage from your device.
Copy	After clicking **Apply**, you may copy the settings from once device to another.

3.6.1.3.2Snapshot

The Snapshot interface is shown in Figure 3-30.

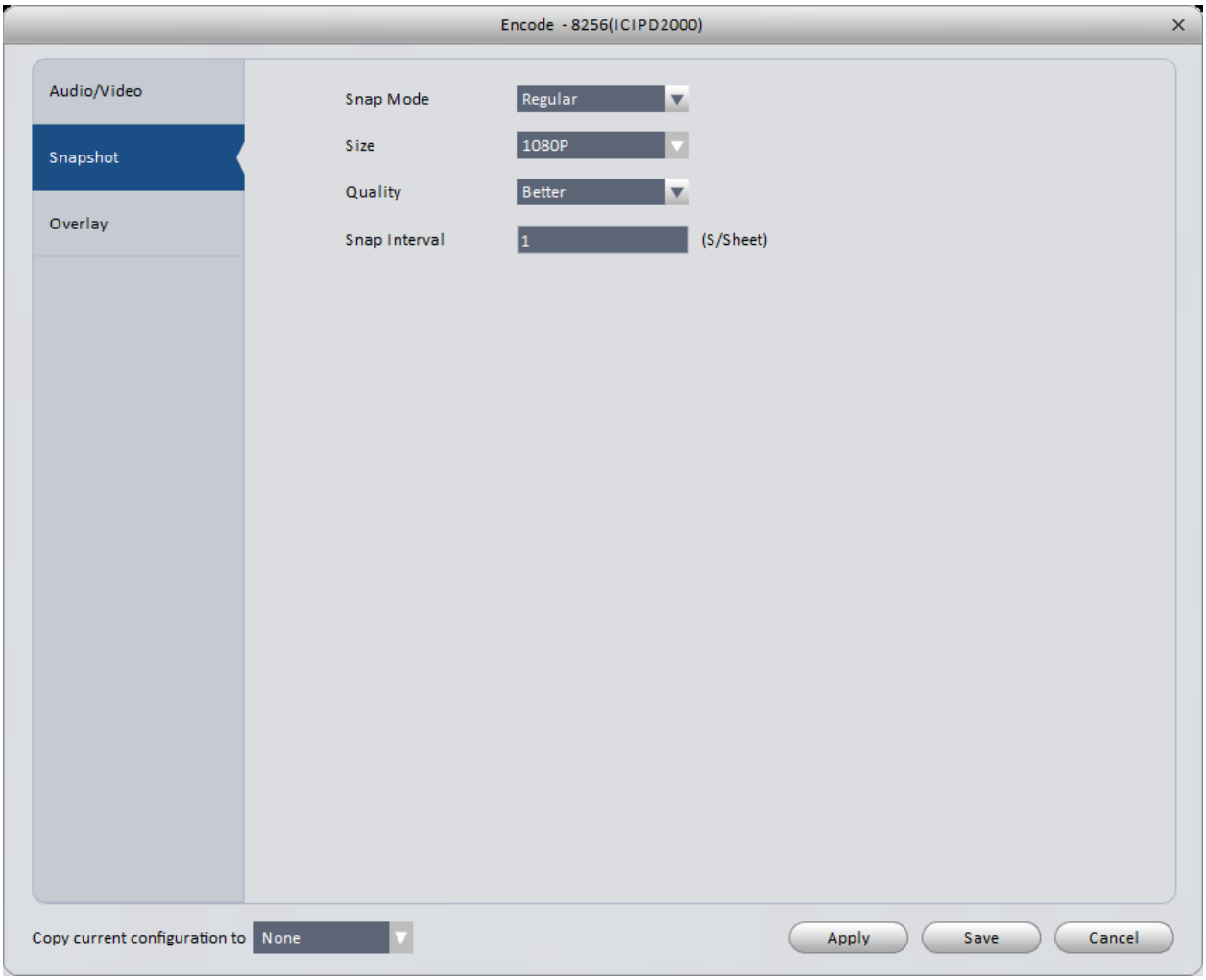


Figure 3-30

Please refer to the table below for detailed information.

Parameter	Function
Snap Mode	Select the mode, then set the Quality and Interval settings for each mode. Regular refers to snapshots taken using the Schedule; Trigger refers to snapshots triggered by MD; ALM refers to snapshots triggered by Alarm inputs or IVS events. Regular Trigger ALM
Size	Matches the Main Stream resolution.
Quality	Set the quality of each image. Worst Worse Bad Good Better Best
Snap Interval	Set how often the camera takes a snapshot.
Copy	After clicking **Apply**, you may copy the settings from once device to another.

3.6.1.3.3Overlay

The Overlay interface is shown in Figure 3-31.

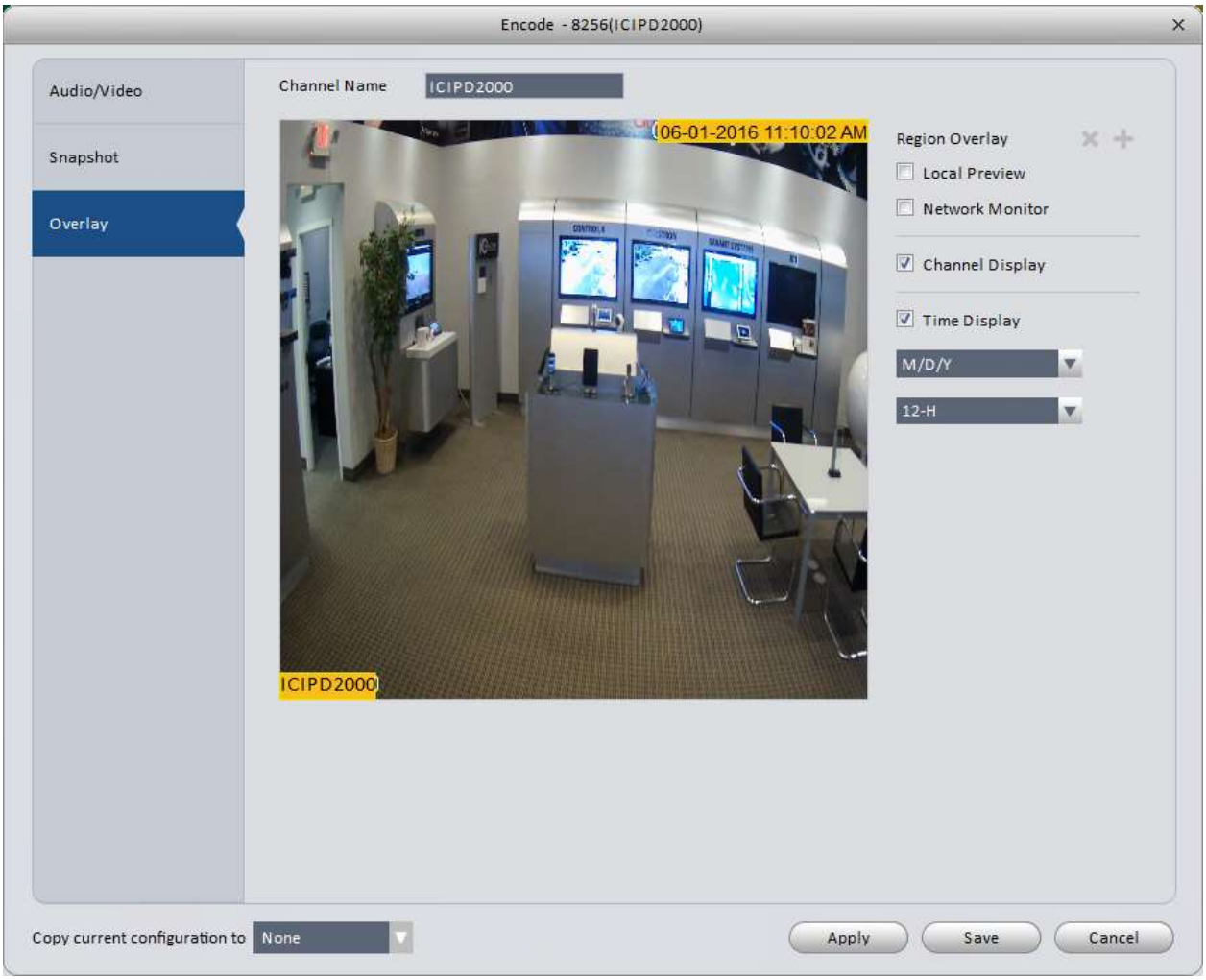


Figure 3-31

Please refer to the table below for detailed information.

Parameter	Function
Channel Name	Set channel name, displayed in the lower-left corner by default.
Region Overlay	Allows you to place up to 4 different rectangular boxes over the image, so they are blocked from view. The boxes can be applied to both the Local Preview (monitor attached to your NVR) and the Network Monitor (web browser or Smart ICRSS) by selecting the corresponding check boxes.
Channel Display	Used to toggle the Channel Display on and off. To move the location of the Channel Name, click and drag the yellow box in the lower-left corner of the image.
Time Display	Used to toggle the Time Display on and off. To move the location of the Time Display, click and drag the yellow box in the upper-right hand corner of the image.

Parameter	Function
Date Format	Select date format from the dropdown list if you want to overlay date information. Options shown below. Y/M/D M/D/Y D/M/Y
Time Format	Select date format from the dropdown list if you want to overlay time information. Options shown below. 12-H 24-H
Copy	After clicking **Apply**, you may copy the settings from once device to another.

3.6.1.4 Image

The Image properties interface is shown in Figure 3-32.

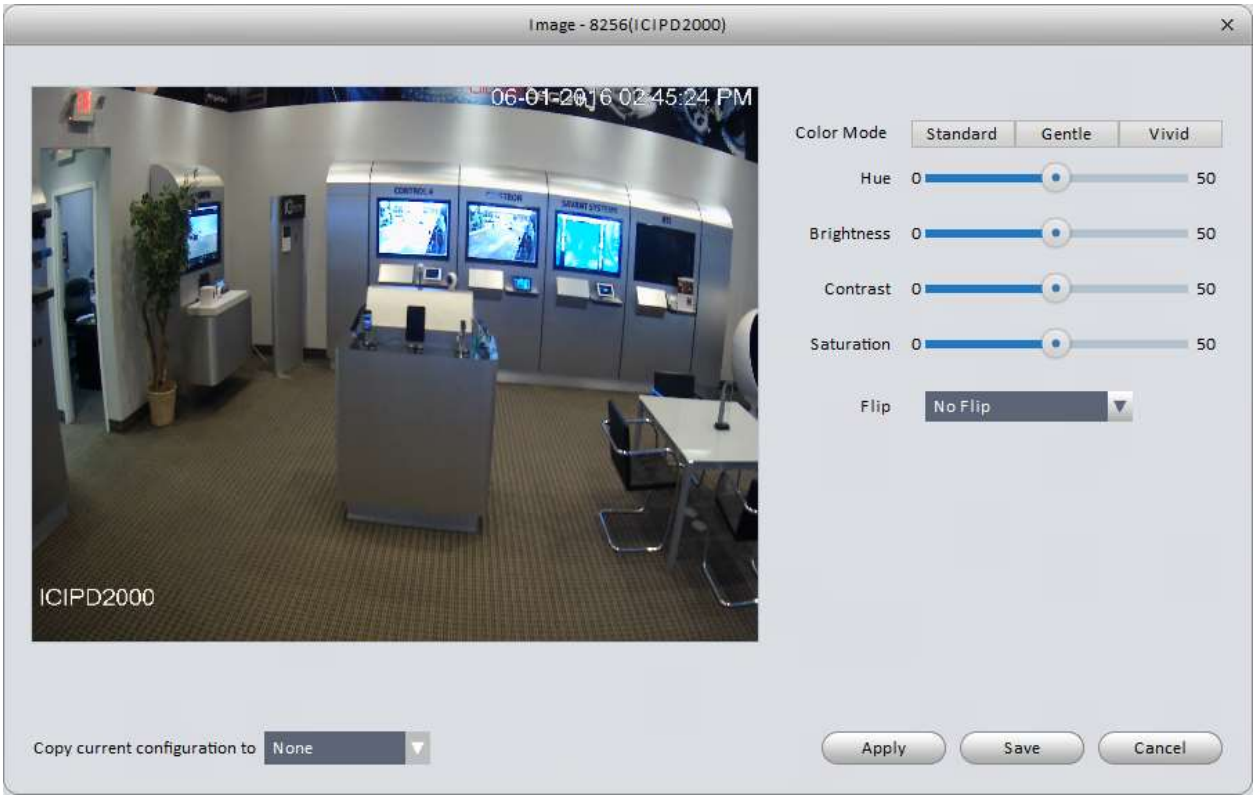


Figure 3-32

Please refer to the table below for detailed information.

Parameter	Function
Color Mode	There are 3 Preset color modes available: Standard, Gentle, and Vivid. Click on the desired mode, then click the **Apply** button to assign the settings to the device.
Hue	Adjust the image hue, from 0 to 100. Default is 50.
Brightness	Adjusts the overall brightness of the image, from 0 to 100. Default is 50.
Contrast	Adjust the contrast settings, from 0 to 100. Default is 50.

Parameter	Function
Saturation	Adjust the color saturation, from 0 to 100. Default is 50.
Flip	Allows you to flip the image 90° left, 90° right, or 180°.
Copy	After clicking **Apply**, you may copy the settings from once device to another.

3.6.1.5 PTZ Control

The PTZ Control interface is shown in Figure 3-33.

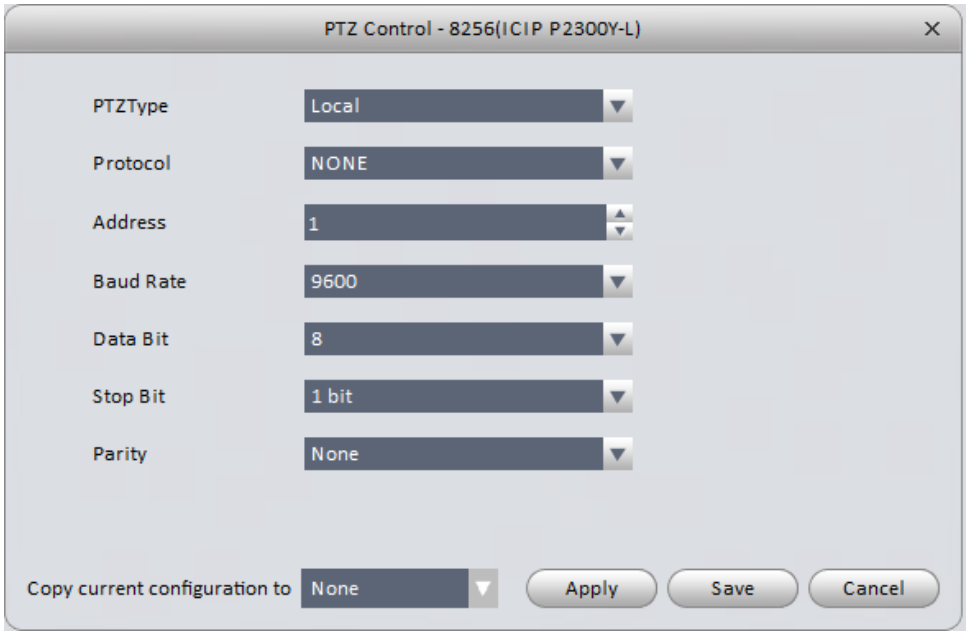


Figure 3-33

Please refer to the table below for detailed information.

NOTE: You will only need to adjust these settings for regular coax, standard definition cameras. To find the settings for each camera, disconnect power to the camera for 5-10 seconds, then power them back up. The settings will show on your local monitor when the cameras(s) start up again.

Parameter	Function
PTZType	Select Remote for IP or AVS cameras; analog cameras require Local.
Protocol	Select the protocol used by the camera. We recommend using ICR-SD or Pelco D protocols.
Address	Set the PTZ address of the camera. This address **MUST** match the address set on the camera to work properly.
Baud Rate	Select the baud rate used by the camera.
Data Bit	Set to 8.
Stop bit	Set to 1 bit.
Parity	Set to None.

3.6.2 Event

3.6.2.1 Video Detect

There are 3 types of Video Detection Events:

1. Video Loss: Video Loss events occur when the camera/DVR/NVR detects a dropped connection to a camera. The Video Loss interface is shown in Figure 3-34.

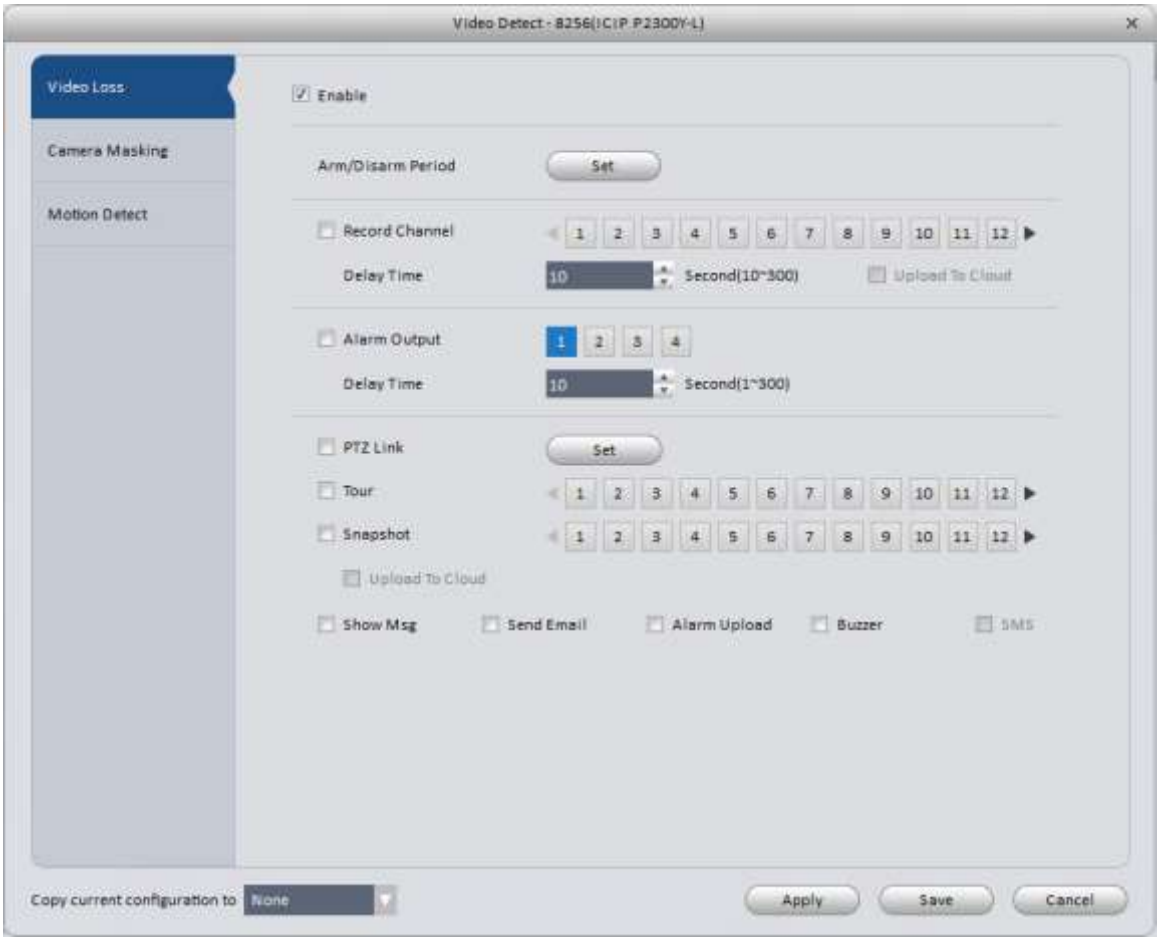


Figure 3-34

2. Camera Masking: Camera Masking events occur when the camera/DVR/NVR can still detect a signal from the camera, but the image has changed significantly. Some camera models can detect when the image suddenly changes focus as well, with the Unfocus option. Camera Masking interface is shown in Figure 3-35.

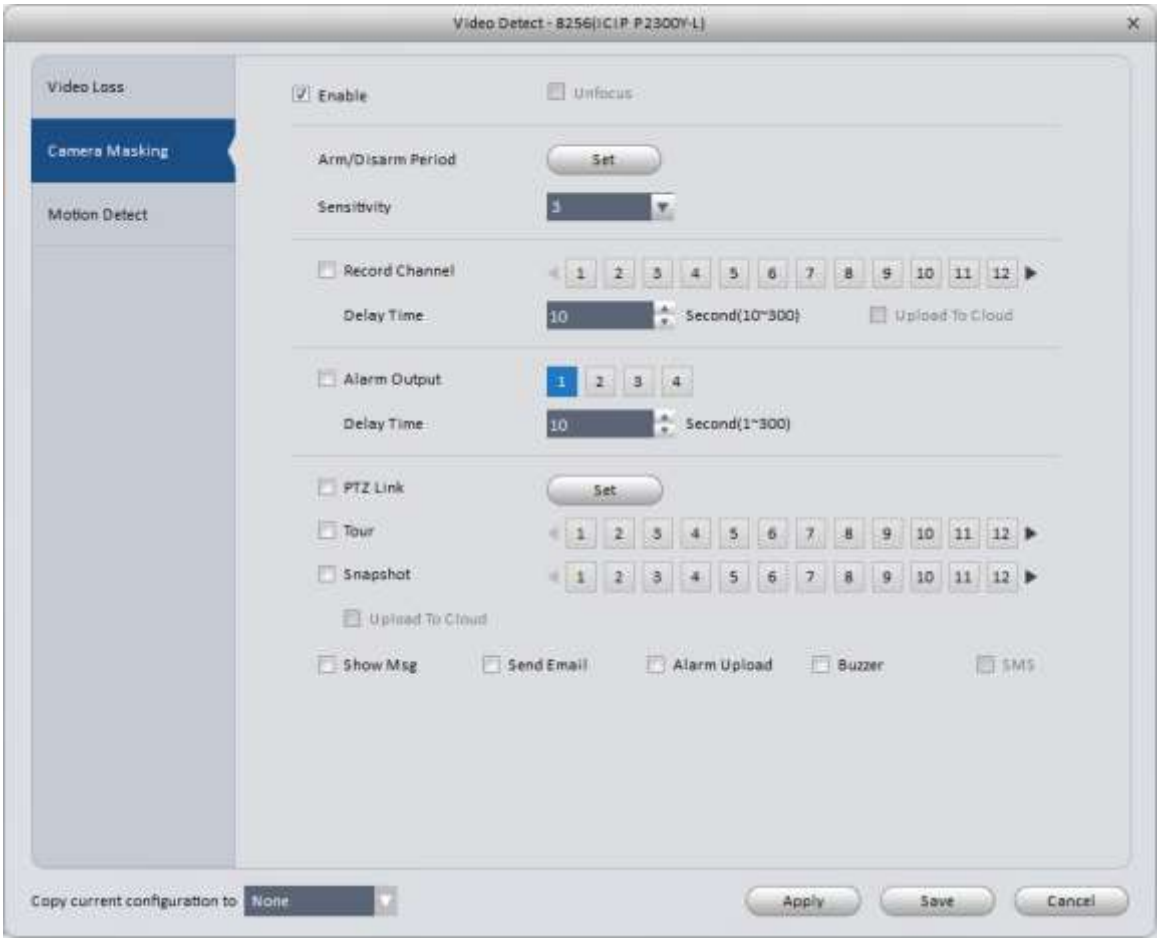


Figure 3-35

3. Motion Detect: Motion Detect (MD) events occur when the camera/DVR/NVR detects pixel changes in an image. Motion Detection interface is shown in Figure 3-36. MD settings allow you to select area(s) in each camera where MD events will and will not be triggered.

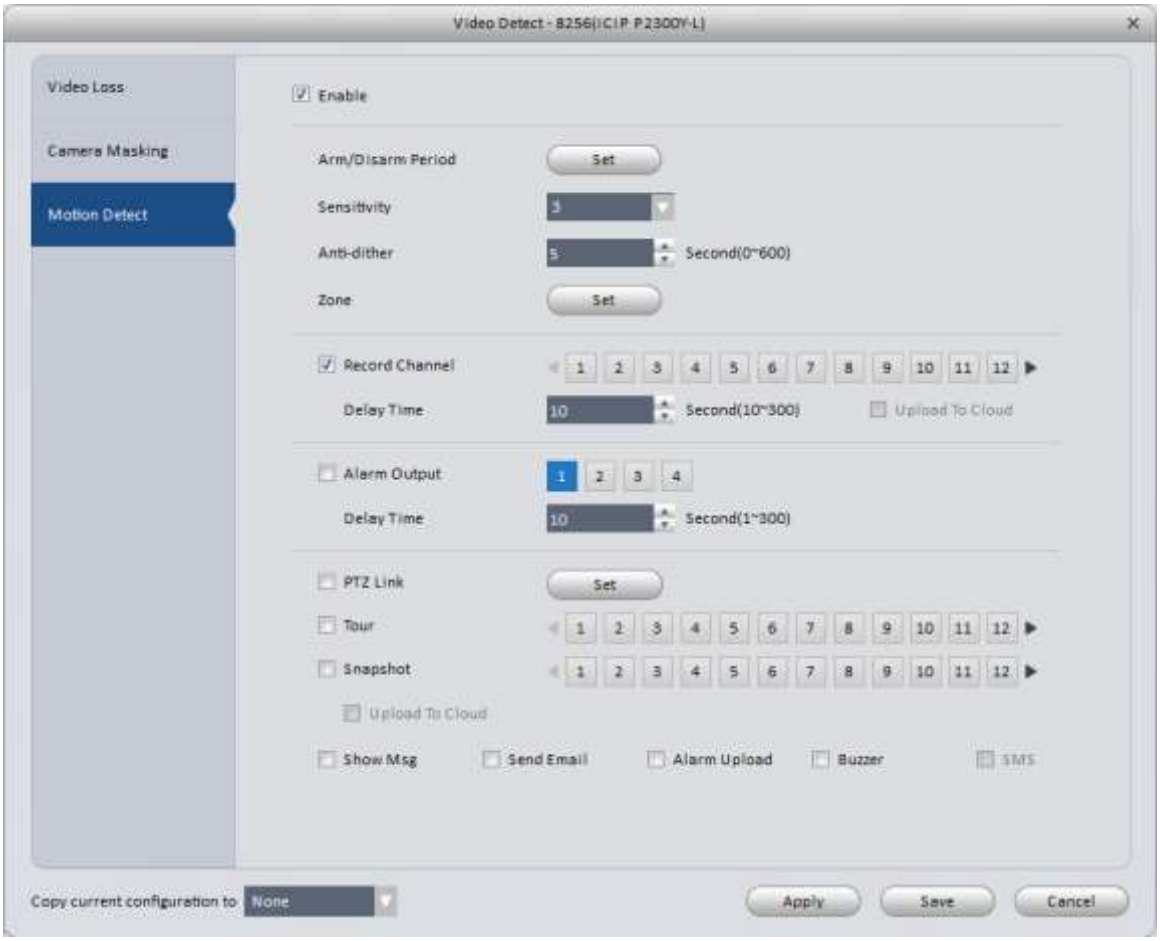


Figure 3-36

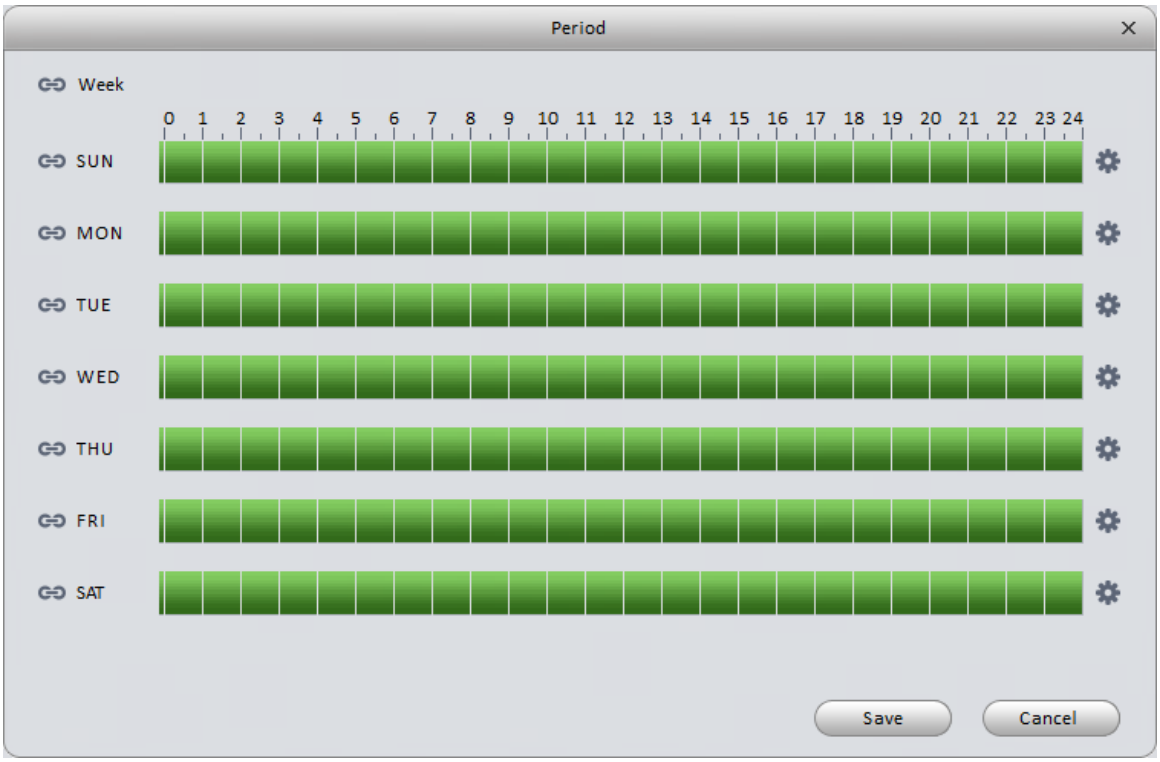


Figure 3-37

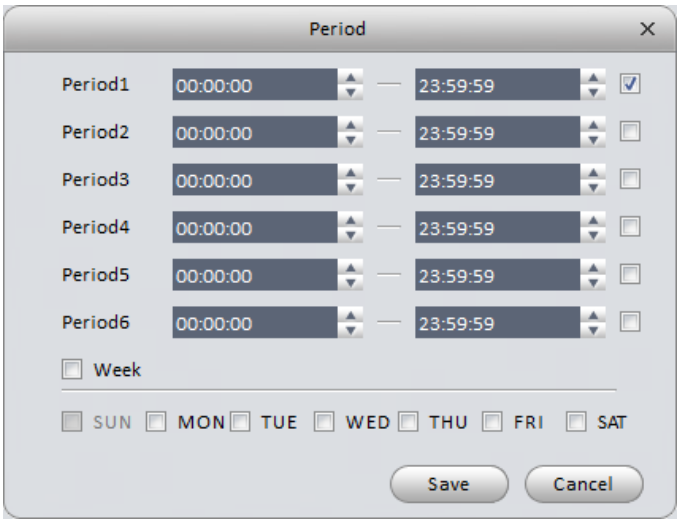


Figure 3-38

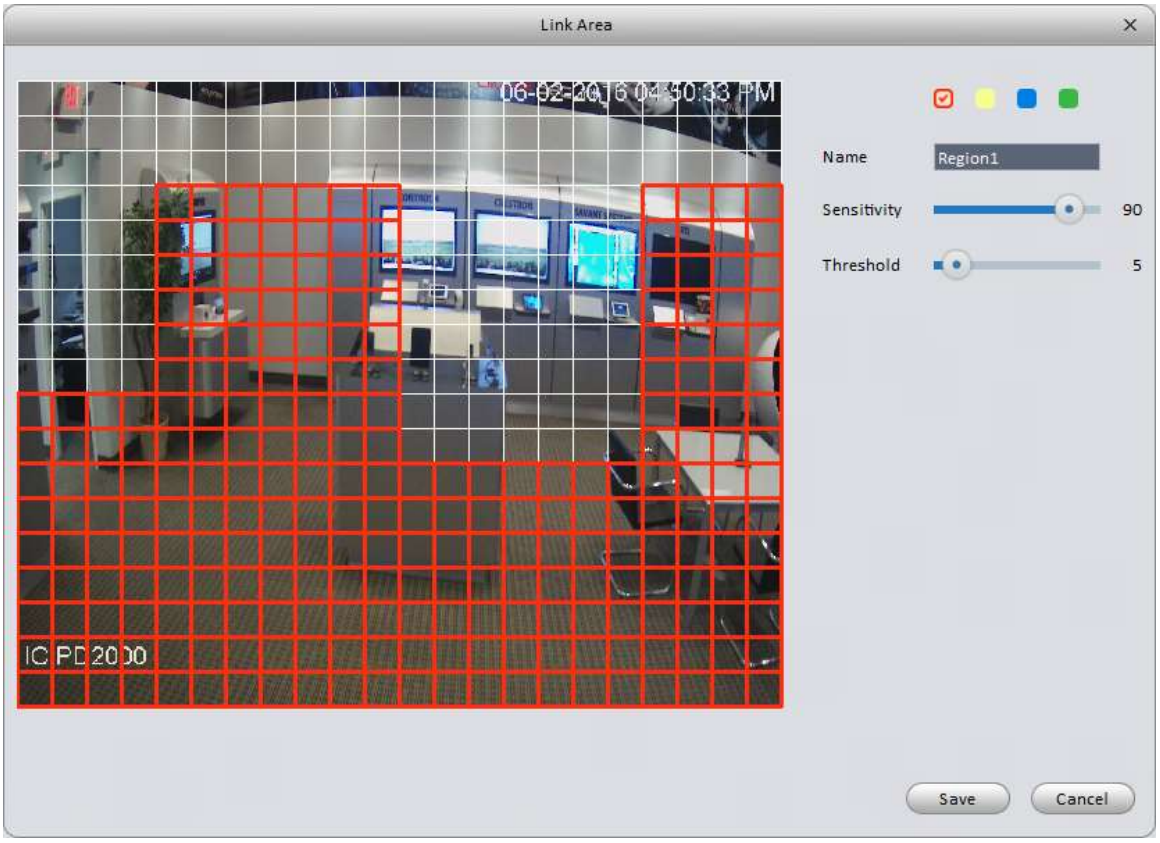


Figure 3-10

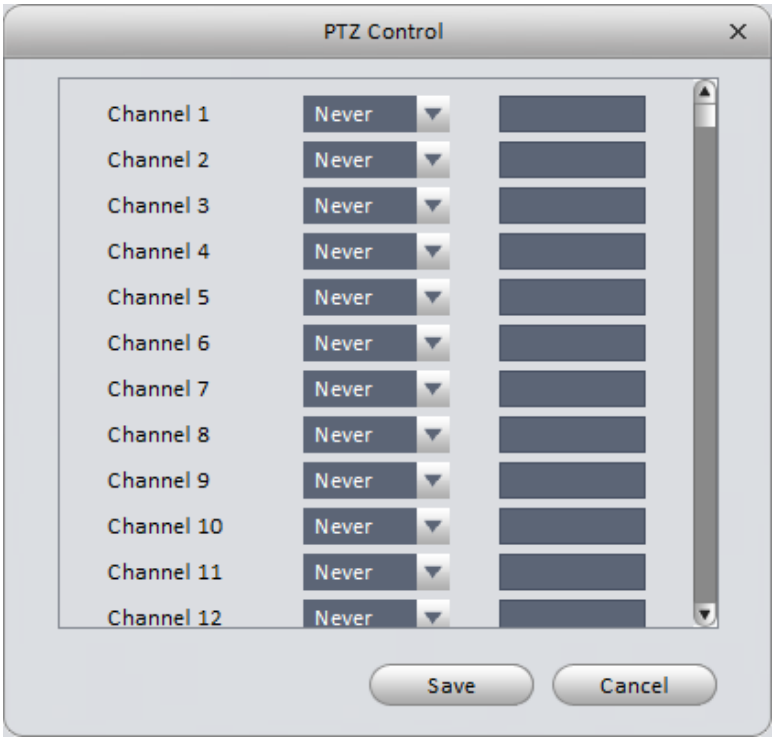
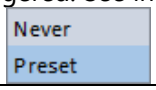


Figure 3-40

Please refer to the following table for information on the settings in each of the Video Detect event screens.

Parameter	Function
Enable	This box **MUST** be checked for the event to operate.
Unfocus (Camera Masking only)	Enables the device to detect rapid unfocusing of the image, in addition to the default Camera Masking options.
Arm/Disarm Period	Create a schedule for each event by clicking the **Set** button to the right of this setting. By default, this period is set to 24 hours/day, 7 days/week. Clicking on the **Set** button opens up the window seen in Figure 3-37; clicking on one of the **gear** buttons in that window will bring up the window in Figure 3-38. To save your schedule to the device, click **Save** on the period screen, then click **Apply** to save the changes to the device.
Sensitivity (Camera Masking only)	Sensitivity adjustment for the Camera Masking event. Scale goes from 1-6, with 6 being the most sensitive.
Anti-dither (MD Only)	Device will only generate 1 MD event for each Anti-dither period. Default is 5 seconds; can be set from 0 to 600 seconds.
Zone (MD Only)	Used to set your Motion Detection zones. Interface shown in Figure 3-39. In that image, the areas covered by the **Red** grid will detect pixel changes, and the uncovered area will ignore them. Also in that window, you have 4 color-coded zones you can set up. By default, only the red zone is activated. Each different-colored zone can have its own Sensitivity and Threshold settings. Sensitivity refers to the light sensitivity of the camera; the scale goes from 1 to 100. **Higher** sensitivity settings mean the device is more likely to trigger a Motion event when there is a change in the lighting. Threshold is the

Parameter	Function
	minimum percentage of pixels, in the entire image, which must be changing to trigger a motion event. The scale is from 1 to 100.
Record Channel	Select this option, then click on the camera channel(s) you want to record when the event is triggered.
Delay Time	The device will continue recording for this period after the event ends. Set from 10 to 300 seconds.
Upload To Cloud	Check to automatically upload footage to the cloud. Device must be added to the software using icmycloud.com.
Alarm Output	Enables the triggering of an Alarm Output attached to the device.
Delay Time	The device will keep the alarm output activated for this period of time. From 1 to 300 seconds.
PTZ Link	You can activate a PTZ camera on the same DVR/NVR to go to a preset when the event is triggered. See interface in Figure 3-40. 
Tour	Enable a tour on the local monitor connected to the DVR/NVR. Select the camera channels you want included in the tour. Further configuration of the tour can be accessed either through the web interface of the DVR/NVR, or using a mouse and local monitor.
Snapshot	Enables a snapshot to be taken from the selected camera(s) when the event is triggered.
Show Msg	When enabled, you will see a message on the local monitor indicating the event is taking place.
Send Email	Triggers an email to be sent every time the event occurs. The email function in the **Network** settings must be set up for this to work.
Alarm Upload	Sends a notification to the alarm monitoring center. You must have the **Alarm Centre** configured under the **Network** settings for this to work.
Buzzer	Triggers the audible alarm on the DVR/NVR motherboard. The sound is a loud beep, not a buzzer.
SMS	Used to send a text notification of an event. IC Realtime devices currently do not support this function.

3.6.2.2 Alarm

Before configuring the alarm on the device, you must have the alarm contacts wired to the appropriate inputs on your DVR/NVR/IP Camera.

Device Alarm interface is shown in Figure 3-41.

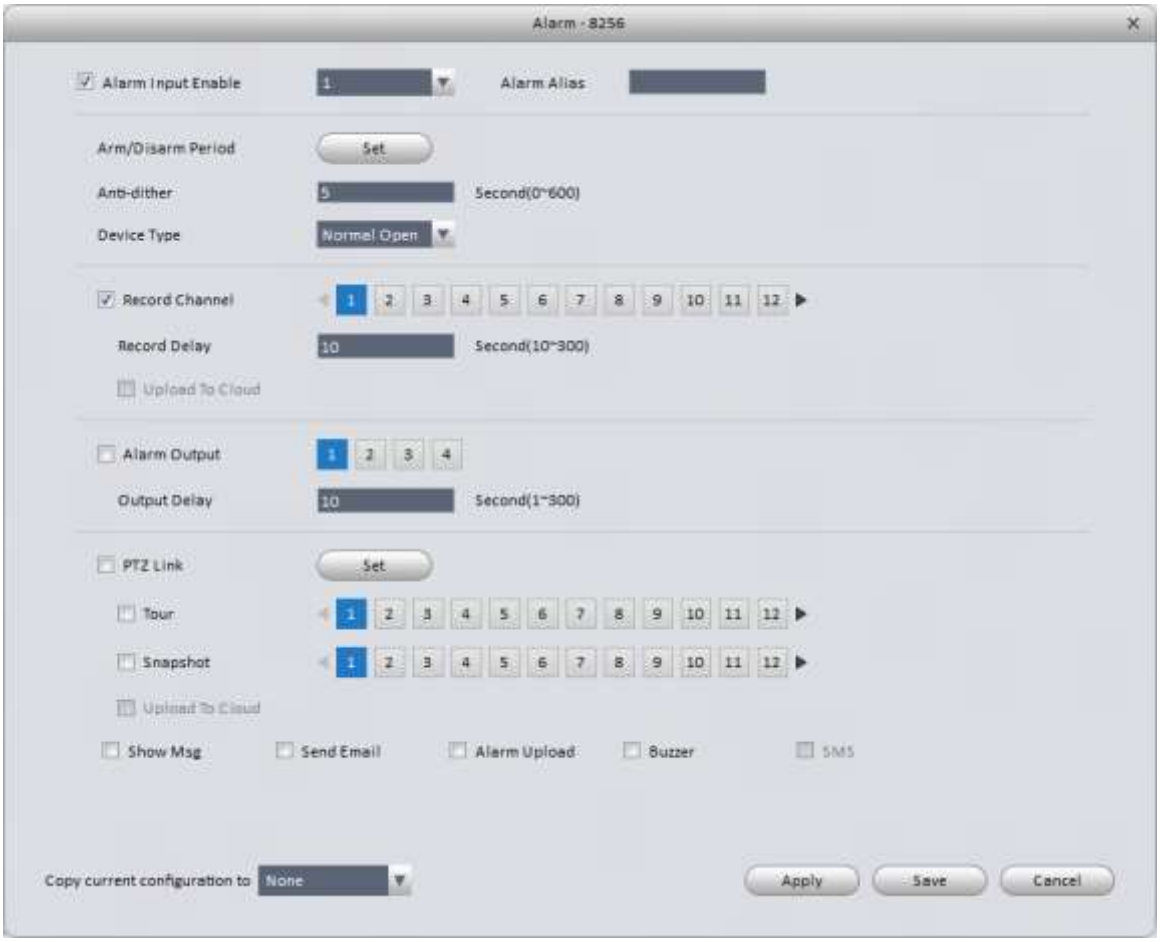


Figure 3-41

Please refer to the table below for detailed information.

Parameter	Function
Enable	Each input being used must be enabled here. Select the appropriate alarm input number from the drop-down list.
Arm/Disarm Period	Create a schedule for each event by clicking the **Set** button to the right of this setting. By default, this period is set to 24 hours/day, 7 days/week. Clicking on the **Set** button opens up the window seen in Figure 3-37; clicking on one of the **gear** buttons in that window will bring up the window in Figure 3-38. To save your schedule to the device, click **Save** on the period screen, then click **Apply** to save the changes to the device.
Anti-dither	Device will only generate 1 Alarm event for each Anti-dither period. Default is 5 seconds; can be set from 0 to 600 seconds.
Device Type	Select Normal Close or Normal Open alarm type. Normal Close Normal Open
Record Channel	Select this option, then click on the camera channel(s) you want to record when the event is triggered.
Record Delay	The device will continue recording for this period after the event ends. Set from 10 to 300 seconds.
Upload To Cloud	Check to automatically upload footage to the cloud. Device

Parameter	Function
	must be added to the software using icmycloud.com.
Alarm Output	Enables an alarm output connected to the device. When the box is checked, the selected alarm outputs(s) will be triggered.
Output Delay	The device will keep the alarm output activated for this period of time. From 1 to 300 seconds.
PTZ Link	You can activate a PTZ camera on the same DVR/NVR to go to a preset when the event is triggered. See interface in Figure 3-40.
Tour	Enable a tour on the local monitor connected to the DVR/NVR. Select the camera channels you want included in the tour. Further configuration of the tour can be accessed either through the web interface of the DVR/NVR, or using a mouse and local monitor.
Snapshot	Enables a snapshot to be taken from the selected camera(s) when the event is triggered.
Show Msg	When enabled, you will see a message on the local monitor indicating the event is taking place.
Send Email	Triggers an email to be sent every time the event occurs. The email function in the **Network** settings must be set up for this to work.
Alarm Upload	Sends a notification to the alarm monitoring center. You must have the **Alarm Centre** configured under the **Network** settings for this to work.
Buzzer	Triggers the audible alarm on the DVR/NVR motherboard. The sound is a loud beep, not a buzzer.
SMS	Used to send a text notification of an event. IC Realtime devices currently do not support this function.

3.6.2.3 Abnormality

There are seven options in the Abnormality window. See Figure 3-42 through Figure 3-8 to familiarize yourself with each one.

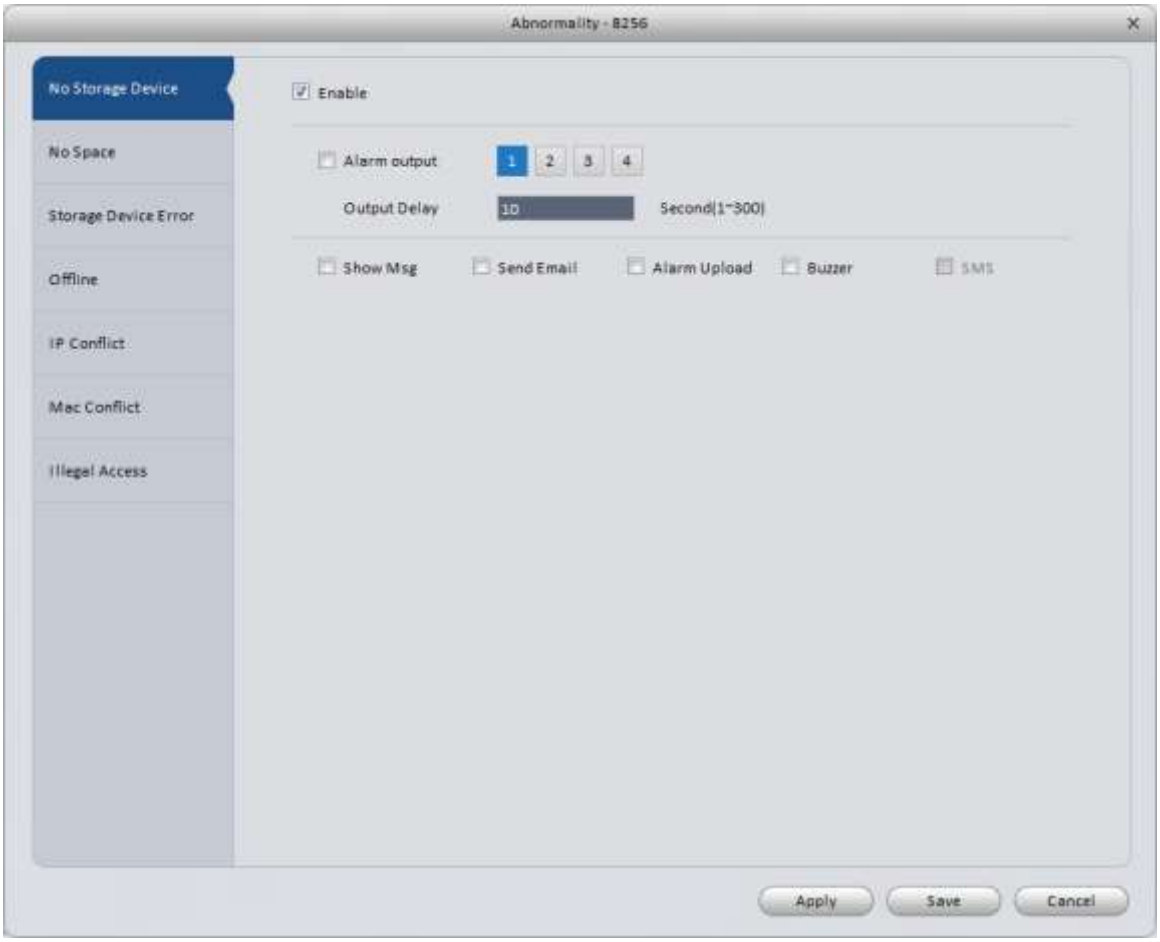

Abnormality - 8256
No Storage Device
No Space
Storage Device Error
Offline
IP Conflict
Mac Conflict
Illegal Access
Enable
Alarm output
1
2
3
4
Output Delay
10
Second(1~300)
Show Msg
Send Email
Alarm Upload
Buzzer
SMS
Apply
Save
Cancel

Figure 3-42

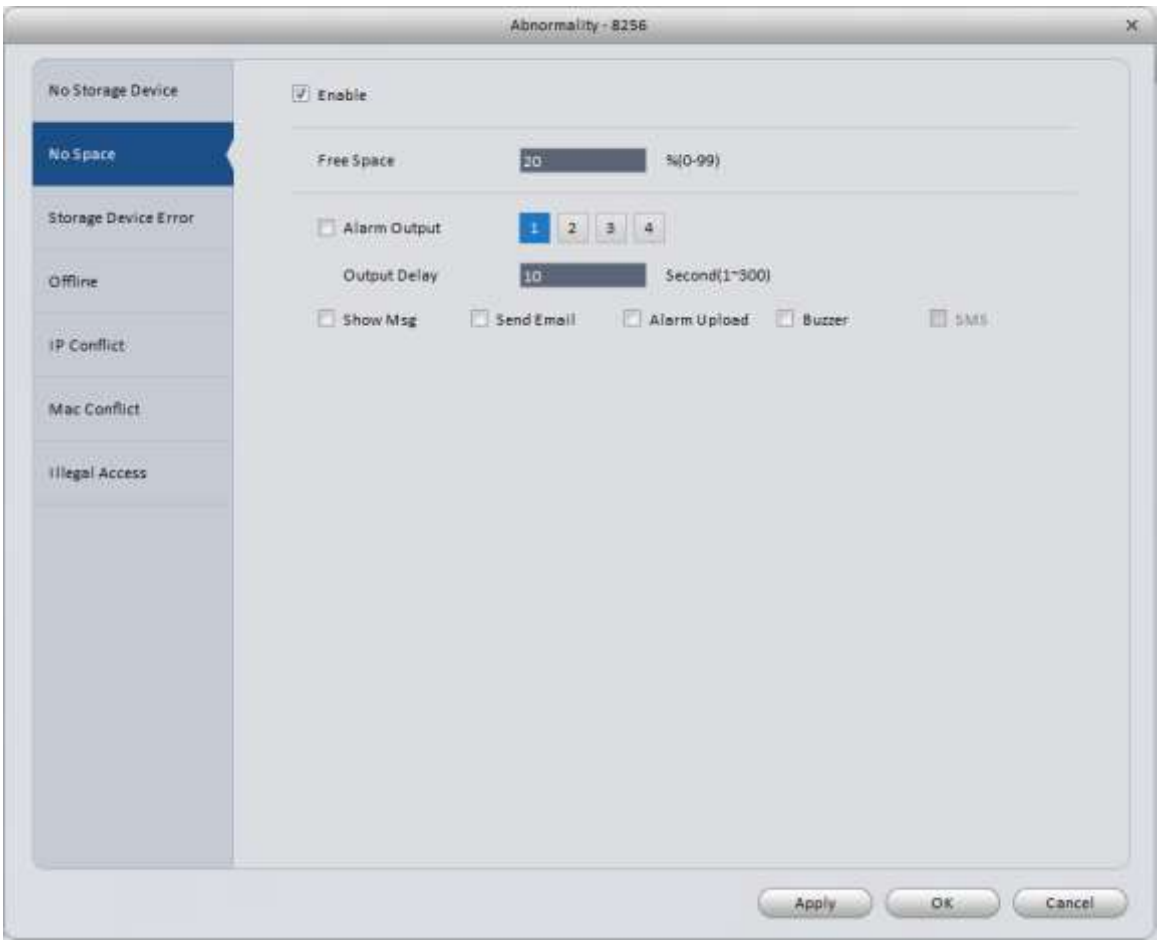

Abnormality - 8256
No Storage Device
No Space
Storage Device Error
Offline
IP Conflict
Mac Conflict
Illegal Access
Enable
Free Space
20
%(0-99)
Alarm Output
1
2
3
4
Output Delay
10
Second(1~300)
Show Msg
Send Email
Alarm Upload
Buzzer
SMS
Apply
OK
Cancel

