## User's Guide





## **TREND**netVIEW 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.

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- 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.



- etVIEW Pro C\\Program Files (x86)\TRENDnet\TRENDnetVIEW Pro\Local TRENDnetVIEW Pro Connection.lxd TRENDNET File View Server Video Tools Help 😤 🗧 🔚 🖸 🖸 🗖 🖸 🖉 🖉 🖉 🔄 😭 承 . 0 2013/09/19 10 LD TV-IP612P ucture Device: -TV4P612P Add, configure or delete camera dev en server's archive. er's archive data onfigure server's events... port cameras' status Start or Stop Server Services and Applic ort to the TRENE (9/19/2013 10:26:52 AM) Application: Started (9/19/2013 10:26:52 AM) Application: Trying to connect to server localitost as admin... (9/19/2013 10:26:54 AM) Application: Elade to connect to server localitost: Operation unavailable (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) Application: Successfully connected to server (admin@localitest) (9/19/2013 10:26:54 AM) ection to remote local or server
- Use the wizards for easy navigation and step-by-step setup.

### Chapter 2

### **TRENDnetVIEW Pro Installation**

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

- 1. "Welcome to the TRENDnetVIEW 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**.

🔂 Setup - TRENDnetVIEW Pro	_ <b>_</b> X
Select Components Which components should be installed?	
Select the components you want to install; clear the component install. Click Next when you are ready to continue.	ts you do not want to
TRENDnetVIEW Pro Server Application	215.3 MB 🔺
TRENDnetVIEW Pro Broadcast Server Application	214.9 MB
TRENDnetVIEW Pro Client Application	241.7 MB
Local TRENDnetVIEW Pro Connection	
✓ Languages	0.1 MB
··· (O) English	0.1 MB
O Russian	0.1 MB
- O Finnish	0.1 MB
🗄 🔘 Spanish	0.1 MB *
Current selection requires at least 258.6 MB of disk space.	
< Back	Next > Cancel

- 5. "Select Start Menu Folder" window appears. Click **Next**. Changing the location is optional but not recommended.
- "Additional Icons" window appears. Click Next. These are shortcuts and are recommended, but optional.
- 7."Ready to install" window appears. Click **Next**. TRENDnetVIEW Pro Server and options will now be installed.
- 8. To complete the installation of the TRENDnetVIEW Pro setup wizard, click **Finish**. Leave "Run server setup wizard" option checked.



### **TRENDnetVIEW Pro**

### TRENDnetVIEW Pro Server Setup Wizard

1. The "TRENDnetVIEW Pro Server Setup Wizard" appears. Click **Next**. 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** 

🚽 TRENDnetVIEW Pro Serve	er Setup Wizard
Server Properties Specify TRENDnetVIEV	N Pro Server properties
Specify server unique ident values intact and press Nex	ifier, title and database settings. To accept default settings, leave xt.
Server <u>I</u> dentifier:	Server <u>T</u> itle:
TEST-PC	TRENDnetVIEW Pro at TEST-PC
Configuration <u>D</u> atabase	
	Dnet\TRENDnetVIEW Pro\Digital Video Recorder.mdb
Compact the configur	ation 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.

STRENDnetVIEW Pro Server Set	tup Wizard		×
Server Administrator Setting Specify TRENDnetVIEW Pro		5	
Specify username and password	for administrator access. To	continue, press Next.	
<u>U</u> semame:	admin		
Password:	•••••		
Password Confirmation:	•••••	]	
	< <u>B</u> ack	<u>N</u> ext >	Cancel

3. The "Server Network Settings and Port settings" window appears. Click **Next**. The default firewall port that TRENDnetVIEW 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 TRENDnetVIEW Pro server settings.

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

STRENDnetVIEW Pro Server Setup Wizard	<b>x</b>
Server Network Settings Specify TRENDnetVIEW Pro Server network availability	
Configure server availability for external network connections. To continue, press	s Next.
-TCP Connections	
Allow TCP connections from remote applications	
TCP Port: 60554 (leave empty to use default value of 605	554)
Note that you will be able to change the settings later (e.g. on registration TRENDnetVIEW Pro) starting this wizard from Start Menu or through TRENDnetVIEW Pro Client application	on of
< <u>B</u> ack Next >	Cancel

#### 4. 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 TRENDnetVIEW Pro upon Windows login.

TRENDnetVIEW	Pro Server Setup Wizard			
Server Execution Mode Specify TRENDnet/IEW Pro Server execution mode				
Applicatio	n Mode			
The serve applicatio	or will be running in application mode, the system tray will contain an icon of the n.			
S <u>t</u> artup:	Manual			
© <u>S</u> ervice M	ode			
The server manager.	will be running in service mode. Execution will be controlled by service			
🔽 Use soft	ware <u>w</u> atchdog			
	<back next=""> Cancel</back>			

#### 5. Click Start Server Application and then click Next.

TRENDnetVIEW Pro Server S	etup Wizard 📃
Server Execution Control Start and stop an instance	of the TRENDnetVIEW Pro Server
Start Server Application	Start TRENDnetVIEW Pro Server in application mode.
Stop Server Application	Stop TRENDnetVIEW Pro Server running in application mode.
Start Server Service	Start TRENDnetVIEW Pro Server in service mode.
Stop Server Service	Stop TRENDnetVIEW Pro Server running in service mode.
	< <u>B</u> ack Next > Cancel

6. Click **Finish** to exit the installation wizard.

### TRENDnetVIEW Pro

### TRENDnetVIEW 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.

# 🛃 🖪 🖸 🗿 📇 🖸 🔂 🥔 😭 💻

2

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

I		
	-	

**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 TRENDnetVIEW Pro window. The structure pane is most useful when you are looking at cameras from multiple locations and multiple TRENDnetVIEW Pro servers. We will discuss the structure pane later on in this chapter.



