

DVR Net (Integration)

Installation and User's Guide

Ver 11.11.0

Digital Video Security System
Digital Video Recorder

www.CCTVONE.com

CCTVONE.

*All contents of this document may change without prior notice, and actual product appearance may differ from depicted herein.

Index

1. Forward	2
2. Introduction	3
3. Installation	4
4. Using Net software	5
4.1. DVR Login Setup	5
4.1.1. Site Setup	6
4.1.2. Setup Connection Mode	8
4.1.3. MISC. Configuration	9
4.1.4. IP Server Setup	9
4.1.5. Change Login Password	10
4.2. Accessing DVR Net	11
4.3. Remote Search	15
4.4. Remote Setup	18
4.5. Event Viewer	18
5. Appendix	19
5.1. Changing Position	19
5.2. Movie Clip & Snapshot	19
5.3. Event Notification	20
5.4. Dial-Up Connection	21
5.4.1. Installation of Dial-Up Server	21
5.4.2. Installation of Dial-Up Client	26
5.4.3. Using Dial-Up Connection	29

1. Forward

Previously, camera manipulation and data storing/searching were possible only on the DVR installed computer. This meant that a person must physically present in front of the specific computer for even minor administration such as checking the current status of the system. This has become a big hassle for those who must overlook many DVR systems. To overcome these difficulties, DVR Net has been introduced.

With DVR Net, you can now enjoy all the functions of a DVR system anytime, any remote location by connecting to the main server computer over modem, LAN, or Internet. The functions include checking the system status, searching the stored data, and even changing the user settings and the recording schedule.

The ability to be able to perform total control from any place any time is what DVR Net makes by introducing Network Security Program for the next generation.

For any question you have, please contact to the following address.

When you are sending your concerned matter, please include your country and phone number.

E-mail: support@cctvone.com

Tel: 323-721-8999

Fax: 323-721-8599

www.cctvone.com

2. Introduction

- **Support TCP/IP.**

Support communication protocol to log in DVR DVR.

- **Real-time Monitoring of DiViS motion pictures**

Log in DVR Net and monitor all DVR system images in real time.

- **Flexible relocation of displayed channels**

Displayed channel can be moved to desired location of the screen by simple drag and drop.

- **Searching and Recording DVR data**

Various feature for Search and Recording, and even bring data to save it on the local computer.

- **Audio Search**

Recorded audio data can be retrieved DVR Net software.

- **Two-way Voice Communications**

DVR Net provides voice communication capabilities with the DVR system.

- **PAN/TILT/ZOOM/FOCUS remote control**

PTZ Controls can be attained by manipulating DVR Net program.

- **Manipulate DVR Settings**

Ability to change settings of DVR system from DVR Net, such as enable / disable of cameras, change recording schedule, and change setting of sensors.

- **Remote Notify function (Automatically message alert sent from DVR)**

When DVR System detects motion or sensor trigger, it notifies its event and automatically turns on DVR Net (while DVR Net is minimized). Also can be verified from event viewer

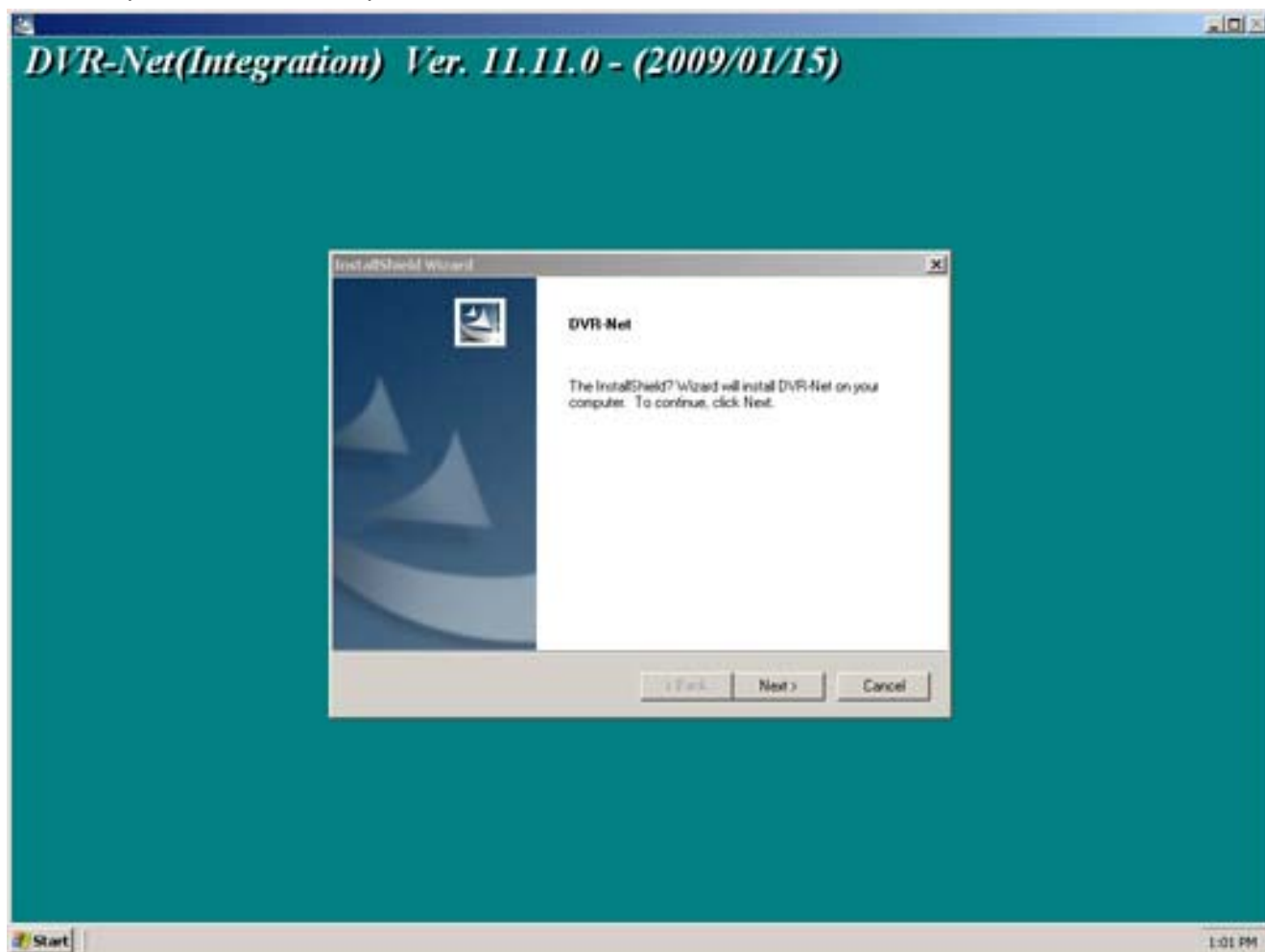
- **Analyzing Event Log**

DVR Net can receive and record events notified from DVR System, and the event viewer will directly connect to the DVR System to retrieve data.

- DVR CAP, DVR LIVCAP, DVR ACAP, DVR MPG, and DVR MPGAMX, DVR D1 are all supported.

3. Installation

Click 'Setup.exe' and follow the procedure.



After installation, following folder will be created in the Start menu.



DVR Net: DVR Net program

AVI Viewer: Program to view video clips recorded at the local storage.

Event Viewer: Program to view event log.

