



Software
ACTi Hybrid nDVR
v1.00

User's Manual



www.acti.com

nDVR-4100

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A. ACTi Hybrid nDVR

1. Main Function

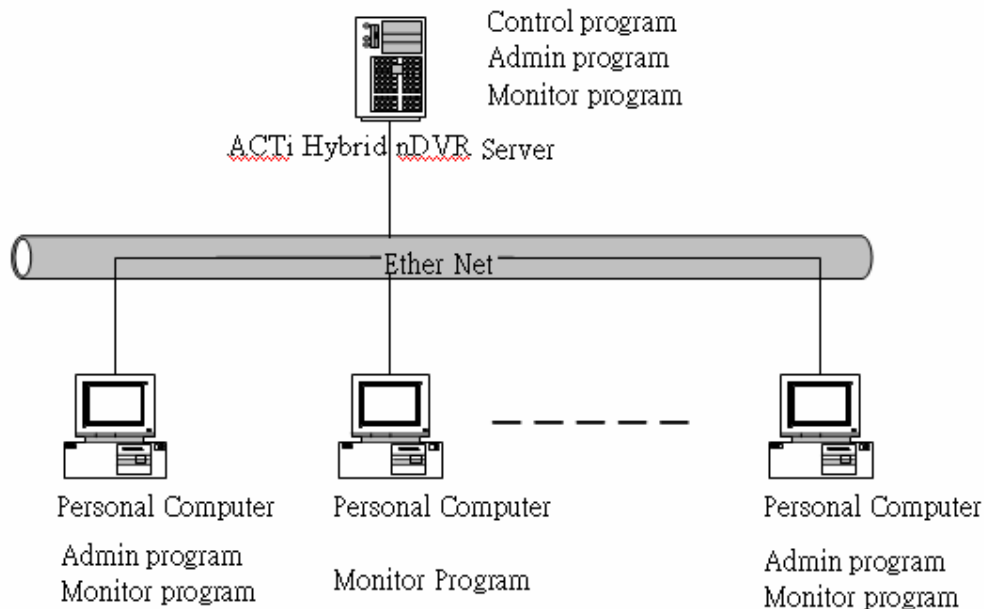
ACTi Hybrid nDVR includes the following programs :

- (A.)  **Admin.exe** : This program allows you to configure the system of ACTi Hybrid nDVR and setup the device which connected to system, for detail please refer to content C.
- (B.)  **Monitor.exe** : This program allows you to view live video and query recorded file and alarm log, for detail please refer to content D.
- (C.)  **Web Monitor** : This program allows you to online monitor live video thru IE from client PC, for detail please refer to content E.
- (D.)  **Control.exe** : This program manages video recording, input/output events and alarm triggering, it is running as a background program of ACTi Hybrid nDVR comes with PC boot up.

2. System Requirement

2.1. Client-Server System Structure

ACTi Hybrid nDVR is consisted of SERVER version and CLIENT version. SERVER version limits one installation, license key are required whenever adding capture card for central management. SERVER version includes Admin, Monitor, Control and Web Monitor programs. The CLIENT version is designed for monitoring purpose, and the Admin program is an option while installation (for detail please refer to content B3).



2.2. System Requirement- SERVER version

- A Windows XP Professional SP2
- A P-4 3.0G 1 G RAM
- A 10/100 Mbps (Fast Ethernet)
- A 1024x768 (XVGA) or above display card

2.3. System Requirement- CLIENT version

- A Windows XP Professional/Home SP2
- A P-4 1.2G 256 MB RAM or above
- A 10/100 Mbps(Fast Ethernet)
- A 1024x768 (XVGA)or above display card

3. Networking Suggestion

ACTi Hybrid nDVR is optimized for small-scale project, simple LAN or simple WAN environment. Place the system behind firewall or IP sharing device to efficiently protect this system from hackers' attack.

B. ACTi Hybrid nDVR- Installation Wizard

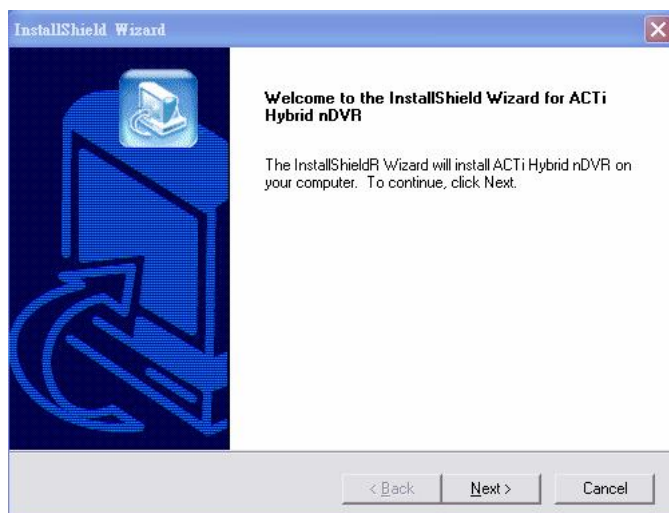
1. ACTi Hybrid nDVR Server version-Installing

【Step 1】 Please insert ACTi Hybrid nDVR CD into CD-ROM drive. Go to ACTi Hybrid nDVR\Server directory to execute Setup.exe.

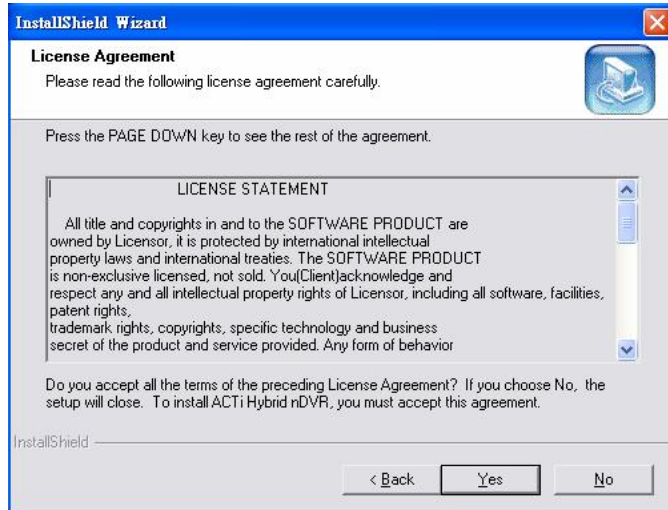
【Step 2】 Select language

The Installation Wizard will select the language of your operation system intelligently. ACTi Hybrid nDVR supports two languages :

- (1) Traditional Chinese
- (2) English



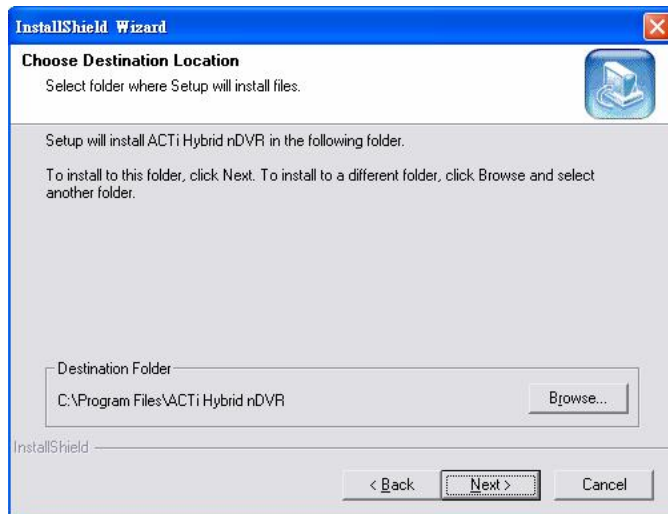
【Step 3】 Click **Next** to begin the installation process.



【Step 4】 Please read the License Statement and select **Yes** to accept and continue.



【Step 5】 Enter the name of user and company that the product is licensed to.



【Step 6】 Choose Destination Location or click **Next** simply

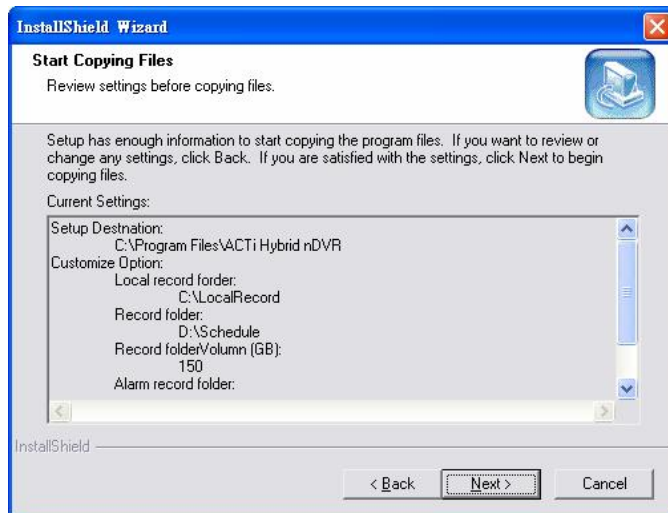
Specify the Destination Folder; you may click **Browse...** to select a folder other than the default one. Click **Next** to continue.

【Note】 The default location is deemed adequate for most situations, it is recommended that you use the default location.



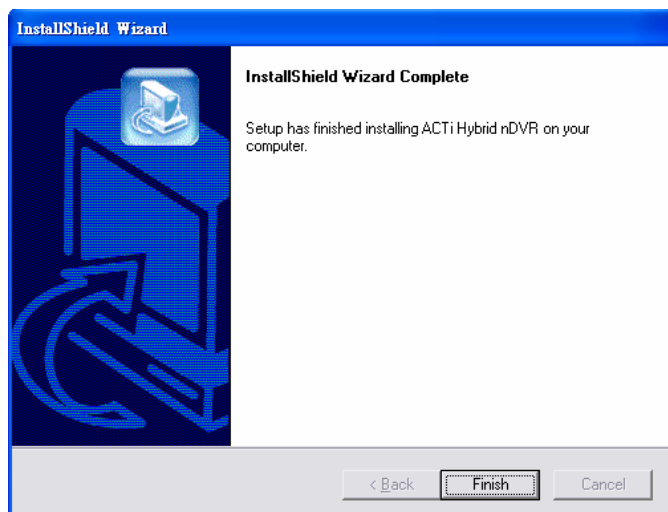
【Step 7】 Select Program Folder

Specify the Program Folder where ACTi Hybrid nDVR icons will be installed to. Click **Next** to continue.





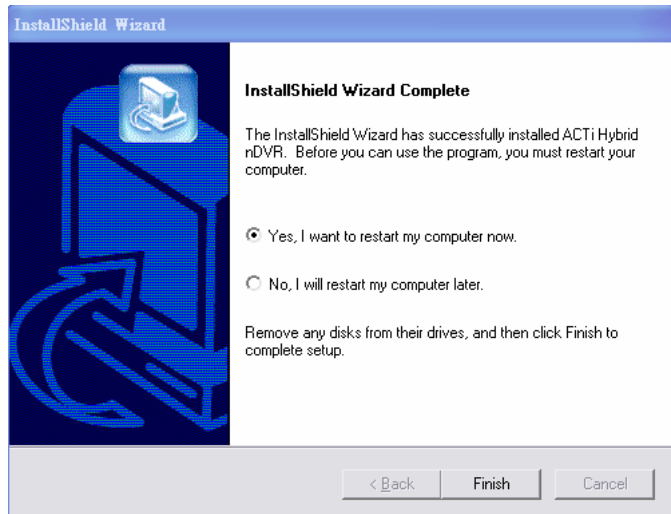
【Step 8】 Start Copying Files page pop out, review all your configuration that you have made. Click **Next** to accept these setting and continue.