**Toggle Structure Filter Pane** – This button toggles *structure filter pane* under regular structure pane. This filter will allow you to quickly locate necessary camera from the list of cameras you currently have, or several set of cameras with similar name.



**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.



**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**

TRENDnetVIEW 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. TRENDnetVIEW 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 -> TRENDnetVIEW 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.



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.



Right click on the icon and select Open Web Application



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

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



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.



### **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	
			g duration quota up. dia devices and storage
<mark>▼</mark> <u>E</u> na	ble global duratio	on quota mana	agement
Sto	rage <u>d</u> uration:	10,00000	days 🔻
	fied amount of tin		erase of footage older tha

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

4. Click **Apply** to save settings.

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### **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.

TCP Communication Properties
Server Connections
Status: Active
Allow remote users access server over network using TCP protocol
Deny remote access, currently connected users (if any) are disconnected
Options
TCP Port: 60554 (default is 60554)
Image: Save these settings as default
OK Cancel Apply

### 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.

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

Watchdog Management - [admin@localhost]

Watchdogs

? X

Watchdog Operation

*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 TRENDnetVIEW Pro application. Once this number has been reached, Watchdog will now reboot Windows and the TRENDnetVIEW 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.

Software Watchdog Properties
State Operation Performance Maintenance
Watchdog State
State: Running
Start Stop
✓ Start watchdog with server Enable watchdog
OK Cancel Apply

Name	State	<u>E</u> nable
Software Wate	hdog	<u>D</u> isable
		Properties
•	III	4
	OK	Cancel Apply

### **TRENDnetVIEW Pro**

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Software Watchdog Properties	×
State Operation Performance Maint	enance
Watchdog will not perform restart or reboo interval from the start of the application.	ot actions within grace
<u>G</u> race interval, seconds:	30
Watchdog can reboot the system in case Should watchdog register at least specifie last specified interval of time, it will restart zero to disable the feature.	ed number of failures within
Reboot interval, minutes:	5
Number of failures to reboot:	3
ОК	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.

Software Watchdog Propertie						
State Operation Performan	nce Maintenance					
	Configure watchdog to monitor system performance, detect contingent situations and attempt to fix the problems.					
Monitor system committe	ed memory usage ratio					
Maximal allowed: 70.0	Currently: 31.5					
Monitor system pool <u>n</u> on	paged memory usage 👔					
M <u>a</u> ximal allowed:	Currently: 73.3					
Monitor server private me	emory usage ratio 🕕					
Maximal allowed: 45.0	Currently: 0.4					
Monitor server <u>v</u> irtual me	emory usage 🕕					
Maximal allowed: 383	9.9 Currently: 371.6					
OF	K Cancel Apply					

#### 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).

S	oftware	Watchd	og Pro	operties		Sec. of	×
[	State	Operatio	on Pe	erformance	Maint	enance	
	any po					ally restart serv prate server sys	
	V	<u>E</u> nable p	eriodic	; restart			
	<u>R</u> e	estart inter	val:	7		days	<b></b>
	V	Enable p	eriodic	; restart <u>h</u> o	urs		
						uring which ma DPM to 11:20	
		<u>F</u> rom:	7:00 P	M	<u>T</u> o:	11:20 PM	
				ОК		Cancel	Apply

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**.

TRENDnetVIEW	Pro - C:\Program Files (x86)\TR	ENDnet\TRENDnetVIEW Pro\Local TRENDnetVIEW Pro Cor
File View Ser	rver Video Tools Help	
🔒 🖥 🔳		] 🕰   💽   🅭 🧬 🕥 📑   💻
Structure	× 201	3/09/19 10:08:25D TV-IP612P
Console Root		
E- admi	Connect	
D-C Vic	Reconnect	
- A	Disconnect	
	Disconnect	
	Refresh	
	Tasks	Server Security Setup Wizard
in ⊕ Arc ⊡ ⊡ Lavouts	Remove	A Manage Server Security
	Move Up Shift+Up	Camera Setup Wizard
	Move Up Shift+Down	Video Frame Export Setup Wizard
	wove bown shint+bown	Open Archive
	Properties	Manage Watchdogs Recording Properties
	1	Communication Properties
	201	
		Automatically discover network video devices
		Backup server's archive data
		Configure server's events

#### Create users or modify existing users rights

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

Server Security Setup Wiz	ard - [admin@localhost]
User Choice Choose a userfors	ecurity setup
Select an existing user to Next to proceed. © <u>C</u> reate a new us	alter permissions, or alternatively use a create new user option. Click er
	Active Directory import
User Name	Comment
🔒 admin 🅁 demo	Bult-in administrator user Bult-in demo user
	< Back Next > Cancel

#### System/User Permissions

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

rver Security Setup Wizard	State of the second		-
System Permissions Configure system access p	emissions		
Please review global scope per permissions. Click Next to proce	nissions. Use the checkmarks to grant or revoke ce ed.	ertain	
Permission	Description	Scope	
V         On           V         Administer Server           V         Connect Locally           V         Connect Remotely           V         Connect Remotely           V         Access Archived De           V         Administer Device           V         Navigate Device	Privilege to access server archive Privilege to administer server Privilege to connect to server locally Privilege to connect to server remotely Privilege to access archived media data Privilege to administer device Privilege to control device PTZ (pan, tit, zoom)	System System System 7 Object: 7 Object: 7 Object:	Ċ
₹.	m		
Configure individual camera	access permissions	Cance	N

Device Permissions Configure system access permissi	ions	ļ
Please review individual device permis uncheck to revoke. Click Next to proc Device: (Al Devices)		
Device	Permission	Description
TRENDnet 192.168.10.130	Access Archived Device D Administer Device Navigate Device Receive Device Data	Privilege to administer de
< [		,

### Setting up an IP Camera

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

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

#### **Configure your IP Cameras automatically**

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- 1. Right click on your server name
- 2. Click Tasks
- 3. Click Automatically discover network video devices.
- 4. The "TRENDnetVIEW Pro Automatic Discovery Wizard " will appear. Click Next.

