User's Guide





SecurView Pro

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Chapter 1 Network IP Cameras

What is a network (IP) camera?

Network camera, IP addressable camera, IP Camera, all referring to the same type of cameras, is a digital camera that can be directly connected to the Internet through a network cable or Wireless connection. Network cameras send already digitized and compressed video streams. Network Cameras are the fastest growing trend in the Surveillance industry. Here are some of the benefits of IP cameras:

- Existing local network infrastructure could be used for the installation.
- Comparably less cabling required compared with an analog CCTV installation.
- Network cameras have built-in motion detectors and compression engines, which enable the DVR Server to use a minimum of its computer resources; therefore, the same computer can also be used for other tasks.
- There are Network (IP) cameras with very high resolution (1.3 Mega pixels and more). Analog cameras are incapable of achieving such resolution.
- Network (IP) camera installations are highly scalable and upgradeable. There is no need to buy and install additional video capture boards for the DVR system in the event you want to add a camera or increase performance of the system.
- Any analog camera can be converted to a network camera by using a Network (IP) server.
- There is no geographical limitation for the installation.
- Effective off site recording (either by itself or in addition to onside recording) eliminates the possibility of destruction of the video medium due to deliberate actions or an accident (fire, flooding, etc.).
- Some of the network cameras also can be used as a webcam to serve as an advertising engine for a business.

MPEG4/H.264 IP cameras:

Without compromising image quality, an H.264 encoder can reduce the size of a digital video file by more than 75% compared with the Motion JPEG format. This means that much less network bandwidth and storage space are required for a video frame. A higher video quality can be achieved with less bit rate.

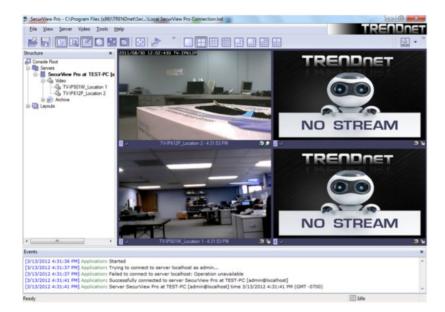
- Better Average Bandwidth and Storage Reduction over MJPEG
- High-quality megapixel video stream at 20fps can be as low as 2 Mbps
- High resolution and bandwidth efficiency

PTZ Cameras

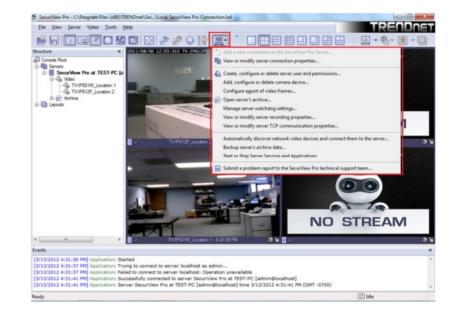
What are PTZ Cameras?

PTZ camera is the camera with the mechanical assembly for Panning, Tilting and Zooming the camera. There are many types of PTZ cameras available and their cost varies based on Speed, Zoom capacity, Manufacturer, etc. Network PTZ cameras does not require any addition wiring or devices, since PTZ commands are being send over TCP/IP network; therefore, making installation process much simpler and eliminating a lot of compatibility and configuration issues.

- Through the software, 32 cameras can be managed, configured, and adjusted, without the need to be at the server site.
- Right mouse click on any camera to show a list of various options like camera setup, recording settings, user management, and etc.
- Right mouse click on any camera to access archive playback, freeze function, digital PTZ, screen arrangement, video transfer options and more.



• Use the wizards for easy navigation and step-by-step setup.



Chapter 2

SecurView Pro Installation

Begin the installation process by double clicking the SecurView Pro setup file.

1. "Welcome to the SecurView Pro Setup Wizard" window appears. Click Next.

2. Please read and accept the **Software License Agreement**. Then click **Next**.

3. Select the installation destinalation and then click **Next**. Changing the location is optional but not recommended.

4. The "Select Components" window appears. Select the desired options to install, choose the desired language and then click **Next**.

elect Components Which components should be installed?	
Select the components you want to install; clear the compone install. Click Next when you are ready to continue.	ents you do not want to
Custom installation	
SecurView Pro Server Application	218.1 MB
SecurView Pro Broadcast Server Application	193.8 MB
SecurView Pro Client Application	255.8 MB
Local SecurView Pro Connection	
✓ Languages	0.1 MB
-	0.1 MB
🔘 Russian	0.1 MB
- O Finnish	0.1 MB
- O Soanish	0.1 MB
Current selection requires at least 268.7 MB of disk space.	

5. "Select Start Menu Folder" window appears. Click **Next**. Changing the location is optional but not recommended.

6. "Additional Icons" window appears. Click **Next**. These are shortcuts and are recommended, but optional.

7."Ready to install" window appears. Click **Next**. SecurView Pro Server and options will now be installed.

8. To complete the installation of the SecurView Pro setup wizard, click **Finish**. Leave "Run server setup wizard" option checked.

Setup - SecurView Pro	
	Completing the SecurView Pro Setup Wizard
	Setup has finished installing SecurView Pro on your computer. The application may be launched by selecting the installed icons.
	Click Finish to exit Setup.
	Run server setup wizard (recommended)
	Finish

SecurView Pro

SecurView Pro Server Setup Wizard

1. The "SecurView Pro Server Setup Wizard" appears. Click Next.

2. When the "Server Properties" window appears, enter your machines unique Identifying name and server title. It is recommended that you check "Compact the configuration database" (checking this option will help optimize your configuration database in the future). Click **Next**

tup Wizard
Server properties
tifier, tile and database settings. To accept default settings, leave ad.
Server Itle:
SecurMew Pro at TEST-PC
e:
TRENDnet\SecurView Pro\Digital Video Recorder.mdb
ration database
< Back Next > Cancel

2. The "Server Administration Settings" window appears. Setup the administrator user name and password in this window. Leave the default user name as "admin" (Recommended), enter a unique password in the "Password" field and reenter the password in the "Password Confirmation" field. You will have the chance to add additional users at a later time. Click **Next**

Note: This user name and password is used for broadcast server login.

SecurView Pro Server Setup Server Administrator Settin Specify SecurView Pro Ser	iga		ļ
Specify usemame and passwo	rd for administrator acce	ess. To continue, press Next.	
Usemane:	admin	_	
Password: Password Confirmation:	•••••	_	
	<	Back Next >	Cancel

3. The "Server Network Settings and Port settings" window appears. Click **Next**. The default firewall port that SecurView Pro uses is 60554 but you can change that to any port that you would like as long as it is open on your firewall. Please check with your network administrator or internet service provider about your firewall settings

Allow TCP connections from remote applications: To enable TCP to accept remote connections can be disabled or enable at any time from the SecurView Pro server settings.

TCP Port: 60554 is the default port and it can be changed to your preferences.

SecurView Pro

Server Network Sett Specify SecurView	-	etwork availability
Configure server availa	bility for exter	mal network connections. To continue, press Next.
-TCP Connections -		
Allow TCP con	nections from	remote applications
TCP Port:	60554	(leave empty to use default value of 60554)
	o) starting thi	o change the settings later (e.g. on registration of s wizard from Start Menu or through SecurView Pro

4. The "Server Execution Mode" window appears. Select **Application Mode** and then click **Next**.

Application Mode.

The following "Startup" option can be selected:

- **Manual**: That means you will physically have to double click the program to get it started.
- Automatically with any user logon: The software will open up when any user logs into Windows on that machine.
- Automatically with current user logon: The user currently logged into Windows, will be the user that activates SecurView Pro upon Windows login.

Server Execu Specify Sec	tion Mode surView Pro Server execution mode
Application	m Mode
The serv application	er will be running in application mode, the system tray will contain an icon of the m.
Startup:	Manual
Service M	lode
The server manager.	will be running in service mode. Execution will be controlled by service
Vise sol	tware <u>w</u> atchdog

5. The "Server Execution Control" window appears. Click **Start Server** Application and then click **Next.**

Start Server Application	Start SecurView Pro Server in application mode.
Stop Server Application	Step SeculView Pro Server running in application mod
Start Server Service	Start SecurView Pro Server in service mode.
Stop Server Service	Stop SeculView Pro Server running in service mode.

6. Click **Finish** to exit the wizard.**End of Server Installation**.

SecurView Pro Terminology

Panel – Panel, window

Toggle- To alternate between two or more electronic, mechanical, or computer-related options, usually by the operation of a single switch or keystroke

Toolbar- The toolbar that you see at the top of your screen gives you various options such as open, save and various screen manipulations, at the click of a button.

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-	5
12	~
V	-7

Open Configuration- This button on the toolbar allows you to open previous SecurView Pro configurations. It is most useful if you are exporting configurations from one machine to another.

	=	
-	-	
		н

Save Configuration- This button on the toolbar allows you to save any changes that you have just made to your DVR, it will continue to save to the same file unless you click on File and Save As then you can save to a different file or even to a floppy.



Structure Pane - This button toggles whether you see or don't see the structure pane on the left side of your SecurView Pro window. The structure pane is most useful when you are looking at cameras from multiple locations and multiple SecurView Pro servers. We will discuss the structure pane later on in this chapter.



Structure Filter Pane – This button toggles whether you see or don't see the *structure pane* on the left side of your Luxriot window. The *structure pane* is most useful when you are looking at cameras from multiple locations and

multiple Luxriot servers. We will discuss the *structure pane* later on in this chapter.



Events - This button toggles the events window. The events window gives you important notifications such as, when you are connecting to a server successfully. It lets you know if you have input improper user names and passwords and gives you error codes when needed.



PTZ Control - This button toggles the PTZ control pane. If you do not have a pan-tilt-zoom camera connected to your system then this button does no need to be pressed.



Video amplification- This button toggles the video amplification pane. When this button is pressed a pane will come up from which you will be able to adjust the brightness, contrast, saturation, sharpness, and hue for any camera.



Audio- This button toggles Audio pane control. Audio pane enables you to listen to Audio from different cameras.