Uninstall: DVR Net remove program

4. Using Net software

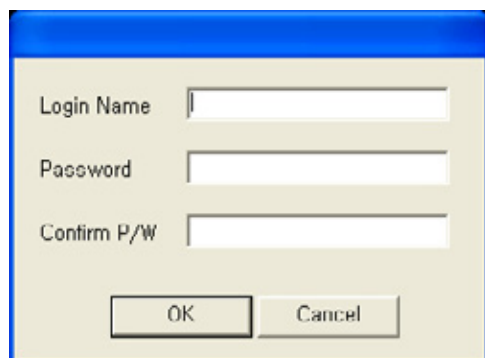
4-1. DVR Login Setup

Run DVR Net. Then following dialogue box appears, which asks for ID of DVR Net.



- **Login:** ID / password are for the authorized manager who controls the local network system. Note that login name and password here is for DVR Net program. It is different login and password than that of DVR-main.
- **New:** Create a new user (management) who wants to have the new network system.
- **Edit:** Change the existing information of registered user.
- **Cancel:** Exit without change.
- **Minimized screen:** Make the tray icon of this network program. Used for Remote Notify.

For the first time, or to add a new user, click “New” and type the information of user as follows.

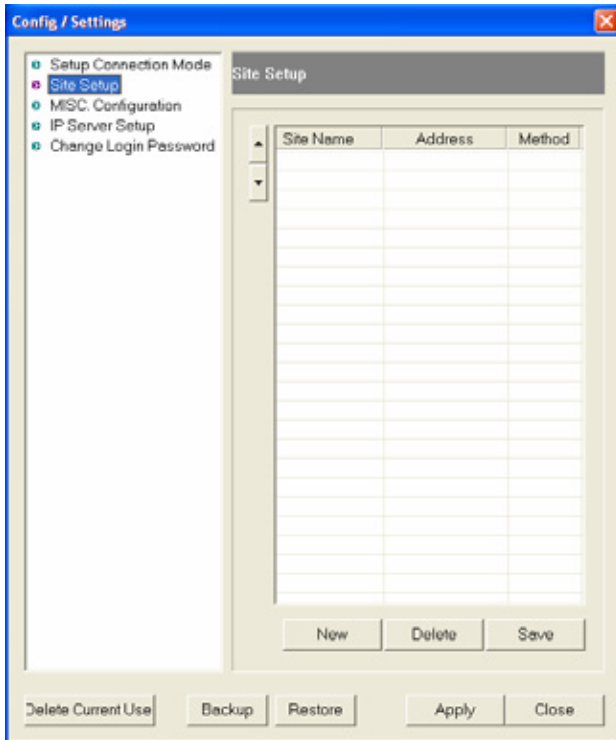


- **Login name:** ID for a DVR Net program user.
- **Password:** Password for Login.
- **Confirm P/W:** Reconfirm the password

Note: The user created here is for local manager, which is not related the user(s) registered at DVR System.

After you input the above information, click “OK”. Then, “Add, Delete and Edit site information” screen will be appeared.

4-1-1. Site Setup



- **New:** Add new site information.
- **Delete:** Delete the registered site.
- **Save:** Record any changes made.

↑ ↓ : allows users to sort the list of sites. Select a site and press either one of the arrow buttons to move an entry up/down.

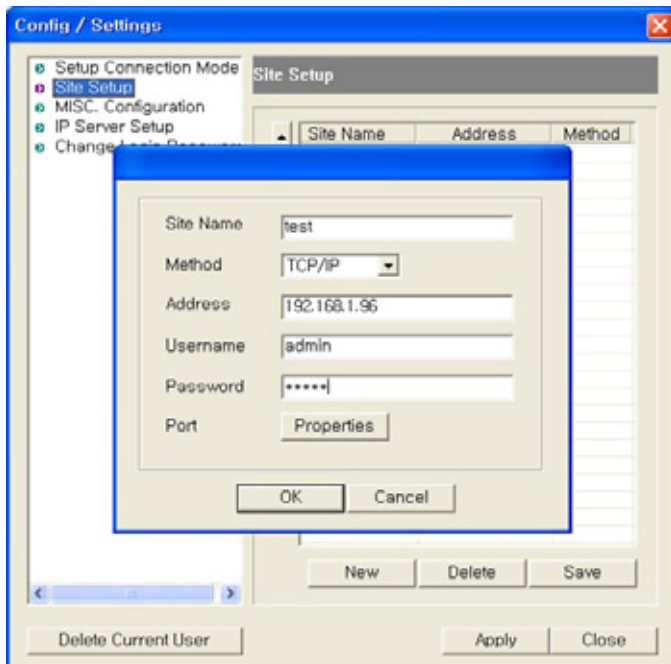
- **Delete Current User:** Remove the user ID currently logged in with. It will also remove all site information registered under the ID.

- **Backup:** Export CONFIG/SETTING information.
- **Restore:** Import and restore CONFIG/SETTING information from an exported file.

- **Apply:** Apply any changed setting and close the Config / Settings.
- **Close:** Close Config / Settings without applying changes

Note: Any changes will be effective once the Save button is clicked. Close or Apply without Save will lose all changed information. The same site name can not be registered twice.

Click "New" to add a new site information.

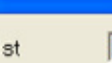


- **Site name:** Assign system's name or site name. In the use of IP Server, put the Code No. , The code for Server side can be set at "system->Use IP Server" in the DVR Setting.

Note: This code is also necessary for Remote notify.

- **Method:** Select "TCP/IP" when you are using LAN, cable modem, ADSL. In case of IP Server, select "SERVER".
- **Address:** Assign IP address of system or IP address in use of IP Server.
- **User name:** Enter ID, registered in DVR System.
- **Password:** Enter password, registered in DVR System

- **Port (Properties):** Set the port No, which was stored in accordance with “Appendix > DVR Management > Detail setting” in DVR main/ User’s Guide. It is recommended to use the default data stored in DVR program unless it is necessary to use others.



Click “OK” to finish a new site setting, then the added site will be listed as following.

The screenshot shows the "Config / Settings" window with the "Site Setup" tab selected. On the left, there are four menu items: "Setup Connection Mode", "Site Setup" (highlighted), "MISC. Configuration", and "IP Server Setup". Below them is "Change Login Password". The main area displays a table with three columns: "Site Name", "Address", and "Method". The first row contains the values "test", "192.168.1.96", and "TCP/IP". There are several empty rows below it. At the bottom right of the table area are three buttons: "New", "Delete", and "Save". At the very bottom of the dialog are five buttons: "Delete Current Use", "Backup", "Restore", "Apply", and "Close".

Config / Settings

- Setup Connection Mode
- **Site Setup**
- MISC. Configuration
- IP Server Setup
- Change Login Password

Site Setup

Site Name	Address	Method
test	192.168.1.96	TCP/IP

New Delete Save

Delete Current Use Backup Restore Apply Close

In order to edit the site information already stored, double click on the site name to change the data.
“Save” must be clicked to take effect.

4-1-2. Setup Connection Mode

Config / Settings

Setup Connection Mode

☒ Single test

☐ Multiple

	Site Name	Camera	Camera(s)
1	[Not Used]		
2	[Not Used]		
3	[Not Used]		
4	[Not Used]		
5	[Not Used]		
6	[Not Used]		
7	[Not Used]		
8	[Not Used]		
9	[Not Used]		
10	[Not Used]		
11	[Not Used]		
12	[Not Used]		
13	[Not Used]		
14	[Not Used]		
15	[Not Used]		

Save

Delete Current Use Backup Restore Apply Close

•**Single:** Check and select one of registered sites to access one site of DVR main.

Config / Settings

Setup Connection Mode

☐ Single test

☒ Multiple

	Site Name	Camera	Camera(s)
1	test	1	
2	test	2	
3	test	3	
4	test	4	
5	Office	1	
6	Office	2	
7	Office	All	
8	Office	Partial	1,3,6,9,14
9	[Not Used]		
10	[Not Used]		
11	[Not Used]		
12	[Not Used]		
13	[Not Used]		
14	[Not Used]		
15	[Not Used]		

Save

Delete Current Use Backup Restore Apply Close

•**Multiple:** Check to access multi-sites upon log in.