TRENDnetVIEW Pro Automatic Discovery Wizard	X
Network Scan Addresses Choose network scan mode addresses by specifying network adapter or address range	$\mathcal{Q}$
Scan network adapter address range Select one or more network adapters from the list below to scan addresses on:	
Atheros AR8151 PCI-E Gigabit Ethernet Controller (NDIS 6.20)	
○ Scan <u>IP</u> address range	
Specify IP address range to be scanned:	
Erom: 192.168.1.1 I.o. 192.168.1.254	
< <u>Back</u>	Cancel

5. Enter port number for each IP camera and then click **Next**. (Leave blank to search all cameras with all ports) 6. TRENDnetVIEW 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 TRENDnetVIEW Pro.

RENDnetVIEW Pro Autom	atic Discovery Wizard		<b>—</b> ×
Preview Devices Review devices four TRENDnetVIEW Pro	nd on the network and check d Server	evices to be configured	on X
adjust device model and o Pro Server.	overed network devices. Use o ther options before the device	is configured with the T	RENDnetVIEW
Name	Model	Address	Chan 📤
TRENDnet TV-IP	TRENDnet TV-IP612WN	192.168.1.185	Default 😑
TRENDnet TV-IP	TRENDnet TV-IP612P	192.168.1.188	Default 📃
TRENDnet TV-IP	TRENDnet TV-IP522P	192.168.1.203	Default
TRENDnet TV-IP	TRENDnet TV-IP751WIC	192.168.1.36	Default
TRENDnet TV-IP	TRENDnet TV-IP751WIC	192.168.1.191	Default
TRENDnet TV-IP	TRENDnet TV-IP851WIC	192.168.1.201	"Cha 🍸
•			
			Properties
	< <u>E</u>	lack <u>N</u> ext >	Cancel

#### Add a Network 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 Setup Wizard - [admin@localhost]		x
Camera choice Select one or more devices to setup		
Use the list below to select one or more devices proceed with setup.	s, which you would like to set up. Press Next t	:0
Title	Device Name	*
Add New Devices		
Network Devices (IP Camera, Video Serve	er) Media Source	=
Review or Modify Existing Devices		
( TRENDnet TV-IP512P - 192.168.1.189	Media Source\021	
JRENDnet TV-IP572PI - 192.168.1.215	Media Source\023	
4 TV-IP551W	Media Source\029	
TV-IP612P	Media Source\027	-
Copy to Clipboard		
	< Back Next > Canc	cel

### 5. Click Next.

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



## Note: The tabs under properties are described below Model Tab

Properties > Model

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



### **TRENDnetVIEW Pro**

#### Access Tab

*Properties > Access* 

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

dio Events Adeo Input e or IP Address: Pass <u>wo</u> rd: ••••• n Device in Brow	Model Externa Video Con Port: 80	
Pass <u>w</u> ord:	P <u>o</u> rt: 80	ifiguration
Pass <u>w</u> ord:	80	0
Pass <u>w</u> ord:	80	0
•••••		•
•••••	WSAF	
••••• n Device in Brov	NSPr	
n Device in Brov	wser	
	onfigure addition	
	and access me	
	configuring the camera model	e necessary to configure addition configuring them on router, firev in camera model and access me OK Cancel

#### Video Input Tab

*Properties > Video Input* 

• Select "Trendnet" for Operation mode.

operties	State of the local division in which the local division in the loc			-	×
Audio	Events	Model	External PTZ	Control	Dewarp
Access	Video Input	Video	Configuration	Frame A	djustments
Defa	uit		litichannel devic		
_	tion Mode				
Trer	Idnet				-
	settings on the access. Please	device, e refer to	e may have to n esp. set using a device manual on device capa	dministrati or contact	ve web
	settings on the access. Please	device, e refer to	esp. set using a device manual	dministrati or contact	ve web

#### 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
  - Bit Mode
  - Quality
  - 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.

Properties				-	×
Audio	Events	Model	External PTZ Configuration	1	Dewarp
Access	Video Input	video	Conliguration	Frame A	djustments
			cify video relate use current car		
Camera	a <u>T</u> itle:				
	Us	se <u>d</u> efault	camera title		E
-Color, F	Resolution and	Encodin	g		
<u>C</u> olor:		Default		•	
Resolut	tion:	Default			•
<u>E</u> ncodi	ng:	Default		•	
-M-JPEC	G Encoding—				
<u>Q</u> uality:		Default		-	
MPEG-	4				
					Ψ.
		ОК	Cance	el	Apply

#### Frame Adjustment Tab

*Properties > Frame Adjustment* 

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

Properties			-		x
Access	Video	Input	V	ideo Configuration	
Frame Adjustments	Audio	Events	Model	External PTZ Con	trol
Auto Adjustr	nent				
<u>B</u> rightness:	I			0	
Contrast:	1			0	
<u>S</u> harpness:	1			0	
<u>H</u> ue:	1			0	
Saturation:	I			0	
				Reset	
	sword on	Áccess tal		nay require that you ileged access to th	
		ок (	Cano	cel <u>A</u> pply	

#### Audio Tab

Properties > Audio

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

operties	-		-		×
Access	Video	Input	Vi	deo Configurat	ion
Frame Adjustments	Audio	Events	Model	External PTZ	Control
Use controls below to be used or attack				udio source de	vice
) <u>N</u> o Audio	Source				
Internal A	udio Sou	Irce			
Use built-in video captu		oture capa	bilities av	vailable along v	vith
Inp <u>u</u> t:					-
External A	udio So	urce Atta	ached		
Attach an e audio part fo				act as an integ vice	gral
Inpu <u>t</u> :	licrophon	e (High De	finition A	hud	•
	Properties				
	0	К	Cano	el <u>A</u>	pply

- 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.