Figure 3-43

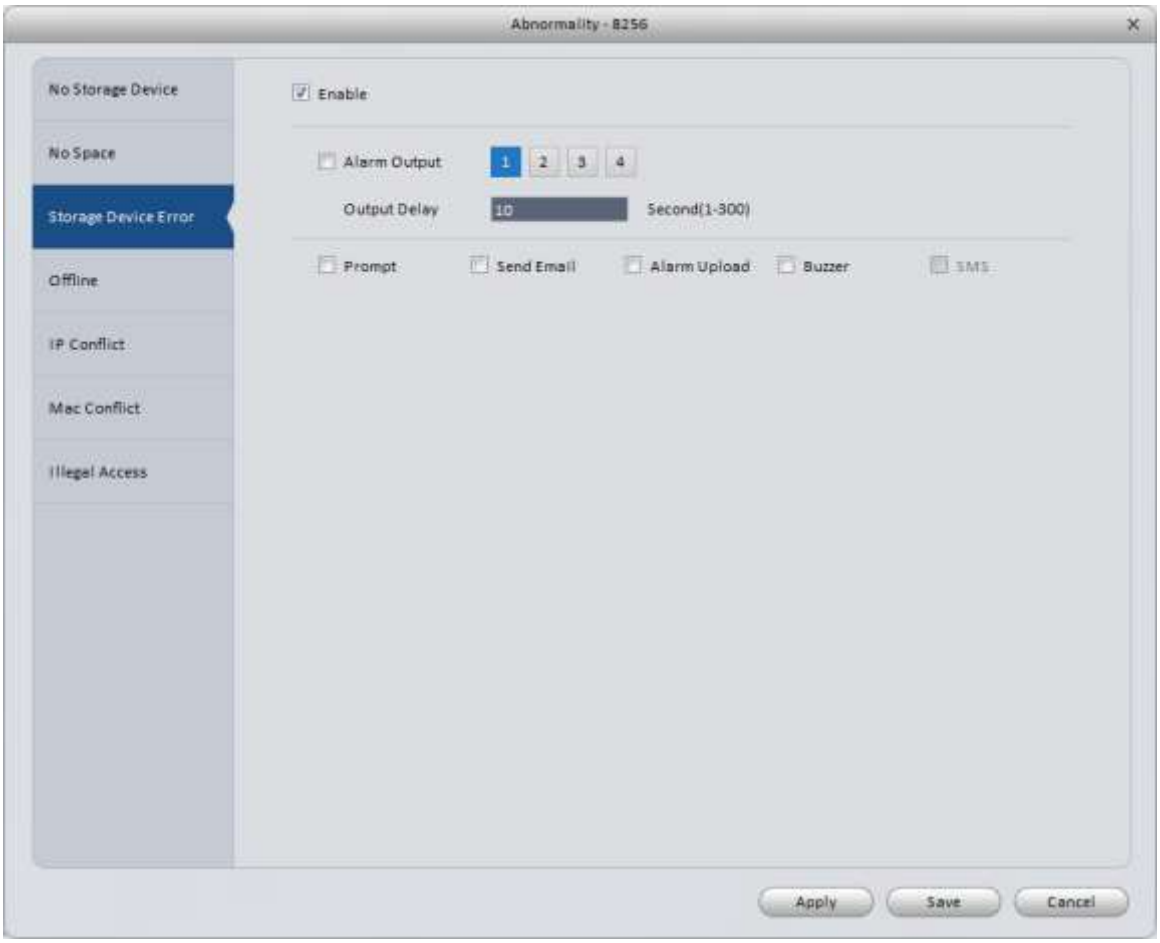


Figure 3-44

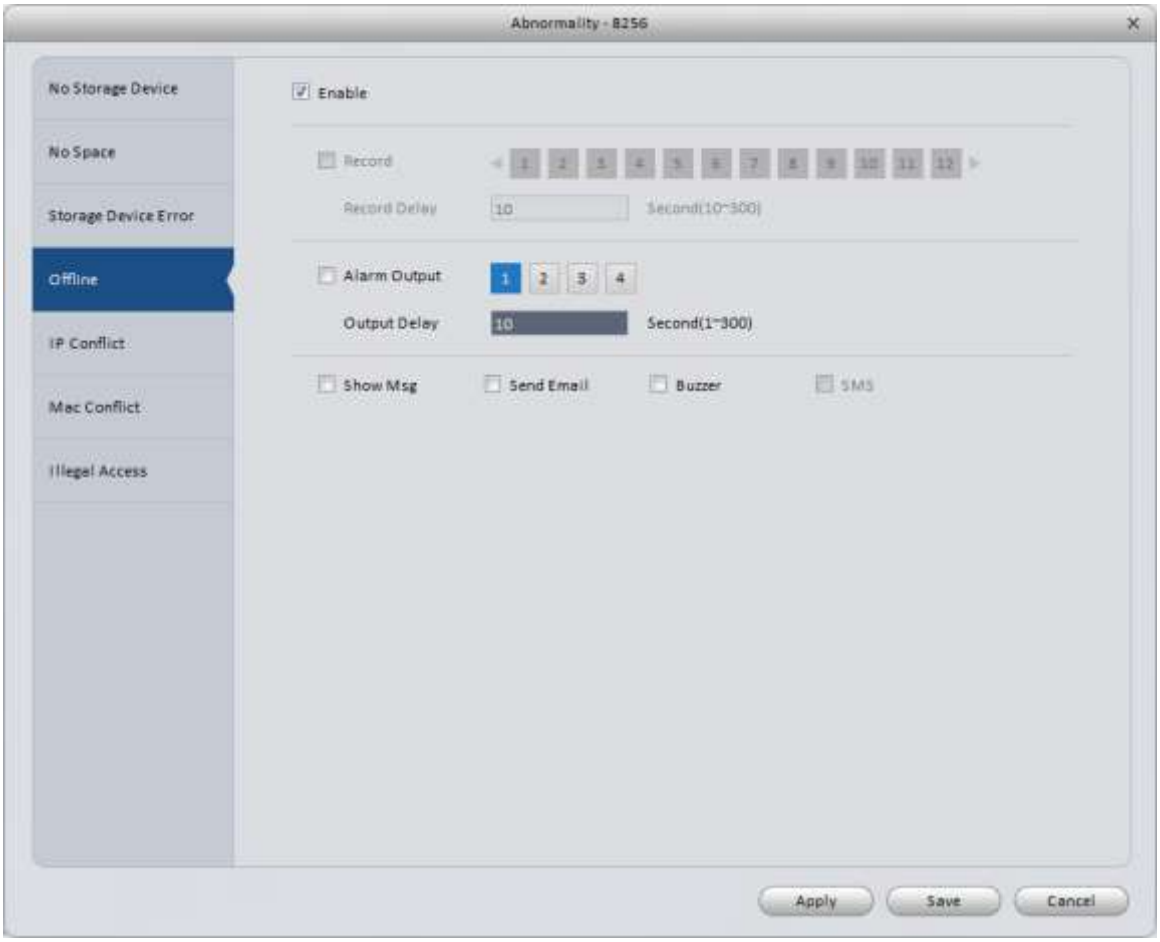

Abnormality - 8256
No Storage Device
No Space
Storage Device Error
Offline
IP Conflict
Mac Conflict
Illegal Access
Enable
Record
Record Delay
10
Second(10~300)
Alarm Output
1
2
3
4
Output Delay
10
Second(1~300)
Show Msg
Send Email
Buzzer
SMS
Apply
Save
Cancel

Figure 3-45

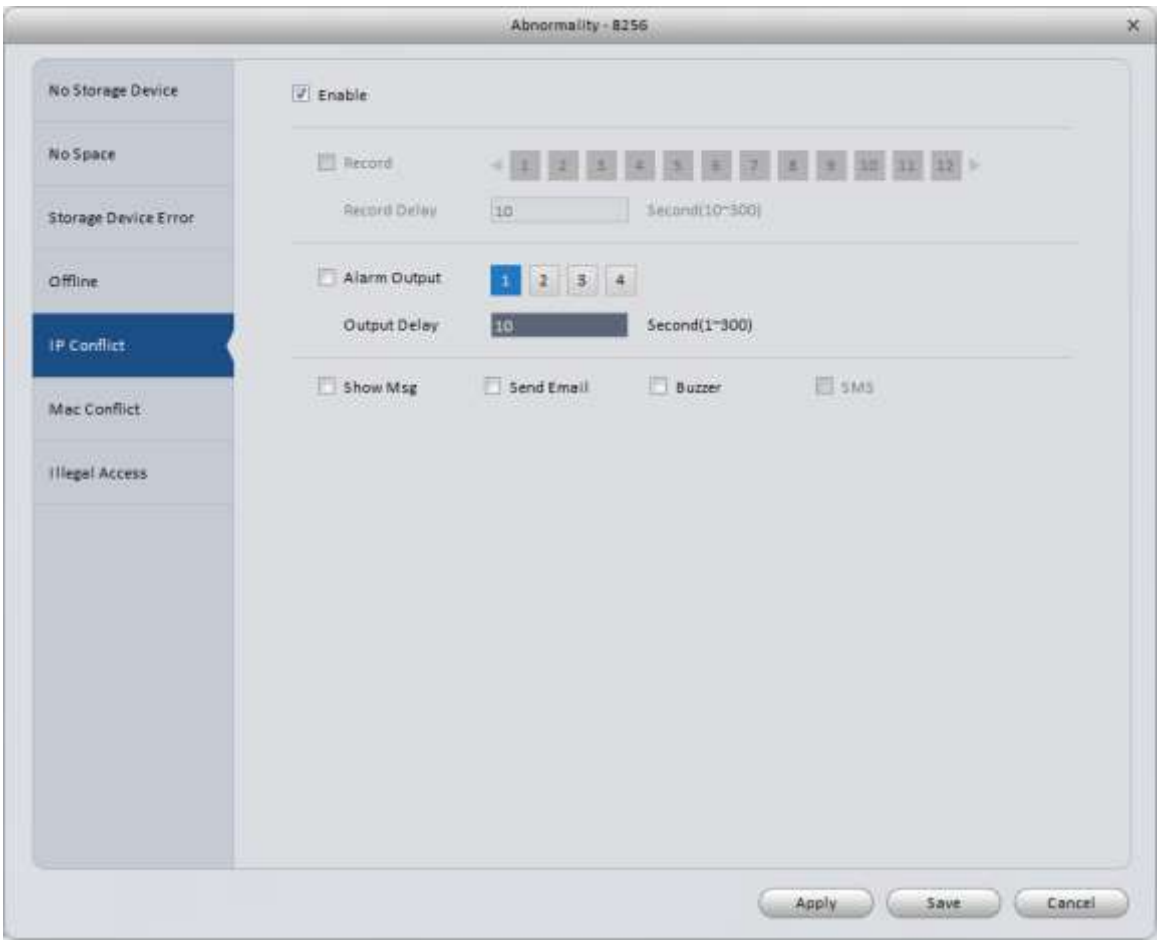

Abnormality - 8256
No Storage Device
No Space
Storage Device Error
Offline
IP Conflict
Mac Conflict
Illegal Access
Enable
Record
Record Delay
10
Second(10~300)
Alarm Output
1
2
3
4
Output Delay
10
Second(1~300)
Show Msg
Send Email
Buzzer
SMS
Apply
Save
Cancel

Figure 3-46

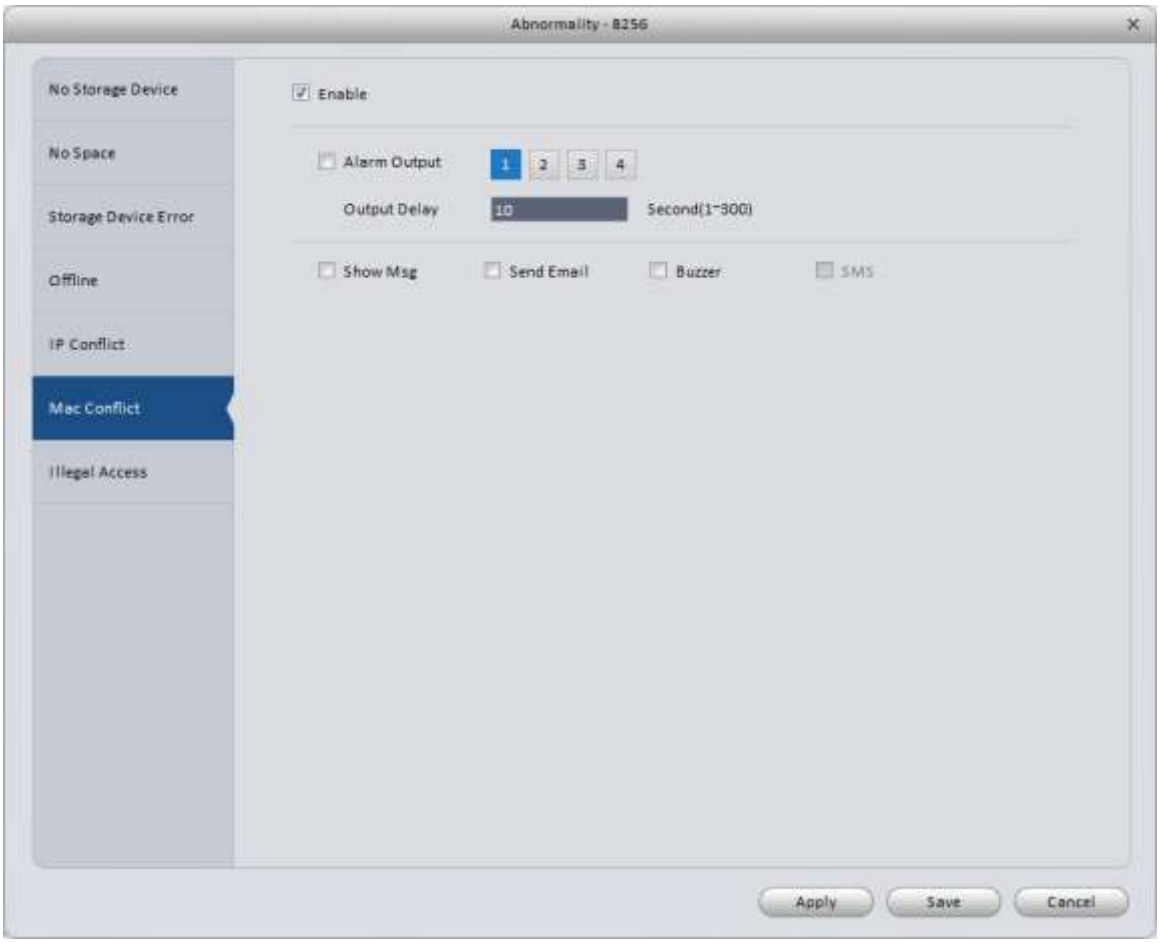


Figure 3-47

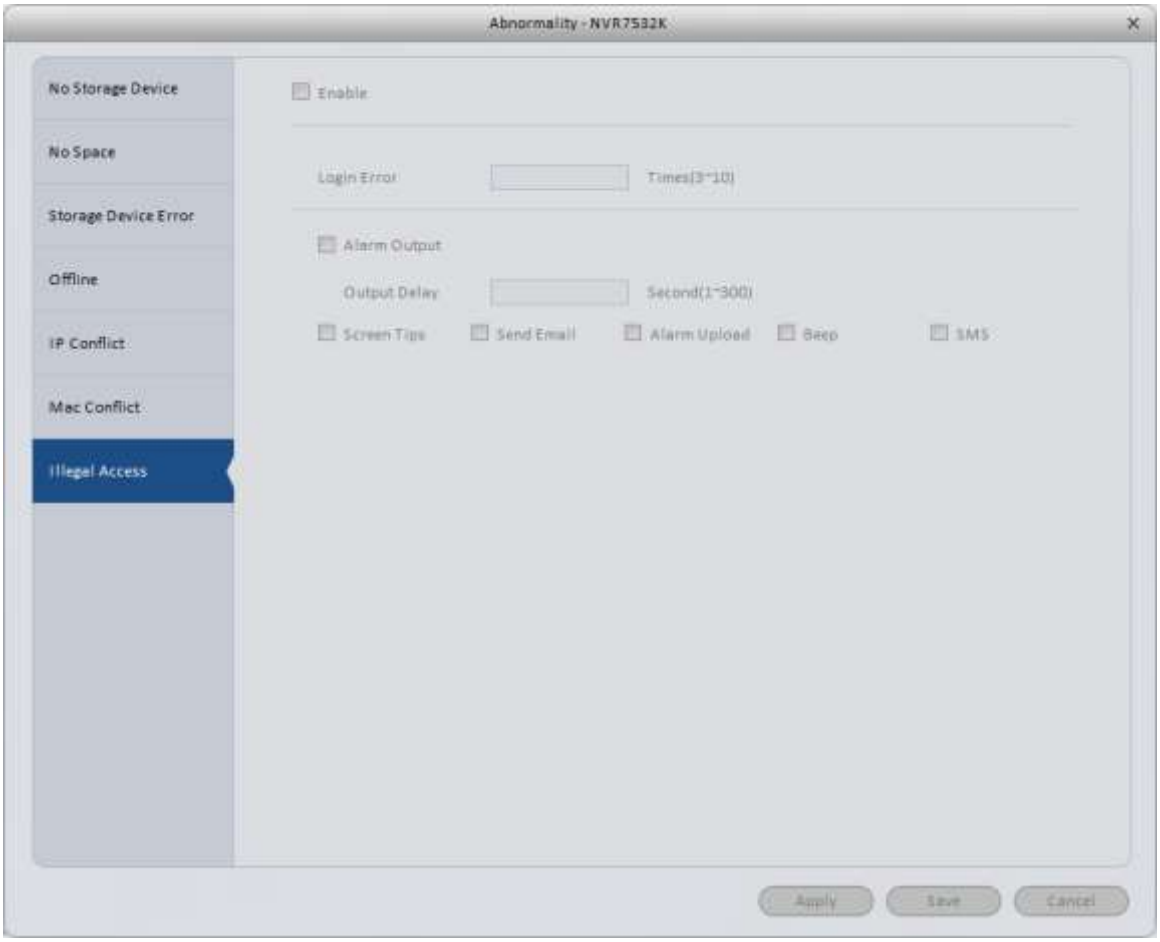


Figure 3-48

Please refer to the table below for detailed information.

Parameter	Function
Enable	Each event being used must be enabled here.
Free Space (No Space only)	Percentage threshold for triggering the Disk No Space event. Default is 20%; when the disk has 20% space remaining, the event will be triggered.
Record (Network errors only)	Select this option, then click on the camera channel(s) you want to record when the event is triggered.
Record Delay (Network errors only)	The device will continue recording for this period after the event ends. Set from 10 to 300 seconds.
Alarm Output	Enables an alarm output connected to the device. When the box is checked, the selected alarm output(s) will be triggered.
Output Delay	The device will keep the alarm output activated for this period of time. From 1 to 300 seconds.
Prompt / Show Msg	When enabled, you will see a message on the local monitor indicating the event is taking place..
Send Email	Triggers an email to be sent every time the event occurs. The email function

Parameter	Function
	in the **Network** settings must be set up for this to work.
Alarm Upload	Sends a notification to the alarm monitoring center. You must have the **Alarm Centre** configured under the **Network** settings for this to work.
Buzzer	Triggers the audible alarm on the DVR/NVR motherboard. The sound is a loud beep, not a buzzer.
SMS	Used to send a text notification of an event. IC Realtime devices currently do not support this function.

3.6.2.4 Smart Config

Use this function to view and configure the Audio Detect and Face Detect features. Please refer to Chapter 4.1.1 for more information on those features.

Audio Detect window shown in Figure 3-49.

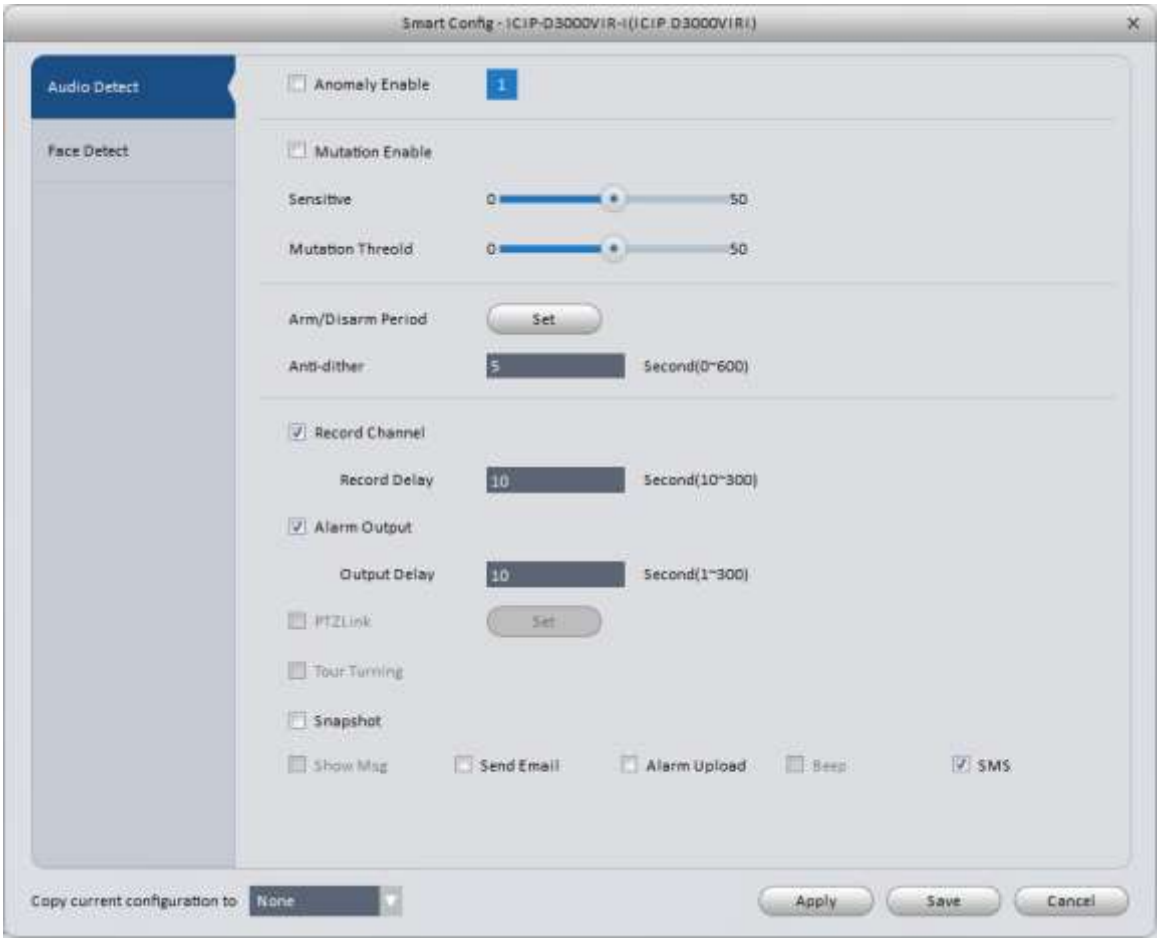


Figure 3-119

Parameter	Note
Anomaly Enable	Place a check here to enable Audio Detection events.
Mutation Enable	Click in this box to enable the Mutation settings. Sensitive： Adjustable from 1 to 100. Higher numbers on the scale indicate higher sensitivity to changes in the environmental audio. Mutation Threold：Adjustable from 1 to 100. Use this setting to set the minimum environmental sound level.
Arm/Disarm Period	Create a schedule for each event by clicking the **Set** button to the right of this setting. By default, this period is set to 24 hours/day, 7 days/week. Clicking on the **Set** button opens up the window seen in Figure 3-37; clicking on one of the **gear** buttons in that window will bring up the window in Figure 3-38. To save your schedule to the device, click **Save** on the period screen, then click **Apply** to save the changes to the device.
Anti-dither	Device will only generate 1 Audio Detection event for each Anti-dither period. Default is 5 seconds; can be set from 0 to 600 seconds.
Record Channel	Select this option, then click on the camera channel(s) you want to record when the event is triggered.
Record Delay	The device will continue recording for this period after the event ends. Set from 10 to 300 seconds.
Alarm Output	Enables an alarm output connected to the device. When the box is checked, the selected alarm output(s) will be triggered.
Output Delay	The device will keep the alarm output activated for this period of time. From 1 to 300 seconds.
PTZ Link	You can activate a PTZ camera on the same DVR/NVR to go to a preset when the event is triggered. See interface in Figure 3-40. Never Preset
Tour Turning	Enable a tour on the local monitor connected to the DVR/NVR. Select the camera channels you want included in the tour. Further configuration of the tour can be accessed either through the web interface of the DVR/NVR, or using a mouse and local monitor.
Snapshot	Enables a snapshot to be taken from the selected camera(s) when the event is triggered.
Show Msg	When enabled, you will see a message on the local monitor indicating the event is taking place.
Send Email	Triggers an email to be sent every time the event occurs. The email function in the **Network** settings must be set up for this to work.
Alarm Upload	Sends a notification to the alarm monitoring center. You must have the **Alarm Centre** configured under the **Network** settings for this to work.
Beep	Triggers the audible alarm on the DVR/NVR motherboard.
SMS	Used to send a text notification of an event. IC Realtime devices currently do not support this function.

Face Detect window is shown in Figure 3-50.

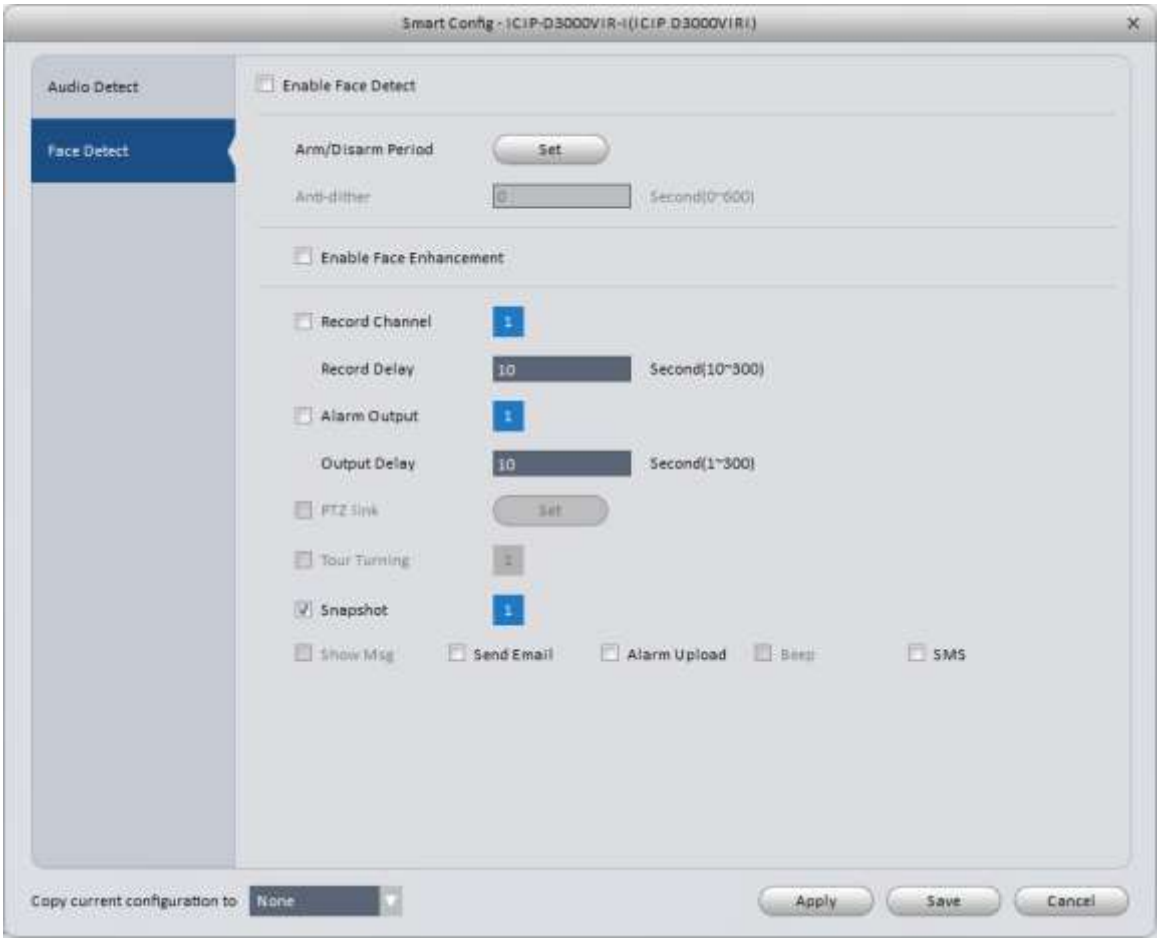


Figure 3-50

Parameter	Note
Enable Face Detect	Place a check here to enable Face Detect events.
Arm/Disarm Period	Create a schedule for each event by clicking the **Set** button to the right of this setting. By default, this period is set to 24 hours/day, 7 days/week. Clicking on the **Set** button opens up the window seen in Figure 3-37; clicking on one of the **gear** buttons in that window will bring up the window in Figure 3-38. To save your schedule to the device, click **Save** on the period screen, then click **Apply** to save the changes to the device.
Anti-dither	Device will only generate 1 Audio Detection event for each Anti-dither period. Default is 5 seconds; can be set from 0 to 600 seconds.
Enable Face Enhancement	Enables the Face Enhancement feature.
Record Channel	Select this option, then click on the camera channel(s) you want to record when the event is triggered.

Parameter	Note
Record Delay	The device will continue recording for this period after the event ends. Set from 10 to 300 seconds.
Alarm Output	Enables an alarm output connected to the device. When the box is checked, the selected alarm output(s) will be triggered.
Output Delay	The device will keep the alarm output activated for this period of time. From 1 to 300 seconds.
PTZ Link	You can activate a PTZ camera on the same DVR/NVR to go to a preset when the event is triggered. See interface in Figure 3-40.
Tour Turning	Enable a tour on the local monitor connected to the DVR/NVR. Select the camera channels you want included in the tour. Further configuration of the tour can be accessed either through the web interface of the DVR/NVR, or using a mouse and local monitor.
Snapshot	Enables a snapshot to be taken from the selected camera(s) when the event is triggered.
Show Msg	When enabled, you will see a message on the local monitor indicating the event is taking place.
Send Email	Triggers an email to be sent every time the event occurs. The email function in the **Network** settings must be set up for this to work.
Alarm Upload	Sends a notification to the alarm monitoring center. You must have the **Alarm Centre** configured under the **Network** settings for this to work.
Beep	Triggers the audible alarm on the DVR/NVR motherboard.
SMS	Used to send a text notification of an event. IC Realtime devices currently do not support this function.

3.6.3 Storage

3.6.3.1 Record

Record window has 2 options: Schedule and Record Control

- Schedule: Set the schedule for when you want the device to record video. By default, this is set to Regular 24 hours/day, 7 days/week.
- Record control: Select which stream(s) are recorded, and set the Pre-Record setting for MD and Alarm recording.

To set your Schedule, use the following steps:

1) Click the **Record** button to bring up the interface shown in Figure 3-51.

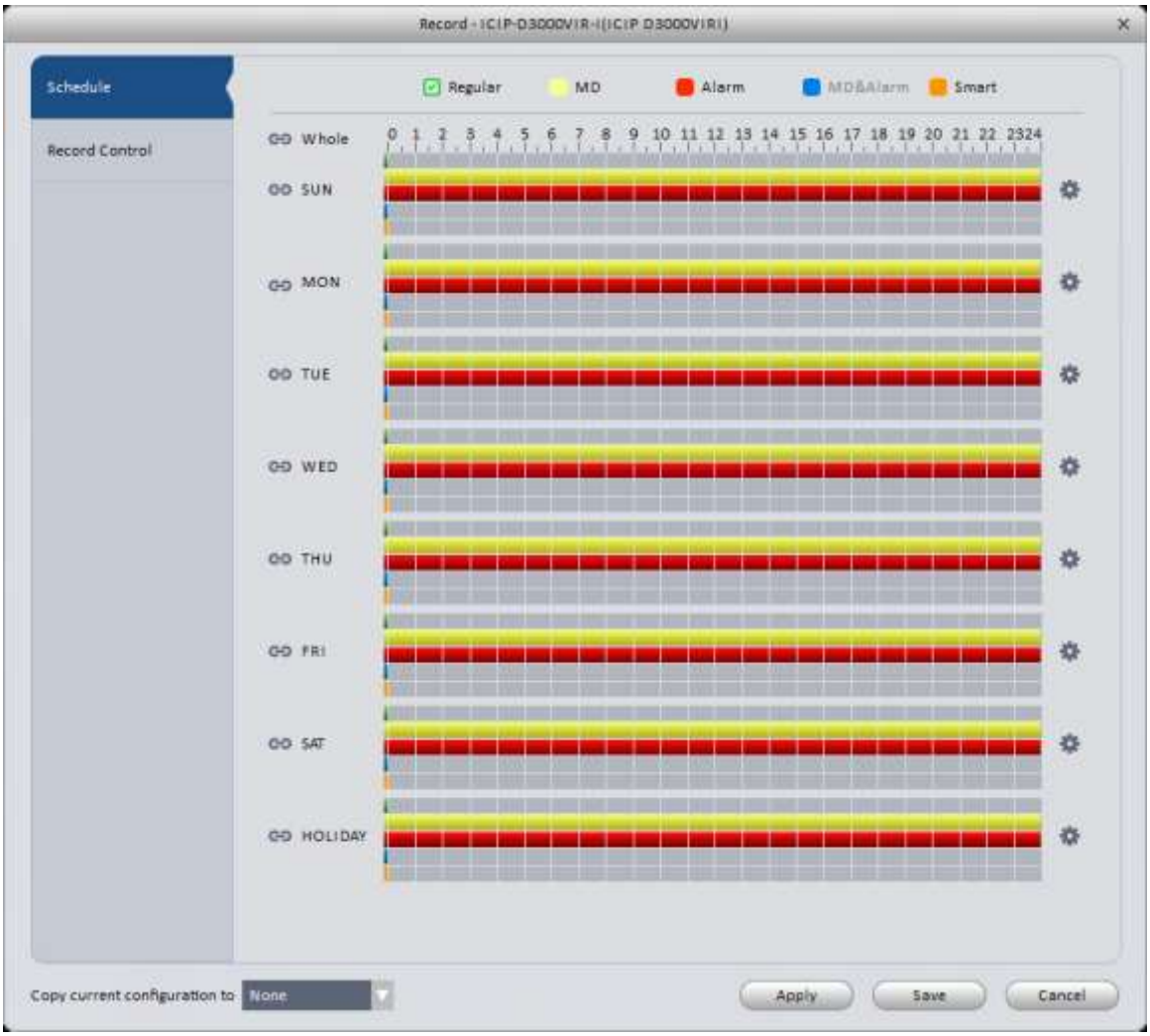


Figure 3-51

- Green stripe: Regular recording. Regular recording is full-time recording.
- Yellow stripe: Motion Detection (MD) recording. When a motion event is triggered, the device will record. Requires additional configuration in **Event → Video Detect → Motion Detect**.
- Red stripe: Alarm recording. The device will record when alarm inputs are triggered. Inputs must be wired in the camera/DVR/NVR correctly, and configuration must be set up in **Event → Alarm** window for this to work.
- Blue stripe: MD & Alarm recording. This will record anytime there is an MD or Alarm event.
- Orange stripe: Smart feature recording. Records on any Smart event from the camera.

2) In this window, you can set the schedule by clicking on the record types. In the window above, **Regular** recording is selected. Click on the color block next to the type you want to set. You can see the days of the week listed along the left side of the graph, and the 24 hours of each day along the top row of the graph. Once you have selected your recording type, you simply draw a line on the schedule where you want your device to record using that method. If you want to record 24 hours every day, simply draw a line all the way across the graph. You may draw the line in 1/2-hour increments. If you click on the button next to the word **Whole**, all the week days will be linked and you can set the schedule for all of them at the same time. You may also use the individual link buttons to select a group of days to set the schedule for all of them at once. When your schedule is set correctly, make sure to click the **Apply** button to save it to the device. You may also use the **Copy…** option to copy the schedule to other cameras on the same DVR/NVR.

3) Click the button on the right side of the graph. to bring up the interface shown in Figure 3-52.

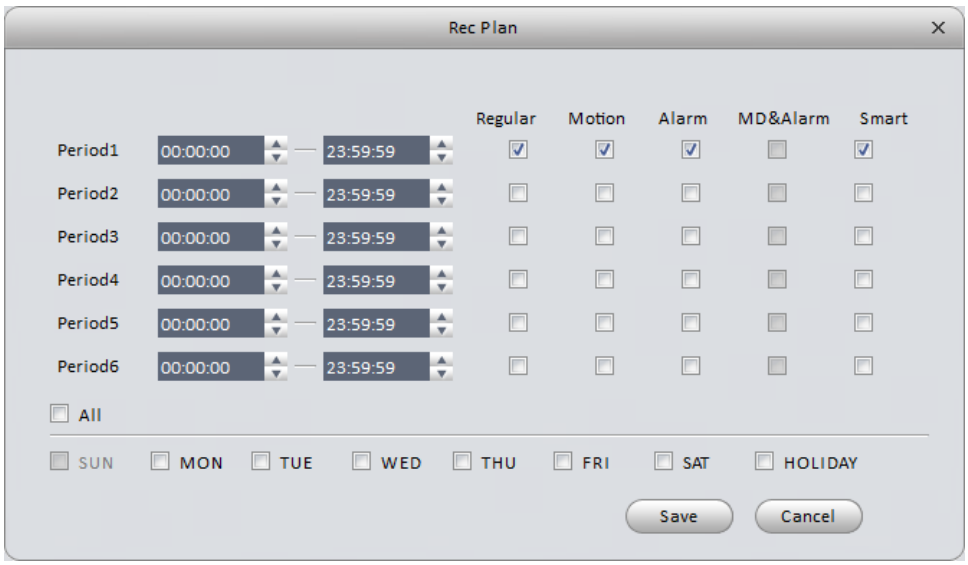


Figure 3-52

4) Use this window if you want to break up your daily recording into multiple different periods. You may set up to 6 different periods per day. In the above window, the device will record Regular, MD events, Alarm events, and Smart events for 24 hours on Sundays. If you want to apply the periods to all 7 days of the week, check the box next to **All**. You may also select a group of days using the individual check boxes to the left of each day. Click the **Save** button at the bottom. You will also have to click either the **Apply** or **Save** button afterwards to save the schedule to your device.

3.6.3.1.1 Record Control

It is for you to set record control mode. See Figure 3-53.

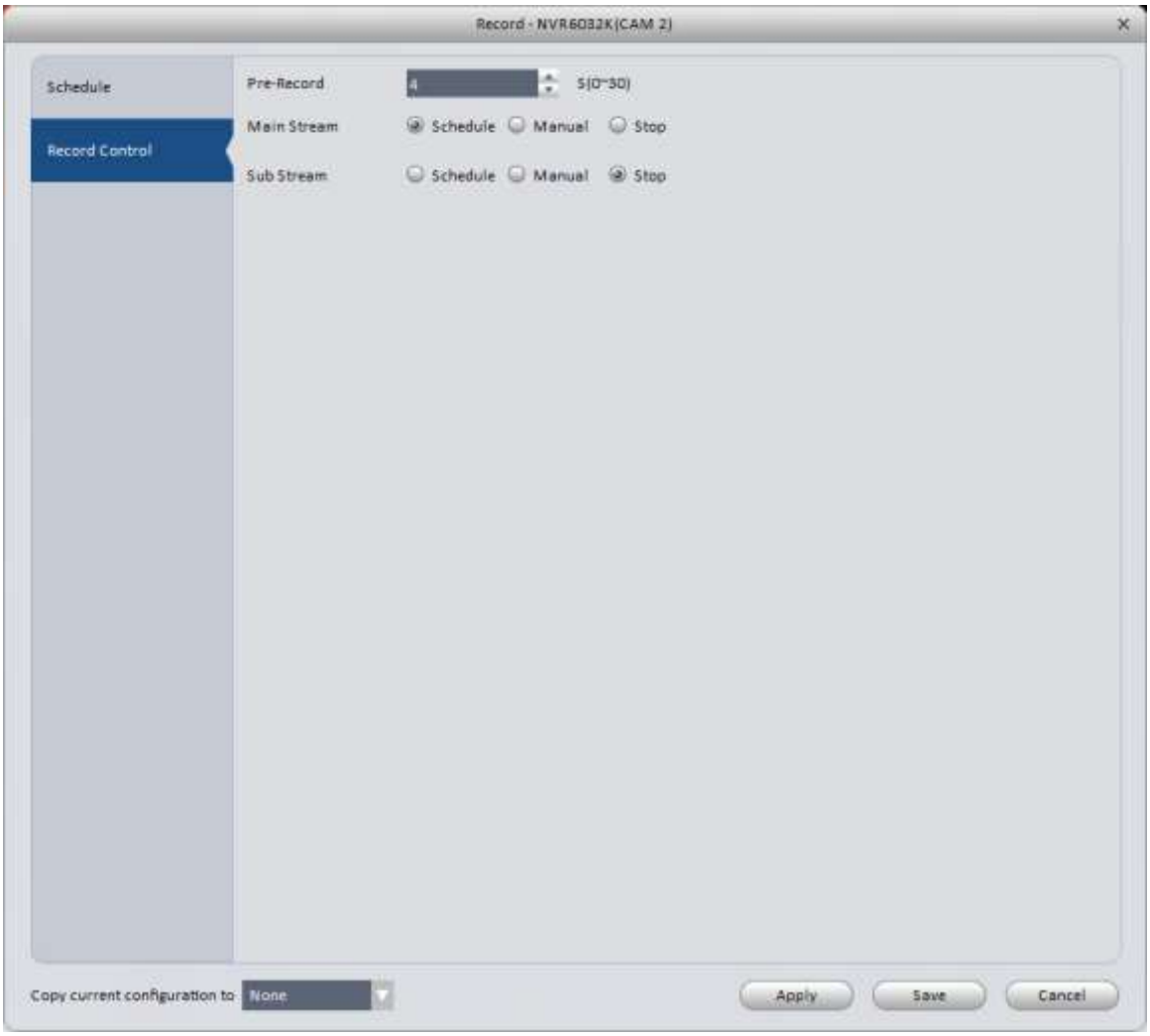


Figure 3-53

Please refer to the table below for detailed information.

Parameter	Function
Pre-Record	Set the length of pre-record time for event-based (Alarm, MD, or Smart) recording. Default is 4 seconds, range is from 0 – 30 seconds.
Schedule	Record based on the schedule only.
Manual	Record constantly, regardless of schedule.
Stop	Do not record.
Main Stream	Choose which type of recording you want for the Main Stream video. Set to Schedule by default.
Sub Stream	Allows recording of the Extra Stream video. Set to Stop by default.

3.6.3.2 HDD

3.6.3.2.1 Local Store

The Local Store window is shown in Figure 3-54. Used to view information about the HDD(s) installed in your device. For IP cameras, you will see information about SD cards installed in the device. Also used if a HDD needs formatting due to errors. HDD Operation options shown in figure 3-55.

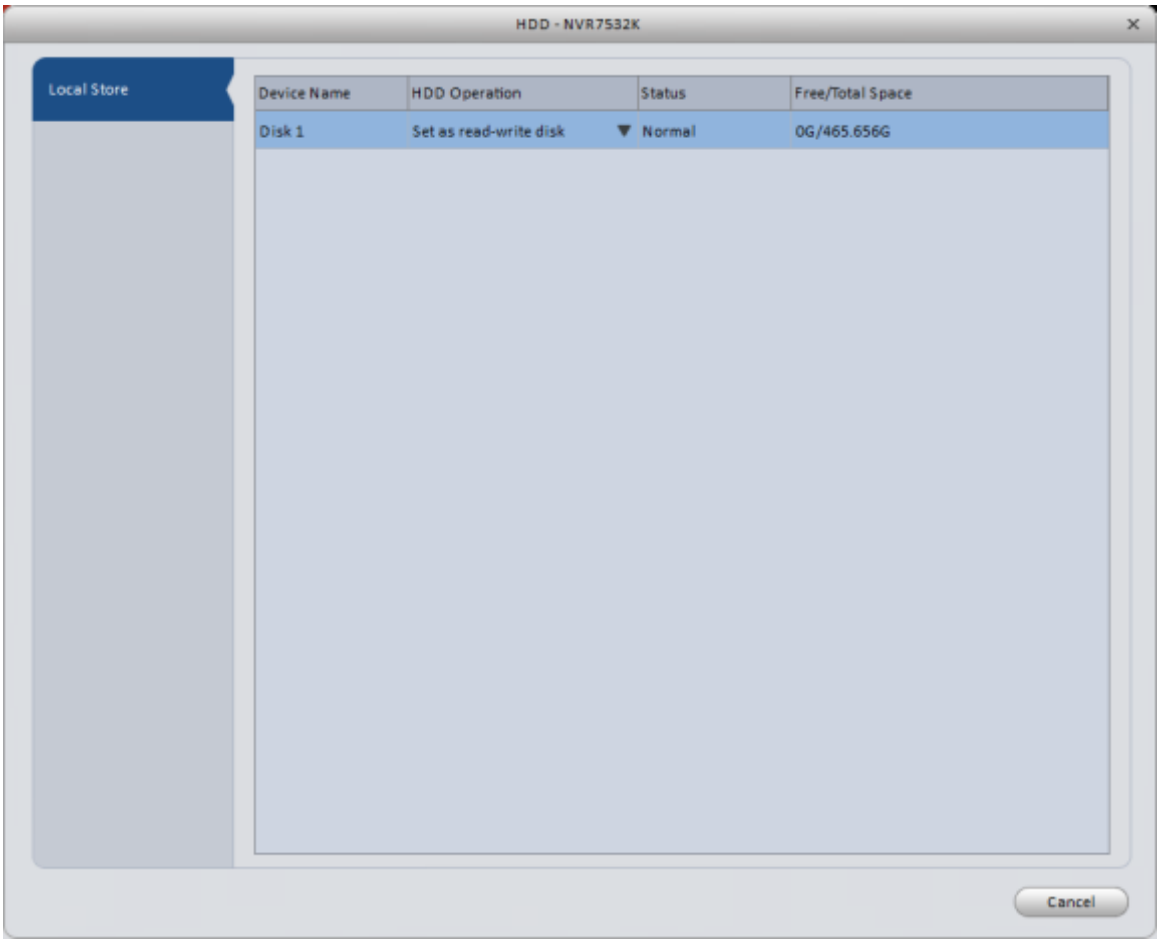


Figure 3-54

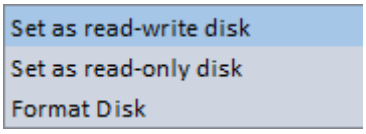


Figure 3-55

3.6.4 Maintenance

3.6.4.1 Account

Used to add, modify, and delete users and groups on a device. User window is shown in Figure 3-126.

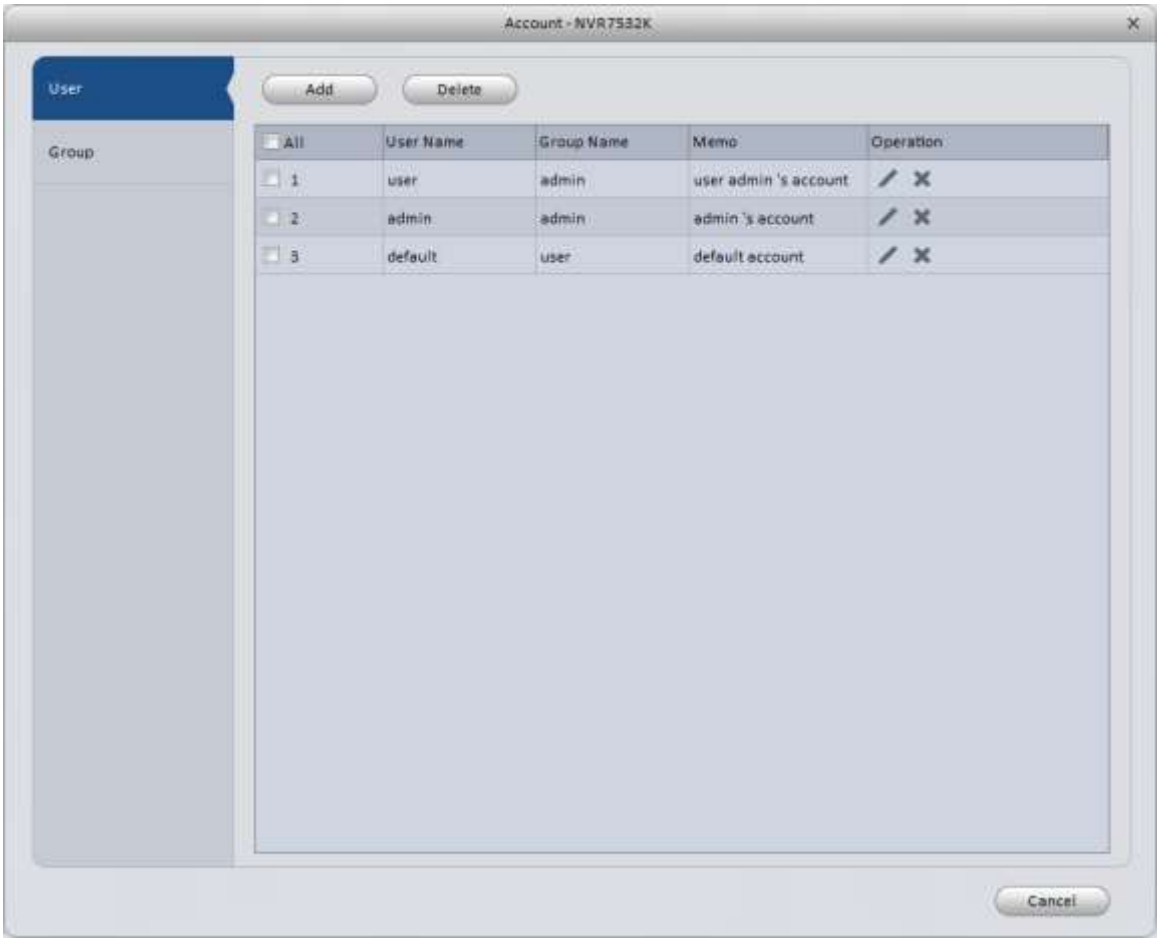


Figure 3-126

Click the **Add** button to add a user to the device. Add User window is shown in Figure 3-137. Enter the User Name and passwords in the desired fields. Check the **Reuseable** box to allow multiple devices or users to use the same username at the same time. Select the group you want the user assigned to, then select the individual rights for that user.

Figure 3-137

To add, modify, or delete a User Group, click the Group tab. Group window is shown in Figure 3-148.

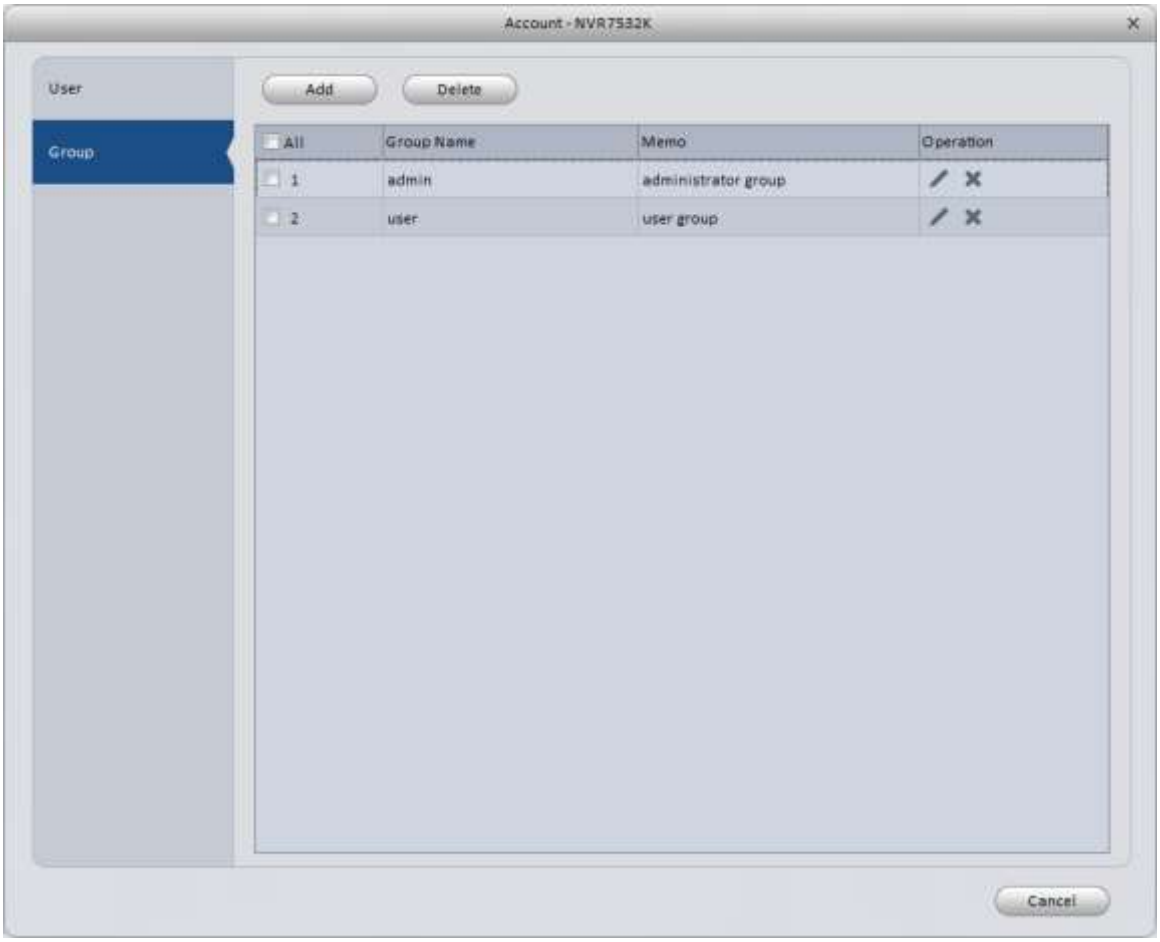


Figure 3-148

Click the **Add** button, and you will see the interface shown in **Error! Reference source not found.**9. Enter your Group Name, then select the rights using the check boxes. When you are done, click **OK** to save your group to the device. Your group name will now show in the drop-down list when adding a new user.