Connection must be defined as following.

• **Site name:** select a site to connect.

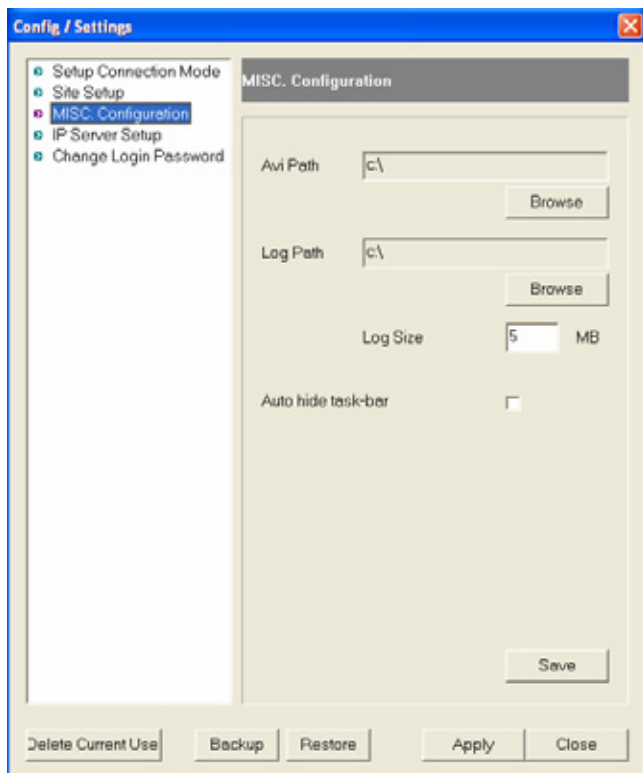
• **Camera number(s):** Choose a camera number, all, or partial

-**All:** Choose to display all available cameras sequentially from the selected site.

-**Partial:** Choose to display multiple cameras from the site. Number of cameras must be assigned. For example, the position 8 will display camera 1, 3, 6, 9, and 14 sequentially from site name Office.

“Save” must be clicked to take effect.

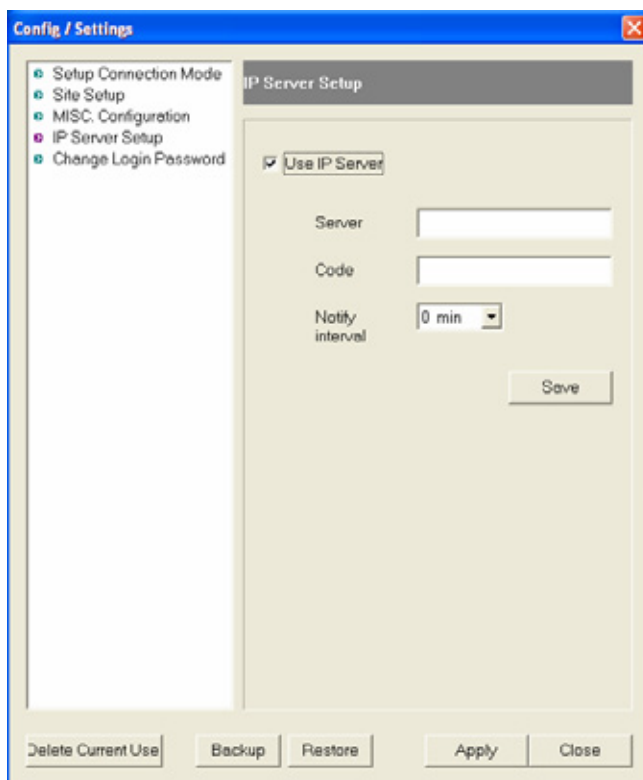
4-1-3. MISC. Configuration



- **AVI Path:** Assigns the path to store video clips recorded while monitoring.
- **Log Path:** Assigns the path to store the log file.
- **Log Size:** Assigns the maximum size of the log file.
- **Auto-hide taskbar:** turn on the Auto-hide taskbar to hide the taskbar on the bottom of the window.

“Save” must be clicked to take effect.

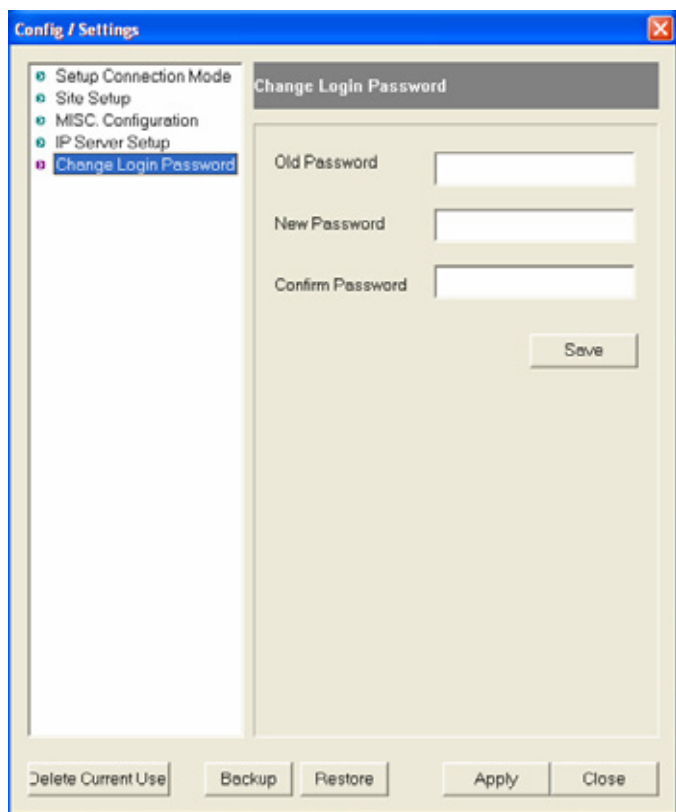
4-1-4. IP Server Setup



- **Use IP Server:** Enables to use IP Server if checked.
- **Server:** IP address of the IP Server.
- **Code:** Assigns unique code name to be registered at the IP Server. Code must be named less than 10 digits, using case sensitive alpha-numeric characters.
- **Interval:** Selects the time interval to notify current IP address to the IP Server.

“Save” must be clicked to take effect.

4-1-5. Change Login Password



The screenshot shows a software configuration window titled "Config / Settings". On the left is a tree view with the following items: "Setup Connection Mode", "Site Setup", "MISC. Configuration", "IP Server Setup", and "Change Login Password" (which is selected and highlighted in blue). The main area of the window is titled "Change Login Password" and contains three text input fields labeled "Old Password", "New Password", and "Confirm Password". Below these fields is a "Save" button. At the bottom of the window, there is a row of five buttons: "Delete Current User", "Backup", "Restore", "Apply", and "Close".

•**Old Password:** Enter current password

•**New Password:** Enter new password

•**Confirm Password:** Confirm new password.



"Save" must be clicked to take effect.

4-2. Accessing DVR Net



Type login and password and click "LOGIN".



 : Minimize DVR Net software in the system tray. Click  at right bottom corner will bring the full window.



- **Date/Time:** indicates the time and date of the location of DVR Net
- **Login name:** User ID currently logged in with.
- **Event Information:** It is the place to indicate any of event notification from connected site(s). To receive notification, "Remote notification of events" must be checked on DVR main.
- **Transfer Status:** This is indicating the connecting speed as bench mark only.



: Refresh the connection.

Press "CAMERA" to control the PTZ.



: PTZ cameras connected to DVR System can be controlled from DVR Net. The arrow buttons will move the camera in the direction of the arrow, and the ZOOM, FOCUS buttons will manipulate the camera accordingly. However, only user with permission can control the PTZ setting.