### **TRENDnetVIEW Pro**



 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.



#### 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.

Pi	roperties	-				x
	Access	Video	Input	V	ideo Configuration	
	Frame Adjustments	Audio	Events	Model	External PTZ Cor	itrol
	Choose device Pa and external using configure selected	the optior	ns below.	Jse Prop		
	) Built-in PT	Z contro	l, if avail	able		
	© E <u>x</u> ternal R	5-232/R	S-422/R	S-485 F	TZ control	
	Properties.				perties, including schedule.	
		0	ОК	Cano	cel <u>A</u> pply	

• **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- communiation settings using cl	
—Pan-Tilt-Zoom Protocol ——	
Protocol:	Pelco D
Communication Settings	
<u>S</u> erial Port:	COM1 -
Port Speed ( <u>B</u> aud Rate):	2,400 -
Device <u>I</u> dentifier:	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

mera Setup Wizard - [	[admin@localhost]
Motion analysis Set up motion infor	mation analysis for video stream
Click Next to proceed th	otion detector for the video stream (f required) using the options below. ten.
Properties	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* 

nsitivity	Exclusion	Format	Source			
Min	, Q	<i>F</i> .	3. 39	E.	а.	Max

### **TRENDnetVIEW Pro**

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 TRENDnetVIEW Pro will be recording based on motion that does not exist.

#### **Exclusion Tab**

Properties > Exclusion

perties					l	-
Sensitivity	Exclusion	Format	Source	•		
Click on th analysis:	ne frame to e	exclude ce	lls from	motion	Reset	
2013/09	19 10:25:1	GD TV-IF6	12.		-	
578						
2						-
			-			2
144				12		
- 1	2	-		100		
angen III						
-						
			╺╅╾┿			
						-
			N.	Vi Barriel		-
	ſ	ОК		Cancel		a b a
	1	UK		Cancel	Ap	лу

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 TRENDnetVIEW Pro.

#### Format Tab

Properties > Format

This controls the internal motion detection analysis properties.

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 -
Horizontal smoothing: 2 Vertical: 2
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
OK Cancel Apply

- 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.
- **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

#### Source Tab

*Properties > Source* 

Properties
Sensitivity Exclusion Format Source
Select source of motion detection information and software motion detection analysis mode using the choices below.
Default (Camera Detected Motion priority)
Use default mode, most appropriate to achieve best performance
© Camera Detected Motion priority
Use camera's motion information or, if absent, detect motion using software analysis
© Camera Detected Motion only
Use camera's motion information if available
Software Motion Detection priority
Detect motion using software analysis regardless of availability of camera detected motion information
OK Cancel Apply

- **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.

mera Setup Wizard - [admin@l	ocalhost]
Data recording Set up data recording feature	e properties
	and select data streams you would like to have recorded to rties button to review archive disk drives and space quotas.
Stream Type	Comment
Video Video Audio	Advanced properties
•	4
	Global Recording 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).

< Back

Next >

Cancel

**Global Recording Properties:** For Global Recording Properties, please refer to the <u>Server 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.

### **TRENDnetVIEW Pro**

#### **Time Lapse Tab**

Advanced Properties > Time Lapse

Properties
Time Lapse Motion and Events Storage Quota
Time lapse recording feature provides an opportunity to record frames with unconditionally constrained recording frame rate. The specified time lapse interval guarantees that at most one data sample is recorded within defined period of time.
Normally, this approach allows to use storage space more efficiently.
Enable time lapse recording
Time lapse frame rate, fps: 5.000
OK Cancel Apply

• **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.

F	Properties	J
	Time Lapse Motion and Events Storage Quota	
	Motion and alert controlled recording feature provides an opportunity to differentiate recording mode of operation in and in absence of alerted state. To save storage space, it is possible to record more footage for alert conditions.	
	Enable motion controlled recording	
	Enable alert event controlled recording	
	Constrain recording frame rate	
	Recording frame rate on motion detection or in alerted state, fps:	
	Time interval to keep recording <u>b</u> efore alert was 1.00	
	Time interval to keep recording <u>a</u> fter alert was 3.00 signaled, seconds:	
	Record frames in absence of motion or alert event	
	Recording frame rate in absence of alert, fps: 0.000	
	OK 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

1	Properties
	Time Lapse Motion and Events Storage Quota
	Additionally to global storage management options, individual storage quotas may be defined to prioritize storage capacity usage between recorded streams. Use controls below to provide individual quota for the selected stream.
	☑ Enable individual limit on amount of stored data
	Keep stored in SecurView Pro Server archive at most amount of data specified below.
	A <u>m</u> ount quota: 20 MB -
	☑ Enable individual limit on duration of stored data
	Keep stored in archive footage, which is not older than specified using controls below.
	D <u>u</u> ration quota: 30 Minutes (Debug) 🔻
	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 TRENDnetVIEW 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.

Camera choice Select one or more devices to setup	
lse the list below to select one or more devices, which you 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
Review or Modify Existing Devices	
TRENDnet 192.168.10.130 (disabled)	Media Source\003
TRENDnet 192.168.10.131	Media Source\004
iopy to Clipboard	

### **TRENDnetVIEW Pro**

### **TRENDnet User's Guide**

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

Camera Setup Wizard	
Set up camera d	levice properties
Please configure the Device title:	device and set up video device options. Click Next to proceed then.
192.168.1.209, 0	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
	< <u>B</u> ack 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.