Figure 3-59

3.6.4.2 Maintenance

3.6.4.2.1 Local Setup

Use this tab to set your Device Name, Device No, Default Language, Video Standard, Pack Duration, and Disk Full behavior. Local Setup window is shown in Figure 3-60.

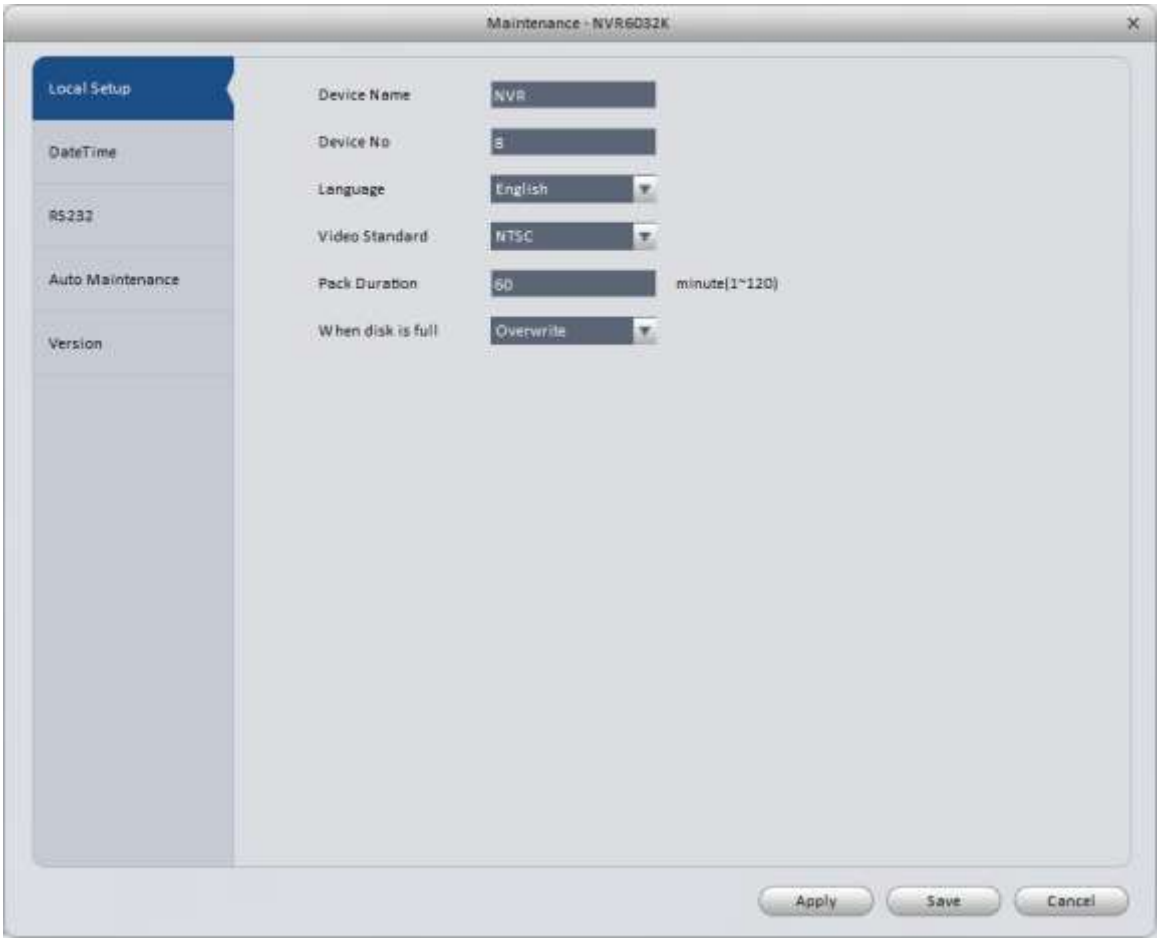


Figure 3-60

Please refer to the table below for detailed information.

Parameter	Function
Device Name	Set a custom device name.
Device No.	Use this if you are controlling multiple DVR/NVR units with a single IR Remote control This device number must be programmed into the remote to work correctly.
Language	Select your preferred language. English is the default option. May require custom firmware to change to another language. The device will have to reboot after you make a change here.
Video Standard	View and change (if available) your Video Standard. NTSC is used in North America, PAL is used mainly in Europe and Asia.
Pack Duration	Set the default file size for continuous recording. By default, it is set to 60 minutes/1 hour.
When disk is full	Select the behavior for when the HDD is full. Options are shown below. Stop Record Overwrite

3.6.4.2.2 DateTime

The date and time interface is shown in Figure 3-61.

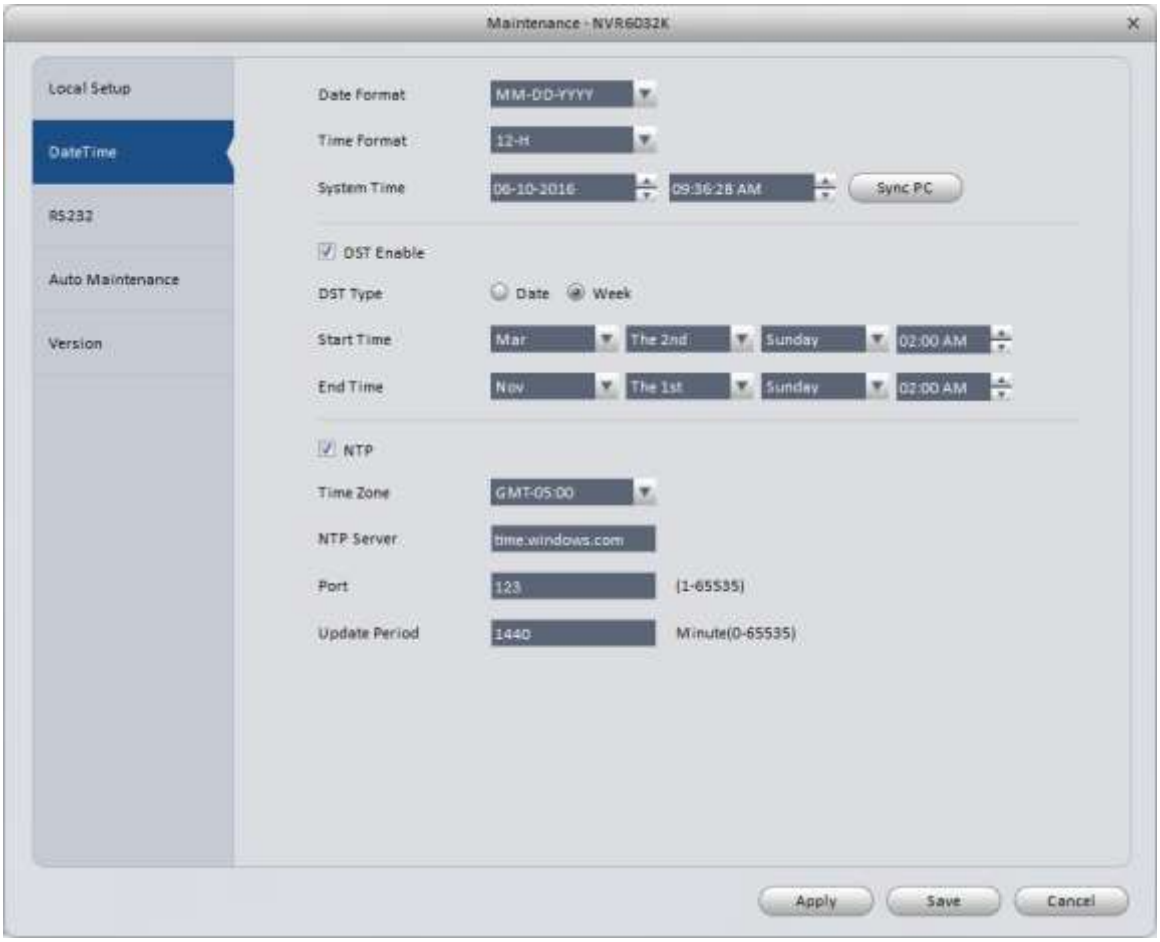


Figure 3-61

Please refer to the table below for detailed information.

Parameter	Function
Date Format	Select the Date Format for the video time stamp. Options shown below. Y/M/D M/D/Y D/M/Y
Time Format	Select 12-H or 24-H time format.
System Time	Shows the current date, followed by the current time on the unit. Month, Day, Year, Hour, Minutes, Seconds, and AM/PM settings can be changed in a few different ways: A) click on the value you want to change, then type the correct value; B) click on the value you want changed and use the arrow buttons to the right; C) use the **Sync PC** button; and D) use the NTP (Network Time Protocol) to automatically set the device clock. If you use A, B, or C, make sure to click the **Apply** or **Save** button to save the changes to the device.
Sync PC	This syncs the device clock with the clock on your computer.
DST Enable	Enables the DST (Daylight Savings Time) update.
DST Type	Select Date or Week. Use the settings shown in Figure 3-61 to ensure your device will automatically update itself for DST every year.

Parameter	Function
Start Time	DST start date & time information. Each value has its own drop-down list.
End Time	DST end date & time information. Each value has its own drop-down list.
NTP	Check the box here to enable automatic updating of the clock with the Network Time Protocol.
Time Zone	Select your GMT offset for your location. In Figure 3-61, the time zone is set to US Eastern Time.
NTP server	If you have a specific NTP server to use, enter the information here. This generally does not need to be changed. Both pool.ntp.org and time.nist.gov are widely-used servers.
Port	This is the port on the NTP end that is open for requests. Use port 123 for pool.ntp.org and time.nist.gov.
Update Period	NTP update interval, in minutes.

3.6.4.2.3 RS232

The RS232 interface is shown in Figure 3-62.

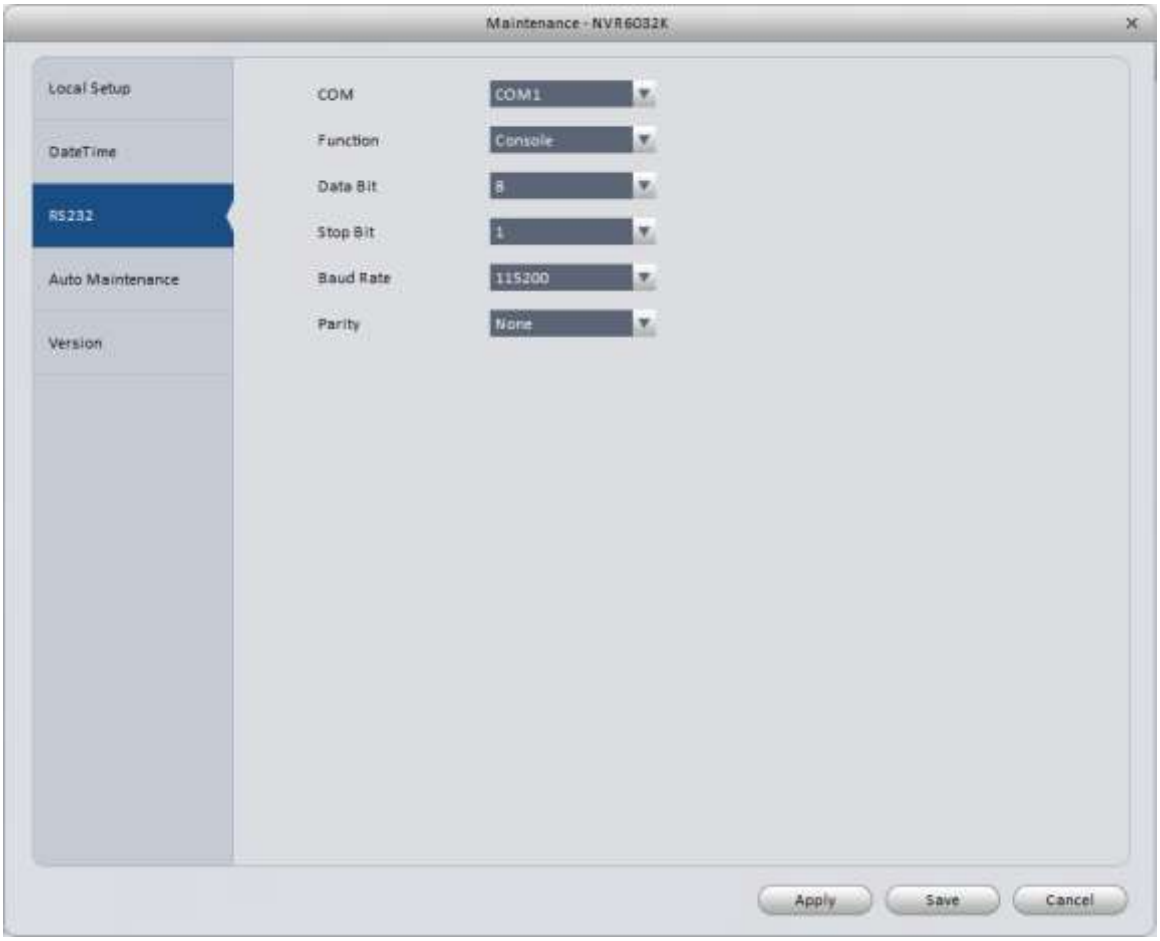


Figure 3-62

Please refer to the table below for detailed information.

Parameter	Function
COM	COM1
Function	IC Realtime devices use either Keyboard or NetKeyboard option depending on what device is being connected.
Data Bit	Default is 8.
Stop Bit	Default is 1.
Baud Rate	Default is 115200.
Parity	Default is None.

3.6.4.2.4 Auto Maintenance

Use to set Auto Reboot and Auto Delete File features. Interface shown in Figure 3-63.

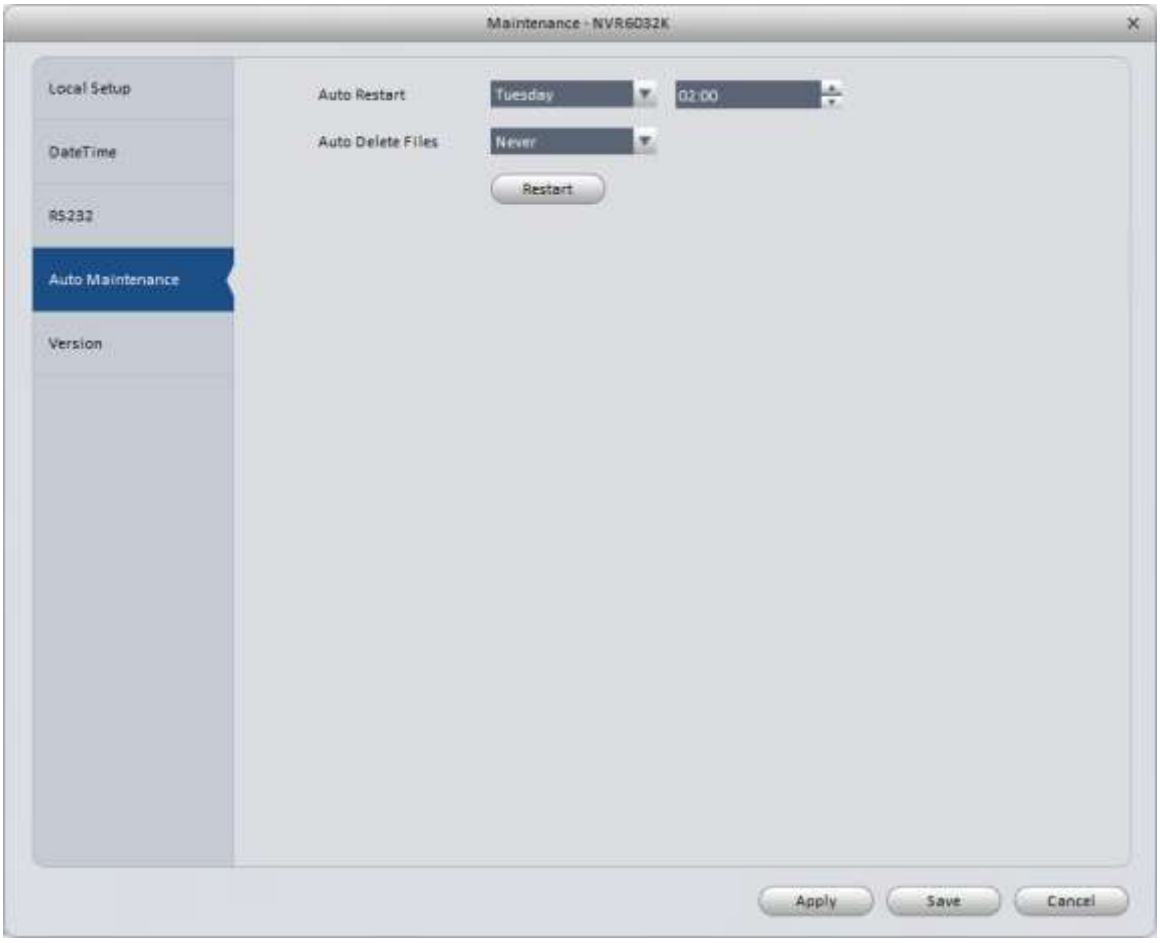


Figure 3-63

Auto Restart: Default setting is to reboot every Tuesday at 2:00 am. It is recommended to periodically reboot your system, but you may turn this feature off or change it to another day and time.

Auto Delete Files: Default is never. Only use this feature if you wish to automatically delete all video footage after a certain number of days.

3.6.4.2.5 Version

Version interface is shown in Figure 3-64. View the Software Version and Serial Number (SN) information

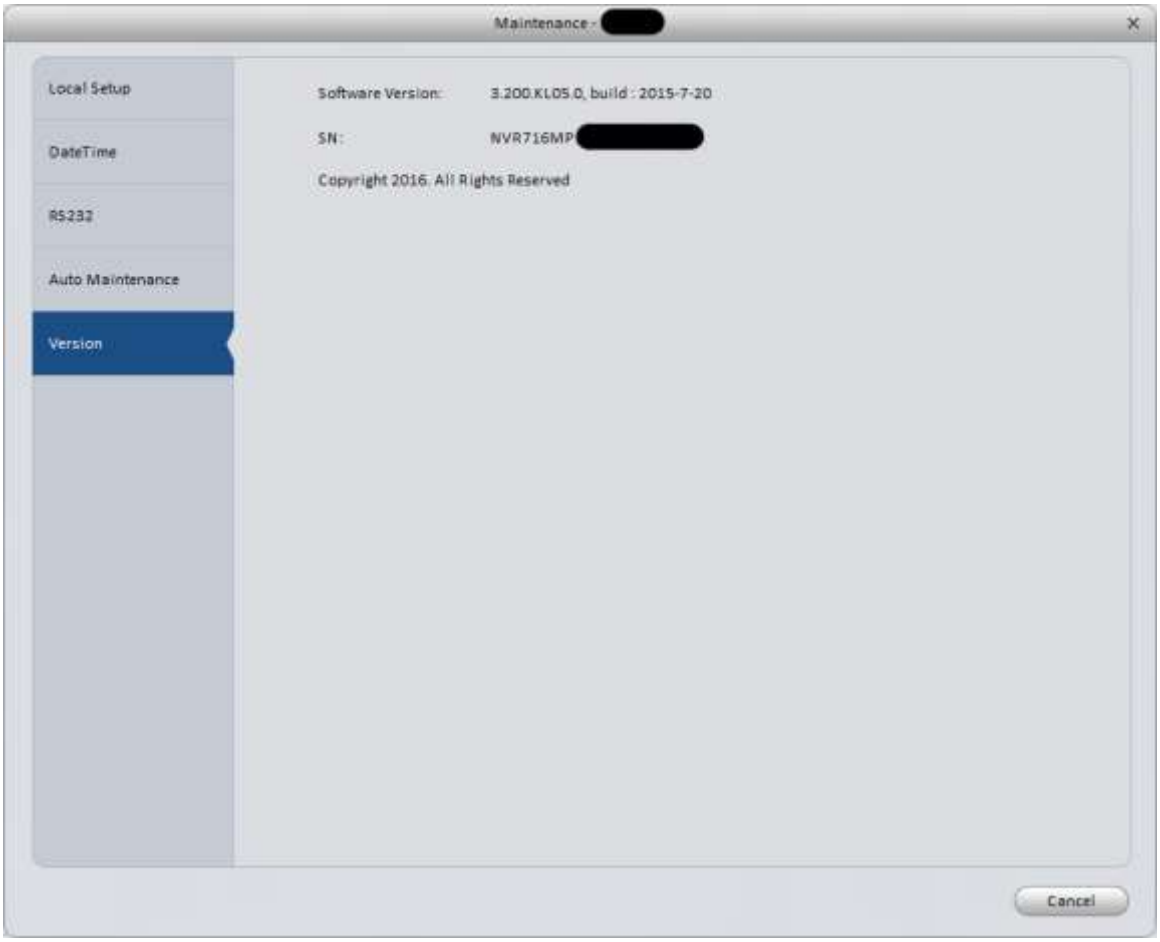


Figure 3-64

3.6.4.3 WEB

Clicking on this button will open the web interface for your device. See Figure 3-155. The following figure is for reference only.

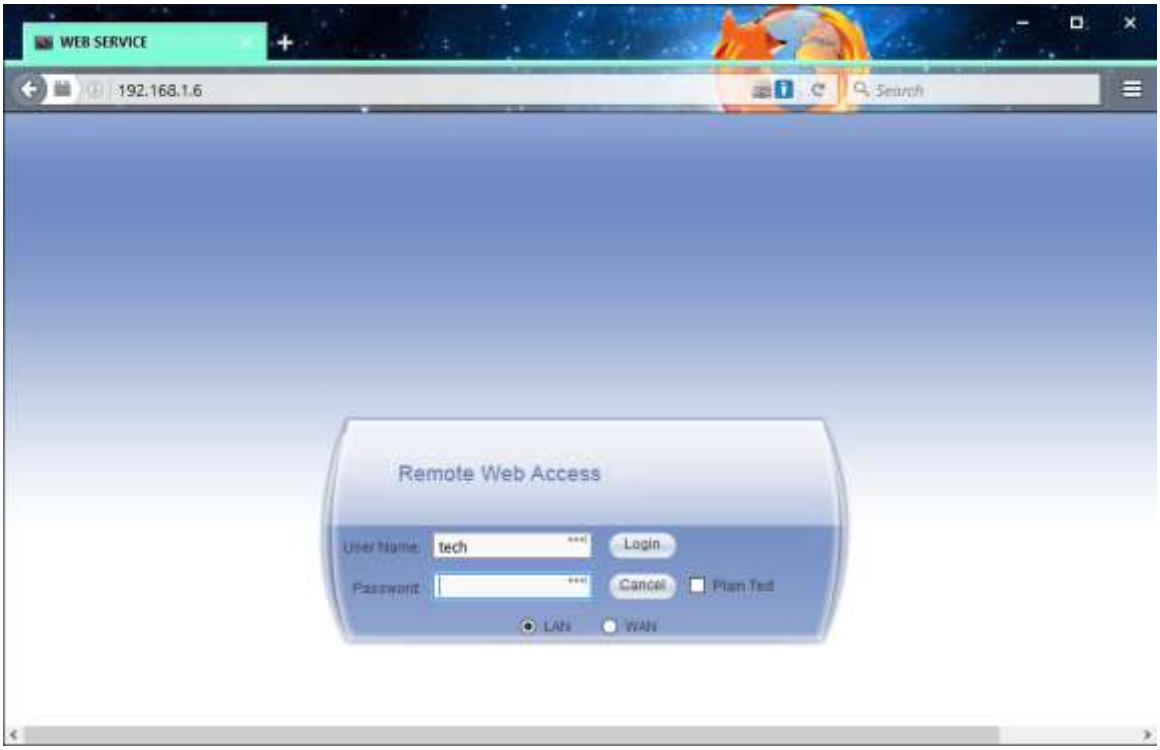


Figure 3-15

3.7 Alarm Setup

3.7.1 Set Alarm Scheme

Follow the steps listed below to set an alarm scheme for the software.

1) Click the icon in the Settings pane, and open the window shown in Figure 3-166.

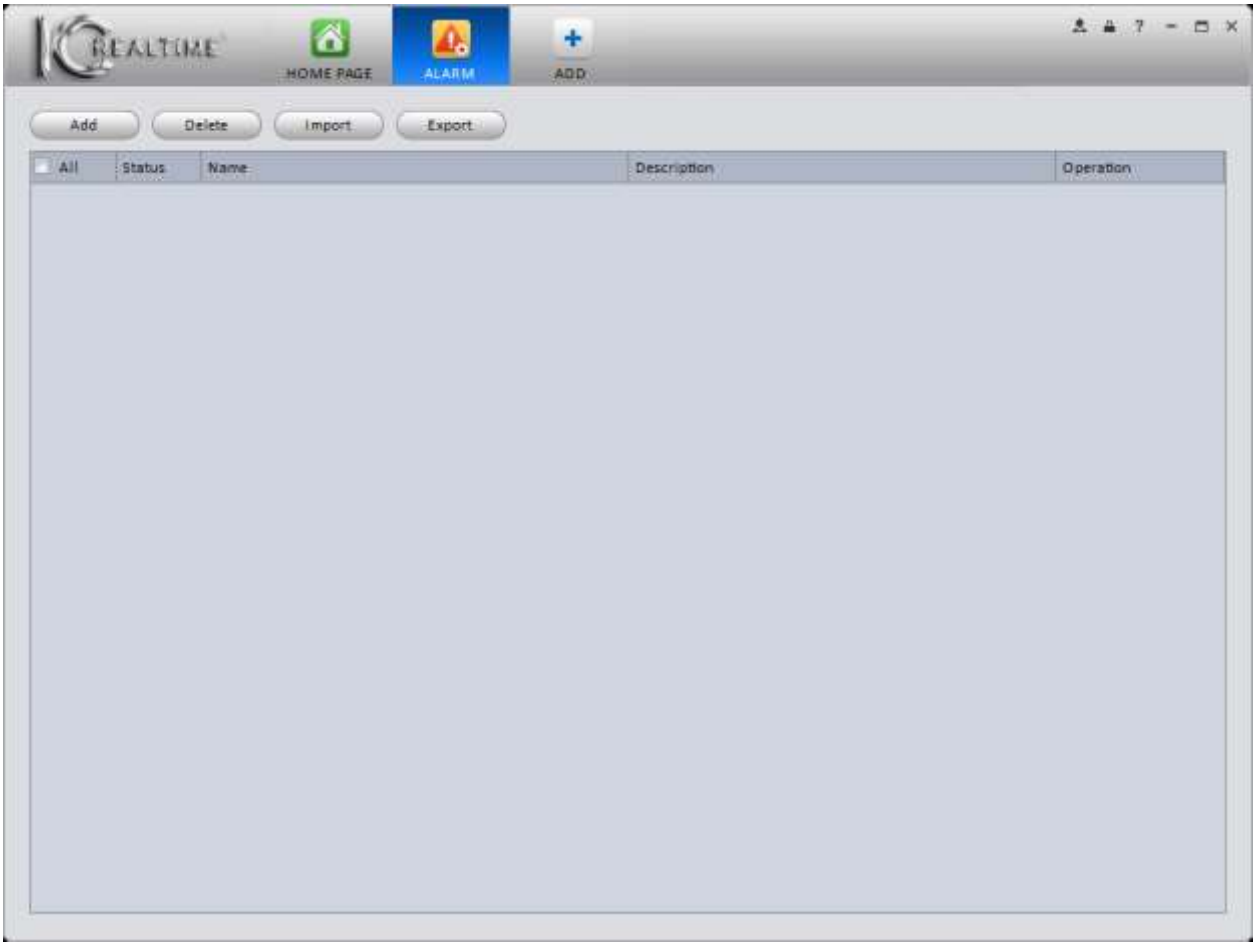
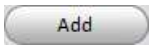


Figure 3-166

2) Set your alarm sources.

   a) Click the  button to bring up the interface shown in **Error! Reference source not found.**7.

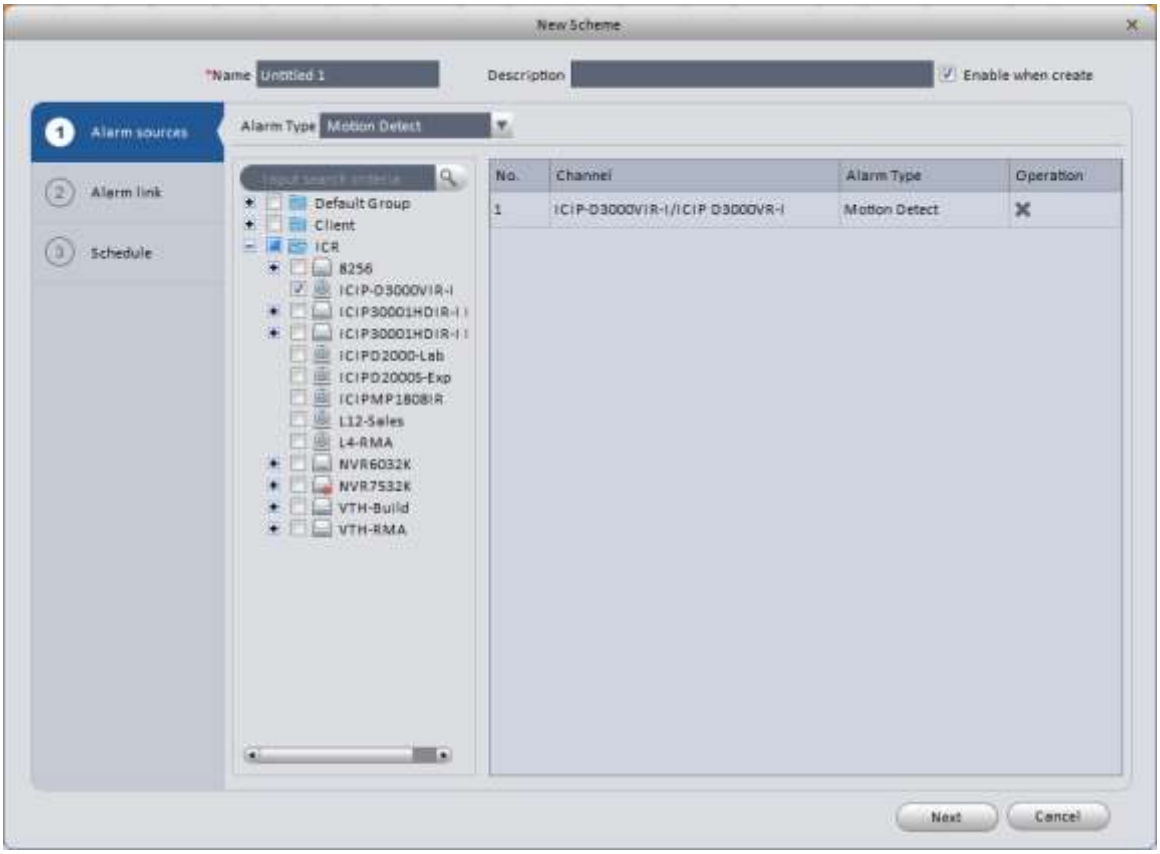


Figure 3-67

3) Enter a name for your alarm scheme. You may also enter information in the Description field (optional). Select the Alarm Type (see options shown in Figure 3-68), then select the devices you want to monitor.

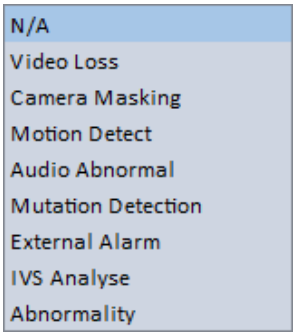


Figure 3-68

4) When you select a camera, it automatically transfers over to the window on the right.

5) Click **Alarm Link** on the left pane or the **Next** button. **Alarm Link** interface is shown in Figure 3-179.

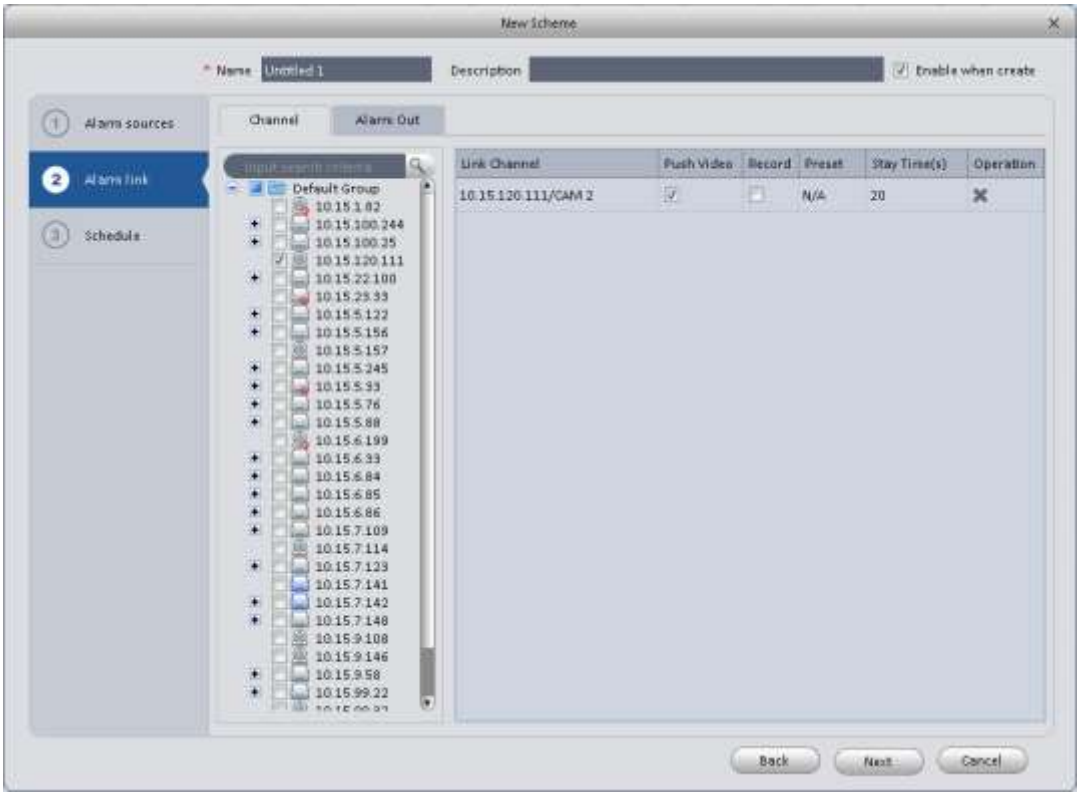


Figure 3-179

6) Once you have selected your options in the **Alarm Link** screen, click **Schedule** or the **Next** button to continue to the **Schedule** interface, shown in Figure 3-70. The schedule may be set by filling in or erasing the green sections in the timeline, or see below for an alternate method.

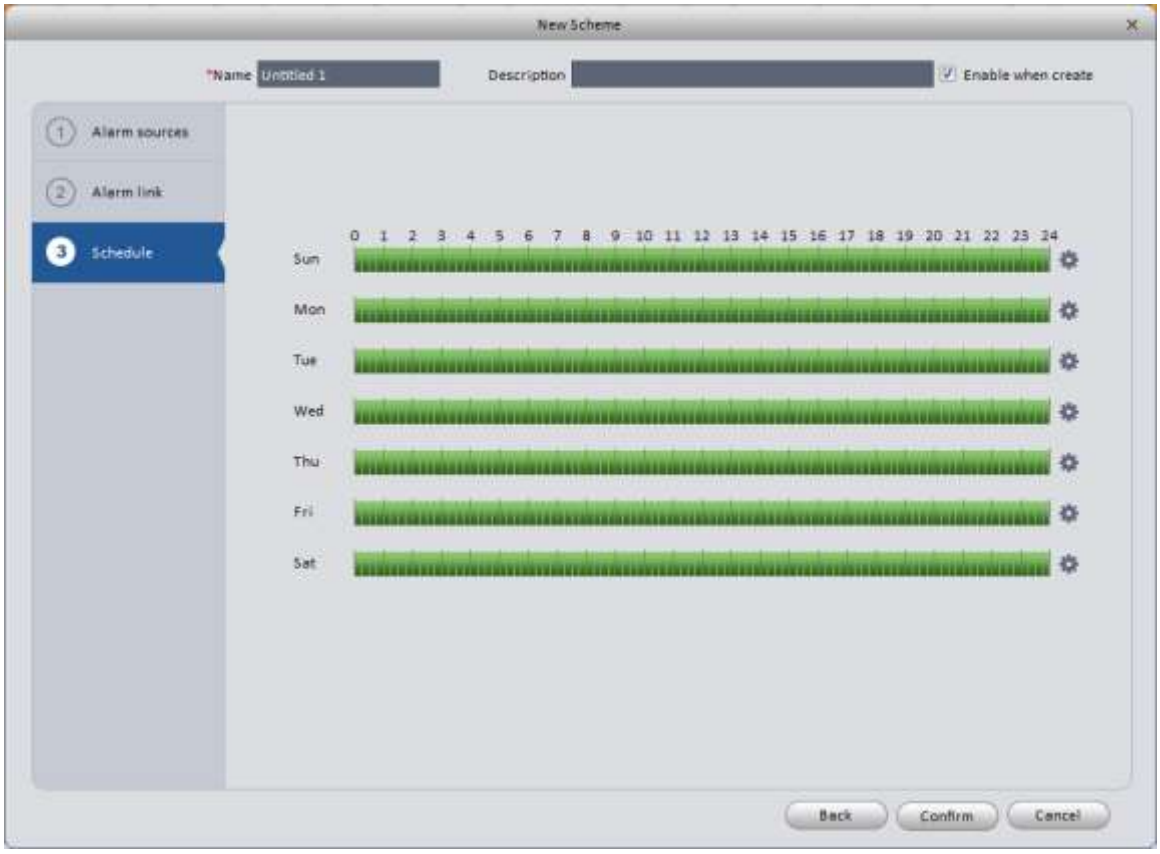


Figure 3-70

Click along the right side of the **Schedule** screen to open the Time Period interface, shown in Figure 3-71. You may set up to 6 periods per day, similar to the period setup in the Record Plan.

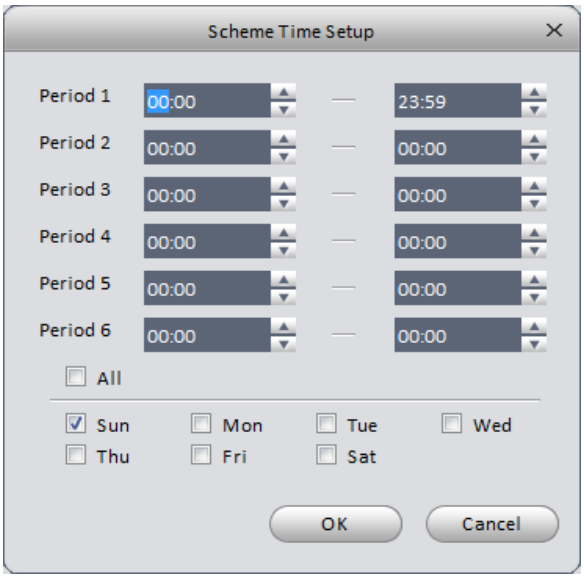


Figure 3-71

7) Click the **OK** or **Submit** button, and you will see the window shown in Figure 3-72. You will see your alarm scheme and you may edit, delete, and enable/disable the scheme using the icons in the Operation column.

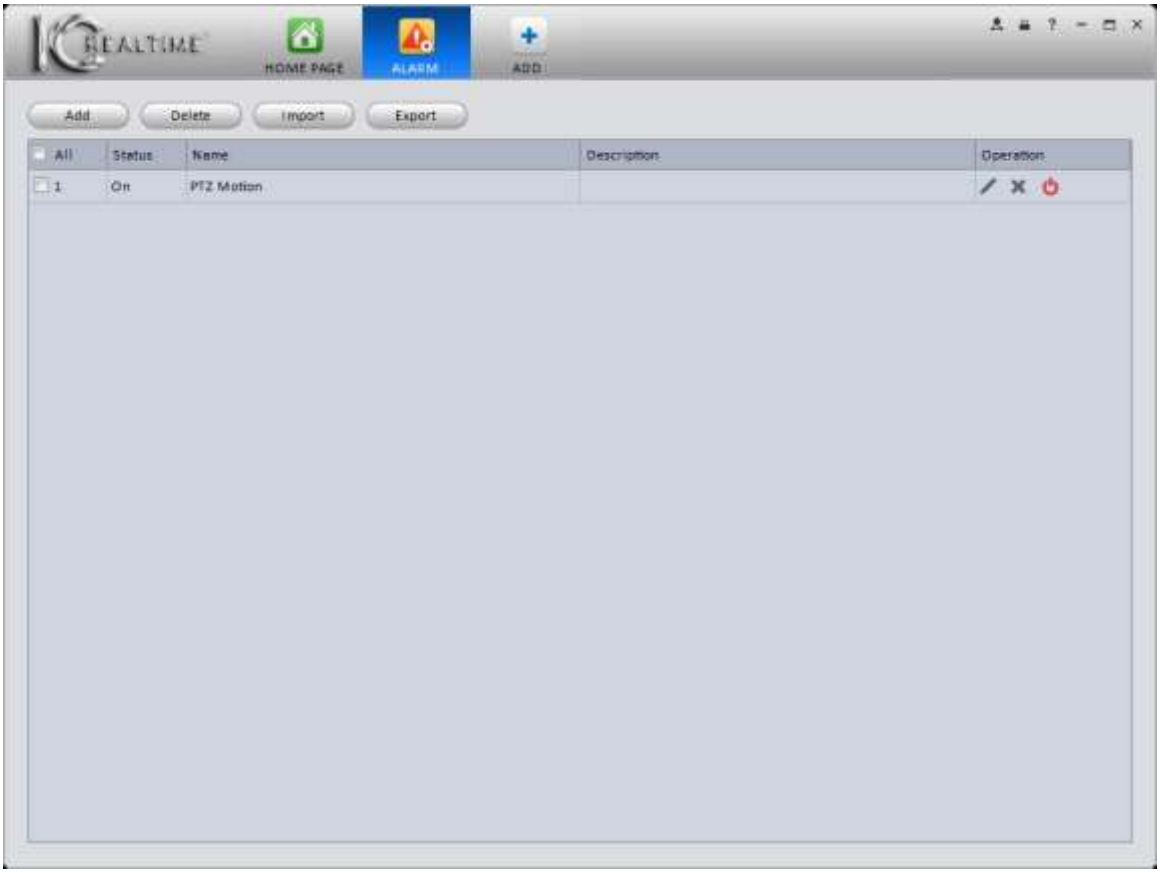


Figure 3-72

3.7.2 Enable/Disable/Export Scheme

After you add a scheme, you can view the following contents for operation information.

- : Edit alarm
- : Delete alarm.
- : Disable alarm.
- : Enable alarm.
- Add: Add alarm.
- Delete: Select one or more alarm(s), then click to delete.
- Import: Import alarm information.
- Export: Export alarm information.

3.8 Tour & Task

Create tours to view custom groups of cameras in Liveview. A Tour consists of one or more **Tasks** that you configure.

1) Click the **Tour & Task** icon in the Settings pane to open the interface, shown in Figure 3-73.

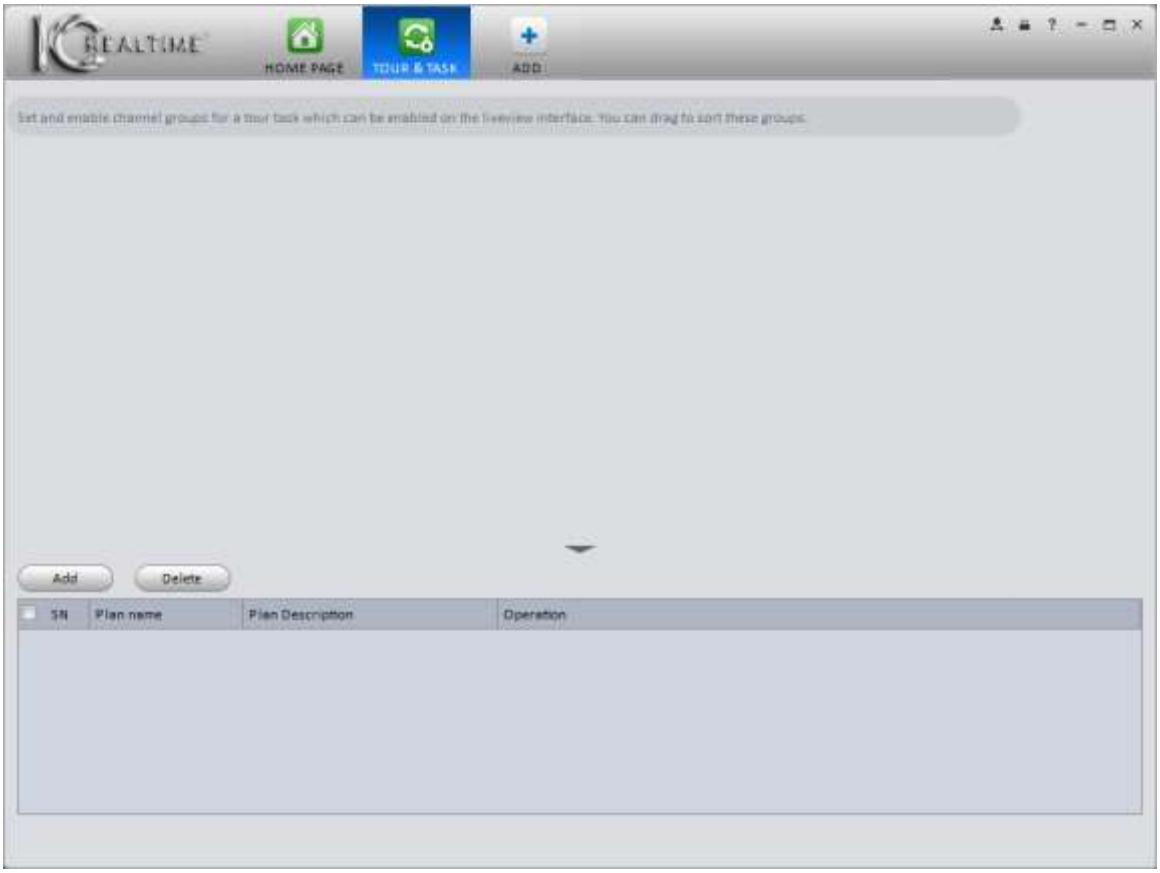


Figure 3-73

2) Click **Add** to bring up the Manual Add window, shown in Figure 3-4.

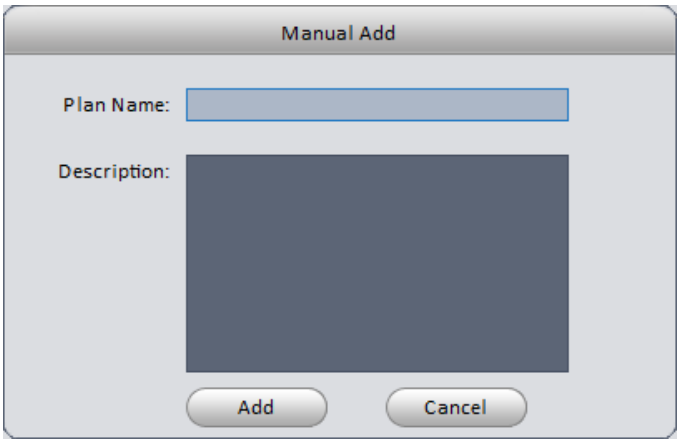


Figure 3-74

3) Enter a name for your tour, then click **Add**.

4) Click button to set up the tour window(s). This will bring up the **Task Config** window, as shown in Figure 3-75.

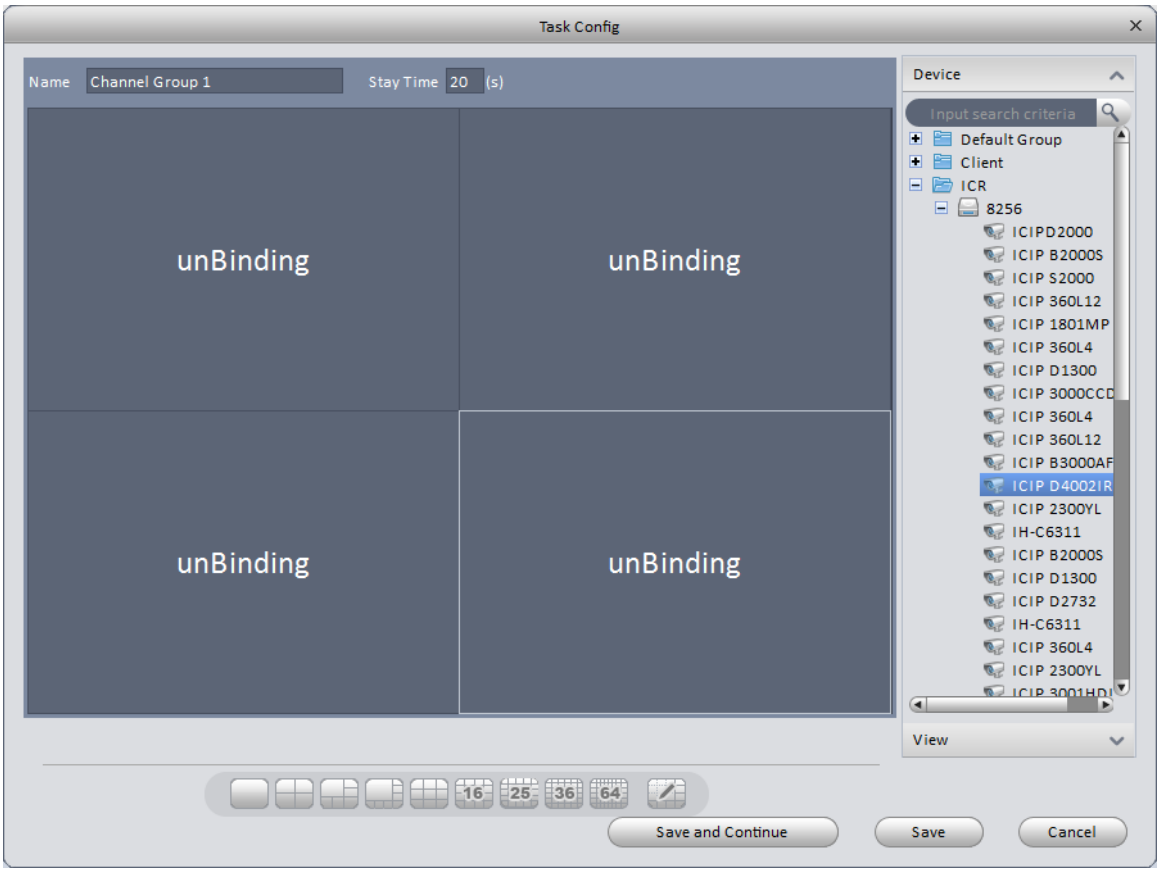


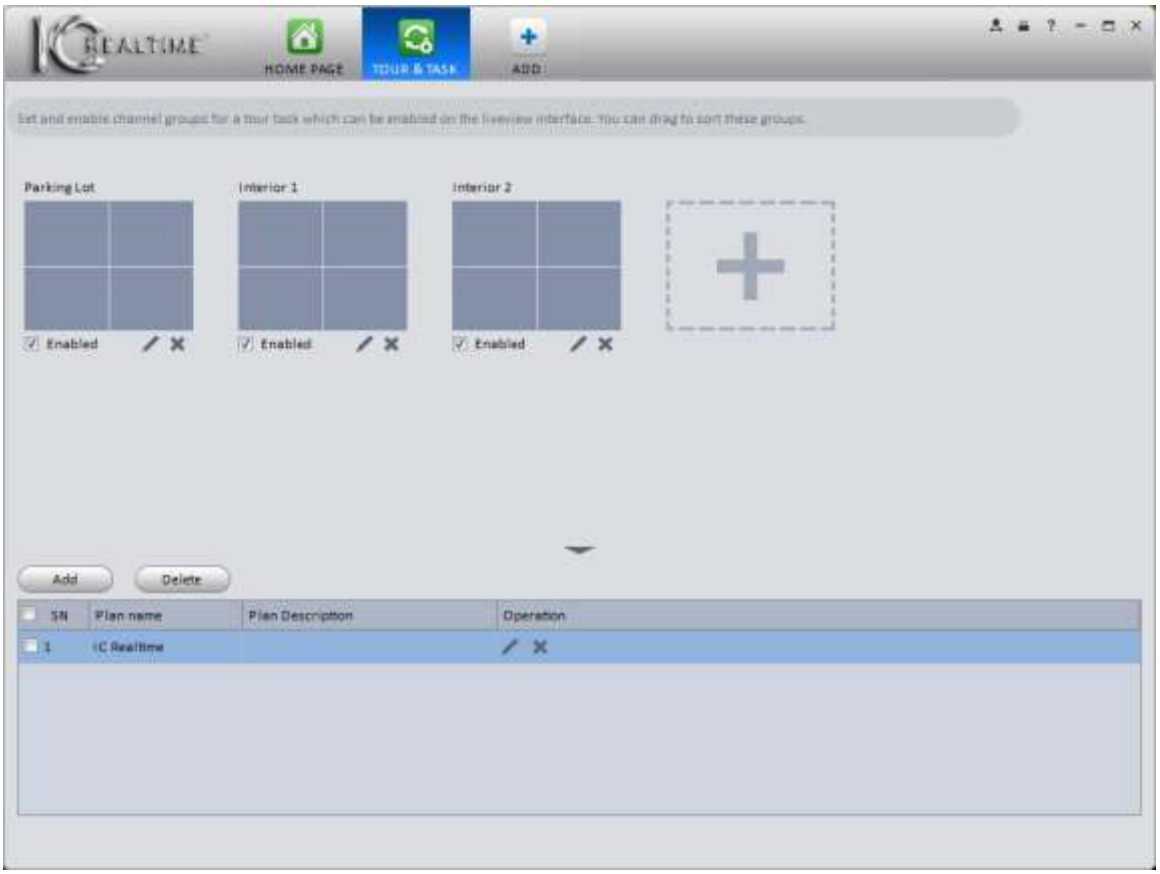
Figure 3-75

5) Enter a task name and stay time, in seconds.

