

VMS User Manual

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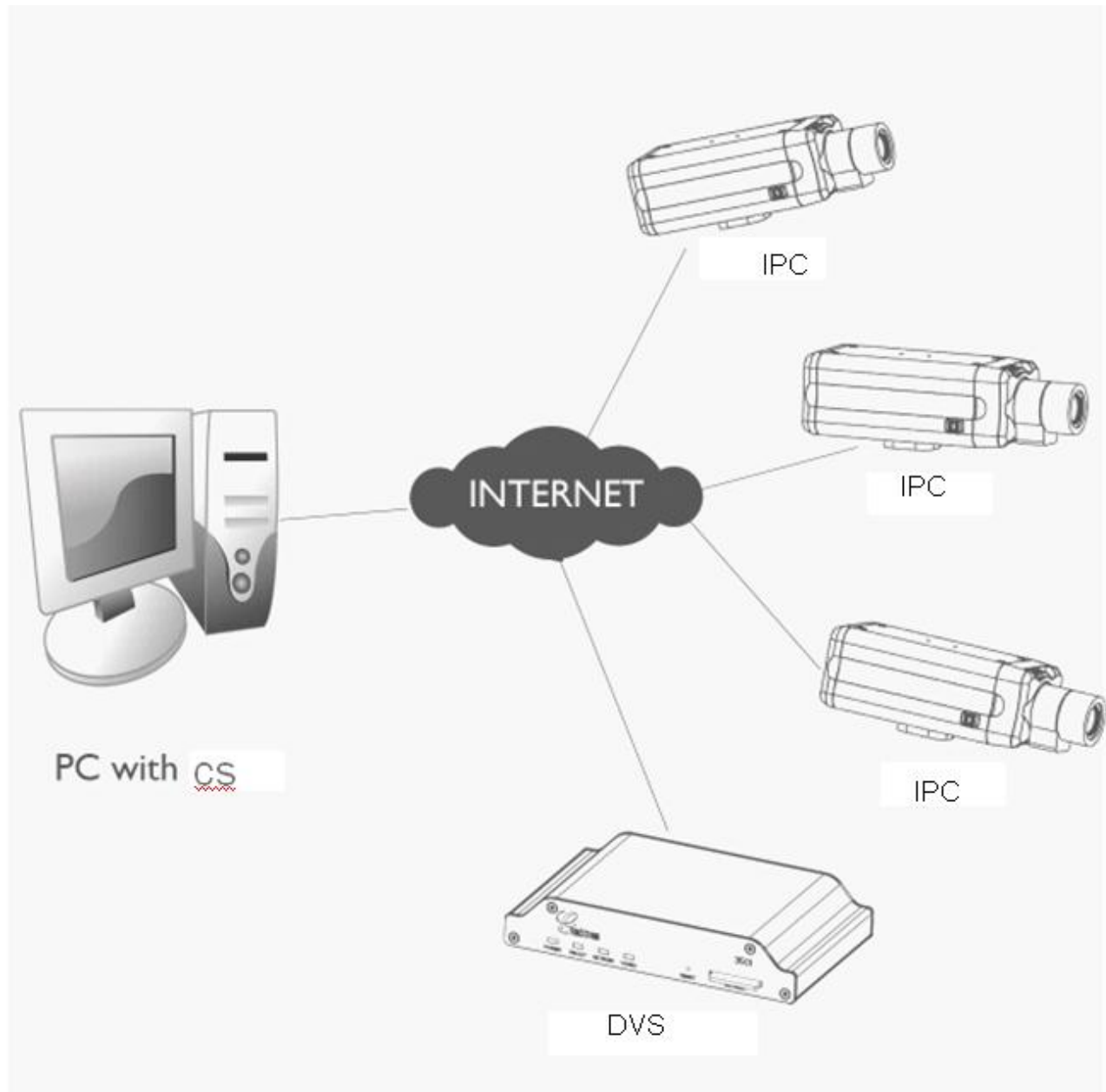
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Introduction

VMS is a monitoring and recording system for up to 36 cameras. VMS supports remote viewing, control and recording from anywhere on the Internet or corporate network.