Full Screen - This button toggles full screen mode. In full screen, none of the panes will be seen and the cameras will be expanded to their maximum size to fill the full screen of your monitor.

Open Archive – This button opens archive viewer window. You will be able to view archived data of your connected DVR.



Emergency Recording – On activation of emergency recording mode for a device, the footage is recorded at full frame rate during specific period of time and then is automatically returned to regular recording settings.



Manage Maps – This button toggles map module window for managing and viewing cameras on Google or previously added maps.



Save Current Frame as – This button allows you to save currently rendered video frame into file. Frame from selected screen will be saved only.

SecurView Pro

TRENDnet User's Guide



Wizards- The wizard's icon on the toolbar gives you a shortcut to various server, and camera options and configurations. You can also access these features through the right click menus in the software.

Views- These buttons on the toolbar allow you to manipulate your views and camera layouts to your own preference.

|--|--|--|--|--|--|--|--|--|



Screen Footer- The screen footer button on the toolbar allows you to display various information underneath each camera window. It can display current frame time, image resolution, and average image size per frame and average frame rate per second. The screen footer is the text below each camera



Stream Selection- The stream selection button allows you to pick which camera you would like to view in the selected camera window. This can also be done through the right click menus and by dragging the desired camera from the structure pane to the desired display window, or right click on any camera window and select stream.



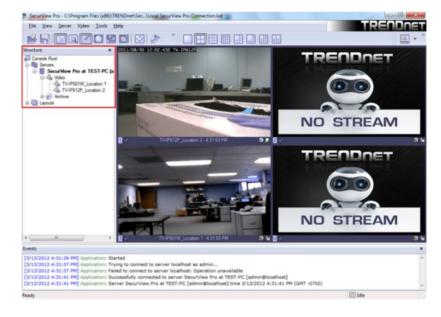
Show Motion- The show motion toolbar button toggles whether or not you want the motion outlined on the selected camera screen. Note: Motion detection must be setup before this feature can be activated



Maximize- When pressed the maximize button puts the selected camera into a single view, if pressed again it will return to the previous view. This can also be accomplished by double clicking on the camera of choice.

Structure Pane

The structure pane is the control center. This is where you will setup all of your cameras as well as your server.



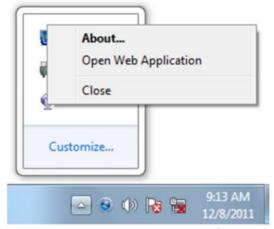
Broadcast Server Connections

SecurView Pro Broadcast Server - is a separate product to broadcast video streams to multiple web-browsing platforms (e.g. Internet Explorer, Firefox, and Google Chrome) as well as for iPhone, Android, etc. SecurView Pro Broadcast Server will resample and recompress video stream for web or mobile client depending on connection speed and viewing capabilities.

1. Start Broadcast Server by clicking on the Start or Windows Icon and then click Program Files→ TRENDnet -> SecurView Pro -> DVR Broadcast Server. This will start Broadcast Server for Viewing over Web browser and Smartphone devices such as Android and/or iPhone through browser.

J TRENDnet
🎉 IPSetup
🎉 SecurView Pro
DVR Broadcast Server
SecurView Pro on the Web
🔶 SecurView Pro
◀ Back
Search programs and files
📀 📜 🙆 💽

2. The Broadcast Server icon will appear in system tray and through it you will be able test/configure Broadcast Server operation. To open the Broadcast Server, Right click on the icon \rightarrow Open Web Application or enter the IP address of the server followed by port 8080.



Also you can enter Broadcast domain for access over the Internet.

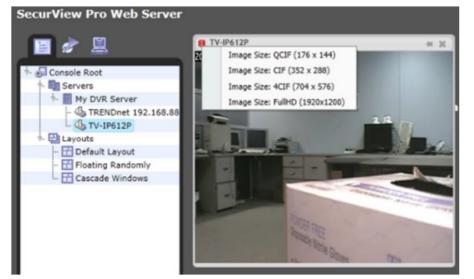
Use the previously set SecurView Pro software user name and password to login to broadcast server.



For Example: http://192.xxx.xxx.xxx8080

When logged into the server via the browser on a PC or Mac, you can click on any cameras to the left in structure pane. The IP cameras will be displayed in main screen as separate windows that can be resized and moved anywhere within the window.

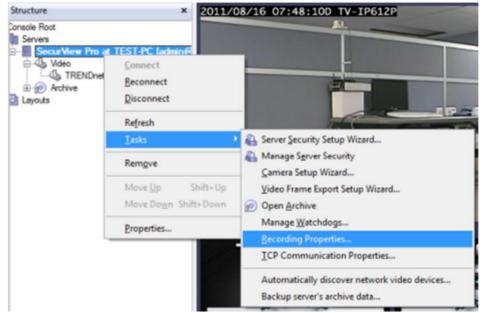
Securities for Mich Securities WWW Client Interface - Workses Enterent Explorer Top (w) (P) (P) (P) (122.02.23.232.0100.146.05.p.client.146.04 Securities for Explorer Tools (Sele) Securities for Explorer Tools (Sele) Securities for Explorer WWW Client Interface	• • • • • • • •
Securities Pro Web Server	t receiving the video stream.



Chapter 3

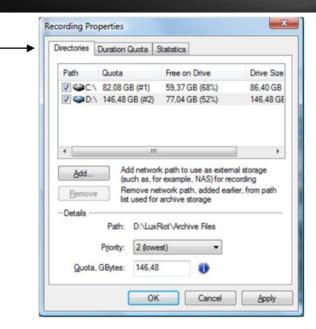
Server Recording Properties

- 1. Right click on your server
- 2. Click Tasks.
- 3. Click Recording Properties.



Directories

- **Priority** Choose which of your drives records first. Check and then highlight (by clicking one time) the drive you wish to customize in this portion
- Quota Chose the amount of space you would like to designate for storage on that particular hard drive. NOTE: NEVER, choose 100% for the C Drive. This may cause your machine to eventually crash due to not available virtual memory for page. The reasonable quota is 85-90% of the drive capacity to avoid the effects of fragmentation issues and also to allow the highly loaded DVR to effectively enforce recording quotas



• Add - Add external storage address for recording such as sharing on a remote computer or NAS drive.



• **Remove**- This button removes currently selected network storage path.

- Duration Quota
 - **Storage Duration** Chose the numbers of days you would like to store.

Directories	Duration Quota	Statistics	
			duration quota up dia devices and sto
🔽 Ena	ble global duratio	n quota mana	igement
Sto	rage duration:	10,00000	days

• **Statistics** - Check on used spaced and available space left on the hard drives being used by SecurView Pro.

4. Click Apply to save settings.

Server Communication Properties

- 1. Right click on your server
- 2. Click Tasks.
- 3. Click TCP Communication Properties.

Connections- Here you can see at all times who is connected to your server. The IP address, user name and connection time can all be seen. Click refresh at any time for an updated list.

erver	Connection	s
	Status:	Active
E	ctivate	Allow remote users access server over network using TCP protocol
De	activate	Deny remote access, currently connected users (if any) are disconnected
Optio	ns	
TC	P Port: 6	0554 (default is 60554)
C C	ave these se	ttings as default

Server Watchdog

Your Server Watchdog performs an important operation, protecting your software from improperly working due to system problems. Configuring your watchdog is not necessary, if you chose to enable it during installation. The default settings will work well, however if you are having frequent restarts, adjusting it may become vital.

- 1. Right click on your server
- 2. Click Tasks.

3. Click Manage Watchdog.

Watchdog Management

4. In order to select the "Disable", "Enable" and "Properties" buttons, left click on "Software Watchdog".

2 X

Properties > Operation

Grace Interval Seconds- The grace period given when starting the application.

Reboot Interval Minutes- The amount of time Watchdog will allow between reboots.

Number of Failure to Reboot- The amount of failed attempts to fix whatever problem has been detected, by restarting only the SecurView Pro application. Once this number has been reached, Watchdog will now reboot Windows and the SecurView Pro application.

State

Properties > State

- State- Start or Stop running Watchdog.
- Start Watchdog with Server- Will begin the Watchdog application when server is started.
- Enable Watchdog-Will keep Watchdog running at all times.

State	Operation	Performance	Maintenance
W	latchdog Stat	0	
	State:	Running	
			Start Stop
-			
W	latchdog Opt	ions	
		chdog with serv	er.
	Enable w	atchdog	
_		OK	Cancel April

Name	State	Enable
Software Watch	dog	Disable
		Properties
4 [

oftware	Watchdog	Properties	
State	Operation	Performance	Maintenance
		perform restart of the applic	or reboot actions within grace ation.
	Gr	sce interval, sec	conds: 🔟
Should last sp	d watchdog	egister at least al of time, it will	in case failures are too frequent, specified number of failures within restart Windows. Set interval to
	Bel	boot interval, mi	nutes; 5
	Numbe	r of failures to r	eboot: 3
		OK	Cancel Apply

Performance

Properties > Performance

This tab allows you to configure which environment performance counters and variables will determine necessity of server or system restart. Watchdog will attempt to restart server or system after any specified threshold exceeding; There are also visible current values of the environment variables.



Maintenance

Properties > Maintenance

Restart Intervals- Days or Hours.

Enable Periodic Restart- Enabling this feature will restart the Server Application at times specified. It is recommended to restart the Server Application to Refresh system resources. The Watchdog Server-Restart will go virtually unnoticed by the user.

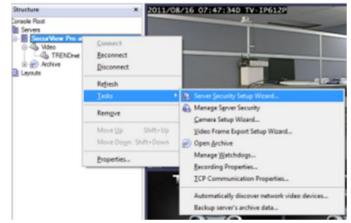
Enable Periodic Restart Hours- Enabling this feature allows the user to define a range in hours during which maintenance restarts are allowed (e.g. from 7:00PM to 11:20PM).

State	Operati	on Pe	erformance	Mainte	enance
any po					ally restart server to cle prate server system
	<u>Enable</u>	periodic	: restart		
B	estart inte	rval:	7		days
V	Enable	periodic	restart hou	irs	
					uring which maintenan PM to 11:20 PM:
				_	
	From:	7:00 P	M	<u>T</u> o:	11:20 PM
	From:	7:00 P	M	<u>T</u> o:	11:20 PM
	<u>F</u> rom:	7:00 P	M	<u>T</u> o:	11:20 PM

Note: If any changes have been made, click Apply.