6) Use the following buttons (found at the bottom of the Task Config window) to select a window layout for your task. A 4 camera screen is selected by default.

7) Drag the cameras from the Device column on the right side to the windows where you would like them placed.

8) Click the Save button to save your current task. You may also click Save and Continue to save the current setup create another. When you are finished defining your tasks, you will see as shown in



9) Figure 3-186.

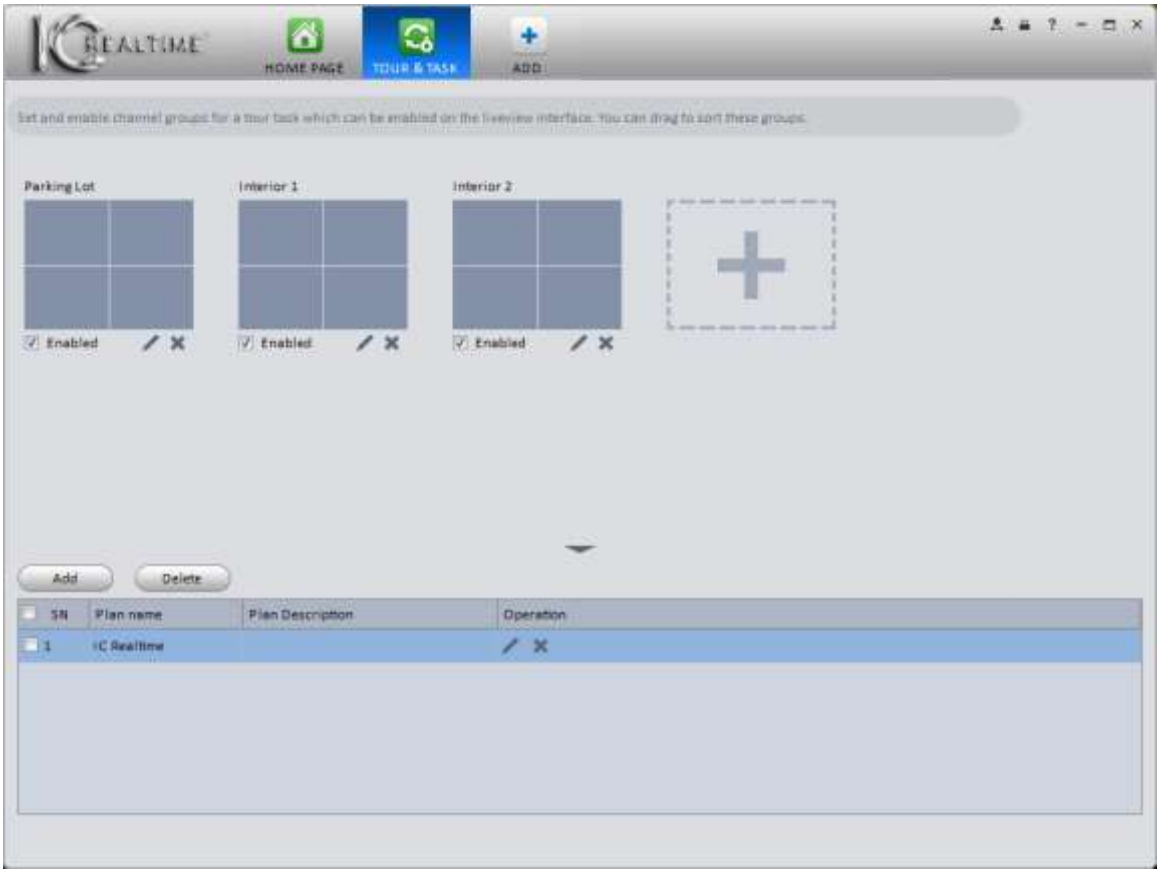


Figure 3-186

In the window above, you see the individual tasks in the top portion, and the Tour name in the bottom. You may enable or disable your individual tasks; edit a task by clicking the button below a task; and delete a task by clicking the button below the task. You may also edit the name of your Tour by clicking the button in the Operation column; and delete the Tour by clicking the button in the Operation column.

Once your Tour is saved, go to the Liveview screen by clicking on the button from the Home Page. On the bottom of the window, you will see this icon: . Click that button and your tour will start. While viewing a tour, click the button to pause the tour.

3.9 PC-NVR

Important

Before you use this function, please make sure you have installed PC-NVR and the PC-NVR application is running on your computer.

PC-NVR allows you to use your computer's hard drive for additional storage for up to 32 cameras.

1) Click the icon in the Settings pane, and you will open the **PC-NVR** window, as shown in Figure 3-197.

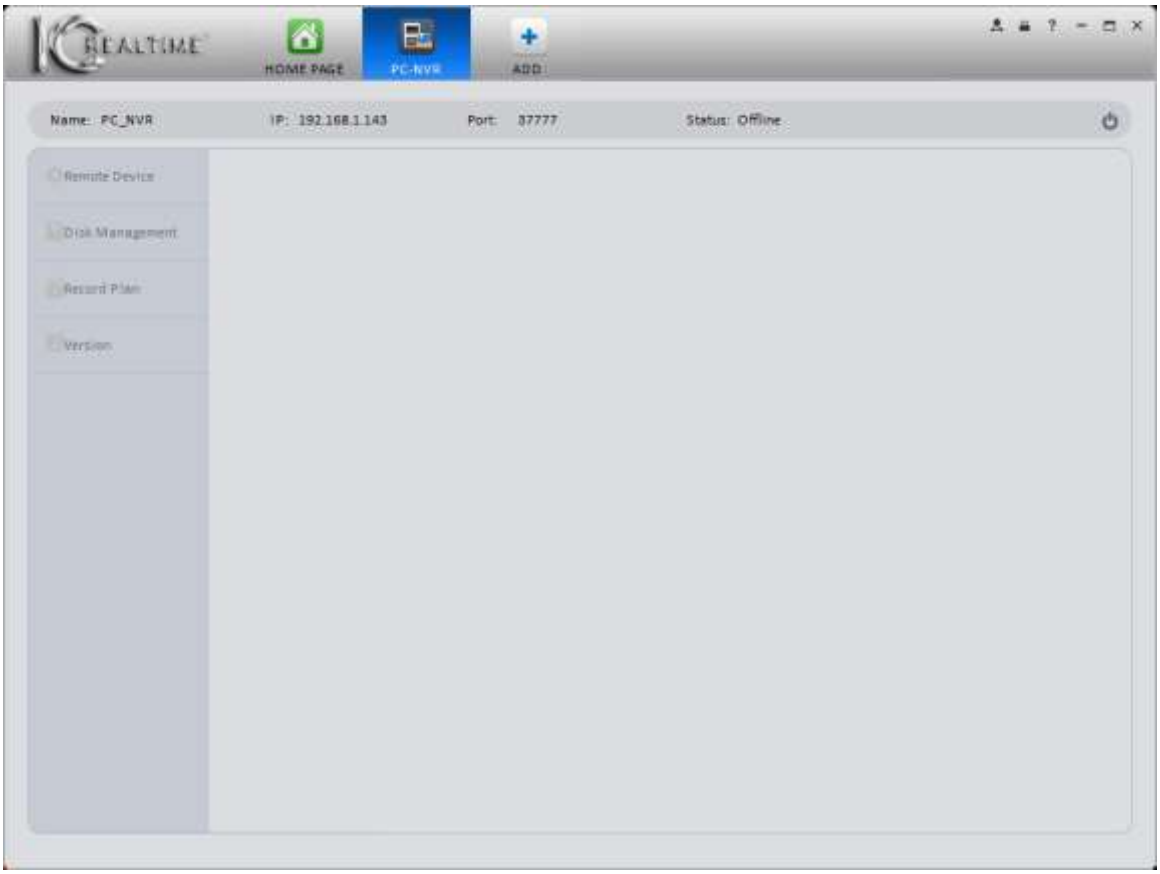


Figure 3-197

2) Click the button to start the PC-NVR service on your computer. The PC-NVR splash screen, as shown in Figure 3-78, will briefly show up on your screen, then go away. Once it starts, you will see the window shown in Figure 3-79.

Figure 3-78

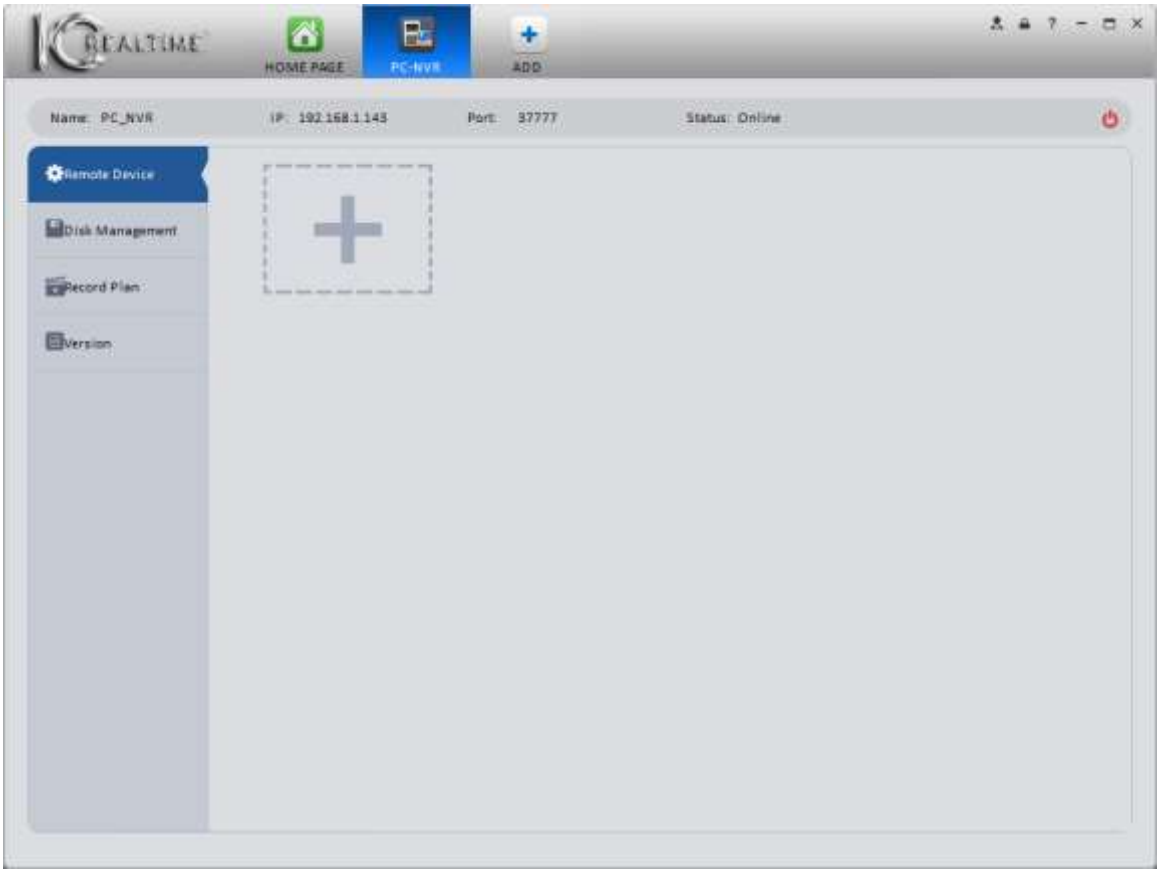


Figure 3-79

3) Remote Device

a) Click the button to bring up the Add channel interface, shown in Figure 3-80.

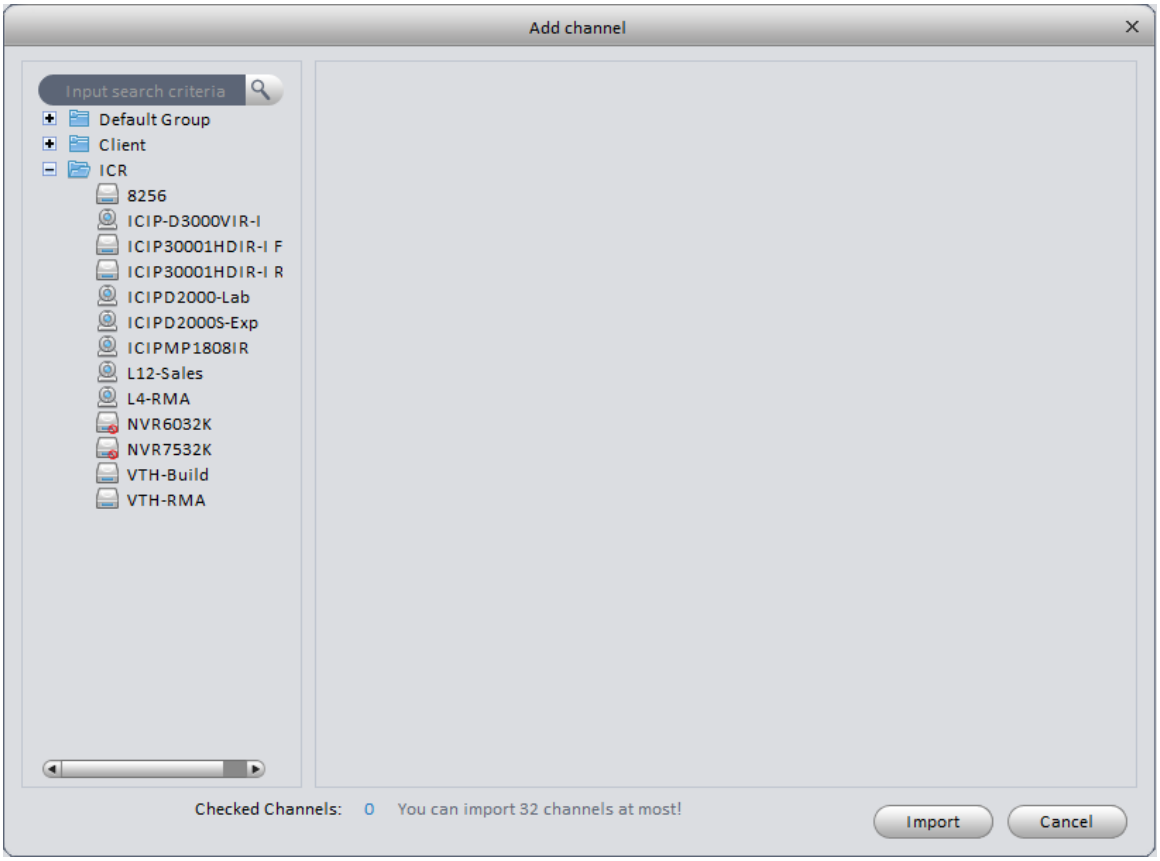


Figure 3-80

b) Select a device from the column on the left. You will see a thumbnail image of the camera(s), as shown in Figure 3-81.

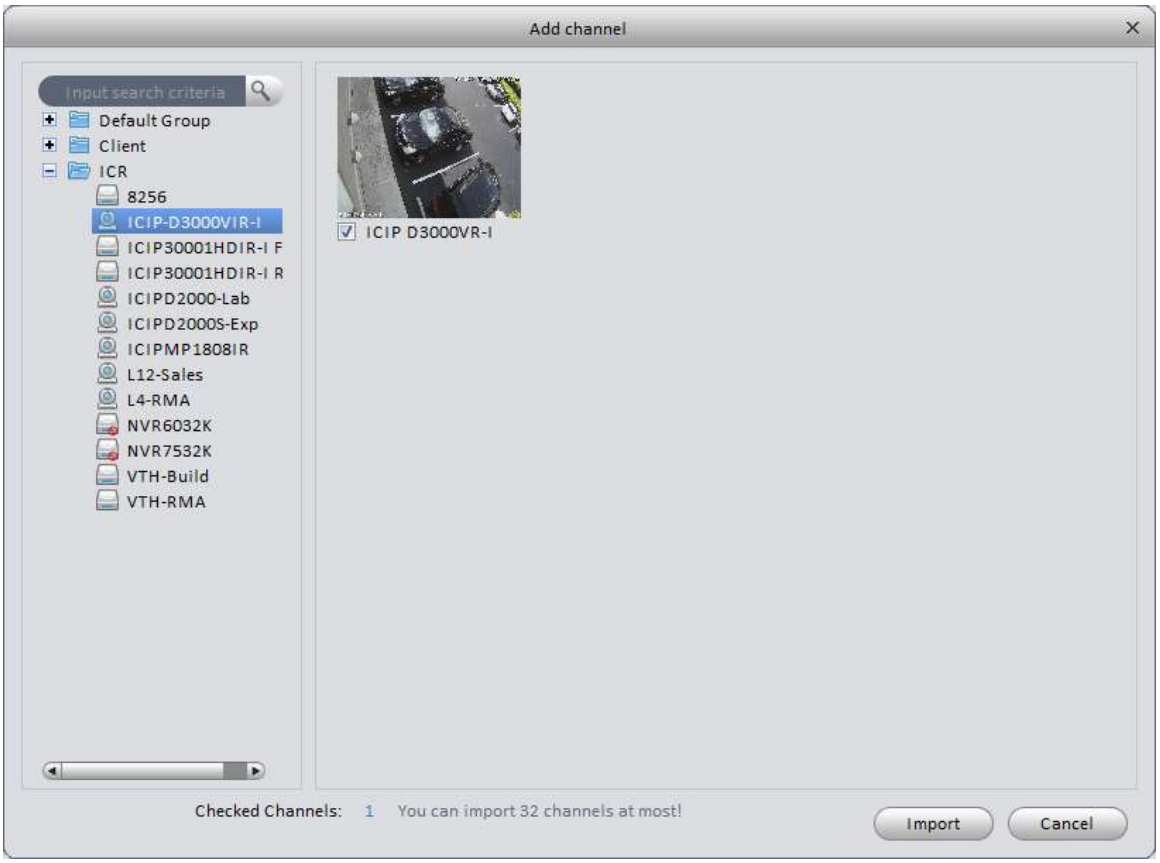


Figure 3-81

c) Click the box next to the cameras you would like to record. **NOTE:** The software has a limit of 32 cameras per drive.

d) Click the Import button.

e) When you are done, you will see the window shown in Figure 3-82.

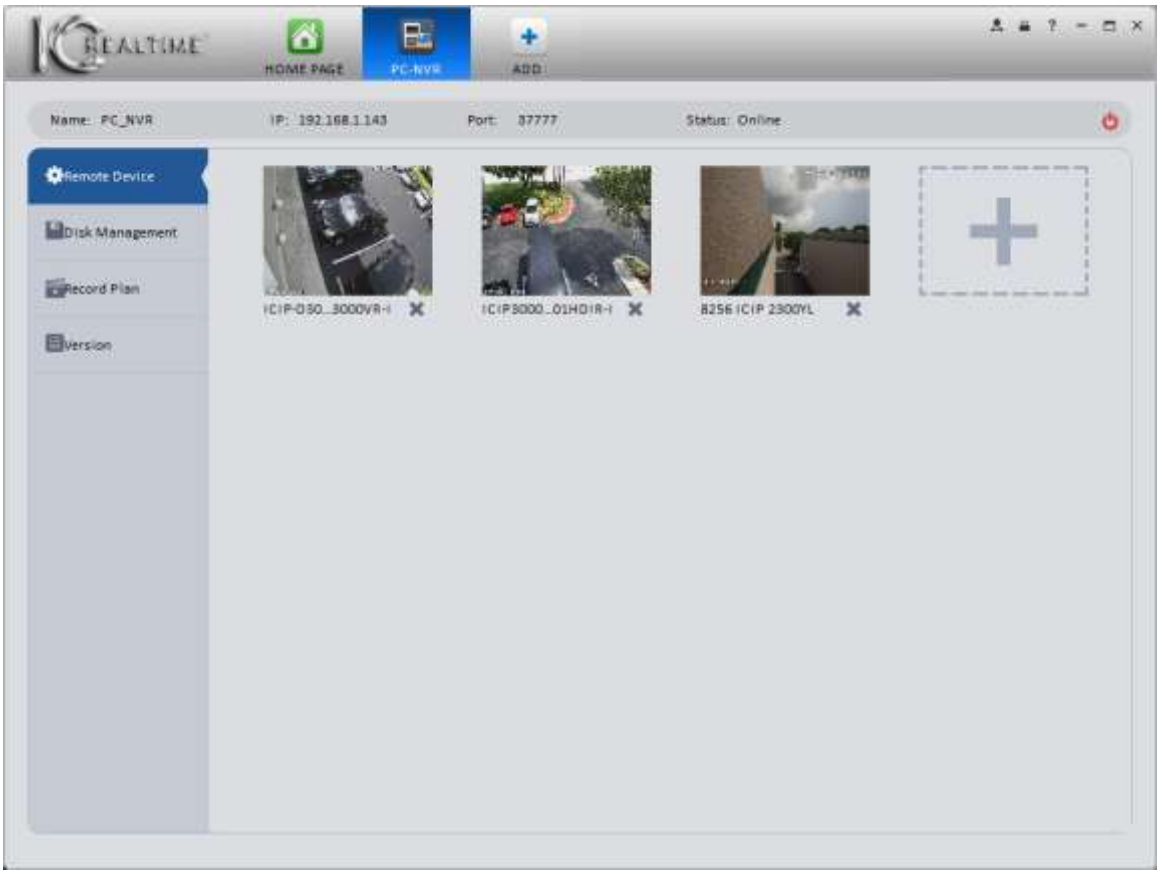


Figure 3-82

4) Disk Management

This interface allows you to set how much space to allocate for recording using the PC-NVR software.

Note: Your HDD must have at least 7GB of free space!!!

a) Click on **Disk Management** to create the partitions on your HDD. The interface is show in Figure 3-83.

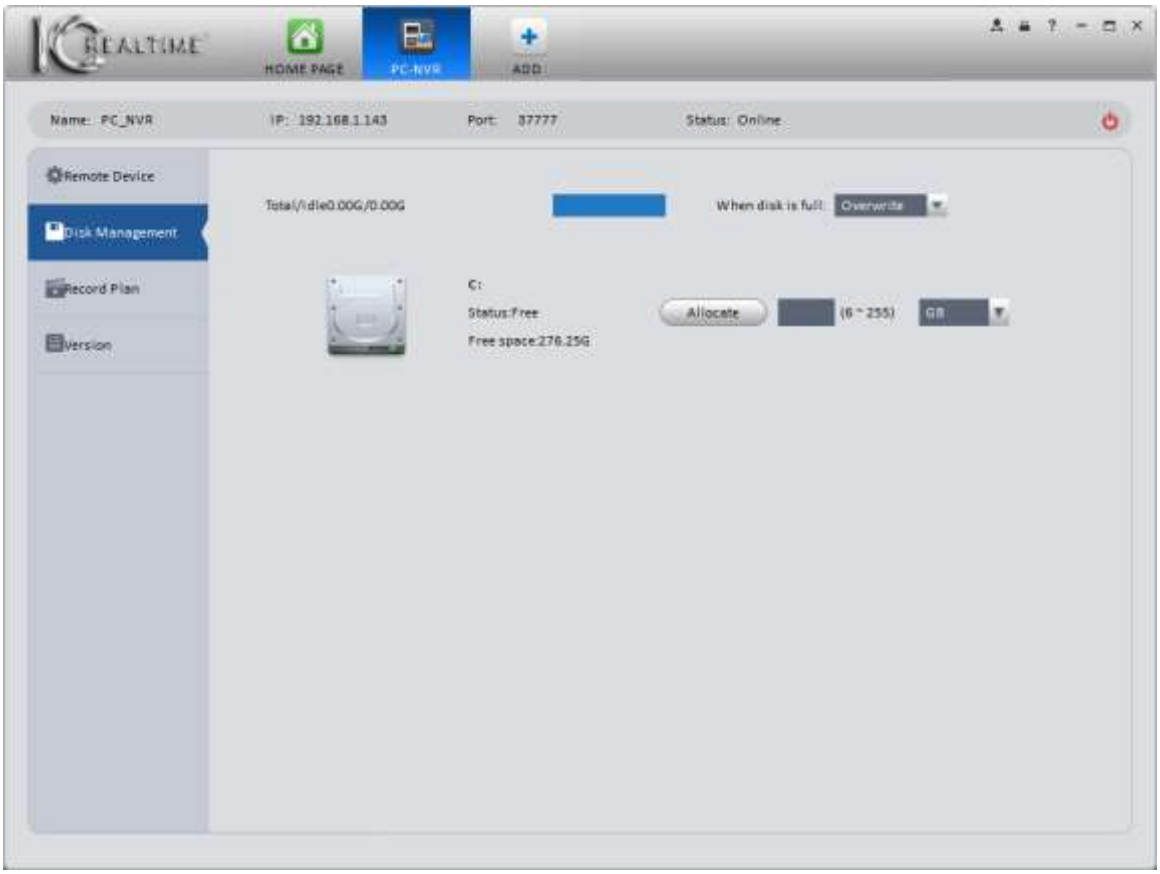


Figure 3-83

b) Select the hard drive(s) and specify how large (in GB) you want the partition, then click the Allocate button. You will see the box shown in Figure 3-84. Click the OK

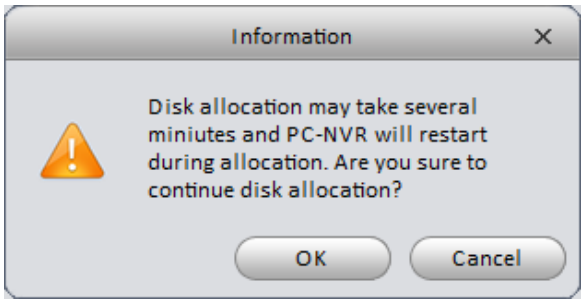


Figure 3-84

c) Your Disk full options are the same as you find in a DVR/NVR: Overwrite and Stop Record. In the drop-down menu next to the text box, you can select between GB and 10GB units.

5) Set Record Plan.

a) Click the **Record Plan** button on the left pane to set the recording schedule. The interface is shown in Figure 3-5.

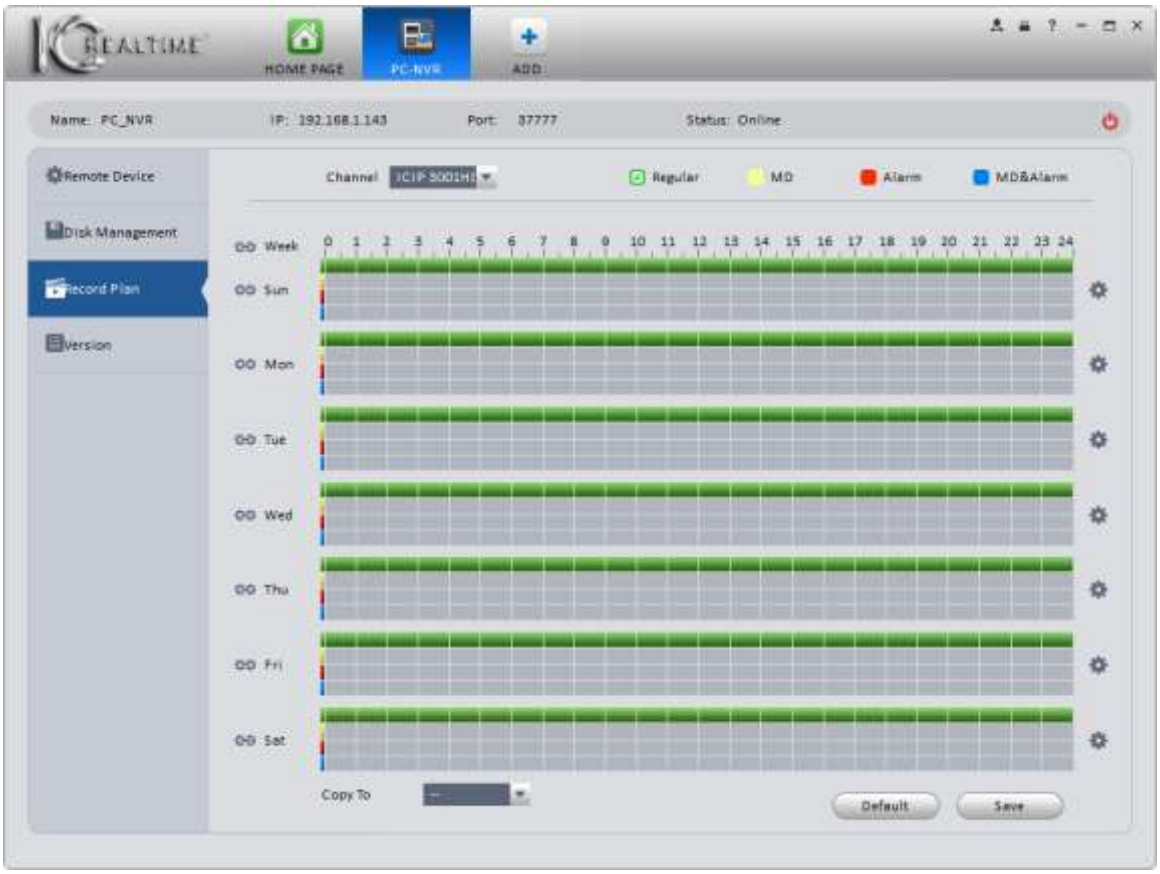


Figure 3-85

b) Select the camera using the drop-down menu next to **Channel**. You may set the schedule for each camera individually, or copy the schedule to some or all of your cameras using the Copy To option.

c) Use the colored buttons to set the type of recording. Click and drag the colored bars across the timeline to set your schedule in 30-minute increments. When your schedule is set, click the Save button.

d) You may also click the ⚙ button and use the Period Setup interface, shown in Figure 3-.

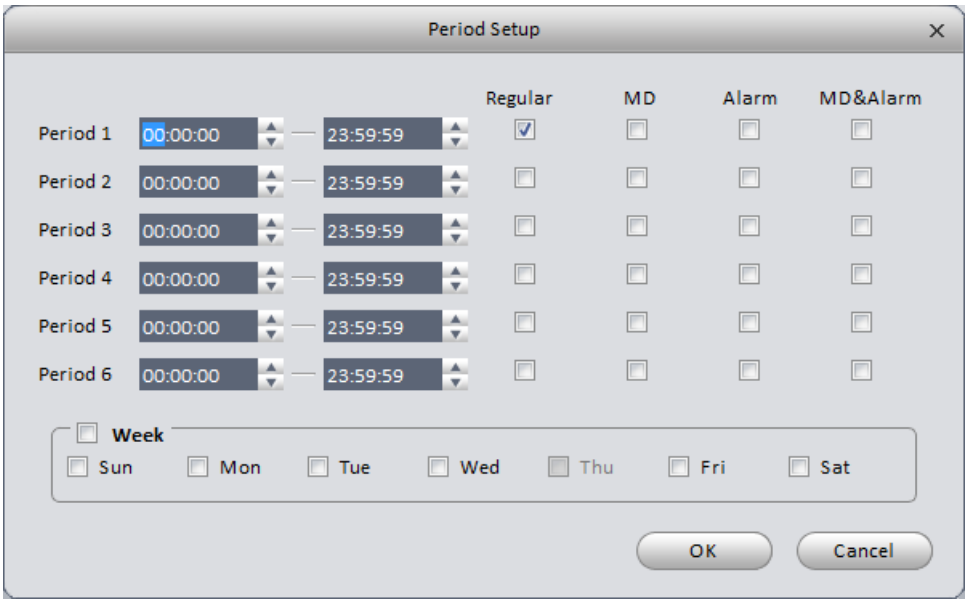


Figure 3-86

e) Set your schedule, then click the OK button.

6) Click on **Version** on the left side to view the PC-NVR version information, shown in Figure 3-87.

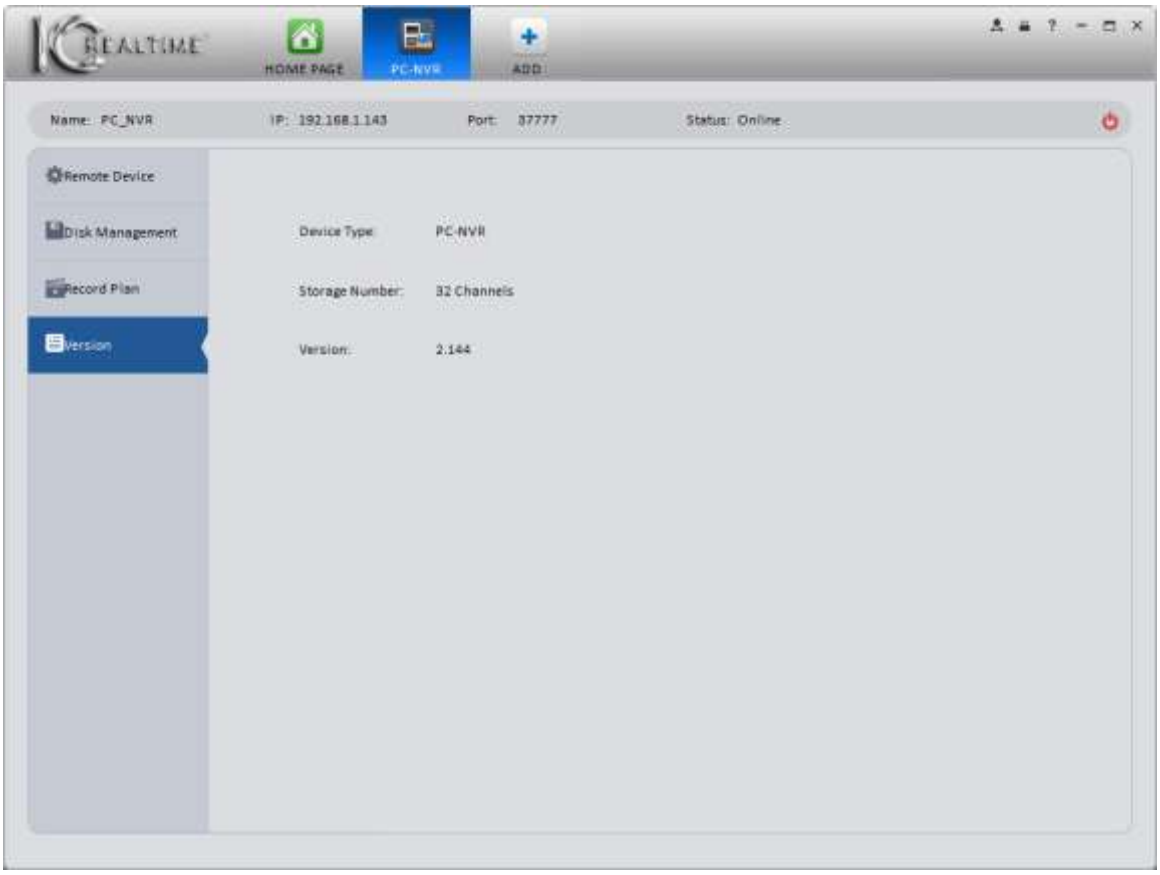


Figure 3-87

3.10 Video Wall Settings

This feature allows you to create a video wall display using multiple TVs.

NOTE: IC Realtime currently does not sell the Decoder hardware needed to use this feature.

1) Click the ,button to open the video wall setup interface, shown in Figure 3-88.

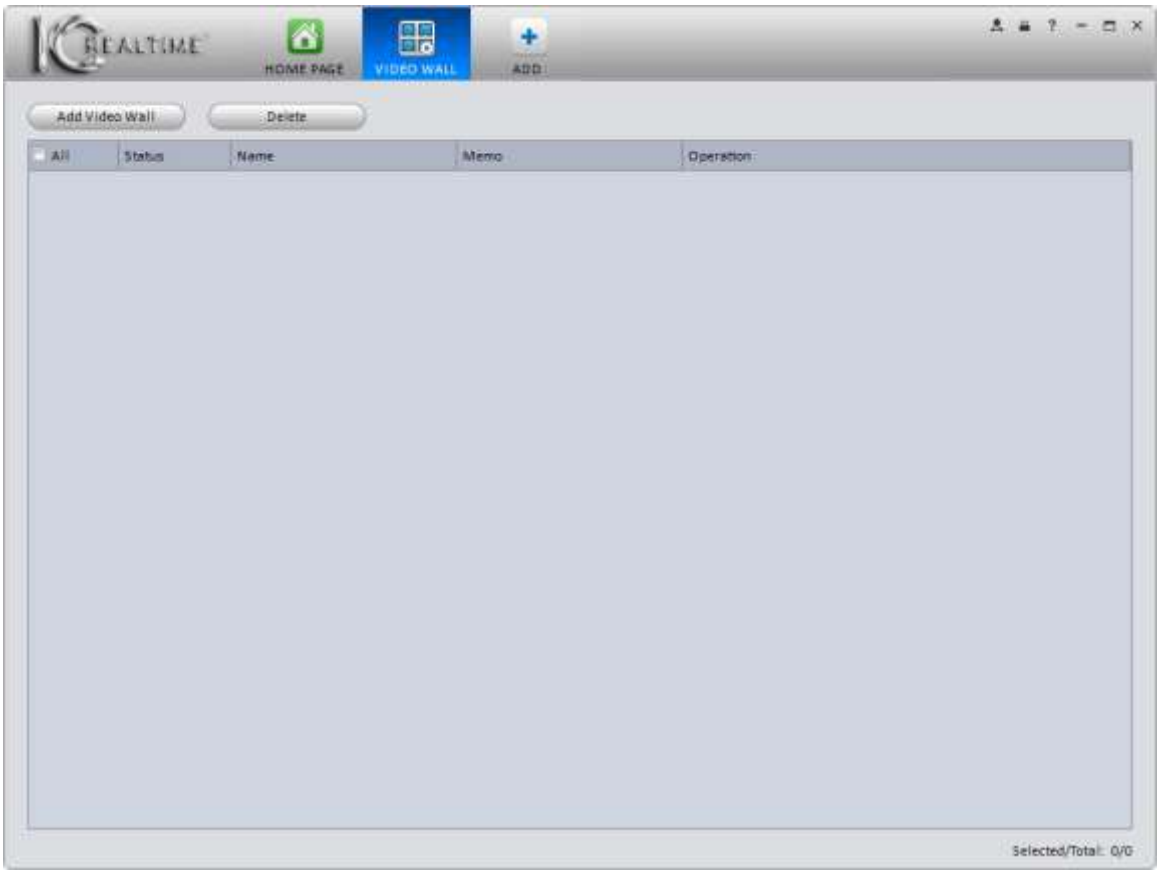


Figure 3-88

2) Click the Add Video Wall button to access the Video Wall Layout Setup window, shown in Figure 3-89.

Figure 3-89

a) Enter a name for your Video Wall. The Memo field is optional.

b) Use the following buttons: to select your screen layout. The M*N button will allow you to create a custom screen layout by designating the number of columns and rows. After you select your screen option, move your mouse to place the screens on the grid, as shown in Figure 3-90.

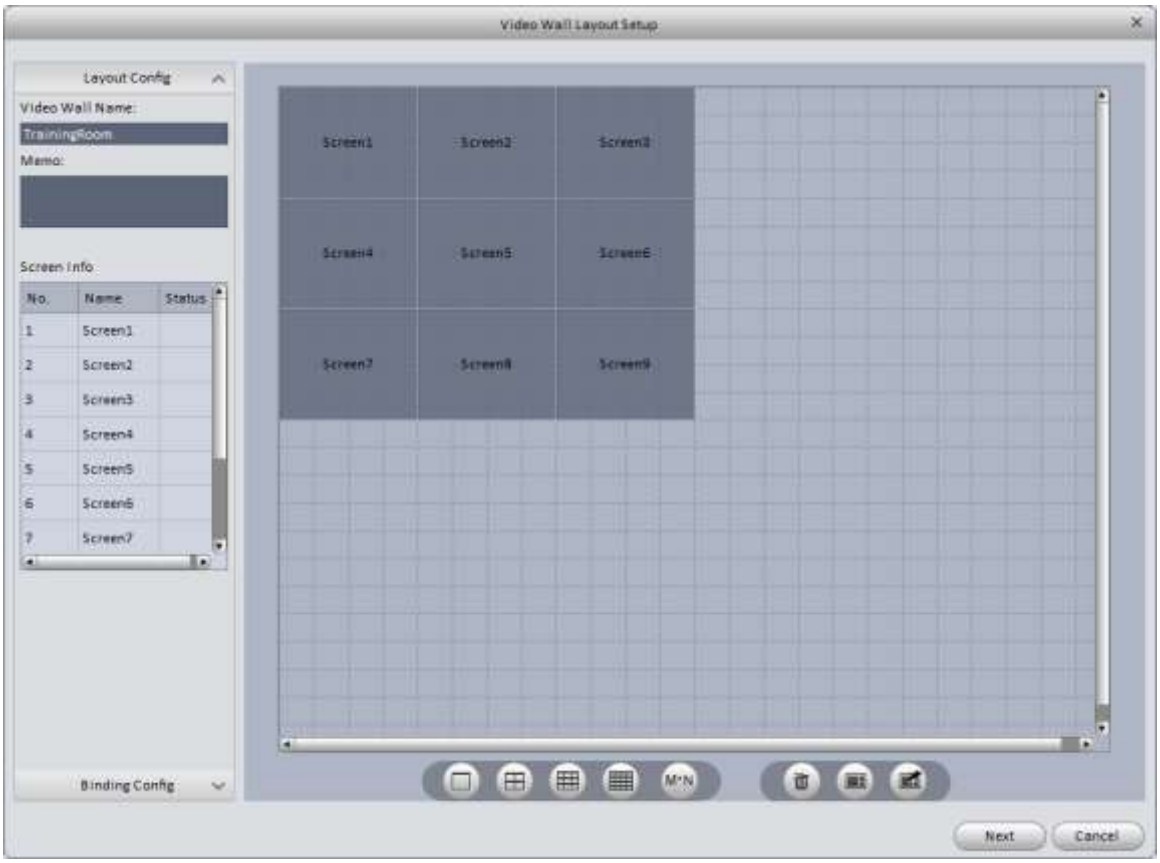
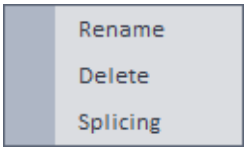


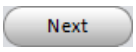
Figure 3-90

Note

- Use Ctrl + left mouse button to select multiple screens for Splicing. Once your screens are selected, click the button to splice the screens into one screen. You may only have 1 spliced screen per Video Wall. Select a spliced screen and click the button to undo the splicing.
- If you right-click with the mouse, you will see the following options:



- Click the button to clear all screens from your video wall.

c) Click the  button to advance to the Binding Config screen, shown in Figure 3-91.

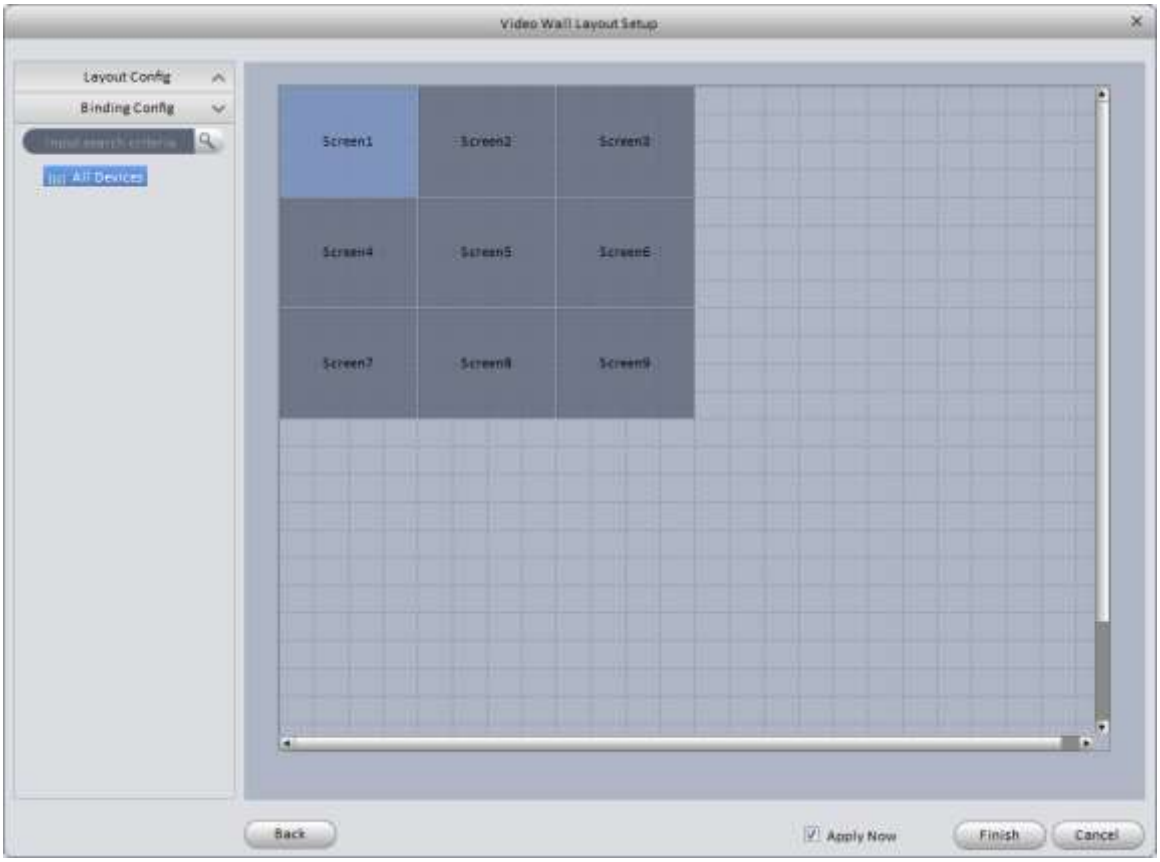


Figure 3-91

3) Binding channels

Select a decoder channel and then drag it to the corresponding screen of the video wall. See Figure 3-92.

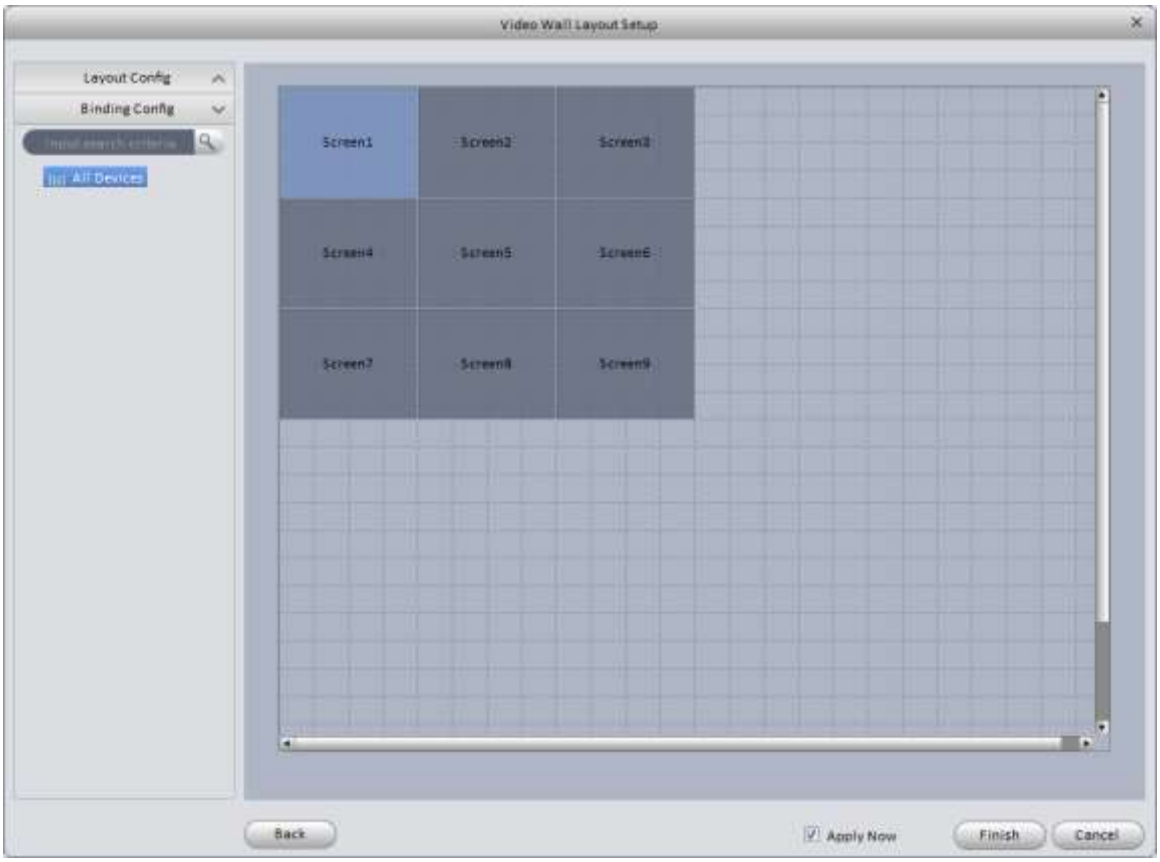


Figure 3-92

4) Click the Finish button to return to the main window, and you will see your Video Wall listed as in Figure 3-3.

If the **Apply Now** button is checked, the Video Wall will automatically be enabled once you click the button.

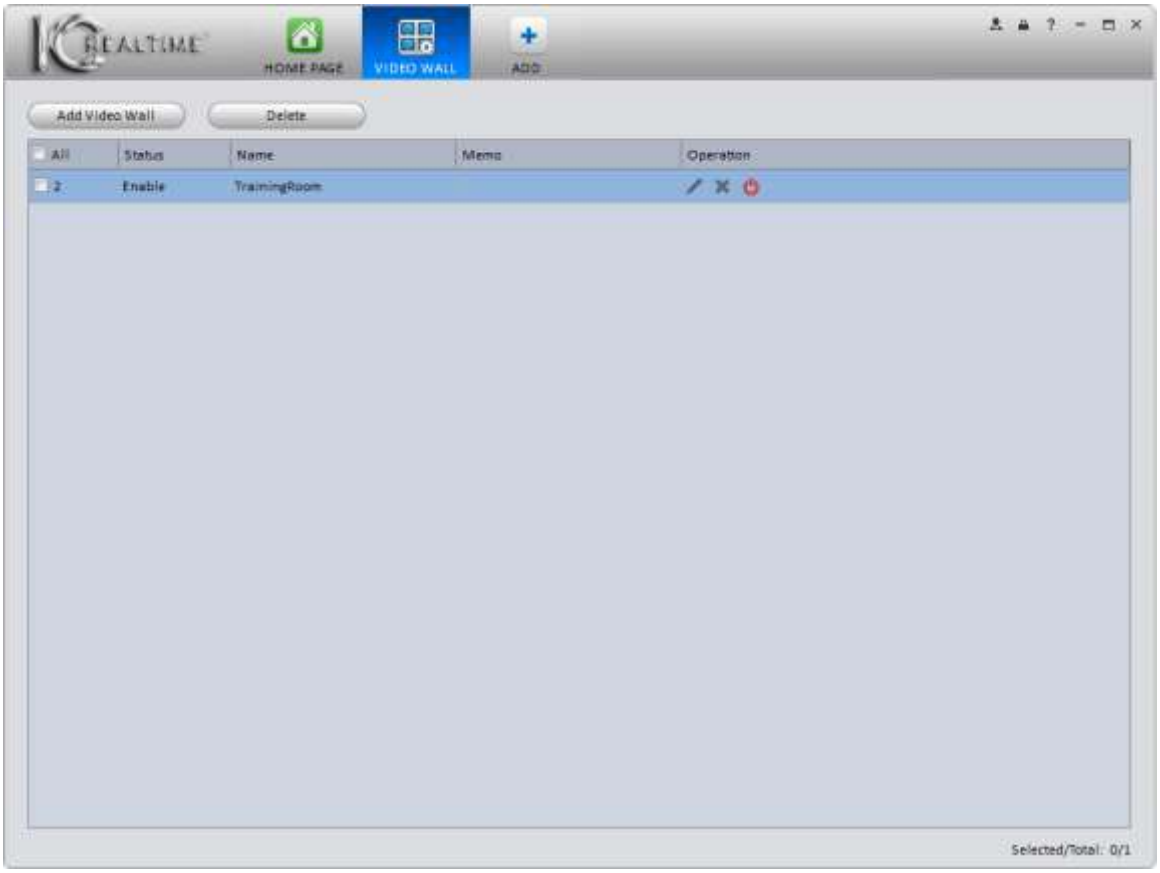


Figure 3-93

Operation Buttons:

Edit/Modify the settings for the selected Video Wall.

