Useful Utilities

This chapter discusses some advanced level features and utilities that could help administrator to maximize system performance in a security network.

Dynamic DNS

The Dynamic DNS is an application that allows users to register domain names that always point to their GV-Systems.   This application is only necessary when your GV-System is using a dynamic IP address.   If so, the DDNS will update GV-System's IP address to DNS Server in every 10 minutes. Therefore, even if your GV-System's IP address changes, you can still locate it by using the registered domain name.

Dynamic DNS supports Windows XP, Windows 2000, and Windows Server 2003 only, but not supports Windows 95/98 or ME.

Dynamic DNS uploads IP address over the Internet through ports 80 and 81.   If your GV-System is connected behind a router or firewall, make sure ports 80 and 81 are open.   Dynamic DNS will only upload global IP addresses.   If your GV-System is using virtual IP, NAT port mapping should be done first.

Installing Dynamic DNS

To install Dynamic DNS, follow these steps:

1. Insert the Surveillance System Software CD to your PC.   It will automatically run, and a window appears.
2. Select the **Install V 8.0.0.0 System** item.
3. Select **Dynamic DNS Service**, and follow the on-screen instructions.

Registering Domain Name with DDNS

1. Go to **Windows Start**, point to **Programs**, select **DDNS**, and then run **Dynamic DNS Service** to bring up the DNSClient dialog box.   Click **Register** and the following Dynamic DNS register page will appear.

2. Type a username in the Username field.   Username can be up to 16 characters.   Username will accept "a ~ z", "0~9", and "-", but will not accept space or "-" as the first character.

3. Enter a password in the Password field.   Passwords are case-sensitive and must be at least 6 characters.   Re-enter the password in the Re-Type password field for confirmation.

4. In the Word Verification section, type the code within the box.   In this example, the code you should enter is *N4GN*.   Word verification is not case-sensitive.
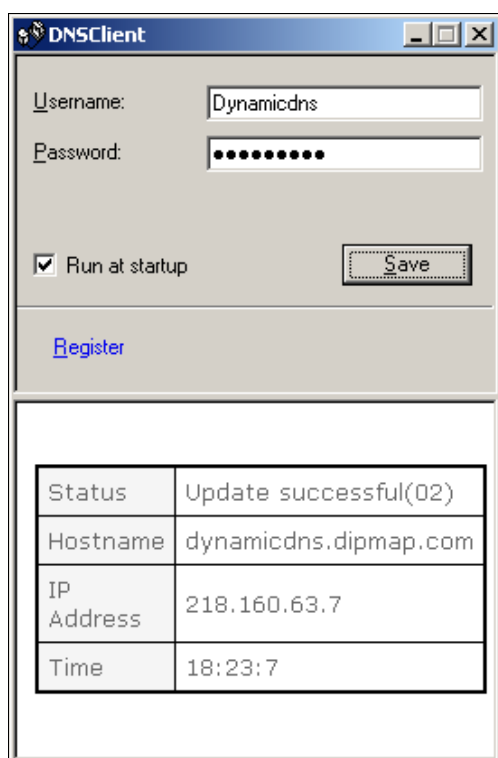

Figure 11-1

5. Click the **Send** button, and the system will display the following message if the registration is completed successfully.

Figure 11-2

■ **Username:**   The username you registered.   In this example the username is "dynamicdns"

■ **Hostname:**   The hostname you created.   Hostname is made by registered username and "dipmap.com".   In this example the host name is " http://dynamicdns.dipmap.com ".   This will be the domain name you use for login to GV-System.

■ **IP Address**:   Your GV-System's current IP address.   This IP address will be updated every 10 minutes.

In the DNS Client dialog box, enter the registered username and password, and then press the **Save** button. The system will show the connection information as illustrated below.   The DNS Client program is now activated.   However, it will not upload IP address unless one of the following applications is running: the Main System, Center V2, VSM, Dispatch Server, Twin DVR, and SMS Server.   If the IP address of your GV-System is not updated for more than 30 days, your host name will be deleted automatically.

Check **Run at startup** if you wish to auto run Dynamic DNS AP on the next Windows start-up.
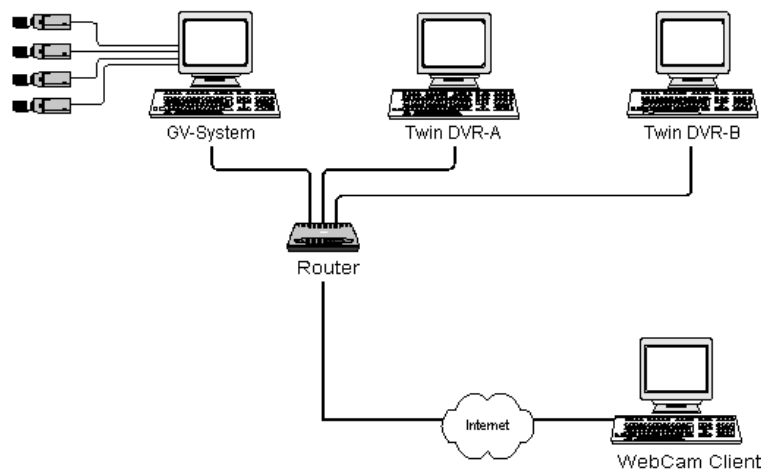

Figure 11-3

TwinDVR System

TwinServer is an external application that helps sharing the networking liability from the GV-System.
A complete TwinServer concept requires at least two computers: a TwinServer, which should be run on
the computer where GV-System is installed, and a TwinDVR, which should be run on a separate
computer connected to the same LAN as the TwinServer.   The TwinServer sends video stream to
TwinDVR, while TwinDVR acts as a WebCam Server and serves all WebCam clients over the Internet.
One TwinDVR can serve approximately 200 channels over the Internet.   Multiple TwinDVRs can be
added to the network as online traffic increases.

There are two ways to connect TwinServer and TwinDVR: TCP/IP mode and Multicast mode.   Both
have its advantages and disadvantages; choose the one that suits your application mostly.

TCP-IP Mode

TCP/IP is a simpler and cost-effective solution.   In the TCP/IP mode, the TwinServer and TwinDVRs
are connected in a point-to-point connection.   It means that video streams are sent from TwinServer
to TwinDVR-A, then TwinDVR-A duplicates the video streams and sends them to TwinDVR-B.   If the
connection between TwinServer and TwinDVR-A is broken, TwinDVR-B will not be able to receive
video streams as well.

Figure 11-4

MultiCast Mode

Multicast Network is more complicated and expensive to setup.   In the Multicast mode, the

TwinServer transmits video streams in packets to a virtual buffer of the Multicast network.   The virtual

buffer then broadcasts the video streams to all TwinDVRs under the network.   Each TwinDVR should

be installed with two network cards.   One is for the hub where TwinServer is plugged in, and the other

for a DSL or ISDN modem with dedicated ISP service to the Internet.   Each TwinDVR serves its own
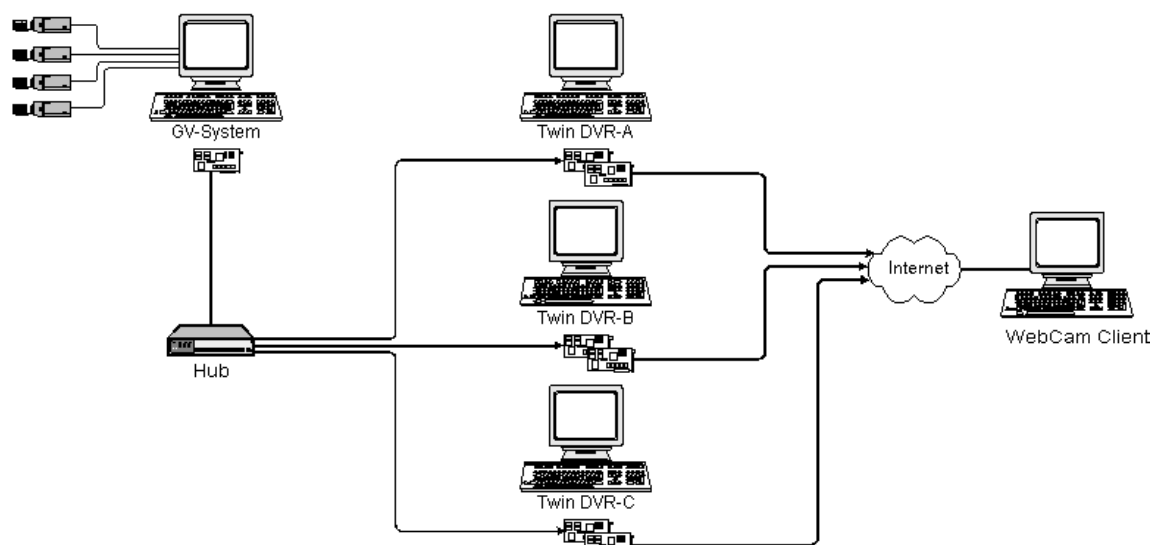
group of WebCam Clients.