This user manual provides a description of VMS features and instruction on how to integrate your cameras and digital video servers with this software.



Installation Guide

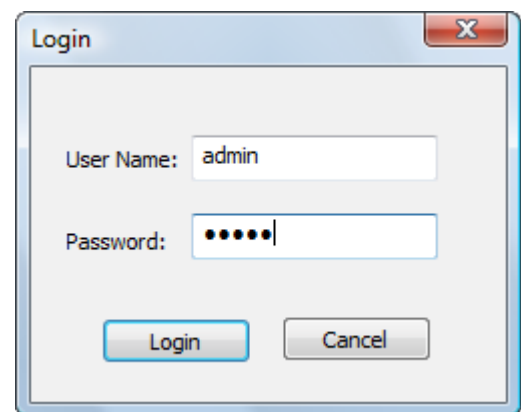
Minimum Recommended System Requirements

- z Windows 2000 Server Professional, Windows XP, Windows Vista
- z CPU: Intel Pentium 4 or higher, 2 GHz
- z RAM: 1 GB (4 GB recommended for larger systems)
- z Support for DirectX 8.0 and above

Login

Open VMS. The login page will prompt you for your user name and password. The administrator user name and password are both set to ***admin*** at the factory default settings.

For security purpose, please change the password after the first time you log in to VMS.





View operation log and alarm log

PTZ control and view groups

Menu items

System - Switch users.

View - Different panels can be displayed in the main window by selecting your preference from the dropdown menu. VMS can display the Toolbar, Device Browser, Map Browser, Alarm List, Log List, PTZ console and Group Browser on the main window.

Configuration

Time Schedule - Add, edit and remove auto recording time schedules.

Event Configuration – Add, edit and remove alarm triggered event rules.

Device Configuration – Add, edit and remove digital video servers or network cameras.

Local Configuration – Establish recording settings for one or more cameras.

Play Mode

Free Play – In free play mode, the user can define where to watch the video streams.

Patrol Play – In patrol play mode, VMS plays video streams from different groups in a loop.

Manage Tool

User Management – Add, edit and remove users.

Log Management – View and search operation logs and alarm logs.

Replay Tool – Browse and view recorded video streams.

Search Tool – Search digital video servers and network cameras in the same LAN.

Help – Information about VMS

Toolbar items



Lets you browse and manage the connected DVS or cameras.



Lets you manage all electronic maps. Right Click to add a new map.



VMS supports the grouping of connected DVS units or cameras. This panel allows users to manage their groups.



PTZ controller.



Click this icon to open/close the login logs.



Click this icon to open/close the alarm logs.



Click this icon to choose the number of channels that will be displayed on the main window.











Click this icon to open the play bar in each video display window.



Click this icon to display the VMS software version number.

Play Bar Items

-  Stops the displayed video in the channel.
-  Records the video in the channel. The icon will display service changes, if VMS is recording the videos, the icon will turn . The recorded video file will be saved in **C:_Record**.
-  Takes a snapshot from the video in the channel. By default, the captured image will be saved in **C:_Capture**.
-  Toggles the sound channel On / Off. At factory default settings, the sound is off. The icon will display service changes, if the sound is on, the icon will turn .
-  Establish or close two-way audio in the channel. At factory default settings, there is no audio connection. The icon will display service changes, if the two-way audio is established, the icon will turn .