Please set up recording properties and select data streams you would like to have recorded to disk. Use Global Recording Properties button to review archive disk drives and space quotas Click Next to proceed.            Image: Click Next to proceed. </th <th>Set up</th> <th></th> <th>lin ta</th> <th></th> <th>cc</th> <th>rdi</th> <th>ng</th> <th>) fe</th> <th>ea</th> <th>tui</th> <th>e</th> <th>pn</th> <th>op</th> <th>er</th> <th>tie</th> <th>s</th> <th></th> <th>ſ</th> <th>Ľ</th>	Set up		lin ta		cc	rdi	ng	) fe	ea	tui	e	pn	op	er	tie	s																				ſ	Ľ
00:00 06:00 12:00 18:00 24	disk. Use G Click Next t	lob o p	al ro	Re	ed	ord	lin	gl	Pro																												
Mon Tue Wed Thu Fri Sat Configure schedule Cooy Paste										5:1	DO							1	12	0	0						1	8	00	D						2	4:0
Tue Wed Thu Fri Sat	Sun	Т	Π	Π	Т	Π	Т	Т	Π	+	Т	Π	Т	Т	Т	Π	Π	Т	Т		Т	Т	Π	Т	Π	Π	Т	П	Т	Т	Π	Π	Т	Т	Π	Т	П
Wed Thu Fri Sat Configure schedule Copy. Paste		Π			Ι	Π		Γ	Π		Ι			Ι			Π	Ι	Γ			Γ	Π							Ι			Ι	Γ			
Thu Fri Sat Configure schedule Copy Paste		Щ		Ш	Ļ	Ц	1	1	Ц	1	1	Ц	4	1	1		Ц	1	⊥		+	Ļ	Ц	4			+	Ц		1	Ц		1	1	Ц	+	Ц
Fri Sat Configure schedule Copy Paste		Щ		Ш	Ļ	Ц	1		Ц	4	1			1			Ц	1	1		$\perp$	L	Ц	4	Ц		$\perp$	Ц		1	Ц		1	1	Ц	$\downarrow$	Ц
Sat		Щ		Ш	Ļ	Ц	+	╞	Ц	4	+	Ц	4	+	+	Ц	Ц	+	∔		+	╞	Ц	+	Н		+	Ц		+	Ц		+	+	Ц	+	Ц
Configure schedule Copy Paste		Щ	+	Ш	Ļ	Ц	+	∔	Ц	4	∔	Ц	4	+	+	Ц	Ц	+	∔		+	1	Ц	+	Н		+	Ц	4	+	Ц		+	+	Ц	+	н
		Ш																																			Ш
Global Recording Properties		Co	nfi	qur	e	sc	he	du	Jle		or	ŊΥ	P	as	te																						
																						ſ		GI	oh	al	Re	-	one	lin		Pro	n	ed	tie	s	_
																						U		-		_					3			-	_		_

### **TRENDnetVIEW Pro**

### **TRENDnet User's Guide**

Click on **Configure schedule** to bring up the "Manage Schedule" window.



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.

Properties	
General	Video Video Motion Audio Events
	use controls below to provide title and color for the schedule the setting are helpful to distinguish among the profiles on e chart.
<u>T</u> itle:	Profile #4
<u>C</u> olor:	Navy -
<u>D</u> escri	ption:
L	OK Cancel Apply

- 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 controls below to configure video recording for the p	rofile
Enable video recording	
Enable motion controlled recording	
Enable alert event controlled recording	
<u>C</u> onstrain recording frame rate	
Recording frame <u>r</u> ate on motion detection or in alerted state, fps:	0.000
Time interval to keep recording <u>b</u> efore alert was signaled, seconds:	0.00
Time interval to keep recording after alert was signaled, seconds:	1.00
Record frames in absence of motion or alert event	t
Recording frame rate in absence of alert (time alert (time lapse recording feature), fps:	0.000
OK Cancel	Apply

Video Motion Tab – Enable video motion recording.

• 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.

External PTZ Control Dewar event generation based on camera  State Alert if Change
State
State
State
Alert if Change
<u>Alert if Change</u>

### Recording

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

Camera Setup Wizard - [admin@localhost]	
Data recording Set up data recording feature properties	
Please set up recording properties and select d disk. Use Global Recording Properties button to Click Next to proceed.	
Stream Type	Comment
<ul><li>✓ Video</li><li>✓ Audio</li></ul>	Advanced properties
•	4
	Global Recording Properties
	<back next=""> Cancel</back>

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 Everts       Storage Quota         Motion and alert controlled recording feature provides an opportunity to differentiate recording mode of operation in and in absence of alerted state. To save storage space, it is possible to record more footage for alert controlled recording         Image: The same matching in the state of the	Properties	×
to differentiale recording mode of operation in and in absence of alerted state. To save storage space, it is possible to record more footage for alert conditions.	Time Lapse Motion and Events Storage Quota	
Enable alert event controlled recording     Constrain recording frame rate     Recording frame rate on motion detection or in 0.000     alerted state. fps:     Time interval to keep recording before alert was     signaled, seconds:     Time interval to keep recording after alert was     signaled, seconds:     W Record frames in absence of motion or alert event!     Recording frame rate in absence of alert, fps:     0.000	to differentiate recording mode of operation in and in ab alerted state. To save storage space, it is possible to re	sence of
Constrain recording frame rate     Recording frame rate on motion detection or in     alerted state. fps:     Time interval to keep recording before alert was     ignaled, seconds:     Time interval to keep recording after alert was     ignaled, seconds:     W Record frames in absence of motion or alert event     Recording frame rate in absence of alert, fps:     0.0000	Enable motion controlled recording	
Recording frame rate on motion detection or in 0.000         alerted state, fps:         Time interval to keep recording before alert was 1.00         signaled, seconds:         Time interval to keep recording after alert was 3.00         signaled, seconds:         Ime interval to keep recording after alert was 3.00         signaled, seconds:         Ime interval to keep recording after alert was 3.00         signaled, seconds:         Ime interval to keep recording after alert was signaled.         Record frames in absence of motion or alert event.         Recording frame rate in absence of alert, fps: 0.0000	Enable alert event controlled recording	
alerted state, fps: Time interval to keep recording before alert was 1.00 signaled, seconds: Time interval to keep recording after alert was 3.00 signaled, seconds: Record frames in absence of motion or alert event! Recording frame rate in absence of alert, fps: 0.0000	✓ Constrain recording frame rate	
signaled, seconds: Time interval to keep recording after alert was signaled, seconds: Record frames in absence of motion or alert event Recording frame rate in absence of alert, fps: 0000		0.000
signaled, seconds:           Image: second se		1.00
Recording frame rate in absence of alert, fps: 0.000		3.00
	Record frames in absence of motion or alert even	ent
	Recording frame rate in absence of alert, fps:	0.000
OK Cancel <u>A</u> pply	OK Cancel	Apply