Figure 11-5

Starting TwinServer

1.   In the Main System, click the **Network** button, and then select **TwinServer**.   This TwinServer
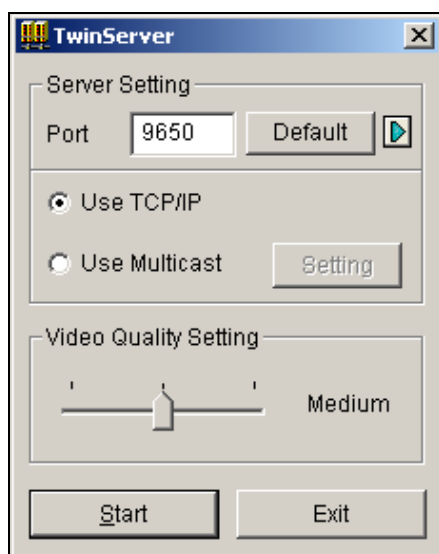
setup dialog box appears.

Figure 11-6   *TwinServer Settings*

2. The default port 9650 is for video transmission.   Keep it as default or modify it if necessary.
    Using UPnP for automatic port configuration to your router, click the **Arrow** button.   For details,
    see *UPnP Settings* in Chapter 6.

3. Select the type of network to be used: **Use TCP/IP** or **Use Multicast**.   If **Use Multicast** is enabled,
    click the **Setting** button to display the Multicast Setting dialog box.   See *Multicast Settings* below.

4. Use the **Video Quality Setting** slider to adjust video quality for Low, Med, or High.

5. Click the **Start** button to activate the TwinServer.

Multicast Settings
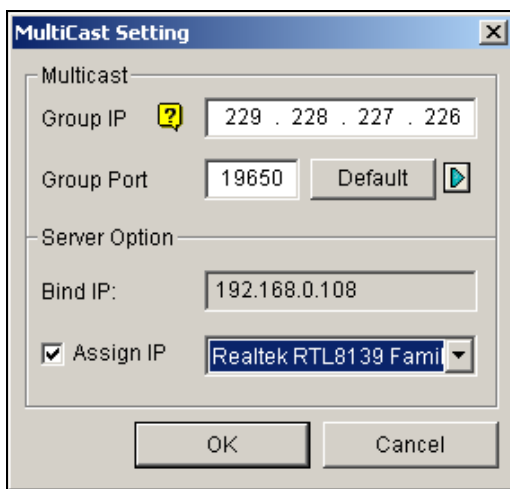
Figure 11-7   *MultiCast Settings*

[MultiCast]

■   **Group IP:**   Displays the IP address for the virtual buffer that stores the video streams in
    Multicast network.

■   **Group Port:**   Used for transferring video streams over the Multicast network.   To enable the
    UPnP function, click the **Arrow** button.   For details, see *UPnP Settings* in Chapter 6.

[Server Option]   Only necessary if more than one network card is installed in your GV-System.
Check **Assign IP** and select one network card.   This will automatically bring up Blind IP of the network
card.

Installing TwinDVR

The TwinDVR is included in the Surveillance System Software CD.   This application should be installed in a separate PC within the same Local Area Network as the TwinServer.   Before installation, make sure your PC meets the following minimum system requirements:

OS	Win 2000, XP, Server2003
CPU	Pentium4 2.0GHz (minimum)
Memory	256 MB RAM
Hard Disk	40 GB (minimum)
VGA	NVIDIA GeForce II 32MB
Network	TCP/IP

1.   Insert the Surveillance System Software CD to the PC where TwinDVR will be installed.   It will run automatically, and a window appears.
2.   Select the **Install V 8.0.0.0 system** item.
3.   Click **TwinDVR System**, and follow the on-screen instructions.
       During the installation, you may be prompted to install GeoMPEG4 codec; simply press **Yes**.

Starting TwinDVR

1.   Run **TwinDVR.exe**.   This displays the TwinDVR dialog box.
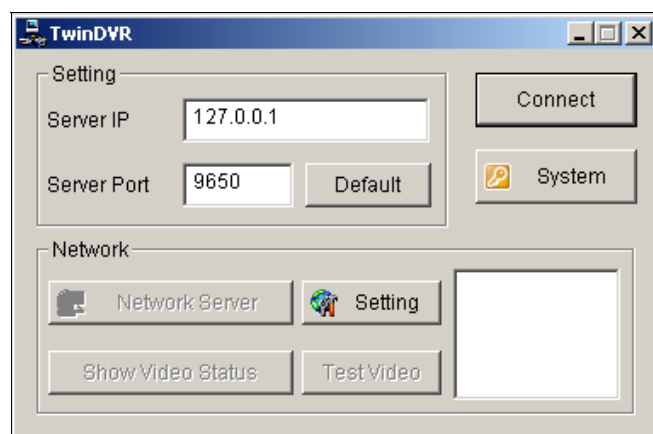
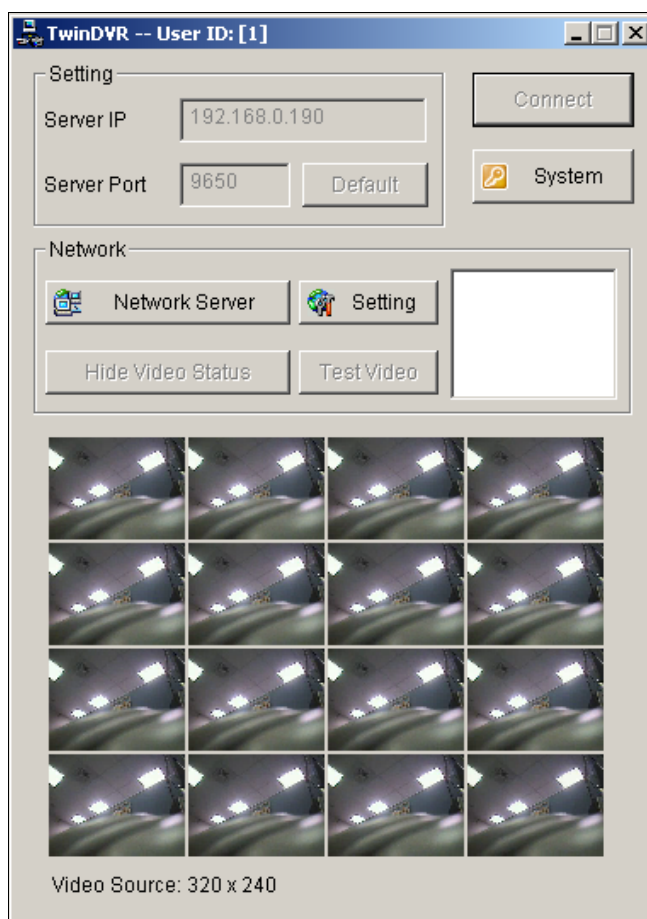*Figure 11-8*   *TwinDVR Setup*

2.   Type the IP address of TwinServer in the Server IP field.
3.   Keep the server port in default, or it should match the TwinServer port.   See Figure 11-6.
4.   Click the **Connect** button to establish the connection between TwinDVR and TwinServer.   A valid user ID and password are required.

If the connection is established, the **Network Server**, **Show Video Status**, and **Test Video** buttons will be available.   You can now use them to set up TwinDVR for:

● Testing Video Stream

● Starting WebCam Server at TwinDVR

● Setting Multiple TwinDVRs in TCP/IP Mode

● Setting Multiple TwinDVRs in Multicast Mode

Testing Video Stream

This function allows you to test the video transmission between TwinServer and TwinDVR.   Click the **Show Video Status** button to display 16 monitoring windows beneath the TwinDVR dialog box.   Click the **Test Video** button and video streams from the connected TwinServer will be streamed to the monitoring windows for 10 seconds.   You may click the **Hide Video Status** button to close the monitoring windows.

Figure 11-9   *Testing Video Stream*

Starting WebCam Server at TwinDVR

Click the **Network Server** button, and then select **WebCam Server** to display the Server Setup dialog box.   See Figure 6-1.

Setting Multiple TwinDVRs in TCP/IP Mode

Click the **Network Server** button, and then select **Extended Server**.   The Extended Server is to duplicate TwinServer's video stream and transmit it to the next TwinDVR in the same network.   If there are five TwinDVRs in the network, you should activate the **Extended Server** function in TwinDVR 1, 2, 3, and 4 respectively.   It's not necessary to activate TwinDVR 5 since there are no more TwinDVR running behind it.

Setting Multiple TwinDVRs in Multicast Mode

Click the **Network Server** button, and then select **Use Multicast Mode**.   The Multicast mode is now activated.   The Multicast Server is to instruct TwinDVR to obtain video streams from the virtual buffer. If there are five TwinDVRs connected to the network, all TwinDVRs will be required to select the **Use Multicast Mode** option.