example, the DVS has 4 channels and

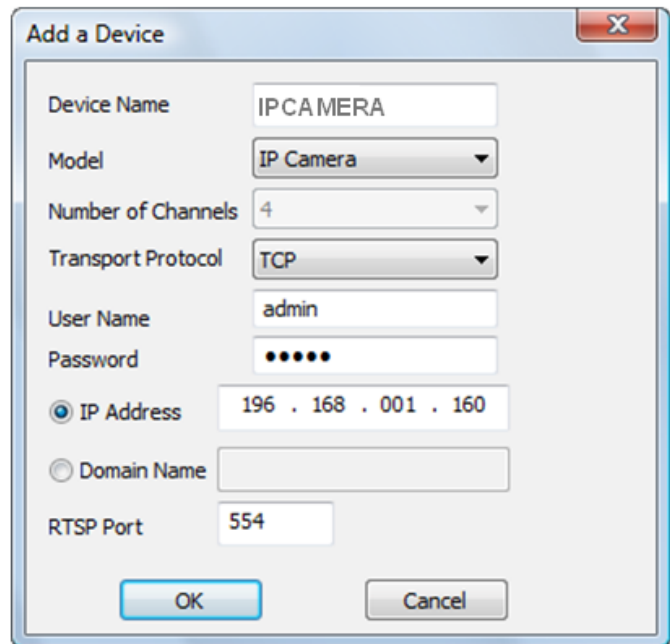
IPCamera has 1channel. **Transport**

Protocol – Select the preferred transport protocol, UDP or TCP.

User Name/password – Enter the user name and password for the device's web GUI.

IP Address/ Domain Name – Enter the IP address or domain name of the device.

RTSP Port – If the device's web access port is 80, enter 554 as RTSP Trans-Port, otherwise, add 2000 to the device's web access port and enter here.



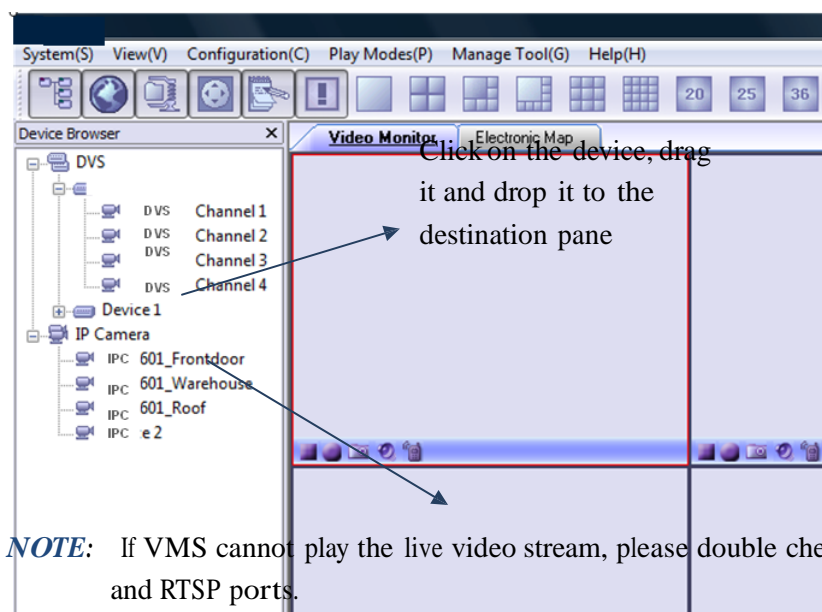
The 'Add a Device' dialog box contains the following fields and options:

- Device Name: IPCAMERA
- Model: IP Camera (dropdown)
- Number of Channels: 4 (dropdown)
- Transport Protocol: TCP (dropdown)
- User Name: admin
- Password: (masked with dots)
- IP Address: 196 . 168 . 001 . 160 (radio button selected)
- Domain Name: (radio button unselected)
- RTSP Port: 554
- Buttons: OK, Cancel

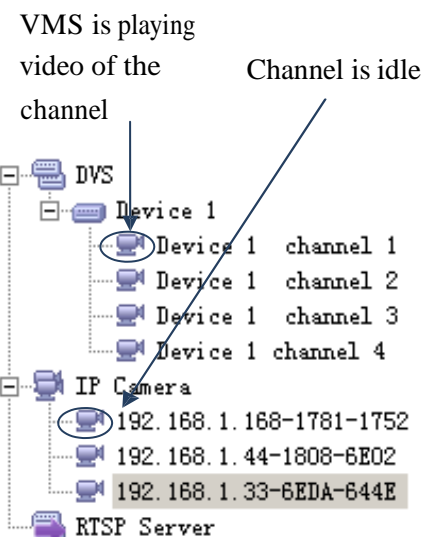
4. Click **OK** to save.