Server User Management

To start the "Server Security Wizard", right-click on the server within the Structure pane, click **Tasks** and then click **Server Security Wizard**.



Create users or modify existing users rights

This wizard guides you step by step to add, remove, or modify user permissions.

erver S	Security Setup Wizard	
	r Choice Choose a user for securit	y setup
	to proceed. Greate a new user Modify an existing us	
	User Name	Comment
	demo	Buit in administrator user Buit in demo user
		< <u>₿</u> ack <u>N</u> ed > Cancel

System/User Permissions

As you see SecurView Pro system permissions provides Global Scope permissions for better user management.

Configure system access p	emissions	2	
Please review global scope per permissions. Click Next to proce	missions. Use the checkmarks to grant or revoke cred.	ertain	
Permission	Description	Scope	1
Access Archive	Privilege to access server archive	System	
Administer Server	Privilege to administer server	System	
Connect Locally	Privilege to connect to server locally	System	1
Connect Remotely	Privilege to connect to server remotely	System	
Access Archived De	Privilege to access archived media data	7 Object:	ł
Administer Device	Privilege to administer device	7 Objects	ĩ
V Navigate Device	Privilege to control device PTZ (pan, tilt, zoom)	7 Objects	ŝ
•	m	,	
er Security Setup Wizard	< Back Next >	Canor	pl.
rer Security Setup Wizard Device Permissions Configure system access p		Cance	d.
Device Permissions Configure system access p	emissions permissions, use checkmarks to grant certain permi o proceed. Permission: <all permissions=""> Permission Description 130 Access Archived Device D 130 Administer Device Privilege to 130 Navigate Device</all>	isson.	
Device Permissions Configure system access p Please review individual device uncheck to revoke. Click Next t Device: KAI Devices> Device Orice TRENDnet 192.168.10 TRENDnet 192.168.10	emissions permissions, use checkmarks to grant certain permi o proceed. Permission: <all permissions=""> Permission Description 130 Access Archived Device D 130 Administer Device Privilege to 130 Navigate Device</all>	ission.	
Device Permissions Configure system access p Please review individual device uncheck to revoke. Click Next t Device: KAI Devices> Device Orice TRENDnet 192.168.10 TRENDnet 192.168.10	emissions permissions, use checkmarks to grant certain permission proceed. Permission: <all permissions=""> Permission Description 130 Access Archived Device D 130 Administer Device Privilege to 130 Nevigate Device 130 Receive Device Data</all>	ission.	

Setting up an IP Camera

There are two ways of setting up an IP camera to work with SecurView Pro:

- 1. Let the software find the cameras automatically
- 2. Manually input all of the camera's IP information

Configure your IP Cameras automatically

- 1. Right click on your server name
- 2. Click Tasks
- 3. Click Auto discover network video devices.
- 4. The "SecurView Pro Automatic Discovery Wizard "will appear. Click Next.
- 5. Insert the port number for your IP cameras and then click Next.

urView Pro Automatic Discover	ny wizard	_
Network Scan Ports		C
Choose network scan mode p	ports	X
Please specify network ports to sca	an network devices on. Press Next to proceed.	
Ports:		
80, 8080		
Provide a comma (,) sep leave the field empty for	parated list of port numbers, e.g. "80, 81, 82, 8080", r default list.	or
	C Parte Next >	Cancel
	< Back Next >	Cancel

6. Insert the user name and password for each IP camera and then click Next.

Network Scan Credentials Optionally provide authorization of	credentials for the devices to be discovered	X
	ore user name and password pairs to attempt t Put one pair per line, separate user name and ed.	
root, root admin, admin		^
4		•

7. Select Scan network adapter address range and then click Next.

- Scan network adapter address range: If you select this option, choose network adapters for searching your network.
- Scan IP address range- If you know your network's IP range, you can search by the IP range for the cameras as well.

	se network scan mo		y specifying network	adapter or address	X
Scan	network adapter	address rang	•		
Select	one or more network	k adapters from	the list below to scan	addresses on:	
V F	ealtek PCIe GBE Fa	mily Controller			
) Scan	JP address range				
	JP address range y IP address range to				
Specif	-	be scanned:	192.168.1.254		
Specif	y IP address range to	be scanned:	192, 168, 1, 254		

8. SecurView Pro will now begin scanning your network and specified ports for any IP cameras. Once it is finished it will give you a list of the cameras that it found and give you an option to add them to SecurView Pro.

Configure your IP Cameras manually

- 1. Right click on your server name
- 2. Click tasks
- 3. Choose "Camera setup Wizard".
- 4. Select "Network Devices (IP Camera, Video Server)".

Camera choice Select one or more devices to setup	
ise the list below to select one or more devices, which yo roceed with setup.	u would like to set up. Press Next to
Title	Device Name
Add New Devices	
Network Devices (IP Camera, Video Server)	Media Source
ioov to Globoard	

- 5. Click Next.
- 6. For "Device title", type in a name for the IP Camera.
- 7. Click Properties.

Camera device p Set up camera	roperties device properties
Device <u>stie</u> :	device and set up video device options. Click Next to proceed then.
TV-IP612P	
Properties	This allows to tune device specific properties. Note that changes of the options have effect immediately.
Delete	The device is dynamic and can be deleted.
	Device is disabled on server, no data grabbing happens Device output is hidden, not lated as available
	< Back Ned > Cancel

Note: The tabs under properties are described below Model Tab

Properties > Model

• Select TRENDnet and then select the IP camera model. Then click **Apply**.

lodel	External PTZ Control	Audio	
	choose device vendo nal property pages.	r and model and press Apply t	to show
Man	ufacturer	Model	*
TRE	NDnet	4 TV-IP422 TV-IP422WN TV-IP501P	
		4 TV-IP501W	
		4 TV-IP512WN 5 TV-IP522P	J
		4 TV-IP551WI	
		TV-IP600W	
		TV-IP612P TV-IP612WN	-
			_
	0	K Cancel	Apply

Access Tab

Properties > Access

• Input the IP address of the IP Camera, Port Number, User Name and Password. Then click **Apply**.

rame Adjustments	Audio	Events	Model	External	PTZ Cont
Access	Video	Input	1	ideo Conf	iguration
-Device Access					
Network Host N	Name or IF	Address	r: F	ort:	
192.168.10.30)			80	
User Name:	Pa	ass <u>w</u> ord:			
admin					
Ping Device	Open Dev	vice in Br	owser		
	ay be neci	essary to	configure		

Video Input Tab

Properties > Video Input

• Select "Trendnet" for Operation mode.

operties			
Frame Adjustment Access	Audio Events Video Input	-	Esternal PTZ Control eo Configuration
-Video Source	Selection for multichar	nnel devio	05
Default			w
Create a dup video source	licate entry for the de-	rice and a	ssign another
		1	Greate
Operation Mo	de		•
	at selected mode may on the device, esp. s		
access	. Please refer to device cturer for details on de	e manual o	r contact

Video Configuration Tab

Properties > Video Configuration

- Color Mode- Color or black and white
- Resolution: Quality of the picture. The higher quality you choose the more space it will take. Options include 704 x 450, 352 x 240 and 176 x 112.
- Encoding: Choose the encoding type that is supported by your camera. Options include Default, MJPEG, MPEG-4 and H.264. Depending on the Encoding type selected, you may be able to adjust the following;
 - o I-Frame Interval
 - o Bit Mode
 - o Quality
 - o Bit Rate
- Frame Rate: Here you may adjust the frame rate for the ip camera. Options include Default, 1, 2, 3, 5, 10, 15 and 30.

ame Ark atmente	Auto Evente Mo	del External PTZ Cont	ml
	Video Input	Video Configuration	194
	below to specify video e defaults to use currer		3
Camera <u>T</u> itle:	Use gefault camera titi		
Color, Resolution a		*	
Çolor:	Default	-	
Resolution:	Default	•	
Encoding:	Default		
MJPEG Encoding			
Quality:	Default	Ŧ	
MPEG-4			L
1-Frame Interval		w	
Bitrate <u>M</u> ode:	Constant Bitrate (CI	BR) ~	
Quelly:			
Bitrate:	Default	w	
H.264 Encoding -			
[Frame Interval		w.	
Bitrate <u>M</u> ode:	Constant Btrate (CI	8R) *	
Quality:		. w	
<u>B</u> itrate:	Default	w	
Frame Rate			ſ
Frame Bate, fps:	Default	•	
Note that ability you provide a p access to the c	to change video settir assword on Access tal amera	ngs may require that b for privleged	
			Ľ

SecurView Pro

Frame Adjustment Tab

Properties > Frame Adjustment

• Brightness, Contrast, etc... Change the appearance of your video quality.

Access	Video Input		Video Configuration	
Frame Adjustments	Audio	Events	Model	External PTZ Contro
Auto Adjustr	ment			
Brightness:			0	0
Contrast:			0	0
Sharpness:			0	0
<u>H</u> ue:			0	0
Saturation:			0	0
provide a pas camera	sword on	Access ta	settings i ab for priv	Reset
Defer changes	until appl	У		

Audio Tab

Properties > Audio

• Audio Input. Audio input can be the audio in of the pc main-board or additional USB audios.

Access	Video	Input	V	ideo Configuration
rame Adjustments	Audio	Events	Model	External PTZ Contro
Use controls below to be used or attac				audio source device
No Audio	Source			
Internal /	Judio So	urce		
Use built-ir video capt		pture capa	abilities a	vailable along with
Inp <u>u</u> t:				*
	Audia Sa	uroo Att	achad	
Cetomal	nuulo Su		acticu	
-				act as an integral vice
Attach an audio part		st video ca	apture de	vice
Attach an audio part	for the hos	st video ca ne (High D	apture de	vice

- Options for Internal Audio Source from an IP camera can be found under the camera properties. From the Audio Tab the internal Audio source can be selected and activated.
- If the camera selected is not an audio compatible camera then the Internal Audio Source" option will not be activated. In the case that the camera does not support internal audio, you can select external audio and use a usb microphone (for one way audio) or your computer's built in microphone.