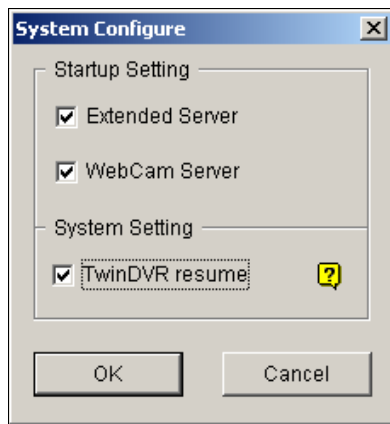# TwinDVR Settings

Network Card Settings

In Figure 11-8, click the **Setting** button, and then select **Network Setting** to display the following dialog box.   The Network Setting option is only necessary when your TwinDVR has more than one network card.   Check **Assign IP** and select one network card.   This will automatically bring up Blind IP of the network card.   The network card will be used for connecting to TwinServer; the other network card will be assigned for connecting to Internet.   If you want the TwinDVR to automatically reconnect to TwinServer, check **Retry until connected** and set the time interval.
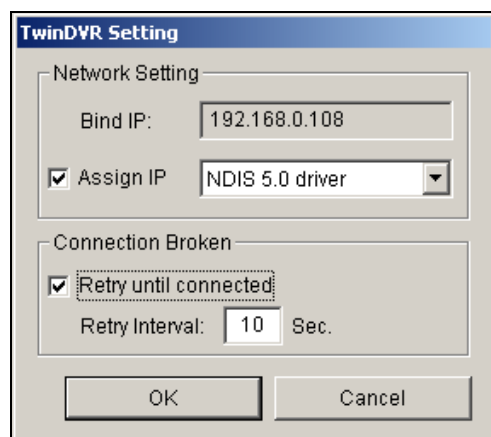
Figure 11-10   *TwinDVR Setting*

System Settings

In Figure 11-8, click the **Setting** button, and then select **System Configure** to display the following
dialog box.   The option is only available when TwinDVR is connecting to TwinServer.

Figure 11-11   *System Settings*

[Startup Setting]

- **Extended Server:**   Activates Extended Server on TwinDVR startup.
- **WebCam Server:**   Activates WebCam Server on TwinDVR startup.

[System Setting]

- **TwinDVR resume:**   Resumes TwinDVR connection when the system shuts down unexpectedly.

Watermark Viewer

You can make a watermark proof to protect videos from unauthorized alteration or manipulation.   In Main System, click the **Configure** button, select **System Configure**, and then check **Use Digital Watermark Protection** option.   This allows all recorded videos to be marked with a permanent and inseparable image.

The watermark is invisible to naked eyes.   In order to see it, the video stream must be open in a watermarking verification program by following these steps:

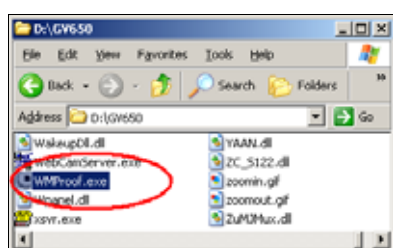1. Go to the system folder, and locate **WMProof.exe**.

Figure 11-12

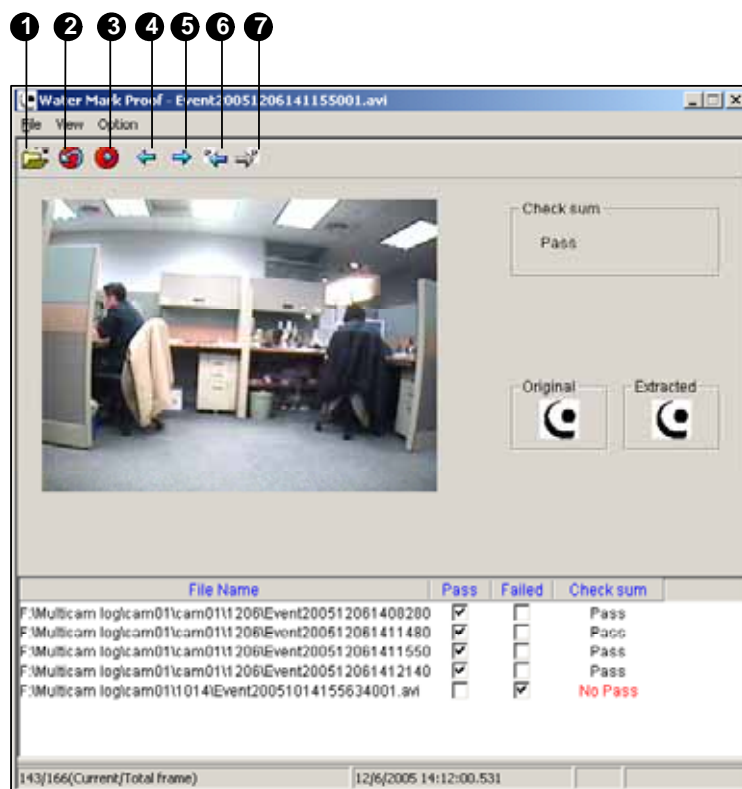2. Double-click to open the program.   This displays the following Watermark Viewer window.

Figure 11-13

The controls in the window:

No.	Name	Description
1	Open File	Finds a video file to play.
2	First Frame	Goes to the first frame of the file.
3	Play	Plays the file.
4	Previous Frame	Goes to the previous frame of the file.
5	Next Frame	Goes to the next frame of the file.
6	Previous Watermarked Frame	Goes to the previous frame that contains watermark.
7	Next Watermarked Frame	Goes to the next frame that contains watermark.

The Watermark Viewer displays the verifying result as follows:

- **Check sum:**   If the video stream has not been tampered, the Check Sum section displays a message: *Pass.*   Otherwise a message: *No Pass* will appear.

- **Original vs. Extracted:**   The Extracted section should have the same icon displayed as that in the Original section.   If not, it indicates the video may have been altered.

3. Click the **Open File** button (No.1, Figure 11-13), select a video file and click **Open**.   The video file is then listed in the status field of the window.   Also, you can drag multiple video files directly from storage folders to the status field.
4. Highlight the file and double-click it to play.

Twin View Display

You can display Main System and ViewLog in two separated monitors.   To make this operation possible, your system must equip with VGA card having dual video outputs.   Each output should be connected to its own monitor display.

1. Right-click on the Windows desktop and select **Properties**.   This displays the Display Property dialog box.
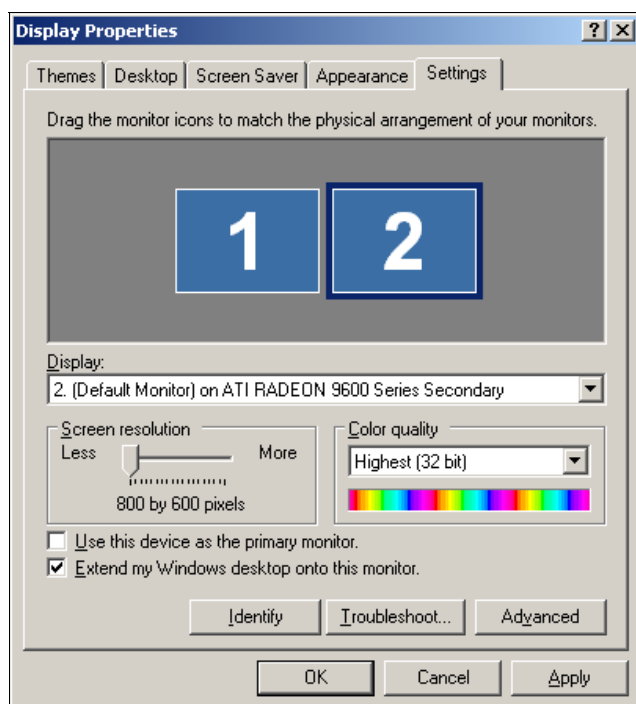2. Select **Settings**, enable **Extend my Windows desktop onto this Monitor**, and then click the **Apply** button.