How to watch video streams

1. Double click on the device listed in the **Device Browser** panel; the live video stream will be display in the first pane of the video monitor area.
2. Click on the device listed in the **Device Browser** panel; drag it and drop to the destination pane. The users can determine where to display the video channels and how many channels will be displayed.



NOTE: If VMS cannot play the live video stream, please double check the host, credentials and RTSP ports.



NOTE: In the *Device Browsers* panel, the device icon displays service changes. If the channel is idle, the icon will show as . And the icon will change to  if VMS is playing video from that channel.

Remove network cameras/digital video servers

1. From VMS, click *Configuration* > *Device Configuration*.
2. Select the device you would like to remove.
3. Click *Delete* to remove the device.

Edit the settings of network cameras/digital video servers

After a network camera or digital video server is added to VMS, the user may need to perform greater software configurations to meet their needs.

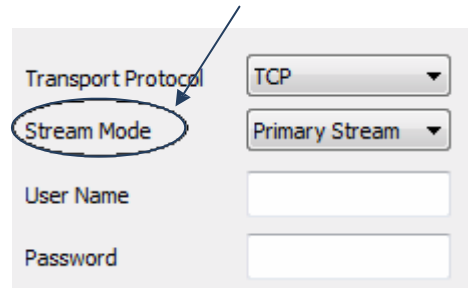
Edit basic settings

To change the host name, device name, RTSP, transport protocol, user account credential and device description:

4. From VMS, click *Configuration* > *Device Configuration*
5. Click on the device/channel you want to configure. The configuration window will come out.
6. Change the setting properly; Click *Save* to save all the changes.

Choose a Stream - primary stream or secondary stream

1. From VMS, click *Configuration* > *Device Configuration*
2. Click on the device/channel you want to configure. The configuration window will appear
3. In the *Stream Mode* dropdown list, select the stream you prefer



The screenshot shows a configuration window with the following fields: Transport Protocol (set to TCP), Stream Mode (set to Primary Stream), User Name (empty), and Password (empty). The 'Stream Mode' dropdown is circled in blue, and an arrow points to it from the text 'Choose a Stream - primary stream or secondary stream'.

In order to conserve bandwidth, users can configure primary and secondary streams. For instance, the user might like to watch the live video stream from the web GUI in low resolution mode while recording a copy in high resolution mode due to the limitation of internet bandwidth. In this case, for example, primary stream can be configured to have better resolution, and then the users can use primary stream to record while watching secondary video streams.

To configure the primary and secondary stream

1. From VMS *Device Browser* panel, right click on the device.
2. In the pop out menu, click *Open the web configuration pages*.

3. Your web browser will open the web configuration pages of the device.
4. Click on **Basic Settings > Video & Audio**.
5. Configure the primary stream and secondary stream according to your preference.

Instructions for **Alarm Triggers and Rules** and **Automatic Recording** will be in the following sections.

Set up Alarm Triggers and Rules

IP cameras and digital video servers support motion detection and alarm events. They can report motion detection or alarm events to VMS.

VMS can be configured to take actions – to notify such events to users. The instructions below will assist you with this set up.

Configure the network cameras/digital video servers

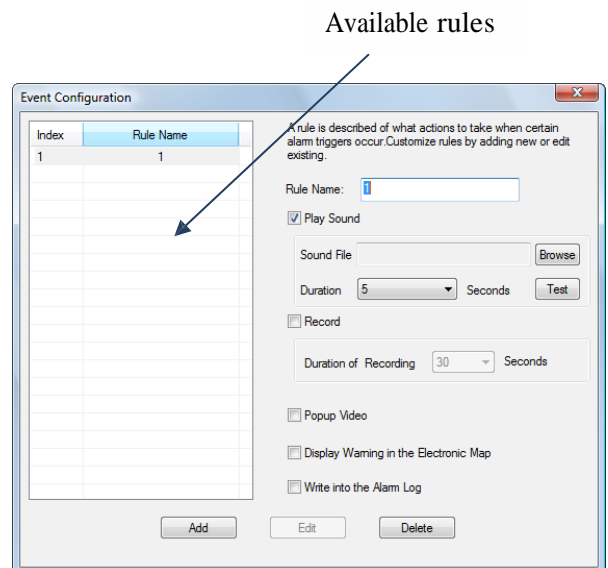
IP cameras and digital video servers need to be configured to report the motion detection and alarm events to VMS.