【Note】 The installation process may take several minutes to complete, depending on the handling capability of your computer system (refer to content A2 for system requirement detail)



【Step 9】 Installshield Wizard Complete; click **Finish** to complete the setup. The system should start ACTi Hybrid nDVR in 1 to 3 minutes, and the icon of

UARGControl () and WatchDog () appear in task bar of screen's lower-right corner. If in real case, this does not happen, please restart your computer.

**【Step 10】 Restart your computer**

Suggest to restart your computer before you use ACTi Hybrid nDVR application.

2. Firewall Configuration

2.1. Windows XP Service Pack 2

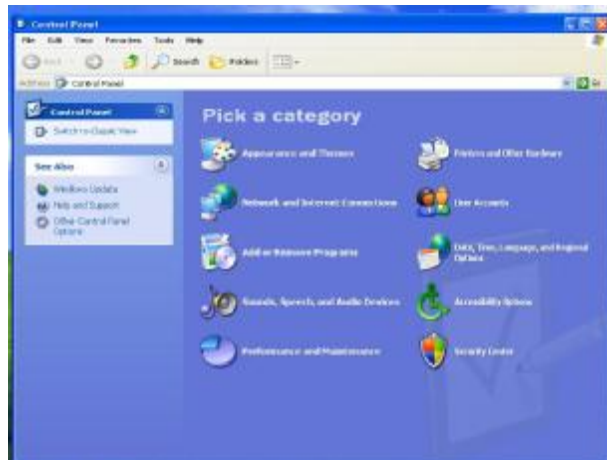
Windows XP Service Pack 2 has a build-in firewall function. Windows XP will ask whether you want to unlock some services while you install ACTi Hybrid nDVR. Please follow the below steps:

【Step 1】 Keep Blocking ACTi Hybrid nDVR service

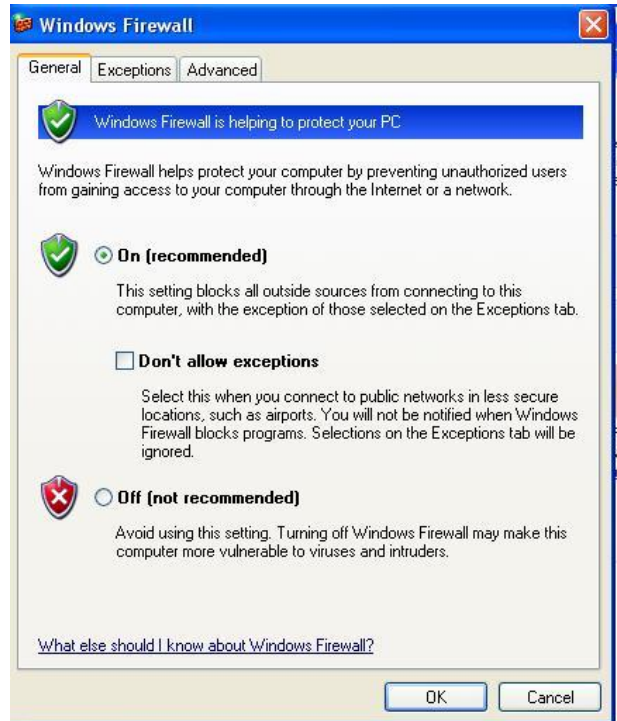
Windows pop up to ask you whether you want to Keep Blocking some of the program as suggested, click **Keep Blocking** and go to the next page.



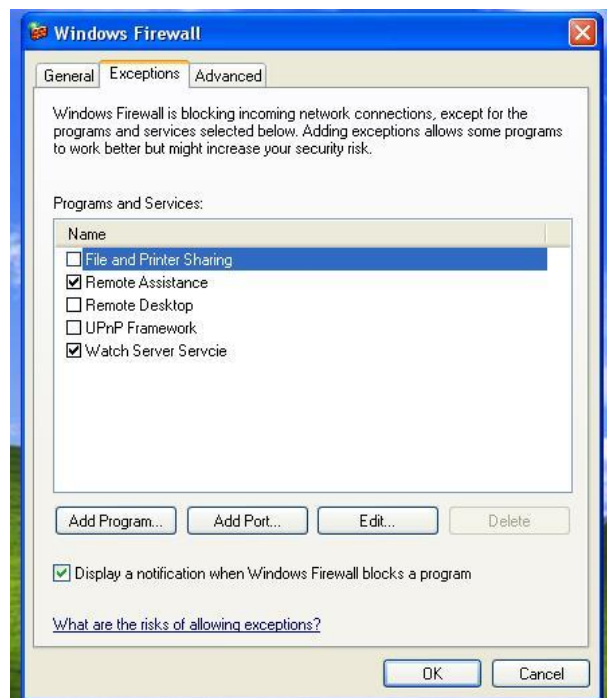
【Step 2】 Select to restart computer or not
Select **No** when system asks you whether you want to restart your computer.



【Step 3】 Go to Windows firewall
From start → Control Panel → Network and Internet Connections, and select "Windows Firewall."

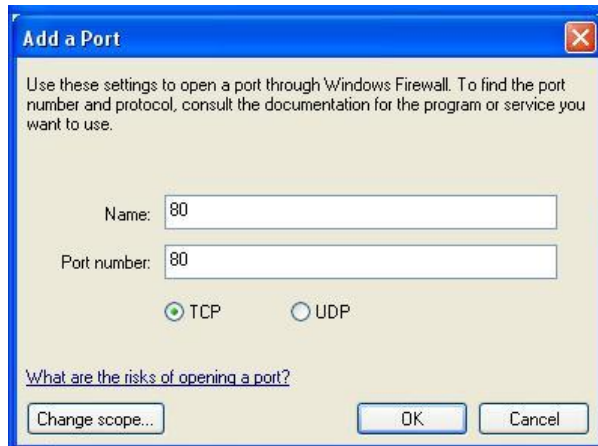
**【Step 4】 Windows Firewall Dialogue**

When Windows Firewall dialogue pops up, select “Exception” tag to review and add Exception ports.

**【Step 5】 Review Exception Programs and Services**

Review all the exception programs and services after finishing installation; make sure that Watch Server Service and Video Proxy are unchecked.

【Step 6】 Click on **Add Port for further setting**



【Step 7】 Add port--8000,8001,8002 and 21, and a description to “Name” field.

【Step 8】 Review new added exception ports—confirm if 8000,8001,8002 and 21 video proxy, control, watch service are added to the exception list.



【Step 9】 Suggest restarting your computer after finishing windows firewall configuration.

2.2. Other 3rd-party Personal Firewall

If your computer has other 3rd-party personal firewall, please consult its user manual to turn on the port of 8000, 8001,8002 and 21. These ports are necessary for ACTi Hybrid nDVR to communication with other IP device.

3. CLIENT version Installing

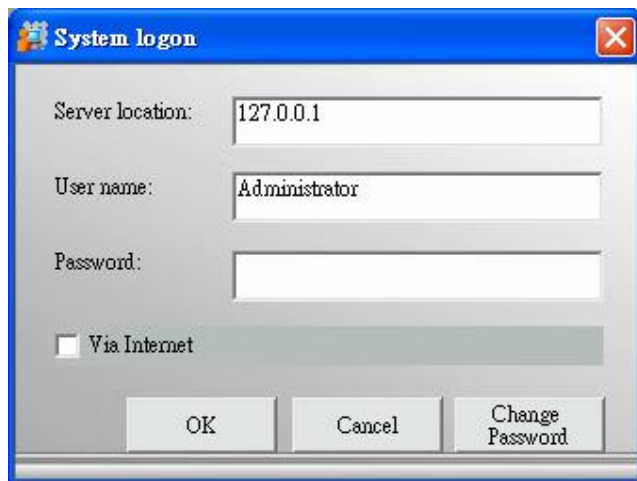
Please insert **ACTi Hybrid nDVR CD** into CD-ROM drive. Go to ACTi Hybrid nDVR\Client directory to execute Setup.exe

【Note】

- (1) You may freely install CLIENT version to whichever computer you want.
- (2) The rest steps are same as installing SERVER version of step 2, 3, 4, 6, 7, and 9.

C. Admin Program

1. Running the Admin Program



【Step1.】 Select Start→All Programs→ACTi Hybrid nDVR(Admin.exe)

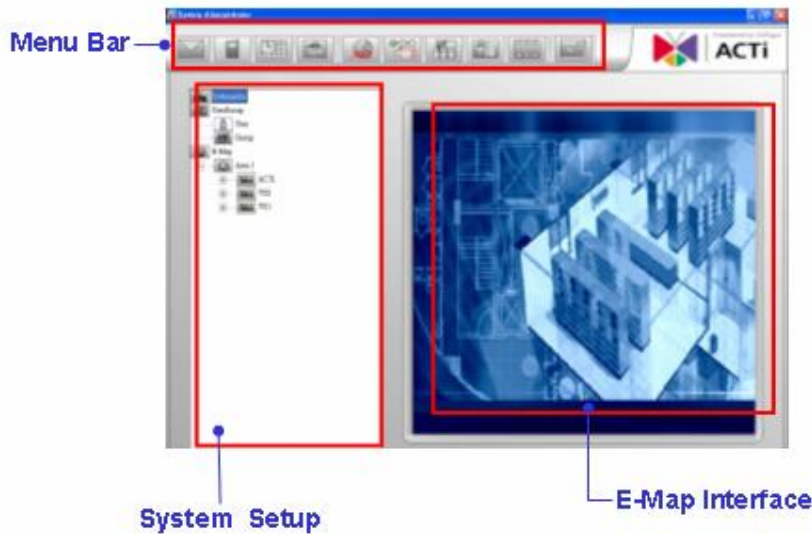
【Step2】 System Log on window. If this is the first time you logon, use Administrator as default user name and leave the password blank, then click OK to log into the system.

AServer Location : “127.0.0.1” is the default for local server. If you want to access server from client, then please enter the IP of server to this text box.

AVia Internet : if you want to remote control ACTi Hybrid nDVR server from client which is not within intranet, then check this box.

【Note】 Password: The default password of Administrator is blank. It is recommended that you change password for security management, please go to User Group section to change the password.

2. Admin Interface Overview



The System Admin screen is divided into three areas:

- (a) The *Menu Bar* area
- (b) The *System Setup* area
- (c) The *E-Map Interface* area











If your system does not display the screen properly, please check if your display resolution is at least 1024 x 768, and that the font size is Windows system default.

ACTi Hybrid nDVR does not support font sizes larger than the Windows system default one.

The buttons that appear in the *Menu Bar* depend on which administration function you are using. For example, when you click the User Group icon in *System Setup* area, the *Menu Bar* buttons will show related function accordingly. Details will be explained in the following sections.

3. System Management Overview


Select SystemAdm icon in *System Setup*, you will see the button in Menu Bar change accordingly.

Button	Use To	Button	Use To
	E-Mail Setting: to specify the email outgoing server for sending security alert.		SMS Setting: to specify the sms service provider and User ID and Password.
	Holiday Setting: to specify the calendar holidays for schedule setting which is not included in weekly routine.		DNS Setting: to specify the Domain Name your computer registered for DNS service.
	Storage: to specify the path and storage for recorded file respectively		System Alarm: to set alarm action respond to the selected system alarm
	Rotation: to set the interval for image rotation in Monitor split screen.		Motion Rectangle: to set the square size of motion detection.
	Video Format Setting: to set video format corresponding to the device format		Registration: to register the license key of capture card



3.1. Email Setting



【Step1】 By selecting E-Mail button() from the *Manu Bar*.

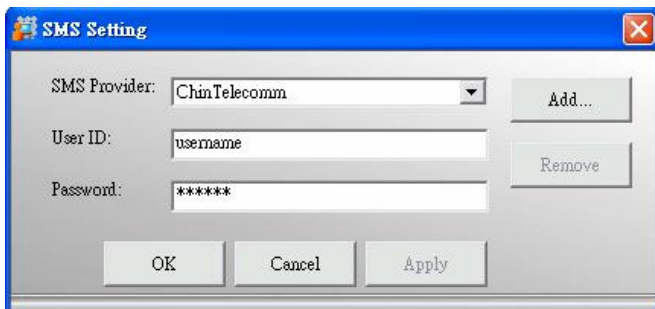
【Step2】 you can specify the email server that will be used when sending security alerts via email.