Figure 11-14

3. Go the system folder and locate **DMPOS.exe**.

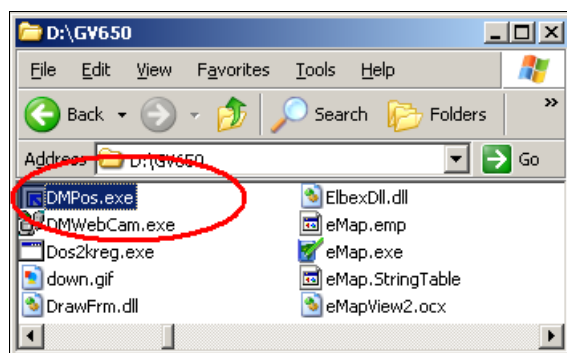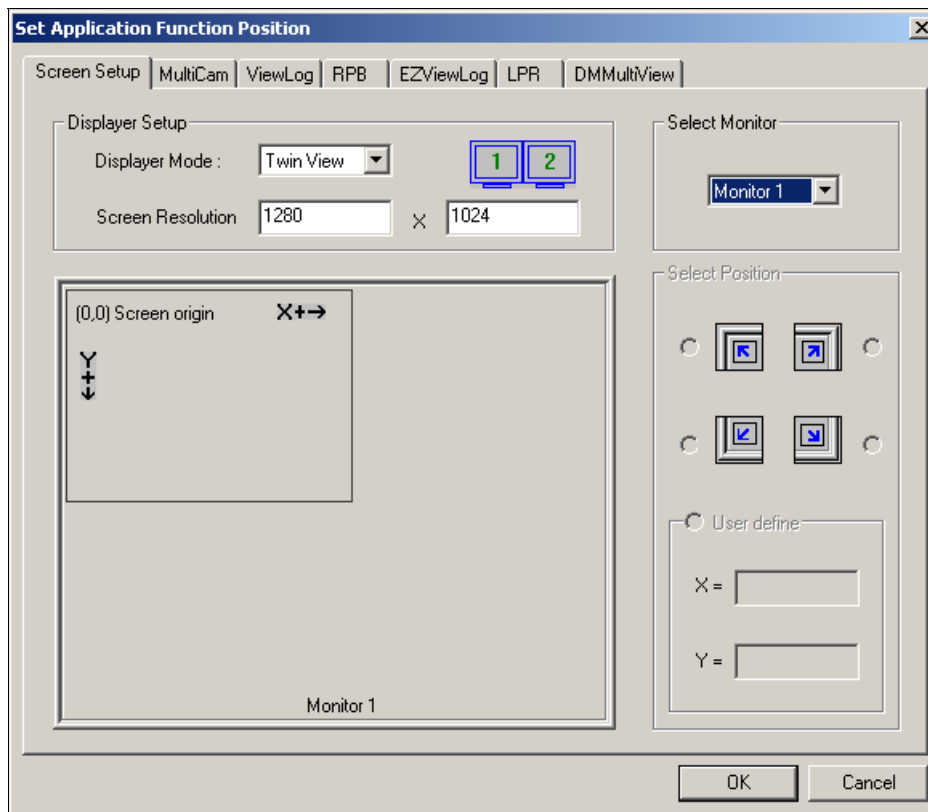*Figure 11-15*

4.   Double-click the program to display the Set Application Function Position window.

Figure 11-16

5.   In the Screen Setup tab, select **TwinView** from the Displayer Mode drop-down list.

6.   In the MultiCam tab, select **Monitor 1** from the Select Monitor drop-down list.

7.   In the ViewLog tab, select **Monitor 2** from the Select Monitor drop-down list.

8.   Click the **OK** button and start GV-System, which should appear in monitor 1.

9.   Click the **ViewLog** button on the main screen and select **Video/Audio log** from the menu.
     ViewLog should appear in monitor 2.

Note: The **Select Position** option allows you to determine where to position GV software on
Windows.   It is only necessary if your GV-System is set at 800x600 panel resolution but your
Windows desktop is set at 1024x768 or higher.   It is recommended that both GV software and
Windows desktop to be set at the same resolution.   For details on how to set the resolution for
GV-System, refer to *Panel Resolution* in Chapter 1.

Windows Lockup

This feature helps you to secure your PC while away from your workstation.   You may lock up the Windows desktop while launching a customized GV-desktop.   The GV-desktop is where operators are limited to run the GV-System and the selected programs.

The GV-desktop Screen

The GV-desktop program is included in the installation of Main System.   Go to the system folder and execute **Desktop.exe**.
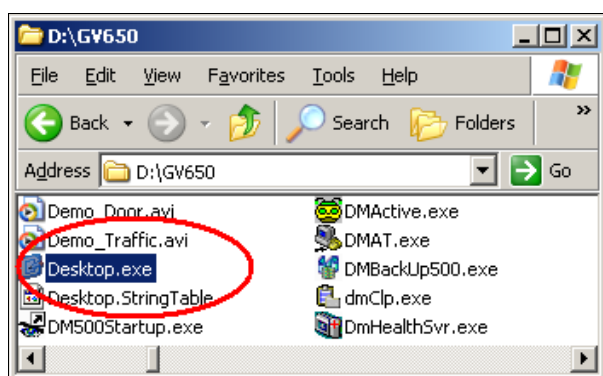

Figure 11-17

The following GV-desktop screen will appear.

Figure 11-18

The controls in the GV-desktop screen:

Icon	Name	Description
1	Programs	Accesses programs.
2	Settings	Adds programs to the programs menu.
3	Log Off	Logs off GV-desktop.
4	Shut Down	Shuts down the computer.
5	Task Manager	Click to view the tasks currently running on your computer.

GV-desktop Features

The five buttons on GV-desktop are discussed below.

Programs

Click the **Programs** button to see the program menu.   The default programs are Multicam Surveillance System (Main System), ViewLog, Backup System, Repair Database Utility, Remote Playback Server, and eMap Editor.   You can add or remove new programs to the menu.   For the example below, Paint is a new program added to the menu.
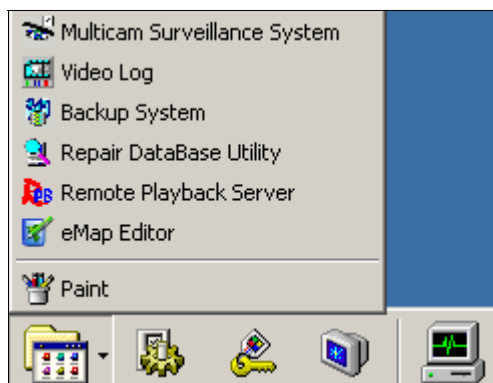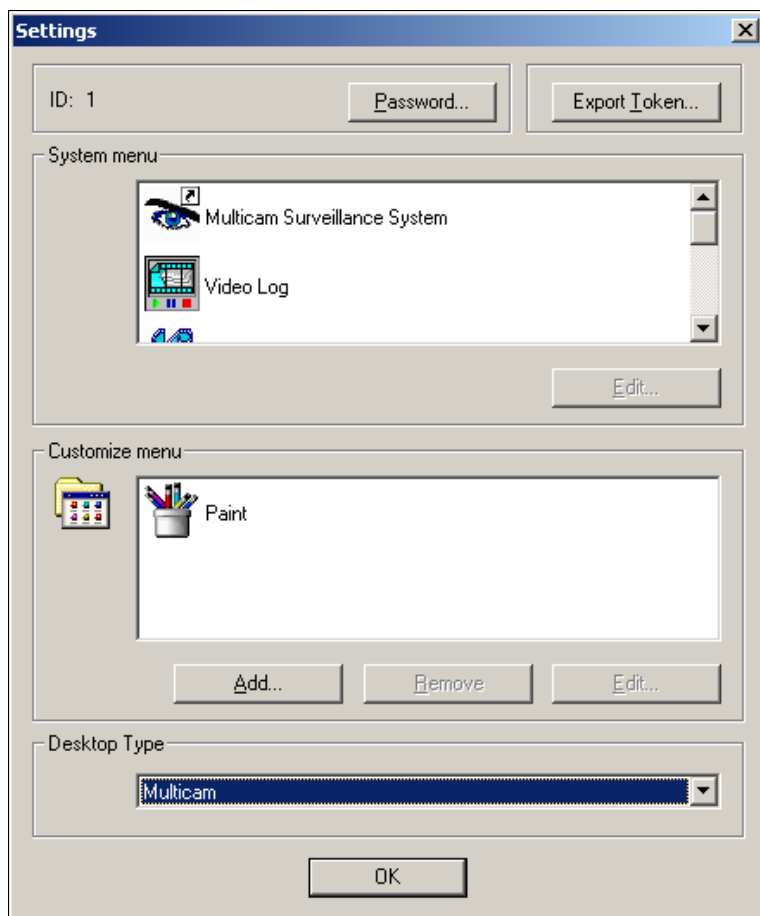

Figure 11-19

Settings

Click the **Settings** button to display the following window.   A valid ID and password are required.

Figure 11-20

[Password]   Click to change the password.   For the option of Allow Removing Password System, see *Setting up Password* in Chapter 1.

[Export Token]   This option is discussed in *Token File for Save Mode* later in this chapter*.*

[System Menu]   The menu lets you rename system programs.   Select a desired program and click the **Edit** button to change its name.

[Customized Menu]   The menu lets you add other programs to the Programs menu.   Click the **Add** button to display the following window.   In the Target field, type a path or click the button next to the field to assign a path.   Then enter the program name, comment, or even change an icon for the program.   Finally, click **OK** to add the program.
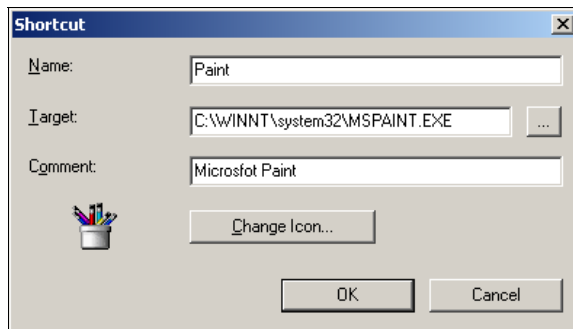
Figure 11-21

[Desktop Type]   Select Windows or GV-desktop (Multicam) from the drop-down menu.   The
selected desktop will launch the next time when you log in to PC.