1. From VMS **Device Browser** panel, right click on the device.
2. In the pop out menu, click **Open the web configuration pages**.
3. Your web browser will open the web configuration pages of the device.
4. Click on the **Advanced Settings > Motion Detection/Alarm Events** page.
5. In **Alarm Actions** Section, check **Upload to Alarm Center**.
6. Click **Save** to save the changes.

Add alarm action rules

A rule is described of what actions to take when certain alarm triggers occurs.

1. From VMS, click **Configuration > Event Configuration**.
2. The **Event Configuration** window will pop up.
3. Enter required information
Rule Name – Enter a rule name.
Play Sound – If it is checked, VMS will play a sound when receiving an alarm report. Make sure to select a sound file and the duration in which it will be played.
Record – If it is checked, VMS will record the video upon receiving an alarm report. Users can also establish the duration of the recording.



Popup Video – If it is checked, a pop up video window will appear on receiving an alarm report.

Display Warning in the Electronic Map – If it is checked, the corresponding icon of that channel in the electronic map will flash red on receiving an alarm report.

Write into Alarm Log – If it is checked, the alarm event will be written to the alarm log

4. Click **Add** to save the settings.

NOTE: Available rules will be listed on the left side of the **Event Configuration** window.

VMS allows you to have various alarm actions.

Edit alarm action rules

1. From VMS, click **Configuration > Event Configuration**.
2. The **Event Configuration** window will pop up.
3. Select the rules you would like to edit.
4. Enter the required information.
5. Click **Edit** to save the changes.

Remove alarm action rules

1. From VMS, click **Configuration > Event Configuration**
2. The **Event Configuration** window will pop up.
3. Select the rules you would like to remove.
4. Click **Delete** to remove the rule.

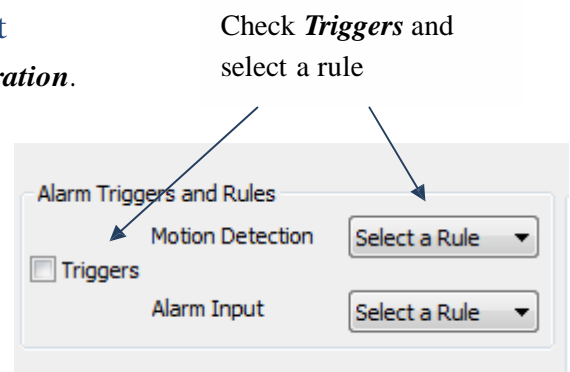
Configure the VMS to take actions on alarm report

1. From VMS, click **Configuration > Device Configuration**.
2. Select the device you would like to monitor the alarm reports.
3. The configuration page will come out.
4. In **Alarm Triggers and Rules** section, check **Triggers**.
5. If you would like to monitor the **Motion**

Detection events, select a rule from the dropdown list. If you would like to monitor the **Alarm Input** events, select a rule for it in the dropdown list. If you would like to monitor both, select a rule for each of them.

NOTE: The available rules you created in **Event Configuration** will be listed in the **Select a Rule** dropdown list.

6. Click **Save** to save all the changes.



Set up Automatic Recording

VMS can be configured to record the video streams from some channels automatically according to some time schedules. The recorded file will be saved in **C:\Record**. Follow these steps to set up a schedule. Once a schedule has been entered, it can be reused as often as necessary.

Add Time Schedules

1. From VMS, click **Configuration > Time Schedule**
2. The **Time Schedule** window will pop up.
3. Enter the *schedule name, date, start time and end time*
4. Click **Add** to save the settings

NOTE: Available rules will be listed on the top of the **Time Schedule** window.