 Audio to the camera can be sent via Client application Audio Pane by selecting a camera from the list and pressing the microphone icon. When the icon is pressed you can speak into microphone connected to Client PC and audio should be sent to the speaker connected to the remote camera.

SecurView Pro - C:\Users\test\Desktop\DV	R.Ixd*	
<u>File View Server Video Iools H</u> e	elp	TRENDNET
🛃 🔚 🖪 🗹 🖸 🖽	S 🖸 🖉 🧟 😭	» 🚺 » 🔬 🔹 »
Structure ×	2011/08/29 09:18:190 TV-1F6129	Audio Player ×
Console Root Servers SecurView Pro at TEST-PC [ad Video Wideo TV-IP612P P() Archive Layouts		Qevice: TV-IP612P

Events

Properties > Events

For more information regarding Events, see Digital Input Configuration and Events sections on page

External PTZ Control Tab

Properties > External PTZ Control

Click Properties.

Access	Video	Input	V	ideo Configuration
Frame Adjustments	Audio	Events	Model	External PTZ Control
Choose device Par and external using configure selected	the option external l	ns below. PTZ contro	Use Prop ol.	
Properties	Sh	ow PTZ c	ontrol pro	PTZ control perties, including schedule.

• **Pan-Tilt-Zoom Protocol**: If you do have an external pan-tilt-zoom device connected to your IP camera, you must choose the correct communication protocol. The protocol has to match the protocol assign on your PTZ camera.

- Communication Settings.
 - Serial Port The communication port has to match the communication port that the RS232/485 controller is connected.
 - **Port Speed (Baud Rate)** Baud rate has to match the baud rate of your PTZ camera.
 - Device Identifier Device Identifier, is a unique ID that has to be set on PTZ cameras. Having multiple PTZ cameras requires a unique id to be set on every individual PTZ camera. Failing to assign a unique id to every single PTZ camera will result for all cameras to move at the same time.

General Settings Scheduler Please configure external Pan	-Tilt-Zoom device type and
-Pan-Tilt-Zoom Protocol	noices below.
Protocol:	Pelco D
-Communication Settings	
Serial Port:	COM1 -
Port Speed (Baud Rate):	2,400 -
Device Identifier:	1

- 8. Click **Apply** to save the settings.
- 9. Click **OK** to exit the properties window.
- 10. Back in the setup wizard, click **Next**.
- 11. The "Motion Analysis" window appears.

• Use Motion for the steam being set up- This box should be checked if you are interested in using Motion Detection. We recommend you use motion detection for it will save you an abundance of well-needed storage space. Choose Properties

Motion analysis Set up motion info	mation analysis for video stream
Click Next to proceed th	otion detector for the video atream (f required) using the options below, hen. tor for the stream being set up Set up motion detector specific properties. Note that changes of the options have effect immediately in case you are modifying settings for the video device which is already running.
	< Back Next > Cancel

12. Click **Properties**. Sensitivity Tab

Properties > Sensitivity

ensitivity	Exclusion	Format	Source]		
	. 0	7	10			
Min						Max

The sensitivity should be adjusted to a point where motion is only seen by people and not by blinking lights, reflections, or shadows, otherwise you will get "false motion" and SecurView Pro will be recording based on motion that does not exist.

Exclusion Tab

Properties > Exclusion

Properties			x
Sensitivity	Exclusion	Format Source	
Click on th analysis:	ne frame to e	exclude cells from motion Reset	
2011 / 202	15 06:45:0		
		OK Cancel App	ily

If you are still getting motion from lights, trees or things moving from an air-conditioner or an open door then you can click on exclusion and block the object out from the motion detection grid. You simply click on the grid boxes around the object that you would like to exclude, to remove them from being seen by the motion detection engine in SecurView Pro.

Format

Properties > Format

This controls the internal motion detection analysis properties.

X Properties Sensitivity Exclusion Format Source Software motion analysis is performed on a per-block basis. Unitary block motion is smoothed and mapped to requested cells. Resolution defines number of unitay blocks per frame, smoothing defines number of blocks to average values. Analysis resolution: 1024 (32 x 32) blocks 2 Vertical: 2 Horizontal smoothing: Number of cells defines representation of motion information for the frame. The entire frame is divided into cells, each cell has its own motion state maintained. Vertical cells: 12 Horizontal: 16 Motion analysis maximal frame rate constrains CPU load. Lower values speed up processing, higher values increase accuracy. Maximal frame rate: 5.0

 Analysis resolution- controls precision of the detection process, the more resolution blocks is selected, the better precision is, and however, the greater CPU consumption is needed.

Cancel

Apply

OK

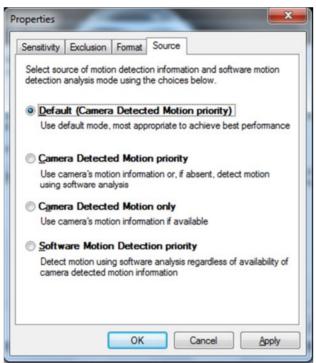
- **Smoothing** feature averages preliminary detection result so that neighboring area is included into motion area as well. Smoothing, however, slightly decreases motion detection sensitivity.
- Horizontal and vertical cell number- Defines the dimensions of the target grid, which is used as output of the motion detection algorithm. The defined cells are shown. Click ok when finished

SecurView Pro

Tab

Source Tab

Properties > Source



- **Default (Camera Detected Motion Priority)** automatic mode, software decides what is best.
- **Camera Detected Motion priority** with this option you enable hardware/on-camera detection to software.
- **Camera Detected Motion only** instructs to only use hardware detection, wherever available, and never detect via software detection.
- **Software Motion Detection priority-** instructs to use software motion detection only.
- 12. Click Apply to save the settings.
- 13. Click **OK** to exit the properties window.
- 14. Back in the setup wizard, click **Next**.
- 15. The "Data Recording" window appears.
- 16. Click Advanced Properties.

Data recording Set up data recording feature prop	ceties	ļ
ease set up recording properties and sk. Use Global Recording Properties lick Next to proceed.		
Stream Type	Comment	
 ✓ Video ✓ Video Motion Information ✓ Events 	Advanced properties	
•		•
	Global Record	ding Properties

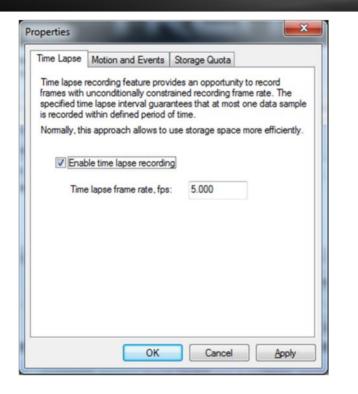
Here you can specify whether or not you would like motion information and video recording to be written to the hard drive. It is recommended that you write both to the hard drive, because it will make it much easier to review your recordings with motion information. Without motion being recorded to the hard drive you will not be able to search by general motion or defined motion regions (Smart Search, see Page 36).

Global Recording Properties: For Global Recording Properties, please refer to the <u>Server</u> <u>Recording Properties section</u> at the beginning of Chapter 3.

Advanced properties - Allows you to setup time-lapse recordings, and Enable Motion control recording. Time lapse creates a small delay between every frame that is written to the hard drive. This allows the space available on on your hard drive to be used more efficiently.

Time Lapse Tab Advanced Properties > Time Lapse

SecurView Pro



• **Time Lapse recording**: The number of frames to be record camera by camera. It gives you the opportunity to use hard drive space more efficiently. Less important cameras can be set to record less frames than others. This does not apply for MPEG-4 and H.264 compressions.

Motion and Events Tab

Advanced Properties > Motion and Events

Enable Motion control recording to save disk space and make playback more efficient.

Time Lapse Motion and Events	Storage Quota	
Motion and alert controlled record to differentiate recording mode of alerted state. To save storage spa footage for alert conditions.	operation in and in a	bsence of
Enable motion controlled recor	ding	
Enable alert event controlled n	ecording	
Constrain recording frame	rate	
Recording frame rate on mo alerted state, fps:	tion detection or in	0.000
Time interval to keep recordin signaled, seconds:	g before alert was	1.00
Time interval to keep recordin signaled, seconds:	g <u>a</u> fter alert was	3.00
Record frames in absence	of motion or alert ev	ent
Recording frame rate in abs	ence of alert, fps:	0.000
ОК	Cancel	Apply

- Enable motion controlled recording Enable recording when motion is not detected at selected frame rate. When Motion occurs recording frame rate goes to maximum automatically.
- Enable alert event controlled recording Enable Alert recording Alert is is detected at selected frame rate. When Alert occurs recording frame rate goes to maximum automatically.
- **Constrain recording frame rate** Constrain the number of frames to be record camera by camera. It gives you the opportunity to use HD space more efficiently. Less important cameras can be set to record less frames than others. Cannot apply for Mpeg4 and H.264 compressions.
- Time interval to keep recording before alert was signaled (in seconds): Prerecording allows you to setup the number of seconds you want to have recorded before the last motion.
- **Time interval to keep recording after alert was signaled (in seconds):** Postrecording allows you to setup the number of seconds you want to have recorded after the last motion.

Storage Quota Tab

Advanced Properties > Storage Quota

Enable Individual limit on amount of stored data - Enable Individual limit amount for data for the current camera. Some cameras are more important than others and some are less important. The user can define the limit for every individual camera. **Enable Individual limit on duration of stored data** - Enable Individual duration limit for the current camera. Can be set to minutes, hours, days or months

P	roperties					X
	Time Lapse	Motion an	d Events	Storag	e Quota	
	Additionally to storage quot between rec individual qu	as may be orded strea	defined to ams. Use o	prioritiz	e storage cap	bacity usage
	C Enable	individual	limit on <u>a</u> m	iount of	stored data	
		tored in Se specified		Pro Serv	er archive at	most amount
	Amoun	t quota:	20		MB 👻	
	🔽 Enable	individual	limit on <u>d</u> u	ration of	stored data	
		tored in an ed using co			ich is not olde	er than
	Duratio	n quota:	30		Minutes (Deb	oug) 🔻
			OK		Cancel	Apply

17. Click **Apply** to save the settings.

18. Click **OK**.

19. Checking "Use Schedule Recording" enables schedule recording. See "Schedule Recording Configuration" section for more information. Click **Next**.