The number in the middle circle indicates the camera number being controlled, and the push of top or bottom arrow button makes the selection of the camera.



: When the PTZ camera supports preset function and tour, this control is available at DVR Net. Number of available preset points are depending on the camera's feature.

Press "IMAGE" to show image control.



: Adjusts the image quality such as Brightness, Contrast, Saturation and Hue by pushing the arrow buttons.

Press "RATE" to adjust resolution and compression rate.



: Compression Rate can be adjusted between 10 ~ 90 to enhance the transmission speed (* for default compression rate). Lower value will provide faster transmission. Resolution can be selected among 1/2, 1/4, or 1/8 (* for default resolution), and lower resolution provides faster transmission speed. Compression rate and resolution adjusted here are not changing actual resolution and compression rate recorded on the server.

Note: this section cannot be applied to hardware compression boards (MPG / AMX / D1 series).

Press "MISC" to control following functions.



- **Switching (SLOW / FAST):** Adjust switching interval slower or faster when the channel is displaying multiple cameras by switching (Applicable for multi connection only).
- **Position Number:** Displays the position number on the image.
- **Site Name:** Displays the site information on the image.
- **Camera Number:** Displays the camera number on the image.
- **Camera Name:** Displays the camera name assigned at the server.
- **Date / Time:** Displays date and time from the server.

• **POS Data:** Displays POS data if available.

• **Event Mute:** Mutes the beep sound by the event notification. It also disables the popup by event notification while minimized.



: Displays the position number, which is currently selected. All adjustments and/or controls are applied to the camera on this position.



: Shows the event list, which contains log of events notified from server(s). Double clicking on the event will popup the search window to retrieve data immediately.



: Open the "Config / Settings" Window (Refer to 4.1.DVR Login Setup for detail).



: Records all displayed channels. Each channel will be recorded in MP4 format at the AVI Path assigned from "Config / Settings" => "MISC Configuration". The position with enabled switching camera will not be recorded. Switching camera must be disabled when the desired camera is on, before start recording.



: Search recorded data from server. Multiple search windows can be initiated simultaneously to search multiple servers at the same time.



: Adjusts setting of DVR System from DVR Net.



: Changes display mode to 1, 4, 6, 9, 10, 16, or 36 split screen.



: Displays next set of view.



: Enlarges the image size from single channel display mode.



: Reduces the image size from single channel display mode.



: Enlarges the DVR Net screen with minimal control buttons.



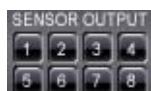
: Enables on-screen PTZ Control. If enabled on the PTZ camera connected, Using mouse, left click and drag on the screen to pan and tilt the camera, and scroll to zoom in and out



: Displays status of current screen mode. Pink color indicates positions currently on-screen.



: To control voice communications between DVR Net and DVR System. For this function, "Sound Recording" of Settings in DVR System must be checked. The functions of four taps are "Send Voice" / "Receive sound" / "Send and receive voice" / "cancel", from the left.



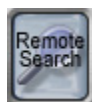
: Displays status of Relay on DVR System. Relay can be activated / deactivated by clicking on the buttons.



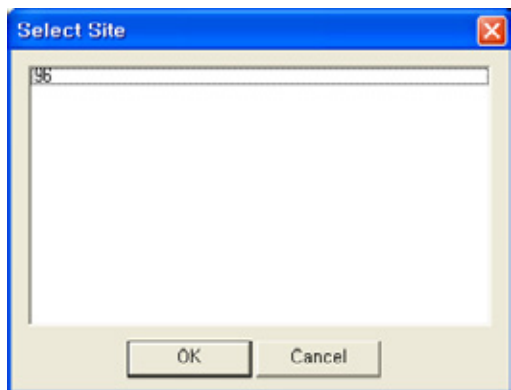
: Click this to exit from DVR Net.

4-3. Remote Search

Search data of DVR System from remote location using DVR Net.



: Click the remote search button to start. The window on the left will show up with list of registered sites



Select the site to search, and click “OK” to start search.



: The calendar allows the user to choose the specific date in which to search through. Days with stored recorded data will be highlighted red.

Search Tool

Image Tool

tools and image control tools.



: Buttons in upper line works for fast rewind (left directional arrow) and fast forward (right directional arrow). Buttons in middle line activate the normal playing back in forward and reverse but the speed can be adjusted by controlling (-), (+) tap on the top. The buttons in lower line give playback frame by frame, forward or reverse.



: Image Tools allow the user to adjust image properties to enhance the image quality. Adjustments are not effecting to the original image recorded. Click on Cancel to go back to the original image.

Zoom Search: It is possible to zoom in, up to x3, to the desired area using right click of the mouse while, or before searching (Available only at single channel search)



: hides the time information.



: Select one of the split image profiles for viewing the images.



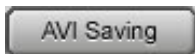
: These taps give the enlarged screen by (+) or return to small screen by (-).




: The camera number is shown vertically on the right and hour on bottom horizontally, and minute on top horizontally. The searching point can be selected by clicking the camera number, hour, and minute (shown in red).



: In above picture, selection of camera can be done by clicking these buttons, scrolling camera group as 4 camera in a group, namely 1~4, 5~8, 9~12, 13~16



 : Save images as a movie clip in AVI or MP4 format. For AVI format, it is recommended to install WMV codec provided. This codec may be downloaded from Microsoft website also.



: Initiate “Smart Search” feature shown below.



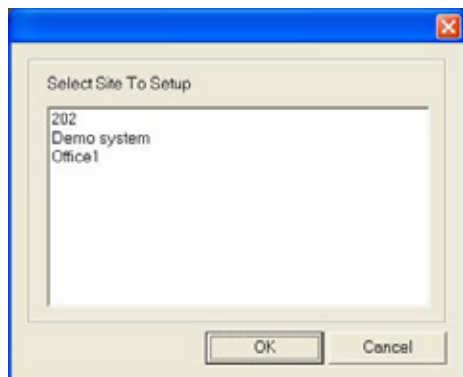
: Exit Search.

Note: Please refer to the DVR manual for detail information about this feature. Motion Sensitivity may be different than running this feature from DVR (server) and the result might differ even if the search is performed under the same condition.

4-4. Remote Setup



: Allow user to change the configuration of DVR System from DVR Net. The following screen will allow the user to select the site.



Select the site and click "OK"

Changes will be applied to the selected DVR System.

Some of setting are not accessible from the DVR Net.

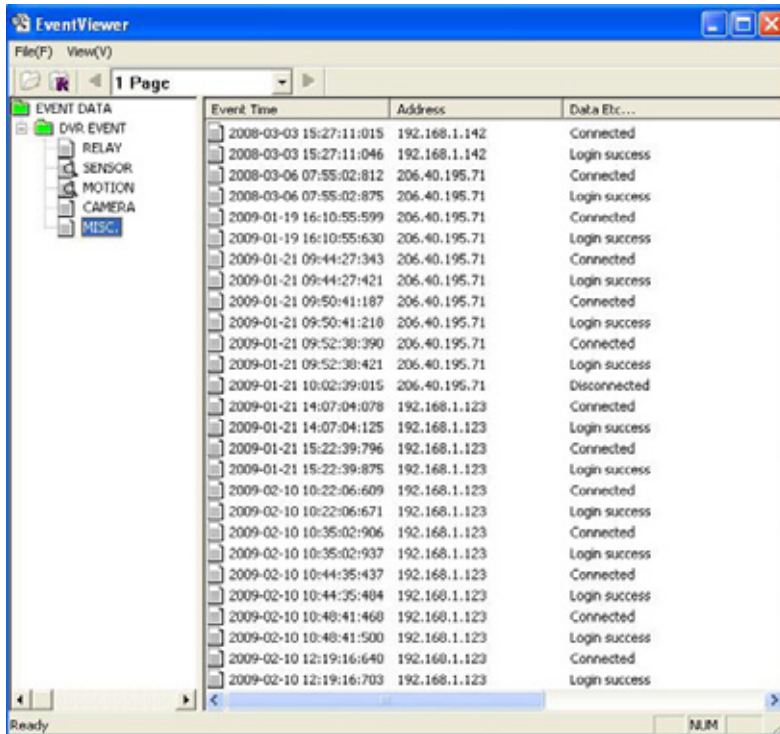
Note: For further setting guide, please refer to [5.Configuration](#) of "Installation and User's Guide" for DVR System.