Edit Time Schedules

1. From VMS, click **Configuration > Time Schedule**
2. The **Time Schedule** window will pop up.
3. Select the schedule you would like to edit
4. Enter the required information
5. Click **Edit** to save the changes

Remove Time Schedules

1. From VMS, click **Configuration > Time Schedule**
2. The **Time Schedule** window will pop up.
3. Select the schedule you would like to remove
4. Click **Delete** to remove the schedule

Configure the VMS to record automatically

1. From VMS, click **Configuration > Device Configuration**
2. Select the device from which you would like to record the videos
3. The configuration page will appear.
4. In **Automatic Recording** section, check **Start Automatic Recording**, and select a schedule for it.

NOTE: The available schedule you created in **Time Schedule** will be listed in the **Select a Schedule** dropdown list.

5. Click **Save** to save all the changes.

Available Time Schedules

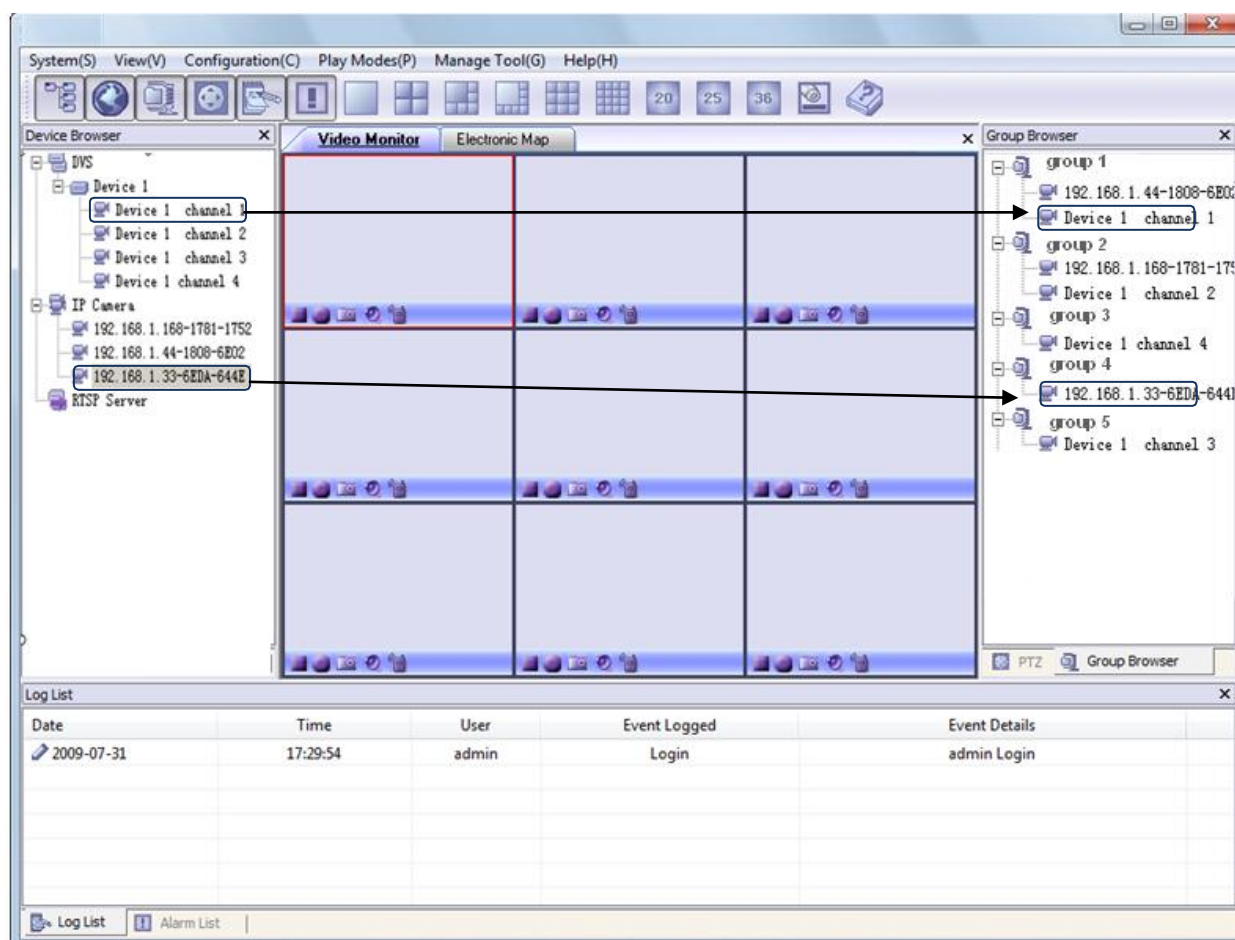
Check **Start Automatic Recording** and select a schedule