Delete the selected Video Wall.

Enable the selected Video Wall.

Disable the selected Video Wall.

4. Basic Operation

4.1 Liveview

4.1.1 Liveview

From the **Home Page** window, click on the button in the Basic pane to go to the Liveview interface, shown in Figure 4-1.

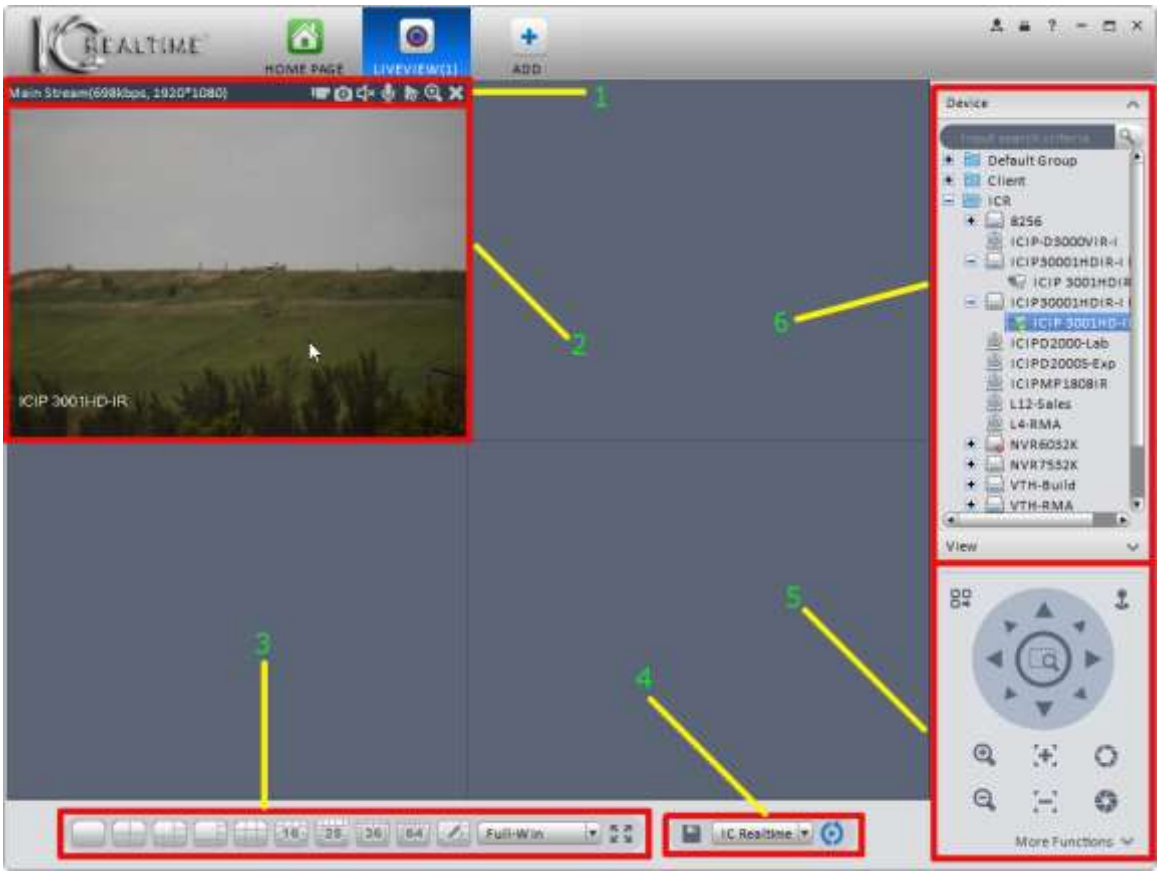
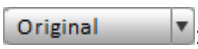


Figure 4-1

Please refer to the table below for detailed information.

SN	Item	Function
1	Stream information & Shortcut menu	Please refer to the following contents for detailed information. λ : Enable/disable local recording. λ : Snapshot. λ : Enable/disable audio. λ : Enable/disable bidirectional talk. λ : Instant playback. λ : Digital zoom λ : Close current window.

SN	Item	Function
2	Video window	Live video
3	Window Split modes	λ : Select a pre-defined window split, from 1 to 64. λ : Click this button, then create a custom Split setup. λ  : Adjust the aspect ratio for each window in the grid. λ : Toggle Full Screen mode.
4	Tour & Task Operation	: Save current view. Saved Views can be used in Liveview, Playback, and Tor & Task areas. Note: When saving a view, check the box next to **Add to Tour Task**, and select the tour in the drop-down menu, to automatically add the view to that tour. : Enable the tour showing in the drop-down menu. Refer to Chapter 3.8. : Pause the current tour.
5	PTZ	This section only appears for PTZ (Pan, Tilt, Zoom) or motorized zoom cameras. For PTZ cameras, you can control the movement and programming of the camera from this menu. For Motorized zoom cameras, you may adjust the zoom and focus settings.
6	Device List	Displays all your devices that can be viewed. You can create groups for your devices by clicking the button. Devices can be clicked and dragged from one group to another. If you right-click on a device, you will open a sub-menu with several options. Select Main Stream or Sub Stream to start viewing live video.

Select a Liveview pane, double click a device in the device list to view the camera live in that pane. Double click a group or a recorder to open all cameras. Right click a device channel to switch between main stream/extra stream. Right click anywhere in the Liveview panes to access the menu shown in Figure 4-2.

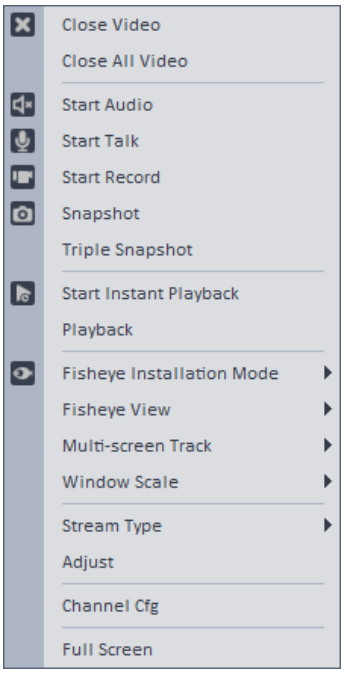


Figure 4-2

Please refer to the table below for detailed information.

Item	Function
Close Video	Closes the current video pane.
Close All Video	Closes all open video panes.
Start Audio	Enables the Audio channel of the current pane.
Start Talk	Enables bi-directional talk with a device. Your computer must have a microphone attached for this to work.
Start Record	Enable live recording of the current video pane to your hard drive.
Snapshot	Takes a snapshot of the video in that pane. One snapshot per click.
Triple Snapshot	Takes 3 quick snapshots of the current pane.
Start Instant Playback	Starts an Instant Playback in the current pane. Instant Playback default is set in the **General** menu, and can be seen in Chapter 3.3.1.
Playback	Automatically search current day's recording for the selected pane.
Fisheye Installation Mode	Use to select the Installation Mode for a 360° Fisheye camera. Select ceiling, wall, or shelf-mount. Options shown in Figure 4-3.
Fisheye View	Select the Fisheye View, after you have selected the Installation Mode. Options shown in Figure 4-4 are for the Ceiling installation mode.

Item	Function
Multi-screen Track	Splits the current pane into a 1 +3 screen or a 1 +5 screen. Figure 4-5 shows the available options; Figure 4-6 shows a pane split into the 1+3 option.
Window Scale	Adjust the Aspect Ratio of the current pane. Options are shown in Figure 4-7.
Stream Type	Switch between main stream and sub stream.
Adjust	Set current pane Brightness, Contrast, Saturation, and Hue levels. Window shown in Figure 4-8.
IVS Rule	Enables viewing of any IVS rules in effect on the current device. Only available on cameras with IVS capabilities.
Channel Cfg	Automatically opens up the **Device Setup** window for the selected device.
Full Screen	Switch to Full Screen mode for your Liveview window. The Liveview grid will completely fill your monitor, and you will not see any of the other options in the software. Right-click and select Exit Full Screen, or press the **Esc** button on your keyboard to return to normal viewing.

Figure 4-3

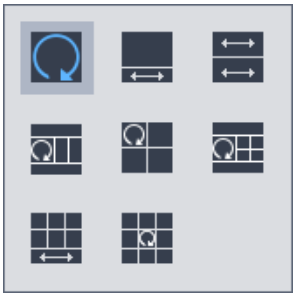


Figure 4-4

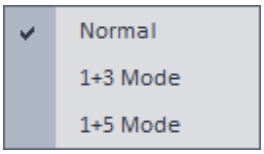


Figure 4-5

Figure 4-6

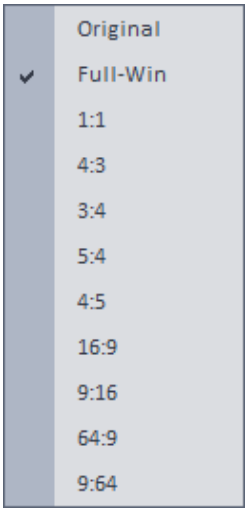


Figure 4-7

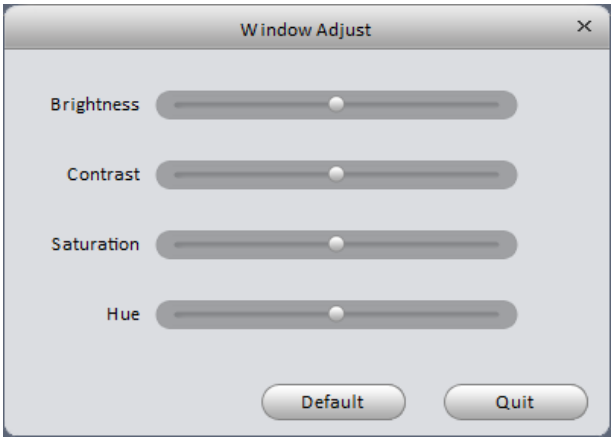


Figure 4-8

4.1.2 Record

Video can be recorded directly from the camera to your computer's hard drive. While in the Liveview window, right-click in the pane for the camera you want to record. Select the **Start Record** button to start the recording. When you are done recording, right-click in the window again and click the **Stop Record** button. The record button along the top of the Liveview pane does the same thing. The video records to the default **Record Path** location, which can be found under **General → File** (refer to Chapter 3.3.2).

4.1.3 Snapshot

Snapshots may be taken from each individual video pane. There are 2 types of snapshot: **Snapshot** (1 still image) and **Triple Snapshot** (3 still images, taken in 2-second intervals).

1) A **Snapshot** can be taken by clicking this button: in the top bar of the pane or in the Right-click menu. When you take a **Snapshot**, you will see a Snapshot Save window, as in Figure 4-9. You may select a reason for the snapshot, as shown in Figure 4-10. You may also type remarks in the box below **Remark**. The Snap Reason and Remarks information will only show up if you open the snapshots in Smart ICRSS. All snapshots are saved in your default **Snapshot Path** location (see Chapter 3.3.2).

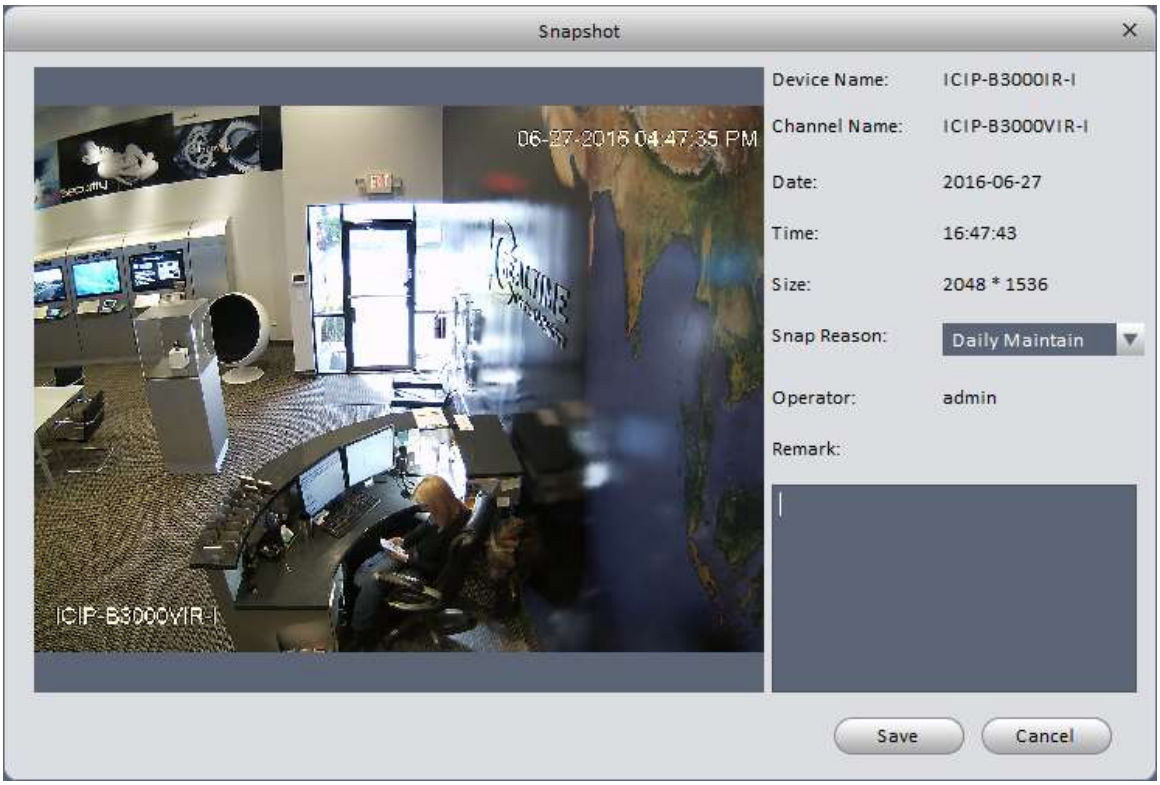


Figure 4-9

Figure 4-10

2) A **Triple Snapshot** may be taken by clicking the option in the Right-Click menu in a video pane. The software will take 3 snapshots, pausing briefly between each one. You will see a confirmation window pop up in the lower right of your monitor, similar to the one in Figure 4-11. Click the icon to automatically open the folder where your snapshots were saved. Click the icon to automatically open the first picture.

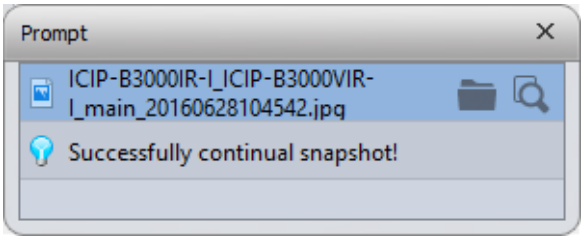


Figure 4-11

4.1.4 Fisheye

To de-warp a 360° fisheye camera, you need to select the **Fisheye Installation Mode** from the right-click menu. There are three options:

: Ceiling mount

: Wall mount

: Floor/Shelf mount

Select the option that matches the camera's physical installation. Each Installation Mode has several views available; not all views are available for each **Fisheye Installation Mode**. Figure 4-12 shows the available views for the Ceiling mount option. In Figure 4-13, the 1+3 view mode has been selected.

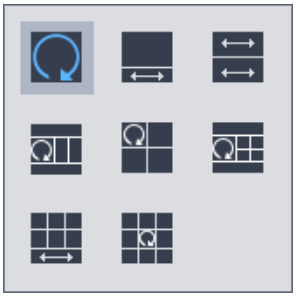


Figure 4-12

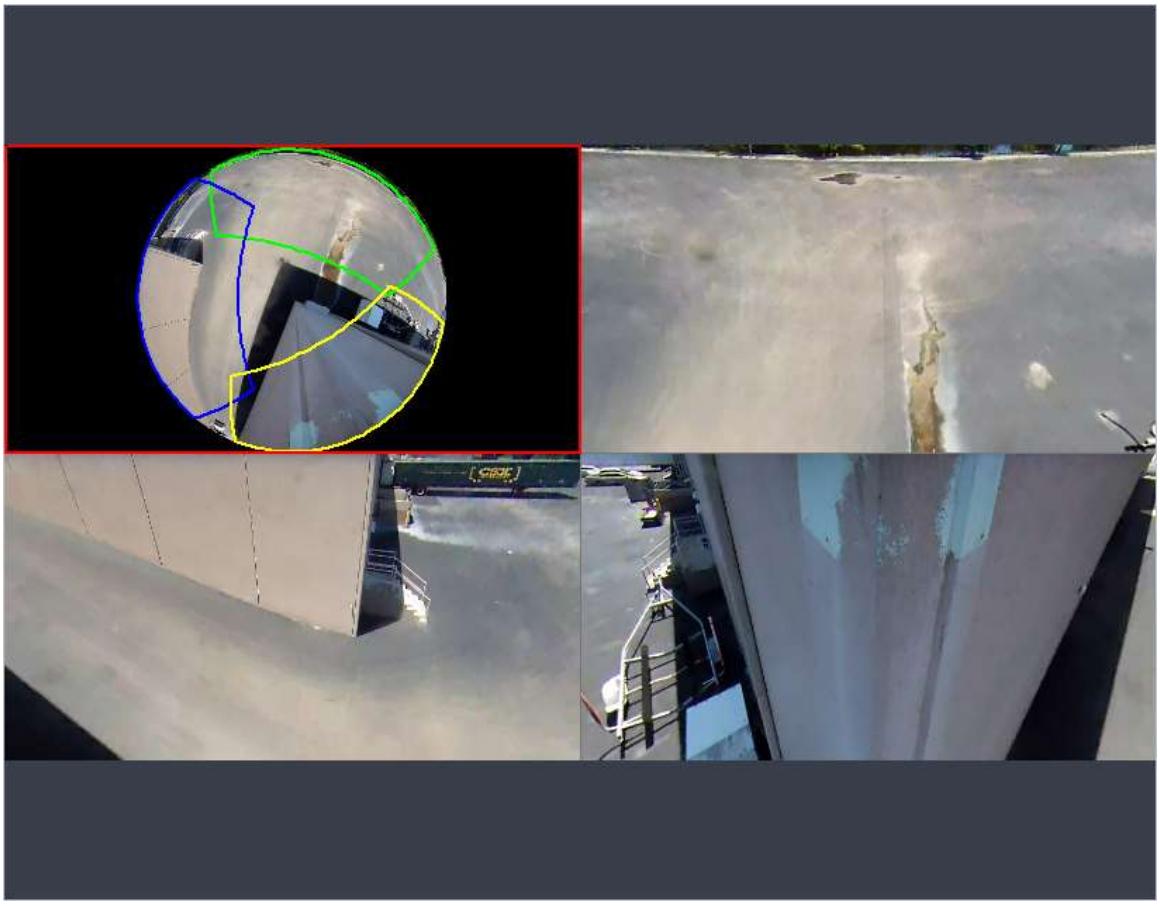


Figure 4-13

In the window above, you can see the 3 regions outlined in blue, green, and yellow in the round image in the upper left quadrant. The regions can be moved around the image by clicking and dragging them around with your mouse in the round image. The regions may also be manipulated by clicking and dragging the mouse inside each of the rectangular quadrants.

4.1.5 IVS Channel Cfg

Step 1. In the device list to the right of the live video panes, right click on a camera that has IVS features (IC Realtime IP cameras with a **–I** after the model have IVS features). See Figure 4-14.

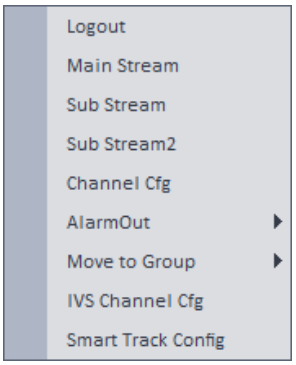


Figure 4-14

Step 2. The window shown in Figure 4-15 pops up for you to configure your rule..

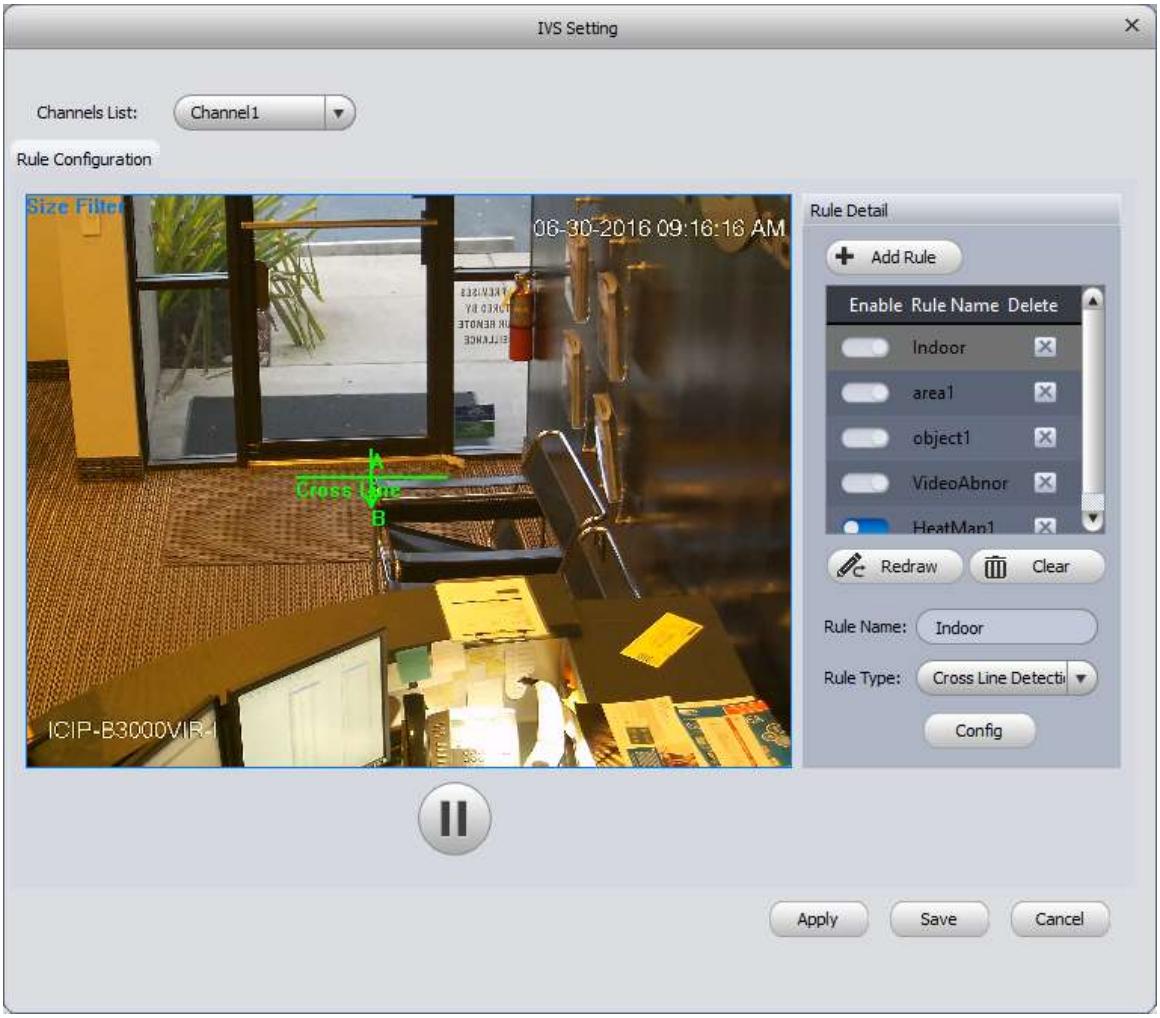


Figure 4-15

Step 3. Click Add Rule. In the Rule List, you will see a new rule called **Rule1**, as outlined in red in Figure 4-16.

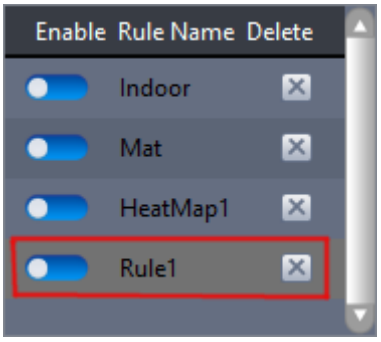


Figure 4-16

Step 4. Enter a Rule Name in the box below the Clear button.

Step 5. Select a Rule Type by clicking the button to the right of the selected rule type. Rule options are shown below, in figure 4-17. Different cameras may have different rule types.

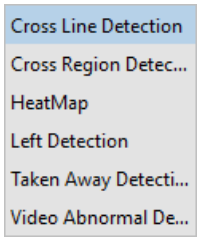


Figure 4-17

Step 6. You are now ready to begin drawing your rule. In the video window, you are being prompted to draw a Cross Line, as in Figure 4-18.

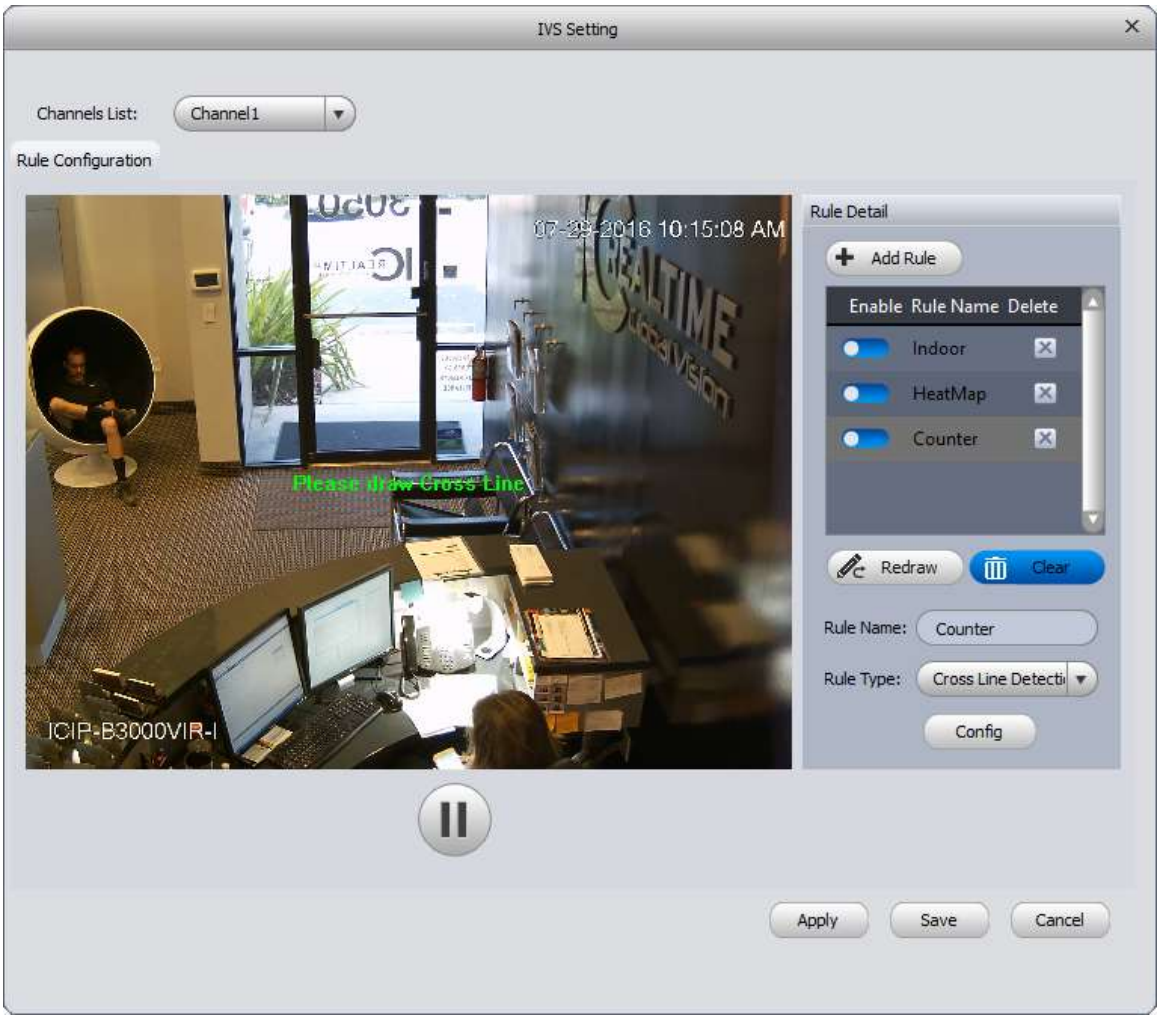


Figure 4-18

Step 7. A Cross Line rule may have several lines linked together, as seen in Figure 4-19. Using multiple lines allows you to fine-tune your tripwire to match up with objects in the environment. Left-click once to set your initial anchor point. Move your mouse to draw a line from the anchor point to your cursor, then continue to left-click to set additional anchors. Once you have the line you want, use the right-click on your mouse to finish the line. Figure 4-19 below shows a completed line.

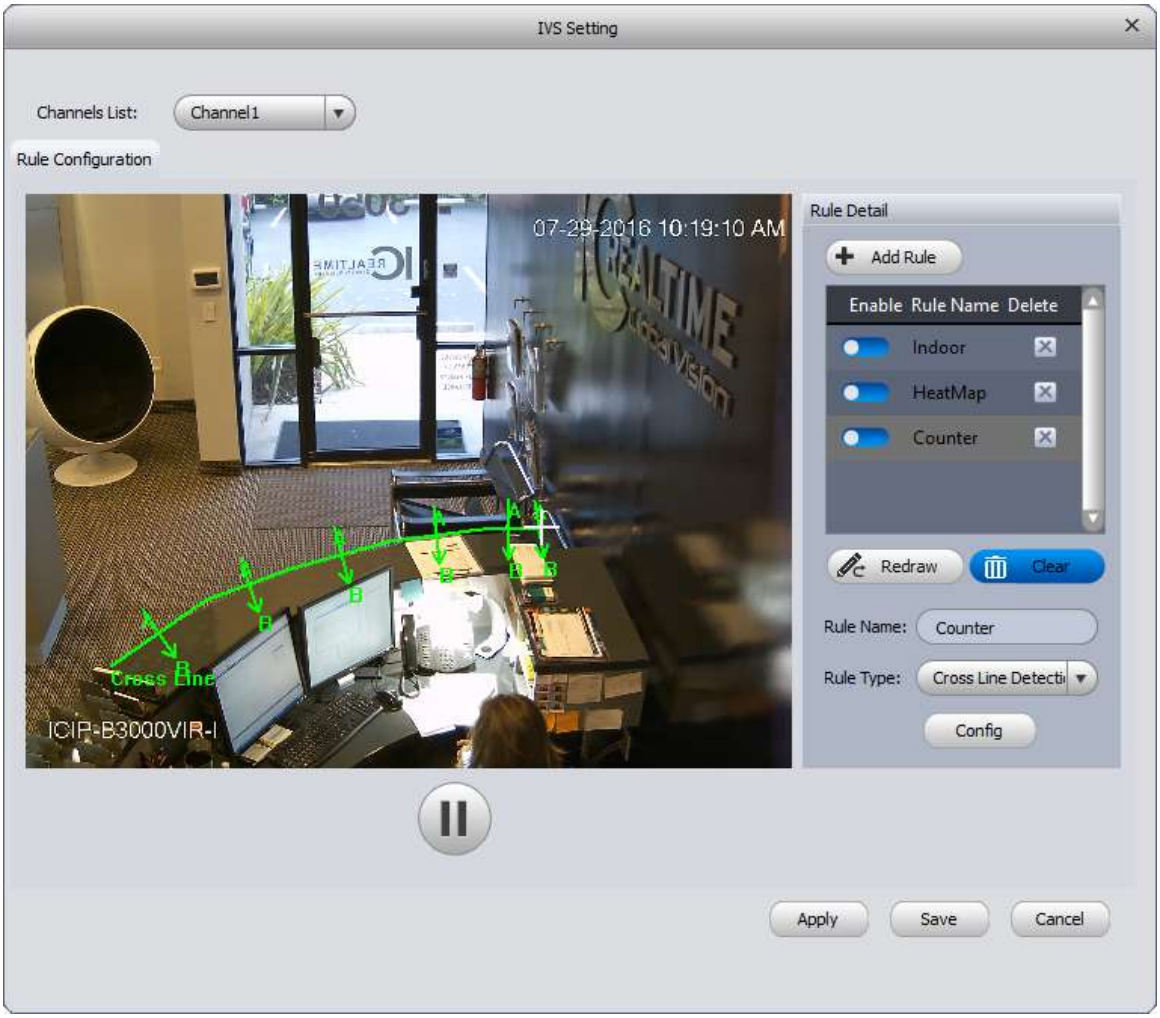


Figure 4-19

Step 8. The software may ask you to create a Size Filter once you have finished drawing your rule, as shown in Figure 4-20.

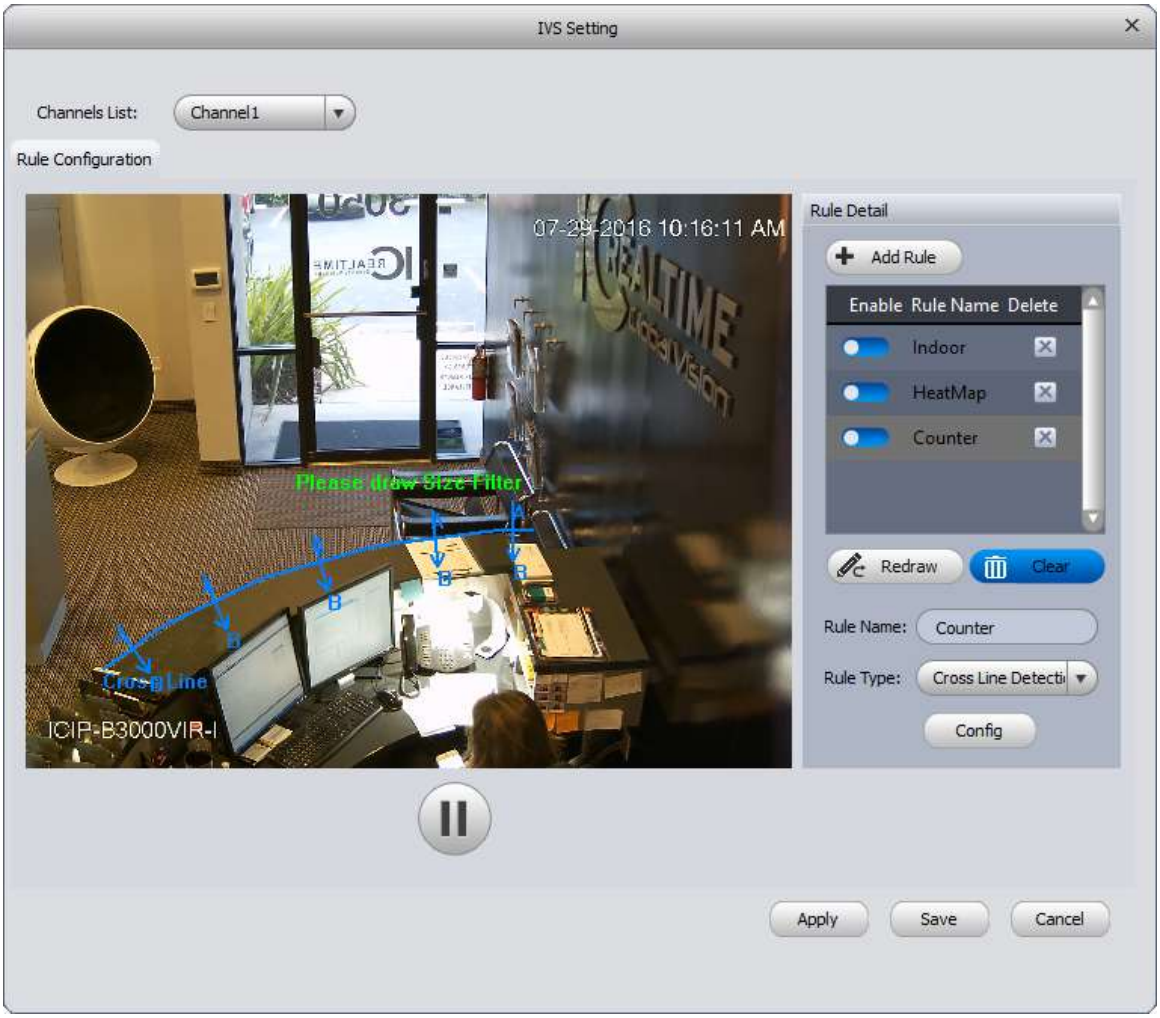


Figure 4-20

Step 9. Left-click anywhere in the frame to start the Size Filter drawing. When you drag your mouse, you set a box-shaped size filter, as in Figure 4-21.

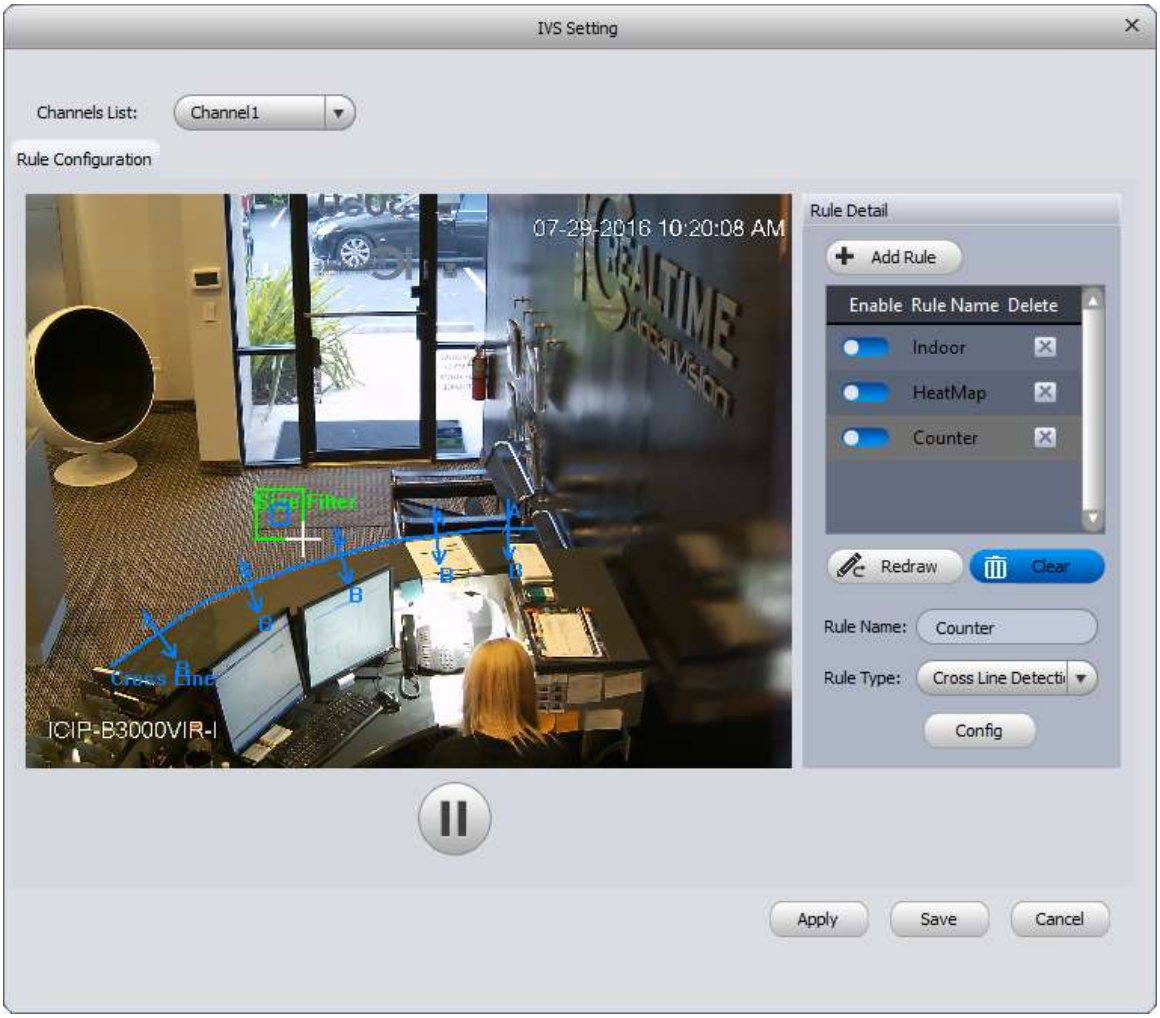


Figure 4-21

Step 10. When you have the filter size you want, left-click with your mouse again to set the Size Filter. You will see a **Draw Completed** message in the center of your video image when you are done, and you will see your rule and the size filter together on the screen, as shown in Figure 4-22.

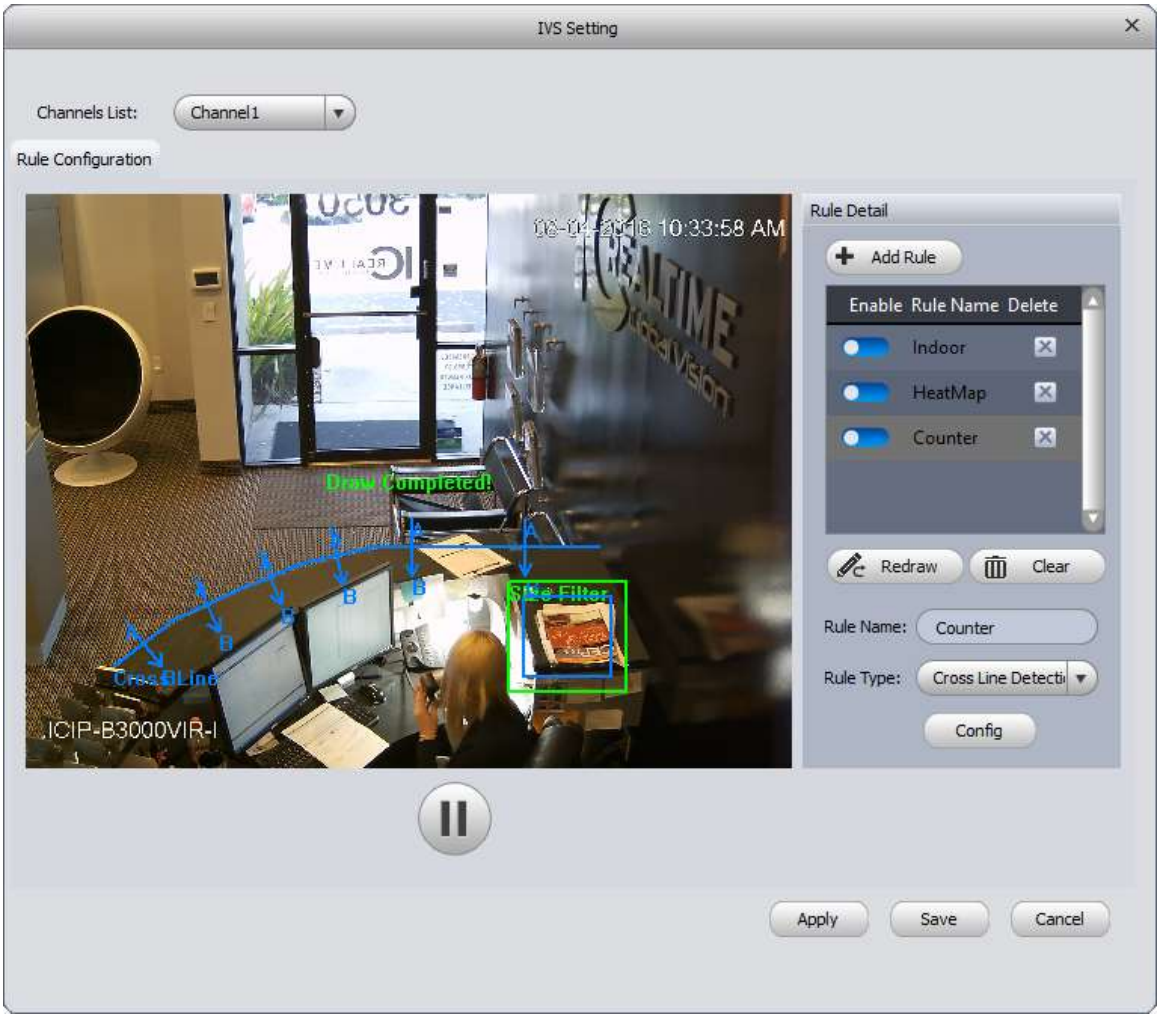


Figure 4-22

Step 11. Click to set the direction, schedule, and alarm settings for your rule. Figure 4-23 shows the Direction setup interface for your rule; Figure 4-24 shows the options available.

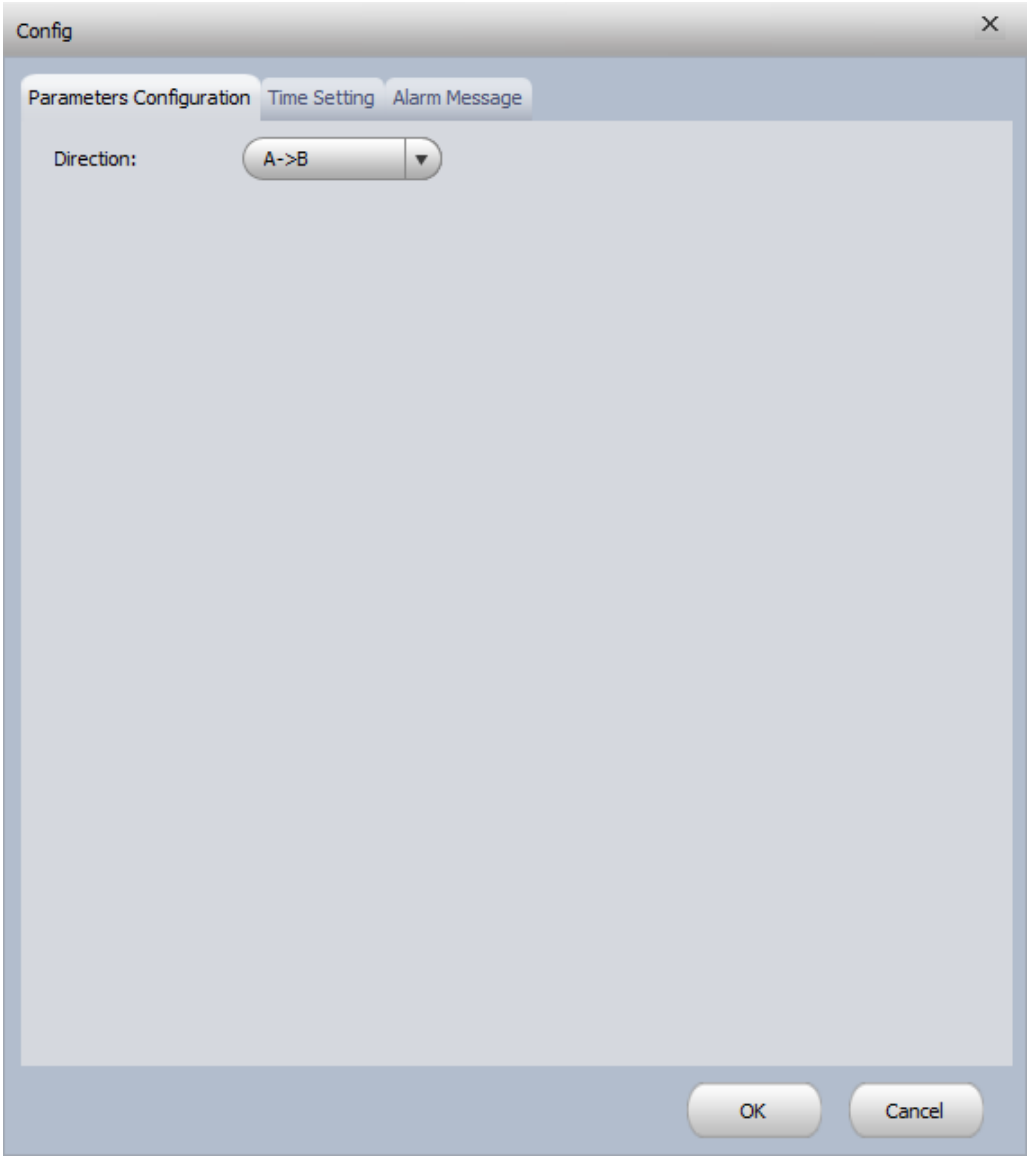


Figure 4-23

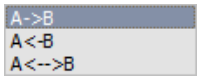


Figure 4-24

Step 12. Set a schedule for your rule by clicking on the **Time Setting** tab. You may also apply the same schedule to any other rules you have set up on the camera using the Copy Day, Copy Week, and Paste To .buttons. The **Time Setting** interface is shown in Figure 4-25.

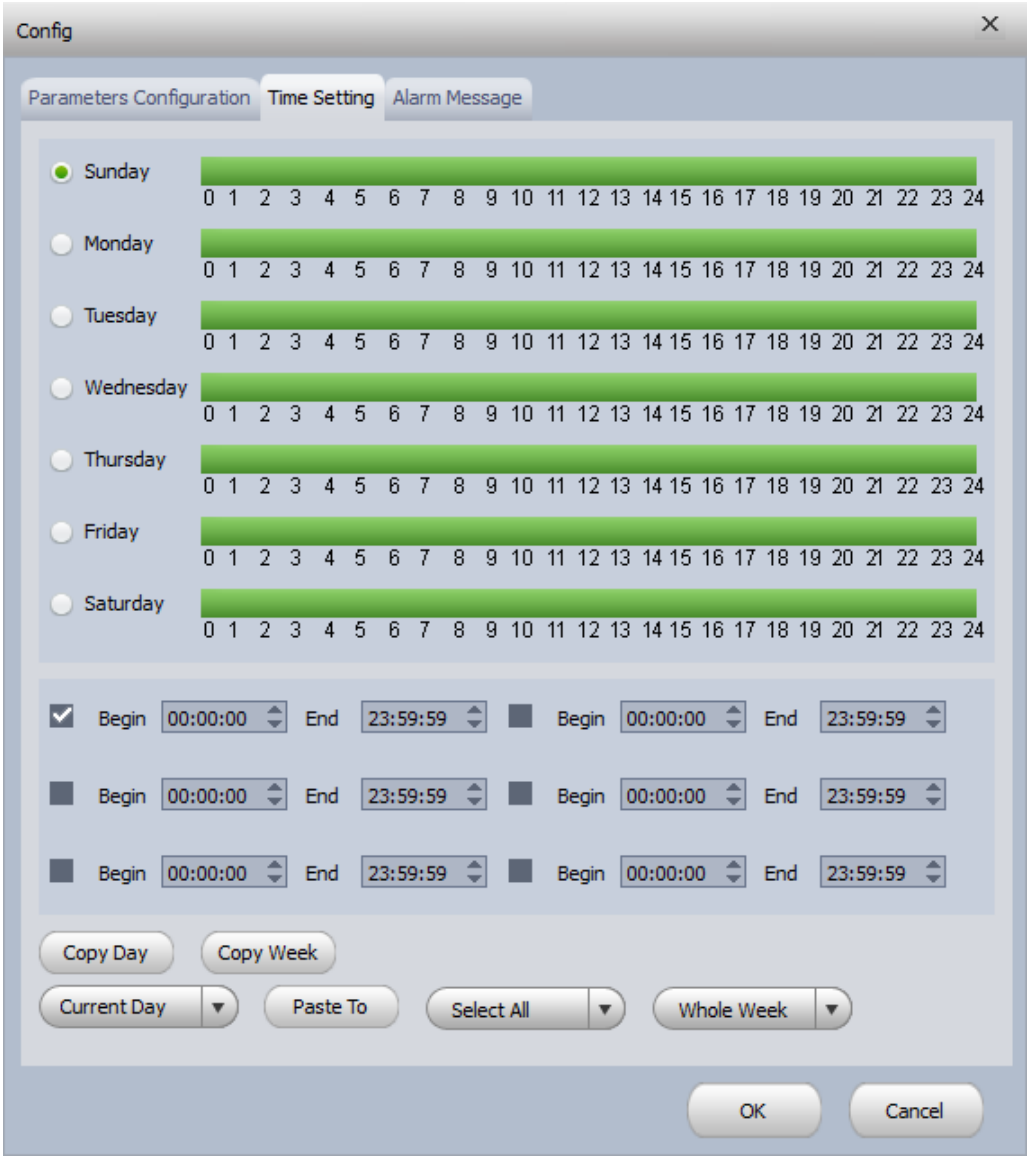


Figure 4-25

Step 13. In the **Alarm Message** tab, you can make the camera trigger an alarm output, start recording, and take a snapshot when an IVS rule's conditions are met. Figure 4-26 shows the options available in the **Alarm Message** tab.