20. The "Action Summary" window appears. This page of the camera setup wizard gives you a summary of all of the changes that you have made throughout the wizard. You should set up every camera that you have connected to your DVR one by one and

disable the inputs that have nothing connected to them. The camera setup wizard only has to be run the first time that you install SecurView Pro to setup all of your inputs or afterwards to make changes to camera names and/or motion detection, recording, etc, properties.

21. Click Finish.

Configure multiple cameras

1. To select multiple IP cameras, click on mouse button while holding down the Shift key and clicking in the window and drag the pointer diagonally, providing drawing frame.

would like to set up. Press Next t
Device Name
Media Source
Media Source\003
Media Source\004

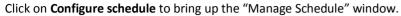
2. When you change the camera settings, you must remember that the camera may already have some of the settings.

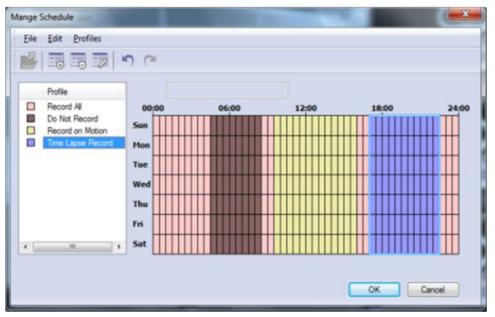
Camera device p Set up camera	device properties
Please configure the	e device and set up video device options. Click Next to proceed then.
Device title:	
192.168.1.209,	Car parking, Office, Port
Properties	Please note that device settings for each camera are configured individually
Delete	The device is dynamic and can be deleted.
	 Device is disabled on server, no data grabbing happens Device output is hidden, not listed as available
	< Back Next > Cancel

Scheduled Recording Configuration

Scheduled recording requires device configuration administration permissions through the "Camera Setup Wizard". As soon as scheduled recording is selected, cameras will be recorded in accordance with the schedule.

Data recording				n –
Set up data reco	ording feature propertie	es		È.
	cording Properties butto		would like to have rec disk drives and space	
00:00	06:00	12:00	18:00	24:00
Sun				
Mon				
Tue				
Wed Thu				
Fri				
Sat				++++
	schedule Copy Paste			
<u>oornigere</u>		_	Nahal Dagartan Daga	dian)
		2	alobal Recording Prope	mes





You can create, edit and delete profiles of the schedule by clicking on the top toolbar. By Selecting a profile from the list and "drawing" on the schedule you can specify the time for the selected profile.

Profile Configuration

Profiles > Create New Profile

• **General tab** -Specify settings that affect only the appearance of the profile in the settings of the schedule.

Seneral	Video	Video Mo	tion A	udio	Events	
	he settin	ols below t ig are help				
<u>T</u> itle:	Profi	e #4				
Color:		Navy			•	
Descrip	tion:					
				_		

- Video tab Allows managing of the video recording settings.
 - Enable video recording enable/disable video recording.
 - Enable motion / alert controlled recording enable/disable the recording of the movement, or events.
 - **Record frames in absence of motion or alert event** this option works differently.
 - **Record of Motion / off events:** includes compression record by limiting the frame rate.
 - **Recording by motion/events enabled** enable recording when there is no movement/events. You can also set the number of frames per second.
 - **Constrain recording** enable/disable the compression record by limiting the frame rate.

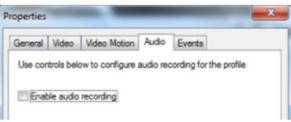
• **Time interval to keep recording before / after alert was signaled** - the recording time before and after the motion or event.

Properties					×
General	Video	Video Motion	Audio	Events	
Use cor	ntrols belo	w to configure	video rec	ording for the	e profile
C Ena	ble video	recording			
Enal	ble motion	n controlled rec	ording		
Enal	ble alert e	vent controlled	recording	9	
	Constrain	recording fram	e rate		
	ecording erted stat	frame <u>r</u> ate on r e, fps:	notion det	ection or in	0.000
	e interval naled, sec	to keep record onds:	ling <u>b</u> efore	e alert was	0.00
	e interval valed, sec	to keep record onds:	ling <u>a</u> fter a	alert was	1.00
	Record fr	ames in ab <u>s</u> en	ce of motio	on or alert ev	ent
		frame rate in a ding feature), f		alert (time	0.000
		ОК		Cancel	Apply

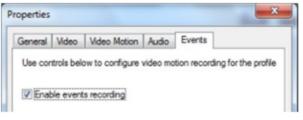
• Video Motion Tab – Enable video motion recording.

-	Video	Video Motion	Aude	Europe
Serielai	1000	1000 1100011	70000	CVERIES
		motion recordin		

Audio Tab - Enable audio recording – enable/disable audio recording.



Events Tab - Enable events recording – enable/disable e recording.



Digital Input Configurations and Events

To activate the dry contacts (digital or dry inputs) on the camera you need run Camera Setup Wizard, open the camera settings and select the tab Events. Next, you need to include the generation of events (Enable event generation), also select the State in which the alert generated by the event - this can be done by clicking the mouse on the link in the column State. After changing the settings you have to continue the Camera Setup Wizard to finish.

Available State:.

- Active by changing the status of the contact, it is recorded in the archive;
- Alert if Change Same as Active, but by changing the state of contact is generated alert;
- Alert if Open the same as Active, but when closing the contact generated alert;
- Alert if Close same as Active, but the closure of the contact is generated alert.

		had a second	And the state of t	and the second se	Video Adjustment
ludio	Events	Motion	Detection	Model	External PTZ Control
activity	ntrols belo and state nable ever			eneration	based on camera
Eve	nt			State	
Dr	ry Inputs				
Inpl	ut 1			Alert. J	<u>LOpen</u>

Recording

For the recording of events, select the corresponding check-box on the page, Data recording, in the Camera Setup Wizard.

properties	
and select data streams you would like	to have recorded to
Comment	
Advanced properties	
Giobal Reco	ording Properties
< Back New	t > Cancel
	Advanced procettes

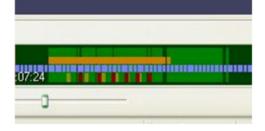
You can also set up to activate record video after an alarm event. To do this, click **Advanced Properties**, select the "Motion and Events tab", and select "Enable alert event controlled recording."

Time Lapse	Motion and Events	Storage Quota	
to differentia alerted state	alert controlled record ate recording mode of b. To save storage spa alert conditions.	operation in and in a	bsence of
Enable n	notion controlled recor	rding	
Enable a	ert event controlled n	ecording	
Cons	train recording frame	rate	
	ding frame <u>r</u> ate on mo d state, fps:	tion detection or in	0.000
	erval to keep recordin I, seconds:	g <u>b</u> efore alert was	1.00
	erval to keep recordin I, seconds:	g <u>a</u> fter alert was	3.00
Reco	ord frames in absence	of motion or alert ev	ent
-	ding frame rate in abs	ance of alert fre-	0.000

Archive

- 1. Click **Archive** in the structure pane on the left.
- 2. Click Video.
- 3. Double click the desired camera.

At the Time Line bar, events are displayed in the lower part, and are marked with yellow or red (alarm events) Labeled.



Search for Events

Seek to Beginning	Ctrl+Left Arrow
Seek to End C	trl+Right Arrow
Step Backward	Shift+Left Arrow
Step Forward Sh	ift+Right Arrow
🛞 Go t <u>o</u> Time	
Seek 5x Backward	Ctrl+Shift+B
Seek Backward	Ctrl+B
Seek Forward	Ctrl+N
Seek 5x Forward	Ctrl+Shift+N
▶ <u>P</u> lay	Enter
jj P <u>a</u> use	Space
🔁 <u>R</u> efresh	F5
🐼 Seek to Previous M	otion Ctrl+P
🔊 Seek to Next Motio	n Ctrl+M
Define Region of M	lotion Interest
Events	

Specify search criteria and click **Search**. Double click on the event of interest to establish the position of the archive at the time of the event

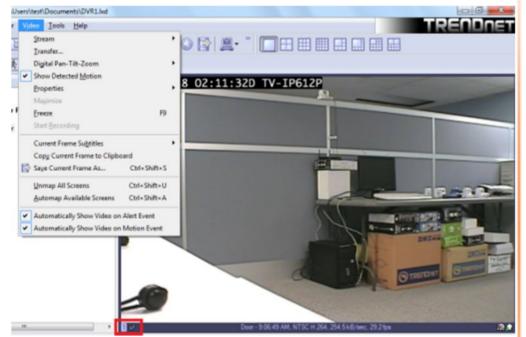
Event search criterias			Time	Name	State	Net	
Start Time:			7/28/2010 11:49:46 AM	Input 1	Closed		
7/28/2010 -	11:49:21 AM	4	7/28/2010 11:49:46 AM	Input 1	Opened	Alert	
		-	7/28/2010 11:49:47 AM	input 1	Closed		
Stop Time:			7/28/2010 11:49:47 AM	Input 1	Opened	Alert	
7/28/2010	11:51:13 AM		7/28/2010 11:49:47 AM	Input 1	Closed		
1720/2010 (B.	11.31.13764	(*)	7/28/2010 11:49:47 AM	input 1	Opened	Net	
Search only alerts			7/28/2010 11:49:51 AM	input 1	Closed		
Search only alerta			7/28/2010 11:49:51 AM	Input 1	Opened	Alert	
	Searc	-	7/28/2010 11:49:57 AM	Input 1	Closed		
	Jear	-	7/28/2010 11:49:57 AM	input 1	Opened	Alert	
	Contin	ue	7/28/2010 11:50:03 AM	input 1	Closed		
			7/28/2010 11:50:03 AM	input 1	Opened	Alert	
			7/28/2010 11:50:10 AM	input 1	Closed		
			7/28/2010 11:50:10 AM	input 1	Opened	Alert	
			7/28/2010 11:50:17 AM	Input 1	Closed		
			7/28/2010 11:50:18 AM	Input 1	Opened	Alert	
			7/28/2010 11:50:25 AM	input 1	Closed		
			7/28/2010 11:50:25 AM	input 1	Opened	Alert.	