Create Groups

VMS allows classifying network cameras/ digital video servers to up to 10 groups, which helps to manage the devices. For example, you can place network cameras in the same monitored area in to the same group.

Add Devices to Groups

From **Device Browser** panel, click on the device, drag it and drop it to the destination Group in **Group browser** panel.



Remove Devices from Groups

On **Group Browser** panel, right click on the device you would like to remove; on the popup menu, click **Delete**. Or on **Group Browser** panel, right click on the group; click **Delete All** on the popup menu to delete all devices in the group.

Patrol Play

In patrol play mode, VMS plays video streams from different groups in a loop. Follow these instructions to set up the patrol play.

1. Create Groups.
2. Configure the groups attributes properly.
3. Start patrol play.

Configure the Group attributes

1. On **Group Browser** panel, right click on the group; on the popup menu, click **Group Settings** to open **Group Settings** dialog.

2. Enter the preferred settings.

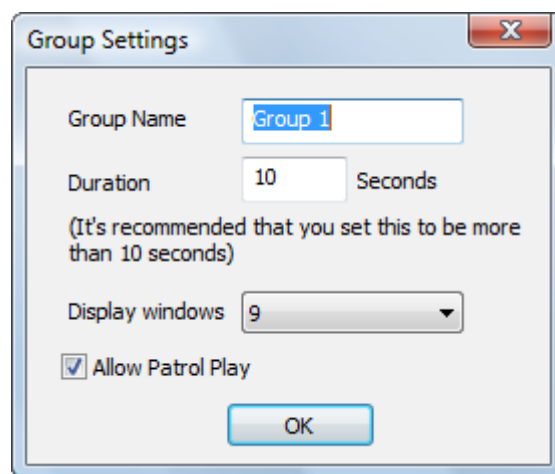
Group name – Enter a group name.

Duration – Duration defines how long the video from this group will be played.

Display windows – The number of channels that will be displayed on the main window. It is better that the number of display windows is larger than the number of devices added to the group to make sure you can watch all the video streams from the group.



Allow Patrol Play – Check this option to add the group to patrol play groups.

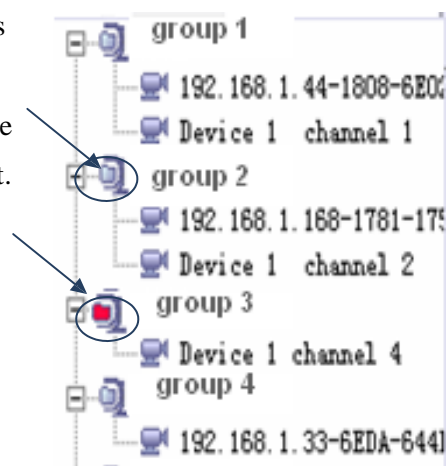
3. Click **OK** to save the changes.



Start Patrol Play

From VMS, click **Play Modes** > **Patrol Play**. VMS starts to play videos from different groups in a loop.

In **Group Browser** panel, the group icon will display status changes. The group changes to become  if VMS is playing video streams from it. Otherwise, the group icon is .



Replay Tool

This tool provides the ability to replay recorded videos. It also provides a search function which allows you to perform a search based on the start time, end time, IP address, and channel.