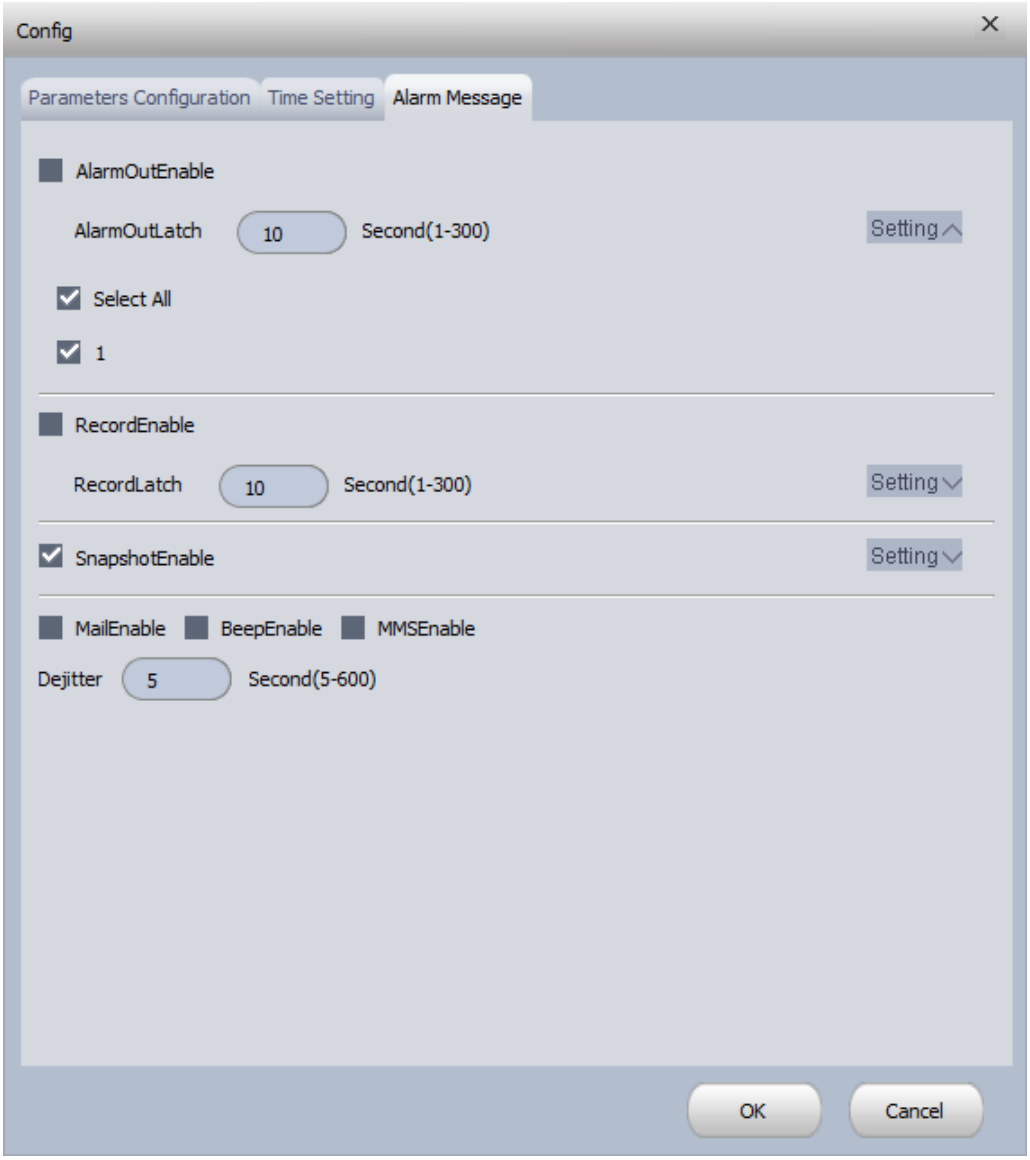


Figure 4-26

Step 14. Click the OK button when you are done setting your Config options to save your settings and return to the **IVS Setting** window.

- Click Apply to save your changes when you are done. Clicking Save will save your settings and close the **IVS Setting** window.
- Click Redraw to redraw your line/region..
- Click Clear. to clear the line/region and its size filter.

4.1.6 Smart Track

The **Smart Track** feature allows you to link a PTZ camera with a 360° Fisheye camera in the same area.

Step 1. In the **Liveview** window, right-click on an available 360° Fisheye camera, then select the **Smart Track Config** option. This will bring up the **Smart Track Config** window, as shown in Figure 4-27.

Figure 4-27

Step 2. Click the button to select the PTZ camera you want to link with your selected 360° Fisheye camera, as shown in Figure 4-28. Select your PTZ camera using the drop-down menu, then click the Save button.

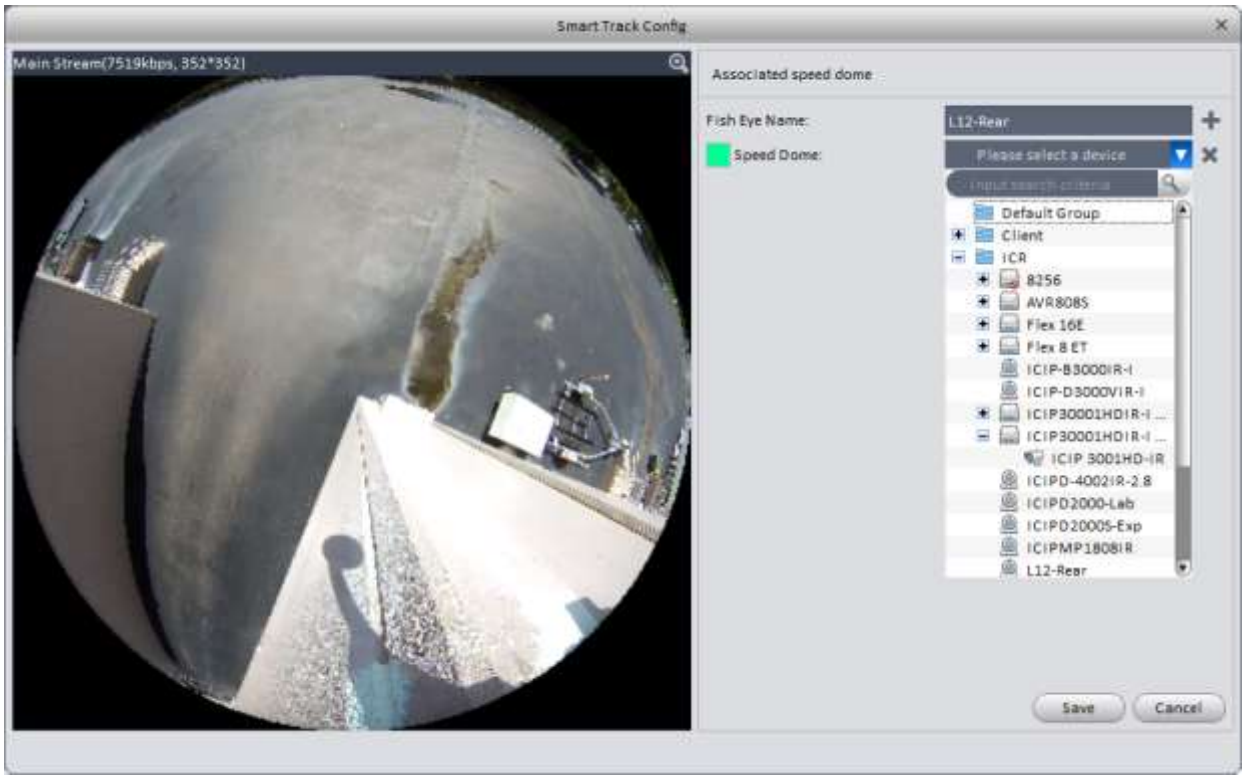


Figure 4-28

Step 3. Click the Add button to add your first reference point in the 360° Fisheye image on the left. You will see this icon: in the image, as shown in Figure 4-28. Left-click the icon and drag it to a reference point in the Fisheye camera image. Make sure the reference point you add can be seen by the PTZ camera. Once you have the icon placed correctly, use your mouse in the PTZ camera image to move the camera so the point selected on the left is as close to the center of the PTZ camera image. Click the button to link the PTZ camera location to the selected point. You will need to add at least 2 more points and PTZ locations in the window to make Smart Track work correctly. Figure 4-29 shows the cameras with 3 reference points saved.

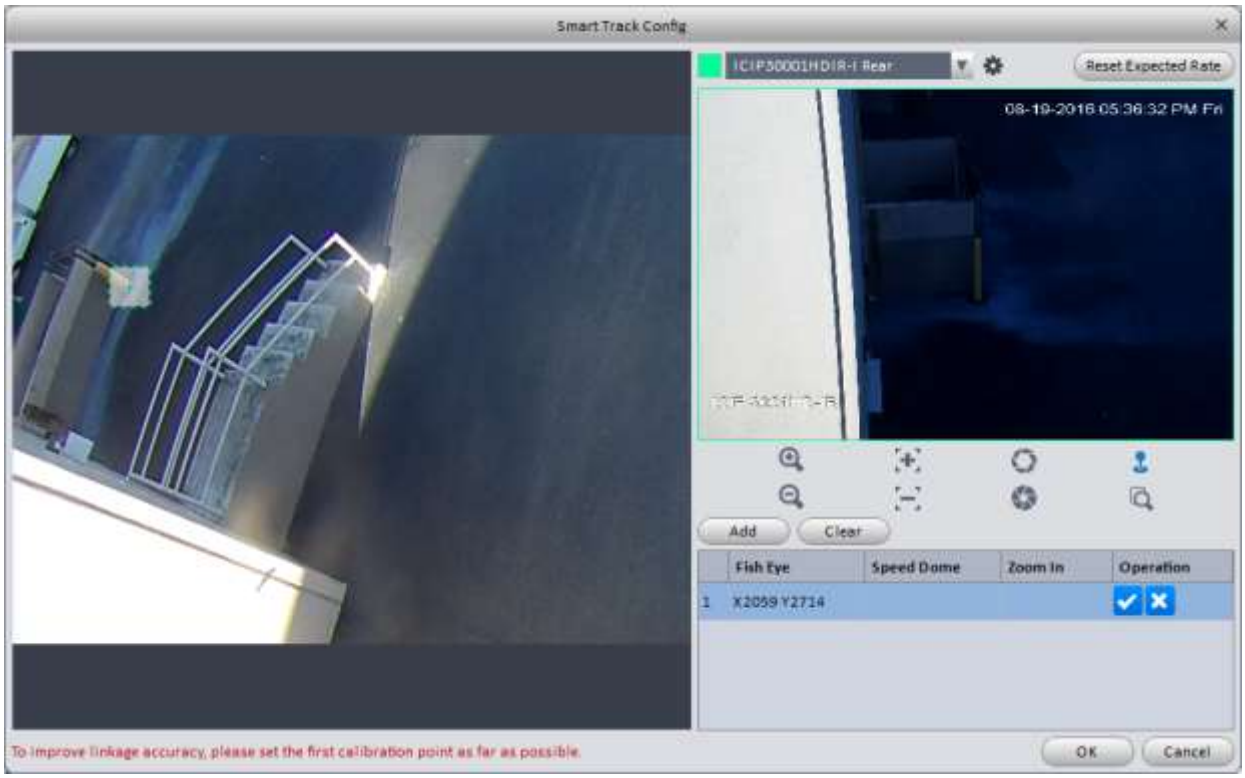


Figure 4-28

Figure 4-29

Step 4. When you have added at least 3 reference points, click the OK button to save the setup.

Step 5. Back in the Liveview window, right-click on the icon for your 360° camera and choose **Smart Track** from the menu, shown in Figure 4-30.

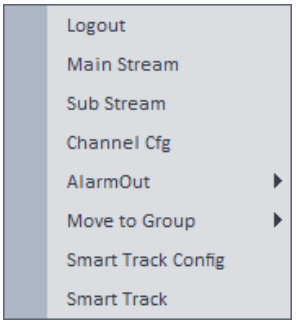


Figure 4-30

Step 6. In the **Smart Track** window, you will see your 360° camera on the left, and your PTZ camera will be on the right, as seen in Figure 4-31. When you left-click with your mouse in the 360° camera image, the PTZ camera will automatically move to cover that point. You also have the traditional PTZ control pad to the right of the PTZ image.

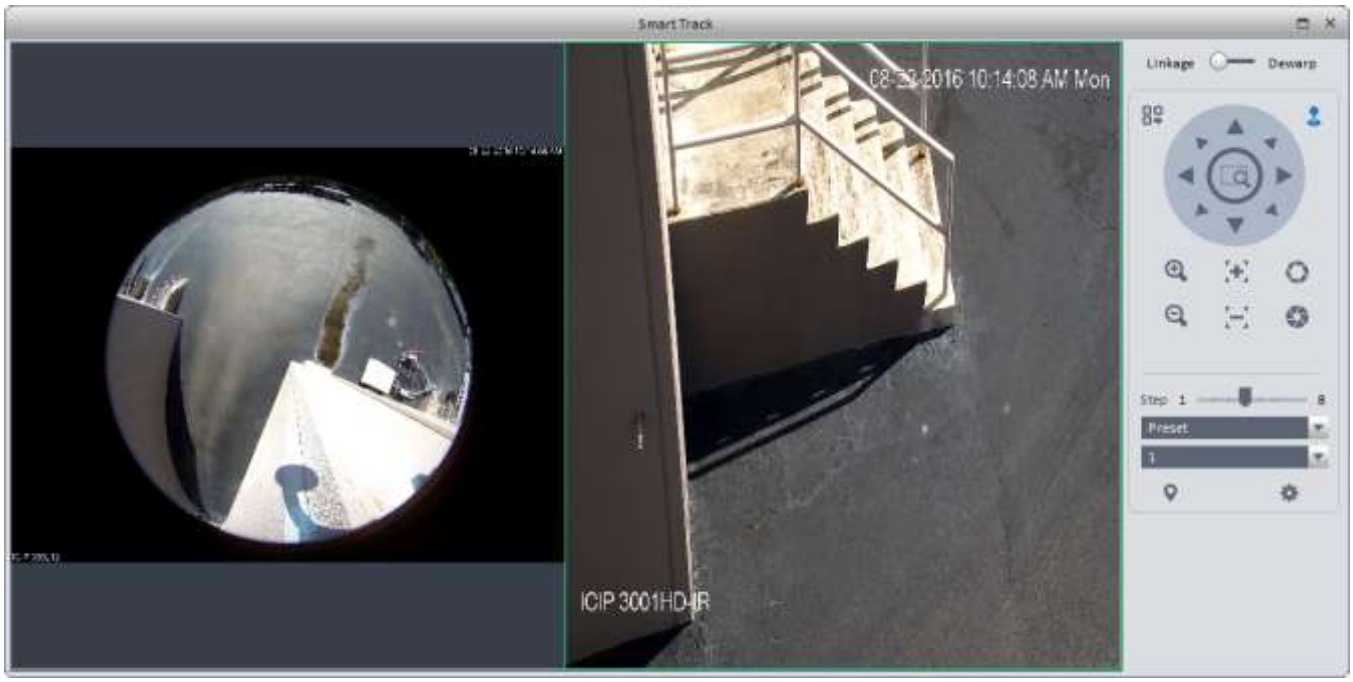


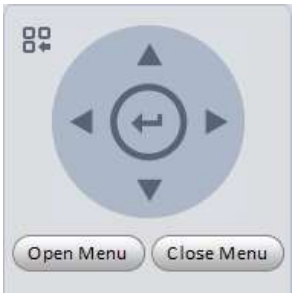
Figure 4-31

4.1.7 PTZ

PTZ controls appear below the Device List in the Liveview window when you have a PTZ camera in one of the video panes. The PTZ control module is shown in Figure 4-32.

Figure 4-32

Please refer to the table below for detailed information.

Item	Function
PTZ OSD menu	Click to open the PTZ OSD controls, shown in Figure 4-33.  Figure 4-33 Click the Open Menu button to open the camera's OSD menu (it is recommended to view the camera in a full-screen view when doing so). The 4 arrow buttons will navigate the onscreen cursor through the menu options. The button will enter the sub-menus. Click the Close Menu button to close the OSD when you are done.
Mouse simulator	Click the icon to enable the Mouse Simulator. When enabled, the icon will look like this: . Click and hold the left mouse button, then drag the cursor in the direction you want the camera to move. Releasing the left button will stop the camera movement.
Direction arrows	Click the arrow buttons to move the camera in the corresponding direction.
Zoom	: Click and hold to make the camera zoom in. : Click and hold to make the camera zoom out.
Focus	and buttons will adjust your focus level. By default, the camera will auto-focus whenever it is moved.
Iris	: Opens the iris. : Closes the iris.
Step	Adjusts how quickly the camera moves. 1 is the slowest.
Preset	Cameras may have up to 128 presets stored internally. Selecting a preset number and clicking the button will make the camera go to that preset. To save a preset location, move the camera where you want it, select the preset number, and click the button.
Tour	A tour will make the camera visit several preset locations in a sequence. It will pause on each preset for 10 seconds by default. Click the button to start a tour. Click the button to create a tour.
Pan	Clicking the button will make the camera continuously pan 360° counter-clockwise. To stop the auto-pan, click the button.

Item	Function
Scan	The camera will pan continuously between 2 points. : sets the left limit for the scan : sets the right limit for the scan : starts the pan once it is saved
Pattern	The camera can memorize dome operation such as pan, tilt, and zoom to repeat.
Aux	Used to set Aux positioning..

4.1.7.1 Preset

Presets record the position, zoom, focus, and iris settings of the camera. Most PTZ cameras allow you to set up to 128 Presets.

Preset setup

1) Select **Preset** from the PTZ Function drop-down menu, as seen in Figure 4-33.

Figure 4-33

2) Click the button, which brings up the Preset Setup menu, as shown in Figure 4-34.

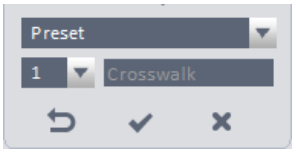


Figure 4-34

3) Use the camera controls to move the camera to the correct location, and set the desired zoom level. The auto-focus will keep the scene in focus.
4) Select the desired number for your preset from the drop-down list, enter a name (this is optional), and click the button to save your preset.
5) Click the button to return to the previous menu. Clicking the button will delete the selected preset.

Goto Preset

To move your camera to an existing preset, select the corresponding preset number from the drop-down menu. Click the button, and the camera will move to the preset location.

4.1.7.2 Tour

A tour will make your camera move among several presets, with a pause at each location.

Important

You MUST have at least 2 presets saved in the camera before you setup a tour.

Tour setup

1) Select **Tour** from the PTZ Function drop-down menu, then click the icon. The Tour List window will appear, as shown in Figure 4-35.

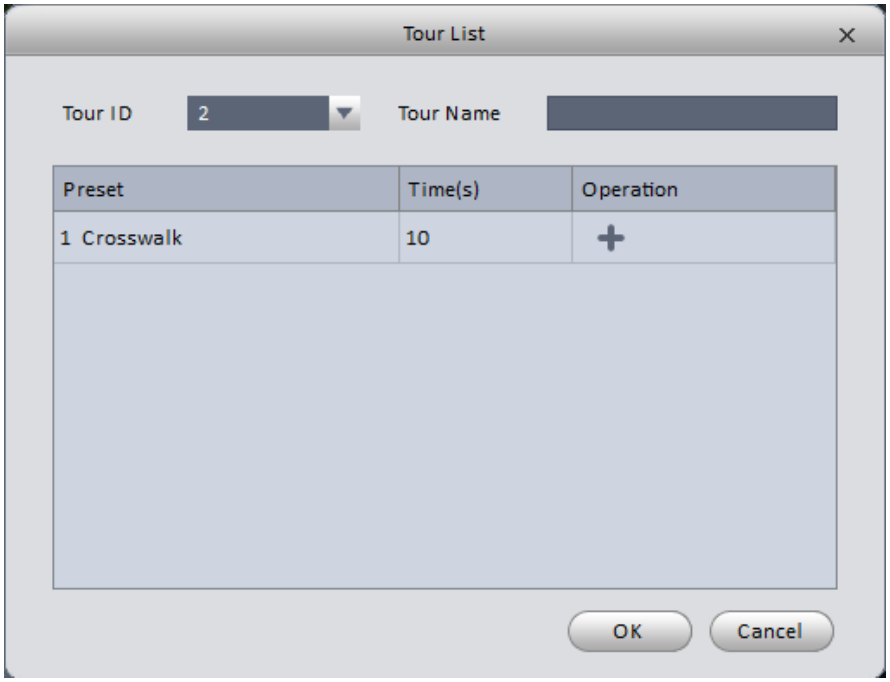


Figure 4-35

2) Select the Tour ID number for your tour. PTZ cameras can have up to 8 tours saved in their memory. You may also type a name for your tour in the box.
3) The software will automatically add Preset 1 as the first stop for your tour. Double-clicking in the Preset field allows you to select any of the presets from a drop-down menu. Double-clicking in the Time field allows you to edit the stay time (in seconds) for each stop.
4) Click the button to add another stop to your tour. Edit the fields for each stop as desired.
5) Once you have all your presets added to the tour, click the OK button to save it in the camera's memory.
6) Select the Tour number from the drop-down list, then click the button to start the tour.

4.1.7.3 Pan

Pan will make your camera continuously spin 360°, counter-clockwise.

1) Select **Pan** from the PTZ Function drop-down menu.
2) Click the button to start the Pan. The camera will continuously spin 360° counter-clockwise.

4.1.7.4 Scan

A scan will make your camera pan horizontally between 2 points, with a slight pause at each point.

1) Select **Scan** from the PTZ Function drop-down menu.

2) Move the PTZ camera to the position where you want the scan to begin. Click the button to set the Left limit of your scan.

3) Move the camera to the position you want for the end of the scan, then click the button to set the Right Limit for your Scan.

4) Click the button to start the scan. The camera will pan horizontally between the 2 points. It will not pause at either location.

4.1.7.5 Pattern

A pattern saves all movements and adjustments made to the camera, then repeats them in a loop.

1) Select **Pattern** from the PTZ Function drop-down menu.
2) Select the Pattern Number from the drop-down menu below the PTZ Function. Cameras may store up to 5 patterns.
3) Click the button to start recording your pattern. The camera image will show a large white dot in the bottom center of the image, as well as a percentage indicator, as shown in Figure 4-36. Moving the camera and adjusting the zoom level will make the percentage decrease. When it gets to 0%, the camera will not be able to record any further movements or adjustments.

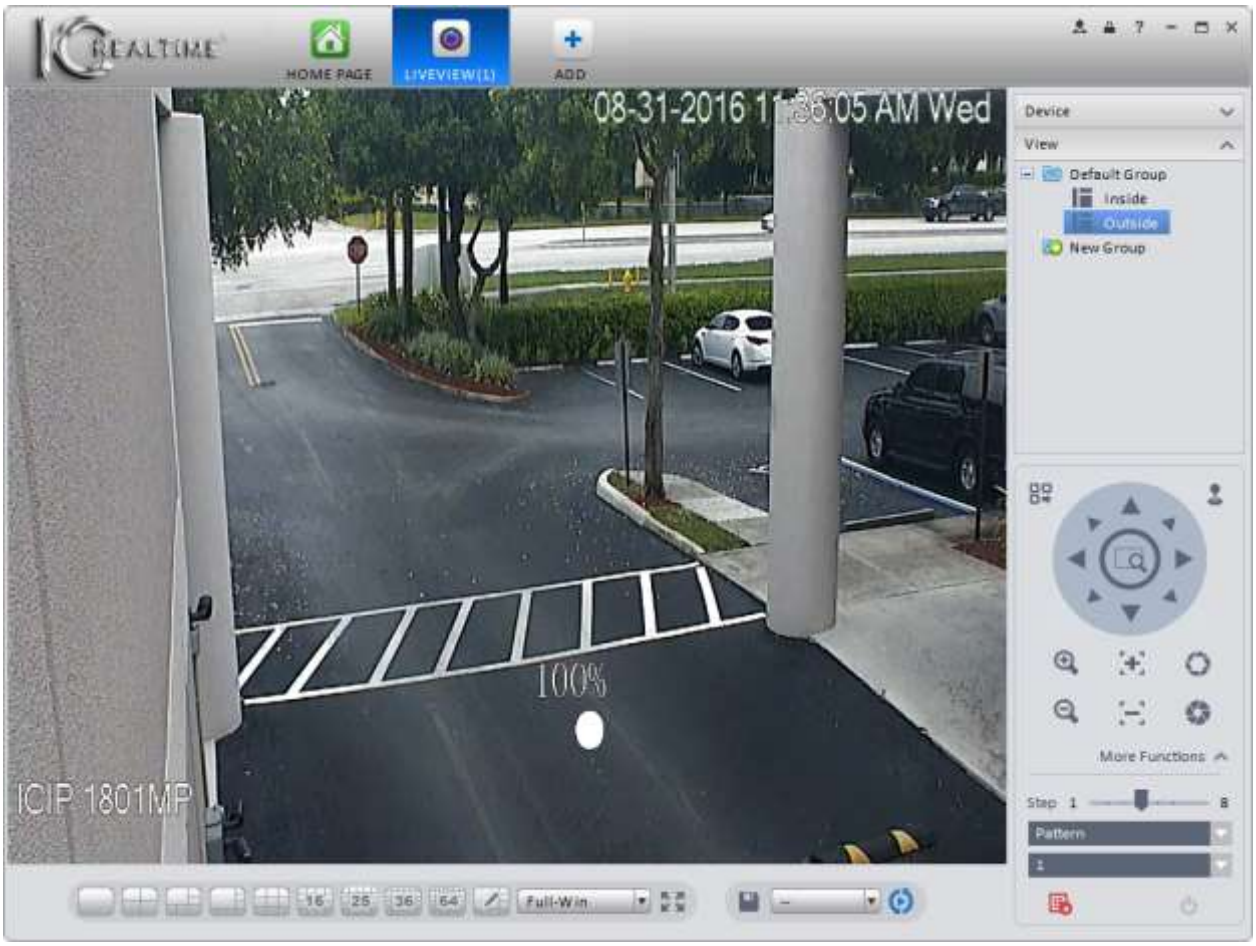


Figure 4-36

4) Click the to stop the pattern recording.

5) To start the pattern running, select the pattern number and click the button.

4.1.7.6 Aux

Some 3rd-party PTZ cameras have an Aux feature, which usually allows you to bring up the OSD menu.

1) Select **Aux** from the PTZ Function drop-down menu.
2) Enter a number between 1 and 255 in the Aux Order box.
3) Click the button to send the Aux command to the camera. If the camera does nothing, it does not support the Aux function.

4.2 Playback

After you recorded a file, you can go to this interface to playback.

On the homepage, click in the Basic pane, you can go to the playback interface. See Figure 4-37.

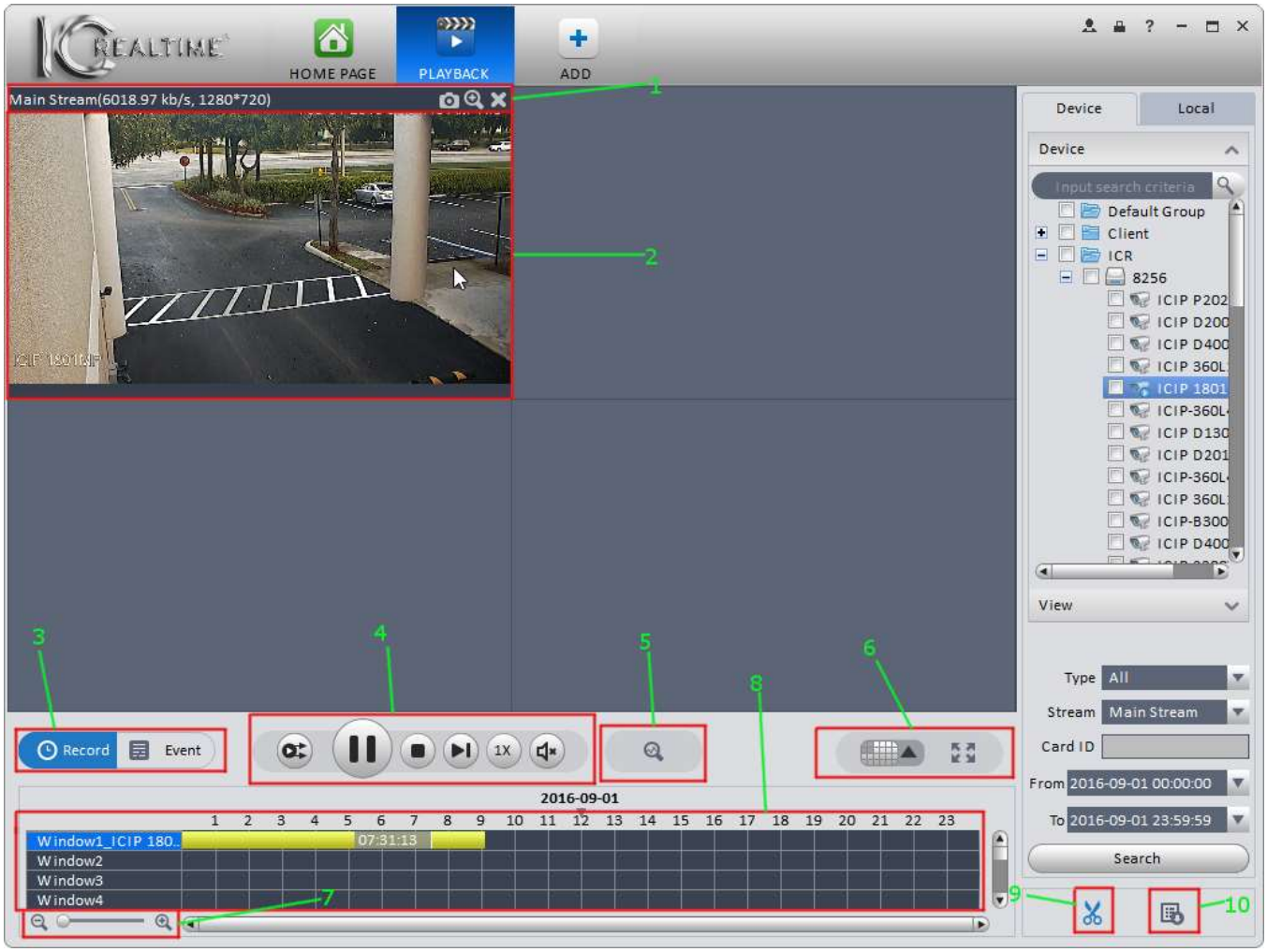


Figure 4-37

Please refer to the table below for detailed information.

SN	Item	Function
1	Shortcut Operation Icons	Shortcut buttons for certain functions. : Saves a snapshot of the image. : Enables Digital Zoom. When enabled, left-click in the image and drag the red box to define the digital zoom area. The image will be magnified by the software. To return to the normal view, click the button. : Closes the video pane.
2	Playback pane	Shows the video from a single camera.
3	Playback Mode	Record: Navigate playback by clicking on the timeline. Allows simultaneous playback of multiple cameras. Event: Navigate playback using a list of events. You may only view one camera at a time in this mode.
4	Playback Toolbar	These buttons control enable various features when viewing recorded footage. : When viewing multiple cameras, this syncs playback so all panes are showing footage from the same time. : Pauses playback in the current pane, or pauses all panes when using Sync. : Starts playback again after a pause in the selected pane. When using Sync, it will start playback for all the windows. : Stops playback in the current pane, or stops all playback panes when using Sync. : Frame-by-frame forward. 1X: Control playback speed; from 1/8 to 8X. : Enables the audio portion. Clicking this button brings up the following menu: Mute Click the check box next to Mute to turn on the audio. Moving the slider up increases the volume.
5	Smart Search	: Enable Smart Search. Smart Search allows you to designate an area in the image and search for motion events in that area.

SN	Item	Function
6	Window Split options	: Allows you to choose from several different window split presets, or create your own custom split configuration. The software currently supports viewing up to 36 panes in Playback. : Makes the current split go to Full Screen mode. Press the **Esc** key on your keyboard to go back to the normal view.
7	Timeline Zoom	Allows you to zoom in and out on your timeline.
8	Timeline	In **Record** mode, click anywhere on the timeline to begin video playback. Each camera pane will have its own timeline. Timelines are color-coded for different types of recording as follows: **Green**: Regular recording **Yellow**: Motion Detect recording **Red**: Alarm recording
9	Scissors	Used to prepare a video clip for download using the timeline in **Record** mode.
10	Export	Used to access the Export window.

4.2.1 Playback Device Record

The steps below will guide you through searching and playing back recorded video.

1) From the **Home Page** screen, click on the **Playback** tile.
2) Select one or more cameras using the Device List to the right of the video panes, as shown in Figure 4-39.
3) Select your Record Type, Stream, Start Time/Date, and End Time/Date using the drop-down menus. Options for Record Type are shown below in Figure 4-38.

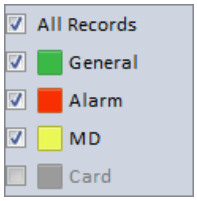


Figure 4-38

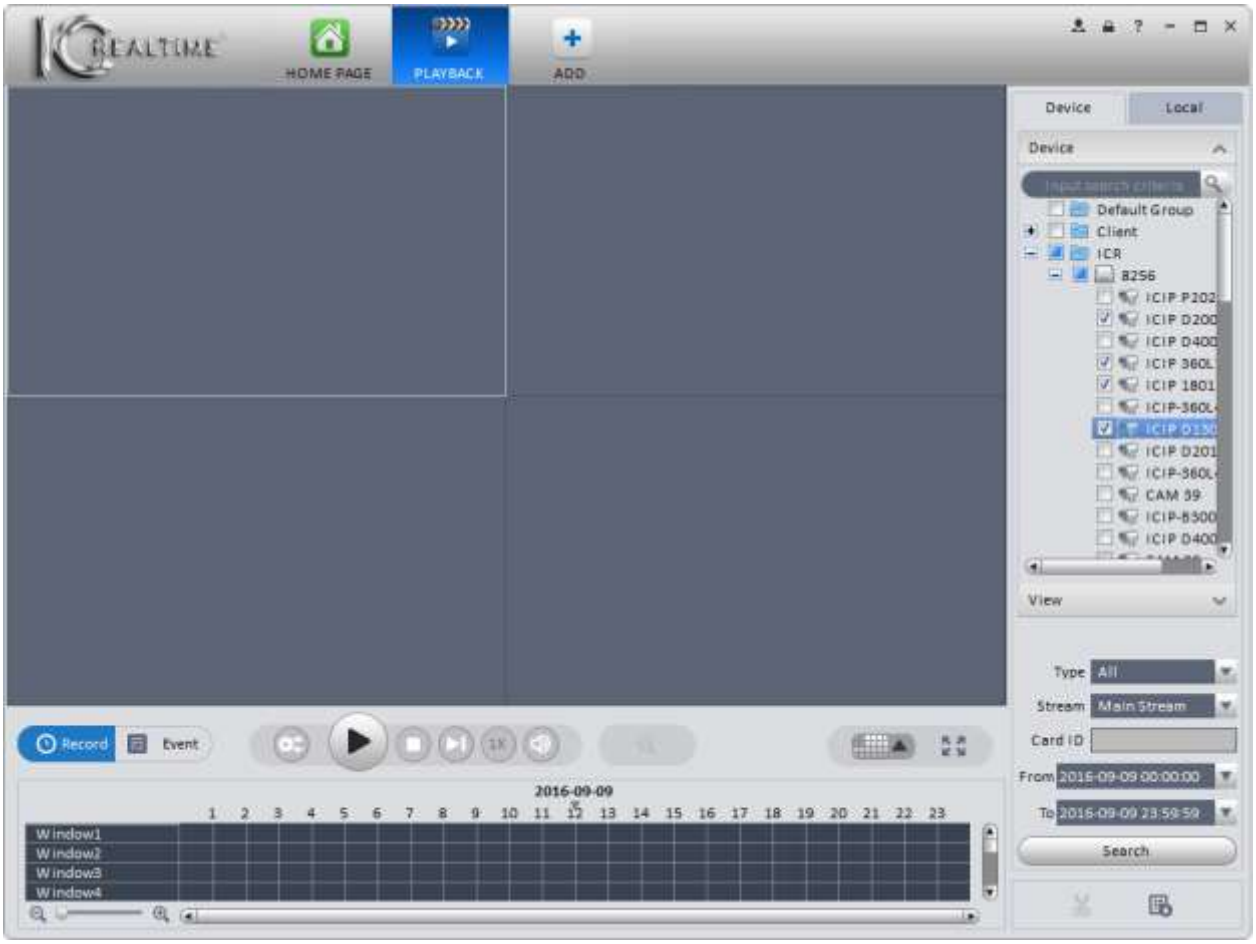


Figure 4-39

4) Click the Search button to initiate the search for footage. When the software is done searching, you will see colored blocks on the timeline for each of the cameras, as shown in Figure 4-40.

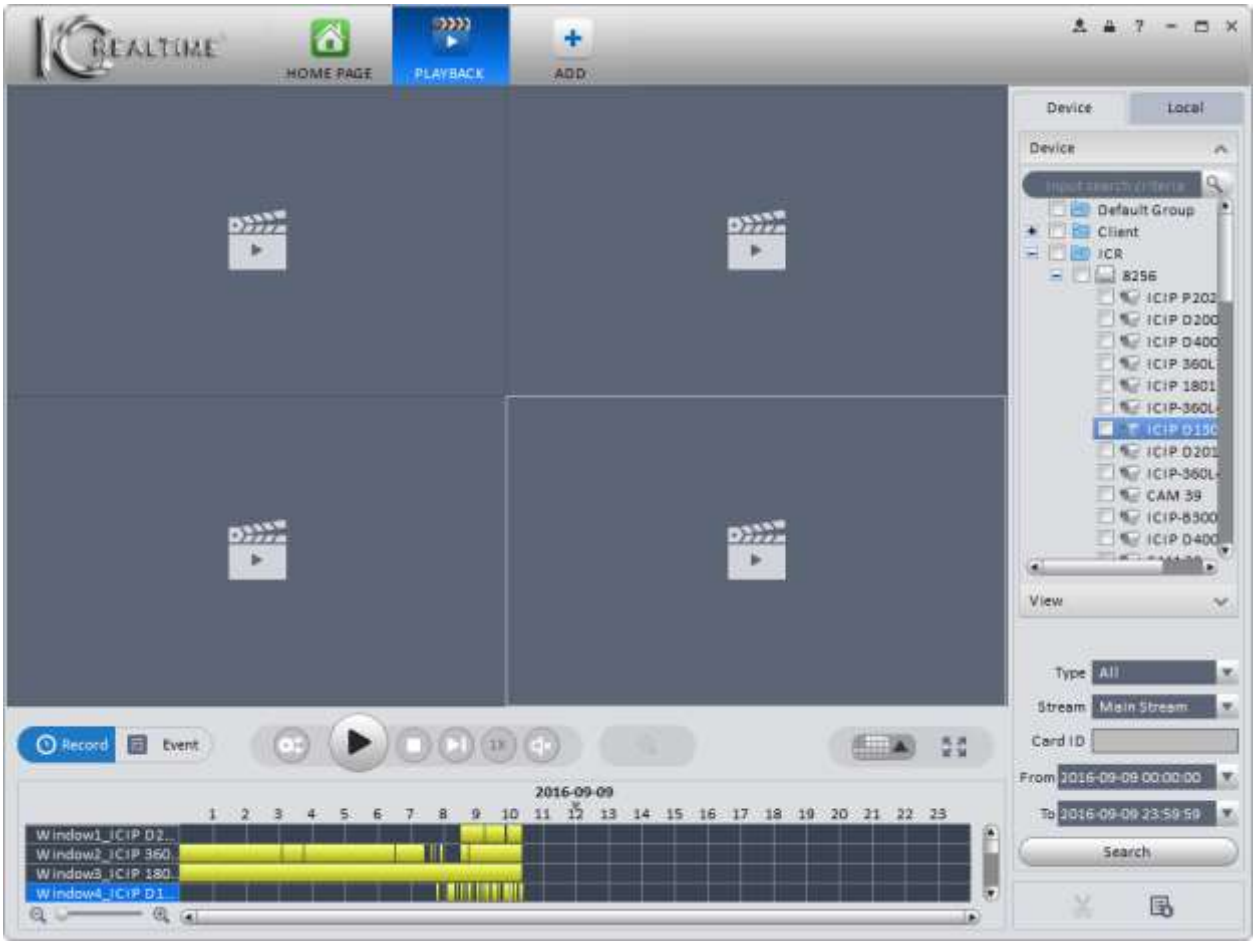


Figure 4-40

- Green blocks are **Regular** recordings.
- Yellow blocks are **Motion Detection** recordings.
- Red blocks are **Alarm** recordings.

5) Click to begin playback from the earliest record in the selected pane.

6) Click to initiate a Smart Search. The camera pane will automatically go full-screen, and you will see a yellow grid over the image, as in Figure 4-41.

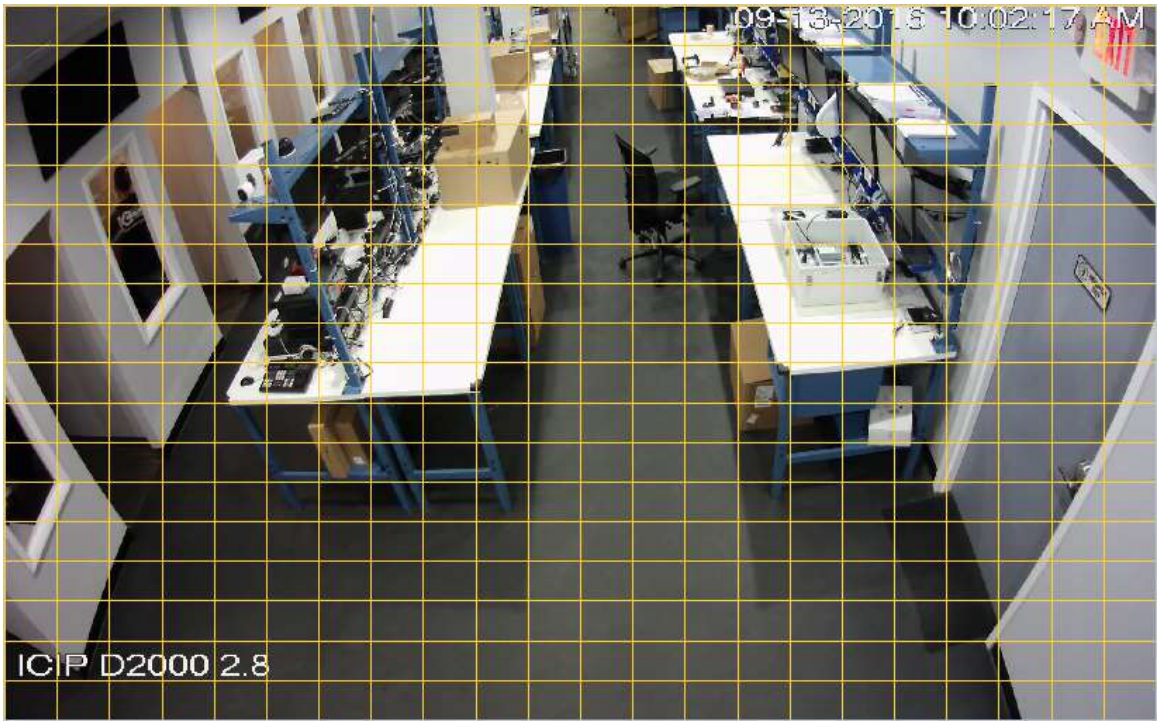


Figure 4-41

7) Left-click and drag to define your smart search area within the image, as shown in Figure 4-42. Once your area is selected, the area will turn yellow, as shown in Figure 4-43.

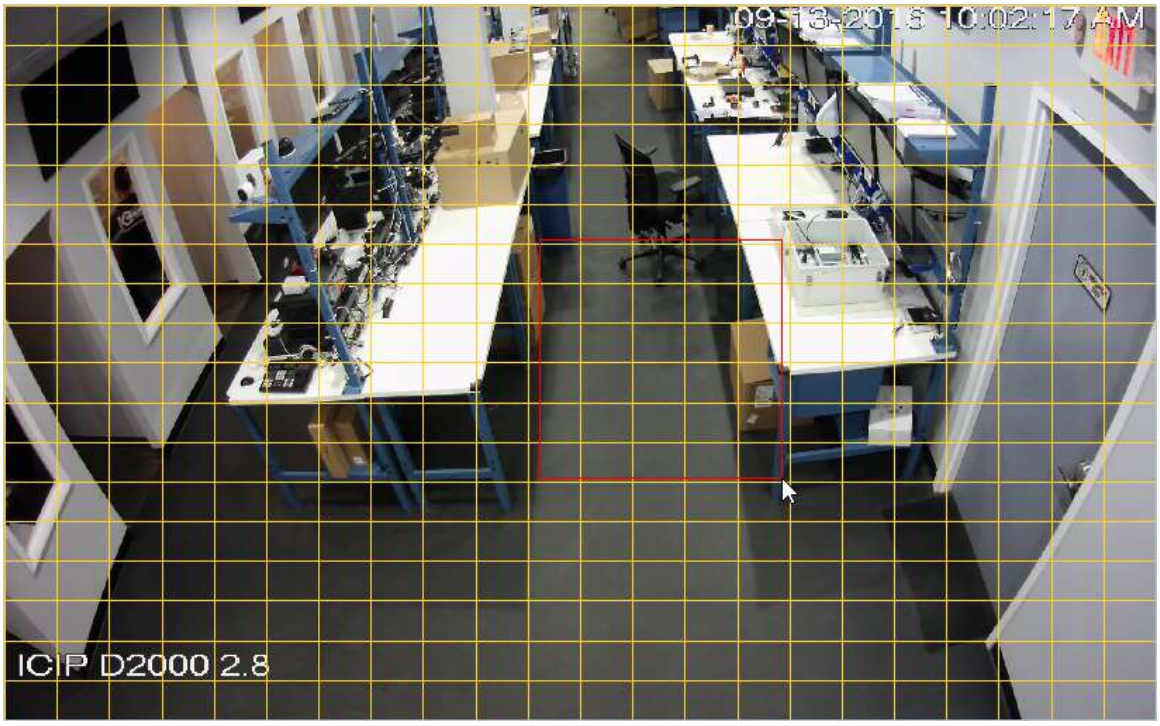


Figure 4-42

Figure 4-43

8) Click the button once more to initiate the search. The timeline will turn purple where MD events are triggered in your Smart Search area, as shown in Figure 4-44.

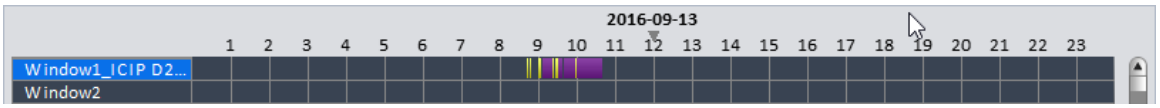


Figure 4-44

9) Click on any of the purple stripes to start playing the Smart Search video.

: Redraw your Smart Search area.

: Return to a regular search.

10) Click Event to search for video using the Event log.

Note: If you cannot find any recorded video using the **Record** mode, use the **Event** mode instead. DVRs installed prior to 2014 may not work using the **Record** mode. **Event** mode plays only 1 camera at a time.

11) You will see a list of events for the camera below the video pane, as shown in Figure 4-45.

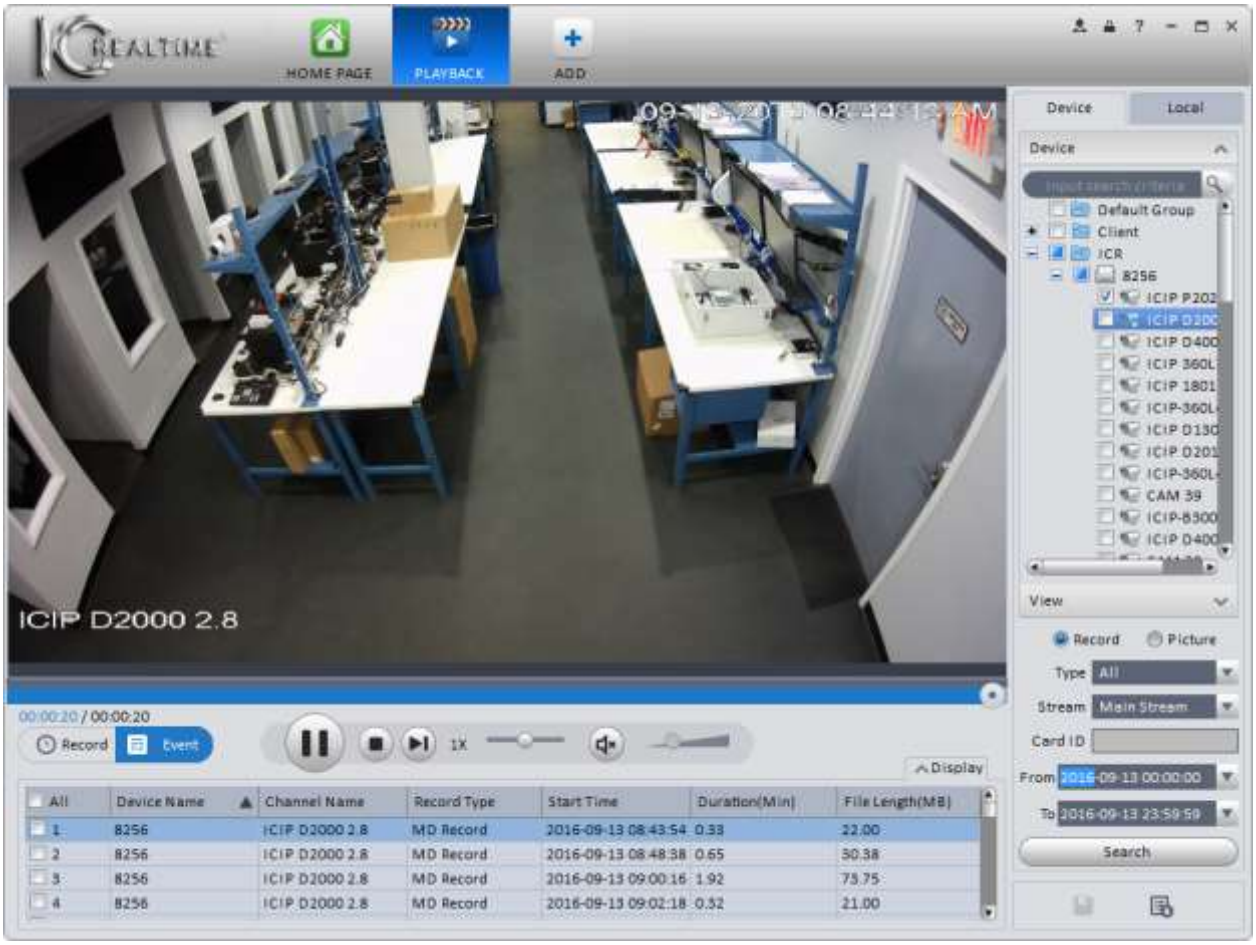


Figure 4-45

12) Click the button to start playing back, starting with the first event listed. You may also play any event by double-clicking it in the list.

13) To search for **Snapshots** stored on the device, click the radio button next to Picture. Select your start time and end time, then click the Search button to begin the search query. The **Picture** search interface is shown below in Figure 4-46.