A Email Server: please enter the mail server which could forward your mail to receiver. Due to (1) SMTP authentication is not available (2) some company mail server set the policy of exchanging email within company only. We suggest you use the mail server of the receiver.

AMail From : it is an email address display in the sending column.



3.2. SMS Setting

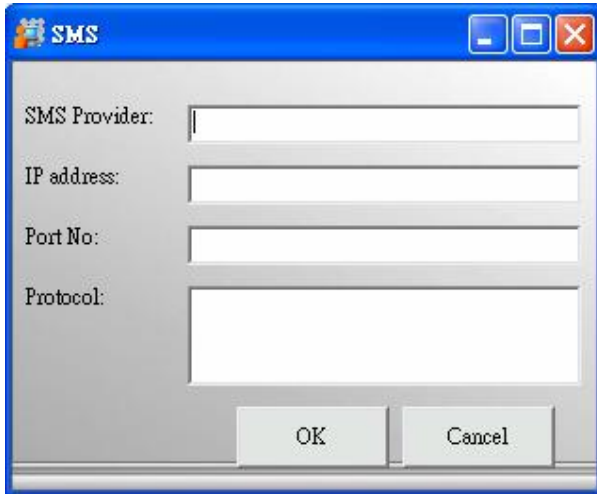


3.2.1 SMS Account Setting

You may specify any SMS provider that provides the SMS service. User should enter the User ID and Password of the SMS service account apply from SMS service provider so that User could get SMS notification when alarm detected

【Step1.】 By selecting SMS button from *Manu Bar*

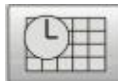
【Step2.】 Enter the User ID and Password of the SMS service account



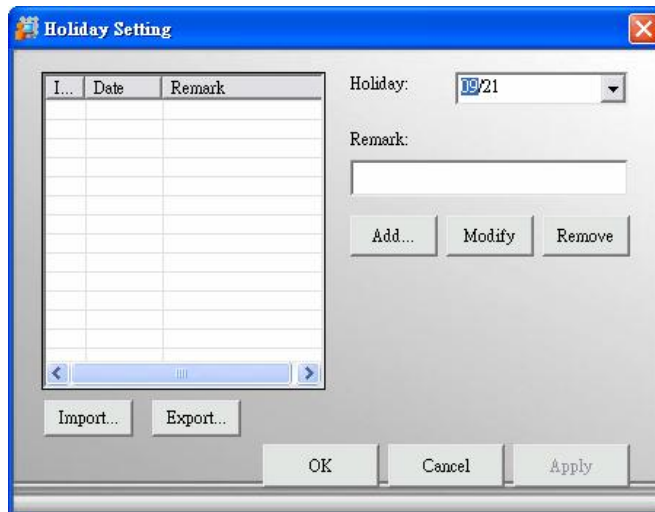
3.2.2 Add SMS provider


The China Telecom is a default SMS service provider. If user wants to add a local SMS provider to enable this service, please consults local distributor for any SMS provider is ready to provide service for ACTi Hybrid nDVR

【Step1.】 Click **Add** to bring up the window, and enter the related information of the SMS provider.



3.3. Holiday Setting



【Step1】By selecting Holiday button () from *Manu Bar*. You may specify any calendar holidays except weekend that may affect the security system settings.

【Note】 User could enable alarm service full day during these holidays if you check "Holiday" box in Content C6.4.

28	29	30	31	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	1
2	3	4	5	6	7	8

Today: 2005-09-28

【Step2.】 You may specify the holiday in the calendar and enter some meaningful description in the "Remark" field.

A Button overview :

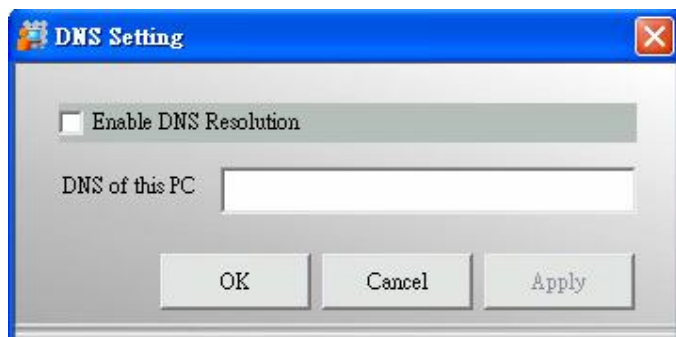
Export... : If you have installed multi sites with ACTi Hybrid nDVR server they might require the same holiday setting, you can set on one server first, and use the **Export...** function to save holiday setting .


Import... : you may update the holiday setting to another ACTi Hybrid nDVR server, by copying the file to that server and use **Import...**to update holiday setting accordingly.



3.4. DNS Setting

It is designed for the DNS resolution between ACTi Hybrid nDVR server and IP device, your video IP device will connect server via IP address of server if you did not enable DNS Resolution. But your IP device will connect server via Domain Name which your server registered, so that alarm action could be executed.



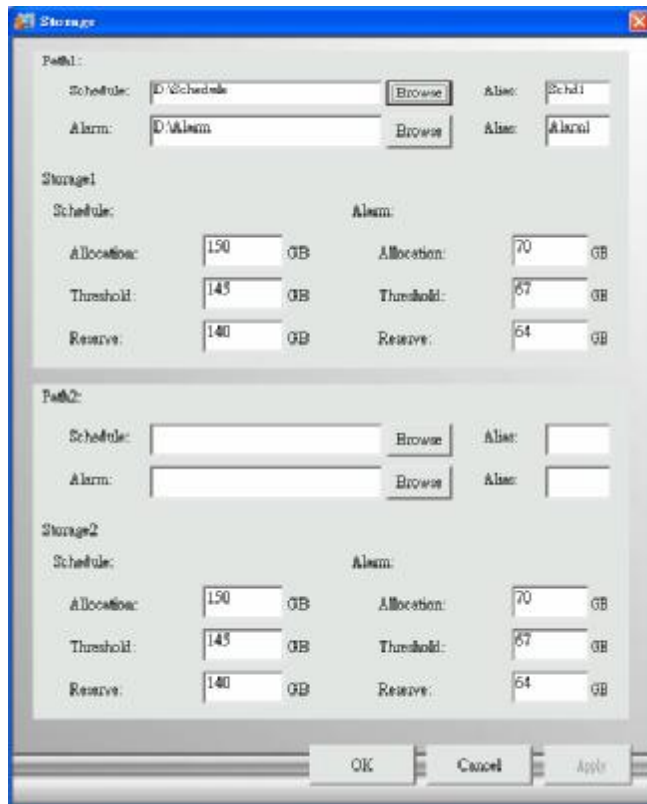
【Step1】 By selecting DNS Setting button () from the *Manu Bar*, you may specify the Domain Name Server


【Step2】 If your computer gets IP from DHCP service or its IP changes periodically due to the policy of your network administrator, please check “Enable DNS resolution”, so any alert message could be delivered to ACTi Hybrid nDVR from camera no matter what IP your computer is assigned. Enter the Domain Name your computer registered to “ DNS of the PC” field.

【Note】 Please request a DNS for ACTi Hybrid nDVR from your MIS.



3.5. Storage



By selecting Storage button () from the *Manu Bar*, you may configure the storage and recycling rule.

3.5.1. Path(1、 2)

Assigned the disk to store recorded data of Schedule and Alarm.

AAlias : suggest to give an alias for the path, so that path could be easily differentiated (please refer to content C 6.3.1 Image Setting)

3.5.2. Storage(1、 2)

Set the maximum disk space for recording image.

A Allocation: The storage allocation should be no less than 2 GB.

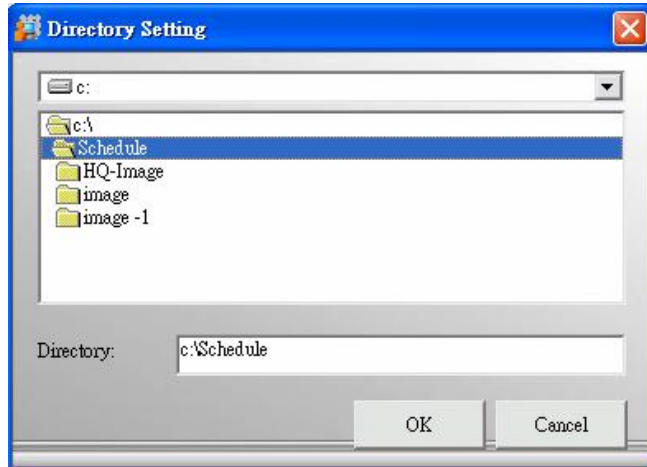
A Threshold: When the image data exceeds 90% of allocation, ACTi Hybrid nDVR will trigger a warning message to related parties. Threshold no less than 1.8 GB.

A Reservation: ACTi Hybrid nDVR will overwrite historical data when it reaches 80% of allocation. Threshold no less than 1.6 GB.

【Note】

(1) Recording video over a long period of time will consume large amounts of disk space. Make sure that you have at least 2GB disk space available if you want to use recording function.

(2) Path 2 is assigned for the backup purpose, it is an optional service.



3.5.3. Browse...

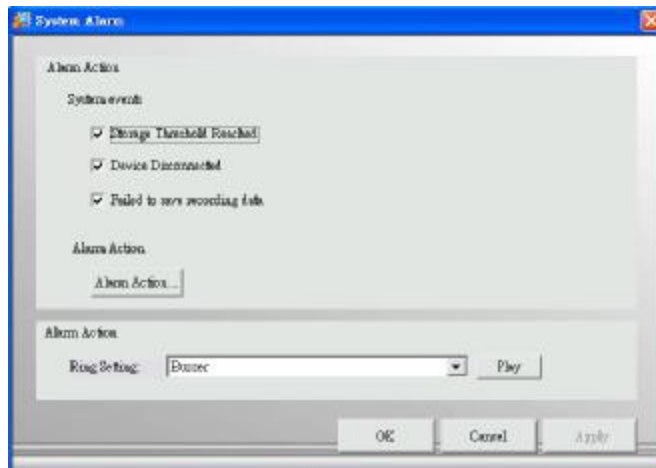
When browse to change the default path, you may change it to...

(1) Directory: please do not choice the directory which has install the operation system (Generally C:\ is designated to windows operation system is installation)


(2) Folder: double click the folder which you want to save recorded file, the folder name will display in the "Directory" field , click **OK** to save the setting.



3.6. System Aalarm



3.6.1. Overview

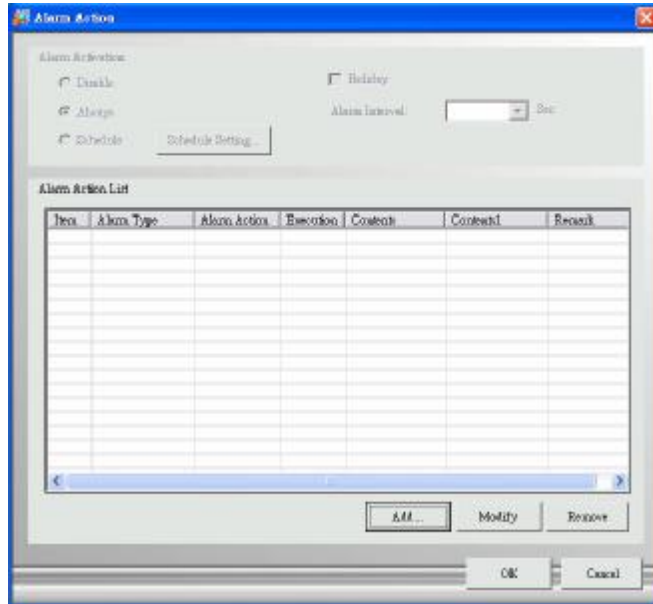
By selecting System Alarm button () from the *Manu Bar*, you can turn on system diagnosis and alarm action

3.6.2. Alarm Action from three system events :

- (1) "Free space is running short" : details please refer to Content C3.5
- (2) "While Device Disconnects"
- (3) "Failed to save recording data"

3.6.3. Alarm Ring Setting

There are 4 sounds effect to be selected.