Log Off
Click the **Log off** button to log off GV-desktop.   A valid ID and password are required.

Shut Down
Click the **Shut Down** button to shut down your computer.   A valid ID and password are required.

Task Manager
Click the **Task Manager** button to view the programs currently running on your computer.   When you
minimize a program, it will be hiding and working in the background.   Double-click the program listed
in Task Manger to bring the program back to desktop.
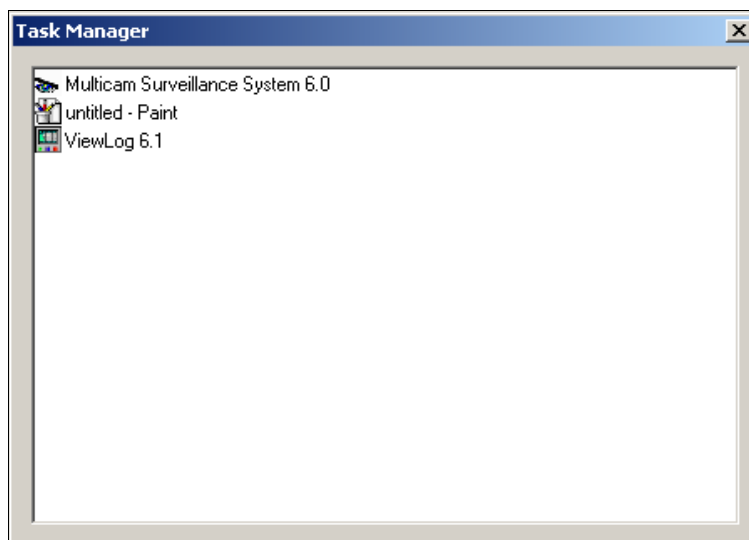
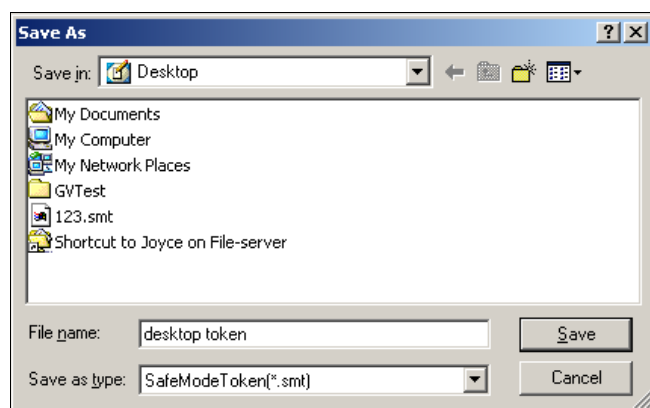*Figure 11-22*

Token File for Save Mode

This option in the Settings section lets you export a token file.   In case you enter safe mode and are in the status of the GV-desktop.   This token file will let you exit from the GV-desktop and enter the Windows desktop.   To export a token file and apply it, follow the steps below.

1.   Click the **Export Toke** button to display the following dialog box.

Figure 11-23

2.   Type a code in the Token Code field.
3.   Click **OK** to display the Save As dialog box.

Figure 11-24

4.   Locate a path, and enter a desired name in the File Name field.
5.   Click **Save** to save the file.
     When you enter safe mode and are in the status of the GV-desktop:
6.   Click the **Settings** button on the desktop.   You will be prompted to locate the stored token file and enter the set token code.
7.   When the Settings window appears (Figure11-20), select **Windows** in the Desktop Type field, and then exit from the window.
8.   Click the **Log Off** button to log off the GV-desktop and enter the Windows desktop.   The token code and file are also required here.

Authentication Server

The Authentication Server allows a remote server to restrict access to the password settings of local GV-Systems.   When the Sever is working, the previous password settings in local GV-Systems will be invalid.   Local GV-Systems will submit to the full control of the Server.

Installing the Server

To install this application in a remote sever, follow these steps:

1.   Insert the Surveillance System Software CD.   It will run automatically, and a window appears.
2.   Select the **Install V8.0.0.0 System item**.
3.   Click **Authentication Server**, and follow the on-screen instructions.

The Server Window

Go to Windows **Start**, point to **Programs**, select **AuthServer**, and then click **AuthServer**. This window appears.
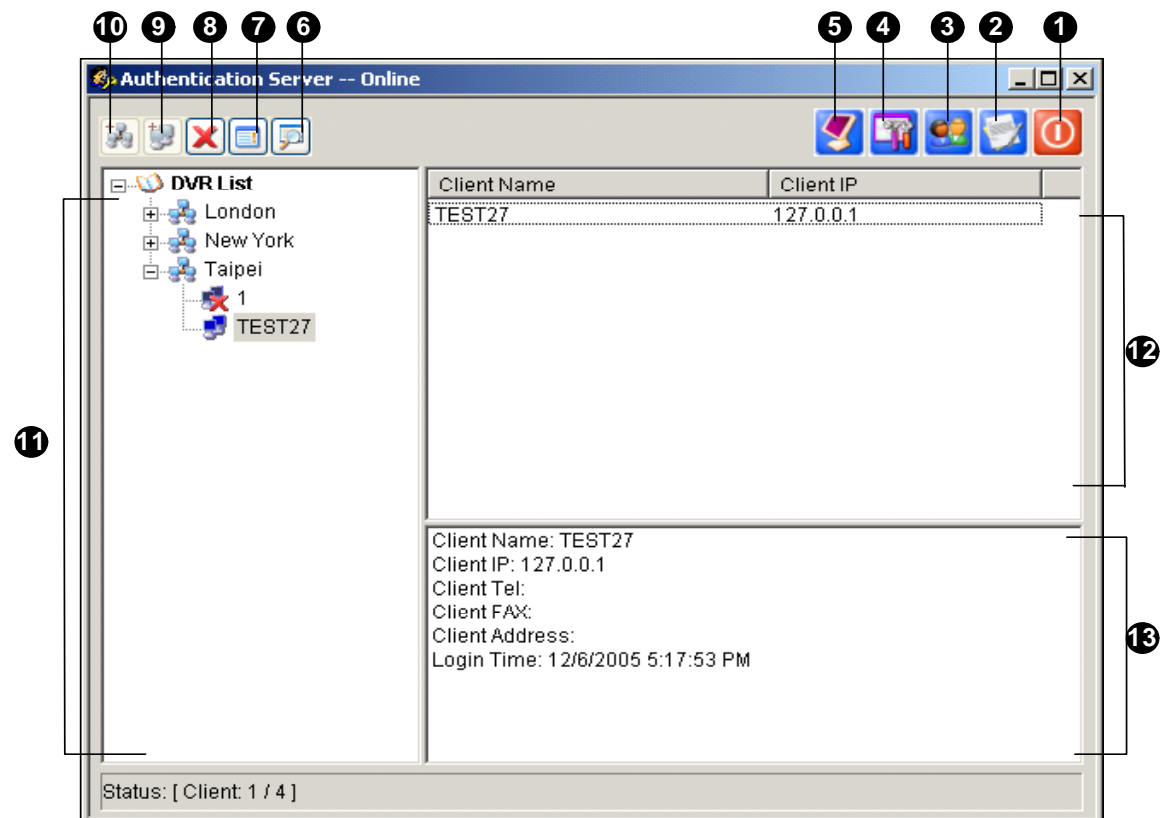
Figure 11-25   *The Authentication Server Window*

The controls in this window:

No.	Button Name	Description
1	Exit	Exits this window; Logs out Administrator; Changes Password, exports account information.
2	Log	Sets up the Authentication Server Log and opens the log browser.
3	Password Setup	Configures passwords and grants permissions to clients.
4	Server Setup	Configures the Authentication Server.
5	Start/Stop Service	Starts/Stops the Authentication Server.
6	Find A Client	Finds an existing client.
7	View/Edit A Client	Select a client from the DVR List, and click to view /edit it.
8	Delete An Area /Client	Deletes an existing group or client.
9	Add A Client	Creates a client account.
10	Add An Area	Creates an Area group.
11	DVR List	Lists the created clients and area groups.
12	Connected DVR List	Lists the connected GV-Systems.
13	DVR Information	Lists the information of the selected GV-System.

Creating a DVR List

You can arrange your clients' GV-Systems into different groups for a better management.   To create a DVR list, follow these steps:

1. To create a group, click the **Add An Area** button (No.10, Figure 11-25).
2. To create a client under the group, click the **Add A Client** button (No.9, Figure 11-25).   This displays the Client Information dialog box.