#### 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

To search for events, choose **Navigation** -> **Events** in the archive window..

<u>N</u> avigation	
Seek to Beginning Ctrl+Left Arrow	
Seek to End Ctrl+Right Arrow	
Markward Shift+Left Arrow	
Step <u>F</u> orward Shift+Right Arrow	
🕲 Go t <u>o</u> Time	
Seek 5x Backward Ctrl+Shift+B	
Seek Forward Ctrl+N	
Seek 5x Forward Ctrl+Shift+N	
Play Enter	
jj P <u>a</u> use Space	
🔁 <u>R</u> efresh F5	
🚳 Seek to Previous Motion Ctrl+P	
🔯 Seek to Next Motion Ctrl+M	
Define Region of Motion Interest	
E <u>v</u> ents	

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	1		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		
meereene @-	11,21,12,204		7/28/2010 11:49:47 AM	Input 1	Opened	Alert	
Search only alerts			7/28/2010 11:49:51 AM	Input 1	Closed		
Search only alerts			7/28/2010 11:49:51 AM	Input 1	Opened	Alert	
	Searc	-	7/28/2010 11:49:57 AM	Input 1	Closed		
	Dearc		7/28/2010 11:49:57 AM	input 1	Opened	Alert	
	Contro	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.	

30

### 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.





### 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 Adjustr	nent	×
	Device: TV_IP612P		
	Adjustment <u>I</u>	<u>M</u> ode:	
	Capture Settir	ngs	-
<u>-</u>	Brightness:		_
	Contrast:		_
	Saturation:		_
	Sharpness:		_
	<u>H</u> ue:		-
	Reset Adjustm	ents	

### **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.

Video Frame Export Setup Wizard	Jeo Frame Export Setup Wizard					
Export Properties Set up export properties for sele	Export Properties Set up export properties for selected video streams					
Title	Export State					
4 TV-IP612P	Not Configured					
Enable export of video f      Properties     Configure	Enable export of video frames     Properties     Configure export properties. Note that the settings will be applied to all video streams listed above.					
	Disable export of video frames All export that might have been set up will be disabled.					
	< Back Next > Cancel					

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.

File	I	T 1	Mr. C.			
rile	Format	Time Lapse	Motion Contro			
frames	are expo	rted to. Choos	ethod and loca e profile from th Manage button	ne list below		0
<u>P</u> r	ofile:					
					•	וו
رغيييي					i	
				<u>M</u> ani	age	
Select	file name	mask to comp	ose file names	for the file	s beina	
export avoid		laceholders, e s.	oose file names g. \$(Unique), to			nd
export avoid <u>F</u> il	ed. Use pl overwrites e Name To	laceholders, e s. emplate:		o write sequ		nd
export avoid <u>Fil</u> \$(Tr \$(Yr \$(Hr \$(Ur	ed. Use pl overwrites e Name Tr itle)-\$(Yr)\$ ), \$(Mon), ), \$(Mon), \$ nique) - A r	laceholders, e emplate: (Mon)\$(Day)-\$ \$(Day) - Currer	g. \$(Unique), to ;(Hr)\$(Min)\$(Se nt date parts • Current time p	ownite sequ		nd
export avoid <u>Fil</u> \$(Tr \$(Yr \$(Hr \$(Ur	ed. Use pl overwrites e Name Tr itle)-\$(Yr)\$ ), \$(Mon), ), \$(Mon), \$ nique) - A r	laceholders, e s. (Mon)\$(Day)-\$ \$(Day) - Currer \$(Sec), \$(Ms) - random unique	g. \$(Unique), to ;(Hr)\$(Min)\$(Se nt date parts • Current time p	ownite sequ		nd

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)

Profiles	s used to export video frames. Note that
reconfiguration or selected for.	f profile affects all video streams the profile is
Profile Title	
	Create
2	

### • FTP Server Export Profile

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

Upload to FTP server, location f	tp://localhost/myvideo Pr
Location	
-FTP Location	
Server host name:	Port:
ftp://trendnet	21
User name:	User password:
user	•••••
Location (directory path) on	server:
-Options	
Passive mode operations	
ОК	Cancel Apply
#### • 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**.

Write to file, directory C:\TRENDnet\TRENDnetVIEW Pro\
Directory
Specify a directory to write video frame files to.
Please note that a server side directory is required, please take care if you are connected remotely.
Directory:
C:\TRENDnet\TRENDnetVIEW Pro\Exported Video Frames
<u>B</u> rowse
OK Cancel Apply

### 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 TRENDnetVIEW 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.