4-5. Event Viewer

Event Viewer allows user to review the event log of Net software. It also contains all event record notified by DVR System. Please refer to the “5.3. System - Allow remote connections” on Installation and User’s Guide to set remote notification.

Event Viewer

: opens the following Event Viewer window.



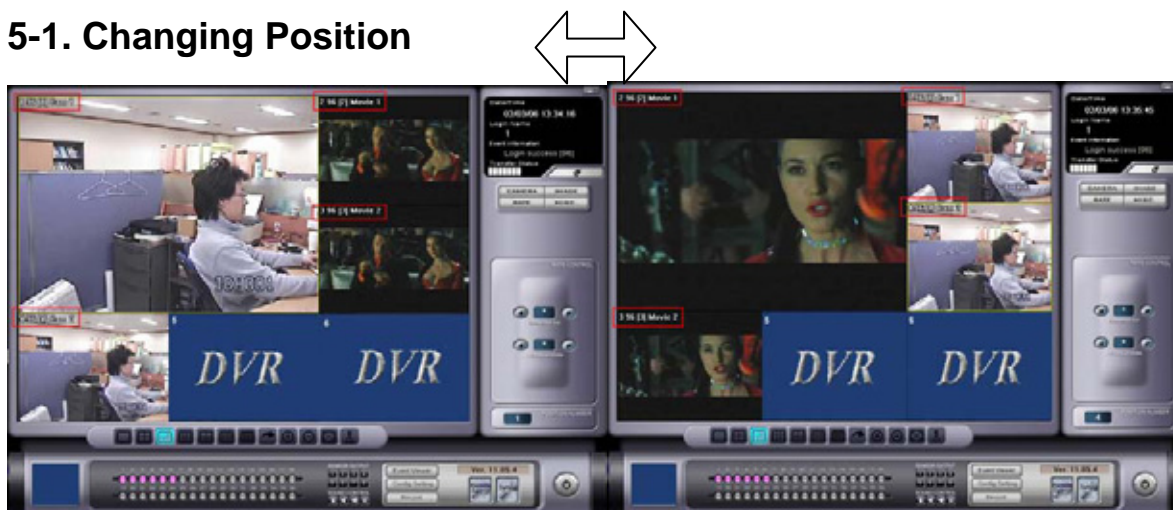
Events can be reviewed and/or searched by categories. Double clicking on a recorded event under Motion and Sensor will load a search popup window, which enables to playback instantly, as shown below.



: Popup search initiated from Event Viewer.

5. Appendix

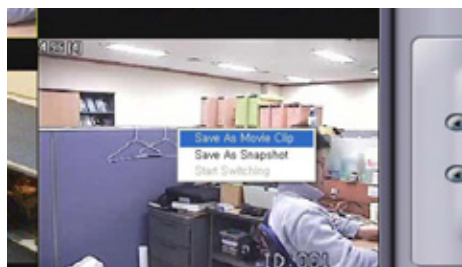
5-1. Changing Position



At the connection of Net software, connected cameras will be positioned in order of camera numbers. It is possible to relocate the camera position to the desired location by left click on the image that needs to be relocated, drag it to the new position, and release the mouse button.

5-2. Movie Clip & Snapshot

Either movie clip or snapshot can be created while monitoring. Right click on the desired position and select "Save as Movie Clip" or "Save as Snapshot."



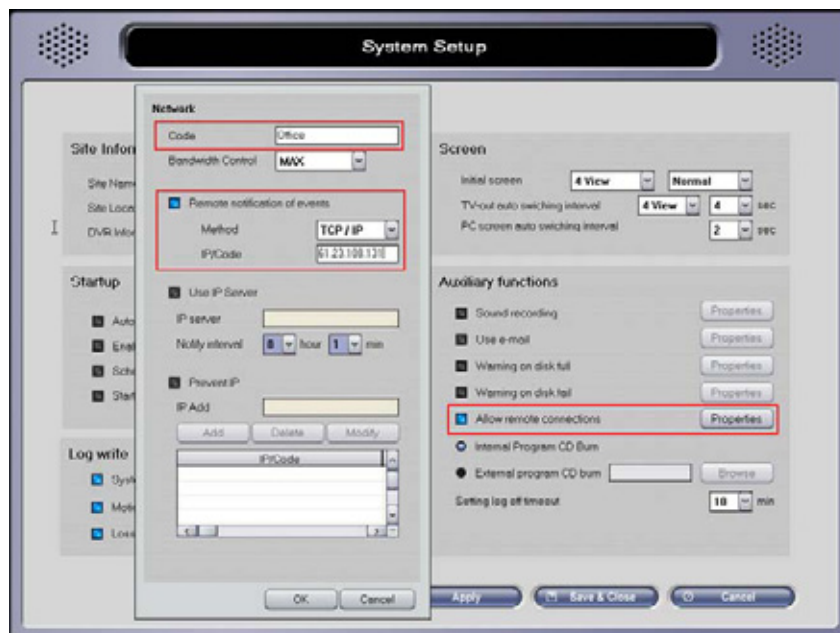
Save as Movie Clip: check to create mp4 format movie clip until unchecked. Recording will be automatically finished when Net software is minimized. Recorded file will be stored at the location assigned from MISC. Configuration, AVI Path.

Save as Snapshot: select to capture the image. It will bring up a snapshot window with a captured image, and the image can be saved as a jpg format file by double clicking on the snapshot window.



5-3. Event Notification

Event notification allows DVR Net users to receive notification from DVR System when any event occurs, such as motion and/or sensor detection. In order to activate, following settings are required at the DVR Main. Open System Setting from the DVR System to configure settings.

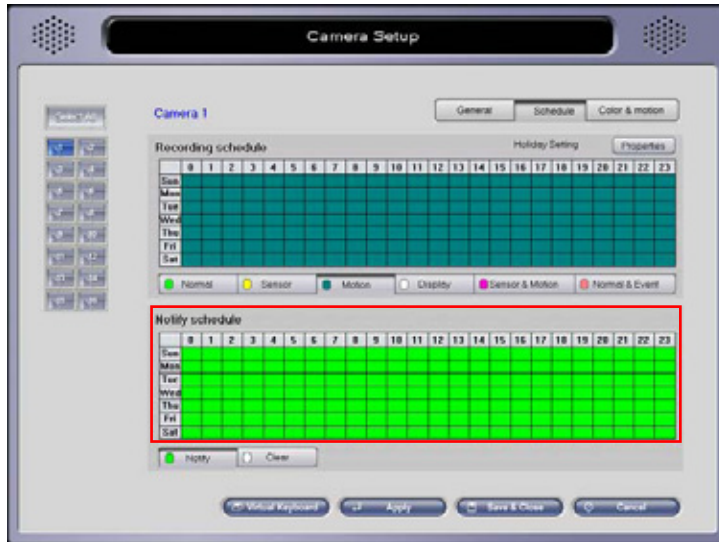


Check “Allow remote connections” and open properties. Check “Remote Notification of events”, and select the method. In IP/Code column, enter IP address or Code depending on the method selected.