Figure 11-26   *Client Information*

3. Type the client's information.   The Name must match that of local GV-System.
4. Click **OK**.

Editing a User

The Authentication Server operator can create users; can grant, deny, or modify permissions; and can allow access to local GV-Systems listed in the DVR list.

1. Click the **Password Setup** button (No.3, Figure 11-25) to display the Password Setup window. The window is the same as the Password Setup window in Main System (see Figure 1-29), except the following section.

Figure 11-27   Password Setup

2. To create and edit a user, refer to *Setting up Password* in Chapter 1.
3. To grant access to local DVRs:
    a. Click the **Group Setting** button in the window.   The Valid Group List window appears.
    b. Click the **New Group** button.   The DVR Group Information window appears.
    c. Give a DVR group name, and check the desired DVRs into the group.
    d. Go back to the Password Setup window.   Use the Valid Group drop-down list to select the created DVR group.
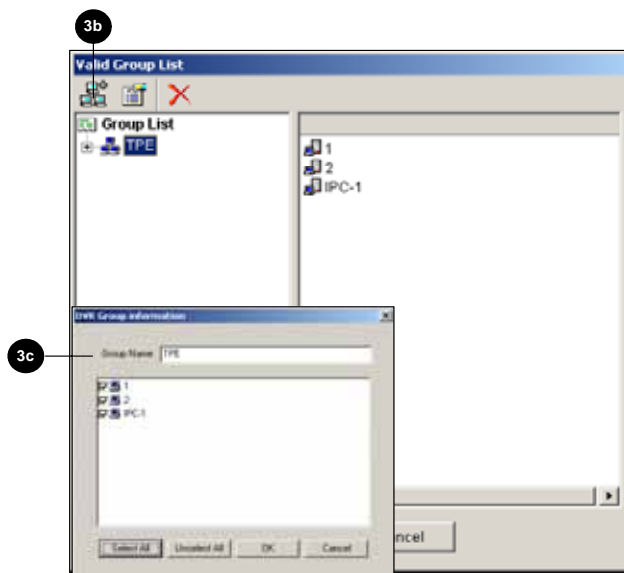
Figure 11-28   Valid Group List and DVR Group Information

Note: In the Password Setup window of Authentication Server, the **Fast Backup & Restore** tab is not available.

Starting the Server

To configure the server and start the service, follow these steps:

1. Click the **Server Setup** button (No. 4, Figure 11-25).   This dialog box appears.

Figure 11-29   *Sever Setup*

[Network Setting]   The default port number is 3663.   Using UPnP for automatic port configuration to your router, click the **Arrow** button.   For details, see *UPnP Settings* in Chapter 6.

[Authorized ID and Password]   The ID and password entered will be those for the local DVRs to log in the server.

- **Enhance network security:**   Enable to enhance network security on Authentication Server.
- **Enable IP White List:**   Create a list of IP addresses allowed to connect to Authentication Server.   For details, see *IP White List Settings* in Chapter 6.

[Server Setting]

- **Auto start service when server startup:**   Starts automatically the service when Windows starts.
- **Notify when DVR disconnected from server:**   Notifies the Authentication Server with a pop-up window when the DVR and server loss connection.

2. Click **OK** to apply above settings.
3. Click the **Start/Stop Service** button (No. 5, Figure 11-25) to start the connection.

Connecting GV-System to the Server

To configure the GV-System in order to access the Authentication Server remotely through a network connection, follow these steps:

1. Click the **Configure** button, point to **Password Setup**, and then select **Remote Authentication Setup**. This dialog box appears.
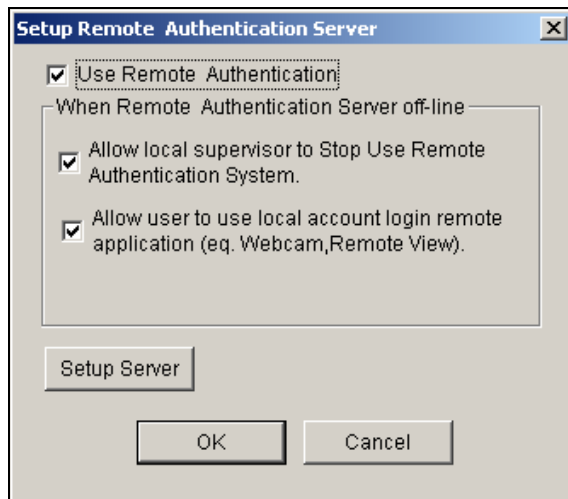
Figure 11-30   Setup Remote Authenticator Server

- **Use Remote Authenticator:**   Enable the connection with the Authentication Server.
- **Allow Local supervisor to stop use remote authentic system:**   Allows the local supervisor to stop the Authentication application when the connection fails.   If the option is disabled and the connection fails, the dialog box won't be accessible until connection resumes.
- **Allow user to use local account login remote application:**   Allows the local users to access other remote applications with their previous password and ID settings when the connection fails.

2. Click the **Setup Server** button in Figure 11-30.   This dialog box appears.
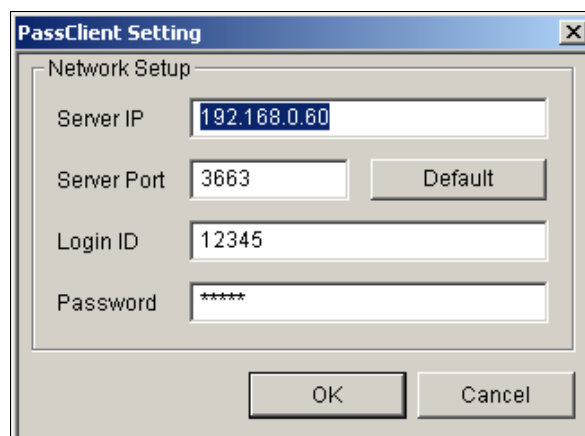
Figure 11-31   PassClient Setting

3. Enter the IP address and port of the Authentication Server.   Enter the valid ID and password created in the Authentication Server (See Figure 13-29).

4. Click **OK** to start the connection.   **When the connection is established, the previous password settings in the GV-System will be invalid.**

5. Press **[L]** on the keyboard to call up the Login dialog box.   The icon indicates the connection is established.

Figure 11-32

6. Type a valid User ID and password for login.

As long as the Authentication sever is working, every time when you start the GV-System, the Login dialog box will appear.

Note: When the disconnection icon appears, there might be three reasons:

1. The valid ID and password created in the Authentication Server (see Figure 11-29) don't match those in the GV-System (see Figure 11-31).
2. The client's given name (see Figure 11-26) doesn't match the GV-System's.
3. The network media has traffic problem.

Fast Backup and Restore

With the Fast Backup and Restore (FBR) solution, you can change interface skin and customize features to suit personal preference, as well as back up and restore your configurations in Main System.

Installing the FBR Program

1. Insert the Surveillance System Software CD.   It will run automatically, and a window appears.
2. Select the **Install V 8.0.0.0 system** item.
3. Click **Fast Backup & Restore Multicam System**, and follow the on-screen instructions.

Running the FBR Program

Run **Fast Backup & Restore main System** from the Start menu. This window will appear.
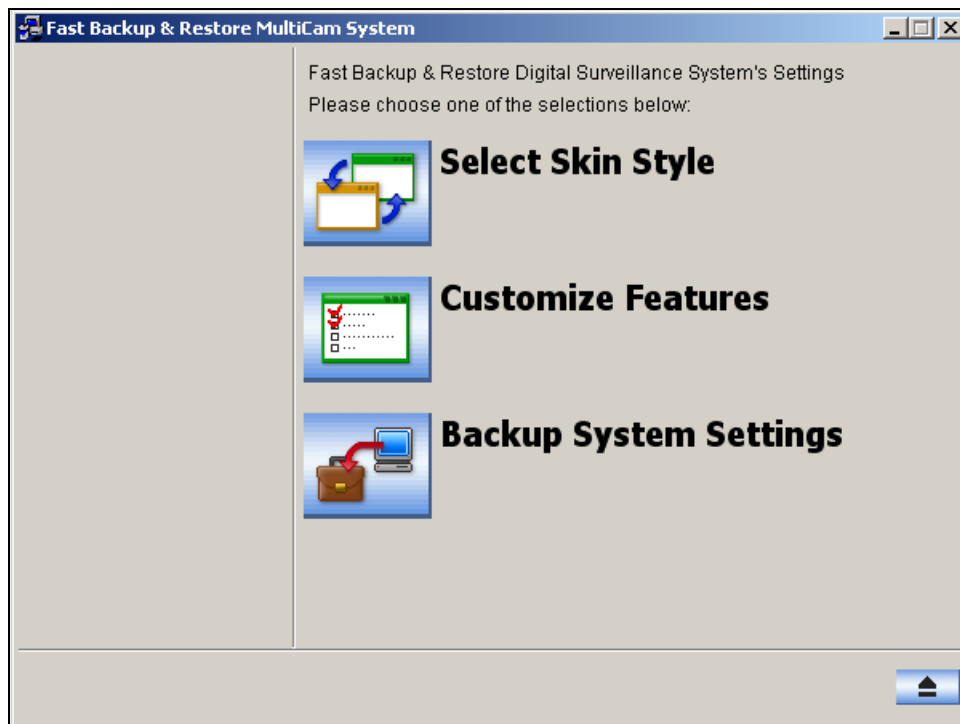
Figure 11-33   *FBR Window*

Selecting a Skin

The GV-System provides two skin options: silver (default) and conventional. The skin change will only apply to the screens of Main System, ViewLog and remote applications. The dialog boxes won't be affected.