Live view pop up by motion and events

1. Cameras will be placed on a client screen as soon as Motion/Event triggered on the camera

2. Each camera has the option in a footer "lock" and "unlock".

When a camera is unlocked it will be changed on the screen if you have enabled Pop up features. If a camera is locked then it will always stay on the screen.



3. On an event, camera placed on the screen by pop up will be marked in red blinking frame.

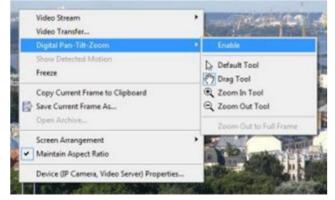


SecurView Pro

Chapter 5

Digital PAN-TILT-ZOOM on live view

1. Right-Click on any camera to activate the Digital Pan-Tilt and Zoom function.



2. Then by activating the PTZ control pane live streaming video can be digitally enhance.



Digital PAN-Tilt-Zoom Tools

- Default Tool It will click and drag as if no digital PTZ was enabled. Digital PTZ control still be accessible via PTZ control pane
- Drag Tool when selected mouse can drag digitally zoomed image around screen changing your viewpoint. Additionally mouse wheel will works as zoom in/zoom out.
- Zoom In(Out) Tool digital zoom out (in) on mouse left button click.
- Zoom Out to Full Frame zoom level automatically reverts to 0, image will fit on screen completely.

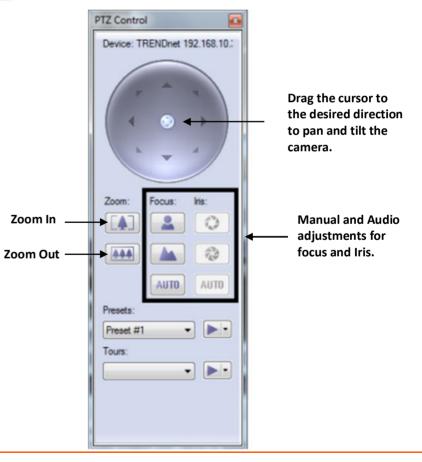
Digital PAN-Tilt-Zoom on Playback

To Activate the Digital Pan-Tilt and zoom function on already recorded video just activating the PTZ control pane from the archive window. It can be controlled only via PTZ control pane.

PTZ Control Panel for optical zoom

Click on this icon on the main toollbar to get to the PTZ control panel.

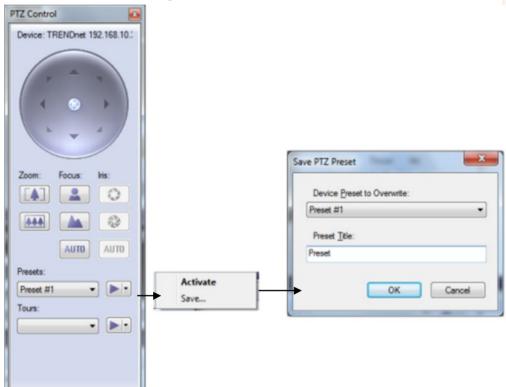




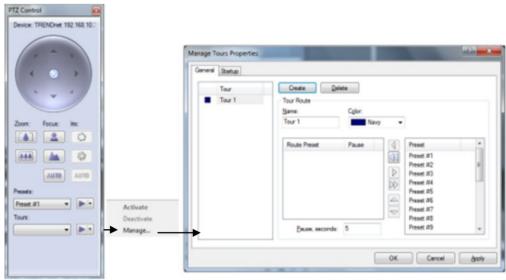
SecurView Pro

Save Presets and Tours for PTZ Cameras

Presets and Tours can be configured from the PTZ control window.



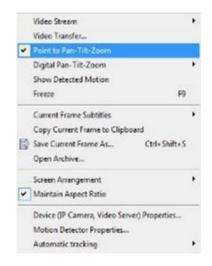
Manage PTZ tours camera by camera by selecting the presets of your choice and time between them.



PTZ control – Point to click PTZ

Point to click works on PTZ cameras that support point to click.

To enable point to click, right-click the live video stream and click **Point to Pan-Tilt-Zoom**.



PTZ control – Shortcut Keys

PTZ cameras can be controlled with the +- and arrow keys form pc keyboard.

Video Adjustments

Video adjustment panel, adjust the video settings for the desired IP camera.

Video Adjustn	nent		×
Device: TV_IP612P	Madai		
Adjustment	_		•
Capitale Setti	ilgo		
 Brightness:		0	
Contrast:	_	0	-
Saturation:		-0	-
Sharpness:	_	0	-
Hue:		-0	-
Reset Adjustm	nents		

Audio Adjustments

From the Audio Panel, enable live audio from the IP camera of your choice



Video Frame Export

Video Frame Export Setup Wizard allows you to configure continuous saving of video frames on network, fixed storage or FTP. Frame export can be configured for multiple devices. Also you can use fps limit (time lapse) and motion controlled export. Exported frames will be saved in JPEG format using file name format you specify when configure export until disabled.

1. Right click on the server in structure pane or click **Server->Selected Server** in the menu bar.

2. Choose Tasks

3. Click on Video Frame Export Setup Wizard

4. The "Video Frame Export Setup Wizard" window appears. Click Next.

5. The "Video Streams" window appears. Select one or more devices from the list for frame export configuration. Then click **Next**.

6. The "Export properties" window appears. You can enable or disable video frame export in this screen.

rd	×
selected video streams	
Export State	
Not Configured	
eo frames gure export properties. Note that the settings will be a leo streams listed above. eo frames e been set up will be disabled.	pplied to
	selected video streams Export State Not Configured to frames pure export properties. Note that the settings will be a leo streams listed above. eo frames

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If you want to enable export, press properties button to configure it. Review the settings:

- **Profile**: Select already created profile or create at least one to start using video frame export. There are two types of profiles: file export profile and FTP export profile. Use manage button to create edit or delete those profiles
- File Name Template: Each frame will be saved into file, this template string will be used for formatting filename. Please make sure that it will be unique by adding it's time in milliseconds (ms) or random unique string (\$(Ms) or \$(Unique) format tags

7. Click Manage.

ile	Format	Time Lapse	Motion Control		
confi	es are expo	rted to. Choos	ethod and location e profile from the l Manage button.		ideo
]	-
				Manage	
expo avoid	ted. Use p overwrites	laceholders, e s.	oose file names for g. \$(Unique), to w		
expo avoid	rted. Use p d overwrites ile Name T	laceholders, e s. emplate:		rite sequence	

8. The "Profiles" window appears. Review the settings:

- **Profiles**: Edit or delete already created profiles in this list by pressing corresponding buttons.
- Create: Use Create button to choose where do you want to export video frames (File Export Profile or FTP Server Export Profile)

rofiles	
	used to export video frames. Note that profile affects all video streams the profile is
Profile Title	
	erver, location ftp://admin@ftp//kariot.com/L.
white to the, direc	story C:\LuxRiot\Exported Video Frames
(Questo - Delete Bopeties
(Create
(and a series of the series of

• FTP Server Export Profile

Fill the fields below with FTP access data to allow SecurView Pro to connect and save frames there. Then click **Apply**.

cation	
FTP Location	
Server host name:	Port:
hp://luelot.com	21
User name:	User password:
user	
Location (directory path)	
Options	
Passive mode operatio	ns

• File Export Profile

Directory: Specify frame export directory. If you are connected remotely please note that this is server side directory. You can specify network storage or share path. Then click **Apply**.

Directory	
Specify a directory to write video frame files to.	
Please note that a server side directory is required, pleas if you are connected remotely.	e take care
Desctory:	
ColumPart/Engented Wden Frames	
Brow	se
OK Cancel	booly

Exclusivity Mode (Windows lock out feature)

Tools > Options > Exclusivity

Exclusivity Mode feature ensures that the operator cannot get access to Windows operating system. The operator can have access to SecurView Pro software only. This is to ensure uninterrupted server operation and stability eliminating the human error.

Exclusivity is a password protected function.

- 1. Enter desired Password
- 2. Under "Mode", check "Enable exclusive mode".
- 3. Click Apply.
- 4. Uncheck "Enable exclusive mode" to disable Exclusivity mode.

Screen	Screen Mapping	Miscellaneous
Product Upd	ate Exclusivit	V Sounds
VR Client is the	can be set up to take spec only application the user ication may be locked with	is interacting with.
Password		
	bassword will be required t and/or remove application	
Password: 1		
5	Request confirmation be	efore lock
Mode		
Enable excl	lusive mode	
Options		
Startup:	Manual start	•
Startup Lock:	Start unlocked	*

Lock Application

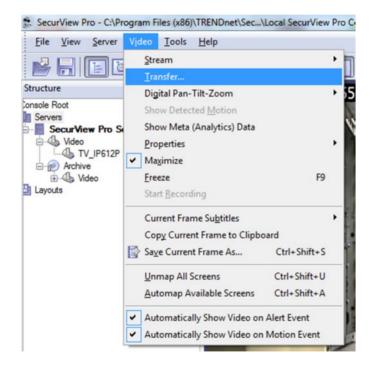
Tools > Lock Application

SecurView Pro Client can be locked to ensure that no one could damage server settings while administrator is away. Exclusivity mode password will be used to unlock application. You can combine Exclusivity Mode and Lock Application features in order to exclusively control SecurView Pro Client application and restrict access to other applications.



Enable Video Transfer Properties

Video Transfer feature is made for network traffic reduction between DVR Server and DVR Client (if remotely connected) and/or CPU load decreasing on the Client side. Video Transfer reduces amounts of data transferred from server to client by skipping some frames, transferring only motion detected frames, re-compressing or downsampling them without reducing recorded data quantity and quality. This feature is useful in slow remote connection or highly loaded network when viewing cameras remotely. Also it will be effective to decrease image resolution or transfer fps on the low-end systems, where DVR Client is used for viewing large amount of cameras. This approach reduces resolution and amount of frames, waiting to be rendered on the screens.