Options	-	-		?
Emerge	ncy Recording	Event Indication	VCA Me	eta Data
Screen	Screen Mapping	Miscellaneous	Exclusivity	Sounds
	e mode forces the a ally, application may			
-Passw	ord			— II.
	ecified password w ive mode and/or re			ion
<u>P</u> assw	ord:			
	Request	confirmation befor	e lock	
-Mode				- 1
Exclus	ive Mode:	Disabled		-
-Option	s			_
Applica	ation Startup:	Manual Start		•
Startup	Pass <u>w</u> ord:	Regular Startup		-
<u>S</u> tartu	o Lock:	Start Unlocked	-	
Lock (	Controls & Layout:	Default (Lock Co	ontrols)	•
		OK Car	ncel	Apply

#### **Lock Application**

#### *Tools > Lock Application*

TRENDnetVIEW 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 TRENDnetVIEW Pro Client application and restrict access to other applications.

SecurView Pro - C:\Users\test\	Documents\DVR1.bd
<u>File View S</u> erver Video	<u>Tools</u> <u>H</u> elp
🛃 🗐 🖬 🕅	Lock Application
	Utilities +
tructure	Options

#### **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 down sampling 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.

#### TRENDnetVIEW Pro - C:\Program Files (x86)\TRENDnet\TRENDnetVIEW Pro Video Tools Help File View Server Stream EC Transfer. Structure Digital Pan-Tilt-Zoom 😹 Console Root Show Detected Motion Servers Show Meta (Analytics) Data admin@loca Video Properties TREN Maximize TREN F9 UN TV-IPS Freeze TV-IPE **Current Frame Subtitles** E @ Archive Copy Current Frame to Clipboard E Layouts Save Current Frame As... Ctrl+Shift+S PTZ Control Unmap All Screens Ctrl+Shift+U Device: TV-IP612P Automap Available Screens Ctrl+Shift+A Automatically Show Video on Alert Event Automatically Show Video on Motion Event

#### 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 TRENDnetVIEW 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

				1	
Title	Server	Time Lapse E	Time Lapse R	Bandwidth Co	Bar
TV-IP612P	[admin@localhost]	Enabled	1.000	Enabled	1.0
<	rith Control				ł
Enable time lapse	e broadcast 0	🛛 🔽 Enable <u>b</u> an	dwidth controlled br	oadcast	1
Time lapse frame	rate, fps: 1.000	Base period	d of time, seconds:	1.0	
		Amount of	data, kilobytes:	16.000	
Motion Controlled Bro	padcast	Recompressi	on		
Enable motion co	ntrolled video transfer	Enable vi	deo transfer r <u>e</u> comp	ression	()
	es when no motion detected	Propert	ies Currently: n	ot specified	

# Video Transfer Defaults

Device: TV-IP612P

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.

ОК

Cancel

Apply



#### <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".



Structure

🛃 Console Root

- Servers

Video
Video
Archive
Video
Archive
Video
Archive
Archiv

## Layout Sequence

When Layouts are created, they can be used for sequencing. To create sequences:1. Right click on Layouts and click Manage Layout Sequences.

SecurView Pro at TEST-PC [admin@local1

Manage Layout Sequences.



Layout Sequences	? ×
Sequence List	
Name	New
Eayout Sequence 1	Delete
	Rename
	Properties
	Activate
	Deactivate
	Set Startup
OK Cancel	Apply

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 Sequence "Layout Sequence	2"	? <b>x</b>
General Schedule		
Layout	Pause	Add
Default Layout	5.00	Remove
Layout 2	5.00 5.00	
	0.00	Move Up
		Move Down
•		
-Sequence item		
Layout:		Pause:
Layout 2	-	5.00
ОК	Cancel	Apply

## Map Module

TRENDnetVIEW 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.



3. Review the settings:

- 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 TRENDnetVIEW 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...

	Add a new connection to the SecurView Pro Server
6	View or modify server connection properties
ſ.	Create, configure or delete server user and permissions
	Add, configure or delete camera device
	Configure export of video frames
P	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 "TRENDnetVIEW 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.

Title		Size	5
V RENDnet TV-IP	551WI - 192.168.1.213	41.81 KB	6/22/2012 2:4
🔽 🔊 TV-IP672WI		36.57 GB	1/17/2013 10:
VIP672WI-Taip	ei	157.54 MB	2/4/2013 4:
4			•
•	36.72 GB		,
Archive size:			
Archive size: Estimated backup size			

- 4. The time selection window appears. Select time range of backup archive. Click Next.
  - 5. The Video Backup Option window appear. Click **Constrain backup video frame** rate to decrease fps of backup in advanced options. Click **Next**.



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**.

🖑 TRENDnetVIE	W Pro Archive Backup Wizard
Backup Dest Choose da	ination ta backup destination and review relevant settings
Burn arc	hive on CD or DVD disc
Write a copy	of selected TRENDnetVIEW Pro archive part to a CD or a DVD disc.
Write a cop	chive to hard disk or network drive y of selected archive part to specified hard disk location, network location or adia. Please provide path to write backup to using controls below.
Location:	C:VArchiveBackup
	Free space: 242.03 GB
Estimated ba	ackup size: 5.64 GB
	< Back Next > Cancel

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

TRENDnetVIEW Pro Arch	nive Backup Wizard
CD/DVD Drive Setting Please select disc drive	s and review recording settings
Interface:	Windows Image Mastering (IMAPI) Version 2
<u>D</u> rive:	TSSTcorp CDDVDW SH-222AB (D:\)
Eject on completion:	Media: There is no media in the device Eject disc drive
Estimated backup size:	5.64 GB
	<back next=""> Cancel</back>

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

- 2. Choose tasks
- 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).



#### 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.



#### **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 TRENDnetVIEW 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".

5	eek to Beginnin	ng Ctrl+Left Arrov
5	sek to End	Ctri-Right Arrow
1 3	ep Backward	Shift+Left Arroy
1 9	tep Forward	Shift-Right Arroy
08 G	o to Time	
415	eek 5x Backwar	d Chi-Shift-B
4 5	eek Backward	Ctri+8
D S	eek Forward	Ctrl+P
ÞÞ s	eek Sx Forward	Ctrl=Shift=N
D E	lay	Ente
11.6	pote	Spec
0 8	efrech	F
<b>G</b> 1 S	eek to Previous	Motion Ctrl+1
10 5	sek to Next Mo	tion Ctrl+N
10 L	efine Region o	Advetision Indexest
E	errts_	

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" by 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.