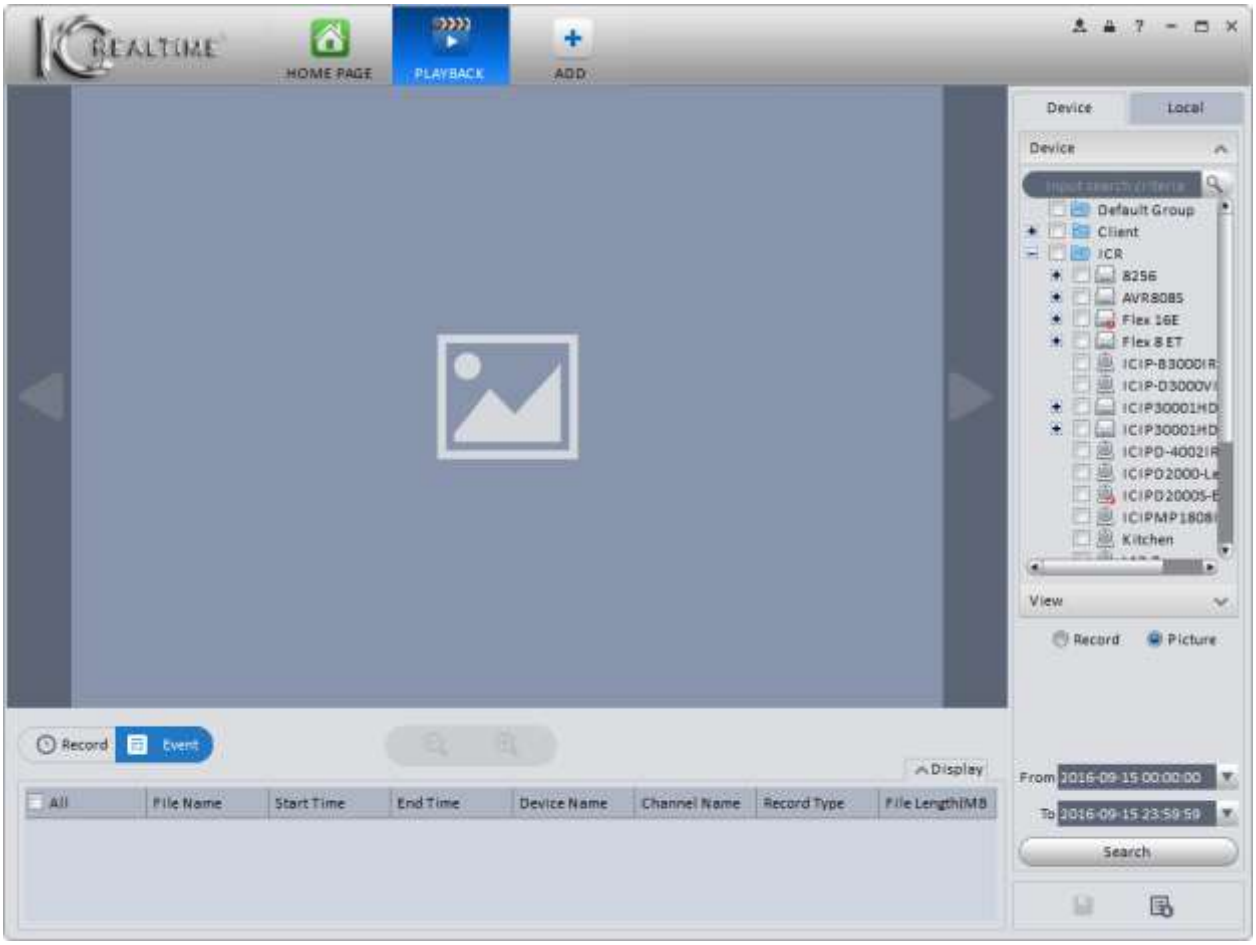


Figure 4-46

14) Once the Picture search is complete, you will see a list of snapshots available to view, as shown in Figure 4-47.

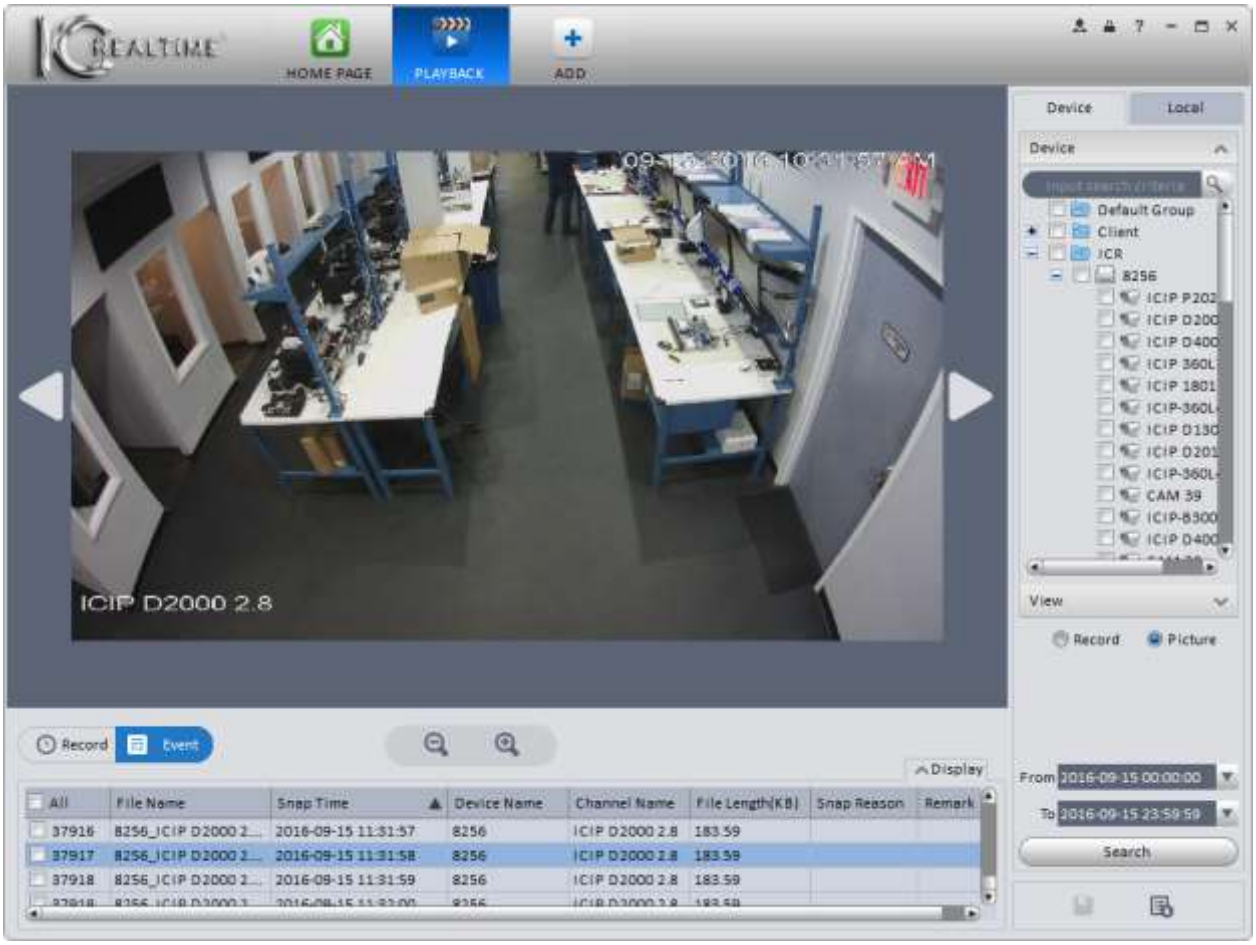


Figure 4-47

15) Click on a snapshot in the list to view it. Click the button to view the next snapshot in the list. Click the button to view the previous snapshot. The and buttons allow you to digitally zoom out and in on the image.

16) You may also search cameras from any saved views you have created. Click on **View** at the bottom of your device list, then enter your search criteria after selecting the Saved View from the list (see steps 3 & 4 above). The View search window is shown below, in Figure 4-48.

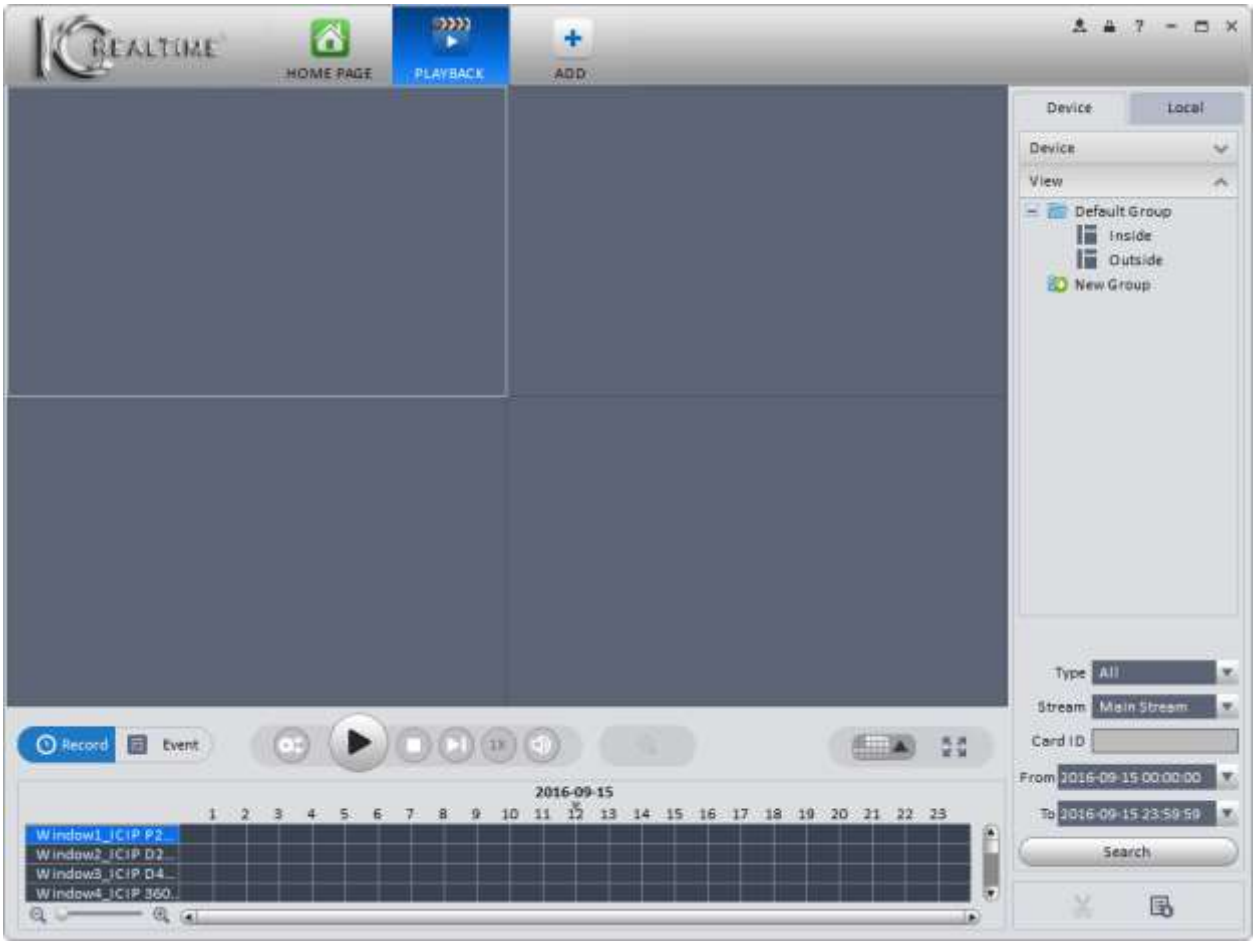


Figure 4-48

4.2.2 Playback Local Record

This feature is used to search for footage recorded to your computer using **PC-NVR**.

1) Click on the **Local** tab above the device list to search footage recorded to your computer using the **PC-NVR** software. The interface window is shown below in Figure 4-49.

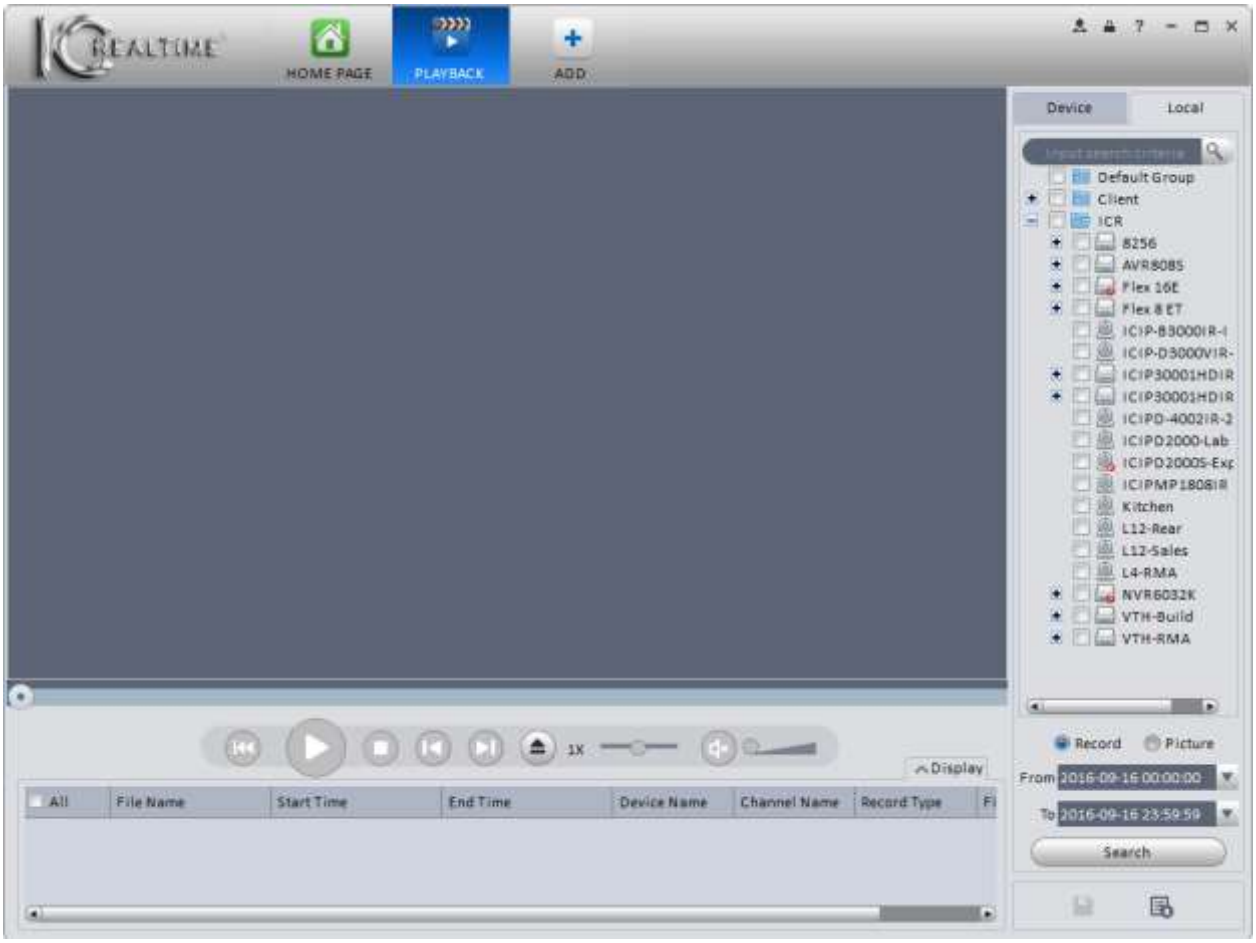


Figure 4-49

2) Select a channel or channels in the device list, then select the search criteria below. Click the Search button to begin the search.

3) Recorded footage will show up below the playback controls in a list format, similar to **Event** mode.

4) To playback downloaded footage on your computer, click the button to bring up the Open File window, as shown below in Figure 4-50.

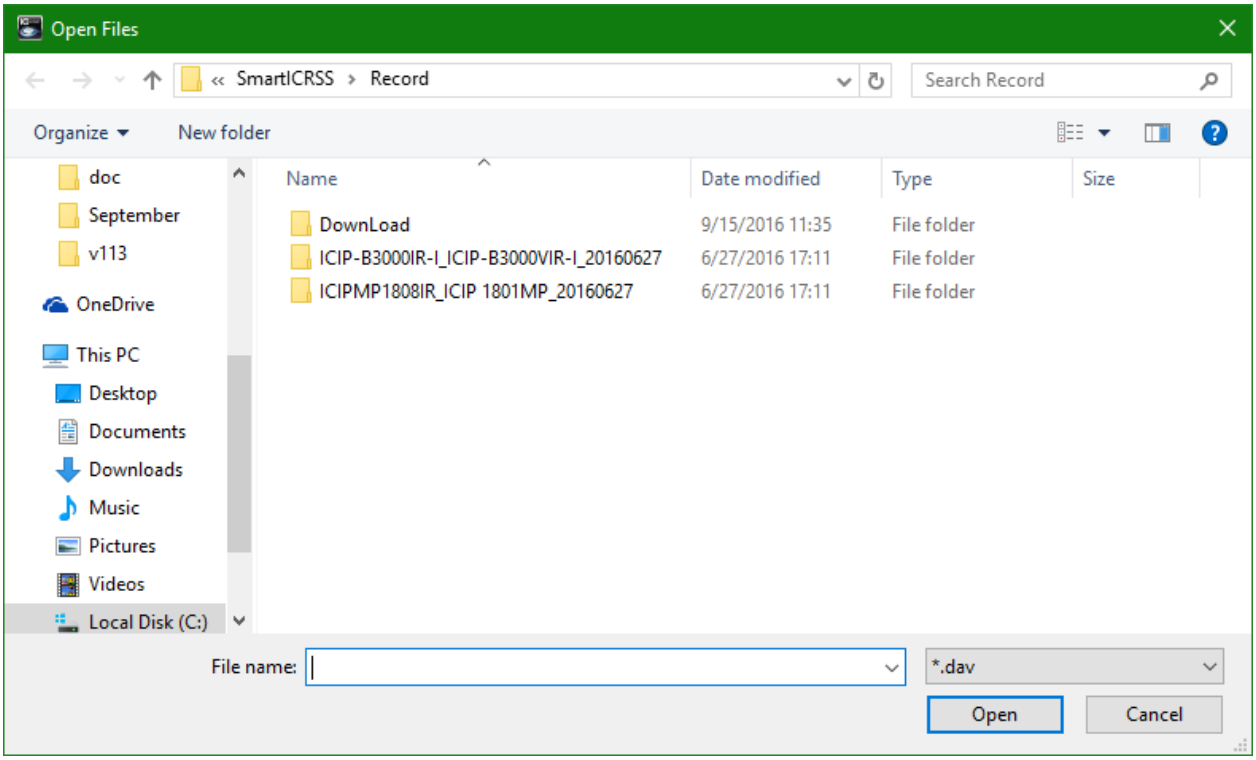


Figure 4-50

5) Locate the footage you want to view, and double-click the file icon (or select the file and click the Open button to begin playing the video.

Please refer to the table below for a description of the playback buttons in this interface.

Item	Function
	Starts the video playback from the beginning.
	Starts playback when video is paused.
	Pauses the video
	Stops the video playback.
	Rewinds the video frame-by-frame.
	Advances the video frame-by-frame.
1X	Use the slider button to change the playback speed, from 1/8 to 8X.
	Enables audio.
	Disables audio.
	Volume scale for audio playback.

4.2.3 Export

Footage can be exported (downloaded) in either **Record** mode or **Event** mode.

Record Mode

1) While in **Record** mode, click on the camera's timeline to begin playback. Click the button to set the start time for your clip.

2) Click on your timeline again where you want the clip to stop, then click the button once more to set the end time and bring up the **Export Setup** window, as shown in Figure 4-51 below. If you leave the Export Smart Player option checked, a Lite version of the **Smart ICRSS Player** software will be downloaded along with the footage. The full-featured version of the Player software for Windows may be downloaded here; and the Mac OS version may be downloaded here.

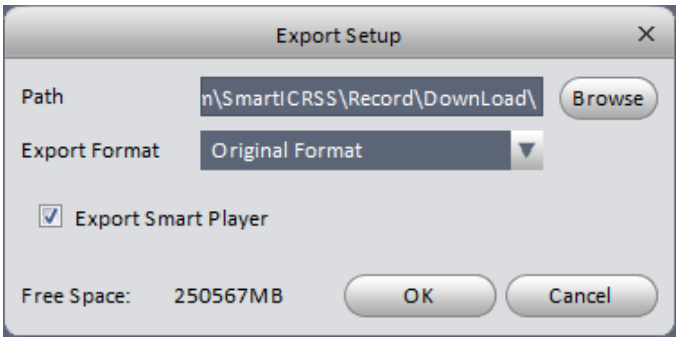


Figure 4-51

3) Select the save location for your file and the Export Format, then click OK to start the download. The Export window will pop up, showing a progress bar detailing the download process, as shown in Figure 4-52.

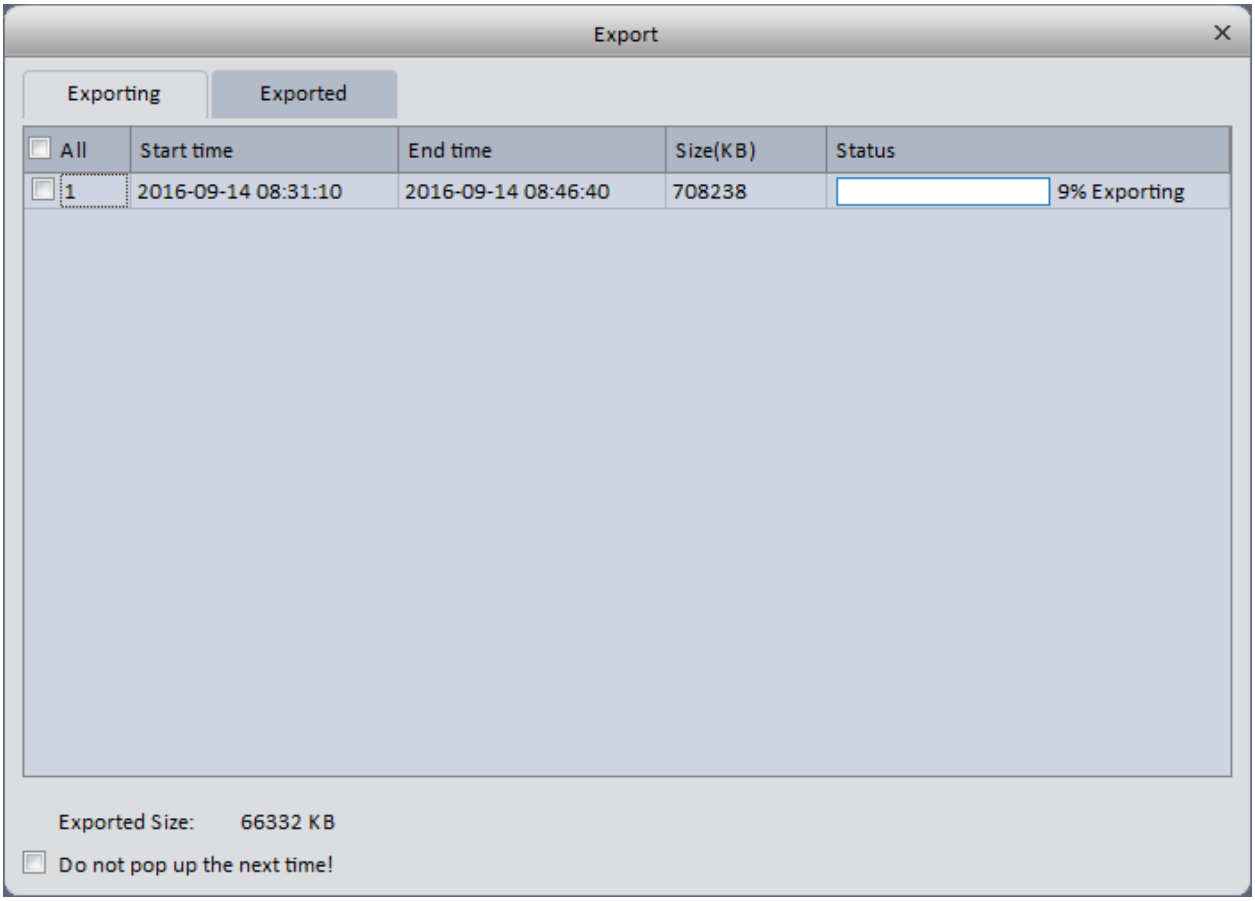


Figure 4-52

4) When the download finishes, it will show up under the **Exported** tab in the Export window.

Event Mode

1) While in Event Mode, select the files you want to download by clicking the boxes next to the file in the list below the playback window. An example is shown below, in Figure 4-53.

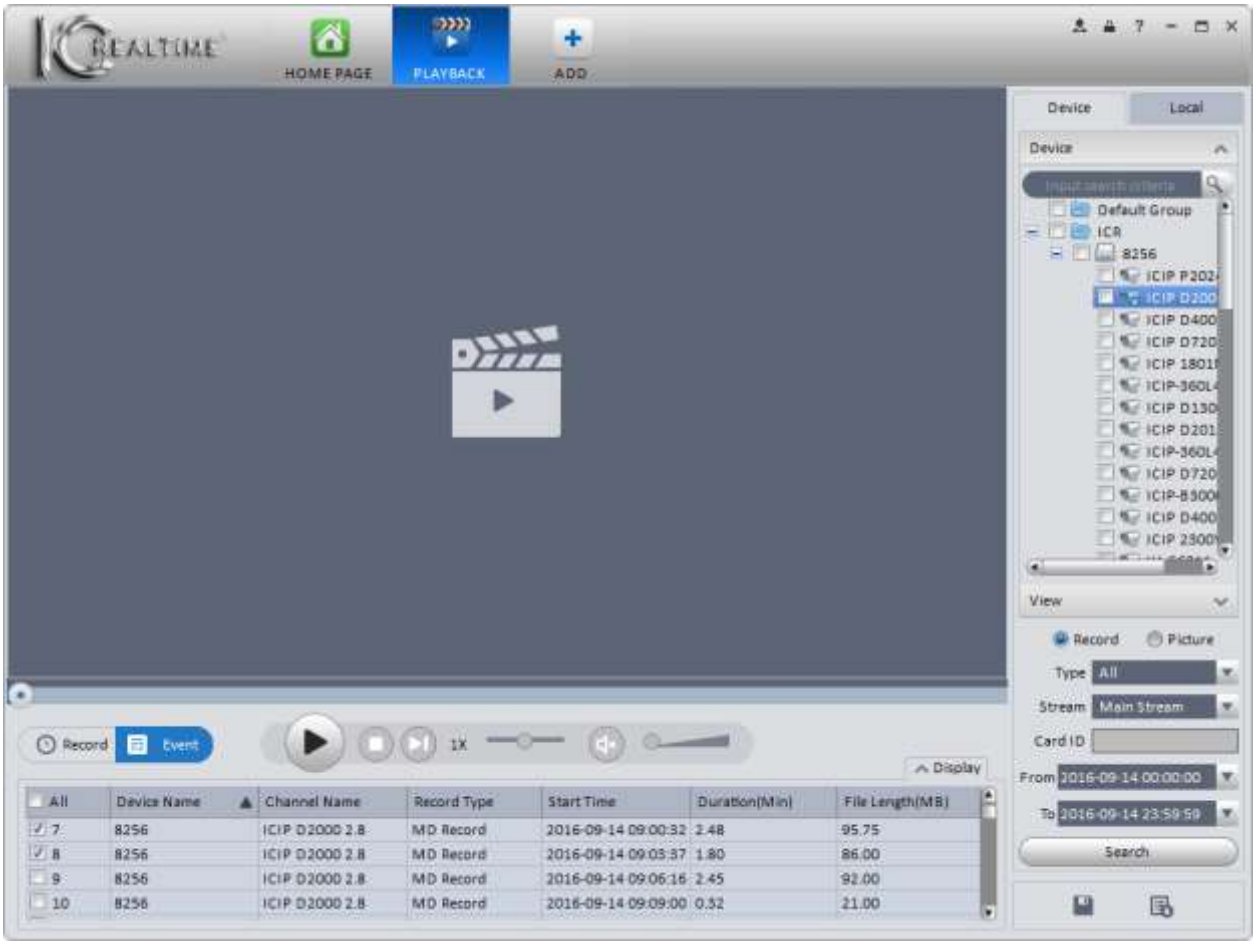


Figure 4-53

2) Once you have selected all the files, click the button to begin downloading the files. Select your options in the Export Setup window, then the Export window will pop up showing the download progress.

4.2.4 Fisheye Playback

Video footage from 360° fisheye cameras can be de-warped in the same way used for live video, either while playing video in the **Device** tab or playing back downloaded footage in the **Local** tab.

Device Playback

1) While watching Device playback from a 360° fisheye camera, right-click in the video pane for that camera, then select the appropriate **Fisheye Installation Mode**.
2) Right-click once more, then select your desired **Fisheye View**. The video image will change to the view selected. See Figure 4-54 below for an example.

Figure 4-54

Local File Playback

1) Open a previously downloaded clip from a 360° fisheye camera in the **Local** tab of the Playback interface. Once the footage is playing, select your **Fisheye Installation Mode**.
2) Select your desired **Fisheye View** and view your video while de-warped. See Figure 4-55 below for reference.

Figure 4-55

4.3 Alarm Manager

Alarm Manager shows all alarms previously set up in the **Alarm Scheme** interface in a list view. See Figure 4-56 below.

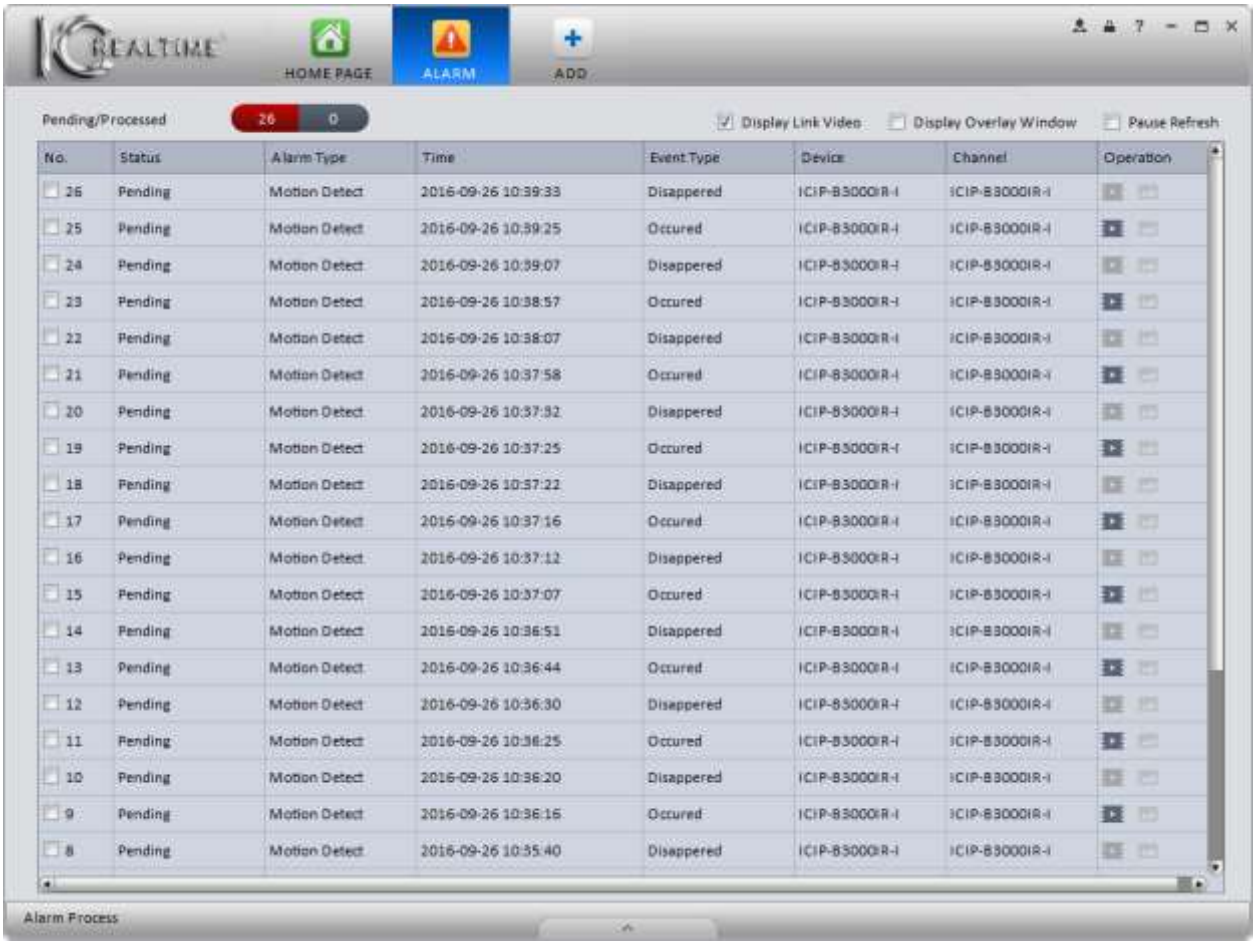


Figure 4-56

- Check the Display Link Video box to automatically open an Alarm Link window showing all active alarm sources.
- Check the Display Overlay Window to open up a small status monitor window on your screen, showing the current CPU usage, number of alarms, and a button to toggle an audible alert when an alarm is triggered. The Display Overlay Window is shown below, in Figure 4-57.

Figure 4-57

- Click in the box next to Pause Refresh to pause the refreshing of the alarm list. Linked video will still pop up in another window.
- Click the button to the right of an alarm to open a playback window showing the event (if the linked device is paired with a DVR/NVR and is recording Alarm and/or MD events). If the linked device is not recording Alarm or MD events, a small liveview window of the camera will open, as shown in Figure 4-58 below.

Figure 4-58

While the alarms are active, the Link Video window will pop up to show live video every time the alarm is triggered. Additionally, you may access the Link Video window by checking the box next to **Display Link Video** in the Alarm Manager interface. The Alarm Link window is shown below, in Figure 4-59.

Figure 4-59

In the Alarm Link window, you can select the number of video panes with the control bar at the bottom. Click in the Pause Refresh box to stop the video from automatically popping up. You may also select one or more cameras under Alarm Source in the upper right, then click the Open Video button to open a live view of the selected camera(s).

4.4 Log

The **Log** interface allows you to search the Client and Device logs. The Client log will show you all activity recorded by the software for the period searched. The Device log shows all log activity on a selected device.

1) On the **Home Page**, click on the icon to open the **Log** interface. The interface window is shown below, in Figure 4-60.

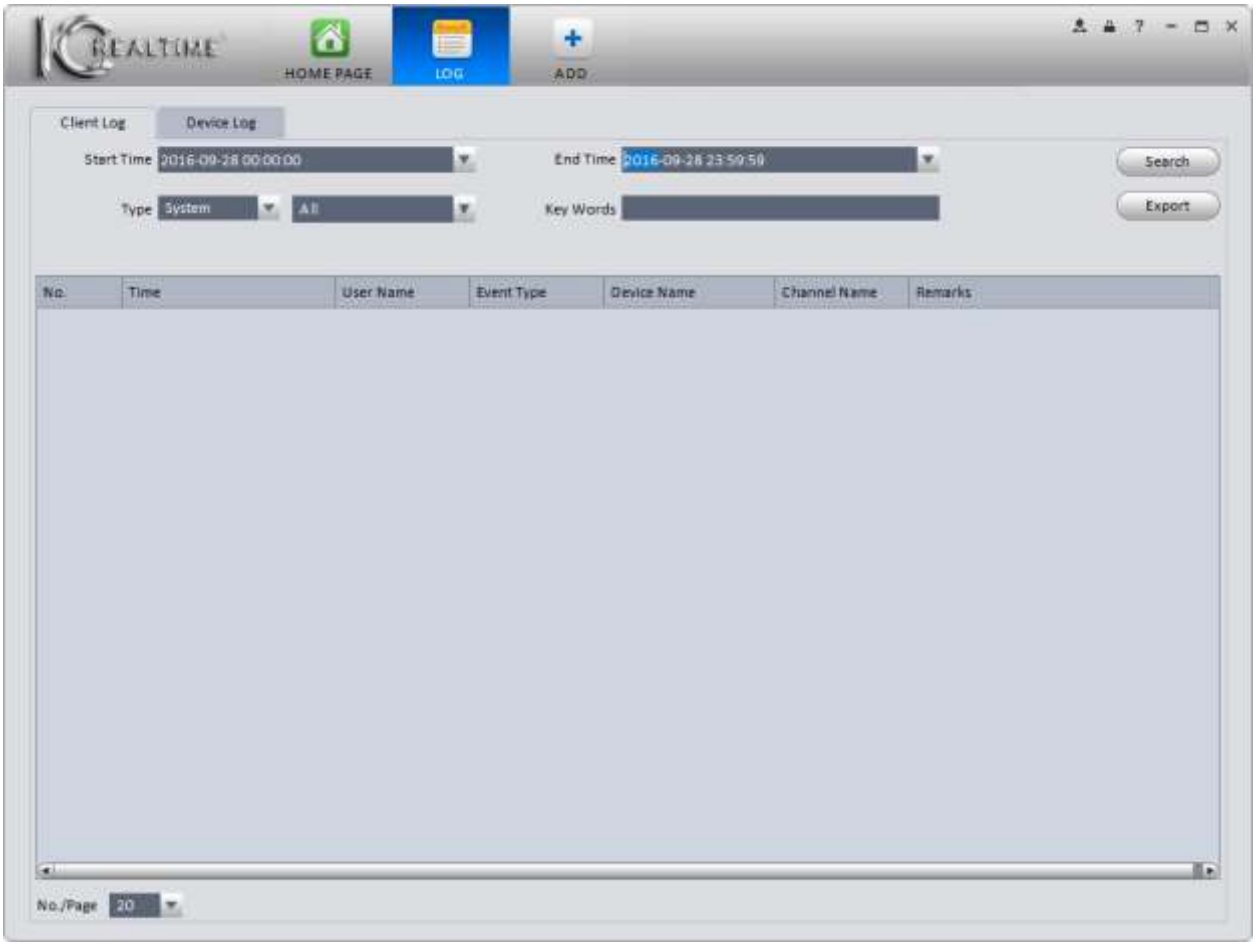


Figure 4-60

2) The **Client Log** tab is selected by default. The Client Log shows log entries created by Smart ICRSS software. Select your Start Time and End Time using the respective drop-down menus. **NOTE** The software allows for a maximum 3 day search in the Client Log tab. Select the Type, then select the specific event(s) that you want to search using the 2 drop-down menus. Click the Search button to begin the search and display the results. An example search is shown below, in Figure 4-61. To Export the results into an Excel spreadsheet (*.xls), click the Export button. Select the file save location, then click the Save button to save the file.

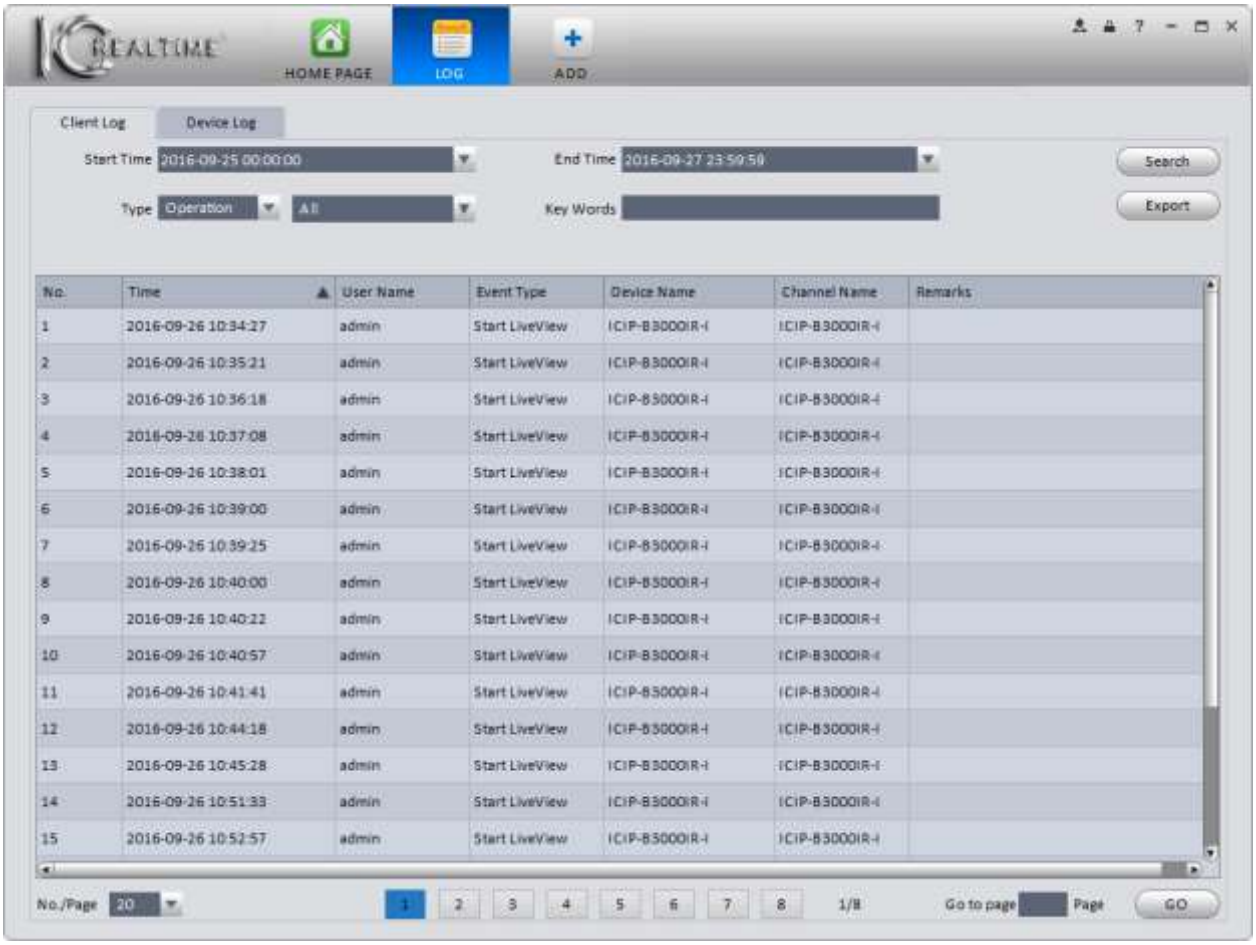


Figure 4-61

3) To view log entries from your devices, select the **Device Log** tab. The Device Log interface window is shown below, in Figure 4-62.

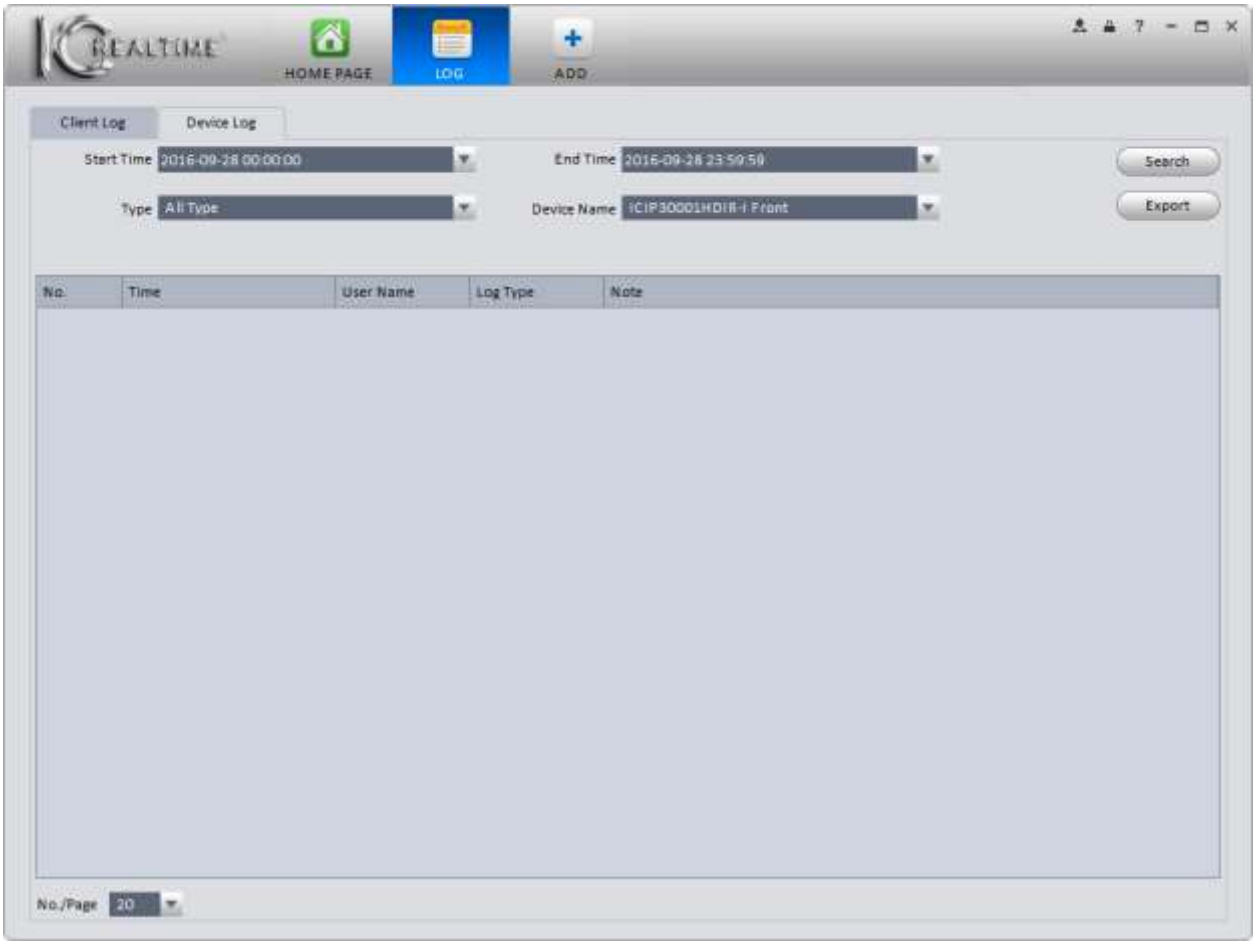


Figure 4-62

4) Select your Start Time and End Time using the drop-down menus. Select the event Type(s), and the device you want to search. Click the Search button to initiate the search. Results are displayed in the table below the search parameters, as shown below in Figure 4-63.

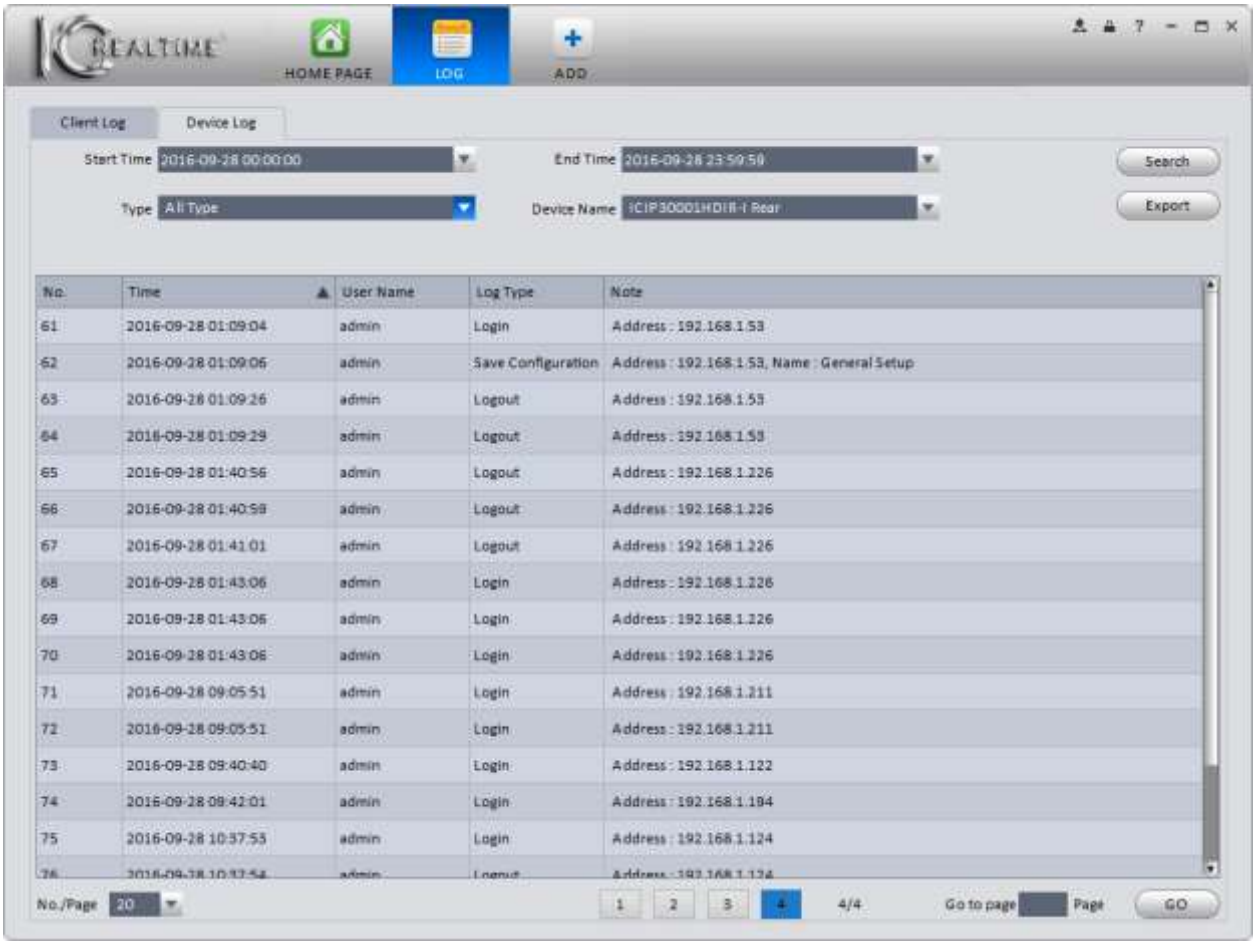


Figure 4-63

5) As with the Client Log, you can export the results into an Excel spreadsheet by clicking the Export button.

4.5 Video Talk

The **Video Talk** interface can only be used with an IC Realtime intercom system. It is the only place you can view the live footage from our outdoor camera (VTO) units. In the future, you will also be able to unlock door(s), make calls to a VTO or VTH (indoor touch panel), and send text messages to VTH units. IC Realtime is currently working on a firmware update for our intercom systems to take advantage of these new capabilities.

You must have a VTO (outdoor camera) added to your devices in the software to use the Video Talk interface. For help adding a device, please see Chapter 3.5.

From the Home Page, click on the icon to open the **Video Talk** interface.

1) Setting

Note: Our VTH (Indoor Touch Panel) and VTO (Outdoor Camera Station) hardware is awaiting a firmware update, which **must** be applied to all hardware, to fully utilize the capabilities of the **Video Talk** interface. Currently, only the **Monitor** tab may be used with IC Realtime Intercom hardware.

a) The Video Talk interface opens up on the **Setting** tab, shown in Figure 4-64.

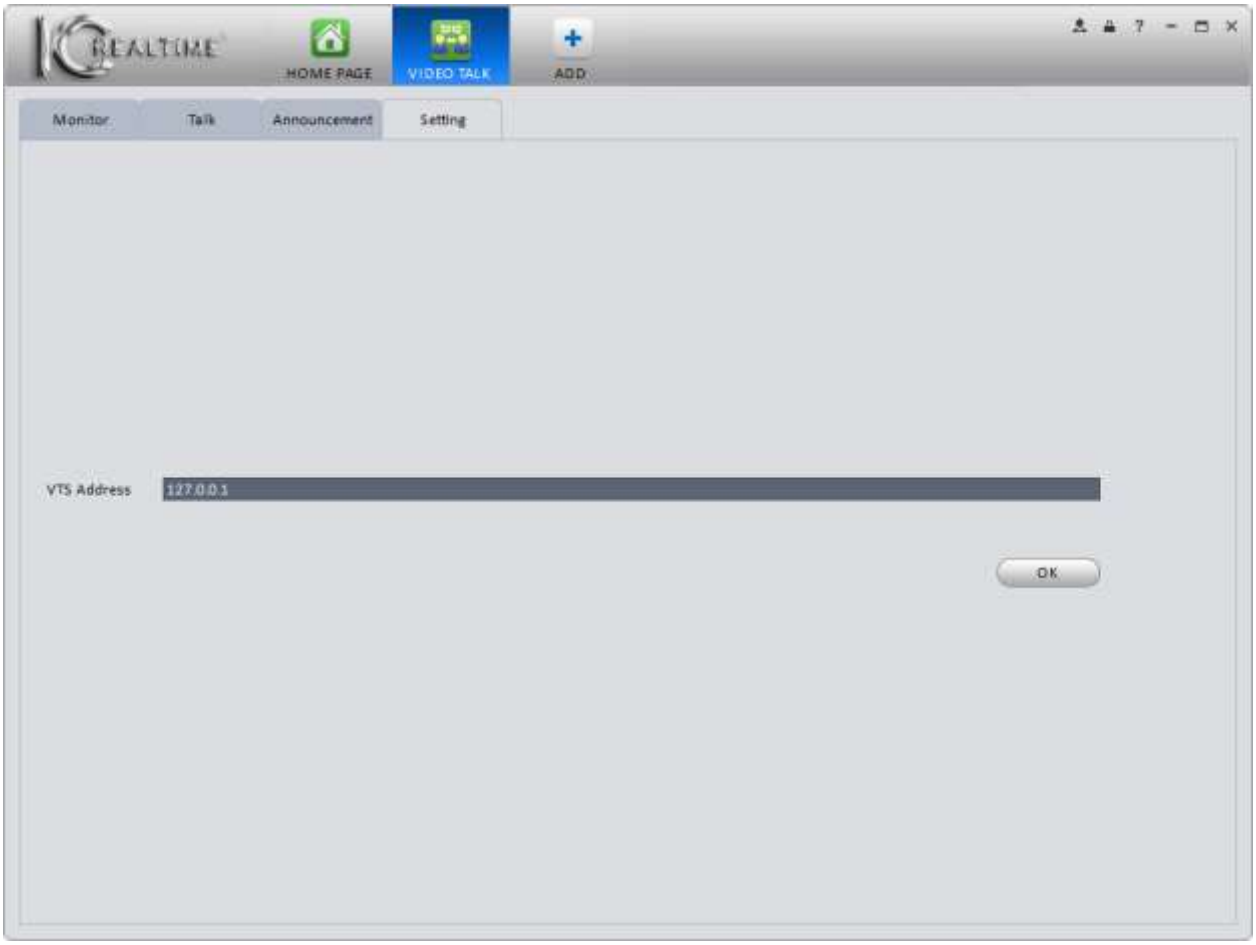


Figure 4-64

b) Enter the VTS Server address, then click the OK button. After a few seconds, you will see the window shown in Figure 4-65 in the lower-right corner of your screen

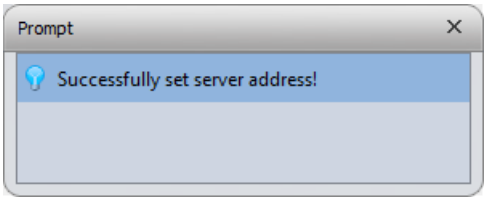


Figure 4-65

2) **Monitor**

a) Click the **Monitor** tab to view your VTO devices live. The interface is shown in Figure 4-66.