Any system event will trigger alarm action, please refers to Content C6.4 for detail.



3.7. Rotation



By selecting Rotation button () from the *Manu Bar*, you can set the camera to assigned splitscreen and rotation interval.

【Set1】 Select the TAB of splitscreen, ex: 4CH,9CH...

【Set2】 Assign camera to splitscreen:

Take 16-splitscreen as example: select Tab of 16CH, and select the split-ed screen (remark the selection by changing color to orange) to move camera from “Unselected Column” to “Selected Column” by clicking

 button.

【Set3】 Set Rotation Sequence


You can adjust camera rotation sequence by clicking up/down button and also set the rotation frequency by selected interval.



3.8. Motion Detection Granularity

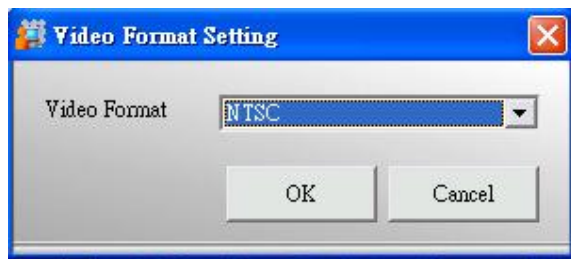


By selecting Motion Detection Granularity


button() from the *Manu Bar*, you can set the granularity of detected area



3.9. Video Format Setting



【Step1】 By selecting Video Format Setting

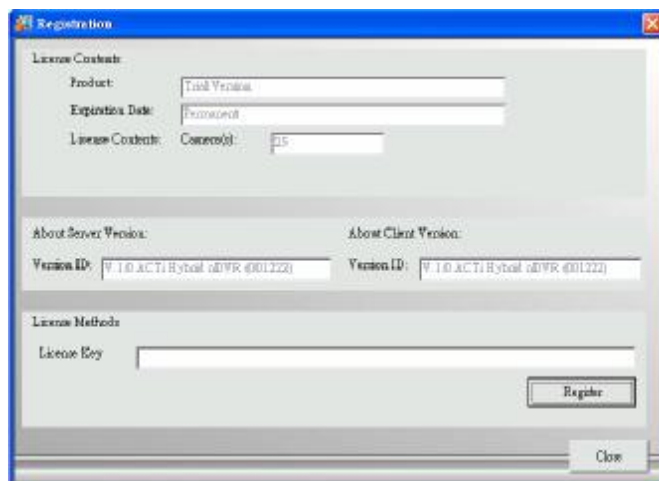
button() from the *Manu Bar*, you can set the video format of ACTi Hybrid nDVR.

【Step2】 Save the setting.


【Step3】 A message pops up to remind you to restart ACTi Hybrid nDVR to activate the new setting.



3.10. Registration



【Step1】 By selecting Registration button

() from the *Manu Bar*, you can register the license key of capture card to ACTi Hybrid nDVR to get camera license.

【Step2】 Please enter the license key of capture card and click **Register** button, the number of license cameras will change accordingly.

【Note】

▲Every license key gets 13 camera (or nodes) authorized, 4 analogue nodes and 9 digital nodes, the analogue

nodes comes in increments of 4 and accumulative, but the digital analogues is non-accumulative. So the maximum cameras are 25 nodes.

Definition:

* Analogue node: camera under capture card







* Digital node: camera under Video Server, or IP camera

4. User Group/User

4.1. Overview

Select User/UserGroup icon in *System Setup*, you will see the button in *Menu Bar* change accordingly.

The User Group functions in *System Setup* area is for managing user privileges. Default user “Administrator” is created with full privileges during installation. You may add users to the system and differentiate their privilege by designating them to different groups.

Button	Use To	Button	Use To
	Add User		User Setting
	Remove User		Add Group
	Group Setting		Remove Group

4.2. User Group Overview

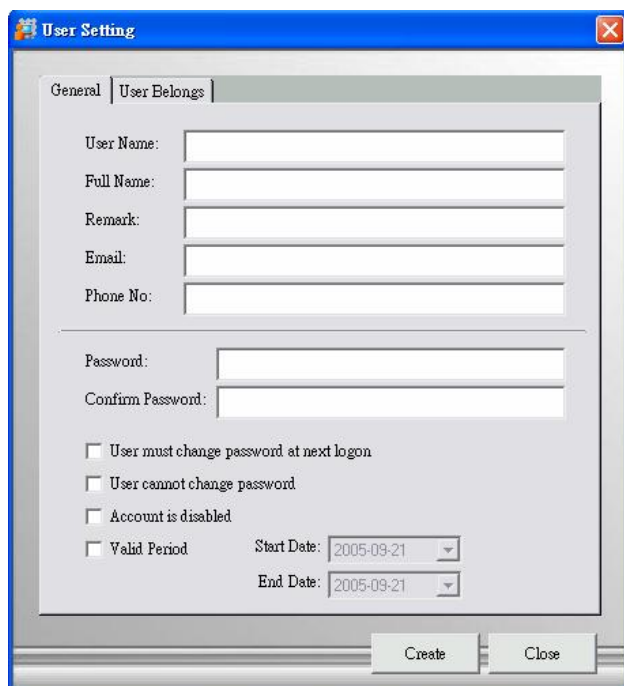
A “Admin Group” is the user group that has the full privilege to the Admin and Monitor programs. The user of “administrator”, system default and belong to “Admin Group”, can add users and assign users to whatever user group.

A “Monitor Group” is the group for general users that has the full privilege to the Monitor program.

A “User Group” is the group for viewing monitor program only



4.3. Add User



User Setting

General | User Belongs

User Name: []

Full Name: []

Remark: []

Email: []


Phone No: []

Password: []

Confirm Password: []

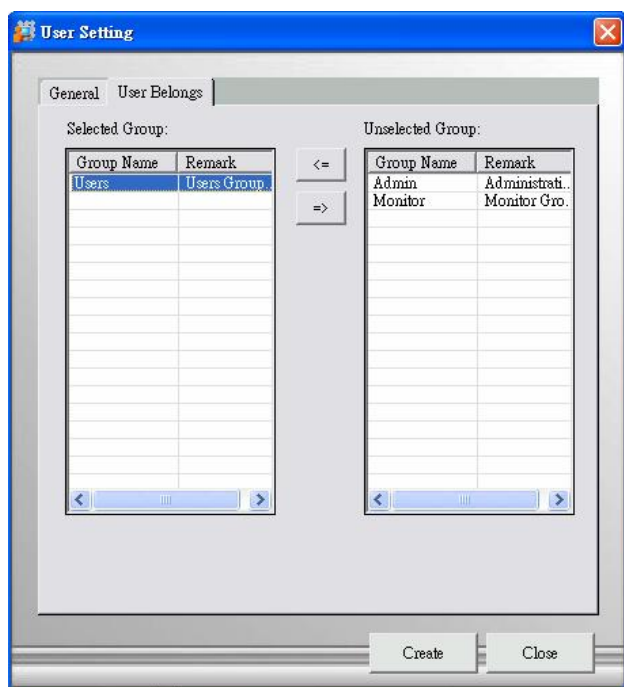
User must change password at next logon
 User cannot change password
 Account is disabled
 Valid Period Start Date: 2005-09-21 [v]
 End Date: 2005-09-21 [v]

[Create] [Close]

【Step 1】 Select User icon in the *System Setup* area, then click the New User button () in the *Menu Bar*.

【Step2】 Enter user information in the “General” Tab.

【Note】 For security concern, it is recommended to assign Password and tick the box for password changing and validation.



User Setting

General | User Belongs

Selected Group:

Group Name	Remark
Users	Users Group.

Unselected Group:

Group Name	Remark
Admin	Administrati..
Monitor	Monitor Gro.

[<=] [>=]

[Create] [Close]

【Step3】 Designating a User to a Group
 Select the “User Belongs” tab to designate a user to a group.

Select the group name and move it between “Selected group” and “Unselected group”. Click **OK** to continue.


After setting both general information and user belongs, click **Create** to save the setting.

4.4. User Setting



【Step1】 Select User Setting

Select User icon in the *System Setup* area, the User Table display in the *E-Map Interface* area, when select any user icon from the User Table, the User Setting Button will display in the *Menu Bar* accordingly. Then click the Edit User button

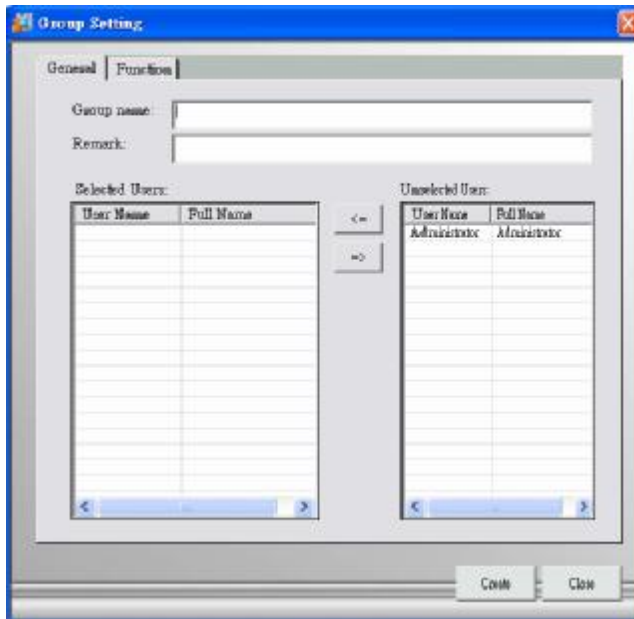
() in the *Menu Bar*.

【Step2】 Modifying user Information

You may change the information by modifying the general information or user belongs of that user



4.5. Adding User Group

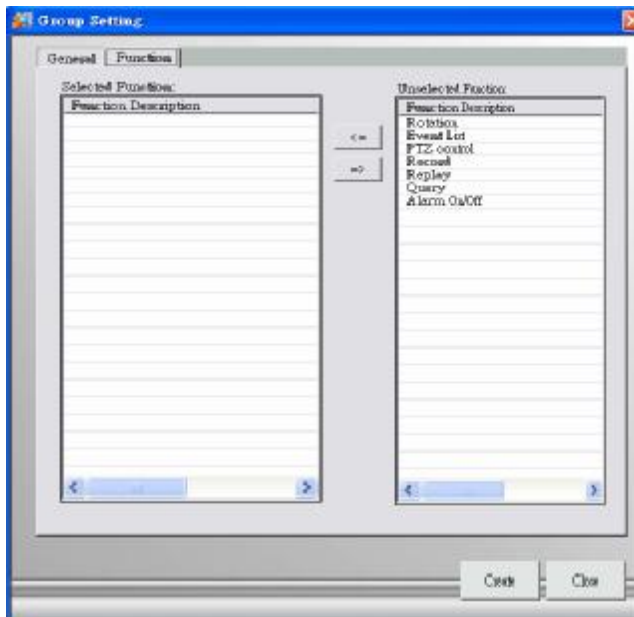


【Step1】 Select the User icon in the *System Setup* area, then click User Group Setting button



() in the *Menu Bar* to modify the user group's data.

【Step2】 Give a name to the new group and group the selected users here in one step.



【Step3】 Select the "Function" tab to designate function to a group.