Review the settings:

- 1. Time Lapse & Bandwidth Control:
 - **Enable time lapse broadcast**: Enable time lapse broadcast on your remote connection only if needed.
 - Enable bandwidth controlled broadcast: Adjust data controlled broadcast if needed.
- 2. Motion Controlled Broad Cast
 - Enable motion controlled video transfer: Enable this feature remotely if want to see video on motion only. This is very helpful because frame rate is distributed to the cameras that have motion only.
- 3. Recompression
 - Enable Video transfer recompression: This feature can be very useful for remote connections only. The SecurView Pro server can record up 3 megapixel images, but remotely using this feature a user can receive more frame rate with less image quality without changing the server properties

Title	Server	Time Lapse E	Time Lapse R	Bandwidth Co	Bar
TV-IP501W_Location 1 TV-IP612P_Location 2	SecurView Pro at TE SecurView Pro at TE		1.000	Disabled Enabled	1.0
*					,
Time Lapse & Bandwidth Co Time Lapse troad Time Lapse frame (ate, f)	cant 0	Base gerio:	dwidth controlled br d of time, seconds: data, kilobytes:	1.0 16.000	0
Motion Controlled Broadcast Diable motion controlled Transfer frames whe Still frames frame rat	l video transfer 0	Recompression	deo transfer recomp	pen server archive	0

Video Transfer Defaults

You can specify default values of the video transfer for newly added devices. All options are identical to the Video Transfer properties. Those defaults can be accessed by clicking on server and choosing menu item Properties.

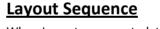
<u>Layouts</u>

Create custom Layouts by grouping cameras from different DVR Servers/Locations into groups for more efficient monitoring, and better management. For example group together all out-door cameras from different location or all POS cameras from all registers.

Individual Layouts can be activated by double-click on them with the mouse.

Users now can perform playback and other function by Right-click on the camera of their interest.

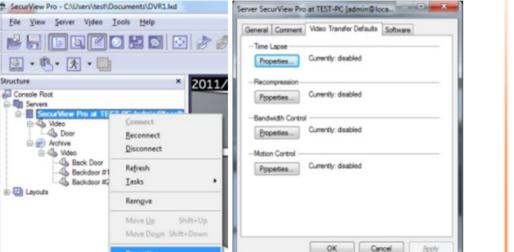
Note: Empty screens by default are filled with available cameras. You can disable this feature by selecting Tools->Options and choosing Screen mapping tab on appeared dialog, Set Automatic mapping mode to "disabled".

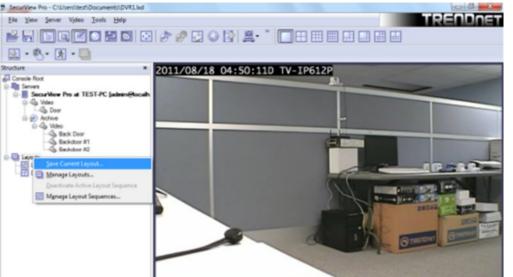


When Layouts are created, they can be used for sequencing. To create sequences:

1. Right click on Layouts and click Manage Layout Sequences.







2. Click New.

	New
Name	New
	Rename
	Properties
	Activate
	Deactivate
	Set Startup

3. Review the settings:

Add/Remove/Move Up/Move Down: Manage priority or remove layouts of your choice.

Layout: Choose given Layouts for adding them in a sequence. **Pause**: Set time interval between layouts (in seconds)

Layout	Pause	Add
E Default Layout	5.00 5.00	Bemove
Layout 1	5.00	Move Up Move Dow
< III Sequence item	,	
Layout: ayout 2		Pause: 5.00

SecurView Pro

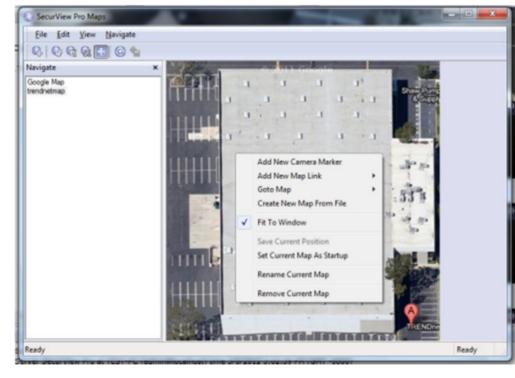
Map Module

SecurView Pro Maps allows you to quickly and conveniently locate cameras for viewing placed on Google Map and/or on your own floor plans added in JPEG format.

1. To start this module, click this button on the toolbar:



2. Right click the map and use context menu commands to configure and control map features.



- Add New Camera Marker this item will add camera marker in place where menu has been called. There will be shown list of servers and cameras after choosing this menu item. After adding new marker you can double click on marker to activate matching camera. To remove marker right click on it and choose according popup menu item.
- Add New Map Link inserts on current map link on the new or already created map. Double click will change current map on the linked map. To remove this link use right click on it and choose according menu item.
- Goto Map navigate to other maps in appeared list.
- Create New Map From File add new map from JPEG image file, which will be used as background.
- Fit To Window JPEG map will strain on window maintaining it's aspect ratio.
- Save Current Position used in Google map to saving it's current position.
- Set Current Map As Startup set current map as startup map. Selected map will be loaded when starting to view this map module.
- **Rename Current Map** rename currently selected map.
- Remove Current Map delete currently selected map.

Archive Backup Wizard

Archive Backup Wizard purpose is to backup specific part of archive or burn CD/DVD with archive and Archive Viewer on it. This can be useful to create backup copies of your archive with lower fps, or writing specific part of the archive on the CD for other machines without SecurView Pro being installed on them. Please note that this wizard works only on the same machine where DVR Server is installed.

1. Click the Wizards icon and select Backup server's archive data...

3. Review the settings:

1	Add a new connection to the SecurView Pro Server
b	View or modify server connection properties
6	Create, configure or delete server user and permissions
	Add, configure or delete camera device
	Configure export of video frames
0	Open server's archive
	Manage server watchdog settings
	View or modify server recording properties
	View or modify server TCP communication properties
	Automatically discover network video devices and connect them to the server
	Backup server's archive data
	Start or Stop Server Services and Applications
Â	Submit a problem report to the SecurView Pro technical support team
-	

2. The "SecurView Pro Archive Backup Wizard" window appears. Click Next.

3. Select Cameras to Backup. Select one or more cameras from the list. Then click Next. Please note **Estimated Backup Size**. There are estimates of backup size on every page in this wizard. Note that you can always decrease estimate size by decreasing output fps of backup archive, deselecting some of the cameras or changing time range.

Select video archive streams and cameras to	backup	Č.
Title	Size	S
🗐 🔊 Backdoor	1.91 KB	3/5/2012 3:2
TRENDnet 192.168.10.101 #1	63.91 MB	3/5/2012 4:2
TRENDnet 192.168.10.101 #2	156.97 KB	3/5/2012 4:2
C TRENDnet 192.168.10.104	291.18 MB	3/8/2012 2:3
C D TV_IP262P	1.09 GB	3/8/2012 11:5
V DTV_IP612P	180.01 MB	3/8/2012 1:1
« [,
Archive size: 1.61 GB		
Estimated backup size: 471.19 MB		

4. The time selection window appears. Select time range of backup archive. Click Next.

SecurView Pro Archive Backup Wizard **Backup Time Interval** Choose date/time interval for the data to backup and provide data split options Please provide local start and stop date/time for the backup process. Data for the specified time interval will be copied from SecurView Pro Server archive. Start time: 3/ 8/2012 . 3:27:53 PM -Stop time: 1/ 9/2012 - 3:03:41 PM -Estimated backup size: 0.00 KB Choose data splitting method for large amounts of data to span through multiple discs. Attempt to split data by time (each disc will contain certain data subinterval) Attempt to split data by stream (each disc will contain certain stream data) < Back Next > Cancel

5. The Video Backup Option window appear. Click **Constrain backup video frame rate** to decrease fps of backup in advanced options. Click **Next**.

😵 SecurView Pro Archive Backup Wizard	8
Video Backup Options Provide additional video stream related backup options	
Constrain backup video frame rate Backup at most defined number of video frames per second to use smaller amount of storage space for the backup copy of archive data. Maximal frame rate per second: Maximal frame rate per second: Note that with temporally compresses video formats, such as MPEG-4/H 264, an attempt to limit frame rate might result in stripping more frames than requested (such as leaving only key frame).	
Estimated backup size: Being estimated	
< <u>B</u> ack <u>Next</u> > Cancel	

SecurView Pro

6. The "Backup Destination" window appears. Select type of backup ("Burn archive on CD or DVD disc" or "Copy archive to hard drive or network drive"). Then click **Next**.

Backup De Choose o	stination data backup destination and re	view relevant settings	
Burn ar	chive on CD or DVD	disc	
Write a co	py of selected SecurView Pro	archive part to a CD or a DVD	disc.
O Copy a	rchive to hard disk or	r network drive	
	ipy of selected archive part to i media. Please provide path to i		
Location	C:\ArchiveBackup		Browse
	Free space: 6.41 GB		
	backup size: 0.00 KB		

7. If you select "Burn archive on CD or DVD disc", the "CD/DVD Device Settings" window appears. Click **Next**.

D/DVD Drive Setting Please select disc driv	e and review recording settings
Interface:	Windows Image Mastering (IMAPI) Version 2
Drive:	TSSTcorp CDDVDW SH-S202G (D:\)
	Media: There is no media in the device
Eject on completion:	Eject disc drive
Estimated backup size:	275.90 MB
	< Back Next > Cancel

8. On the next window you will see progress of backup action. After backup is complete, click **Finish**

Chapter 6

How to playback video

1. Right click on your server name

Reconnect

Disconnect

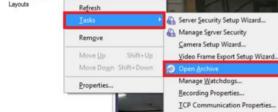
2. Choose tasks

- TV-IP501

+ P Archive

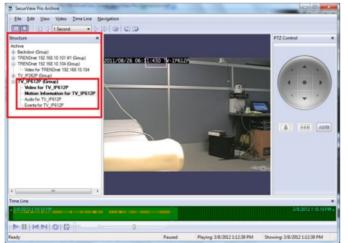
3. Click Open archive.