Archive Export
User Interface (GUI) Complexity Choose appropriate user interface complexity and amount of choices for the wizard
Please choose desired user interface complexity between the choices offered below. To proceed, click Next.
© Simple Mode
Reduced choices with most important commands and options only. Recommended to avoid confusing by multiple available choices and complexity.
© <u>A</u> d√anced Mode
Full range of available choices to offer maximal flexibility in configuration. Recommended for experienced and power users who perfer to have full control over the process.
< <u>B</u> ack Next > Cancel

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

Archive Export Export Type Choose export larget type	
Please use the options below to specify export target. Cl Output Type	ick Next to proceed then.
Audio Video Interleaved (AVI) File Video Frame File Series Advanced Systems Format (ASF, also WMV) File	Video, Audio Video Video, Audio
	Back Next > Cancel

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

Please use the optio proceed.	ns below to specify exported video stream and related options. Click Next
<u>V</u> ideo Stream:	TRENDnet TV-IP551WI - 192.168.1.213
<u>F</u> ormat:	Regular Compression 💌
Resolution:	Original Full Resolution
	☑ Maintain Aspect Ratio
Subtitles:	Hard Subtitles (Merge with Video)    Properties

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

Archive Export
Audio Stream Choose and configure exported audio stream
Please use the options below to specify exported audio stream. Click Next to proceed.
Audio Stream: TRENDnet TV-IP551WI - 192.168.1.213
Quality: Low Bitrate (Compact)
-Options
Desync Compensation, ms: 0.00
Note that footage may be recorded out of synchronization between video and audio streams, due to specific buffering and different synchronization sources. This provides an option to manually compensate the synchronization, positive compensation value will delay audio relatively to video.
< <u>B</u> ack <u>N</u> ext > Cancel

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

Archive Export		-	×
Export Options Specify export proced	ure options		
Please specify export option	ns using the choices t	pelow. Click Next to pr	oceed then.
Start and Stop Time			
Start From:	9/19/2013	11:32:40 AM 🗦	Show Local Time
Stop At:	9/19/2013 🔍 🗸	11:32:40 AM 🗦	
Time Options			
✓ Reduce Long <u>G</u> aps			
Output Rate Adjustmen	t		
Adjust Exported Vid	eo <u>R</u> ate: 1.00	-0	
		< <u>B</u> ack	Vext > Cancel

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

ASF Export Options Provide ASF file export option	IS			A
Please specify ASF output options	using the choi	ces below. Click Ne	ext to proceed then.	
Output File: Record file			Browse	
Video <u>C</u> odec: Windows	s Media Video	9	•	
Frame Rate per Second:	15.00			
<u>B</u> itrate, kBps:	2048.00			

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 fi	ulfilled at once in batch mo	ode 🛛
		6
The requested export task has been added to th	ne batch. To start exporting	g press Next, use
controls below to modify batch, or press Cancel		
Video Stream	Time Interval	Destination
TRENDnet TV-IP551WI - 192.168.1.213	4/1/2013 11:32:40	. Record file
< III		
۲ <u>ا</u>		re <u>R</u> emove
< III	Add Mo	re <u>R</u> emove

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

Archive Export			×
Content CD/DVD Disc Burn exported footage to a CD/D	VD disc		
You can optionally burn the files, both controls below. To skip burning, leave	the bax unchecked.	other, to a CD/I	DVD disc using
Device: TSSTcorp CDDVDW St	H-S202G (D:\)	Ψ	
File Name	Size	Location	Add
Currently Exported Files			Bemove
V Output File	32.00 KB		
٠ ( III		,	
	< <u>B</u> ack	Next >	Cancel

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..."



4. Select a location and file name for your image

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

File Edit View	Video	Timeline Navigation		
EO 4 4	Co	rrent Frame Subtitles py Current Frame to Clipt	ooard Ctrl+C	۲
Archive + TRENDnet TV-IP + TV-IP672WI (Group) + TV-IP672WI-Taipei		e Current Frame As	Ctrl+S	
	Qu	ick Save Current Frame	Ctrl+Alt+S	
	Qu	ick Save Properties		
	🖌 Ma	intain Aspect <mark>R</mark> atio		
	Dig	ital Pan-Tilt-Zoom		۲

2. Setup preferred directory for saving the snapshots.

	eo Frame Properties
Location	
video snaps	video frame feature provides an opportunity to save nots into pre-defined location with a single keyboard sing menu. Use controls below to configure quick
Directory:	C:\Users\test\Documents
File Name:	\$(Year)-\$(Month)-\$(Day) \$(Hour)-\$(Minute 🔻 🕨
	at use of .JPG or .BMP file name extension specifies image file format.
Replacemen	t <u>C</u> haracter:
💙 name t	at some characters, e.g. dash or colon mark, from file emplate may not accepted for a file name; this provides sement to compose a valid file name.
	OK Cancel Apply

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

V <u>i</u> deo	<u>T</u> ime Line	<u>N</u> avigation	1	
Cur	rrent Frame S <u>u</u>	ubtitles		×
<u>C</u> ot	py Current Fra	ime to Clipb	oard Ctrl+C	
Sav	e Current Fra	me As	Ctrl+S	
0	ick Save Curre		Chill, Albert	
			Ctri+Ait+5	
3 Qui	ick Save Prope	erties		_
Ma	intain <u>A</u> spect	Ratio		
Dig	ital Pan-Tilt-Z	Zoom		•

# Chapter 7

#### Upgrading TRENDnetVIEW 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. 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.

# TRENDNET®

# Product Warranty Registration

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

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