Select the function list and move them from "Unselected function" to "Selected function". Click **OK** to continue.

【Step4】 After setting both Tab of "General" and "Function", click **Create** to save the setting.



4.6. User Group Setting



【Step1】 Select User Group

Select User Group icon in the *System Setup* area, the User Group Table display in the *E-Map* area, when select the icon from the User Group Table, the User Group Setting Button will display in the *Menu Bar* accordingly. Then click

the Edit User button () in the *Menu Bar*.

【Step2】 Modify User group Information

You may change the information by modifying the general information or function of that user group.





5. Area and eMap management

Area: Area refers to the geography and device scope of ACTi Hybrid nDVR. Area is a prerequisite of any device setting (device includes: capture card, video server, LanCam, camera image, relay or sensor), ACTi Hybrid nDVR provides multi-areas to meet user different requirement.

eMap: eMap refer to (1) a hierarchical tree-structured management tool in *System Setup* area (2) background of the area, it could be a picture or a map (3) an interface which combines eMap background and device icon, eMap visually presents the devices in your security system.



To configure a new system, select E-Map icon in the *System Setup* to bring up the Area button in the *Menu Bar*. Select the newly created area under the E-Map branch and use the corresponding menu options to add a capture card, camera or Video Server to your system or to upload a background picture to the *eMap Interface*.

5.1. Icon Overview


Icon	Representing
	Area icon: The first level of the E-Map hierarchy, the place to add a device
	Capture Card/Video Server : Depending on the device model. There may be an image, a sensor, or a relay under this object (DIDO currently not supported in ACTi Hybrid nDVR)
	LanCam : ditto
	Image icon: The image component of a camera




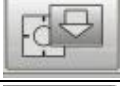



5.2. Button overview

When you select E-Map icon, *Menu Bar* will display the following functions:

Button	Use to
	Area: This button allows you to add a new area under E-Map branch.
	Remove All Area: This button allows you to remove all areas and devices that are under the E-Map branch.

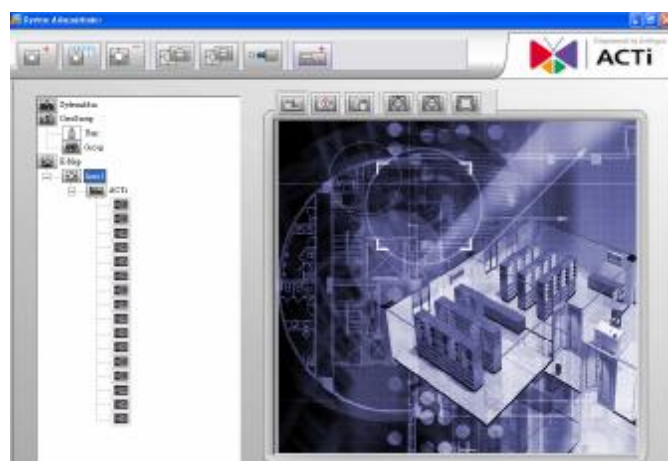
When you select the Area icon, *Menu Bar* will display the following functions:

Button	Use to
	Area: This button allows you to add a new sub area under Area branch.

	Area Setting: This button allows you to edit a name of a selected area.
	Remove Area: This button allows you to remove a selected area and all devices in that area.
	Upload eMap: This button allows you to upload a blueprint or map to a selected area.
	Refresh eMap: This button allows you to refresh a blueprint or map from your PC to get updated in case a new eMap was uploaded from server or another client access.
	Resize eMap icon: This button allows you to change the ratio of the device icons to display on the eMap interface.
	Add Capture card/Video Server: This button allows you to add a new capture card or video server to the area.
	Add LanCam: This button allows you to add a new IP Cam, Speed Dome and Fix Dome to the area.


5.3. Add Area/Remove Area

A  Add Area/ Add Sub Area



【Step1】 Select eMap icon from the *System Setup*.

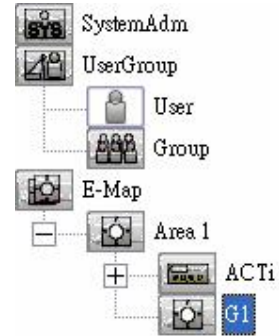


【Step2】 Click Add Area button () from the *Menu Bar*. An Area Setting window will pop up. Enter the name to the "Area Name" text box.


【Step3】 Click **Create** to save setting, a newly created area demonstrate as following:



Before Add Area




After Add Area


【Step4】 Adding a Sub Area: Select Area icon from the *System Setup* and then click Add Area button () from the *Menu Bar*. A sub area can be created.



【Note】 When click the Area icon in *System Setup* area, the function display in menu bar will change as attached graph, function detail will explain later.

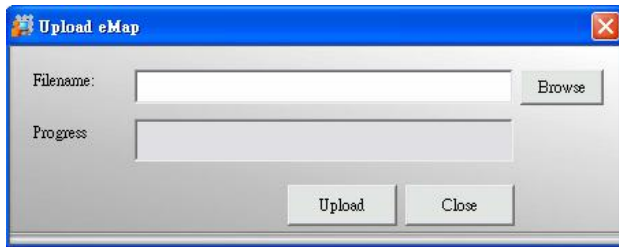
A•  Removing All Areas/•  Removing Area


• (1) Select E-Map icon, then click the Remove All Areas button(• ) . A warning message pops up confirming if you want to remove all areas and devices under area. Click **OK** to confirm.

• (2) Select Area icon, then click the Remove Area button() . A warning message pops up to get your confirmation. Click **OK** to confirm.

【Note】 Area name could be modified in Area Setting button () .

5.4.  **Upload eMap**



【Step1】 Select Upload E-Map button () in the *Menu Bar*. An Upload E-Map window will pop up.

【Step2】 Click **Browse** to navigate the image file representing the area that you wish to secure, and then click **Upload** button

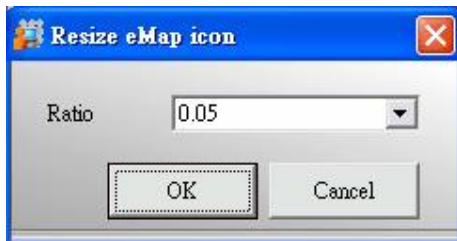
【Note】 Image files can be in the format of *.jpg , *.gif , *.bmp , *.wmf , *.emf , *.ico


5.5.  **eMap related graphs**

5.5.1. Refresh eMap

For the system performance, all the admin setting are kept by cache, so if the server eMap is changed from the client PC, then the others PC ,no matter server nor client is, need to refresh the eMap background manually by clicking the Refresh eMap button (•).

5.5.2. Resize eMap icon



【Step1】 Select Device Ratio button() in the *Menu Bar*. An Resize emap icon window pops up.

【Step2】 Select the ratio of device and click **OK**, the icon display in eMap interface will change it's ratio accordingly.

5.6. Tools in Manu Bar of e-Map interface



eMap tools bar will appear above the *eMap Interface* area after the picture that you uploaded to the *E-Map Interface* area.

The tools of eMap interface could be used to control the eMap background as following:

- (a) Pointer : to drag the device icon on the interface
- (b) Area Zoom : to enlarge background from the specified area selected by mouse
- (c) eMap Shift : to move the background
- (d) Center Zoom In : to enlarge background from the center
- (e) Center Zoom Out : to downsize background from the center
- (f) Default Size : back to the default size and location

6. Device Management



New camera should be added and configured in ACTi Hybrid nDVR Admin program, the following section will explain the details of capture card video server and LanCam setting.

Capture Card/Video Server

Capture Card/Video Server are devices which receive the analogue signal and feed digital signal to ACTi Hybrid nDVR sever. Currently supported Models are :

ACapture Card : PCI-4100



AVideo Server : SED 2100/2300Q/2400/2500

ALanCam : CAM 5100/5120/5130/5140/5200/6100/6200/6400/7100/7200

6.1. Adding Device (Capture Card/Video Server/LanCam)



【Step1】 Click (1) Add Capture Card/Video Server

button () or (2) LanCam() from the *Menu Bar* to bring up the Device Setting window. Type information to text box as following :

AModels : Select the model

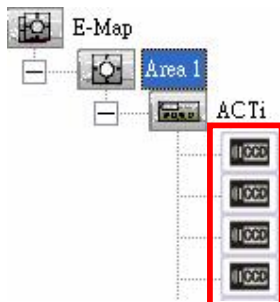
AIPaddress :

If model designate Capture card(ACTi 4100), the IP is default to server IP:127.0.0.1

If model designate Video Server(ACTi 2100) or LanCam, please enter a valid IP address from your video server you wish to connect to.

APort No : The default port number is 80, which can be edited to match with camera web configuration

A Location: The naming of newly added device.








【Step2】 After Capture Card/Video Server is added, please process the Image Setting (refer to C6.3.1).

Note in the left example, the Capture Card/Video Server device now appears under Area icon - the device tree of *System Setup* area, and of cameras (images) icon appear under the camera tree.

6.2. Device Configurations



When select Capture Card/Video Server icon in *System Setup* area, the buttons display in *Menu Bar* as following

Button	Use To
	Capture Card/Video Server Setting: to configure IP/ Port Number associated to a selected device, it displays the information set in Add Capture Card/Video Server button for further modify
	LanCam Setting: same function designed for LanCam further modify
	Remove Capture Card/Video Server: to remove the configuration of a selected Capture Card/Video Server including the image under it.
	Remove LanCam: same function designed for LanCam to remove the configuration
	Hardware PW: to change the User Name or Password of selected Capture Card/Video Server from ACTi Hybrid nDVR or to sync with the direct change in device.

6.3. HW Password



【Step1】 Select the device icon in the System Setup area, and click HW Password button (•) from the Menu Bar to bring up the setting window.

A Old User Name/Password :

- (1) information saved in ACTi Hybrid nDVR
- (2) system default User Name: Admin
- (3) system default Password:123456

A New user name/Password :


Change information and save to both ACTi Hybrid nDVR and Web configurator of selected device.

【Step2】 Click OK to save the setting.

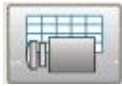




【Note】 When to configure?

ACTi Hybrid nDVR system default are same as device default, only when you want to change PW from ACTi Hybrid nDVR or when you find the PW of device has been changed in web configuration program

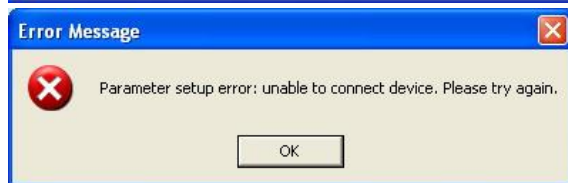
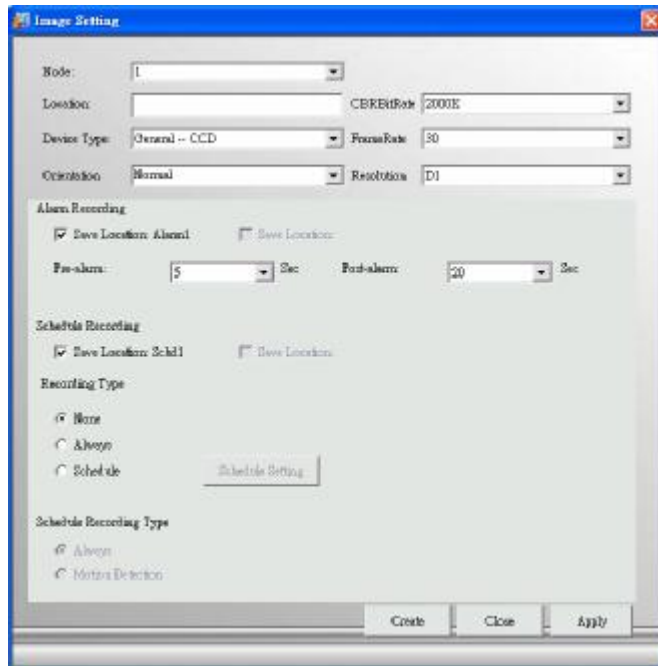
6.4. The Image setting under Capture card/Video Server




Select the Camera Image icon () of a Capture Card/or a Video Server in the *System Setup* area, and click Image Setting button from the *Menu Bar* to bring up the Image setting window.