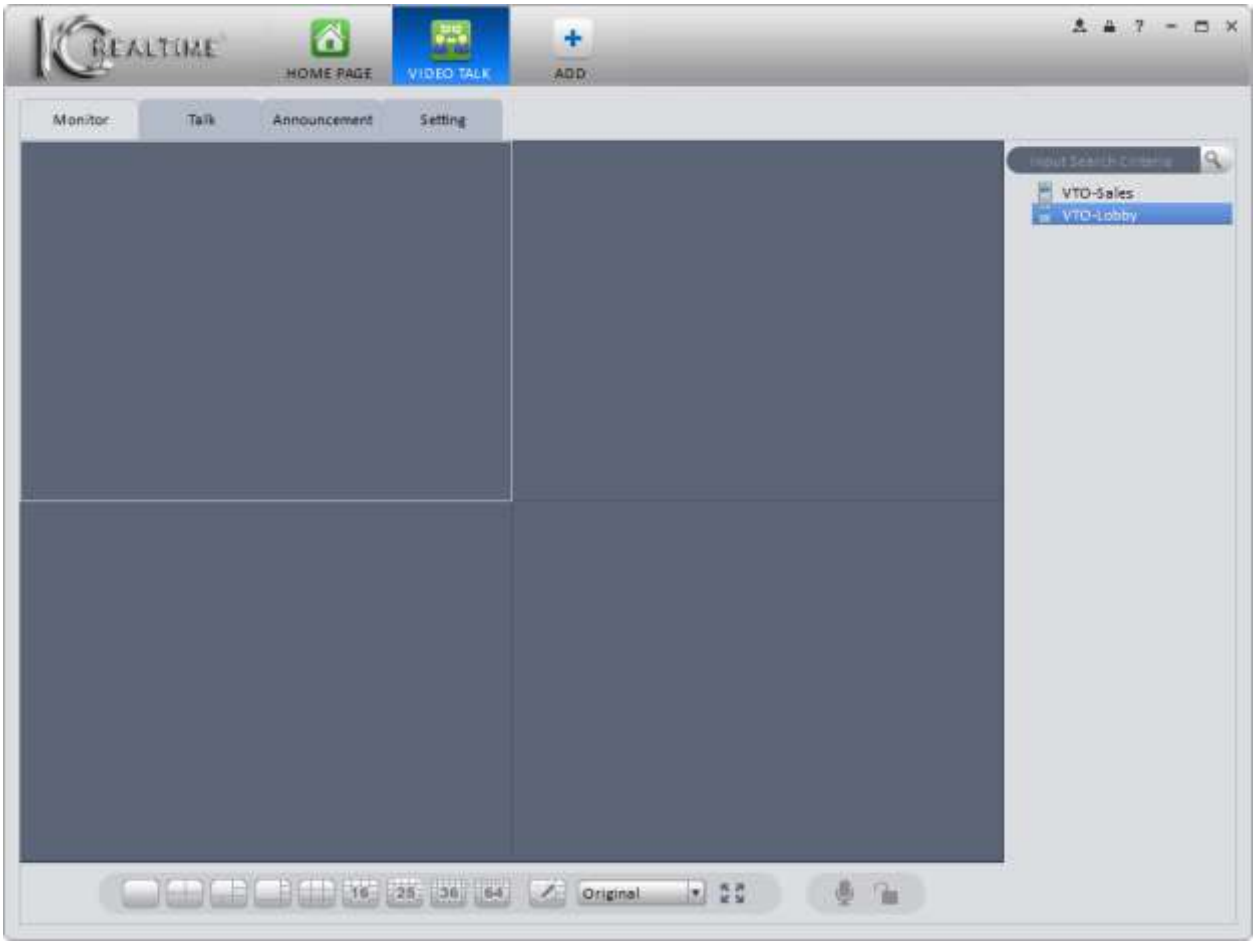


Figure 4-66

b) To view live video from a VTO unit, either click and drag the device from the device list to one of the video panes, or double-click the device and it will begin playing in the current pane (the current pane has a white border).

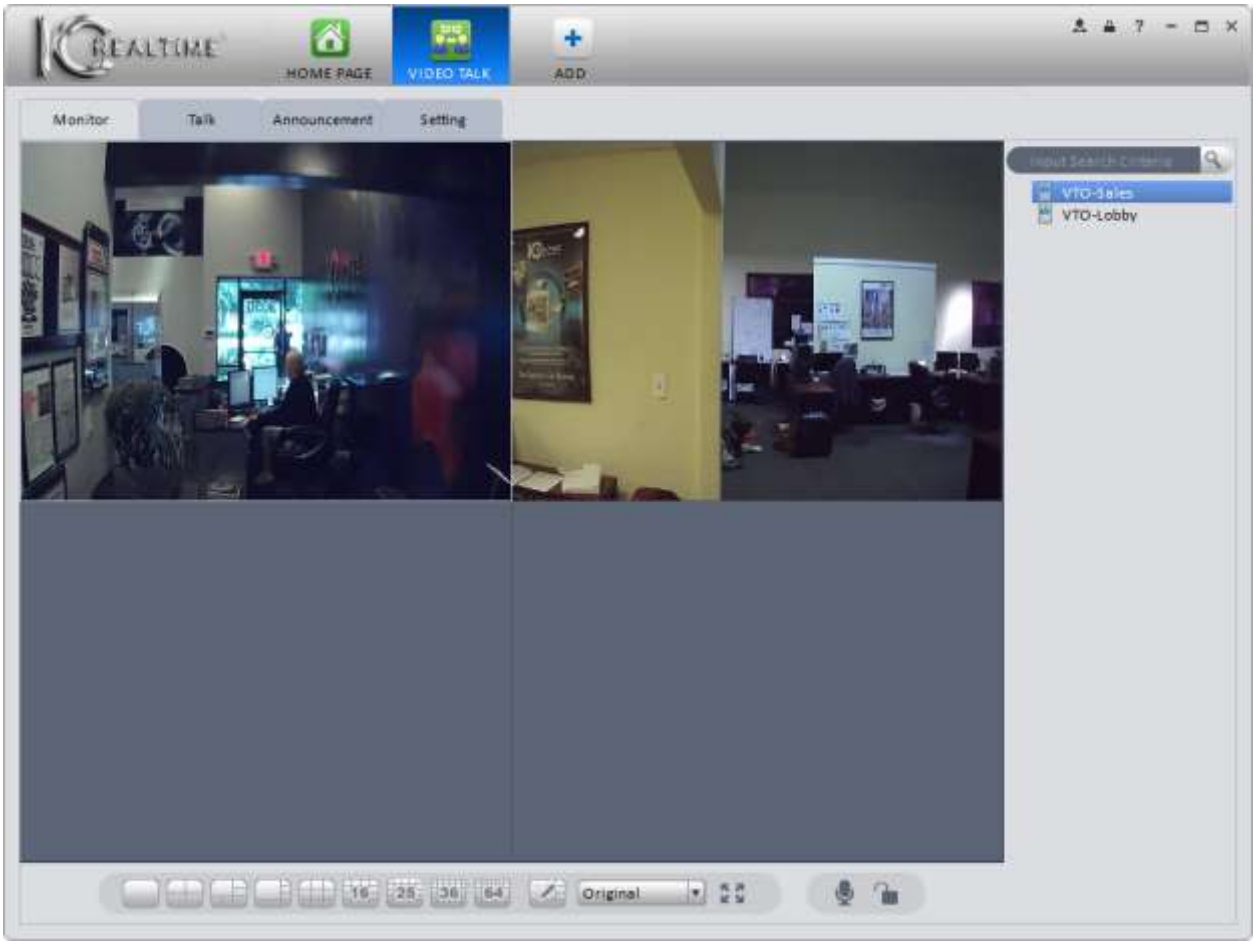


Figure 4-67

c) Click the button to take a snapshot of the current video pane.

d) Click the button to start recording video from the currently-selected pane.

e) When available, clicking the button will unlock the door when the VTO device is installed and connected to an electronic door strike release.

f) When available, the button will allow you to talk to a person through the VTO. Your computer will have to have a microphone and speakers/headphones attached to work properly.

There are several options available when you right-click in a Video Talk pane. See Figure 4-68 below for the context menu that pops up.

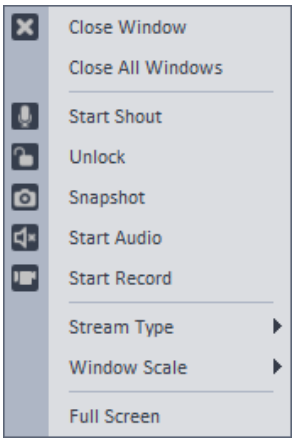


Figure 4-68

3) Talk.

a) Click the **Talk** tab.

When available, this interface will allow you to call any of the VTO or VTH devices already added to the software. You will be able to lock and unlock doors that are wired properly with this interface, as well as take snapshots and record video.

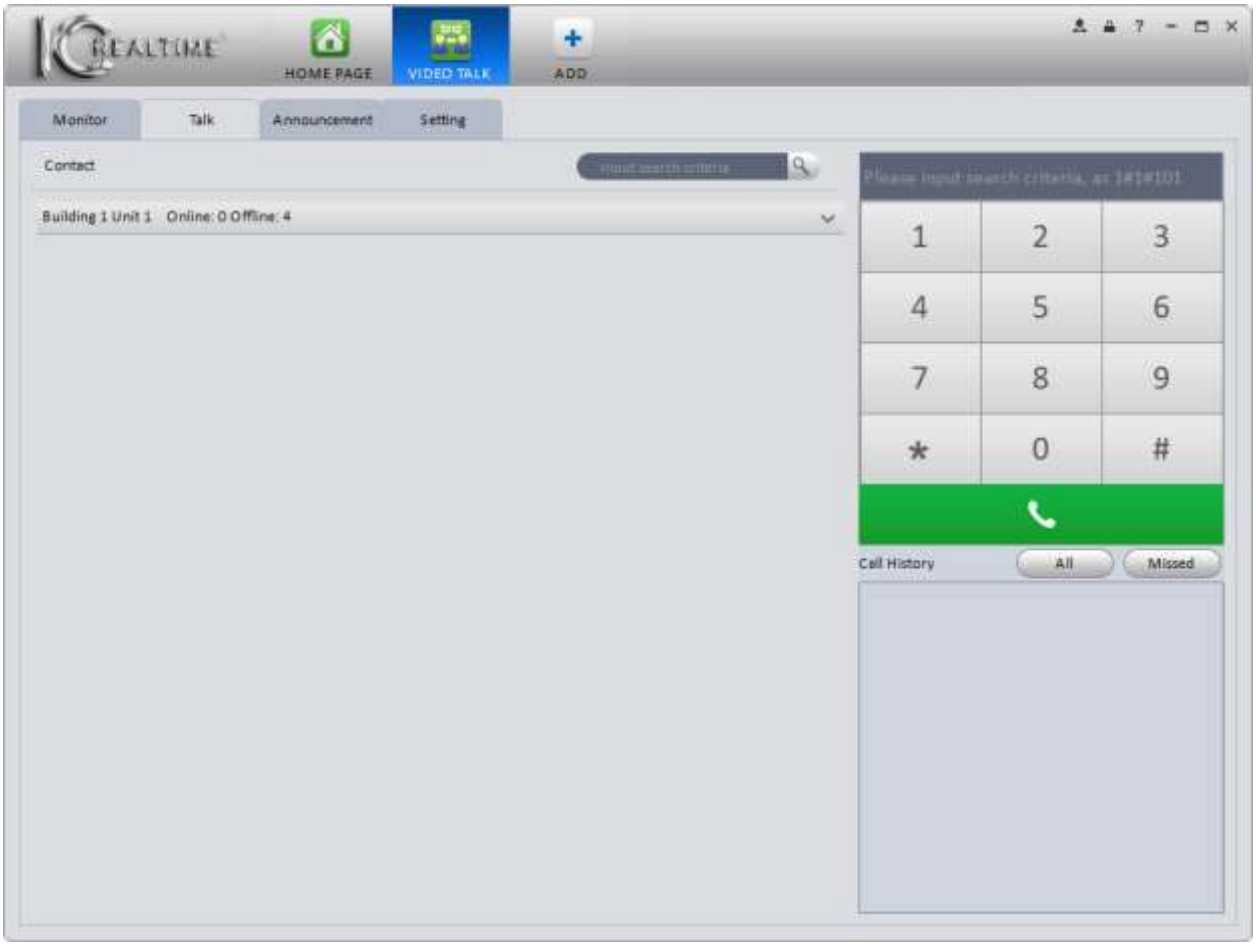


Figure 4-69

4) Announcement.

a) Click the **Announcement** tab.

b) Select one or more VTH devices connected to your VTO cameras, then enter a title and message in the corresponding fields, as shown in Figure 4-70.

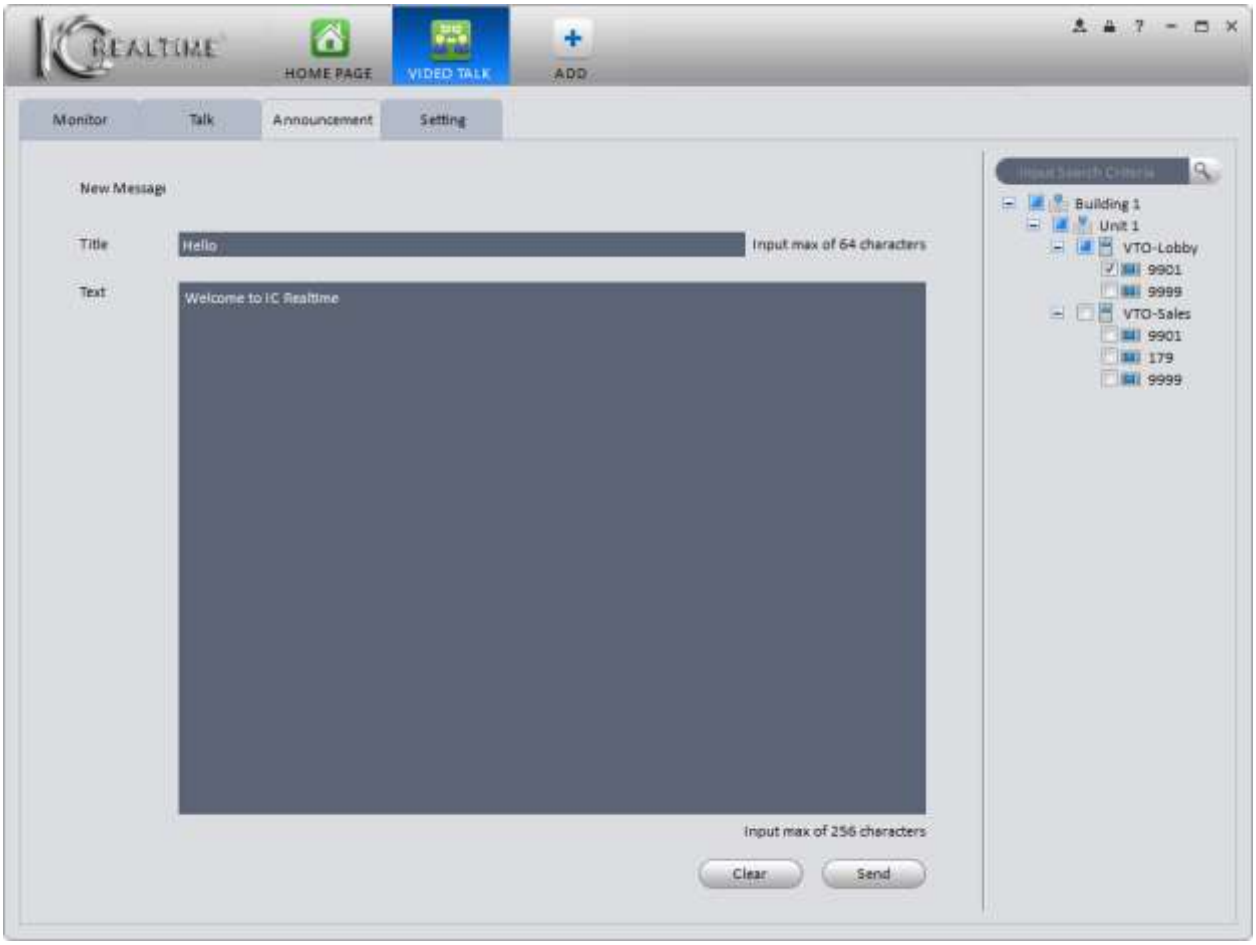


Figure 4-70

c) Click the Send button to send the message to all the devices checked in the device list. You will get a pop-up window confirming the message is being sent, as shown in Figure 4-71 below.

Figure 4-71

d) You will see a confirmation window pop-up in the lower-right corner of your monitor when the message is sent, as shown in Figure 4-72 below.

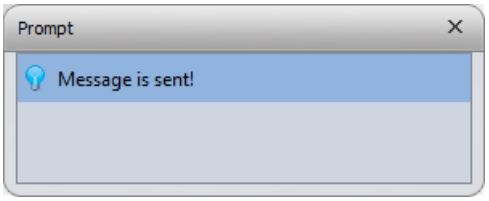


Figure 4-72

5. Advanced

5.1 Video Wall

After your **Video Wall** is created, you can configure the display in this interface. (For help setting up the video wall, please see Chapter 3.10.) As noted earlier, IC Realtime does not currently sell the Decoder hardware necessary to use this feature.

1) Click the icon on the Home Page, under Advanced. The **Video Wall** interface opens, as shown in Figure 5-1 below.

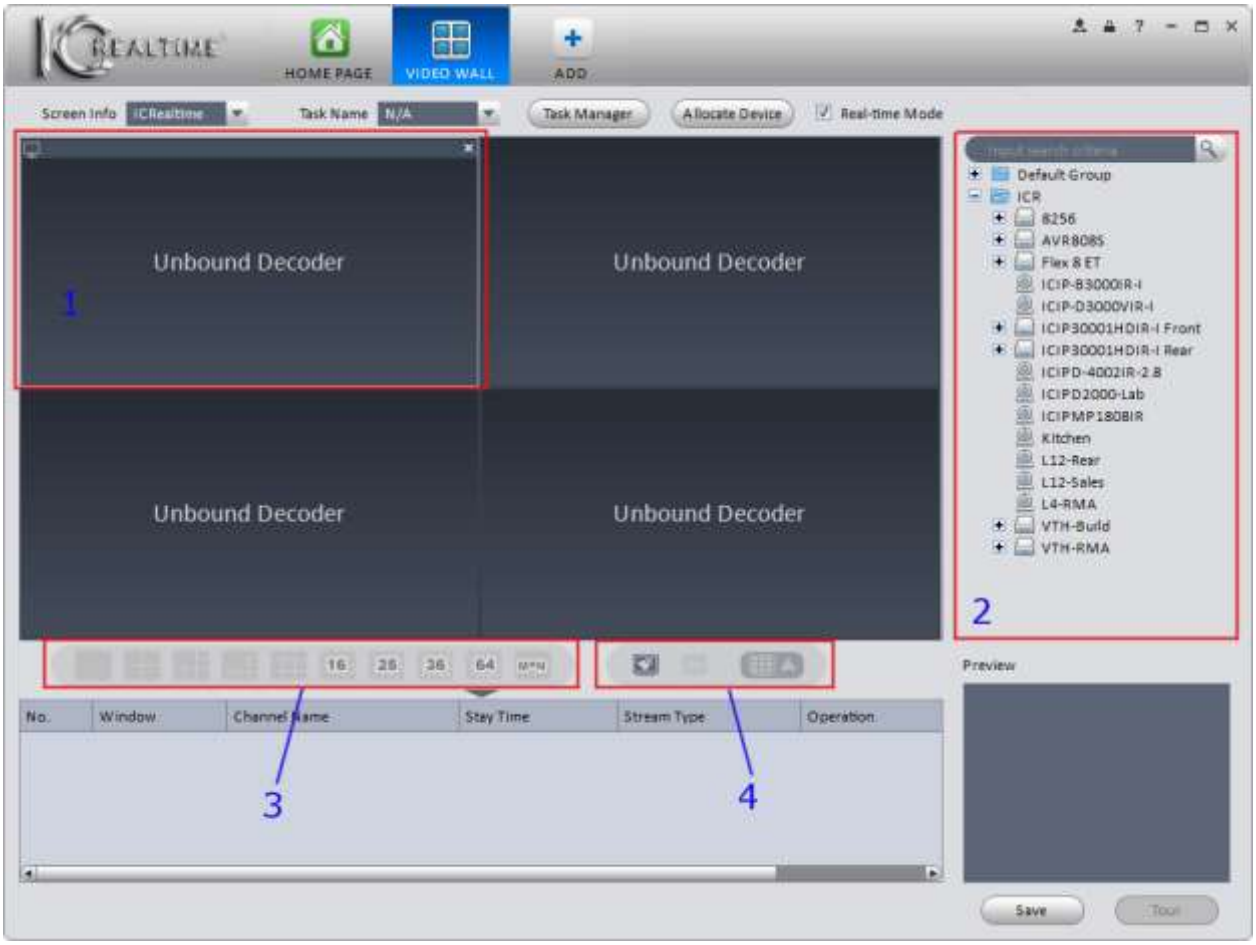


Figure 5-1

Please refer to the table below for detailed information on the Video Wall interface.

SN	Item	Function
1	Video Pane	Allows you to configure the display. You must have a decoder added to the Devices to use this.
2	Device List	Shows the available devices.
3	Video Layout Options	Select the number of video panes in the TV Wall.

4	Miscellaneous Buttons	: Clear all video panes. : Turn the TV Wall on or off. : Send the current video panes to the TV Wall.

5.2 E-map

The E-Map interface allows you to add a map image of your property and place your cameras on the map so you can see where they are located. You can view the cameras from the map as well.

5.2.1 Add E-map

Click on the button on the Home Page, found under Advanced. You will see the Map interface, as shown below in Figure 5-2.

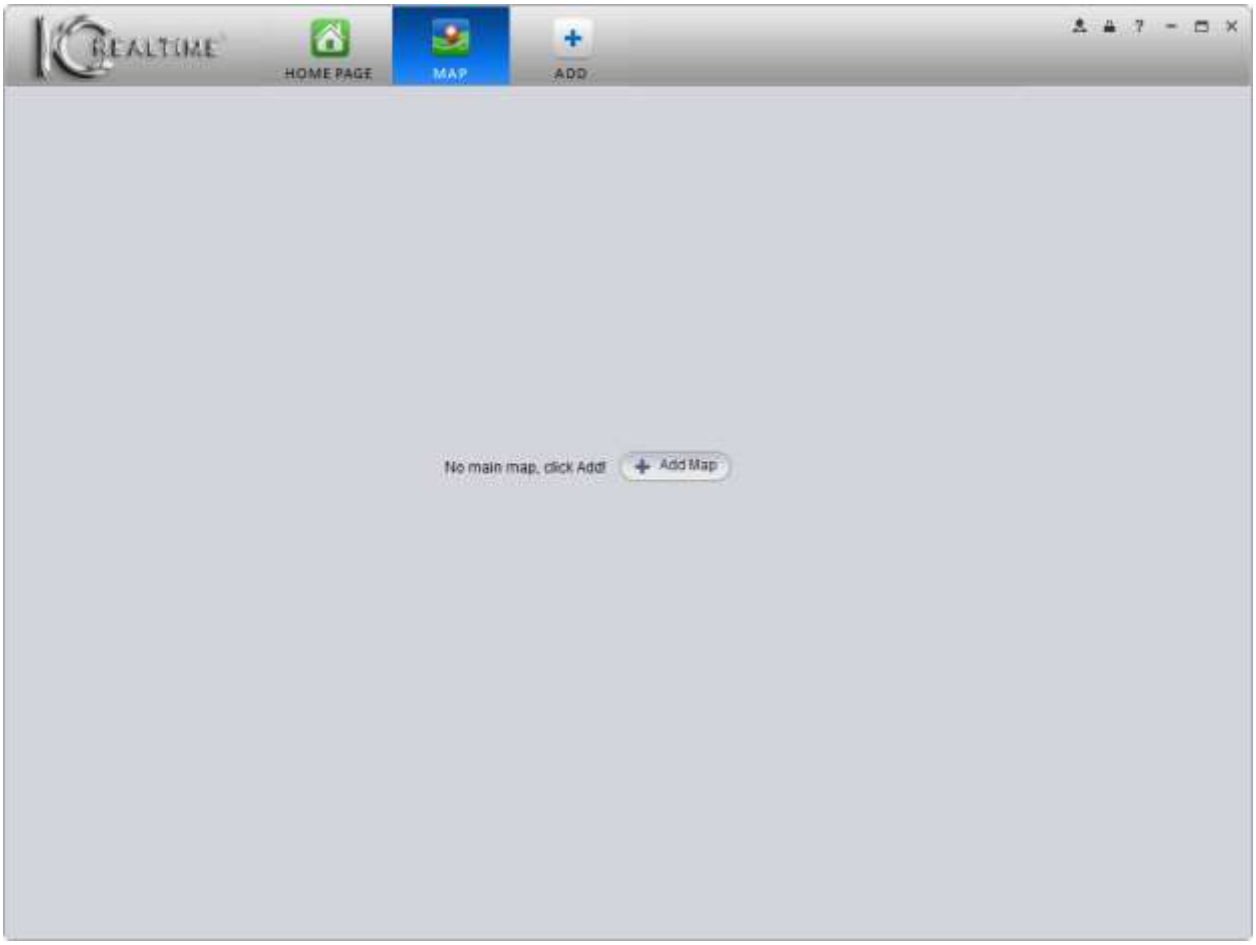


Figure 5-2

Click the Add Map button to open the Add Map dialog box, shown below in Figure 5-3.

Figure 5-3

Enter a name for your map. Click the File button to select the picture you want to use for your map. Once you have selected your image, click the Save button.

Note: Your image must be in *.bmp, *.jpg, or *.png format.

After you click save, you will be shown the Map View window, as shown below in Figure 5-4.

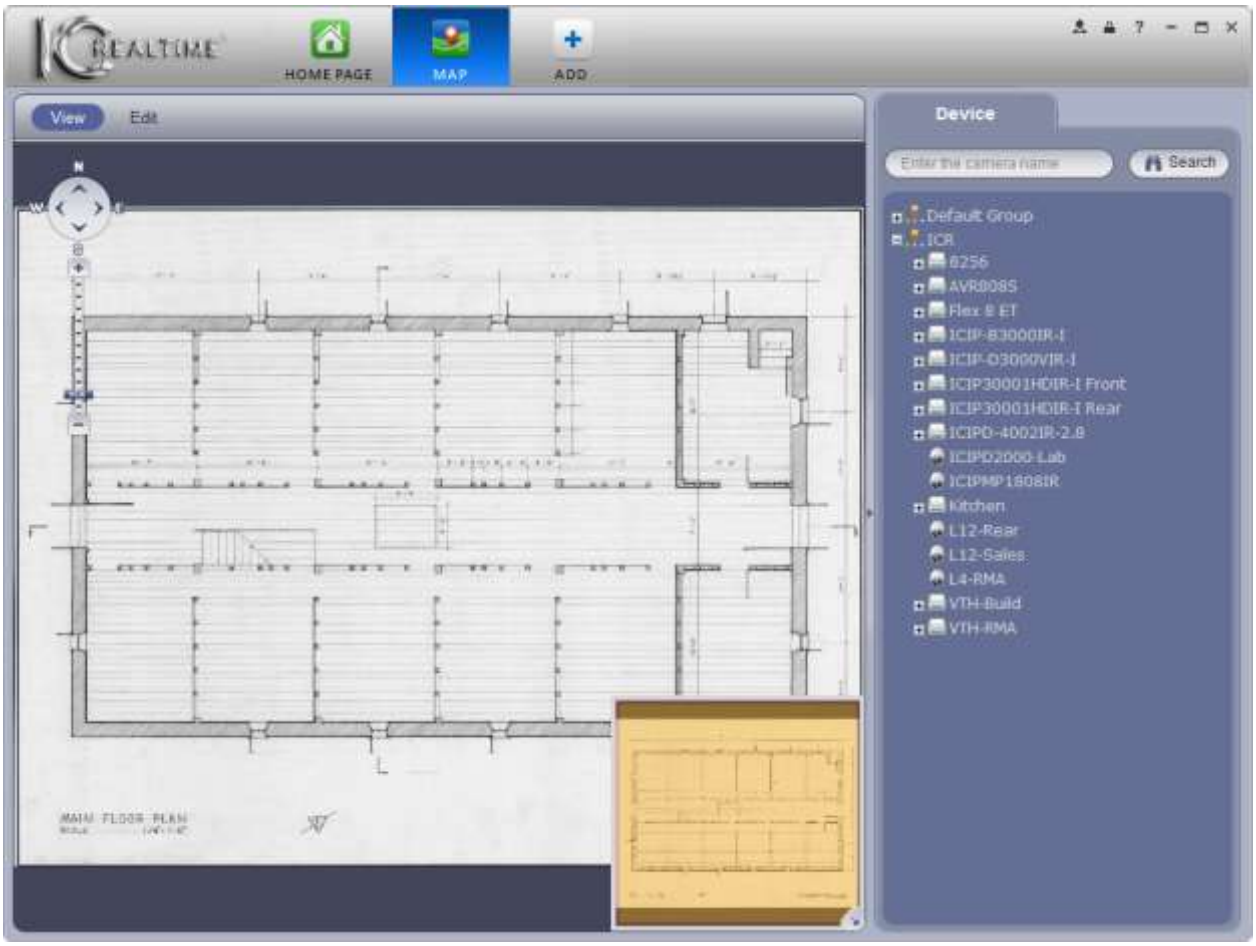


Figure 5-4

There is a mini-map in the lower-right corner of the map. This is used to show the map view area when you increase the scale of the map, using the map scale tool on the upper left. Click the button to collapse the mini map.

5.2.2 Edit E-map

Click the Edit button to place your cameras on the map. The Map Edit interface is shown below, in Figure 5-5.

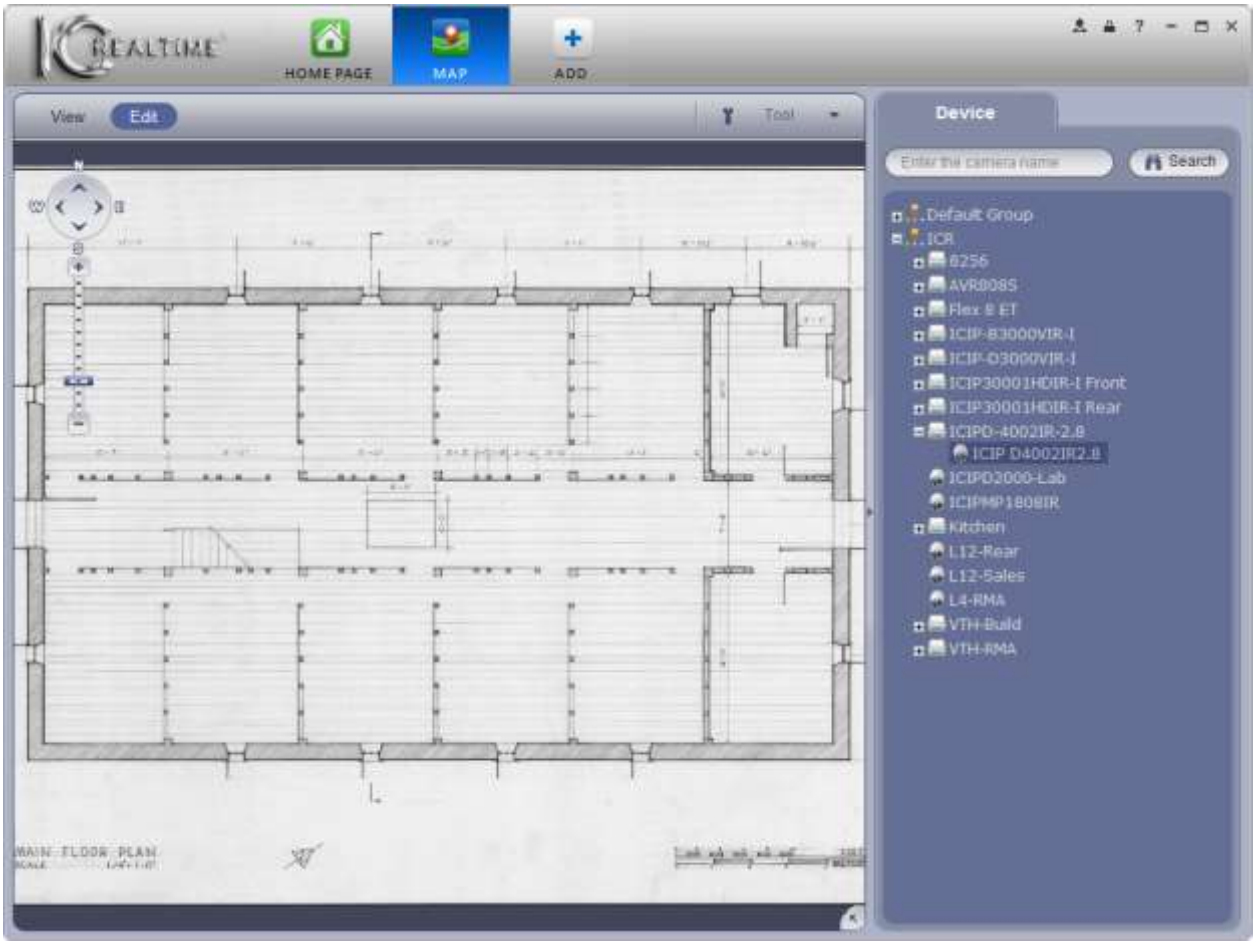


Figure 5-5

To place your cameras on the map, drag them from the Device list on the right side to the appropriate location in the map image. You will see a little icon with the camera name for each camera placed. Please see Figure 5-6 below for a map image with several cameras.

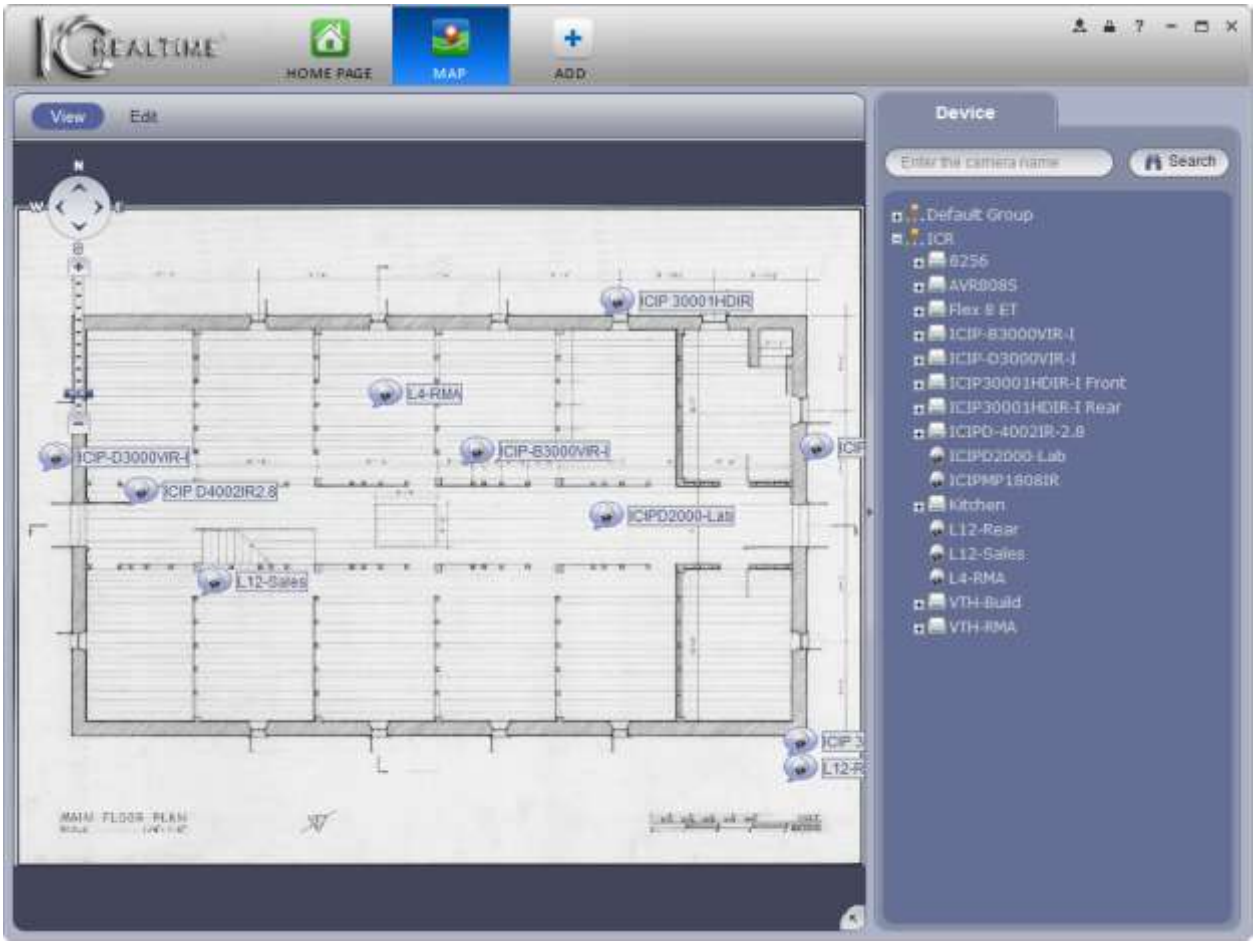


Figure 5-6

Click on the

button to open the Map Tool menu, as shown below in Figure 5-7.

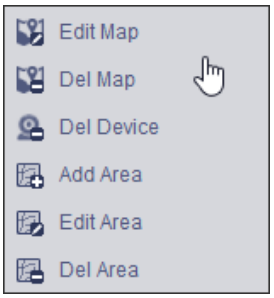


Figure 5-7

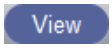
Please refer to the table below for detailed information.

Item	Function
Edit Map	Change the name, source image, or description of your map.
Del Map	Delete the map.
Del Device	Delete the selected camera(s).
Add Area	Add an additional map to the main map.
Edit Area	Change area name, source image, or description.

Item	Function
Del Area	Delete the selected area.

Map areas are additional maps that can be added to the main map for further detail. For example, if your main map is your home, you could add area map(s) for each of the rooms in the home. While viewing the main map, you may click on the area maps to open them up and see the cameras placed there.

5.2.3 Liveview E-map

Once your cameras and areas are configured on your map, click the 

button to go to the Liveview map. To view any camera, double-click with your mouse and another window will pop up showing that camera's images. For an example, see below in Figure 5-.8

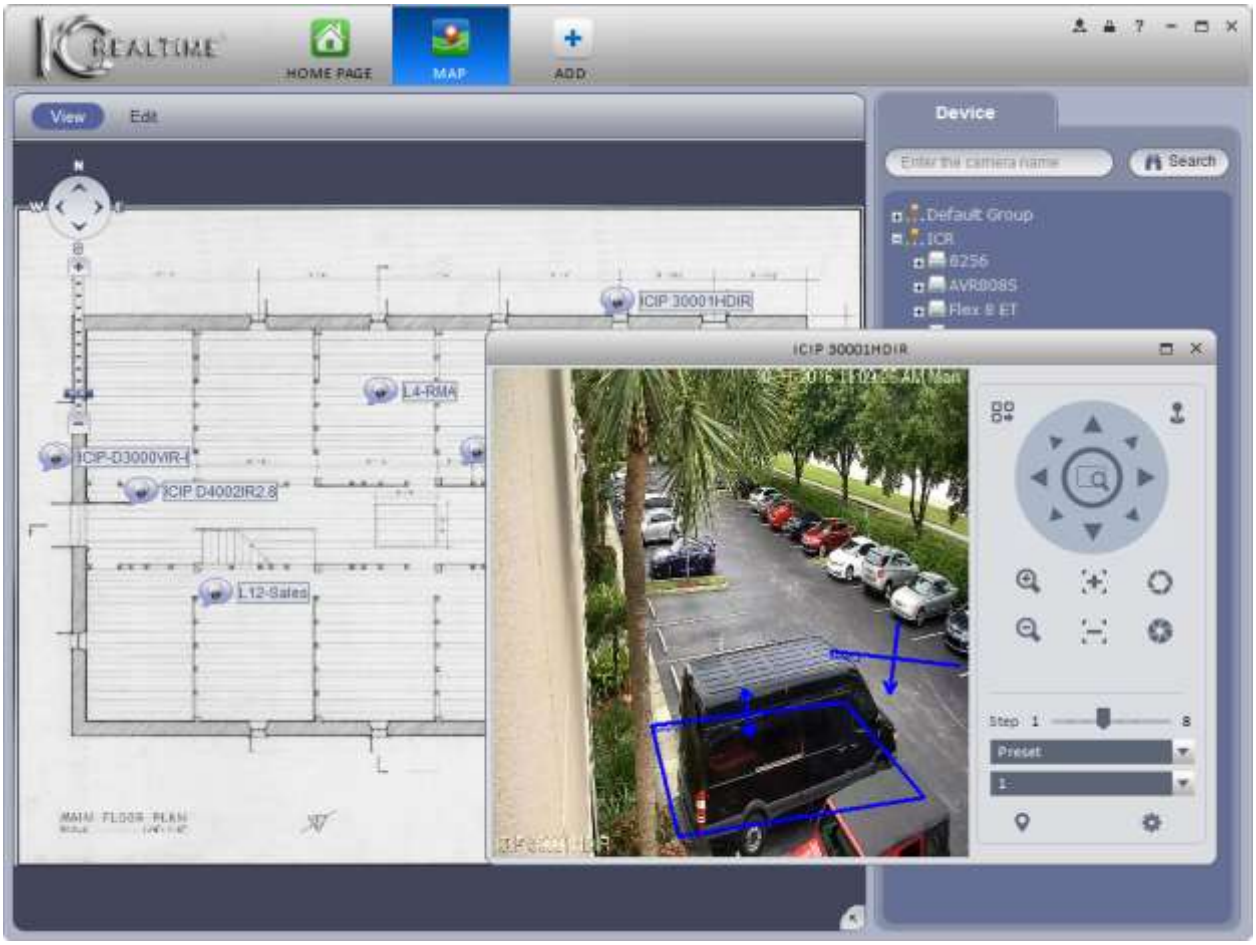


Figure 5-8

5.3 Device Display

The **Display** interface allows you to change the display settings for NVR8128 and NVR8256 units. It is not compatible with any other IC Realtime units.

Click the icon on the Home Page, which will open up the Display interface, as shown below in Figure 5-9.

Figure 5-9

Use the buttons along the bottom to select your desired window split. Screen 1 supports up to 64 panes; all other screens can have up to 16. When you click on the split configuration button, you will see a menu pop up allowing you to choose which cameras are displayed in the window by default. The menu for a 4-split is shown below, in Figure 5-10. Selecting any of those options will automatically assign the channels shown to the 4 panes of your selected split.

001_004	041_044	081_084	121_124
005_008	045_048	085_088	125_128
009_012	049_052	089_092	
013_016	053_056	093_096	
017_020	057_060	097_100	
021_024	061_064	101_104	
025_028	065_068	105_108	
029_032	069_072	109_112	
033_036	073_076	113_116	
037_040	077_080	117_120	

Figure 5-10

After selecting the split parameters, you can select different cameras to show in the panes by clicking the camera in the Device list in the lower-right hand corner, then dragging it to the pane where you want the camera to show.

5.4 Data Report

The **Data Report** interface allows you to view a graphical report showing People Counting statistics for various time periods.

1) Click the button from the Home Page. The initial Data Report interface is shown below, in Figure 5-11.

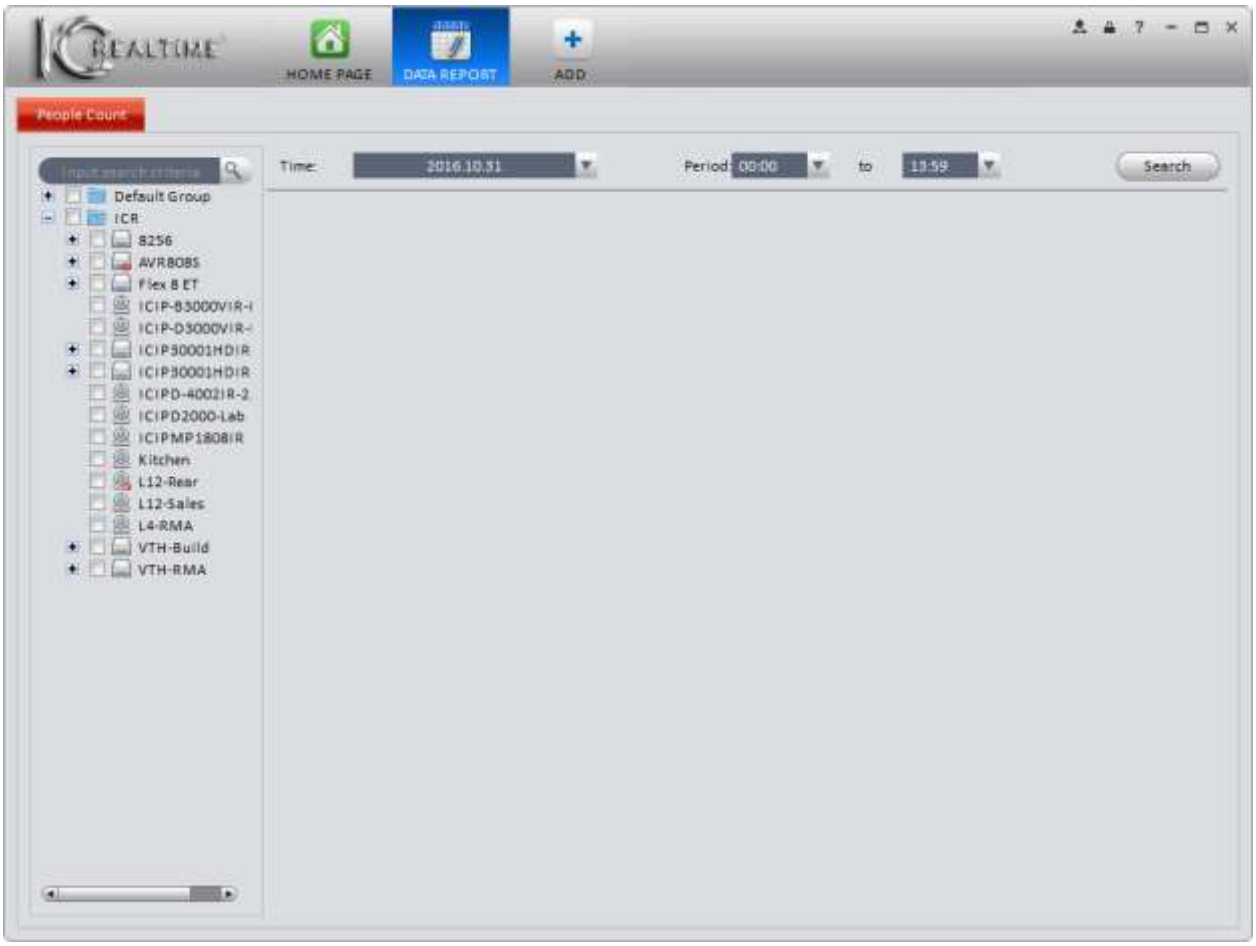


Figure 5-11

2) Begin by selecting the camera from the device list on the left side. Next, select a time period for your report. The time period options are shown below, in Figure 5-12.

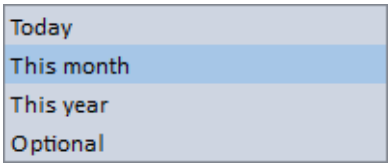


Figure 5-12

If you are selecting a single day, adjust your Start and End times as well. When done, click the Search button.

Your report will show up and look similar to the one shown below, in Figure 5-13.

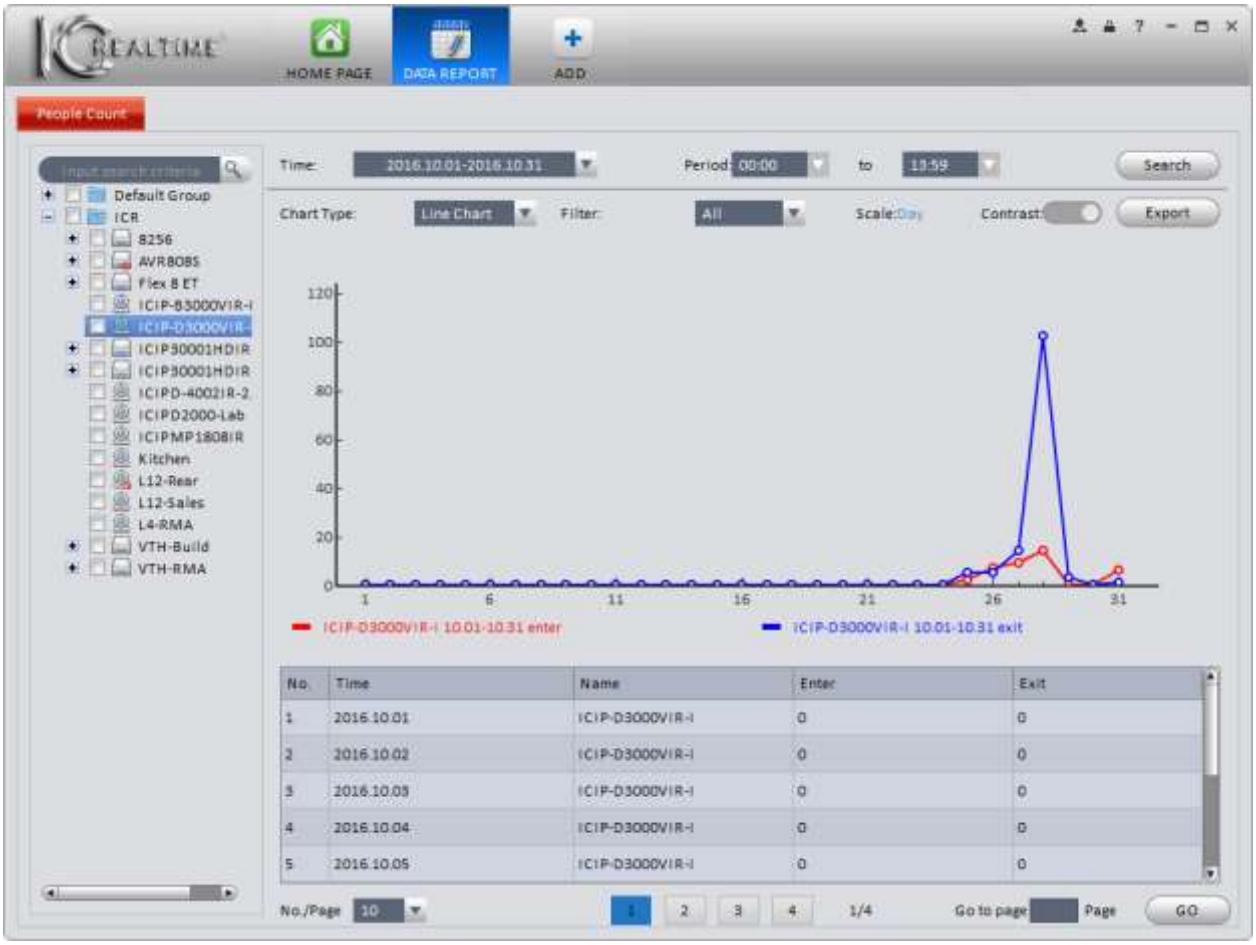


Figure 5-13

- Time：Select Today, This Month, This Year, or Optional (allows you to select a custom time frame for your report).
- Chart Type：Choose to display the results in a Line Chart or Bar Chart. The results will display in a Line Chart by default.
- Filter：Choose between All, Enter, or Exit.
- Contrast：Allows you to select up to 5 devices for comparison. The results can be displayed by Channel or Time.
- Export：Exports the data into an Excel spreadsheet (*.xls).

Note:

- **This manual is for reference only. There may be slight variations in capabilities depending on your hardware.**
- **All designs and software are subject to change without notice.**
- **All trademarks, and registered trademarks, are the properties of their respective owners.**
- **If you have any questions or concerns, please contact IC Realtime: 954-772-5327.**
- **Please visit our website or contact your installer for more information. Thank you for choosing IC Realtime!**