Note: You can also right click on any camera view and choose open archive.



4. The archive pane will now open up.

- **Playback Window Structure** Now that you are in the playback screen, the structure pane on the left lists all of the cameras that you have recordings for .
- **To Navigate through the Video** Double click on the camera you wish to playback (This camera will now appear with footage on the video screen).



The solid green line on the bottom represents time. The light green lines represent recorded video. The orange lines represent motion information.



There are basic VCR controls on the bottom of the playback screen, which you can use to play, pause, forward, and rewind.

Fast forward & Rewind

There is a dial on the bottom of the screen, which you can drag in either direction to browse through your video in high speeds. Another way to fast forward is to use the arrow controls on top of the screen in which you can define how many increments of time you would like to move through the video.

	Eile Edit View Video Iime Line
Time Line	
« 3/8/2012 3:33:38 PM	Structure 1 Second 10 Seconds
	Archive 1 Minute 10 Minute 10 Minute 10 Minute 1 Hour 0- Backdoor #1 (Gi 4 Hour 8- Backdoor #2 (Girut 1 Day

Playback Motion Only

Located at the top of your Archive Pane, there are two buttons that allow you to seek video with actual motion in return saving you time.

With the camera you wish to review selected and showing in your video screen

Choose either

"seek previous motion"

or "seek next motion"

Smart Search

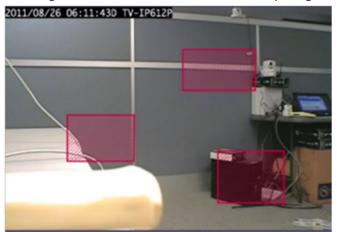
You can also search through video not only by motion in the screen, but also by motion in a specific part of your camera screen. Through SecurView Pro's playback screen, you can define a specific object in your view, or define a path, and seek through motion only in that specific region. This process is very commonly referred to as "smart search".

Define motion of interest

- 1. Click on **Navigation** at the top of the archive window.
- 2. Click on "Define region of motion interest".

Nevigetion	
Seek to Beginning	Ctrl+Left Arrow
Seek to End C	trl+Right Arrow
Step Backward 5	hift+Left Arrow
Step Eorward Sh	ift-Right Arrow
Go to Time	
(Seek 3x Backward	Ctrl+Shift+8
Seek Backward	Ctrl+B
Seek Forward	Ctrl+N
Seek 3x Forward	Ctrl+Shift+N
> Elay	Enter
J] Pguie	Space
😒 Befresh	FS
(2) Seek to Previous M	otion Ctrl+P
D Seek to Next Motion	n Ctri-M
Define Region of M	otion Interest
Egents	

3. Press the left button and drag the mouse over the area you would like to see motion in. This will create a grid in that area. You can also select multiple regions.



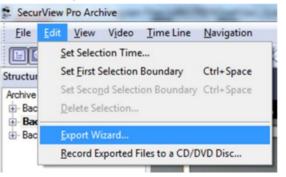
4. Click on "seek to previous motion" or "seek to next motion" to search through motion in the defined area or areas.

Export Video

To export video, you first have to select the section of recordings that you want to export to a different location (This will also prevent it from getting overwritten). To select video:

1. Click on **Edit** at the top of the playback screen.

2. Click on Export Wizard.



3. Select Simple Mode or Advanced Mode and then click Next.



3. The **Export Type** window appears. Click **Next**. Note: Video + Audio export available only for ASF and WMV formats.

Export Type Choose export target type	
lease use the options below to specify export target	. Click Next to proceed then.
Output Type	Streams
Audio Video Interleaved (AVI) File	Video
Video Frame File Series Advanced Systems Format (ASF, also WMV) File	Video, Audio

4. The "Video Stream" window appears. Choose the desired camera (video stream), compression (format) and subtitles. Then click **Next**.

Rease use the options roceed.	below to specify exported video stream and related options. Click Next to
<u>Video</u> Stream:	Video for TRENDnet 192.168.10.101
Eormat:	Regular Compression
Resolution:	Original Full Resolution
Subttles:	Hard Subttles (Merge with Video) Properties
Sglt Subtities Form	Accompanying SubRip (.st) File *

5. The "Audio Stream" window appears. Choose which Audio stream you want to export along with video. Then click **Next**.

Choose and co	nfigure exported audio stream	
Please use the optio	ns below to specify exported audio stream. Click Next to proceed.	
Audio Stream:	Audio for TV_IP612P	
Quality:	Low Bitrate (Compact)	
Options		
Desync Compensa	ation, ms: 0.00	
an option to r	tage may be recorded out of synchronization between video and audio to specific buffering and different synchronization sources. This provides manually compensate the synchronization, positive compensation value will elatively to video.	

6. The "Export Options" window appears. Select the start and finish times of the video clip that you want to export. Click **Next**.

Export Options Specify export p	rocedure options				
lease specify export	options using the	choice	below. Click N	end to p	proceed then.
Start and Stop Tir	ne				
🖉 gat From:	12/15/2011		3:25:45 PM	*	Show Local Time
7 9,00 A	12/15/2011		3:25:45 PM	*	
Time Options					
Reduce Long	Gaps				
Output Rate Adju	stment				
Adjust Exporte	d Video <u>B</u> ate:	1.00	<u></u>		

7. The Wizard will guide you to the next step for you do designate to which drive or folder to save the export video.

Note: To play back the SecurView Pro AVI file on a computer that doesn't have SecurView Pro installed, a codec (a small executable file) will have to be installed in order for your media player to recognize the SecurView Pro video file. The codec can be downloaded from http://www.trendnet.com/downloads.

Archive Export	A COLUMN	
ASF Export Options Provide ASF file export option	18	l
Please specify ASF output options Qutput File:	using the choices below. Click I	Next to proceed then.
Output File		Browse
Video Godec: Window	s Media Video 9	•
Frame Rate per Second:	15.00	
Btrate, kBps:	512.00	
	< Back	Next > Cancel

8. The "Export Batch" window appears. Set all necessary parameters and before start export. The export Batch Window allows you add multiple export tasks.

Export Batch Queue multiple archive export tasks to be	fulfilled at once in batch mod	
he requested export task has been added to ontrols below to modify batch, or press Cance	el to exit from the wizard.	
Video Stream	Time Interval	Destination
٠ (m.		-
	ådd More	Bemove

9. The "Content CD/DVD Disc" window appears. Click Next.

Content CD/DVD Disc Burn exported footage to a CD/D	OVD disc		
You can optionally burn the files, both controls below. To skip burning, leave Create a CD/DVD disc with export	the bax unchecked.	other, to a CD/I	DVD disc using
Device: TSSTcorp CDDVDW S	H-\$202G (D:\)	Ψ	
File Name	Size	Location	Add
Currently Exported Files	32.00 KB		Bemove
		,	

10. Archive Export wizard is now complete. Click Finish.

Export Snapshots

Another way to export video is to save one frame at a time, like a snapshot.

- 1. Pause the video on the image that you would like to copy.
- 2. Click on Video.
- 3. Choose "Save Current Frame As..."

Vi	deo Iools Help	
	Stream	,
	Iransfer	
	Digital Pan-Tilt-Zoom	•
	Show Detected Motion	
ŧ	Show Meta (Analytics) Dat	
	Properties	•
۲	Magimize	
	Freeze	F9
	Start Recording	
	Current Frame Subtitles	,
	Copy Current Frame to Cli	breodq
10	Sage Current Frame As	Ctrl+Shift+S
_		

4. Select a location and file name for your image

SecurView Pro

TRENDnet User's Guide

5. Click Save.

Now you will have the image stored so that you can print, e-mail, or enhance that snapshot.

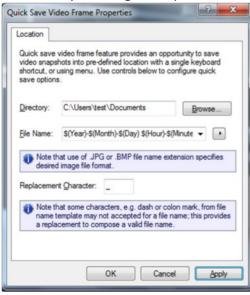
Quick snapshot save and current visible frame save

The Quick save feature provides you the option to quick save video snapshot to a predefine location with a single keyboard shortcut.

1. Prior to using the "quick save current frame" the Quick save properties must be configured to pre-define the save location



2. Setup preferred directory for saving the snapshots.



3. Press Ctrl + Alt +S on your keyboard or click **Video** and select **Quick Save Current Frame**.

Video	<u>T</u> ime Line <u>N</u> avigation
C	urrent Frame Subtitles
<u>c</u>	opy Current Frame to Clipboard Ctrl+C
S 🔄	ave Current Frame As Ctrl+S
Q	uick Save Current Frame Ctrl+Alt+S
Q	uick Save Properties
	faintain <u>A</u> spect Ratio
D	igital Pan-Tilt-Zoom

Chapter 7

Upgrading SecurView Pro software to a newer version

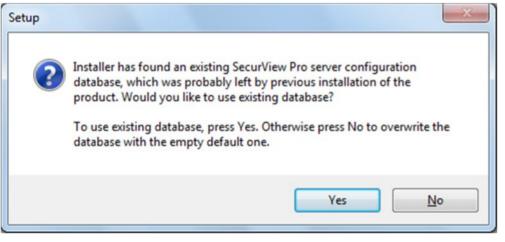
To check for upgrades and new free versions you can always visit www.trendnet.com

Updating the software requires all DVR services to stop before Installation (see page 10-13).

During the installation of the new version you will encounter the following message.

Yes: Recommended. Keep all current configurations of your server.

No: Start a new database. All previous settings and configurations will be erased and a new database will be created.



After you complete the above steps, you can continue with the installation.



Product Warranty Registration

Please take a moment to register your product online. Go to TRENDnet's website at http://www.trendnet.com/register

> TRENDnet 20675 Manhattan Place Torrance, CA 90501. USA

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