When select Camera Image icon in *System Setup* area, the buttons display in *Menu Bar* as following :

Button	Use To
	Image Setting: to configure frame per second of recording and activate schedule recording for that camera image.
	Remove Image: to remove all the configuration of a selected camera image.
	Image Alarm: to set alarm action when alarm is detected on selected camera image.
	Motion Detection: to specify area for detecting motion.
	Image Quality: to configure the contrast, hue, brightness and resolution of camera image.

6.4.1.


Camera Image Setting


【Step1】 Select the Image icon () of a Capture Card/or a Video Server in the *System Setup* area, and click Image Setting button() from the *Menu Bar* to bring up the Image setting window.

【Step2】 Click **Create** to save the setting.

【Note】 The CBR BitRate, Frame Rate and Resolution are configurable only in Capture Card (ACTi 4100).

If an error message pops up, please check if any related device is unable to connect due to the information described in Error Message window. Solve the problem, and then go back to Capture Card/Video Server Setting button to configure this device again.

All the setting item defined as following :

ANodes : the number of camera nodes of capture card and video server could be varied base on what models is selected.

ALocation : to differentiate the device image source. Please give a meaningful description that identifies the installed location.

ADevice Type : here are two options of device type which are the Speed Dome or General-CCD. Speed Dome should only support the models which are on the list, but General-CCD has no model limitation. You can freely connect to whatever General-CCD as you like. (Currently we support General-CCD only.)

AOrientation : Normal or Inverted to get image up-side down.

AAlarm Recording : you may define the “frame per second” and the seconds of “pre-alarm” and “post-alarm” of alarm recording.

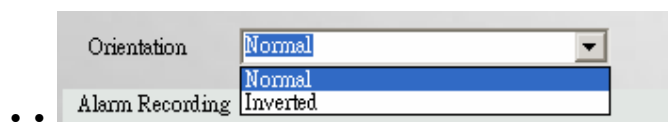
(Save Location Alarm1 : here display the alias of recorded path. For detail, please refer to Content C3.4 Storage.

ASchedule Recording : you may define the “frame per second” and recording schedule.

(Save Location Schd1 : here display the alias of recorded path. For detail, please refer to Content C3.4 Storage.

Recording Type : Schedule recording could be activated by clicking to select “Always” or “Schedule”, and check Recording Type of “Motion Detection” to significantly reduce the storage of schedule recording.

6.4.2. Image Setting- Rotation



【Step1】 Select the Image icon and click

Image Setting button() to bring up the Image setting window.

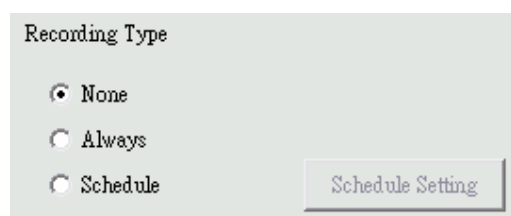
【Step2】 Set Orientation

Click on the right of Image Rotation drop list to support different camera mounting methods. Here are “Normal” and “Inverted” for your option.

【Note】

- (1) Monitor program requires restarting to activate the new setting.
- (2) This configuration requires 20 sec at least to reconnect camera.

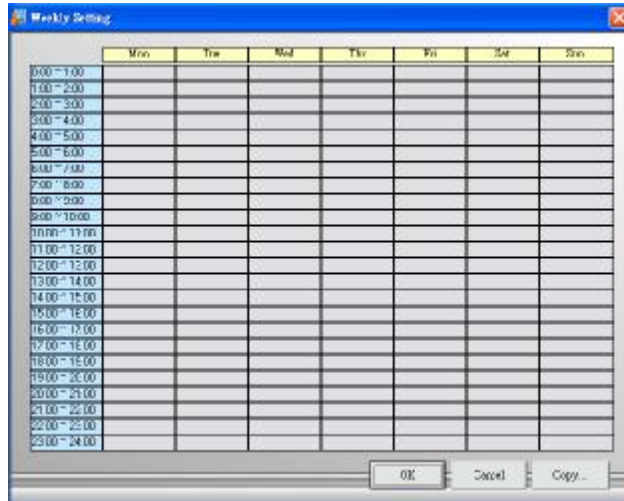
6.4.3. Image Setting- Cycling “Schedule Recording”



【Step1】 Select the Image icon and click Image Setting button to bring up the Image setting window.

【Step2】 Select “Recording Type”

Check the Schedule in Recording Type first, and you will find that the Schedule Setting is enabled.



【Step3】 Schedule a Weekly Setting

Click the Schedule Setting button. A Weekly Setting table will pop up. Select the time period for which you want to schedule a recording. The activated block will turn pink.

【Step4】 Edit a Schedule

To cancel or modify a schedule setting, click the pink block to deactivate it.

【Step5】 Run schedule recording automatically

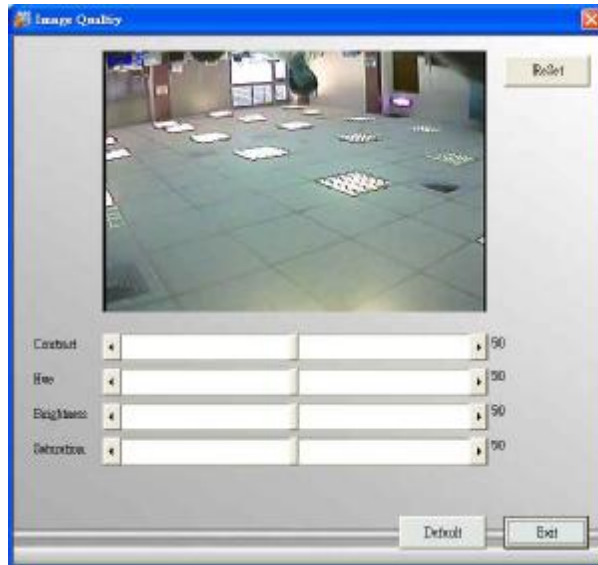
Schedule recording will be executed immediately after click **OK** in Weekly Setting and Image setting window.

【Note】 Weekly setting is a cycling setting which is automatically applied to the following week, with each block being equal to 1 hour.


6.4.4. Copy the setting

If you want to copy the setting from one of the existing setting, click **Copy** to select the device you want to copy from, you can easily copy all the setting information. This function could be found in Image setting, weekly setting, alarm action, etc.

6.4.5.


Image Setting


Select the Image icon of a Capture Card/Video Server in the *System Setup* area, and click Image Quality

button() from the *Menu Bar* to bring up the Image Quality window.


【Note】 **Reset** button is activated while select camera image under capture card, by clicking this button to get the real time Image Quality.

User may drag the scroll bar to right or left direction for your viewing preference and get real time quality

6.4.6.


Motion Detection


【STEP1】 Select the Image icon of a Capture Card/Video Server in the *System Setup* area, and click Motion

Detection button() from the *Menu Bar* to bring up the Motion Detection window.

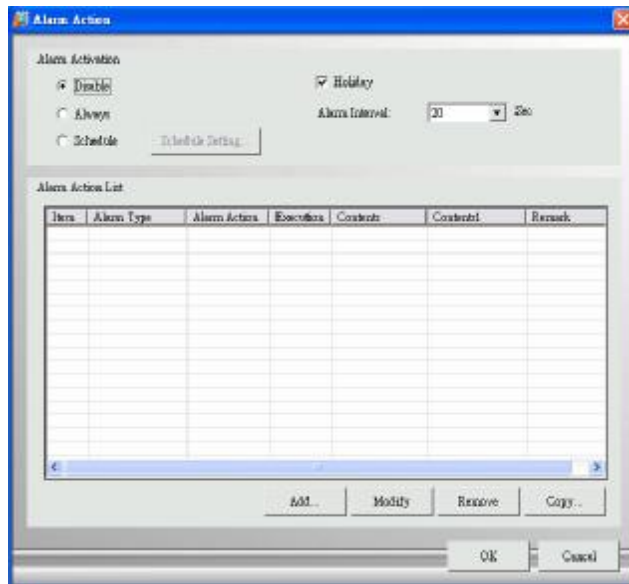
【Step2】 Set Detection Area: A red square follows mouse movement, click to place the red square to the area of motion detection or click to deselect a specified area. Any motion within the detected area should over the threshold of sensitivity to trigger an motion detection alarm.

【Step3】 Sensitivity and Frequency setting
 Sensitivity refers to the pixels of image changes, and Frequency refers to the No of frame mapping.

【Note】 The size of red frame is configurable in Motion Detection Granularity, details please refer to Content C 3.8.




6.5. Alarm Action



6.5.1. To Activate Alarm Action

【Step1】 Start Alarm Action

Select the Image icon of a Capture Card/Video Server in the *System Setup* area, and click Alarm Action

button() from the *Menu Bar* to bring up the Alarm Action window.

【Step2】 Select the Alarm ActivationType

It is disabled by default you can change to “Always” to turn it on, or “Schedule” to activate it per schedule defined in Schedule Setting.

(For “Schedule Setting” detail, please refer to Content C 6.4.3)

【Step3】 The “Holiday” Option

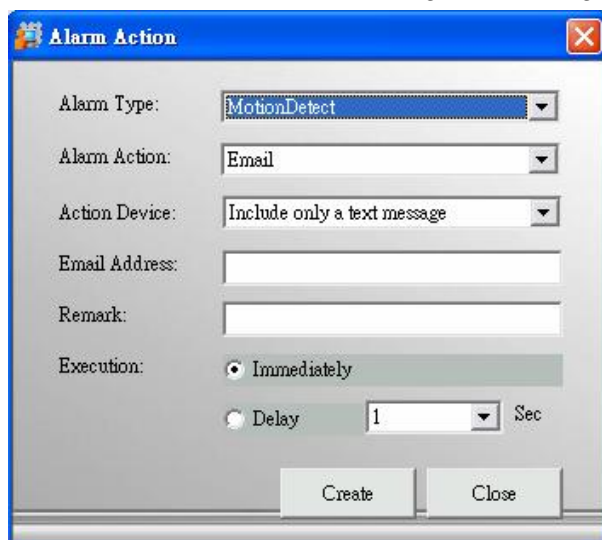
“Holiday” check box only works with Schedule, you may click to check “Holiday” to activate alarm action full day during holiday, regardless the scheduled time in previous setting. The holiday is also user-definable.(Please refer to Content C3.3)

【Step4】 The “Alarm Interval”

Configure the number of seconds between alarms. If successive alarm occurred during this interval, it will be ignored. The total seconds of pre-alarm and post-alarm are suggested to be the minimum of alarm interval.

【Step5】 Click Add... to add new Alarm Action.(Detail please refer to Content C6.5.2)

【Step6】 Click **OK** to save all alarm action configuration (including Add..., Modify..., Remove and Copy...) and dismiss this window. Click **Cancel** to ignore all configuration and dismiss this window.



6.5.2. Alarm Action – General Setting

【Step1】 To add Alarm Action by clicking **Add** to continue.

【Step2】 “Alarm Type” go with the icon you selected. If select camera image icon, then it bring up Motion Detection as alarm type.

【Step3】 Select Alarm Action (refer to Alarm Action Table)

【Step4】 Select “Action Device”, and enter the information to “Remark” field.

【Step 5】 Set “Execution” time.
Action execution could be set by the delayed second you configured here. This setting does not apply to Live Video, which is always executed immediately.