Note: The code shall be same as the one entered in “Code” at 4.1.3. IP Server Setup



From “Color & motion” of “Camera Setup”, check “Detective motion – Notification”. Click on “Properties”, and check “Remote Notify” to send notifications when an event occurs. Check “Use Notify Schedule” to utilize the schedule to notify the DVR Net. If selected, notification schedule on the following page must be configured.



Set up “Notify scheduling” in “Scheduling” of “Camera Setup”.

When event notification is completely set, Net software will display and store the event information into the log file, which can be retrieved and searched by the Event Viewer. Also it will allow to restore the Net software, if any event occurred and notified while Net software is minimized.

The DVR Net may be minimized, but must be running in order to receive the notification. The icon will be placed on the system tray when it is minimized.

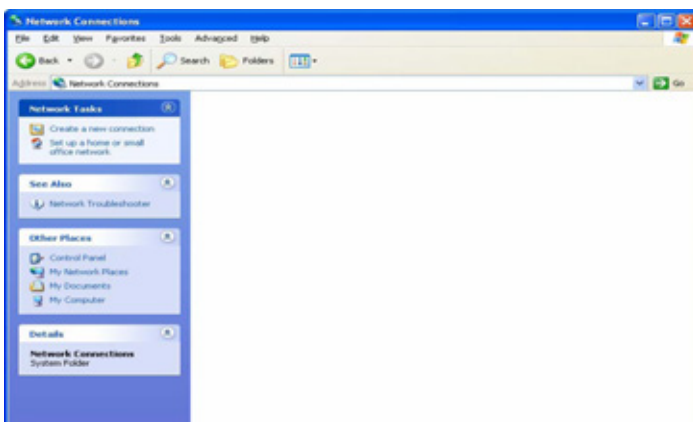


5-4. Dial-Up Connection

In order to connect to the DVR System through regular phone connection, both DVR System and Net system need to be equipped with modem, and Dial-Up Server / Client must be configured. The following instruction is based on the Windows XP environment.

5-4-1. Installation of Dial-Up Server

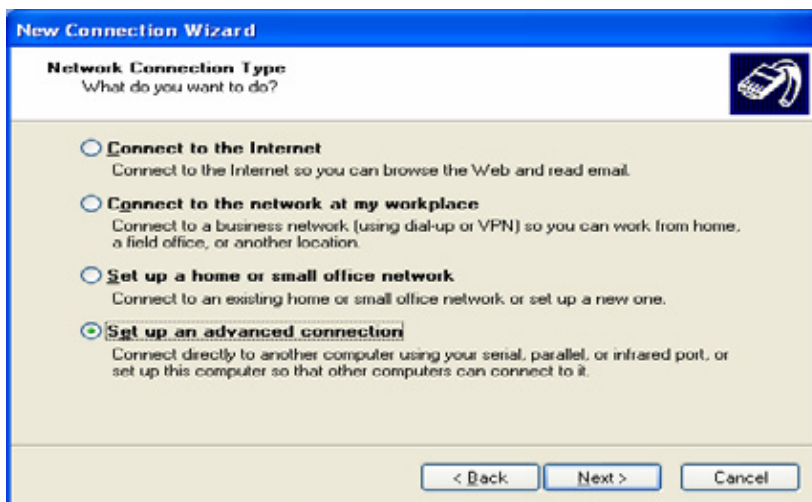
On DVR System, click “Start > Control panel > Network Connections.”



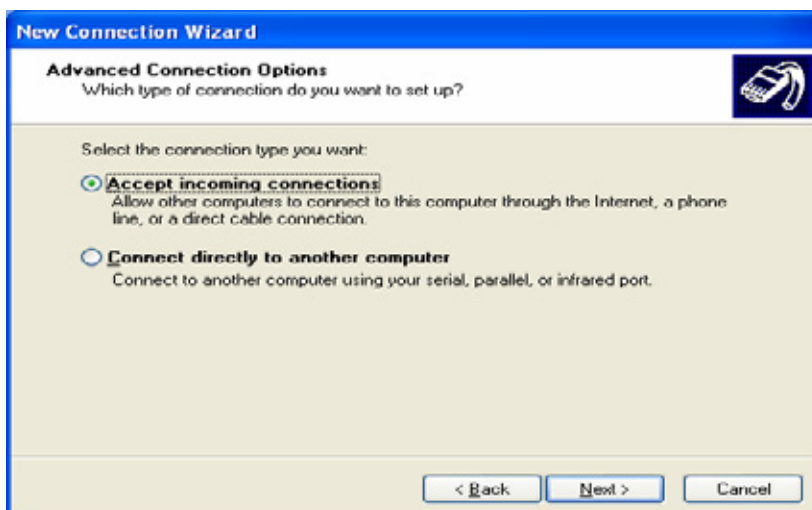
Click “Create a new connection.”



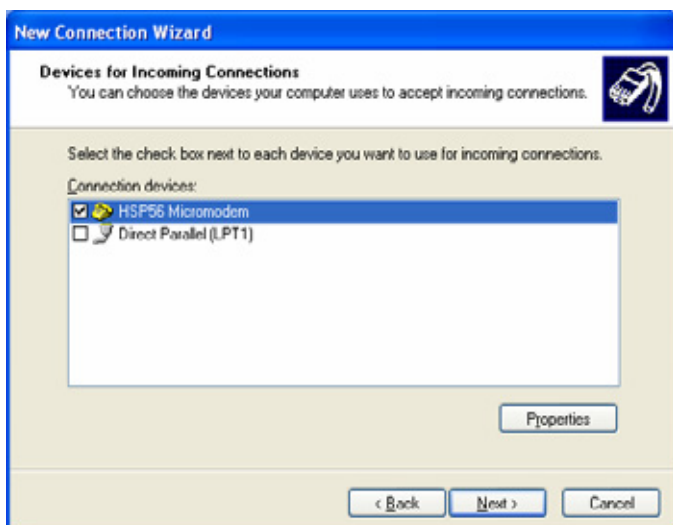
Click 'Next'.



Select "Set up an advanced connection", and Click "Next".



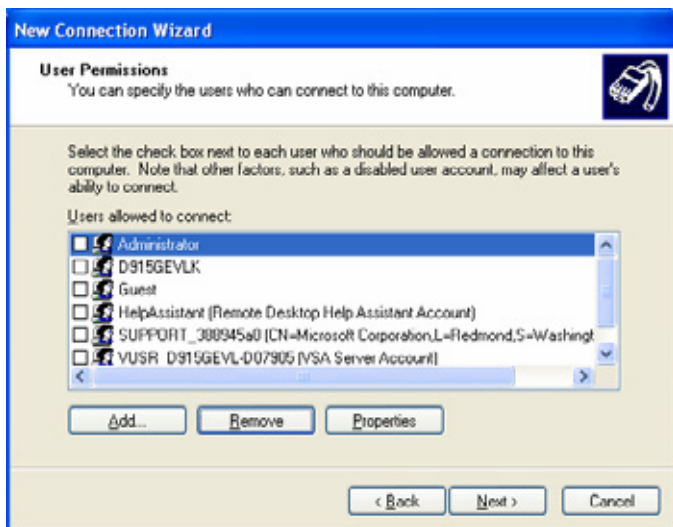
Check "Accept incoming connection" and Click "Next".



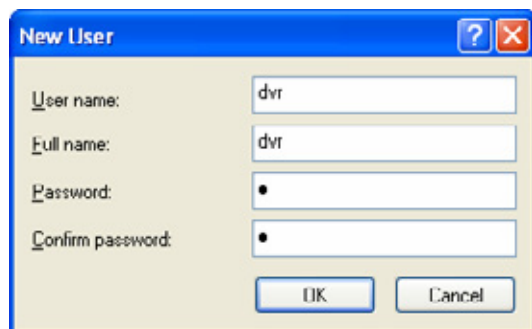
Select a proper modem from device list, and click “Next”



Select “Do not allow virtual private connections”, and click “Next”.