Electronic Map

A map gives a visual overview of the cameras in your installation. A map is an image, for example a drawing or a photograph, on which you place cameras and views. VMS supports an electronic map that lets you identify the locations of your cameras and the status of their alarms.


Add an Electronic Map

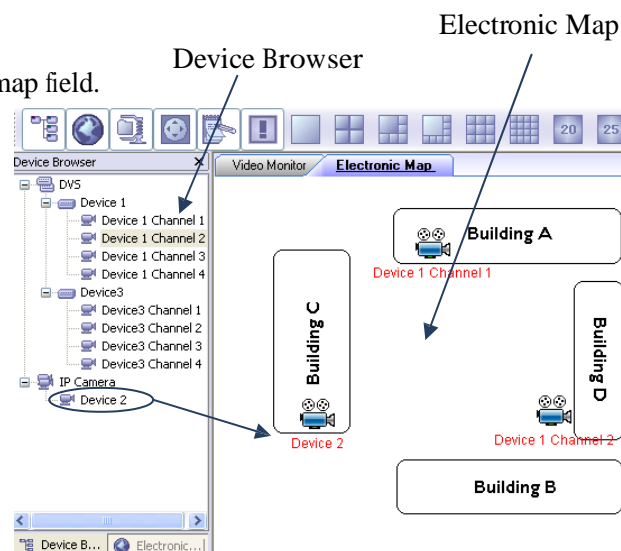
1. Right click on the **Electronic Map Browser**; click on the **Add a map** on the popup menu.
2. Choose an image. The map will be displayed in the electronic map field.


NOTE: The supported image files are: bmp, jpg or gif. VMS will display the electronic map in full resolution, and the user can use the scroll bars to view the whole image.

Add a device to the electronic map

1. Open **Device Browser** panel and electronic map field.
2. On **Device Browser** panel, click on the channel, drag it and drop it to the preferred destination on the map.

3. An icon  with the device name and the channel number will now be shown on the map. Right click on the icon to change the icon settings.



NOTE: When VMS receives an alarm report and the alarm action is set to **Display Warning in Electronic Map**, the corresponding icon on the map will flash red .

Lock the map

To avoid changing the positions of cameras on the map accidentally, the users can lock the map after adding all devices. Right on the map, in the popup menu, enable **Lock the map**.

Remove a device from the electronic map

On the map, right click on the  icon; click **Delete** to remove the device from the map.

PTZ

Click PTZ on the toolbar to open the PTZ panel. If the connected devices are PTZ cameras or have a PTZ device connected, users can use the console to adjust the focus, brightness, contrast, speed, IRIS, and also pan / tilt the devices.



Log Management

Users can search a log by the log type, start time and end time.

User Management

The VMS administrator can add, modify and delete users here. The administrator can give users different privilege levels.

Add a User

1. From VMS, click **Management Tool > User Management**.
2. The User Management window will popup.
3. Enter the **user name**, **password** and **privileges**.
4. Click **Add** to add a new user.

Edit a User

1. From VMS, click **Management Tool > User Management**.
2. The User Management window will popup.
3. Select the user you would like to change the settings and enter the changes.
4. Click **Edit** to save the changes.

Remove a User

1. From VMS, click **Management Tool > User Management**.
2. The User Management window will popup.
3. Select the user you would like to delete.
4. Click **Delete** to remove the user.

NOTE: Available rules will be listed on the left side of the **User Management** window.

Local Configuration

Recording Settings Items

Recording Drives – This section displays the names, total space and free space of the local disks. This section also lets you select which local disks you can use to store recorded video files. You can also configure the reserve space for each disk. If multiple disks are chosen, VMS will start from the first disk until the free space equals the reserved space, and then go to the next one.

On Disk Full – When a disk is full, users can choose to stop all recordings or keep recording and store them by deleting the oldest files on the disk.

Split Files per X minutes – Configures the duration of each video recording.

Snapshot Directory – Lets you select the location where the snapshots will be saved.