【Step6】 Create it to Alarm Action List
Click **Create** to add action to alarm action list. If no further action to add, click **Close** to dismiss this window.

▲Alarm Action Table

Alarm Action	Use To
Email	The email and take snapshot of breached device, one Email receiver at an action.
Live Video	The live video of breached camera, it will pop up in Monitor's 4-split screen.
Recording	The alarm recording of breached camera; it is set by number of seconds.
SMS	The sms of breached event

6.5.3. “Alarm Breach” Scenario

Set alarm triggered by Camera-image 1 and records the video of Camera-image 2:

Select Camera-image 1 icon in *System setup Area* and click Image Alarm button from *Menu bar*, then select “Alarm action” by Recording and “Acting Device” by “Camera-image 2”.

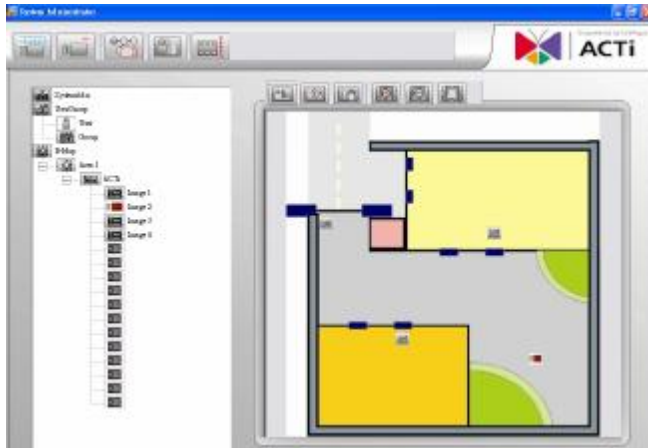
6.5.4. “Alarm Live Video” Scenario

1. If only one alarm is triggered, the different device breached by “live video” alarm action will be displayed on the 4 split screen of Monitor Program and is arranged starting from upper-left to upper-right, lower-left, and lower-right.

2. If live video is breached by different alarm source, live video is display respectively. The live video of latest event will replace the live video of old event. If the number of live video is greater than 4, they will be displayed rotationally.


3. Dismiss the live video in 4-split of monitor program: click “Cancel Alarm” button in Monitor Program.

6.6. Placing Device to eMap



Drag-and-drop the Camera Image icon from *System Setup* area to its location on the *E-Map interface*. All devices under camera (include image, relay, and sensor) can be placed on the E-Map interface.

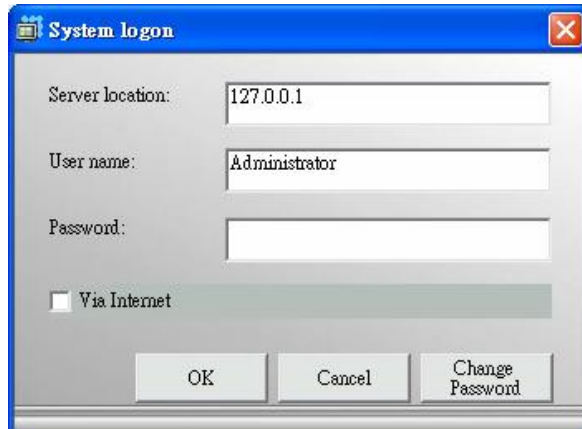
7. Exit the Admin Program

Click the upper-right button () to exit the Admin program, system will pop up a warning message to confirm if you want to exit.

D. Monitor Program

ACTi Hybrid nDVR Monitor program could be selected from the Program Path, user may log on monitor program through Monitor.exe or Web monitor. You may access ACTi Hybrid nDVR server thru IE browsing by entering the URL (format are: IP address of server and “\ACTiShare”. Example are:127.0.0.1\ACTiShare)

1. Running Monitor Program



【Step1.】 Select Start(All Programs(ACTi Hybrid nDVR(Monitor.exe

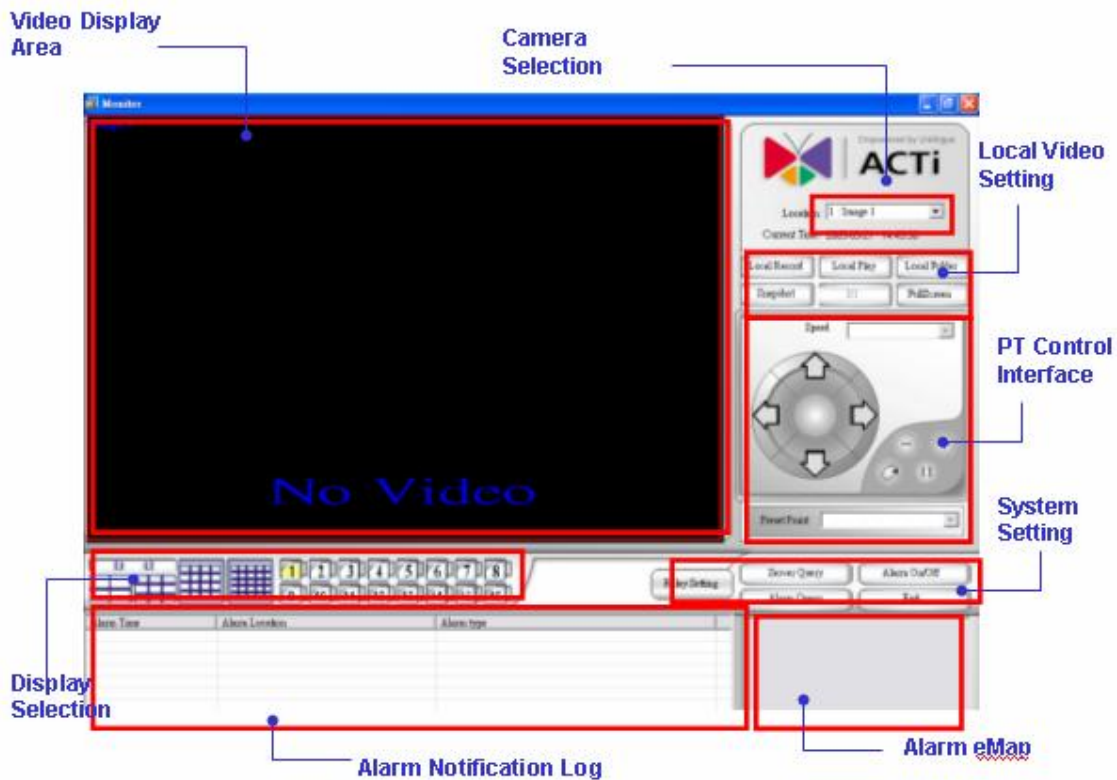
【Step2】 System Log on window. If this is the first time you login, use Administrator as default user name and leave the password blank, then click OK to log into the system.

A Server Location : “127.0.0.1” is the default for local server. If you want to access from client PC, then please enter the IP of server PC to this filed.

A Via Internet : if you want to remote control ACTi Hybrid nDVR server from a client which is not within intranet, then check this box, so that you can remote monitoring in internet environment.

【Note】 Password: The default password of Administrator is blank. It is recommended that you change this default password, please go to User Group section to change the password.

2. Monitor Program Interface



The User Interface has been classified into the following functions:

- A Video Display Area
- A Display Selection
- A Alarm Notification Log
- A Camera Selection
- A Local Video Setting
- A PT Control interface
- A System Setting
- A Alarm eMap

3. Video Display Area

Video display area display video of single camera or split screen of multiple cameras, when you want to control a camera in your monitor program, you may click the split-ed screen and it will covered by a red-frame.

4. Display Selection

4.1. Display video of single camera

Here are two methods to display video of single camera, elaborates as following:



【Method1】

Select camera button in *Display Selection*

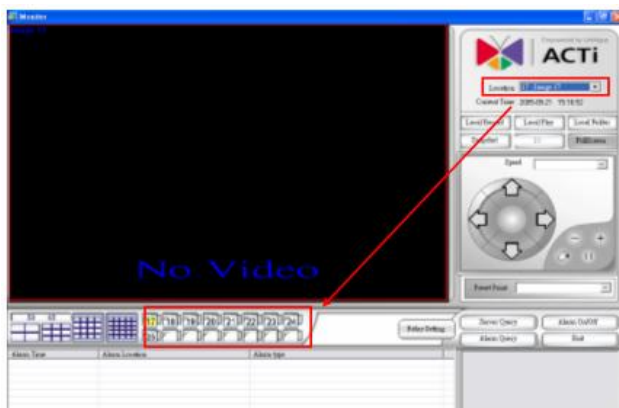
【Note】The number of camera varies according to the registration status.



【Method 2】

Select the camera location by clicking the drop list.

【Note】 The camera from number 17 to 25 could be displayed only when select them from camera location, the number of camera button will change accordingly.



4.2. Display splitscreen of multiple Cameras





Select splitscreen in *Display Selection*, the video display area will change the video accordingly.

【Note】 Double click the selected screen in Split screen, the splitscreen will change to single display mode.

4.2.1. Pause the live video



Click the pause button (), the live video will be paused and the button change to play button () , for user to click to get the live video back.

5. Local Video Setting

5.1. Resolution switch while Single camera



While video display in a single mode (only one video display in Video Display Area), or the select one video from the splitscreen, you may click **CIF** or **D1** button to change resolution to 352x240/320x288(NTSC/PAL) or 704x480/704x576 (NTSC/PAL).

A CIF/D1/FullScreen display: ACTi Hybrid nDVR resolution button will change text according to the device resolution setting. (Detail please refer to Content C 5.3.1)

(1) If device resolution set to D1, the button will display text of FullScreen.



(2) If device resolution set to CIF, the button will display text of CIF and D1 respectively. User may click D1 to display a stretched D1.

【Step2】 If you change device resolution from Web Configurator, then a warning message will pop up in ACTi Hybrid nDVR to remind you to relogin Monitor program.

5.2. FullScreen of Splitscreen

While video display in splitscreen, the resolution button will change to D1 and FullScreen respectively, while click D1, it display D1 of selected camera, while click FullScreen, it display a full screen of the splitscreen.

5.3. Start/Stop Local Record

Live video could be manually recorded in the local computer by clicking the Local Record button, so that user could record live video easily and save in any local computer.

5.3.1. Start Local Record



【Step1】 Select a camera from display area by a red frame.

【Step2】 Click “Local Record” button to start the recording.



The text of the button will change from Local Record to Recording. The maximum of Local Record is 15 minutes and recording status will display in the Process Bar.

5.3.2. Stop Local Record

Click the Recording button. The text of the button will change from Recording to Local Record. The Process Bar will disappear.

【Note】 The path of Local Record has no storage recycle service, because Local Record could be executed in whatever CLIENT PC which is out of Server Management scope.

5.4. Local Folder



Click **Local Folder** button, system will bring up “Local Directory Setting” window for user to select the local folder. System will create a sub-folder differentiate by camera location automatically.

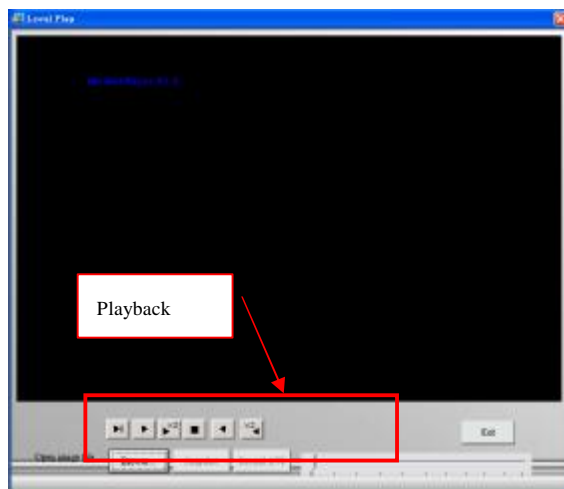
5.5. Local Play

The Local Play button allows you to playback recorded video through “Local Record” at local PC. This function also provides additional functions for exporting video files to the AVI format and taking snapshots.