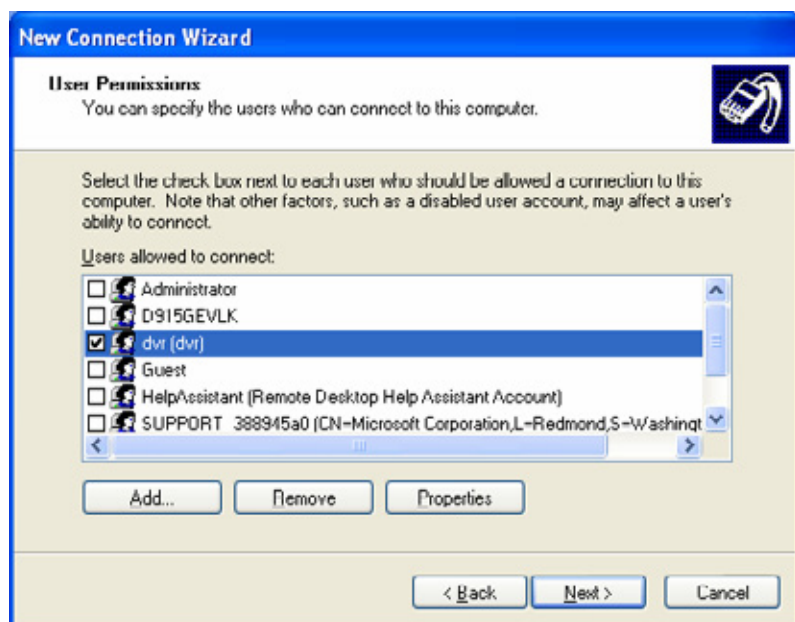
Click “Add” to add a new user. The user must be created to allow connection to the DVR System.



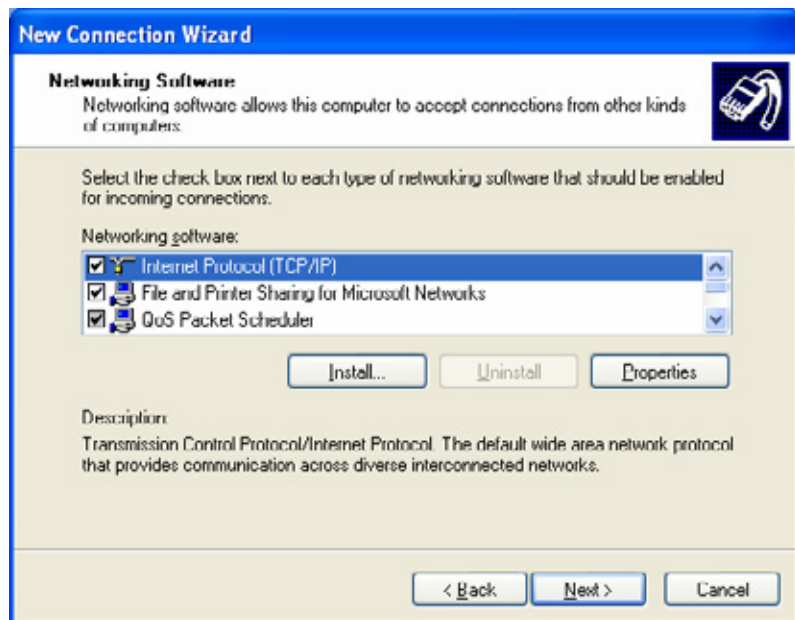
Fill out the user information and click “OK”.

This user information must be used at the Dial-Up Client, which will be discussed on the next chapter.

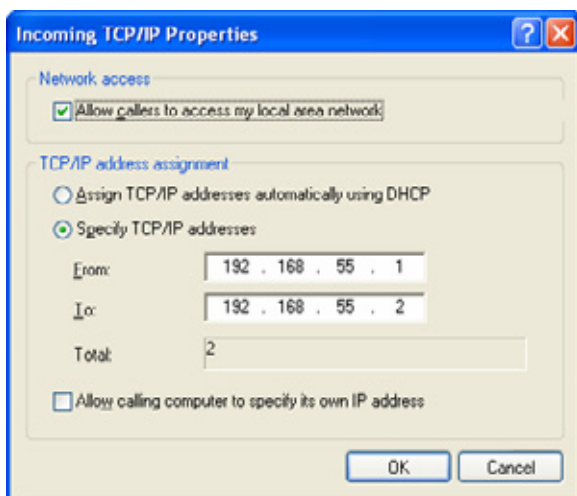
Note: The “Allowed User” means “RAS User” who can access the Dial-Up server from Dial-Up Client.



After a user created, make sure to check the user created, and click “Next”.



Select “Internet Protocol TCP/IP” and click ‘Properties’.

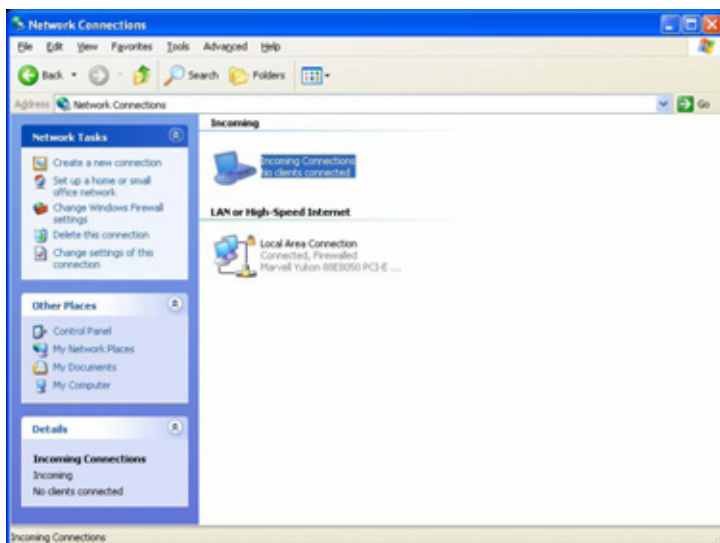


Check “Allow callers to access my local area network”. In TCP/IP address assignment, check “Specify TCP/IP addresses”, and fill out from and to IP address as shown in picture. It is strongly recommended to use as it is shown. Click “OK”, and click “Next” at the Networking Components.

When the connection established successfully, ‘From’ IP will be the virtual IP of the server, DVR System, and ‘To’ IP will be assigned to the client.



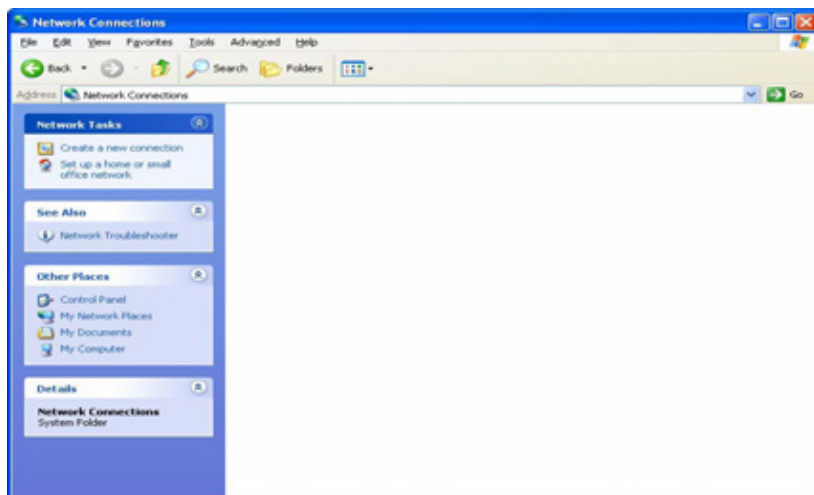
Specify the connection name and click “Finish”. Any name may be used for connection name.