You can also change the screen image of startup splash, non-active video and video lost.

Changing the Skin Syle

1. In the FBR window (see Figure 11-33), click the **Select Skin Style** icon.   The option menu appears.
2. To use one skin style for all applications, simply select **All use Conventional Style** or **All use Silver Style**.
    To change the skin style of a single application, point to the desired application, and then select the skin style you want to apply.
3. Close the FBR window, and start the GV-System to see the change.

Customizing the Screen Images

You can replace the screen images of Startup Splash, Non-Active Video and Video Lost with your own.

Before you start, remember that each screen image has its specified size.   Create your own image according to these specifications:

● **Startup Splash:** Bit Depth 24, Width 319, and Height 272.
● **Non-Active Video:** Bit Depth 24, Width 720, and Height 576.
● **Video Lost:** Bit Depth 24, Width 270, and Height 576.

To customize the screen image, follow these steps:

1. In the FBR window (see Figure 11-33), click the **Select Skin Style** icon, point to **DVR**, and then select **Custom Logo…**.   This window appears.
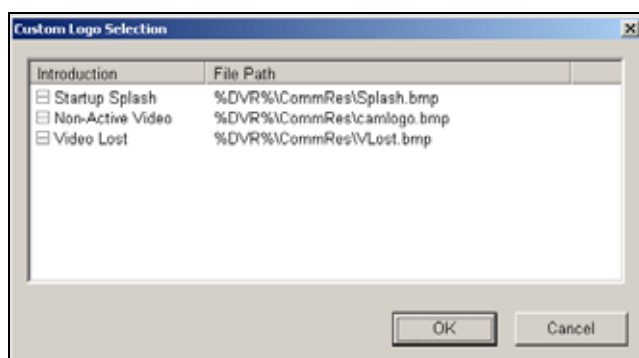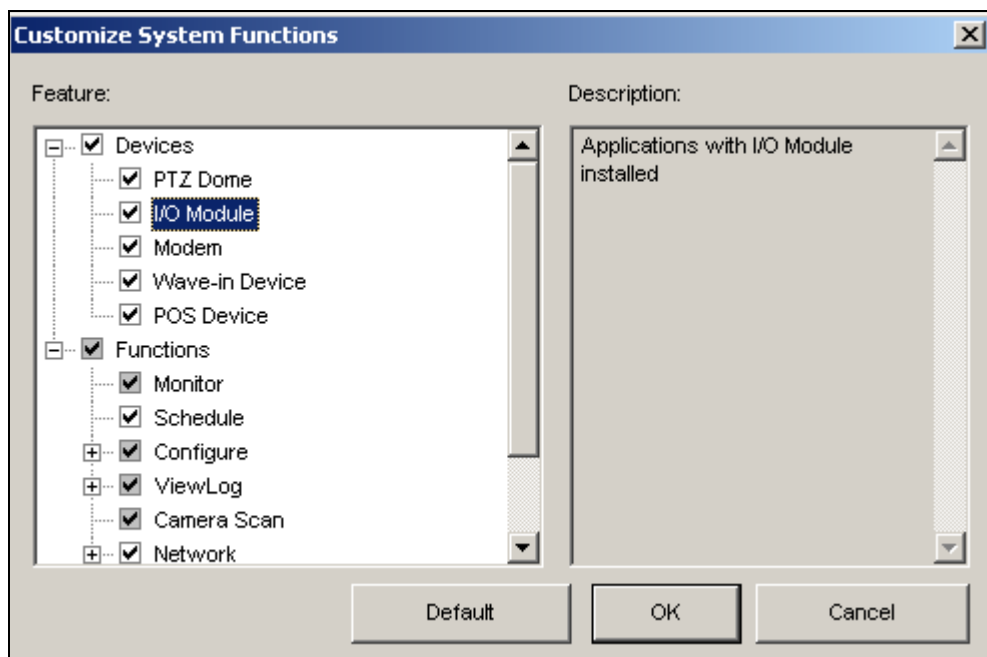

Figure 11-34

2. Click a desired screen image to be replaced with an imported image.

3. Exit the FBR program, and start the GV-System to see the change.

Customizing the Features

Not every feature may be of equal interest to you.   You can now specify which features are to be
displayed at system startup.

1. In the FBR Window (see Figure 11-33), click the **Customize Features** icon to display this dialog
    box.

Figure 11-35

[Devices]   Expand this folder, and select the device applications you want to enable in the
GV-System.

[Functions]   Expand this folder, and select the functions you want to enable in the GV-System.
The gray checked boxes indicate that the functions are enabled by default.   No changes can be
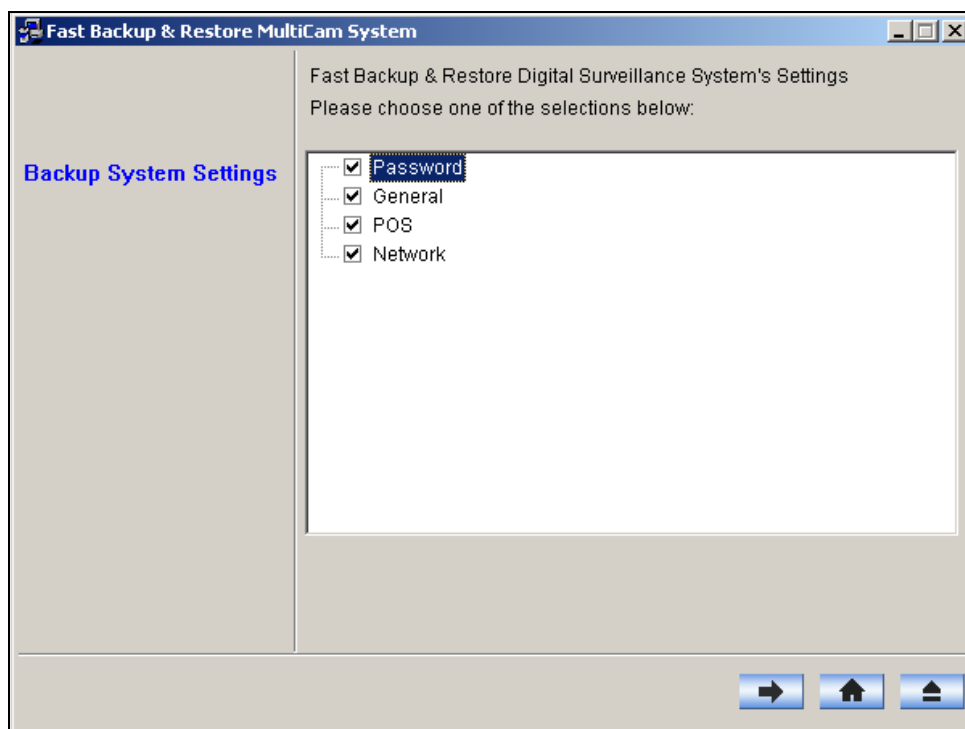made to these functions.

2. Click **OK** to apply the settings.

Backing up and Restoring Settings

You can back up the configurations you made in Main System, and restore the backup data to the current system or import it to another GV-System.

Backing up the settings

1. In the FBR window (see Figure 11-33), click the **Backup System Settings** icon.   This dialog box appears.

Figure 11-36

2. Check which settings you want to back up, and press the **Next Step** button ➡.   The Save As dialog box appears.
3. Select the destination drive to store the backup file.   When the backup is complete, this message will appear: *Successfully Backup MultiCam System Settings*.

Restoring the System

You can restore the current system with the backup of configuration file.   Also, you can copy this backup file to configure another system with the same settings as the current system.