5.5.1. Basic Operation

【Step1】 Open the Local Play window.



【Step2】 Browse a file
Browse the file you want to display.

【Step3】 Play a file
You may also select playback speed by selecting

different button .

5.5.2. Snapshot

Click Pause button to get a still image first, then click Snapshot button to save the image in JPG format (please refer to section D5.5)

5.5.3. Transfer to AVI

Click the Record AVI to export the image to the AVI format. Assign a file name, a location, and a video compression option.

【Note】 The available compression format varies according to computers, depending on the Codec application components installed, operation system and Media Player version. If you require the best image quality, choose the “Full Screen (uncompressed)” option.

5.6. Snapshot

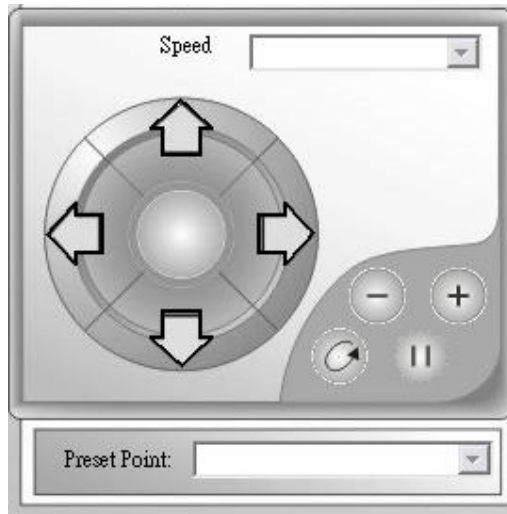


【Step1】 Select a camera from Video Display Area.

【Step2】 Click “Snapshot” button to get a still image of the camera.


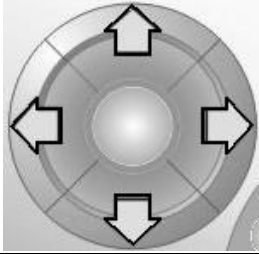





【Step3】 Click the Save to save a still image in your computer by .jpg format.

6. PT Control Interface (This function is not available in ACTi Hybrid nDVR v1.00)



If your camera under Capture Card/Video Server or your IP Camera has PTZ function, you may use ACTi Hybrid nDVR control interface to view different angle of Camera by clicking button on PT Control Interface.

6.1. Button Overview

Button	Use To
	PT Speed: You may select the drop list to change speed of camera movement
	PT control: PT interface consist of a control icon which can change then view angle of your camera to 4 directions manually.
	+ (Zoom in) : to get PT camera zoom in
	- (Zoom out) : to get PT camera zoom out
	AutoPan: to get PT camera auto panning
	Stop: to stop PT camera's auto-action
	Preset Location: by this drop list, you could select preset point (Preset point is configured in Admin program)

7. System Setting Area

7.1. Server Query

The Server Query button allows you to playback recorded video of “Schedule Recording” or “Alarm Recording”. This function also provides functions of exporting video files to the AVI format and taking snapshots.



7.1.1. Basic Operation

【Step1】 Click **Server Query** Button.

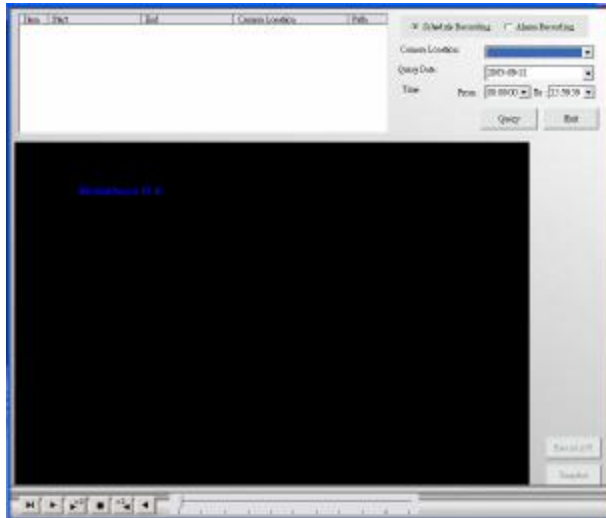
【Step2】 Open the window

Query Video File via criteria setting of :

- (a) “Schedule recording” or “Alarm recording”
- (b) “Image Location”
- (a) “Query Date”.

【Step3】 Click the **Query**, a query result will appear in the upper left table.

【Step4】 Select the file you want to display.



7.1.2. Take a Snapshot

For detail, please refer to D 5.5.2 & D 5.6.

7.1.3. Record AVI (For detail, please refer to D 5.5.3)

7.2. Turning On/Off Alarms

Alarm Disable

You can disable alarms when your security staff is on duty to handle event. To do this, click the Alarm On/Off button to disable all alarm settings in the Administration program.

Alarm Enable

Use this function when your security staff is off duty and you need ACTi Hybrid nDVR to automatically handle events. To enable all alarm settings, click the Alarm On/Off button to enable all alarm settings in the Administration program.



【Step1】 Click **Alarm On/Off** button

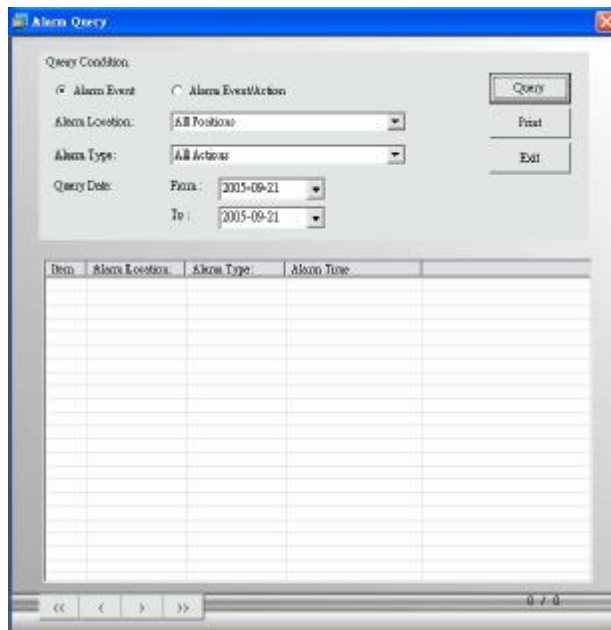


【Step2】 System will bring up a window and display the current alarm status. You may change the status by clicking the **Alarm disable** or **Alarm enable** button.

7.3. Alarm Query



【Step1】 Click **Alarm Query** button



【Step2】 Open a window to set query criteria.

Query Alarm Log via criteria setting of :

- (a) "Alarm event" or "Alarm event/action"
- (b) "Alarm location"
- (c) "Alarm style"
- (d) "Query date"

【Step3】 A query result will appear in the lower spreadsheet. You can use the arrow button to navigate the page of the spreadsheet, and print the page which you selected.

<< : Home

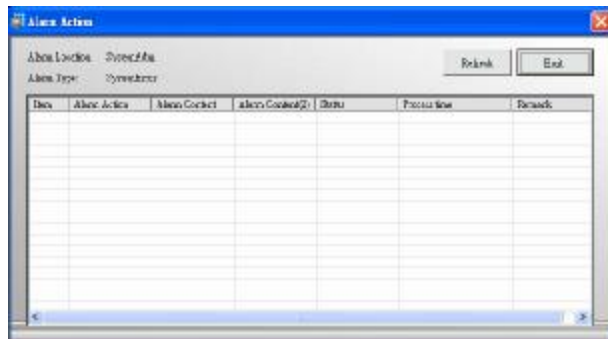
< : Page Up

> : Page Down

 : End

【Step4】 You can print out the query by clicking the **Print/Export** button.


【Step5】 Select the Export support list, assign export format and destination support. Text , Excel and Word are all supported.



【Step6】 Select an alarm log and click it to bring up a window to get the alarm action detail.

7.4. Cancel Alarm

Breach Alert!




(1)When a “**Breach Alert**” message appears, Click the **Cancel Alarm** button to close the “**Breach Alert**” message.

(2)A live video of the device may pop up in the Video Display Area if you set alarm action of live video.

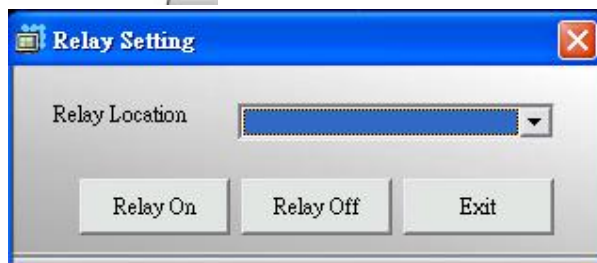
(3)Alarm logged in the alarm notification log.

(4) eMap with the device that triggered the alarm pop up in eMap display area

7.5. Relay Setting (This function is not available in ACTi Hybrid nDVR v1.00)



【Step1】 Click **Relay Setting** button



【Step2】 Select the “Relay Location” to remote control Digital Output (light, for example, via Internet) to on or off. Control facility via “Relay Setting” may involve electronic danger, please consult your system integrator and get their professional support.

【Note】 **Relay Setting** button use the same button of Cancel Alarm, the text varies according to alarm status.

7.6. Exit Monitor Program



Click **Exit** to close Monitor program.

8. Alarm notification log

The most up-to-date alarm was logged in the alarm notification log.

9. Alarm eMap

An E-Map with the device that triggered the alarm will pop up in the E-Map display area

E. Web Monitor

Web Monitor provides User a easy access thru IE to get real time video and central monitoring. central monitoring web access, you may monitor the real time video just through IE.

1. Logon Web Monitor

【Step1】

E Log on Web Monitor from server

Start à Program Files à ACTi Hybrid nDVR à Web Monitor.

E Log on Web Monitor from client

You may open IE browser and entering the URL in the format of server IP and “ACTiShare”. (Example http://localhost/ACTiShare/)



【Step2】 System will bring up IE and display log In window for user to login User Name and Password.

【Note】

(1.)System Requirement for browsing this website :

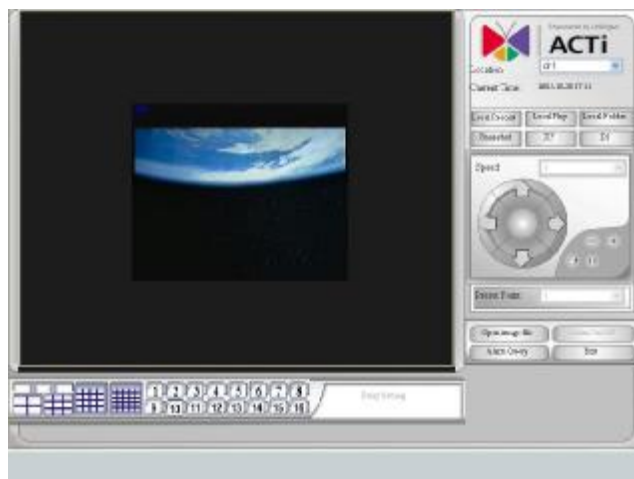
IE5.5 SP1 or above version

Screen display resolution is at least 1024*768。 Microsoft DirectX8.1 or above version.

(2.)Permit to use pop-up window

【Step3】 After login, system will auto detect if this computer has Active X component installed or not. If not installed yet, an installation page will pop up for user to install this component.

【Step4】 For the first time login Web Monitor, system will auto detect if this computer has installed VideoPlayer Control or not. It not installed yet, an installation page will pop up for user to install this program.



【Step5】After installation all these required program, the Web Monitor will pop up, the operation process are exactly same as Monitor program.

【Note】 Web Monitor is for viewing convenience, so there are few differences between Web Monitor and Monitor program, and which are (1) no alarm notification log (2) no alarm eMap (3) no schedule status display in Web Monitor.