Upon completion of Network Connection Wizard, the new connection icon will be located in Network Connection.

5-4-2. Installation of Dial-Up Client

On DVR Net system, click “Start > Setup > Control pad > Network Connection.”



Click “Create a new connection.”



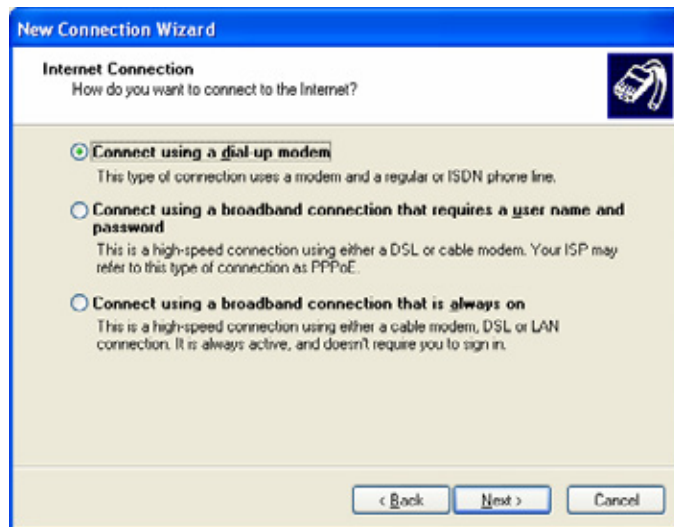
Click 'Next'.



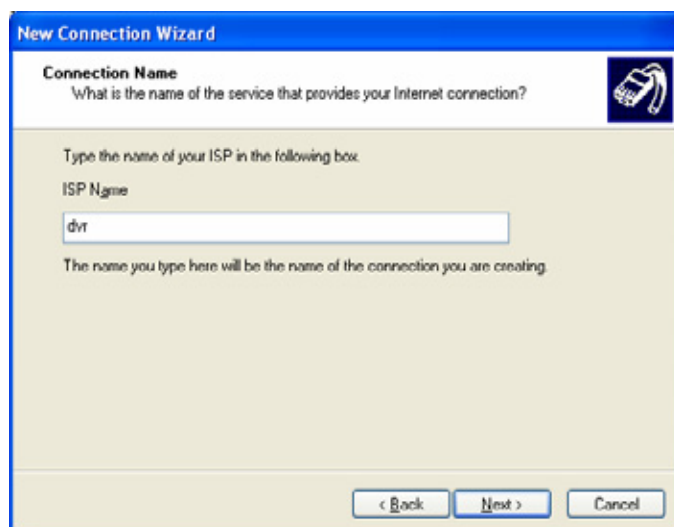
Select “Connect to the Internet”, and Click “Next”.



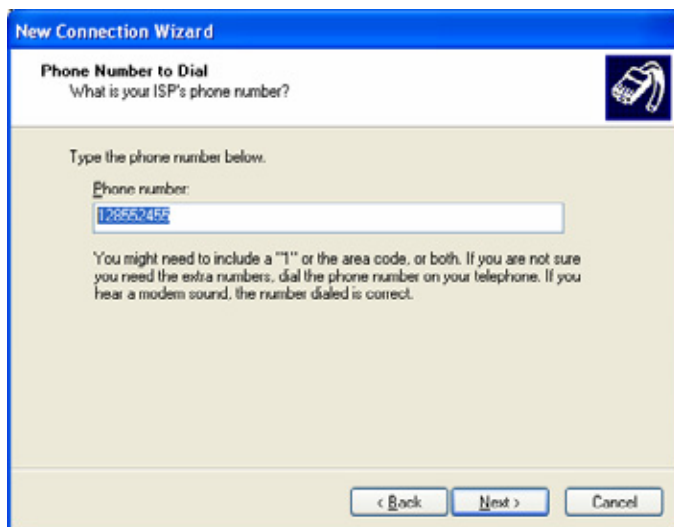
Select “Set up my connection manually”, and Click “Next”.



Select “Connect using a dial-up modem”, and Click “Next”.



Set ISP Name as you want, and Click “Next”.



New Connection Wizard

Phone Number to Dial
What is your ISP's phone number?

Type the phone number below.

Phone number:
128552455

You might need to include a "1" or the area code, or both. If you are not sure you need the extra numbers, dial the phone number on your telephone. If you hear a modem sound, the number dialed is correct.

< Back Next > Cancel

Enter the phone number which is assigned to the DVR System, and Click "Next".



New Connection Wizard

Internet Account Information
You will need an account name and password to sign in to your Internet account.

Type an ISP account name and password, then write down this information and store it in a safe place. (If you have forgotten an existing account name or password, contact your ISP.)

User name: dvr

Password: •

Confirm password: •

☒ Use this account name and password when anyone connects to the Internet from this computer

☒ Make this the default Internet connection

< Back Next > Cancel

Enter the user information, which was created on the DVR System, and Click "Next".



New Connection Wizard

Completing the New Connection Wizard

You have successfully completed the steps needed to create the following connection:

dvr

- Make this the default connection
- Share with all users of this computer
- Use the same user name & password for everyone

The connection will be saved in the Network Connections folder.

☐ Add a shortcut to this connection to my desktop

To create the connection and close this wizard, click Finish.

< Back Finish Cancel

Click "Finish" to complete setting.

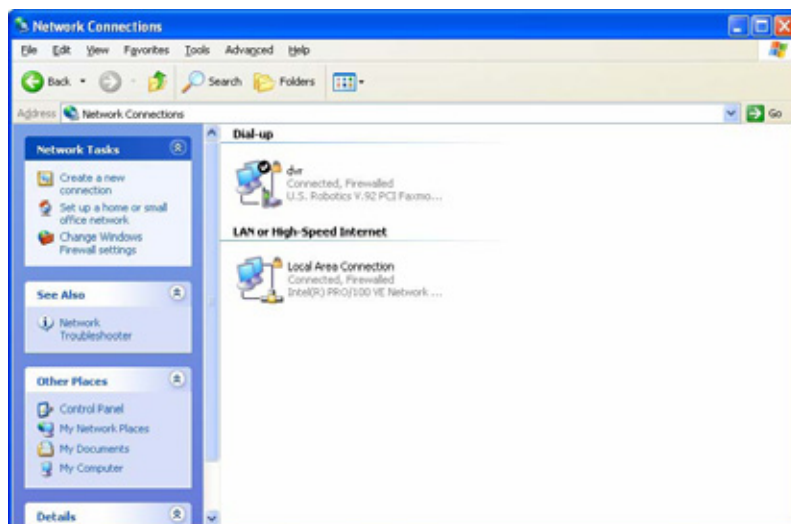
5-4-3. Using Dial-Up Connection

- On DVR system

Make sure that the Dial-Up Server is configured and Main is running.

- On DVR Net system,

Click "Start > Setup > Control pad > Network Connection."



The icon for the Dial-up will be displayed with the name assigned while setting. Double click on the icon. It is 'dvr' on the left picture.



Verify the user name, password, and number to dial.

Then click on 'Dial' to establish the connection.

If the connection fails, check modem drivers on both DVR and Net systems, under Device Manager, and check the Dial-up server and client setting.

If connected, run DVR Net and register a site with following information.

Method: TCP/IP

Address: the virtual IP registered at 'From' in Dial-up server.

Username & Password: user information registered at the DVR System.

After setting the site information as above, it is ready to connect to the DVR System.

Note: The image will be displayed very slowly due to the limited transmission speed.