1. Open the backup file (*.exe) you previously stored.   A valid ID and password are required to display this window.
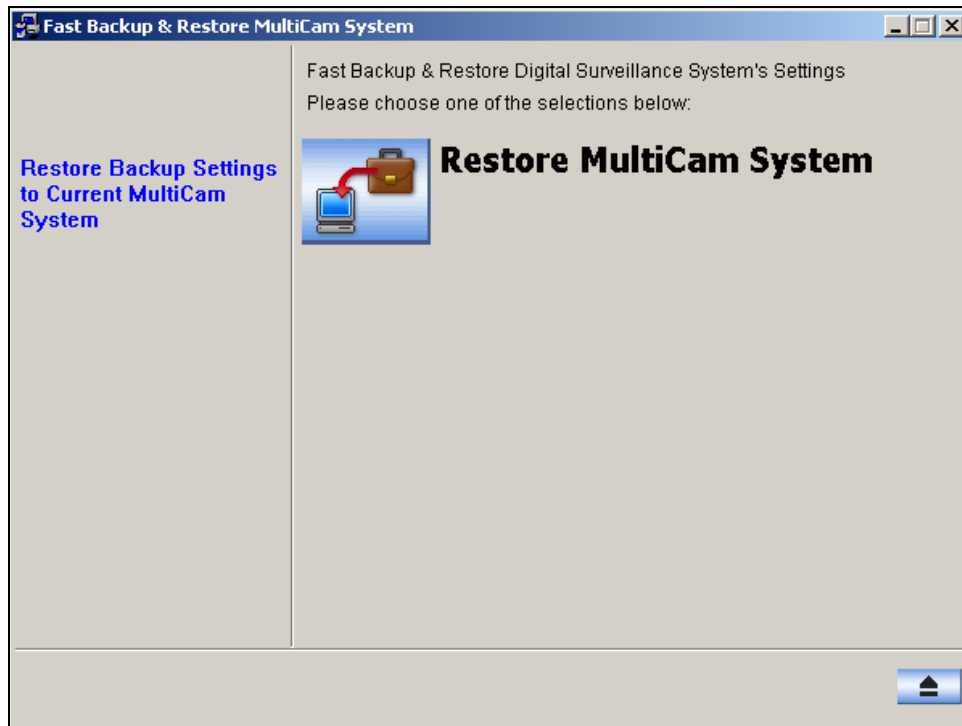
Figure 11-37

2. Click the **Restore Multicam System** icon, and then check which backup settings you want to restore.
3. Press the **Next Step** button [→] to start restoring.
4. When the restoration is complete, this message will appear: *Successfully Restore MultiCam System Settings*.

Hot-Swap Recording

The program Media Man Tool provides a hot-swap feature, allowing a non-stop recording.   You can add and remove a hot-swap or portable hard drive to the GV-System while the monitoring keeps on. When the new drive is added, it will be configured to the recording path automatically.

Additionally, you can back up ViewLog player and files to play back at any computer.

Note: The hot-swap feature supports the disk capacity of 800 MB at least.

The Media Man Tool Window

This program comes with the installation of Main System.   Run **MediaMenTools.exe**.   The following window will appear.
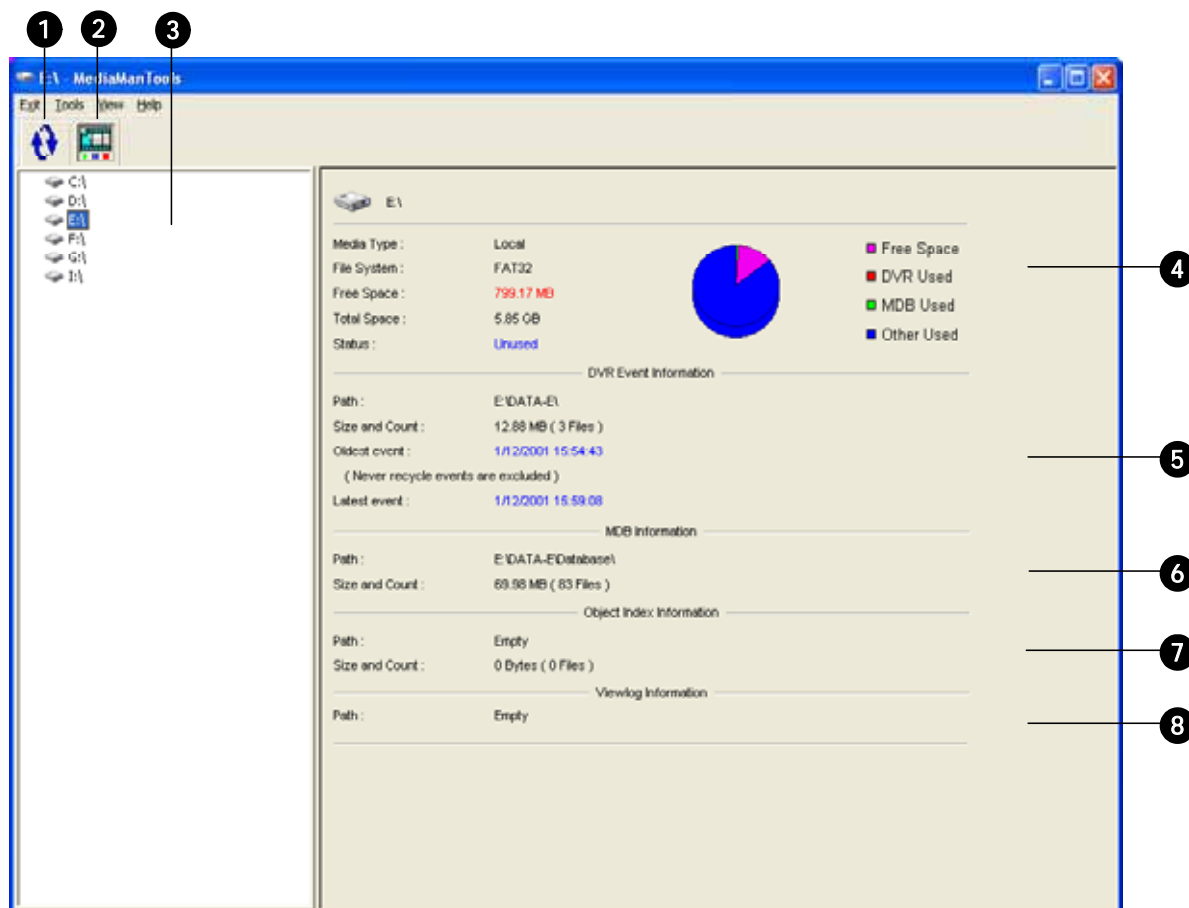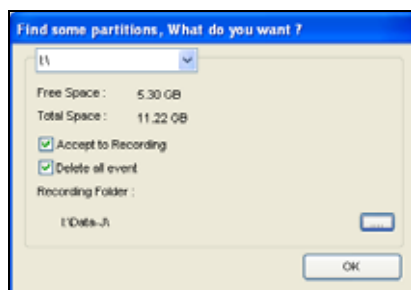

Figure 11-38

The controls on the MediaMan window:

No.	Name	Description
1	Refresh	Updates all data information on the window.
2	Copy ViewLog	Selects a hard drive to copy ViewLog files.
3	Disk List	Selects a disk.
4	Disk Properties	Indicates disk information.
		In "Media Type," two messages may appear:
		• **LAN**: indicates a hard drive is connected.
		• **Local**: indicates a local hard drive is connected.
		In "Status", three messages may appear:
		• **Standby**: indicates the hard drive already specified as the recording path.
		• **Unused**: indicates the hard drive not specified as the recording path.
		• **Recording**: indicates the files are being recorded to the disk.
5	DVR Event Info	Indicates the path, size and number of recorded events; the dates of the oldest and latest events.
6	MDB Info	Indicates the path, size and number of System Log files.
7	Object Index Info	Indicates the path, size and number of Object Index files.
8	ViewLog Info	Indicates the location you have backed up the EZ ViewLog player.

Note: The DVR Event Info updates every one minute.   The MDB Info, Object Index Info and ViewLog Info update as data changes.

Adding a Disk Drive

1. Run **MediaManTools.exe**.
2. Insert a hot-swap hard drive or plug a portable hard drive to your computer.   This dialog box appears.

Figure 11-39

- ■ **Accept to Recording:**   Adds the hard drive to the recording path.
- ■ **Delete all events:**   Deletes the recorded files already on the hard drive.

3.   Click **OK** to automatically configure the hard drive to the recording path.

To verify the hard drive is added successfully, select the drive in the MediaMan Tools window and see if "Status" in Disk Properties displays: *Standby*.   Or, in Main System, click the **Configure** button and select **Set Location** to confirm the new recording path.

Removing a Disk Drive

On the Disk List, right-click the hot-swap or portable hard drive, and select **Stop for recording**.   The "Status" in Disk Properties will display: *Unused*.   Then you can remove the hard drive safely.

Note: Removing the hard drive will affect ViewLog database.   To restore these events, add the hard drive back to the system and run **Repair Database Utility**.

Backing Up ViewLog Files

You can export ViewLog player and files to play back at any computer without the system.

On the Disk List, right-click the hot-swap or portable hard drive to have these options:
- **Copy ViewLog:**   Exports the ViewLog player and files to the hard drive.
- **Recreate ViewLog database:**   When the ViewLog player is already on the hard drive, select this option to update the ViewLog files.

To play back files at another computer, simply run **EZViewLog500.exe** from the created ViewLog folder on the hard drive.